



# I Commands

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# show icam entries acl module inst

```
show icam entries acl module <module> inst <inst> [ history <num_intervals> ] [ sort { top <top_x> | sort-order { ascending | descending } | filter <f_f> [ exact ] | top <top_x> sort-order { ascending | descending } | top <top_x> filter <f_f> [ exact ] | top <top_x> sort-order { ascending | descending } filter <f_f> [ exact ] | top <top_x> filter <f_f> [ exact ] sort-order { ascending | descending } | sort-order { ascending | descending } top <top_x> | sort-order { ascending | descending } filter <f_f> [ exact ] | sort-order { ascending | descending } filter <f_f> [ exact ] top <top_x> | sort-order { ascending | descending } top <top_x> filter <f_f> [ exact ] | filter <f_f> [ exact ] top <top_x> | filter <f_f> [ exact ] sort-order { ascending | descending } | filter <f_f> [ exact ] top <top_x> sort-order { ascending | descending } | filter <f_f> [ exact ] sort-order { ascending | descending } top <top_x> } ] [ __readonly__ <module> <instance> [ <num_intervals> ] [ { TABLE_ACL_entries <Feature> <Pkt_Type> <SourceIP_Mask_DestIP_Mask> <Action> <Intf_name> <Stats> [ <Rate> ] } ] ]
```

### Syntax Description

|                      |   |
|----------------------|---|
| show                 | Show running system information   |
| icam                 | intelligent CAM   |
| entries              | TCAM Entries with result and stats  |
| acl                  | ACL entries   |
| module               | Module Number   |
| <i>module</i>        | Enter Module Number   |
| inst                 | ASIC/Forwarding Engine Instance Number  |
| <i>inst</i>          | Enter Instance Number   |
| sort                 | (Optional) Sorted display   |
| top                  | (Optional) Show top x% entries (Default:100%)                                 |
| <i>top_x</i>         | (Optional) x% of entries to be displayed                                      |
| sort-order           | (Optional) Choose the order of displaying sorted entries (Default:descending) |
| ascending            | (Optional) Sort in Ascending order of Stats                                   |
| descending           | (Optional) Sort in Descending order of Stats                                  |
| filter               | (Optional) Feature to be filtered (Default:All)                               |
| <i>f_f</i>           | (Optional) Enter feature to be filtered                                       |
| exact                | (Optional) Exact match for feature filter                                     |
| history              | (Optional) Show entries history   |
| <i>num_intervals</i> | (Optional) Number of intervals to display                                     |

|                                  |  |
|----------------------------------|--|
| <i>__readonly__</i>              | (Optional) Read Only                     |
| <i>module</i>                    | (Optional) Module number                 |
| <i>instance</i>                  | (Optional) Instance number               |
| <i>num_intervals</i>             | (Optional) Number of intervals displayed |
| TABLE_ACL_entries                | (Optional) Table for ACL entries         |
| <i>Feature</i>                   | (Optional) Feature name                  |
| <i>Pkt_Type</i>                  | (Optional) Packet type                   |
| <i>SourceIP_Mask_DestIP_Mask</i> | (Optional) IP addresses                  |
| <i>Action</i>                    | (Optional) Action                        |
| <i>Intf_name</i>                 | (Optional) Interface name                |
| <i>Stats</i>                     | (Optional) Total stats                   |
| <i>Rate</i>                      | (Optional) Rate packets/sec              |

**Command Mode**

- /exec

## show icam entries multicast module

```
show icam entries multicast module <module> [ history <num_intervals> ] [ sort { top <top_x> | sort-order
{ ascending | descending } | top <top_x> sort-order { ascending | descending } | sort-order { ascending |
descending } top <top_x> } ] [ __readonly__ <module> [ <num_intervals> ] [ { TABLE_MULTICAST_entries
<Vdc> <Table_Id> <Source_Mask> <Group_Mask> <Rpf> <Stats> [ <Rate> ] } ] ]
```

### Syntax Description

|                         |  |
|-------------------------|--|
| show                    | Show running system information  |
| icam                    | intelligent CAM  |
| entries                 | TCAM Entries with result and stats   |
| multicast               | Multicast entries  |
| module                  | Module Number  |
| <i>module</i>           | Enter Module Number  |
| sort                    | (Optional) Sorted display  |
| top                     | (Optional) Show top x% entries (Default:100%)                                    |
| <i>top_x</i>            | (Optional) x% of entries to be displayed   |
| sort-order              | (Optional) Choose the order of displaying sorted entries<br>(Default:Descending) |
| ascending               | (Optional) Sort in Ascending order of Stats                                      |
| descending              | (Optional) Sort in Descending order of Stats                                     |
| history                 | (Optional) Show entries history  |
| <i>num_intervals</i>    | (Optional) Number of intervals to display  |
| <i>__readonly__</i>     | (Optional) Read Only   |
| <i>module</i>           | (Optional) Module number   |
| <i>num_intervals</i>    | (Optional) Number of intervals displayed   |
| TABLE_MULTICAST_entries | (Optional) Table for Multicast entries   |
| <i>Vdc</i>              | (Optional) VDC id  |
| <i>Table_Id</i>         | (Optional) Table id  |
| <i>Source_Mask</i>      | (Optional) Source address  |
| <i>Group_Mask</i>       | (Optional) Group address   |
| <i>Rpf</i>              | (Optional) RPF/Ordinal   |

|              |                             |
|--------------|-----------------------------|
| <i>Stats</i> | (Optional) Total stats      |
| <i>Rate</i>  | (Optional) Rate packets/sec |

**Command Mode**

- /exec

## show icam prediction entries acl module inst

```
show icam prediction entries acl module <module> inst <inst> <YYYY> <Month> <Date> <Time> [ top
<top_x> ] [ __readonly__ <module> <instance> [ { TABLE_PREDICTION_ACL_entries <Feature>
<Pkt_Type> <Value_Mask> <Action> <Intf_name> <Stats> <Prediction> } ] ]
```

### Syntax Description

|                              |   |
|------------------------------|---|
| show                         | Show running system information                     |
| icam                         | intelligent CAM                                     |
| prediction                   | Machine learning prediction                         |
| entries                      | TCAM Entries with result and stats                  |
| acl                          | ACL entries   |
| module                       | Module Number                                       |
| <i>module</i>                | Enter Module Number                                 |
| inst                         | ASIC/Forwarding Engine Instance Number              |
| <i>inst</i>                  | Enter Instance Number                               |
| <i>YYYY</i>                  | Enter year in YYYY format                           |
| <i>Month</i>                 | Enter Month as Jan, Feb, Mar, ..., Oct, Nov, or Dec |
| <i>Date</i>                  | Enter day of month in dd format                     |
| <i>Time</i>                  | Enter hour, minutes, seconds as HH:MM:SS            |
| top                          | (Optional) Show top x% entries (Default:1%)         |
| <i>top_x</i>                 | (Optional) x% of entries to be displayed            |
| <i>__readonly__</i>          | (Optional) Read Only                                |
| <i>module</i>                | (Optional) Module number                            |
| <i>instance</i>              | (Optional) Instance number                          |
| TABLE_PREDICTION_ACL_entries | (Optional) Table for ACL entries prediction         |
| <i>Feature</i>               | (Optional) Feature name                             |
| <i>Pkt_Type</i>              | (Optional) Packet type                              |
| <i>Value_Mask</i>            | (Optional) Value mask                               |
| <i>Action</i>                | (Optional) Action                                   |
| <i>Intf_name</i>             | (Optional) Interface name                           |



|                   |                          |
|-------------------|--------------------------|
| <i>Stats</i>      | (Optional) Current stats |
| <i>Prediction</i> | (Optional) Prediction    |

**Command Mode**

- /exec

## show icam prediction entries multicast module

```
show icam prediction entries multicast module <module> <YYYY> <Month> <Date> <Time> [ top <top_x>
] [ __readonly__ <module> [ { TABLE_PREDICTION_MULTICAST_entries <Vdc> <Table_Id>
<Source_Mask> <Group_Mask> <Rpf> <Stats> <Prediction> } ] ]
```

### Syntax Description

|   |   |
|---|---|
| show                                      | Show running system information                     |
| icam                                      | intelligent CAM                                     |
| prediction                                | Machine learning prediction                         |
| entries                                   | TCAM Entries with result and stats                  |
| multicast                                 | Multicast entries                                   |
| module                                    | Module Number                                       |
| <i>module</i>                             | Enter Module Number                                 |
| <i>YYYY</i>                               | Enter year in YYYY format                           |
| <i>Month</i>                              | Enter Month as Jan, Feb, Mar, ..., Oct, Nov, or Dec |
| <i>Date</i>                               | Enter day of month in dd format                     |
| <i>Time</i>                               | Enter hour, minutes, seconds as HH:MM:SS            |
| top                                       | (Optional) Show top x% entries (Default:1%)         |
| <i>top_x</i>                              | (Optional) x% of entries to be displayed            |
| <i>__readonly__</i>                       | (Optional) Read Only                                |
| <i>module</i>                             | (Optional) Module number                            |
| <i>TABLE_PREDICTION_MULTICAST_entries</i> | (Optional) Table for multicast entries prediction   |
| <i>Vdc</i>                                | (Optional) VDC id                                   |
| <i>Table_Id</i>                           | (Optional) Table id                                 |
| <i>Source_Mask</i>                        | (Optional) Source address                           |
| <i>Group_Mask</i>                         | (Optional) Group address                            |
| <i>Rpf</i>                                | (Optional) RPF/Ordinal                              |
| <i>Stats</i>                              | (Optional) Current stats                            |
| <i>Prediction</i>                         | (Optional) Prediction                               |

### Command Mode

- /exec

## show icam prediction resource acl\_tcam module inst trend

```
show icam prediction resource acl_tcam module <module> inst <inst> trend [ __readonly__ <module>
<instance> [ { TABLE_PREDICTION_ACL_feature <Feature> <Dir> <TCAM> <BANK> <Feature_Entries1>
<Free_Entries1> <Percent_Util1> <Feature_Entries2> <Free_Entries2> <Percent_Util2> <Feature_Entries3>
<Free_Entries3> <Percent_Util3> } ] [ <mod> <inst> { TABLE_PREDICTION_ACL_tcam <Tcam_no>
<Bank_no> <Used1> <Free1> <Util1> <Used2> <Free2> <Util2> <Used3> <Free3> <Util3> } ] ]
```

### Syntax Description

|                              |  |
|------------------------------|--|
| show                         | Show running system information                |
| icam                         | intelligent CAM                                |
| prediction                   | Machine learning prediction                    |
| resource                     | TCAM Resource utilization                      |
| acl_tcam                     | ACL TCAM resource                              |
| module                       | Module Number                                  |
| <i>module</i>                | Enter Module Number                            |
| inst                         | ASIC/Forwarding Engine Instance Number         |
| <i>inst</i>                  | Enter Instance Number                          |
| trend                        | ACL Prediction Trend                           |
| <i>__readonly__</i>          | (Optional) Read Only                           |
| <i>module</i>                | (Optional) Module number                       |
| <i>instance</i>              | (Optional) Instance number                     |
| TABLE_PREDICTION_ACL_feature | (Optional) ACL Feature utilization predictions |
| <i>Feature</i>               | (Optional) Feature name                        |
| <i>Dir</i>                   | (Optional) Direction                           |
| <i>TCAM</i>                  | (Optional) TCAM entry                          |
| <i>BANK</i>                  | (Optional) BANK entry                          |
| <i>Feature_Entries1</i>      | (Optional) +24Hr Feature_Entries               |
| <i>Free_Entries1</i>         | (Optional) +24Hr Free_Entries                  |
| <i>Percent_Util1</i>         | (Optional) +24Hr Percent_Util                  |
| <i>Feature_Entries2</i>      | (Optional) +48Hr Feature_Entries               |
| <i>Free_Entries2</i>         | (Optional) +48Hr Free_Entries                  |

|                           |   |
|---------------------------|---|
| <i>Percent_Util2</i>      | (Optional) +48Hr Percent_Util               |
| <i>Feature_Entries3</i>   | (Optional) +1 wk Feature_Entries            |
| <i>Free_Entries3</i>      | (Optional) +1 wk Free_Entries               |
| <i>Percent_Util3</i>      | (Optional) +1 wk Percent_Util               |
| <i>mod</i>                | (Optional) Module number                    |
| <i>inst</i>               | (Optional) Instance number                  |
| TABLE_PREDICTION_ACL_tcam | (Optional) ACL TCAM utilization predictions |
| <i>Tcam_no</i>            | (Optional) Tcam number                      |
| <i>Bank_no</i>            | (Optional) Bank number                      |
| <i>Used1</i>              | (Optional) +24Hr Used                       |
| <i>Free1</i>              | (Optional) +24Hr Free                       |
| <i>Util1</i>              | (Optional) +24Hr Percent_Util               |
| <i>Used2</i>              | (Optional) +48Hr Used                       |
| <i>Free2</i>              | (Optional) +48Hr Free                       |
| <i>Util2</i>              | (Optional) +48Hr Percent_Util               |
| <i>Used3</i>              | (Optional) +1 wk Used                       |
| <i>Free3</i>              | (Optional) +1 wk Free                       |
| <i>Util3</i>              | (Optional) +1 wk Percent_Util               |

**Command Mode**

- /exec

## show icam prediction resource module inst

```
show icam prediction resource { acl_tcam | fib_tcam | l2_table } module <module> inst <inst> <YYYY>
<Month> <Date> <Time> [ __readonly__ <module> <instance> [ { TABLE_PREDICTION_ACL_feature
<Feature> <Dir> <TCAM> <BANK> <Feature_Entries> <Free_Entries> <Percent_Util> } ] [ <mod> <inst>
{ TABLE_PREDICTION_ACL_tcam <Tcam_no> <Bank_no> <Used> <Free> <Percent_Util> } ] [ {
TABLE_PREDICTION_FIB_tcam <Class> <Used_Entries> <Max_Entries> <Percent_Util> } ] [ {
TABLE_PREDICTION_L2_TABLE <Used_Entries> <Free_Entries> <Percent_Util> } ] ] ]
```

### Syntax Description

|                              |   |
|------------------------------|---|
| show                         | Show running system information                     |
| icam                         | intelligent CAM                                     |
| prediction                   | Machine learning prediction                         |
| resource                     | TCAM Resource utilization                           |
| acl_tcam                     | ACL TCAM resource                                   |
| fib_tcam                     | FIB TCAM resource                                   |
| l2_table                     | L2 TABLE resource                                   |
| module                       | Module Number                                       |
| <i>module</i>                | Enter Module Number                                 |
| inst                         | ASIC/Forwarding Engine Instance Number              |
| <i>inst</i>                  | Enter Instance Number                               |
| YYYY                         | Enter year in YYYY format                           |
| <i>Month</i>                 | Enter Month as Jan, Feb, Mar, ..., Oct, Nov, or Dec |
| <i>Date</i>                  | Enter day of month in dd format                     |
| <i>Time</i>                  | Enter hour, minutes, seconds as HH:MM:SS            |
| __readonly__                 | (Optional) Read Only                                |
| <i>module</i>                | (Optional) Module number                            |
| <i>instance</i>              | (Optional) Instance number                          |
| TABLE_PREDICTION_ACL_feature | (Optional) ACL Feature utilization predictions      |
| <i>Feature</i>               | (Optional) Feature name                             |
| <i>Dir</i>                   | (Optional) Direction                                |
| <i>TCAM</i>                  | (Optional) TCAM entry                               |

|                           |   |
|---------------------------|---|
| <i>BANK</i>               | (Optional) BANK entry                       |
| <i>Feature_Entries</i>    | (Optional) Feature_Entries                  |
| <i>Free_Entries</i>       | (Optional) Free_Entries                     |
| <i>Percent_Util</i>       | (Optional) Percent_Util                     |
| <i>mod</i>                | (Optional) Module number                    |
| <i>inst</i>               | (Optional) Instance number                  |
| TABLE_PREDICTION_ACL_tcam | (Optional) ACL TCAM utilization predictions |
| <i>Tcam_no</i>            | (Optional) Tcam number                      |
| <i>Bank_no</i>            | (Optional) Bank number                      |
| <i>Used</i>               | (Optional) Used                             |
| <i>Free</i>               | (Optional) Free                             |
| <i>Percent_Util</i>       | (Optional) Percent_Util                     |
| TABLE_PREDICTION_FIB_tcam | (Optional) FIB TCAM utilization predictions |
| <i>Class</i>              | (Optional) FIB class                        |
| <i>Used_Entries</i>       | (Optional) Used entries                     |
| <i>Max_Entries</i>        | (Optional) Max entries                      |
| <i>Percent_Util</i>       | (Optional) Percent_Util                     |
| TABLE_PREDICTION_L2_TABLE | (Optional) L2 TABLE Util prediction         |
| <i>Used_Entries</i>       | (Optional) Used                             |
| <i>Free_Entries</i>       | (Optional) Free                             |
| <i>Percent_Util</i>       | (Optional) Percent_Util                     |

**Command Mode**

- /exec

## show icam resource module inst

```
show icam resource { acl_tcam | fib_tcam | l2_table } module <module> inst <inst> [ history <num_intervals> ] [ __readonly__ <module> <instance> [ { TABLE_feature_resource <Feature> <TCAM> <BANK> [ { TABLE_ingress_stats <Feature_Entries> <Free_Entries> <Percent_Util> <Timestamp> } ] } ] [ { TABLE_egress_feature_resource <Feature> <TCAM> <BANK> [ { TABLE_egress_stats <Feature_Entries> <Free_Entries> <Percent_Util> <Timestamp> } ] } ] [ <mod> <inst> { TABLE_tcam_bank_utilization <Tcam_no> <Bank_no> [ { TABLE_tcam_bank_stats <Used> <Free> <Percent_Util> <Timestamp> } ] } ] [ { TABLE_global_configs <Atomic_Update> <Bank_Chain_Mode> <Dynamic_Bank_Mapping> <LOU_Threshold_Value> } ] [ { TABLE_fib_resource <Class> [ { TABLE_fib_stats <Used_Entries> <Max_Entries> <Percent_Util> <Timestamp> } ] } ] [ { TABLE_l2_table_resource <Total_Entries> <Used_Entries> <Percent_Util> <Timestamp> } ] ]
```

### Syntax Description

|                        |  |
|------------------------|--|
| show                   | Show running system information                |
| icam                   | intelligent CAM                                |
| resource               | TCAM Resource utilization                      |
| acl_tcam               | ACL TCAM resource                              |
| fib_tcam               | FIB TCAM resource                              |
| l2_table               | L2 TABLE resource                              |
| module                 | Module Number                                  |
| <i>module</i>          | Enter Module Number                            |
| inst                   | ASIC/Forwarding Engine Instance Number         |
| <i>inst</i>            | Enter Instance Number                          |
| history                | (Optional) Show resource history               |
| <i>num_intervals</i>   | (Optional) Number of intervals in history      |
| <i>__readonly__</i>    | (Optional) Read Only                           |
| <i>module</i>          | (Optional) Module number                       |
| <i>instance</i>        | (Optional) Instance number                     |
| TABLE_feature_resource | (Optional) Table for ingress feature resources |
| <i>Feature</i>         | (Optional) Feature name                        |
| <i>TCAM</i>            | (Optional) TCAM entry                          |
| <i>BANK</i>            | (Optional) BANK entry                          |
| TABLE_ingress_stats    | (Optional) Table for ingress feature stats     |



|                               |  |
|-------------------------------|--|
| <i>Feature_Entries</i>        | (Optional) Feature_Entries                     |
| <i>Free_Entries</i>           | (Optional) Free_Entries                        |
| <i>Percent_Util</i>           | (Optional) Percent_Util                        |
| <i>Timestamp</i>              | (Optional) Timestamp                           |
| TABLE_egress_feature_resource | (Optional) Table for egress feature resources  |
| <i>Feature</i>                | (Optional) Feature name                        |
| <i>TCAM</i>                   | (Optional) TCAM entry                          |
| <i>BANK</i>                   | (Optional) BANK entry                          |
| TABLE_egress_stats            | (Optional) Table for egress feature stats      |
| <i>Feature_Entries</i>        | (Optional) Feature_Entries                     |
| <i>Free_Entries</i>           | (Optional) Free_Entries                        |
| <i>Percent_Util</i>           | (Optional) Percent_Util                        |
| <i>Timestamp</i>              | (Optional) Timestamp                           |
| <i>mod</i>                    | (Optional) Module number                       |
| <i>inst</i>                   | (Optional) Instance number                     |
| TABLE_tcam_bank_utilization   | (Optional) Table for tcam and bank utilization |
| <i>Tcam_no</i>                | (Optional) Tcam number                         |
| <i>Bank_no</i>                | (Optional) Bank number                         |
| TABLE_tcam_bank_stats         | (Optional) Table for tcam and bank stats       |
| <i>Used</i>                   | (Optional) Used                                |
| <i>Free</i>                   | (Optional) Free                                |
| <i>Percent_Util</i>           | (Optional) Percent_Util                        |
| <i>Timestamp</i>              | (Optional) Timestamp                           |
| TABLE_global_configs          | (Optional) TABLE_global_configs                |
| <i>Atomic_Update</i>          | (Optional) Atomic_Update                       |
| <i>Bank_Chain_Mode</i>        | (Optional) Bank_Chain_Mode                     |
| <i>Dynamic_Bank_Mapping</i>   | (Optional) Dynamic_Bank_Mapping                |
| <i>LOU_Threshold_Value</i>    | (Optional) LOU_Threshold_Value                 |
| TABLE_fib_resource            | (Optional) Table for fib resources             |

|                         |   |
|-------------------------|---|
| <i>Class</i>            | (Optional) FIB class                    |
| TABLE_fib_stats         | (Optional) Table for fib resource stats |
| <i>Used_Entries</i>     | (Optional) Used entries                 |
| <i>Max_Entries</i>      | (Optional) Max entries                  |
| <i>Percent_Util</i>     | (Optional) Percent_Util                 |
| <i>Timestamp</i>        | (Optional) Timestamp                    |
| TABLE_l2_table_resource | (Optional) Table for L2 Resources       |
| <i>Total_Entries</i>    | (Optional) Total L2 entries             |
| <i>Used_Entries</i>     | (Optional) Used L2 entries              |
| <i>Percent_Util</i>     | (Optional) Percent_Util                 |
| <i>Timestamp</i>        | (Optional) Timestamp                    |

**Command Mode**

- /exec



|                          |  |
|--------------------------|--|
| ipv6-host-routes         | (Optional) IPv6 host routes                        |
| ipv4-isis-routes         | (Optional) IPv4 IS-IS routes                       |
| ospf-size                | (Optional) OSPF size                               |
| test                     | (Optional) VxLAN test                              |
| history                  | (Optional) Show scale history                      |
| <i>num_intervals</i>     | (Optional) Number of intervals in history          |
| utilization              | (Optional) Show utilization statistics             |
| thresholds               | (Optional) Show thresholds statistics              |
| <i>__readonly__</i>      | (Optional) Read Only                               |
| <i>Info_Thres</i>        | (Optional) Configured info threshold percent       |
| <i>Warn_Thres</i>        | (Optional) Configured warning threshold percent    |
| <i>Crit_Thres</i>        | (Optional) Configured critical threshold percent   |
| TABLE_technology         | (Optional) Table technology                        |
| <i>Technology</i>        | (Optional) Technology name                         |
| TABLE_feature            | (Optional) Table feature                           |
| <i>Feature</i>           | (Optional) Feature name                            |
| <i>Verified_Scale</i>    | (Optional) Verified scale                          |
| <i>Config_Scale</i>      | (Optional) Configured scale                        |
| TABLE_feature_stats      | (Optional) Table feature stats                     |
| <i>Used_Entries</i>      | (Optional) Used entries                            |
| <i>Cur_Util</i>          | (Optional) Current utilization                     |
| <i>Thres_Exceeded</i>    | (Optional) Threshold type exceeded                 |
| <i>Polled_TS</i>         | (Optional) Polled timestamp                        |
| <i>Avg_Util</i>          | (Optional) Average utilization                     |
| <i>Week_Util</i>         | (Optional) 1 week utilization                      |
| <i>Week_TS</i>           | (Optional) 1 week peak utilization timestamp       |
| <i>Peak_Util</i>         | (Optional) Peak utilization                        |
| <i>Peak_TS</i>           | (Optional) Peak utilization timestamp              |
| <i>Info_Thres_Exceed</i> | (Optional) Number of times info threshold exceeded |

|                             |  |
|-----------------------------|--|
| <i>Info_Thres_Exceed_TS</i> | (Optional) Last info threshold exceeded timestamp      |
| <i>Warn_Thres_Exceed</i>    | (Optional) Number of times warning threshold exceeded  |
| <i>Warn_Thres_Exceed_TS</i> | (Optional) Last warning threshold exceeded timestamp   |
| <i>Crit_Thres_Exceed</i>    | (Optional) Number of times critical threshold exceeded |
| <i>Crit_Thres_Exceed_TS</i> | (Optional) Last critical threshold exceeded timestamp  |

**Command Mode**

- /exec

# show ieth-header-decode

show ieth-header-decode <ieth>

## Syntax Description

|                    |  |
|--------------------|--|
| show               | Show running system information                    |
| ieth-header-decode | Show decode of ieth header                         |
| <i>ieth</i>        | ieth header in hex (0xFF...) or string (FF..) form |

## Command Mode

- /exec

# show imp client

show imp client

## Syntax Description

|        |                                 |
|--------|---------------------------------|
| show   | Show running system information |
| imp    | ipsec management process        |
| client | Show ipsec clients name         |

## Command Mode

- /exec

# show imp client sa

show imp client sa

## Syntax Description

|        |                                 |
|--------|---------------------------------|
| show   | Show running system information |
| imp    | IPSec management process        |
| client | IMP client                      |
| sa     | Display all SAs                 |

## Command Mode

- /exec



## show incompatibility-all system

```
show incompatibility-all { system <uri0> | nxos <uri1> } [ __readonly__ { [ TABLE_incompat_all <Str1> [
<Serv> ] [ <Cap> ] [ <Desc> ] [ <Req> ] [ <Enable> ] ] [ <Dynamic> ] } ]
```

### Syntax Description

|                     |  |
|---------------------|--|
| show                | Show running system information                        |
| incompatibility-all | Show incompatible configurations for the entire system |
| system              | show incompatibilities with an image                   |
| <i>uri0</i>         | Enter image uri  |
| nxos                | show incompatibilities with an image                   |
| <i>uri1</i>         | Enter image uri  |
| <i>__readonly__</i> | (Optional)   |
| TABLE_incompat_all  | (Optional) Show incompatibility system table           |
| <i>Str1</i>         | (Optional)   |
| <i>Serv</i>         | (Optional)   |
| <i>Cap</i>          | (Optional)   |
| <i>Desc</i>         | (Optional)   |
| <i>Req</i>          | (Optional)   |
| <i>Enable</i>       | (Optional)   |
| <i>Dynamic</i>      | (Optional)   |

### Command Mode

- /exec

## show incompatibility system

```
show incompatibility { system <uri0> | nxos <uri1> } [ __readonly__ { [ TABLE_incompat <Str1> [ <Serv>
] [ <Cap> ] [ <Desc> ] [ <Req> ] [ <Enable> ] [ <Dynamic> ] } ]
```

### Syntax Description

|                     |  |
|---------------------|--|
| show                | Show running system information              |
| incompatibility     | Show incompatible configurations             |
| system              | show incompatibilities with an image         |
| <i>uri0</i>         | Enter image uri                              |
| nxos                | show incompatibilities with an image         |
| <i>uri1</i>         | Enter image uri                              |
| <i>__readonly__</i> | (Optional)                                   |
| TABLE_incompat      | (Optional) Show incompatibility system table |
| <i>Str1</i>         | (Optional)                                   |
| <i>Serv</i>         | (Optional)                                   |
| <i>Cap</i>          | (Optional)                                   |
| <i>Desc</i>         | (Optional)                                   |
| <i>Req</i>          | (Optional)                                   |
| <i>Enable</i>       | (Optional)                                   |
| <i>Dynamic</i>      | (Optional)                                   |

### Command Mode

- /exec

# show install

```
show install { inactive | active [ brief ] | committed } [ __readonly__ { <curr_nxos_image> [ TABLE_smu_list
<install_smu_id> + ] [ TABLE_package_list <package_id> ] } ]
```

## Syntax Description

|                        |   |
|------------------------|---|
| show                   | Show running system information             |
| install                | Install related show commands               |
| inactive               | Inactive packages                           |
| active                 | Active packages                             |
| brief                  | (Optional) Brief                            |
| committed              | Committed packages                          |
| __readonly__           | (Optional)                                  |
| <i>curr_nxos_image</i> | (Optional) NXOS image                       |
| TABLE_smu_list         | (Optional)                                  |
| <i>install_smu_id</i>  | (Optional) install operation smu identifier |
| TABLE_package_list     | (Optional)                                  |
| <i>package_id</i>      | (Optional) Package name                     |

## Command Mode

- /exec

## show install all failed-standby

```
show install all failed-standby [ __readonly__ { [ TABLE_installFailStandby <Str1> ] } ]
```

### Syntax Description

|                          |   |
|--------------------------|---|
| show                     | Show running system information                     |
| install                  | Show the software install impact between two images |
| all                      | Show install all information                        |
| failed-standby           | show log from failed standby                        |
| __readonly__             | (Optional)  |
| TABLE_installFailStandby | (Optional) Install failed-standby table             |
| <i>Str1</i>              | (Optional)  |

### Command Mode

- /exec

## show install all failure-reason

```
show install all failure-reason [ __readonly__ { [ TABLE_installFailReason <installFailReasonStr> ] } ]
```

### Syntax Description

|                             |   |
|-----------------------------|---|
| show                        | Show running system information                     |
| install                     | Show the software install impact between two images |
| all                         | show install all information                        |
| failure-reason              | Show failure reason for the last install all        |
| __readonly__                | (Optional)  |
| TABLE_installFailReason     | (Optional) Install failure-reason table             |
| <i>installFailReasonStr</i> | (Optional)  |

### Command Mode

- /exec

# show install all impact

show install all impact [ nxos <uri> ] + [ non-disruptive ]

## Syntax Description

|                |   |
|----------------|---|
| show           | Show running system information                     |
| install        | Show the software install impact between two images |
| all            | show install all information                        |
| impact         | show impact of the install all command              |
| nxos           | (Optional) boot-variable name                       |
| <i>uri</i>     | (Optional) Enter image uri                          |
| non-disruptive | (Optional) non-disruptive show install              |

## Command Mode

- /exec

# show install all status

show install all status

## Syntax Description

|         |   |
|---------|---|
| show    | Show running system information                     |
| install | Show the software install impact between two images |
| all     | show install all information                        |
| status  | show status of the current or last install all      |

## Command Mode

- /exec

# show install all time-stats

show install all time-stats [ detail | handshake ]

## Syntax Description

|            |   |
|------------|---|
| show       | Show running system information   |
| install    | Show the software install impact between two images   |
| all        | show install all information  |
| time-stats | show overall time statistics of the last install all  |
| detail     | (Optional) show detailed time statistics of the last install all                              |
| handshake  | (Optional) show handshake time statistics for sysmgr and lc processes of the last install all |

## Command Mode

- /exec



# show install impact

show install impact <uri0> <uri1>

## Syntax Description

|             |  |
|-------------|--|
| show        | Show running system information                            |
| install     | Show the software install impact between two images        |
| impact      | impact system_uri {active_system_uri/active_kickstart_uri} |
| <i>uri0</i> | Enter system URI   |
| <i>uri1</i> | Enter active URI   |

## Command Mode

- /exec

# show install impact

show install impact <uri0>

## Syntax Description

|             |  |
|-------------|--|
| show        | Show running system information                            |
| install     | Show the software install impact between two images        |
| impact      | impact system_uri {active_system_uri/active_kickstart_uri} |
| <i>uri0</i> | Enter system URI   |

## Command Mode

- /exec

# show install impact detail

show install impact <uri0> detail

## Syntax Description

|             |  |
|-------------|--|
| show        | Show running system information                            |
| install     | Show the software install impact between two images        |
| impact      | impact system_uri {active_system_uri/active_kickstart_uri} |
| <i>uri0</i> | Enter system URI   |
| detail      | Show detailed install impact of given system image         |

## Command Mode

- /exec

## show install log

```
show install log { [ <id> | from <id1> ] [ detail ] [ reverse ] [ last ] } [ __readonly__ { current_time <curr_time>
[ TABLE_show_log_output <install_id> <install_log_entry> + ] } ]
```

### Syntax Description

|                          |  |
|--------------------------|--|
| show                     | Show running system information                              |
| install                  | Install related show commands                                |
| log                      | log  |
| <i>id</i>                | (Optional) Install Identifies                                |
| from                     | (Optional) Starting at this install identifier               |
| <i>idl</i>               | (Optional) Install Identifier                                |
| detail                   | (Optional) Detailed information including impacted processes |
| reverse                  | (Optional) Displays the logs in reverse order                |
| last                     | (Optional) Display the logs for last install operation       |
| __readonly__             | (Optional)   |
| current_time             | (Optional) current time                                      |
| <i>curr_time</i>         | (Optional) current time                                      |
| TABLE_show_log_output    | (Optional)   |
| <i>install_id</i>        | (Optional) install operation id                              |
| <i>install_log_entry</i> | (Optional) install log entry                                 |

### Command Mode

- /exec

# show install packages

```
show install packages [ __readonly__ { <curr_nxos_image> [ TABLE_package_list <package_name>
<version> <state> ] } ]
```

## Syntax Description

|                           |                                 |
|---------------------------|---------------------------------|
| show                      | Show running system information |
| install                   | Install related show commands   |
| packages                  | All packages                    |
| <i>__readonly__</i>       | (Optional)                      |
| <i>curr_nxos_image</i>    | (Optional) NXOS image           |
| <i>TABLE_package_list</i> | (Optional)                      |
| <i>package_name</i>       | (Optional) Package name         |
| <i>version</i>            | (Optional) Package version      |
| <i>state</i>              | (Optional) package state        |

## Command Mode

- /exec

# show install patches

```
show install patches [ __readonly__ { <curr_nxos_image> [ TABLE_smu_list <install_smu_id>
<install_smu_state> [ TABLE_module_list <install_modno> <install_mod_smu_state> ] ] } ]
```

## Syntax Description

|                              |   |
|------------------------------|---|
| show                         | Show running system information             |
| install                      | Install related show commands               |
| patches                      | All Patches                                 |
| <i>__readonly__</i>          | (Optional)                                  |
| <i>TABLE_smu_list</i>        | (Optional)                                  |
| <i>curr_nxos_image</i>       | (Optional) NXOS image                       |
| <i>install_smu_id</i>        | (Optional) install operation smu identifier |
| <i>install_smu_state</i>     | (Optional) install operation smu state      |
| <i>TABLE_module_list</i>     | (Optional)                                  |
| <i>install_modno</i>         | (Optional) install operation module number  |
| <i>install_mod_smu_state</i> | (Optional) install operation module state   |

## Command Mode

- /exec

# show interface

```
show interface <iftun_desc> [ __readonly__ TABLE_interface <interface> <state> [ <state_rsn_desc> ] [
<desc> ] <admin-state> { <tunnel-ipv4> | <tunnel-ipv6> } <mtu> <bandwidth> <encap-type>
<keepalive-period> <keepalive-retries> { <src-ipv4> | <src-ipv6> } <src-intf> { <dest-ipv4> | <dest-ipv6> }
<dest-hostname> <vrf_name> <wccp_header> <ttl_val> <tunnel_pmtud_age_time> <tunnel_pmtud_min_mtu>
<tunnel_pmtud> <tunnel_pgm_mtu> <tunnel_rx_pkt_count> <tunnel_rx_byte_count> <tunnel_rx_rate>
<tunnel_tx_pkt_count> <tunnel_tx_byte_count> <tunnel_tx_rate> <tunnel_clear_counter> ]
```

## Syntax Description

|                          |  |
|--------------------------|--|
| show                     | Show running system information                |
| interface                | Show interface status and information          |
| <i>iftun_desc</i>        | Enter tunnel interface number                  |
| <i>__readonly__</i>      | (Optional) Read Only                           |
| <i>interface</i>         | (Optional) Interface index                     |
| TABLE_interface          | (Optional) show interface                      |
| <i>state</i>             | (Optional) Interface state                     |
| <i>state_rsn_desc</i>    | (Optional) Interface state reason detailed     |
| <i>desc</i>              | (Optional) Interface description               |
| <i>admin-state</i>       | (Optional)                                     |
| <i>tunnel-ipv4</i>       | (Optional) interface IPv4 address              |
| <i>mtu</i>               | (Optional) interface Maximum Transmission Unit |
| <i>bandwidth</i>         | (Optional) interface Bandwidth in kilobits     |
| <i>encap-type</i>        | (Optional)                                     |
| <i>keepalive-period</i>  | (Optional) keealive period                     |
| <i>keepalive-retries</i> | (Optional) number of retries                   |
| <i>src-ipv4</i>          | (Optional) tunnel source IPv4 address          |
| <i>src-intf</i>          | (Optional) tunnel source interface             |
| <i>dest-ipv4</i>         | (Optional) tunnel destination IPv4 address     |
| <i>dest-hostname</i>     | (Optional) tunnel destination hostname         |
| <i>vrf_name</i>          | (Optional) transport VRF name                  |
| <i>wccp_header</i>       | (Optional) wccp header                         |

|                              |   |
|------------------------------|---|
| <i>ttl_val</i>               | (Optional) tunnel time to live value                |
| <i>tunnel_pmtud_age_time</i> | (Optional) tunnel path MTU discovery age time       |
| <i>tunnel_pmtud_min_mtu</i>  | (Optional) tunnel path MTU discovery min mtu        |
| <i>tunnel_pmtud</i>          | (Optional) tunnel path MTU discovered               |
| <i>tunnel_pgm_mtu</i>        | (Optional) tunnel actual programmed MTU             |
| <i>tunnel_rx_pkt_count</i>   | (Optional) total number of packets received         |
| <i>tunnel_rx_byte_count</i>  | (Optional) total number of bytes received           |
| <i>tunnel_rx_rate</i>        | (Optional) packets input rate per 5 minutes         |
| <i>tunnel_tx_pkt_count</i>   | (Optional) total number of packets transmitted      |
| <i>tunnel_tx_byte_count</i>  | (Optional) total number of bytes transmitted        |
| <i>tunnel_tx_rate</i>        | (Optional) packets transmitted per 5 minutes        |
| <i>tunnel_clear_counter</i>  | (Optional) Last clearing of show interface counters |

**Command Mode**

- /exec





### Syntax Description

|                               |   |
|-------------------------------|---|
| show                          | Show running system information                       |
| interface                     | Show interface status and information                 |
| <i>ifid</i>                   | Enter interface type and number in module/slot format |
| brief                         | (Optional) Show brief info of interface               |
| quick                         | (Optional) Show info of interface skipping stats      |
| __readonly__                  | (Optional) Read Only                                  |
| TABLE_interface               | (Optional) show interface                             |
| <i>interface</i>              | (Optional) Interface index                            |
| <i>desc</i>                   | (Optional) Interface description                      |
| <i>svi_if_index</i>           | (Optional) Interface                                  |
| <i>svi_admin_state</i>        | (Optional)  |
| <i>svi_rsn_desc</i>           | (Optional) Interface state reason detailed            |
| <i>svi_line_proto</i>         | (Optional)  |
| <i>svi_hw</i>                 | (Optional) Hardware                                   |
| <i>svi_mac</i>                | (Optional) Address                                    |
| <i>svi_desc</i>               | (Optional) Interface Description                      |
| <i>svi_ip_addr</i>            | (Optional) IP Address                                 |
| <i>svi_ip_mask</i>            | (Optional) IP address mask                            |
| <i>svi_mtu</i>                | (Optional) MTU size in bytes                          |
| <i>svi_bw</i>                 | (Optional) Bandwidth in kilobits                      |
| <i>svi_delay</i>              | (Optional) Throughput delay (tens of microseconds)    |
| <i>svi_tx_load</i>            | (Optional) Tx Load                                    |
| <i>svi_rx_load</i>            | (Optional) Rx Load                                    |
| <i>svi_carrier_delay_sec</i>  | (Optional) carrier delay value in seconds             |
| <i>svi_carrier_delay_msec</i> | (Optional) carrier delay value in milli-seconds       |
| <i>svi_arp_type</i>           | (Optional) ARP type                                   |
| <i>svi_arp_timeout</i>        | (Optional) ARP timeout value                          |
| <i>svi_time_last_cleared</i>  | (Optional) Time last cleared                          |

|                              |  |
|------------------------------|--|
| <i>TABLE_sec_vlan</i>        | (Optional) secondary vlans                 |
| <i>sec_vlan</i>              | (Optional) vlan id                         |
| <i>sec_vlan_type</i>         | (Optional) secondary vlan type             |
| <i>eth_load_interval1_rx</i> | (Optional) interval 1 timer value in sec   |
| <i>eth_inrate1_bits</i>      | (Optional) interval 1 input rate bits/sec  |
| <i>eth_inrate1_pkts</i>      | (Optional) interval 1 input rate pkts/sec  |
| <i>eth_load_interval1_tx</i> | (Optional) interval 1 timer value in sec   |
| <i>eth_outrate1_bits</i>     | (Optional) interval 1 output rate bits/sec |
| <i>eth_outrate1_pkts</i>     | (Optional) interval 1 output rate pkts/sec |
| <i>eth_load_interval2</i>    | (Optional) interval 2 timer value in sec   |
| <i>eth_inrate2_bits</i>      | (Optional) interval 2 input rate bits/sec  |
| <i>eth_inrate2_pkts</i>      | (Optional) interval 2 input rate pkts/sec  |
| <i>eth_outrate2_bits</i>     | (Optional) interval 2 output rate bits/sec |
| <i>eth_outrate2_pkts</i>     | (Optional) interval 2 output rate pkts/sec |
| <i>eth_load_interval3</i>    | (Optional) interval 3 timer value in sec   |
| <i>eth_inrate3_bits</i>      | (Optional) interval 3 input rate bits/sec  |
| <i>eth_inrate3_pkts</i>      | (Optional) interval 3 input rate pkts/sec  |
| <i>eth_outrate3_bits</i>     | (Optional) interval 3 output rate bits/sec |
| <i>eth_outrate3_pkts</i>     | (Optional) interval 3 output rate pkts/sec |
| <i>eth_l2_ucastpkts</i>      | (Optional) L2 switched ucast pkts          |
| <i>eth_l2_ucastbytes</i>     | (Optional) L2 switched ucast bytes         |
| <i>eth_l2_mcastpkts</i>      | (Optional) L2 switched mcast pkts          |
| <i>eth_l2_mcastbytes</i>     | (Optional) L2 switched mcast bytes         |
| <i>eth_l2_bcastpkts</i>      | (Optional) L2 switched bcast pkts          |
| <i>eth_l2_bcastbytes</i>     | (Optional) L2 switched bcast bytes         |
| <i>eth_l3in_ucastpkts</i>    | (Optional) IPv4 L3 in switched ucast pkts  |
| <i>eth_l3in_ucastbytes</i>   | (Optional) IPv4 L3 in switched ucast bytes |
| <i>eth_l3in_mcastpkts</i>    | (Optional) IPv4 L3 in switched mcast pkts  |
| <i>eth_l3in_mcastbytes</i>   | (Optional) IPv4 L3 in switched mcast bytes |

|                               |  |
|-------------------------------|--|
| <i>eth_l3in_bcastpkts</i>     | (Optional) L3 in switched bcast pkts                     |
| <i>eth_l3in_bcastbytes</i>    | (Optional) L3 in switched bcast bytes                    |
| <i>eth_l3out_ucastpkts</i>    | (Optional) IPv4 L3 out switched ucast pkts               |
| <i>eth_l3out_ucastbytes</i>   | (Optional) IPv4 L3 out switched ucast bytes              |
| <i>eth_l3out_mcastpkts</i>    | (Optional) IPv4 L3 out switched mcast pkts               |
| <i>eth_l3out_mcastbytes</i>   | (Optional) IPv4 L3 out switched mcast bytes              |
| <i>eth_l3out_bcastpkts</i>    | (Optional) L3 out switched bcast pkts                    |
| <i>eth_l3out_bcastbytes</i>   | (Optional) L3 out switched bcast bytes                   |
| <i>eth_l3in_routed_pkts</i>   | (Optional) L3 in routed pkts                             |
| <i>eth_l3in_routed_bytes</i>  | (Optional) L3 in routed bytes                            |
| <i>eth_l3out_routed_pkts</i>  | (Optional) L3 out routed pkts                            |
| <i>eth_l3out_routed_bytes</i> | (Optional) L3 out routed bytes                           |
| <i>eth_l3avg1_inbytes</i>     | (Optional) Load interval 1 L3 average in switched bytes  |
| <i>eth_l3avg1_inpkts</i>      | (Optional) Load interval 1 L3 average in switched pkts   |
| <i>eth_l3avg1_outbytes</i>    | (Optional) Load interval 1 L3 average out switched bytes |
| <i>eth_l3avg1_outpkts</i>     | (Optional) Load interval 1 L3 average out switched pkts  |
| <i>eth_l3avg2_inbytes</i>     | (Optional) Load interval 2 L3 average in switched bytes  |
| <i>eth_l3avg2_inpkts</i>      | (Optional) Load interval 2 L3 average in switched pkts   |
| <i>eth_l3avg2_outbytes</i>    | (Optional) Load interval 2 L3 average out switched bytes |
| <i>eth_l3avg2_outpkts</i>     | (Optional) Load interval 2 L3 average out switched pkts  |
| <i>eth_l3avg3_inbytes</i>     | (Optional) Load interval 3 L3 average in switched bytes  |
| <i>eth_l3avg3_inpkts</i>      | (Optional) Load interval 3 L3 average in switched pkts   |
| <i>eth_l3avg3_outbytes</i>    | (Optional) Load interval 3 L3 average out switched bytes |
| <i>eth_l3avg3_outpkts</i>     | (Optional) Load interval 3 L3 average out switched pkts  |
| <i>eth_inpkts</i>             | (Optional) Packets input                                 |
| <i>eth_inbytes</i>            | (Optional) Bytes input                                   |
| <i>eth_nobuf</i>              | (Optional) No buffer received                            |
| <i>eth_inbcst</i>             | (Optional) Broadcasts                                    |
| <i>eth_inmcast</i>            | (Optional) Multicasts                                    |

|                            |   |
|----------------------------|---|
| <i>eth_inucast</i>         | (Optional) Unicasts                             |
| <i>eth_ingiants</i>        | (Optional) giants                               |
| <i>eth_ipmcast</i>         | (Optional) IP multicast                         |
| <i>eth_inhw_switched</i>   | (Optional) Input H/W Switched                   |
| <i>eth_insw_switched</i>   | (Optional) Input S/W Switched                   |
| <i>eth_runts</i>           | (Optional) runts                                |
| <i>eth_storm_supp</i>      | (Optional) storm suppression                    |
| <i>eth_throtles</i>        | (Optional) throttles                            |
| <i>eth_inerr</i>           | (Optional) input errors                         |
| <i>eth_crc</i>             | (Optional) CRC                                  |
| <i>eth_ecc</i>             | (Optional) ECC                                  |
| <i>eth_frame</i>           | (Optional) frame                                |
| <i>eth_overrun</i>         | (Optional) overrun                              |
| <i>eth_ignored</i>         | (Optional) ignored                              |
| <i>eth_watchdog</i>        | (Optional) watchdog                             |
| <i>eth_outbcast</i>        | (Optional) Broadcasts                           |
| <i>eth_outmcast</i>        | (Optional) Multicasts                           |
| <i>eth_outucast</i>        | (Optional) Unicasts                             |
| <i>eth_outgiants</i>       | (Optional) giants                               |
| <i>eth_inpause</i>         | (Optional) pause input                          |
| <i>eth_dribble</i>         | (Optional) input packets with dribble condition |
| <i>eth_in_ifdown_drops</i> | (Optional) Input if-down drops                  |
| <i>eth_bad_eth</i>         | (Optional) bad ether type drop                  |
| <i>eth_bad_proto</i>       | (Optional) bad protocol drops                   |
| <i>eth_outpkts</i>         | (Optional) packets output                       |
| <i>eth_outbytes</i>        | (Optional) bytes output                         |
| <i>eth_underrun</i>        | (Optional) underruns                            |
| <i>eth_outhw_switched</i>  | (Optional) Out H/W Switched                     |
| <i>eth_outsw_switched</i>  | (Optional) Out S/W Switched                     |

|                             |  |
|-----------------------------|--|
| <i>eth_outerr</i>           | (Optional) output errors                         |
| <i>eth_coll</i>             | (Optional) collisions                            |
| <i>eth_resets</i>           | (Optional) interface resets                      |
| <i>eth_babbles</i>          | (Optional) babbles                               |
| <i>eth_latecoll</i>         | (Optional) late collision                        |
| <i>eth_deferred</i>         | (Optional) deferred                              |
| <i>eth_lostcarrier</i>      | (Optional) lost carrier                          |
| <i>eth_nocarrier</i>        | (Optional) no carrier                            |
| <i>eth_outpause</i>         | (Optional) PAUSE output                          |
| <i>eth_buffail</i>          | (Optional) output buffer failures                |
| <i>eth_bufswapped</i>       | (Optional) output buffers swapped out            |
| <i>eth_arpdrops</i>         | (Optional) arp drops                             |
| <i>eth_out_ifdown_drops</i> | (Optional) Output if-down drops                  |
| <i>eth_single_coll</i>      | (Optional) single collisions                     |
| <i>eth_multi_coll</i>       | (Optional) multi collisions                      |
| <i>eth_excess_coll</i>      | (Optional) excessive collisions                  |
| <i>eth_jabbers</i>          | (Optional) jabbers                               |
| <i>eth_shortframe</i>       | (Optional) short frames                          |
| <i>eth_indiscard</i>        | (Optional) discards                              |
| <i>eth_bad_encap</i>        | (Optional) bad encapsulation                     |
| <i>eth_outcrc</i>           | (Optional) Output CRC                            |
| <i>eth_symbol</i>           | (Optional) symbol errors                         |
| <i>eth_out_drops</i>        | (Optional) output drops                          |
| <i>eth_sqetest</i>          | (Optional) SQE test                              |
| <i>eth_inb64</i>            | (Optional) input pkts between 0 and 64 bytes     |
| <i>eth_inb65_127</i>        | (Optional) input pkts between 65 and 127 bytes   |
| <i>eth_inb128_255</i>       | (Optional) input pkts between 128 and 255 bytes  |
| <i>eth_inb256_511</i>       | (Optional) input pkts between 256 and 511 bytes  |
| <i>eth_inb512_1023</i>      | (Optional) input pkts between 512 and 1023 bytes |

|                             |  |
|-----------------------------|--|
| <i>eth_inb1024_1518</i>     | (Optional) input pkts between 1024 and 1518 bytes  |
| <i>eth_inb1519_1548</i>     | (Optional) input pkts between 1519 and 1548 bytes  |
| <i>eth_intrunk</i>          | (Optional) input trunk pkts                        |
| <i>eth_outb64</i>           | (Optional) output pkts between 0 and 64 bytes      |
| <i>eth_outb65_127</i>       | (Optional) output pkts between 65 and 127 bytes    |
| <i>eth_outb128_255</i>      | (Optional) output pkts between 128 and 255 bytes   |
| <i>eth_outb256_511</i>      | (Optional) output pkts between 256 and 511 bytes   |
| <i>eth_outb512_1023</i>     | (Optional) output pkts between 512 and 1023 bytes  |
| <i>eth_outb1024_1518</i>    | (Optional) output pkts between 1024 and 1518 bytes |
| <i>eth_outb1519_1548</i>    | (Optional) output pkts between 1519 and 1548 bytes |
| <i>eth_outtrunk</i>         | (Optional) output trunk pkts                       |
| <i>eth_bpdu_outlost</i>     | (Optional) BPDU output lost                        |
| <i>eth_cos0_outlost</i>     | (Optional) output pkts                             |
| <i>eth_cos1_outlost</i>     | (Optional) output pkts                             |
| <i>eth_cos2_outlost</i>     | (Optional) output pkts                             |
| <i>eth_cos3_outlost</i>     | (Optional) output pkts                             |
| <i>eth_cos4_outlost</i>     | (Optional) output pkts                             |
| <i>eth_cos5_outlost</i>     | (Optional) output pkts                             |
| <i>eth_cos6_outlost</i>     | (Optional) output pkts                             |
| <i>eth_cos7_outlost</i>     | (Optional) output pkts                             |
| <i>eth_fcoe_in_pkts</i>     | (Optional) fcoe in pkts                            |
| <i>eth_fcoe_in_octets</i>   | (Optional) fcoe in octets                          |
| <i>eth_fcoe_out_pkts</i>    | (Optional) fcoe out pkts                           |
| <i>eth_fcoe_out_octets</i>  | (Optional) fcoe out octets                         |
| <i>eth_nfcoe_in_pkts</i>    | (Optional) nfcoe in pkts                           |
| <i>eth_nfcoe_in_octets</i>  | (Optional) nfcoe in octets                         |
| <i>eth_nfcoe_out_pkts</i>   | (Optional) nfcoe out pkts                          |
| <i>eth_nfcoe_out_octets</i> | (Optional) nfcoe out octets                        |
| <i>eth_eee_atx_lpi_msec</i> | (Optional) Tx Lpi usec                             |

|                                     |                                   |
|-------------------------------------|-----------------------------------|
| <i>eth_eee_arcv_lpi_msec</i>        | (Optional) Rx Lpi usec            |
| <i>eth_eee_atx_lpi_transitions</i>  | (Optional) Tx Lpi requests        |
| <i>eth_eee_arcv_lpi_transitions</i> | (Optional) Rx Lpi indications     |
| <i>eth_phy_ber_count</i>            | (Optional) Bit error rate counter |
| <i>eth_phy_errblks_count</i>        | (Optional) Errored blocks counter |
| <i>svi_reliability</i>              | (Optional) Reliability            |
| <i>switchport</i>                   | (Optional) Switchport enabled     |

**Command Mode**

- /exec



# show interface

```
show interface <ifmgmt> [ __readonly__ TABLE_interface <interface> <state> [ <state_rsn_desc> ] [
<state_rsn> ] [ <eth_rsn_fac> ] [ <eth_rsn_code> ] [ <share_state> ] [ <eth_bundle> ] [ <eth_dce_mode> ] [
<vpc_status> ] [ <eth_hw_desc> ] [ <eth_hw_addr> ] [ <eth_bia_addr> ] [ <desc> ] [ <eth_ip_addr> ] [
<eth_ip_mask> ] [ <eth_ip_prefix> ] [ <eth_mtu> ] [ <eth_bw> ] [ <eth_encap_vlan> ] [ <eth_dly> ] [
<eth_reliability> ] [ <eth_txload> ] [ <eth_rxload> ] [ <eth_loopback> ] [ <eth_keepalive> ] [ <eth_duplex>
] [ <eth_speed> ] [ <eth_mode> ] [ <eth_ratemode> ] [ <eth_autoneg> ] [ <eth_beacon> ] [ <eth_media> ] [
<eth_in_flowctrl> ] [ <eth_out_flowctrl> ] [ <eth_mdix> ] [ <eth_swt_monitor> ] [ <eth_ether_type> ] [
<eth_members> ] [ <eth_clk_mode> ] [ <eth_arp_type> ] [ <eth_arp_timeout> ] [ <eth_last_in> ] [
<eth_last_out> ] [ <eth_out_hang> ] [ <eth_clear_counters> ] [ <eth_link_flapped> ] [ <eth_inq_size> ] [
<eth_inq_max> ] [ <eth_inq_drops> ] [ <eth_inq_flush> ] [ <eth_out_drop> ] [ <eth_q_strategy> ] [
<eth_outq_size> ] [ <eth_outq_max> ] [ <eth_reset_cntr> ] [ <mgmt_hw_desc> ] [ <mgmt_hw_addr> ] [
<mgmt_ip_addr> ] [ <mgmt_ip_mask> ] [ <mgmt_mtu> ] [ <mgmt_speed> ] [ <mgmt_duplex> ] [
<vdc_lvl_in_avg_bits> ] [ <vdc_lvl_in_avg_pkts> ] [ <vdc_lvl_out_avg_bits> ] [ <vdc_lvl_out_avg_pkts>
] [ <vdc_lvl_in_pkts> ] [ <vdc_lvl_in_ucast> ] [ <vdc_lvl_in_mcast> ] [ <vdc_lvl_in_bcast> ] [
<vdc_lvl_in_bytes> ] [ <vdc_lvl_in_bps> ] [ <vdc_lvl_in_pps> ] [ <vdc_lvl_out_pkts> ] [ <vdc_lvl_out_ucast>
] [ <vdc_lvl_out_mcast> ] [ <vdc_lvl_out_bcast> ] [ <vdc_lvl_out_bytes> ] [ <vdc_lvl_out_bps> ] [
<vdc_lvl_out_pps> ] ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                       |
| interface             | Show interface status and information                 |
| <i>ifmgmt</i>         | Enter interface type and number in module/slot format |
| <u>__readonly__</u>   | (Optional) Read Only                                  |
| <i>interface</i>      | (Optional) Interface index                            |
| TABLE_interface       | (Optional) show interface                             |
| <i>state</i>          | (Optional) Interface state                            |
| <i>state_rsn_desc</i> | (Optional) Interface state reason detailed            |
| <i>state_rsn</i>      | (Optional) Interface state reason                     |
| <i>eth_rsn_fac</i>    | (Optional) State reason facility                      |
| <i>eth_rsn_code</i>   | (Optional) State reason code                          |
| <i>share_state</i>    | (Optional) Interface ownership                        |
| <i>eth_bundle</i>     | (Optional) Belongs to bundle                          |
| <i>eth_dce_mode</i>   | (Optional) DCE mode description                       |
| <i>vpc_status</i>     | (Optional) VPC status                                 |
| <i>eth_hw_desc</i>    | (Optional) HW description                             |

|                         |                                    |
|-------------------------|------------------------------------|
| <i>eth_hw_addr</i>      | (Optional) HW address              |
| <i>eth_bia_addr</i>     | (Optional) bia address             |
| <i>desc</i>             | (Optional) Interface description   |
| <i>eth_ip_addr</i>      | (Optional) IP Address              |
| <i>eth_ip_mask</i>      | (Optional) IP address mask         |
| <i>eth_ip_prefix</i>    | (Optional) IP address prefix       |
| <i>eth_mtu</i>          | (Optional) MTU                     |
| <i>eth_bw</i>           | (Optional) Bandwidth               |
| <i>eth_encap_vlan</i>   | (Optional) Encapsulation Vlan      |
| <i>eth_dly</i>          | (Optional) Delay                   |
| <i>eth_reliability</i>  | (Optional) Reliability             |
| <i>eth_txload</i>       | (Optional) Tx load                 |
| <i>eth_rxload</i>       | (Optional) Rx load                 |
| <i>eth_loopback</i>     | (Optional) Loopback                |
| <i>eth_keepalive</i>    | (Optional) Keepalive               |
| <i>eth_duplex</i>       | (Optional) Duplex                  |
| <i>eth_speed</i>        | (Optional) Speed                   |
| <i>eth_mode</i>         | (Optional) Port mode               |
| <i>eth_ratemode</i>     | (Optional) Rate mode               |
| <i>eth_autoneg</i>      | (Optional) Autonegotiation         |
| <i>eth_beacon</i>       | (Optional) Beacon                  |
| <i>eth_media</i>        | (Optional) Media type              |
| <i>eth_in_flowctrl</i>  | (Optional) Input flowcontrol       |
| <i>eth_out_flowctrl</i> | (Optional) Output flowcontrol      |
| <i>eth_mdix</i>         | (Optional) Mdx                     |
| <i>eth_swt_monitor</i>  | (Optional) Switchport Monitor      |
| <i>eth_etherType</i>    | (Optional) EtherType               |
| <i>eth_members</i>      | (Optional) Members in this channel |
| <i>eth_clk_mode</i>     | (Optional) Clock mode              |

|                             |   |
|-----------------------------|---|
| <i>eth_arp_type</i>         | (Optional) ARP type                                 |
| <i>eth_arp_timeout</i>      | (Optional) ARP timeout                              |
| <i>eth_last_in</i>          | (Optional) Last input                               |
| <i>eth_last_out</i>         | (Optional) Last output                              |
| <i>eth_out_hang</i>         | (Optional) Last output hang                         |
| <i>eth_clear_counters</i>   | (Optional) Last clearing of show interface counters |
| <i>eth_link_flapped</i>     | (Optional) Last link flapped                        |
| <i>eth_inq_size</i>         | (Optional) Input queue size                         |
| <i>eth_inq_max</i>          | (Optional) Input queue max                          |
| <i>eth_inq_drops</i>        | (Optional) Input queue drops                        |
| <i>eth_inq_flush</i>        | (Optional) Input queue flushes                      |
| <i>eth_out_drop</i>         | (Optional) Output drops                             |
| <i>eth_q_strategy</i>       | (Optional) Queuing strategy                         |
| <i>eth_outq_size</i>        | (Optional) Output queue size                        |
| <i>eth_outq_max</i>         | (Optional) Output queue max                         |
| <i>eth_reset_cntr</i>       | (Optional) Interface resets                         |
| <i>mgmt_hw_desc</i>         | (Optional) HW description                           |
| <i>mgmt_hw_addr</i>         | (Optional) HW address                               |
| <i>mgmt_ip_addr</i>         | (Optional) IP address                               |
| <i>mgmt_ip_mask</i>         | (Optional) IP address mask                          |
| <i>mgmt_mtu</i>             | (Optional) MTU                                      |
| <i>mgmt_speed</i>           | (Optional) Speed                                    |
| <i>mgmt_duplex</i>          | (Optional) Duplex                                   |
| <i>vdc_lvl_in_avg_bits</i>  | (Optional) VDC level average input bits             |
| <i>vdc_lvl_in_avg_pkts</i>  | (Optional) VDC level average input packets          |
| <i>vdc_lvl_out_avg_bits</i> | (Optional) VDC level average output bits            |
| <i>vdc_lvl_out_avg_pkts</i> | (Optional) VDC level average output packets         |
| <i>vdc_lvl_in_pkts</i>      | (Optional) VDC level input packets                  |
| <i>vdc_lvl_in_ucast</i>     | (Optional) VDC level input unicast packets          |

|                          |  |
|--------------------------|--|
| <i>vdc_lvl_in_mcast</i>  | (Optional) VDC level input multicast packets   |
| <i>vdc_lvl_in_bcast</i>  | (Optional) VDC level input broadcast packets   |
| <i>vdc_lvl_in_bytes</i>  | (Optional) VDC level input bytes               |
| <i>vdc_lvl_in_bps</i>    | (Optional) VDC level input bytes per second    |
| <i>vdc_lvl_in_pps</i>    | (Optional) VDC level input packets per second  |
| <i>vdc_lvl_out_pkts</i>  | (Optional) VDC level output packets            |
| <i>vdc_lvl_out_ucast</i> | (Optional) VDC level output unicast packets    |
| <i>vdc_lvl_out_mcast</i> | (Optional) VDC level output multicast packets  |
| <i>vdc_lvl_out_bcast</i> | (Optional) VDC level output broadcast packets  |
| <i>vdc_lvl_out_bytes</i> | (Optional) VDC level output bytes              |
| <i>vdc_lvl_out_bps</i>   | (Optional) VDC level output bytes per second   |
| <i>vdc_lvl_out_pps</i>   | (Optional) VDC level output packets per second |

**Command Mode**

- /exec

## show interface

```

show interface [ controller | quick ] [ __readonly__ TABLE_interface <interface> [ <state> ] [ <state_rsn_desc>
] [ <state_rsn> ] [ <eth_rsn_fac> ] [ <eth_rsn_code> ] [ <admin_state> ] [ <share_state> ] [ <parent_interface>
] [ <vpc_status> ] [ <eth_bundle> ] [ <eth_hw_desc> ] [ <eth_hw_addr> ] [ <eth_bia_addr> ] [ <desc> ] [
<eth_ip_addr> ] [ <eth_ip_mask> ] [ <eth_ip_prefix> ] [ <eth_mtu> ] + [ <eth_bw> ] [ <eth_dly> ] [
<eth_reliability> ] [ <eth_txload> ] [ <eth_rxload> ] [ <eth_encap_vlan> ] [ <medium> ] [ <eth_mode> ] [
<eth_duplex> ] [ <eth_speed> ] [ <eth_media> ] [ <eth_beacon> ] [ <eth_autoneg> ] [ <eth_in_flowctrl> ] [
<eth_out_flowctrl> ] [ <eth_mdix> ] [ <eth_ratemode> ] [ <eth_swt_monitor> ] [ <eth_ethertype> ] [
<eth_eee_state> ] [ <eth_members> ] [ <eth_link_flapped> ] [ <eth_clear_counters> ] [ <eth_reset_cntr> ] [
<eth_load_interval1> ] [ <eth_load_interval1_rx> ] [ <eth_inrate1_bits> ] [ <eth_inrate1_pkts> ] [
<eth_load_interval1_tx> ] [ <eth_outrate1_bits> ] [ <eth_outrate1_pkts> ] [ <eth_load_interval2> ] [
<eth_inrate1_summary_bits> ] [ <eth_inrate1_summary_pkts> ] [ <eth_outrate1_summary_bits> ] [
<eth_outrate1_summary_pkts> ] [ <eth_load_interval2_rx> ] [ <eth_inrate2_bits> ] [ <eth_inrate2_pkts> ] [
<eth_load_interval2_tx> ] [ <eth_outrate2_bits> ] [ <eth_outrate2_pkts> ] [ <eth_load_interval3> ] [
<eth_inrate2_summary_bits> ] [ <eth_inrate2_summary_pkts> ] [ <eth_outrate2_summary_bits> ] [
<eth_outrate2_summary_pkts> ] [ <eth_load_interval3_rx> ] [ <eth_inrate3_bits> ] [ <eth_inrate3_pkts> ] [
<eth_load_interval3_tx> ] [ <eth_outrate3_bits> ] [ <eth_outrate3_pkts> ] [ <eth_inrate3_summary_bits> ]
[ <eth_inrate3_summary_pkts> ] [ <eth_outrate3_summary_bits> ] [ <eth_outrate3_summary_pkts> ] [
<eth_l2_ucastpkts> ] [ <eth_l2_ucastbytes> ] [ <eth_l2_mcastpkts> ] [ <eth_l2_mcastbytes> ] [
<eth_l2_bcastpkts> ] [ <eth_l2_bcastbytes> ] [ <eth_l3in_routed_pkts> ] [ <eth_l3in_routed_bytes> ] [
<eth_l3out_routed_pkts> ] [ <eth_l3out_routed_bytes> ] [ <eth_l3in_ucastpkts> ] [ <eth_l3in_ucastbytes> ]
[ <eth_l3in_mcastpkts> ] [ <eth_l3in_mcastbytes> ] [ <eth_l3in_bcastpkts> ] [ <eth_l3in_bcastbytes> ] [
<eth_l3out_ucastpkts> ] [ <eth_l3out_ucastbytes> ] [ <eth_l3out_mcastpkts> ] [ <eth_l3out_mcastbytes> ] [
<eth_l3out_bcastpkts> ] [ <eth_l3out_bcastbytes> ] [ <eth_l3avg1_inbytes> ] [ <eth_l3avg1_inpkts> ] [
<eth_l3avg1_outbytes> ] [ <eth_l3avg1_outpkts> ] [ <eth_inucast> ] [ <eth_inmcast> ] [ <eth_inbcast> ] [
<eth_inpkts> ] [ <eth_inbytes> ] [ <eth_jumbo_inpkts> ] [ <eth_storm_supp> ] [ <eth_runts> ] [ <eth_giants>
] [ <eth_crc> ] [ <eth_nobuf> ] [ <eth_inerr> ] [ <eth_frame> ] [ <eth_overrun> ] [ <eth_underrun> ] [
<eth_ignored> ] [ <eth_watchdog> ] [ <eth_bad_eth> ] [ <eth_bad_proto> ] [ <eth_in_ifdown_drops> ] [
<eth_dribble> ] [ <eth_indiscard> ] [ <eth_inpause> ] [ <eth_outucast> ] [ <eth_outmcast> ] [ <eth_outbcast>
] [ <eth_outpkts> ] [ <eth_outbytes> ] [ <eth_jumbo_outpkts> ] [ <eth_outerr> ] [ <eth_coll> ] [ <eth_deferred>
] [ <eth_latecoll> ] [ <eth_lostcarrier> ] [ <eth_nocarrier> ] [ <eth_babbles> ] [ <eth_outdiscard> ] [
<eth_outpause> ] [ <mgmt_hw_desc> ] [ <mgmt_hw_addr> ] [ <mgmt_ip_addr> ] [ <mgmt_ip_mask> ] [
<mgmt_mtu> ] [ <mgmt_speed> ] [ <mgmt_duplex> ] [ <vdc_lvl_in_avg_bits> ] [ <vdc_lvl_in_avg_pkts>
] [ <vdc_lvl_out_avg_bits> ] [ <vdc_lvl_out_avg_pkts> ] [ <vdc_lvl_in_pkts> ] [ <vdc_lvl_in_ucast> ] [
<vdc_lvl_in_mcast> ] [ <vdc_lvl_in_bcast> ] [ <vdc_lvl_in_bytes> ] [ <vdc_lvl_in_bps> ] [ <vdc_lvl_in_pps>
] [ <vdc_lvl_out_pkts> ] [ <vdc_lvl_out_ucast> ] [ <vdc_lvl_out_mcast> ] [ <vdc_lvl_out_bcast> ] [
<vdc_lvl_out_bytes> ] [ <vdc_lvl_out_bps> ] [ <vdc_lvl_out_pps> ] [ <mgmt_in_pkts> ] [ <mgmt_in_bytes>
] [ <mgmt_in_mcast> ] [ <mgmt_in_compressed> ] [ <mgmt_in_errors> ] [ <mgmt_in_frame> ] [
<mgmt_in_overrun> ] [ <mgmt_in_fifo> ] [ <mgmt_out_pkts> ] [ <mgmt_out_bytes> ] [
<mgmt_out_underruns> ] [ <mgmt_out_errors> ] [ <mgmt_out_collisions> ] [ <mgmt_out_fifo> ] [
<mgmt_out_carrier> ] [ <mgmt_align_err> ] [ <mgmt_fcs_err> ] [ <mgmt_xmit_err> ] [ <mgmt_rcv_err> ]
[ <mgmt_undersize> ] [ <mgmt_outdisc> ] [ <mgmt_single_col> ] [ <mgmt_multi_col> ] [ <mgmt_late_col>
] [ <mgmt_excess_col> ] [ <mgmt_carri_sen> ] [ <mgmt_runts> ] [ <mgmt_giants> ] [ <mgmt_sqetest_err>
] [ <mgmt_deferred_tx> ] [ <mgmt_inmactx_err> ] [ <mgmt_inmacrx_err> ] [ <mgmt_symbol_err> ] [
<loop_in_pkts> ] [ <loop_in_bytes> ] [ <loop_in_mcast> ] [ <loop_in_compressed> ] [ <loop_in_errors> ]
[ <loop_in_frame> ] [ <loop_in_overrun> ] [ <loop_in_fifo> ] [ <loop_out_pkts> ] [ <loop_out_bytes> ] [
<loop_out_underruns> ] [ <loop_out_errors> ] [ <loop_out_collisions> ] [ <loop_out_fifo> ] [
<loop_out_carriers> ] <admin-state> { <tunnel-ipv4> | <tunnel-ipv6> } <mtu> <bandwidth> <encap-type>
<keepalive-period> <keepalive-retries> { <src-ipv4> | <src-ipv6> } <src-intf> { <dest-ipv4> | <dest-ipv6> }

```

```

<dest-hostname> <vrf_name> <wccp_header> <ttl_val> <tunnel_pmtud_age_time> <tunnel_pmtud_min_mtu>
<tunnel_pmtud> <tunnel_pgm_mtu> <tunnel_rx_pkt_count> <tunnel_rx_byte_count> <tunnel_rx_rate>
<tunnel_tx_pkt_count> <tunnel_tx_byte_count> <tunnel_tx_rate> <tunnel_clear_counter> [ <svi_if_index>
] [ <svi_admin_state> ] [ <svi_rsn_desc> ] [ <svi_line_proto> ] [ <svi_hw> ] [ <svi_mac> ] [ <svi_desc> ] [
<svi_ip_addr> ] [ <svi_ip_mask> ] [ <svi_mtu> ] [ <svi_bw> ] [ <svi_delay> ] [ <svi_tx_load> ] [
<svi_rx_load> ] [ <svi_carrier_delay_sec> ] [ <svi_carrier_delay_msec> ] [ <svi_arp_type> ] [
<svi_arp_timeout> ] [ <svi_time_last_cleared> ] { [ TABLE_sec_vlan ] [ <sec_vlan> ] [ <sec_vlan_type> ]
} [ <svi_routed_pkts_in> ] [ <svi_routed_bytes_in> ] [ <svi_routed_pkts_out> ] [ <svi_routed_bytes_out> ]
[ <svi_ucast_pkts_in> ] [ <svi_ucast_bytes_in> ] [ <svi_mcast_pkts_in> ] [ <svi_mcast_bytes_in> ] [
<svi_ucast_pkts_out> ] [ <svi_ucast_bytes_out> ] [ <svi_mcast_pkts_out> ] [ <svi_mcast_bytes_out> ] [
<svi_ipv4_ucast_pkts_in> ] [ <svi_ipv4_ucast_bytes_in> ] [ <svi_ipv4_ucast_pkts_out> ] [
<svi_ipv4_ucast_bytes_out> ] [ <svi_ipv4_mcast_pkts_in> ] [ <svi_ipv4_mcast_bytes_in> ] [
<svi_ipv4_mcast_pkts_out> ] [ <svi_ipv4_mcast_bytes_out> ] [ <svi_ipv6_ucast_pkts_in> ] [
<svi_ipv6_ucast_bytes_in> ] [ <svi_ipv6_ucast_pkts_out> ] [ <svi_ipv6_ucast_bytes_out> ] [
<svi_ipv6_mcast_pkts_in> ] [ <svi_ipv6_mcast_bytes_in> ] [ <svi_ipv6_mcast_pkts_out> ] [
<svi_ipv6_mcast_bytes_out> ] [ <svi_average_input_bits> ] [ <svi_average_input_packets> ] [
<svi_average_output_bits> ] [ <svi_average_output_packets> ] [ <svi_rate_in_mins> ] [ <svi_reliability> ]
[ <overlay_addr> ] [ <overlay_addr_mask> ] [ <overlay_mtu> ] [ <overlay_bandwidth> ] [ <overlay_encap_str>
] [ <overlay_vrf> ] [ <overlay_src_addr> ] [ <overlay_dst_addr> ] [ <overlay_last_link_flap> ] [
<overlay_clear_counters> ] [ <overlay_load_interval> ] [ <overlay_rx_ucastpkts> ] [ <overlay_rx_ucastbytes>
] [ <overlay_rx_mcastpkts> ] [ <overlay_rx_mcastbytes> ] [ <overlay_rx_pkts> ] [ <overlay_rx_bytes> ] [
<overlay_rx_bcastpkts> ] [ <overlay_rx_bcastbytes> ] [ <overlay_rx_bitrate> ] [ <overlay_rx_pktrate> ] [
<overlay_tx_ucastpkts> ] [ <overlay_tx_ucastbytes> ] [ <overlay_tx_mcastpkts> ] [ <overlay_tx_mcastbytes>
] [ <overlay_tx_bcastpkts> ] [ <overlay_tx_bcastbytes> ] [ <overlay_tx_pkts> ] [ <overlay_tx_bytes> ] [
<overlay_tx_bitrate> ] [ <overlay_tx_pktrate> ] <switchport> ]

```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                  |
| interface             | Show interface status and information            |
| controller            | (Optional) Show controller configured interfaces |
| quick                 | (Optional) Show info of interface skipping stats |
| __readonly__          | (Optional) Read Only                             |
| <i>interface</i>      | (Optional) Interface index                       |
| TABLE_interface       | (Optional) show interface                        |
| <i>state</i>          | (Optional) Interface state                       |
| <i>state_rsn_desc</i> | (Optional) Interface state reason detailed       |
| <i>state_rsn</i>      | (Optional) Interface state reason                |
| <i>switchport</i>     | (Optional) Switchport enabled                    |
| <i>eth_rsn_fac</i>    | (Optional) State reason facility                 |
| <i>eth_rsn_code</i>   | (Optional) State reason code                     |
| <i>admin_state</i>    | (Optional) admin state                           |

|                         |                                  |
|-------------------------|----------------------------------|
| <i>share_state</i>      | (Optional) Interface ownership   |
| <i>parent_interface</i> | (Optional) parent interface      |
| <i>vpc_status</i>       | (Optional) VPC status            |
| <i>eth_bundle</i>       | (Optional) Belongs to bundle     |
| <i>eth_hw_desc</i>      | (Optional) HW description        |
| <i>eth_hw_addr</i>      | (Optional) HW address            |
| <i>eth_bia_addr</i>     | (Optional) bia address           |
| <i>desc</i>             | (Optional) Interface description |
| <i>eth_ip_addr</i>      | (Optional) IP Address            |
| <i>eth_ip_mask</i>      | (Optional) IP address mask       |
| <i>eth_ip_prefix</i>    | (Optional) IP address prefix     |
| <i>eth_mtu</i>          | (Optional) MTU                   |
| <i>eth_bw</i>           | (Optional) Bandwidth             |
| <i>eth_dly</i>          | (Optional) Delay                 |
| <i>eth_reliability</i>  | (Optional) Reliability           |
| <i>eth_txload</i>       | (Optional) Tx load               |
| <i>eth_rxload</i>       | (Optional) Rx load               |
| <i>eth_encap_vlan</i>   | (Optional) Encapsulation Vlan    |
| <i>medium</i>           | (Optional) medium type           |
| <i>eth_mode</i>         | (Optional) Port mode             |
| <i>eth_duplex</i>       | (Optional) Duplex                |
| <i>eth_speed</i>        | (Optional) Speed                 |
| <i>eth_media</i>        | (Optional) Media type            |
| <i>eth_beacon</i>       | (Optional) Beacon                |
| <i>eth_autoneg</i>      | (Optional) Autonegotiation       |
| <i>eth_in_flowctrl</i>  | (Optional) Input flowcontrol     |
| <i>eth_out_flowctrl</i> | (Optional) Output flowcontrol    |
| <i>eth_mdix</i>         | (Optional) Mdx                   |
| <i>eth_ratemode</i>     | (Optional) Rate mode             |

|                                  |   |
|----------------------------------|---|
| <i>eth_sw_t_monitor</i>          | (Optional) Switchport Monitor                       |
| <i>eth_ether_tpe</i>             | (Optional) EtherType                                |
| <i>eth_eee_state</i>             | (Optional) EEE state                                |
| <i>eth_members</i>               | (Optional) Members in this channel                  |
| <i>eth_link_flapped</i>          | (Optional) Last link flapped                        |
| <i>eth_clear_counters</i>        | (Optional) Last clearing of show interface counters |
| <i>eth_reset_cntr</i>            | (Optional) Interface resets                         |
| <i>eth_load_interval1</i>        | (Optional) interval 1 timer value in sec            |
| <i>eth_load_interval1_rx</i>     | (Optional) interval 1 timer value in sec            |
| <i>eth_inrate1_bits</i>          | (Optional) interval 1 input rate bits/sec           |
| <i>eth_inrate1_pkts</i>          | (Optional) interval 1 input rate pkts/sec           |
| <i>eth_load_interval1_tx</i>     | (Optional) interval 1 timer value in sec            |
| <i>eth_outrate1_bits</i>         | (Optional) interval 1 output rate bits/sec          |
| <i>eth_outrate1_pkts</i>         | (Optional) interval 1 output rate pkts/sec          |
| <i>eth_load_interval2</i>        | (Optional) interval 2 timer value in sec            |
| <i>eth_inrate1_summary_bits</i>  | (Optional) interval 1 input rate bit summary        |
| <i>eth_inrate1_summary_pkts</i>  | (Optional) interval 1 input rate pkt summary        |
| <i>eth_outrate1_summary_bits</i> | (Optional) interval 1 output rate bit summary       |
| <i>eth_outrate1_summary_pkts</i> | (Optional) interval 1 output rate pkt summary       |
| <i>eth_load_interval2_rx</i>     | (Optional) interval 2 timer value in sec            |
| <i>eth_inrate2_bits</i>          | (Optional) interval 2 input rate bits/sec           |
| <i>eth_inrate2_pkts</i>          | (Optional) interval 2 input rate pkts/sec           |
| <i>eth_load_interval2_tx</i>     | (Optional) interval 2 timer value in sec            |
| <i>eth_outrate2_bits</i>         | (Optional) interval 2 output rate bits/sec          |
| <i>eth_outrate2_pkts</i>         | (Optional) interval 2 output rate pkts/sec          |
| <i>eth_load_interval3</i>        | (Optional) interval 3 timer value in sec            |
| <i>eth_inrate2_summary_bits</i>  | (Optional) interval 2 input rate bit summary        |
| <i>eth_inrate2_summary_pkts</i>  | (Optional) interval 2 input rate pkt summary        |
| <i>eth_outrate2_summary_bits</i> | (Optional) interval 2 output rate bit summary       |



|                                  |   |
|----------------------------------|---|
| <i>eth_outrate2_summary_pkts</i> | (Optional) interval 2 output rate pkt summary |
| <i>eth_load_interval3_rx</i>     | (Optional) interval 3 timer value in sec      |
| <i>eth_inrate3_bits</i>          | (Optional) interval 3 input rate bits/sec     |
| <i>eth_inrate3_pkts</i>          | (Optional) interval 3 input rate pkts/sec     |
| <i>eth_load_interval3_tx</i>     | (Optional) interval 3 timer value in sec      |
| <i>eth_outrate3_bits</i>         | (Optional) interval 3 output rate bits/sec    |
| <i>eth_outrate3_pkts</i>         | (Optional) interval 3 output rate pkts/sec    |
| <i>eth_inrate3_summary_bits</i>  | (Optional) interval 3 input rate bit summary  |
| <i>eth_inrate3_summary_pkts</i>  | (Optional) interval 3 input rate pkt summary  |
| <i>eth_outrate3_summary_bits</i> | (Optional) interval 3 output rate bit summary |
| <i>eth_outrate3_summary_pkts</i> | (Optional) interval 3 output rate pkt summary |
| <i>eth_l2_ucastpkts</i>          | (Optional) L2 switched ucast pkts             |
| <i>eth_l2_ucastbytes</i>         | (Optional) L2 switched ucast bytes            |
| <i>eth_l2_mcastpkts</i>          | (Optional) L2 switched mcast pkts             |
| <i>eth_l2_mcastbytes</i>         | (Optional) L2 switched mcast bytes            |
| <i>eth_l2_bcastpkts</i>          | (Optional) L2 switched bcast pkts             |
| <i>eth_l2_bcastbytes</i>         | (Optional) L2 switched bcast bytes            |
| <i>eth_l3in_ucastpkts</i>        | (Optional) L3 in switched ucast pkts          |
| <i>eth_l3in_ucastbytes</i>       | (Optional) L3 in switched ucast bytes         |
| <i>eth_l3in_mcastpkts</i>        | (Optional) L3 in switched mcast pkts          |
| <i>eth_l3in_mcastbytes</i>       | (Optional) L3 in switched mcast bytes         |
| <i>eth_l3in_bcastpkts</i>        | (Optional) L3 in switched bcast pkts          |
| <i>eth_l3in_bcastbytes</i>       | (Optional) L3 in switched bcast bytes         |
| <i>eth_l3out_ucastpkts</i>       | (Optional) L3 out switched ucast pkts         |
| <i>eth_l3out_ucastbytes</i>      | (Optional) L3 out switched ucast bytes        |
| <i>eth_l3out_mcastpkts</i>       | (Optional) L3 out switched mcast pkts         |
| <i>eth_l3out_mcastbytes</i>      | (Optional) L3 out switched mcast bytes        |
| <i>eth_l3out_bcastpkts</i>       | (Optional) L3 out switched bcast pkts         |
| <i>eth_l3out_bcastbytes</i>      | (Optional) L3 out switched bcast bytes        |

|                               |  |
|-------------------------------|--|
| <i>eth_l3in_routed_pkts</i>   | (Optional) L3 in routed pkts                             |
| <i>eth_l3in_routed_bytes</i>  | (Optional) L3 in routed bytes                            |
| <i>eth_l3out_routed_pkts</i>  | (Optional) L3 out routed pkts                            |
| <i>eth_l3out_routed_bytes</i> | (Optional) L3 out routed bytes                           |
| <i>eth_l3avg1_inbytes</i>     | (Optional) Load interval 1 L3 average in switched bytes  |
| <i>eth_l3avg1_inpkts</i>      | (Optional) Load interval 1 L3 average in switched pkts   |
| <i>eth_l3avg1_outbytes</i>    | (Optional) Load interval 1 L3 average out switched bytes |
| <i>eth_l3avg1_outpkts</i>     | (Optional) Load interval 1 L3 average out switched pkts  |
| <i>eth_inucast</i>            | (Optional) Unicasts                                      |
| <i>eth_inmcast</i>            | (Optional) Multicasts                                    |
| <i>eth_inbcast</i>            | (Optional) Broadcasts                                    |
| <i>eth_inpkts</i>             | (Optional) Packets input                                 |
| <i>eth_inbytes</i>            | (Optional) Bytes input                                   |
| <i>eth_jumbo_inpkts</i>       | (Optional) Incoming jumbo pkts                           |
| <i>eth_storm_supp</i>         | (Optional) storm suppression                             |
| <i>eth_runts</i>              | (Optional) runts   |
| <i>eth_giants</i>             | (Optional) giants  |
| <i>eth_crc</i>                | (Optional) CRC   |
| <i>eth_nobuf</i>              | (Optional) No buffer received                            |
| <i>eth_inerr</i>              | (Optional) input errors                                  |
| <i>eth_frame</i>              | (Optional) frame   |
| <i>eth_overrun</i>            | (Optional) overrun                                       |
| <i>eth_underrun</i>           | (Optional) underruns                                     |
| <i>eth_ignored</i>            | (Optional) ignored                                       |
| <i>eth_watchdog</i>           | (Optional) watchdog                                      |
| <i>eth_bad_eth</i>            | (Optional) bad ether type drop                           |
| <i>eth_bad_proto</i>          | (Optional) bad protocol drops                            |
| <i>eth_in_ifdown_drops</i>    | (Optional) Input if-down drops                           |
| <i>eth_dribble</i>            | (Optional) input packets with dribble condition          |

|                             |   |
|-----------------------------|---|
| <i>eth_indiscard</i>        | (Optional) discards                         |
| <i>eth_inpause</i>          | (Optional) pause input                      |
| <i>eth_outucast</i>         | (Optional) Unicasts                         |
| <i>eth_outmcast</i>         | (Optional) Multicasts                       |
| <i>eth_outbcast</i>         | (Optional) Broadcasts                       |
| <i>eth_outpkts</i>          | (Optional) packets output                   |
| <i>eth_outbytes</i>         | (Optional) bytes output                     |
| <i>eth_jumbo_outpkts</i>    | (Optional) Outgoing jumbo pkts              |
| <i>eth_outerr</i>           | (Optional) output errors                    |
| <i>eth_coll</i>             | (Optional) collisions                       |
| <i>eth_deferred</i>         | (Optional) deferred                         |
| <i>eth_latecoll</i>         | (Optional) late collision                   |
| <i>eth_lostcarrier</i>      | (Optional) lost carrier                     |
| <i>eth_nocarrier</i>        | (Optional) no carrier                       |
| <i>eth_babbles</i>          | (Optional) babbles                          |
| <i>eth_outdiscard</i>       | (Optional) output discard                   |
| <i>eth_outpause</i>         | (Optional) PAUSE output                     |
| <i>mgmt_hw_desc</i>         | (Optional) HW description                   |
| <i>mgmt_hw_addr</i>         | (Optional) HW address                       |
| <i>mgmt_ip_addr</i>         | (Optional) IP address                       |
| <i>mgmt_ip_mask</i>         | (Optional) IP address mask                  |
| <i>mgmt_mtu</i>             | (Optional) MTU                              |
| <i>mgmt_speed</i>           | (Optional) Speed                            |
| <i>mgmt_duplex</i>          | (Optional) Duplex                           |
| <i>vdc_lvl_in_avg_bits</i>  | (Optional) VDC level average input bits     |
| <i>vdc_lvl_in_avg_pkts</i>  | (Optional) VDC level average input packets  |
| <i>vdc_lvl_out_avg_bits</i> | (Optional) VDC level average output bits    |
| <i>vdc_lvl_out_avg_pkts</i> | (Optional) VDC level average output packets |
| <i>vdc_lvl_in_pkts</i>      | (Optional) VDC level input packets          |

|                            |  |
|----------------------------|--|
| <i>vdc_lvl_in_ucast</i>    | (Optional) VDC level input unicast packets     |
| <i>vdc_lvl_in_mcast</i>    | (Optional) VDC level input multicast packets   |
| <i>vdc_lvl_in_bcast</i>    | (Optional) VDC level input broadcast packets   |
| <i>vdc_lvl_in_bytes</i>    | (Optional) VDC level input bytes               |
| <i>vdc_lvl_in_bps</i>      | (Optional) VDC level input bytes per second    |
| <i>vdc_lvl_in_pps</i>      | (Optional) VDC level input packets per second  |
| <i>vdc_lvl_out_pkts</i>    | (Optional) VDC level output packets            |
| <i>vdc_lvl_out_ucast</i>   | (Optional) VDC level output unicast packets    |
| <i>vdc_lvl_out_mcast</i>   | (Optional) VDC level output multicast packets  |
| <i>vdc_lvl_out_bcast</i>   | (Optional) VDC level output broadcast packets  |
| <i>vdc_lvl_out_bytes</i>   | (Optional) VDC level output bytes              |
| <i>vdc_lvl_out_bps</i>     | (Optional) VDC level output bytes per second   |
| <i>vdc_lvl_out_pps</i>     | (Optional) VDC level output packets per second |
| <i>mgmt_in_pkts</i>        | (Optional) Input packets                       |
| <i>mgmt_in_bytes</i>       | (Optional) Input bytes                         |
| <i>mgmt_in_mcast</i>       | (Optional) Input multicast frames              |
| <i>mgmt_in_compressed</i>  | (Optional) Input compressed                    |
| <i>mgmt_in_errors</i>      | (Optional) Input errors                        |
| <i>mgmt_in_frame</i>       | (Optional) Input frame errors                  |
| <i>mgmt_in_overnun</i>     | (Optional) Input overrun                       |
| <i>mgmt_in_fifo</i>        | (Optional) Input fifo                          |
| <i>mgmt_out_pkts</i>       | (Optional) Output packets                      |
| <i>mgmt_out_bytes</i>      | (Optional) Output bytes                        |
| <i>mgmt_out_underruns</i>  | (Optional) Output overruns                     |
| <i>mgmt_out_errors</i>     | (Optional) Output errors                       |
| <i>mgmt_out_collisions</i> | (Optional) Output collisions                   |
| <i>mgmt_out_fifo</i>       | (Optional) Output fifo                         |
| <i>mgmt_out_carrier</i>    | (Optional) Output carrier errors               |
| <i>mgmt_align_err</i>      | (Optional) Align error                         |

|                           |                               |
|---------------------------|-------------------------------|
| <i>mgmt_fcs_err</i>       | (Optional) FCS error          |
| <i>mgmt_xmit_err</i>      | (Optional) Transmit error     |
| <i>mgmt_rcv_err</i>       | (Optional) Receive error      |
| <i>mgmt_undersize</i>     | (Optional) Undersize          |
| <i>mgmt_outdisc</i>       | (Optional) Out discard        |
| <i>mgmt_single_col</i>    | (Optional) Single collision   |
| <i>mgmt_multi_col</i>     | (Optional) Multiple collision |
| <i>mgmt_late_col</i>      | (Optional) Late collision     |
| <i>mgmt_excess_col</i>    | (Optional) Excess collision   |
| <i>mgmt_carri_sen</i>     | (Optional) Carrier sense      |
| <i>mgmt_runts</i>         | (Optional) Runts              |
| <i>mgmt_giants</i>        | (Optional) Giants             |
| <i>mgmt_sqetest_err</i>   | (Optional) SQETest error      |
| <i>mgmt_deferred_tx</i>   | (Optional) Deferred tx        |
| <i>mgmt_inmactx_err</i>   | (Optional) In MAC tx          |
| <i>mgmt_inmacrx_err</i>   | (Optional) In MAC rx          |
| <i>mgmt_symbol_err</i>    | (Optional) Symbol error       |
| <i>loop_in_pkts</i>       | (Optional) Input packets      |
| <i>loop_in_bytes</i>      | (Optional) Input bytes        |
| <i>loop_in_mcast</i>      | (Optional) Input multicast    |
| <i>loop_in_compressed</i> | (Optional) Input compressed   |
| <i>loop_in_errors</i>     | (Optional) Input errors       |
| <i>loop_in_frame</i>      | (Optional) Input frame errors |
| <i>loop_in_overrun</i>    | (Optional) Input overrun      |
| <i>loop_in_fifo</i>       | (Optional) Input fifo         |
| <i>loop_out_pkts</i>      | (Optional) Output packets     |
| <i>loop_out_bytes</i>     | (Optional) Output bytes       |
| <i>loop_out_underruns</i> | (Optional) Output underruns   |
| <i>loop_out_errors</i>    | (Optional) Output errors      |

|                              |   |
|------------------------------|---|
| <i>loop_out_collisions</i>   | (Optional) Output collisions                        |
| <i>loop_out_fifo</i>         | (Optional) Output fifo                              |
| <i>loop_out_carriers</i>     | (Optional) Output carrier errors                    |
| <i>admin-state</i>           | (Optional)  |
| <i>tunnel-ipv4</i>           | (Optional) interface IPv4 address                   |
| <i>mtu</i>                   | (Optional) interface Maximum Transmission Unit      |
| <i>bandwidth</i>             | (Optional) interface Bandwidth in kilobits          |
| <i>encap-type</i>            | (Optional)  |
| <i>keepalive-period</i>      | (Optional) keealive period                          |
| <i>keepalive-retries</i>     | (Optional) number of retries                        |
| <i>src-ipv4</i>              | (Optional) tunnel source IPv4 address               |
| <i>src-intf</i>              | (Optional) tunnel source interface                  |
| <i>dest-ipv4</i>             | (Optional) tunnel destination IPv4 address          |
| <i>dest-hostname</i>         | (Optional) tunnel destination hostname              |
| <i>vrf_name</i>              | (Optional) transport VRF name                       |
| <i>wccp_header</i>           | (Optional) wccp header                              |
| <i>ttl_val</i>               | (Optional) tunnel time to live value                |
| <i>tunnel_pmtud_age_time</i> | (Optional) tunnel path MTU discovery age time       |
| <i>tunnel_pmtud_min_mtu</i>  | (Optional) tunnel path MTU discovery min mtu        |
| <i>tunnel_pmtud</i>          | (Optional) tunnel path MTU discovered               |
| <i>tunnel_pgm_mtu</i>        | (Optional) tunnel actual programmed MTU             |
| <i>tunnel_rx_pkt_count</i>   | (Optional) total number of packets received         |
| <i>tunnel_rx_byte_count</i>  | (Optional) total number of bytes received           |
| <i>tunnel_rx_rate</i>        | (Optional) packets input rate per 5 minutes         |
| <i>tunnel_tx_pkt_count</i>   | (Optional) total number of packets transmitted      |
| <i>tunnel_tx_byte_count</i>  | (Optional) total number of bytes transmitted        |
| <i>tunnel_tx_rate</i>        | (Optional) packets transmitted per 5 minutes        |
| <i>tunnel_clear_counter</i>  | (Optional) Last clearing of show interface counters |
| <i>svi_if_index</i>          | (Optional) Interface                                |

|                               |  |
|-------------------------------|--|
| <i>svi_admin_state</i>        | (Optional)   |
| <i>svi_rsn_desc</i>           | (Optional) Interface state reason detailed         |
| <i>svi_line_proto</i>         | (Optional)   |
| <i>svi_hw</i>                 | (Optional) Hardware                                |
| <i>svi_mac</i>                | (Optional) Address                                 |
| <i>svi_desc</i>               | (Optional) Interface Description                   |
| <i>svi_ip_addr</i>            | (Optional) IP Address                              |
| <i>svi_ip_mask</i>            | (Optional) IP address mask                         |
| <i>svi_mtu</i>                | (Optional) MTU size in bytes                       |
| <i>svi_bw</i>                 | (Optional) Bandwidth in kilobits                   |
| <i>svi_delay</i>              | (Optional) Throughput delay (tens of microseconds) |
| <i>svi_tx_load</i>            | (Optional) Tx Load                                 |
| <i>svi_rx_load</i>            | (Optional) Rx Load                                 |
| <i>svi_carrier_delay_sec</i>  | (Optional) carrier delay value in seconds          |
| <i>svi_carrier_delay_msec</i> | (Optional) carrier delay value in milli-seconds    |
| <i>svi_arp_type</i>           | (Optional) ARP type                                |
| <i>svi_arp_timeout</i>        | (Optional) ARP timeout value                       |
| <i>svi_time_last_cleared</i>  | (Optional) Time last cleared                       |
| TABLE_sec_vlan                | (Optional) secondary vlans                         |
| <i>sec_vlan</i>               | (Optional) vlan id                                 |
| <i>sec_vlan_type</i>          | (Optional) secondary vlan type                     |
| <i>svi_reliability</i>        | (Optional) Reliability                             |
| <i>overlay_addr</i>           | (Optional) Overlay address                         |
| <i>overlay_addr_mask</i>      | (Optional) Overlay address mask                    |
| <i>overlay_mtu</i>            | (Optional) MTU                                     |
| <i>overlay_bandwidth</i>      | (Optional) Bandwidth                               |
| <i>overlay_encap_str</i>      | (Optional) Encap type                              |
| <i>overlay_vrf</i>            | (Optional) VRF                                     |
| <i>overlay_src_addr</i>       | (Optional) Source address                          |

|                               |   |
|-------------------------------|---|
| <i>overlay_dst_addr</i>       | (Optional) Destination address                      |
| <i>overlay_last_link_flap</i> | (Optional) Last link flap                           |
| <i>overlay_clear_counters</i> | (Optional) Last clearing of show interface counters |
| <i>overlay_load_interval</i>  | (Optional) Load interval                            |
| <i>overlay_rx_ucastpkts</i>   | (Optional) Received ucast pkts                      |
| <i>overlay_rx_ucastbytes</i>  | (Optional) Received ucast bytes                     |
| <i>overlay_rx_mcastpkts</i>   | (Optional) Received mcast pkts                      |
| <i>overlay_rx_mcastbytes</i>  | (Optional) Received mcast bytes                     |
| <i>overlay_rx_bcastpkts</i>   | (Optional) Received bcast pkts                      |
| <i>overlay_rx_bcastbytes</i>  | (Optional) Received bcast bytes                     |
| <i>overlay_rx_pkts</i>        | (Optional) Total received pkts                      |
| <i>overlay_rx_bytes</i>       | (Optional) Total received bytes                     |
| <i>overlay_rx_bitrate</i>     | (Optional) Receive bit rate                         |
| <i>overlay_rx_pktrate</i>     | (Optional) Receive pkt rate                         |
| <i>overlay_tx_ucastpkts</i>   | (Optional) Trasnmitted ucast pkts                   |
| <i>overlay_tx_ucastbytes</i>  | (Optional) Trasnmitted ucast bytes                  |
| <i>overlay_tx_mcastpkts</i>   | (Optional) Trasnmitted mcast pkts                   |
| <i>overlay_tx_mcastbytes</i>  | (Optional) Trasnmitted mcast bytes                  |
| <i>overlay_tx_bcastpkts</i>   | (Optional) Trasnmitted bcast pkts                   |
| <i>overlay_tx_bcastbytes</i>  | (Optional) Trasnmitted bcast bytes                  |
| <i>overlay_tx_pkts</i>        | (Optional) Total transmitted pkts                   |
| <i>overlay_tx_bytes</i>       | (Optional) Total transmitted bytes                  |
| <i>overlay_tx_bitrate</i>     | (Optional) Transmit bit rate                        |
| <i>overlay_tx_pktrate</i>     | (Optional) Transmit pkt rate                        |

### Command Mode

- /exec



# show interface

```
show interface <ifloop> [ __readonly__ TABLE_interface <interface> [ <state> ] [ <admin_state> ] [
<share_state> ] [ <state_rsn> ] [ <state_rsn_desc> ] [ <desc> ] [ <eth_bundle> ] [ <mgmt_sfp> ] [ <mgmt_type> ]
] [ <eth_eee_state> ] [ <eth_dce_mode> ] [ <vpc_status> ] [ <eth_rsn_fac> ] [ <eth_rsn_code> ] [
<eth_hw_desc> ] [ <eth_hw_addr> ] [ <eth_bia_addr> ] [ <eth_ip_addr> ] [ <eth_ip_mask> ] [ <eth_ip_prefix> ]
] [ <eth_mtu> ] [ <eth_bw> ] [ <eth_encap_vlan> ] [ <eth_dly> ] [ <eth_reliability> ] [ <eth_txload> ] [
<eth_rxload> ] [ <eth_loopback> ] [ <eth_keepalive> ] [ <eth_duplex> ] [ <eth_speed> ] [ <eth_mode> ] [
<eth_ratemode> ] [ <eth_autoneg> ] [ <eth_beacon> ] [ <eth_media> ] [ <eth_in_flowctrl> ] [
<eth_out_flowctrl> ] [ <eth_mdix> ] [ <eth_swt_monitor> ] [ <eth_ethertype> ] [ <eth_members> ] [
<eth_clk_mode> ] [ <eth_arp_type> ] [ <eth_arp_timeout> ] [ <eth_last_in> ] [ <eth_last_out> ] [
<eth_out_hang> ] [ <eth_clear_counters> ] [ <eth_link_flapped> ] [ <eth_inq_size> ] [ <eth_inq_max> ] [
<eth_inq_drops> ] [ <eth_inq_flush> ] [ <eth_out_drop> ] [ <eth_q_strategy> ] [ <eth_outq_size> ] [
<eth_outq_max> ] [ <eth_reset_cnt> ] [ <loop_in_pkts> ] [ <loop_in_bytes> ] [ <loop_in_mcast> ] [
<loop_in_compressed> ] [ <loop_in_errors> ] [ <loop_in_frame> ] [ <loop_in_overrun> ] [ <loop_in_fifo> ]
] [ <loop_out_pkts> ] [ <loop_out_bytes> ] [ <loop_out_underruns> ] [ <loop_out_errors> ] [
<loop_out_collisions> ] [ <loop_out_fifo> ] [ <loop_out_carriers> ] ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                       |
| interface             | Show interface status and information                 |
| <i>ifloop</i>         | Enter interface type and number in module/slot format |
| <u>__readonly__</u>   | (Optional) Read Only                                  |
| <i>interface</i>      | (Optional) Interface index                            |
| TABLE_interface       | (Optional) show interface                             |
| <i>state</i>          | (Optional) Interface state                            |
| <i>admin_state</i>    | (Optional) Interface admin state                      |
| <i>share_state</i>    | (Optional) Interface ownership                        |
| <i>state_rsn</i>      | (Optional) Interface state reason                     |
| <i>state_rsn_desc</i> | (Optional) Interface state reason detailed            |
| <i>desc</i>           | (Optional) Interface description                      |
| <i>mgmt_sfp</i>       | (Optional) mgmt sfp                                   |
| <i>mgmt_type</i>      | (Optional) mgmt type                                  |
| <i>eth_bundle</i>     | (Optional) Belongs to bundle                          |
| <i>eth_eee_state</i>  | (Optional) EEE state                                  |
| <i>eth_dce_mode</i>   | (Optional) DCE mode description                       |

|                         |                                  |
|-------------------------|----------------------------------|
| <i>vpc_status</i>       | (Optional) VPC status            |
| <i>eth_rsn_fac</i>      | (Optional) State reason facility |
| <i>eth_rsn_code</i>     | (Optional) State reason code     |
| <i>eth_hw_desc</i>      | (Optional) HW description        |
| <i>eth_hw_addr</i>      | (Optional) HW address            |
| <i>eth_bia_addr</i>     | (Optional) bia address           |
| <i>eth_ip_addr</i>      | (Optional) IP Address            |
| <i>eth_ip_mask</i>      | (Optional) IP address mask       |
| <i>eth_ip_prefix</i>    | (Optional) IP Prefix             |
| <i>eth_mtu</i>          | (Optional) MTU                   |
| <i>eth_bw</i>           | (Optional) Bandwidth             |
| <i>eth_encap_vlan</i>   | (Optional) Encapsulation Vlan    |
| <i>eth_dly</i>          | (Optional) Delay                 |
| <i>eth_reliability</i>  | (Optional) Reliability           |
| <i>eth_txload</i>       | (Optional) Tx load               |
| <i>eth_rxload</i>       | (Optional) Rx load               |
| <i>eth_loopback</i>     | (Optional) Loopback              |
| <i>eth_keepalive</i>    | (Optional) Keepalive             |
| <i>eth_duplex</i>       | (Optional) Duplex                |
| <i>eth_speed</i>        | (Optional) Speed                 |
| <i>eth_mode</i>         | (Optional) Port mode             |
| <i>eth_ratemode</i>     | (Optional) Rate mode             |
| <i>eth_autoneg</i>      | (Optional) Autonegotiation       |
| <i>eth_beacon</i>       | (Optional) Beacon                |
| <i>eth_media</i>        | (Optional) Media type            |
| <i>eth_in_flowctrl</i>  | (Optional) Input flowcontrol     |
| <i>eth_out_flowctrl</i> | (Optional) Output flowcontrol    |
| <i>eth_mdix</i>         | (Optional) Mdx                   |
| <i>eth_swt_monitor</i>  | (Optional) Switchport Monitor    |

|                           |   |
|---------------------------|---|
| <i>eth_ethertype</i>      | (Optional) EtherType                                |
| <i>eth_members</i>        | (Optional) Members in this channel                  |
| <i>eth_clk_mode</i>       | (Optional) Clock mode                               |
| <i>eth_arp_type</i>       | (Optional) ARP type                                 |
| <i>eth_arp_timeout</i>    | (Optional) ARP timeout                              |
| <i>eth_last_in</i>        | (Optional) Last input                               |
| <i>eth_last_out</i>       | (Optional) Last output                              |
| <i>eth_out_hang</i>       | (Optional) Last output hang                         |
| <i>eth_clear_counters</i> | (Optional) Last clearing of show interface counters |
| <i>eth_link_flapped</i>   | (Optional) Last link flapped                        |
| <i>eth_inq_size</i>       | (Optional) Input queue size                         |
| <i>eth_inq_max</i>        | (Optional) Input queue max                          |
| <i>eth_inq_drops</i>      | (Optional) Input queue drops                        |
| <i>eth_inq_flush</i>      | (Optional) Input queue flushes                      |
| <i>eth_out_drop</i>       | (Optional) Output drops                             |
| <i>eth_q_strategy</i>     | (Optional) Queuing strategy                         |
| <i>eth_outq_size</i>      | (Optional) Output queue size                        |
| <i>eth_outq_max</i>       | (Optional) Output queue max                         |
| <i>eth_reset_cntr</i>     | (Optional) Interface resets                         |
| <i>loop_in_pkts</i>       | (Optional) Input packets                            |
| <i>loop_in_bytes</i>      | (Optional) Input bytes                              |
| <i>loop_in_mcast</i>      | (Optional) Input multicast                          |
| <i>loop_in_compressed</i> | (Optional) Input compressed                         |
| <i>loop_in_errors</i>     | (Optional) Input errors                             |
| <i>loop_in_frame</i>      | (Optional) Input frame errors                       |
| <i>loop_in_overn</i>      | (Optional) Input overrun                            |
| <i>loop_in_fifo</i>       | (Optional) Input fifo                               |
| <i>loop_out_pkts</i>      | (Optional) Output packets                           |
| <i>loop_out_bytes</i>     | (Optional) Output bytes                             |

|                            |                                  |
|----------------------------|----------------------------------|
| <i>loop_out_underruns</i>  | (Optional) Output underruns      |
| <i>loop_out_errors</i>     | (Optional) Output errors         |
| <i>loop_out_collisions</i> | (Optional) Output collisions     |
| <i>loop_out_fifo</i>       | (Optional) Output fifo           |
| <i>loop_out_carriers</i>   | (Optional) Output carrier errors |

**Command Mode**

- /exec

# show interface

```
show interface <ifeth> [ quick ] [ __readonly__ TABLE_interface <interface> <state> [ <state_rsn_desc> ]
[ <state_rsn> ] [ <eth_rsn_fac> ] [ <eth_rsn_code> ] [ <admin_state> ] [ <share_state> ] [ <parent_interface> ]
] [ <vpc_status> ] [ <eth_bundle> ] [ <eth_hw_desc> ] [ <eth_hw_addr> ] [ <eth_bia_addr> ] [ <desc> ] [
<eth_ip_addr> ] [ <eth_ip_mask> ] [ <eth_ip_prefix> ] [ <eth_mtu> ] + [ <eth_bw> ] [ <eth_dly> ] [
<eth_reliability> ] [ <eth_txload> ] [ <eth_rxload> ] [ <eth_encap_vlan> ] [ <medium> ] [ <eth_mode> ] [
<eth_duplex> ] [ <eth_speed> ] [ <eth_media> ] [ <eth_beacon> ] [ <eth_autoneg> ] [ <eth_in_flowctrl> ] [
<eth_out_flowctrl> ] [ <eth_mdix> ] [ <eth_ratemode> ] [ <eth_swt_monitor> ] [ <eth_ethertype> ] [
<eth_eee_state> ] [ <eth_members> ] [ <eth_link_flapped> ] [ <eth_clear_counters> ] [ <eth_reset_cntr> ] [
<eth_load_interval1> ] [ <eth_load_interval1_rx> ] [ <eth_inrate1_bits> ] [ <eth_inrate1_pkts> ] [
<eth_load_interval1_tx> ] [ <eth_outrate1_bits> ] [ <eth_outrate1_pkts> ] [ <eth_load_interval2> ] [
<eth_inrate1_summary_bits> ] [ <eth_inrate1_summary_pkts> ] [ <eth_outrate1_summary_bits> ] [
<eth_outrate1_summary_pkts> ] [ <eth_load_interval2_rx> ] [ <eth_inrate2_bits> ] [ <eth_inrate2_pkts> ] [
<eth_load_interval2_tx> ] [ <eth_outrate2_bits> ] [ <eth_outrate2_pkts> ] [ <eth_load_interval3> ] [
<eth_inrate2_summary_bits> ] [ <eth_inrate2_summary_pkts> ] [ <eth_outrate2_summary_bits> ] [
<eth_outrate2_summary_pkts> ] [ <eth_load_interval3_rx> ] [ <eth_inrate3_bits> ] [ <eth_inrate3_pkts> ] [
<eth_load_interval3_tx> ] [ <eth_outrate3_bits> ] [ <eth_outrate3_pkts> ] [ <eth_inrate3_summary_bits> ]
[ <eth_inrate3_summary_pkts> ] [ <eth_outrate3_summary_bits> ] [ <eth_outrate3_summary_pkts> ] [
<eth_l2_ucastpkts> ] [ <eth_l2_ucastbytes> ] [ <eth_l2_mcastpkts> ] [ <eth_l2_mcastbytes> ] [
<eth_l2_bcastpkts> ] [ <eth_l2_bcastbytes> ] [ <eth_l3in_routed_pkts> ] [ <eth_l3in_routed_bytes> ] [
<eth_l3out_routed_pkts> ] [ <eth_l3out_routed_bytes> ] [ <eth_l3in_ucastpkts> ] [ <eth_l3in_ucastbytes> ]
[ <eth_l3in_mcastpkts> ] [ <eth_l3in_mcastbytes> ] [ <eth_l3in_bcastpkts> ] [ <eth_l3in_bcastbytes> ] [
<eth_l3out_ucastpkts> ] [ <eth_l3out_ucastbytes> ] [ <eth_l3out_mcastpkts> ] [ <eth_l3out_mcastbytes> ] [
<eth_l3out_bcastpkts> ] [ <eth_l3out_bcastbytes> ] [ <eth_l3avg1_inbytes> ] [ <eth_l3avg1_inpkts> ] [
<eth_l3avg1_outbytes> ] [ <eth_l3avg1_outpkts> ] [ <eth_inucast> ] [ <eth_inmcast> ] [ <eth_inbcast> ] [
<eth_inpkts> ] [ <eth_inbytes> ] [ <eth_jumbo_inpkts> ] [ <eth_storm_supp> ] [ <eth_runts> ] [ <eth_giants>
] [ <eth_crc> ] [ <eth_nobuf> ] [ <eth_inerr> ] [ <eth_frame> ] [ <eth_overrun> ] [ <eth_underrun> ] [
<eth_ignored> ] [ <eth_watchdog> ] [ <eth_bad_eth> ] [ <eth_bad_proto> ] [ <eth_in_ifdown_drops> ] [
<eth_dribble> ] [ <eth_indiscard> ] [ <eth_inpause> ] [ <eth_outucast> ] [ <eth_outmcast> ] [ <eth_outbcast>
] [ <eth_outpkts> ] [ <eth_outbytes> ] [ <eth_jumbo_outpkts> ] [ <eth_outerr> ] [ <eth_coll> ] [ <eth_deferred>
] [ <eth_latecoll> ] [ <eth_lostcarrier> ] [ <eth_nocarrier> ] [ <eth_babbles> ] [ <eth_outdiscard> ] [
<eth_outpause> ] [ <switchport> ] ]
```

## Syntax Description

|                  |   |
|------------------|---|
| show             | Show running system information                       |
| interface        | Show interface status and information                 |
| <i>ifeth</i>     | Enter interface type and number in module/slot format |
| quick            | (Optional) Show info of interface skipping stats      |
| __readonly__     | (Optional) Read Only                                  |
| <i>interface</i> | (Optional) Interface index                            |
| TABLE_interface  | (Optional) show interface                             |
| <i>state</i>     | (Optional) Interface state                            |

|                         |  |
|-------------------------|--|
| <i>state_rsn_desc</i>   | (Optional) Interface state reason detailed |
| <i>state_rsn</i>        | (Optional) Interface state reason          |
| <i>eth_rsn_fac</i>      | (Optional) State reason facility           |
| <i>eth_rsn_code</i>     | (Optional) State reason code               |
| <i>admin_state</i>      | (Optional) admin state                     |
| <i>share_state</i>      | (Optional) Interface ownership             |
| <i>parent_interface</i> | (Optional) parent interface                |
| <i>vpc_status</i>       | (Optional) VPC status                      |
| <i>eth_bundle</i>       | (Optional) Belongs to bundle               |
| <i>eth_hw_desc</i>      | (Optional) HW description                  |
| <i>eth_hw_addr</i>      | (Optional) HW address                      |
| <i>eth_bia_addr</i>     | (Optional) bia address                     |
| <i>desc</i>             | (Optional) Interface description           |
| <i>eth_ip_addr</i>      | (Optional) IP Address                      |
| <i>eth_ip_mask</i>      | (Optional) IP address mask                 |
| <i>eth_ip_prefix</i>    | (Optional) IP address prefix               |
| <i>eth_mtu</i>          | (Optional) MTU                             |
| <i>eth_bw</i>           | (Optional) Bandwidth                       |
| <i>eth_dly</i>          | (Optional) Delay                           |
| <i>eth_reliability</i>  | (Optional) Reliability                     |
| <i>eth_txload</i>       | (Optional) Tx load                         |
| <i>eth_rxload</i>       | (Optional) Rx load                         |
| <i>eth_encap_vlan</i>   | (Optional) Encapsulation Vlan              |
| <i>medium</i>           | (Optional) medium type                     |
| <i>eth_mode</i>         | (Optional) Port mode                       |
| <i>eth_duplex</i>       | (Optional) Duplex                          |
| <i>eth_speed</i>        | (Optional) Speed                           |
| <i>eth_media</i>        | (Optional) Media type                      |
| <i>eth_beacon</i>       | (Optional) Beacon                          |

|                                  |   |
|----------------------------------|---|
| <i>eth_autoneg</i>               | (Optional) Autonegotiation                          |
| <i>eth_in_flowctrl</i>           | (Optional) Input flowcontrol                        |
| <i>eth_out_flowctrl</i>          | (Optional) Output flowcontrol                       |
| <i>eth_mdix</i>                  | (Optional) Mdx                                      |
| <i>eth_ratemode</i>              | (Optional) Rate mode                                |
| <i>eth_sw_t_monitor</i>          | (Optional) Switchport Monitor                       |
| <i>eth_etherstype</i>            | (Optional) EtherType                                |
| <i>eth_eee_state</i>             | (Optional) EEE state                                |
| <i>eth_members</i>               | (Optional) Members in this channel                  |
| <i>eth_link_flapped</i>          | (Optional) Last link flapped                        |
| <i>eth_clear_counters</i>        | (Optional) Last clearing of show interface counters |
| <i>eth_reset_cntr</i>            | (Optional) Interface resets                         |
| <i>eth_load_interval1</i>        | (Optional) interval 1 timer value in sec            |
| <i>eth_load_interval1_rx</i>     | (Optional) interval 1 timer value in sec            |
| <i>eth_inrate1_bits</i>          | (Optional) interval 1 input rate bits/sec           |
| <i>eth_inrate1_pkts</i>          | (Optional) interval 1 input rate pkts/sec           |
| <i>eth_load_interval1_tx</i>     | (Optional) interval 1 timer value in sec            |
| <i>eth_outrate1_bits</i>         | (Optional) interval 1 output rate bits/sec          |
| <i>eth_outrate1_pkts</i>         | (Optional) interval 1 output rate pkts/sec          |
| <i>eth_load_interval2</i>        | (Optional) interval 2 timer value in sec            |
| <i>eth_inrate1_summary_bits</i>  | (Optional) interval 1 input rate bit summary        |
| <i>eth_inrate1_summary_pkts</i>  | (Optional) interval 1 input rate pkt summary        |
| <i>eth_outrate1_summary_bits</i> | (Optional) interval 1 output rate bit summary       |
| <i>eth_outrate1_summary_pkts</i> | (Optional) interval 1 output rate pkt summary       |
| <i>eth_load_interval2_rx</i>     | (Optional) interval 2 timer value in sec            |
| <i>eth_inrate2_bits</i>          | (Optional) interval 2 input rate bits/sec           |
| <i>eth_inrate2_pkts</i>          | (Optional) interval 2 input rate pkts/sec           |
| <i>eth_load_interval2_tx</i>     | (Optional) interval 2 timer value in sec            |
| <i>eth_outrate2_bits</i>         | (Optional) interval 2 output rate bits/sec          |

|                                  |   |
|----------------------------------|---|
| <i>eth_outrate2_pkts</i>         | (Optional) interval 2 output rate pkts/sec    |
| <i>eth_load_interval3</i>        | (Optional) interval 3 timer value in sec      |
| <i>eth_inrate2_summary_bits</i>  | (Optional) interval 2 input rate bit summary  |
| <i>eth_inrate2_summary_pkts</i>  | (Optional) interval 2 input rate pkt summary  |
| <i>eth_outrate2_summary_bits</i> | (Optional) interval 2 output rate bit summary |
| <i>eth_outrate2_summary_pkts</i> | (Optional) interval 2 output rate pkt summary |
| <i>eth_load_interval3_rx</i>     | (Optional) interval 3 timer value in sec      |
| <i>eth_inrate3_bits</i>          | (Optional) interval 3 input rate bits/sec     |
| <i>eth_inrate3_pkts</i>          | (Optional) interval 3 input rate pkts/sec     |
| <i>eth_load_interval3_tx</i>     | (Optional) interval 3 timer value in sec      |
| <i>eth_outrate3_bits</i>         | (Optional) interval 3 output rate bits/sec    |
| <i>eth_outrate3_pkts</i>         | (Optional) interval 3 output rate pkts/sec    |
| <i>eth_inrate3_summary_bits</i>  | (Optional) interval 3 input rate bit summary  |
| <i>eth_inrate3_summary_pkts</i>  | (Optional) interval 3 input rate pkt summary  |
| <i>eth_outrate3_summary_bits</i> | (Optional) interval 3 output rate bit summary |
| <i>eth_outrate3_summary_pkts</i> | (Optional) interval 3 output rate pkt summary |
| <i>eth_l2_ucastpkts</i>          | (Optional) L2 switched ucast pkts             |
| <i>eth_l2_ucastbytes</i>         | (Optional) L2 switched ucast bytes            |
| <i>eth_l2_mcastpkts</i>          | (Optional) L2 switched mcast pkts             |
| <i>eth_l2_mcastbytes</i>         | (Optional) L2 switched mcast bytes            |
| <i>eth_l2_bcastpkts</i>          | (Optional) L2 switched bcast pkts             |
| <i>eth_l2_bcastbytes</i>         | (Optional) L2 switched bcast bytes            |
| <i>eth_l3in_ucastpkts</i>        | (Optional) L3 in switched ucast pkts          |
| <i>eth_l3in_ucastbytes</i>       | (Optional) L3 in switched ucast bytes         |
| <i>eth_l3in_mcastpkts</i>        | (Optional) L3 in switched mcast pkts          |
| <i>eth_l3in_mcastbytes</i>       | (Optional) L3 in switched mcast bytes         |
| <i>eth_l3in_bcastpkts</i>        | (Optional) L3 in switched bcast pkts          |
| <i>eth_l3in_bcastbytes</i>       | (Optional) L3 in switched bcast bytes         |
| <i>eth_l3out_ucastpkts</i>       | (Optional) L3 out switched ucast pkts         |



|                               |  |
|-------------------------------|--|
| <i>eth_l3out_ucastbytes</i>   | (Optional) L3 out switched ucast bytes                   |
| <i>eth_l3out_mcastpkts</i>    | (Optional) L3 out switched mcast pkts                    |
| <i>eth_l3out_mcastbytes</i>   | (Optional) L3 out switched mcast bytes                   |
| <i>eth_l3out_bcastpkts</i>    | (Optional) L3 out switched bcast pkts                    |
| <i>eth_l3out_bcastbytes</i>   | (Optional) L3 out switched bcast bytes                   |
| <i>eth_l3in_routed_pkts</i>   | (Optional) L3 in routed pkts                             |
| <i>eth_l3in_routed_bytes</i>  | (Optional) L3 in routed bytes                            |
| <i>eth_l3out_routed_pkts</i>  | (Optional) L3 out routed pkts                            |
| <i>eth_l3out_routed_bytes</i> | (Optional) L3 out routed bytes                           |
| <i>eth_l3avg1_inbytes</i>     | (Optional) Load interval 1 L3 average in switched bytes  |
| <i>eth_l3avg1_inpkts</i>      | (Optional) Load interval 1 L3 average in switched pkts   |
| <i>eth_l3avg1_outbytes</i>    | (Optional) Load interval 1 L3 average out switched bytes |
| <i>eth_l3avg1_outpkts</i>     | (Optional) Load interval 1 L3 average out switched pkts  |
| <i>eth_inucast</i>            | (Optional) Unicasts                                      |
| <i>eth_inmcast</i>            | (Optional) Multicasts                                    |
| <i>eth_inbcast</i>            | (Optional) Broadcasts                                    |
| <i>eth_inpkts</i>             | (Optional) Packets input                                 |
| <i>eth_inbytes</i>            | (Optional) Bytes input                                   |
| <i>eth_jumbo_inpkts</i>       | (Optional) Incoming jumbo pkts                           |
| <i>eth_storm_supp</i>         | (Optional) storm suppression                             |
| <i>eth_runts</i>              | (Optional) runts   |
| <i>eth_giants</i>             | (Optional) giants  |
| <i>eth_crc</i>                | (Optional) CRC   |
| <i>eth_nobuf</i>              | (Optional) No buffer received                            |
| <i>eth_inerr</i>              | (Optional) input errors                                  |
| <i>eth_frame</i>              | (Optional) frame   |
| <i>eth_overrun</i>            | (Optional) overrun                                       |
| <i>eth_underrun</i>           | (Optional) underruns                                     |
| <i>eth_ignored</i>            | (Optional) ignored                                       |

|                            |   |
|----------------------------|---|
| <i>eth_watchdog</i>        | (Optional) watchdog                             |
| <i>eth_bad_eth</i>         | (Optional) bad ether type drop                  |
| <i>eth_bad_proto</i>       | (Optional) bad protocol drops                   |
| <i>eth_in_ifdown_drops</i> | (Optional) Input if-down drops                  |
| <i>eth_dribble</i>         | (Optional) input packets with dribble condition |
| <i>eth_indiscard</i>       | (Optional) discards                             |
| <i>eth_inpause</i>         | (Optional) pause input                          |
| <i>eth_outucast</i>        | (Optional) Unicasts                             |
| <i>eth_outmcast</i>        | (Optional) Multicasts                           |
| <i>eth_outbcast</i>        | (Optional) Broadcasts                           |
| <i>eth_outpkts</i>         | (Optional) packets output                       |
| <i>eth_outbytes</i>        | (Optional) bytes output                         |
| <i>eth_jumbo_outpkts</i>   | (Optional) Outgoing jumbo pkts                  |
| <i>eth_outerr</i>          | (Optional) output errors                        |
| <i>eth_coll</i>            | (Optional) collisions                           |
| <i>eth_deferred</i>        | (Optional) deferred                             |
| <i>eth_latecoll</i>        | (Optional) late collision                       |
| <i>eth_lostcarrier</i>     | (Optional) lost carrier                         |
| <i>eth_nocarrier</i>       | (Optional) no carrier                           |
| <i>eth_babbles</i>         | (Optional) babbles                              |
| <i>eth_outdiscard</i>      | (Optional) output discard                       |
| <i>eth_outpause</i>        | (Optional) PAUSE output                         |
| <i>switchport</i>          | (Optional) Switchport enabled                   |

### Command Mode

- /exec

# show interface

```
show interface <ifrange> [ __readonly__ TABLE_interface <interface> <state> <state_rsn> <state_rsn_desc>
<desc> [ <overlay_addr> ] [ <overlay_addr_mask> ] [ <overlay_mtu> ] [ <overlay_bandwidth> ] [
<overlay_encap_str> ] [ <overlay_vrf> ] [ <overlay_src_addr> ] [ <overlay_dst_addr> ] [
<overlay_last_link_flap> ] [ <overlay_clear_counters> ] [ <overlay_load_interval> ] [ <overlay_rx_ucastpkts>
] [ <overlay_rx_ucastbytes> ] [ <overlay_rx_mcastpkts> ] [ <overlay_rx_mcastbytes> ] [ <overlay_rx_pkts>
] [ <overlay_rx_bytes> ] [ <overlay_rx_bcastpkts> ] [ <overlay_rx_bcastbytes> ] [ <overlay_rx_bitrate> ] [
<overlay_rx_pktrate> ] [ <overlay_tx_ucastpkts> ] [ <overlay_tx_ucastbytes> ] [ <overlay_tx_mcastpkts> ]
[ <overlay_tx_mcastbytes> ] [ <overlay_tx_bcastpkts> ] [ <overlay_tx_bcastbytes> ] [ <overlay_tx_pkts> ]
[ <overlay_tx_bytes> ] [ <overlay_tx_bitrate> ] [ <overlay_tx_pktrate> ] ]
```

## Syntax Description

|                               |   |
|-------------------------------|---|
| show                          | Show running system information                     |
| interface                     | Show interface status and information               |
| <i>ifrange</i>                | Enter interface type and number                     |
| <i>__readonly__</i>           | (Optional) Read Only                                |
| <i>interface</i>              | (Optional) Interface index                          |
| TABLE_interface               | (Optional) show interface                           |
| <i>state</i>                  | (Optional) Interface state                          |
| <i>state_rsn</i>              | (Optional) Interface state reason                   |
| <i>state_rsn_desc</i>         | (Optional) Interface state reason detailed          |
| <i>desc</i>                   | (Optional) Interface description                    |
| <i>overlay_addr</i>           | (Optional) Overlay address                          |
| <i>overlay_addr_mask</i>      | (Optional) Overlay address mask                     |
| <i>overlay_mtu</i>            | (Optional) MTU                                      |
| <i>overlay_bandwidth</i>      | (Optional) Bandwidth                                |
| <i>overlay_encap_str</i>      | (Optional) Encap type                               |
| <i>overlay_vrf</i>            | (Optional) VRF                                      |
| <i>overlay_src_addr</i>       | (Optional) Source address                           |
| <i>overlay_dst_addr</i>       | (Optional) Destination address                      |
| <i>overlay_last_link_flap</i> | (Optional) Last link flap                           |
| <i>overlay_clear_counters</i> | (Optional) Last clearing of show interface counters |

|                              |                                    |
|------------------------------|------------------------------------|
| <i>overlay_load_interval</i> | (Optional) Load interval           |
| <i>overlay_rx_ucastpkts</i>  | (Optional) Received ucast pkts     |
| <i>overlay_rx_ucastbytes</i> | (Optional) Received ucast bytes    |
| <i>overlay_rx_mcastpkts</i>  | (Optional) Received mcast pkts     |
| <i>overlay_rx_mcastbytes</i> | (Optional) Received mcast bytes    |
| <i>overlay_rx_bcastpkts</i>  | (Optional) Received bcast pkts     |
| <i>overlay_rx_bcastbytes</i> | (Optional) Received bcast bytes    |
| <i>overlay_rx_pkts</i>       | (Optional) Total received pkts     |
| <i>overlay_rx_bytes</i>      | (Optional) Total received bytes    |
| <i>overlay_rx_bitrate</i>    | (Optional) Receive bit rate        |
| <i>overlay_rx_pktrate</i>    | (Optional) Receive pkt rate        |
| <i>overlay_tx_ucastpkts</i>  | (Optional) Trasnmitted ucast pkts  |
| <i>overlay_tx_ucastbytes</i> | (Optional) Trasnmitted ucast bytes |
| <i>overlay_tx_mcastpkts</i>  | (Optional) Trasnmitted mcast pkts  |
| <i>overlay_tx_mcastbytes</i> | (Optional) Trasnmitted mcast bytes |
| <i>overlay_tx_bcastpkts</i>  | (Optional) Trasnmitted bcast pkts  |
| <i>overlay_tx_bcastbytes</i> | (Optional) Trasnmitted bcast bytes |
| <i>overlay_tx_pkts</i>       | (Optional) Total transmitted pkts  |
| <i>overlay_tx_bytes</i>      | (Optional) Total transmitted bytes |
| <i>overlay_tx_bitrate</i>    | (Optional) Transmit bit rate       |
| <i>overlay_tx_pktrate</i>    | (Optional) Transmit pkt rate       |

**Command Mode**

- /exec

# show interface

```
show interface <ifrange> [ __readonly__ TABLE_interface <interface> <state> [ <state_rsn_desc> ] [
<state_rsn> ] [ <admin_state> ] [ <eth_rsn_fac> ] [ <eth_rsn_code> ] [ <share_state> ] [ <vpc_status> ] [
<eth_bundle> ] [ <eth_hw_desc> ] [ <eth_hw_addr> ] [ <eth_bia_addr> ] [ <desc> ] [ <eth_ip_addr> ] [
<eth_ip_mask> ] [ <eth_mtu> ] [ <eth_bw> ] [ <eth_dly> ] [ <eth_reliability> ] [ <eth_txload> ] [ <eth_rxload>
] [ <eth_encap_vlan> ] [ <eth_mode> ] [ <eth_duplex> ] [ <eth_speed> ] [ <eth_media> ] [ <eth_beacon> ]
[ <eth_autoneg> ] [ <eth_in_flowctrl> ] [ <eth_out_flowctrl> ] [ <eth_mdix> ] [ <eth_ratemode> ] [
<eth_swt_monitor> ] [ <eth_ethertype> ] [ <eth_members> ] [ <eth_link_flapped> ] [ <eth_clear_counters>
] [ <eth_reset_cntr> ] [ <nve_addr> ] [ <nve_addr_mask> ] [ <nve_vcid> ] [ <nve_mtu> ] [ <nve_bandwidth>
] [ <nve_encap_str> ] [ <nve_vrf> ] [ <nve_src_addr> ] [ <nve_dst_addr> ] [ <nve_last_link_flap> ] [
<nve_clear_counters> ] [ <nve_load_interval> ] [ <nve_rx_ucastpkts> ] [ <nve_rx_ucastbytes> ] [
<nve_rx_mcastpkts> ] [ <nve_rx_mcastbytes> ] [ <nve_rx_pkts> ] [ <nve_rx_bytes> ] [ <nve_rx_bcastpkts>
] [ <nve_rx_bcastbytes> ] [ <nve_rx_bitrate> ] [ <nve_rx_pktrate> ] [ <nve_tx_ucastpkts> ] [
<nve_tx_ucastbytes> ] [ <nve_tx_mcastpkts> ] [ <nve_tx_mcastbytes> ] [ <nve_tx_bcastpkts> ] [
<nve_tx_bcastbytes> ] [ <nve_tx_pkts> ] [ <nve_tx_bytes> ] [ <nve_tx_bitrate> ] [ <nve_tx_pktrate> ] ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information            |
| interface             | Show interface status and information      |
| <i>ifrange</i>        | Enter interface type and number            |
| <u>__readonly__</u>   | (Optional) Read Only                       |
| <i>interface</i>      | (Optional) Interface index                 |
| TABLE_interface       | (Optional) show interface                  |
| <i>state</i>          | (Optional) Interface state                 |
| <i>state_rsn_desc</i> | (Optional) Interface state reason detailed |
| <i>state_rsn</i>      | (Optional) Interface state reason          |
| <i>admin_state</i>    | (Optional) admin state                     |
| <i>eth_rsn_fac</i>    | (Optional) State reason facility           |
| <i>eth_rsn_code</i>   | (Optional) State reason code               |
| <i>share_state</i>    | (Optional) Interface ownership             |
| <i>vpc_status</i>     | (Optional) VPC status                      |
| <i>eth_bundle</i>     | (Optional) Belongs to bundle               |
| <i>eth_hw_desc</i>    | (Optional) HW description                  |
| <i>eth_hw_addr</i>    | (Optional) HW address                      |
| <i>eth_bia_addr</i>   | (Optional) bia address                     |

|                           |   |
|---------------------------|---|
| <i>desc</i>               | (Optional) Interface description                    |
| <i>eth_ip_addr</i>        | (Optional) IP Address                               |
| <i>eth_ip_mask</i>        | (Optional) IP address mask                          |
| <i>eth_mtu</i>            | (Optional) MTU                                      |
| <i>eth_bw</i>             | (Optional) Bandwidth                                |
| <i>eth_dly</i>            | (Optional) Delay                                    |
| <i>eth_reliability</i>    | (Optional) Reliability                              |
| <i>eth_txload</i>         | (Optional) Tx load                                  |
| <i>eth_rxload</i>         | (Optional) Rx load                                  |
| <i>eth_encap_vlan</i>     | (Optional) Encapsulation Vlan                       |
| <i>eth_mode</i>           | (Optional) Port mode                                |
| <i>eth_duplex</i>         | (Optional) Duplex                                   |
| <i>eth_speed</i>          | (Optional) Speed                                    |
| <i>eth_media</i>          | (Optional) Media type                               |
| <i>eth_beacon</i>         | (Optional) Beacon                                   |
| <i>eth_autoneg</i>        | (Optional) Autonegotiation                          |
| <i>eth_in_flowctrl</i>    | (Optional) Input flowcontrol                        |
| <i>eth_out_flowctrl</i>   | (Optional) Output flowcontrol                       |
| <i>eth_mdix</i>           | (Optional) Mdx                                      |
| <i>eth_ratemode</i>       | (Optional) Rate mode                                |
| <i>eth_swt_monitor</i>    | (Optional) Switchport Monitor                       |
| <i>eth_ethertype</i>      | (Optional) EtherType                                |
| <i>eth_members</i>        | (Optional) Members in this channel                  |
| <i>eth_link_flapped</i>   | (Optional) Last link flapped                        |
| <i>eth_clear_counters</i> | (Optional) Last clearing of show interface counters |
| <i>eth_reset_cntr</i>     | (Optional) Interface resets                         |
| <i>nve_addr</i>           | (Optional) Peer address                             |
| <i>nve_addr_mask</i>      | (Optional) Peer address mask                        |
| <i>nve_vcids</i>          | (Optional) VCID                                     |

|                           |   |
|---------------------------|---|
| <i>nve_mtu</i>            | (Optional) MTU                                      |
| <i>nve_bandwidth</i>      | (Optional) Bandwidth                                |
| <i>nve_encap_str</i>      | (Optional) Encap type                               |
| <i>nve_vrf</i>            | (Optional) VRF                                      |
| <i>nve_src_addr</i>       | (Optional) Source address                           |
| <i>nve_dst_addr</i>       | (Optional) Destination address                      |
| <i>nve_last_link_flap</i> | (Optional) Last link flap                           |
| <i>nve_clear_counters</i> | (Optional) Last clearing of show interface counters |
| <i>nve_load_interval</i>  | (Optional) Load interval                            |
| <i>nve_rx_ucastpkts</i>   | (Optional) Received ucast pkts                      |
| <i>nve_rx_ucastbytes</i>  | (Optional) Received ucast bytes                     |
| <i>nve_rx_mcastpkts</i>   | (Optional) Received mcast pkts                      |
| <i>nve_rx_mcastbytes</i>  | (Optional) Received mcast bytes                     |
| <i>nve_rx_bcastpkts</i>   | (Optional) Received bcast pkts                      |
| <i>nve_rx_bcastbytes</i>  | (Optional) Received bcast bytes                     |
| <i>nve_rx_pkts</i>        | (Optional) Total received pkts                      |
| <i>nve_rx_bytes</i>       | (Optional) Total received bytes                     |
| <i>nve_rx_bitrate</i>     | (Optional) Receive bit rate                         |
| <i>nve_rx_pktrate</i>     | (Optional) Receive pkt rate                         |
| <i>nve_tx_ucastpkts</i>   | (Optional) Trasnmitted ucast pkts                   |
| <i>nve_tx_ucastbytes</i>  | (Optional) Trasnmitted ucast bytes                  |
| <i>nve_tx_mcastpkts</i>   | (Optional) Trasnmitted mcast pkts                   |
| <i>nve_tx_mcastbytes</i>  | (Optional) Trasnmitted mcast bytes                  |
| <i>nve_tx_bcastpkts</i>   | (Optional) Trasnmitted bcast pkts                   |
| <i>nve_tx_bcastbytes</i>  | (Optional) Trasnmitted bcast bytes                  |
| <i>nve_tx_pkts</i>        | (Optional) Total transmitted pkts                   |
| <i>nve_tx_bytes</i>       | (Optional) Total transmitted bytes                  |
| <i>nve_tx_bitrate</i>     | (Optional) Transmit bit rate                        |
| <i>nve_tx_pktrate</i>     | (Optional) Transmit pkt rate                        |

### Command Mode

- /exec



## show interface brief

```
show interface <ifrange> brief [ __readonly__ TABLE_interface <interface> <state> [ <state_rsn> ] [
<state_rsn_desc> ] [ <overlay_mtu> ] [ <overlay_bandwidth> ] [ <overlay_vrf> ] [ <overlay_src_addr> ] [
<overlay_dst_addr> ] ]
```

### Syntax Description

|                          |  |
|--------------------------|--|
| show                     | Show running system information            |
| interface                | Show interface status and information      |
| <i>ifrange</i>           | Enter interface type and number            |
| brief                    | Show brief info of interface               |
| <i>__readonly__</i>      | (Optional) Read Only                       |
| <i>interface</i>         | (Optional) Interface index                 |
| TABLE_interface          | (Optional) show interface                  |
| <i>state</i>             | (Optional) Interface state                 |
| <i>state_rsn</i>         | (Optional) Interface state reason          |
| <i>state_rsn_desc</i>    | (Optional) Interface state reason detailed |
| <i>overlay_mtu</i>       | (Optional) MTU                             |
| <i>overlay_bandwidth</i> | (Optional) Bandwidth                       |
| <i>overlay_vrf</i>       | (Optional) VRF                             |
| <i>overlay_src_addr</i>  | (Optional) Source address                  |
| <i>overlay_dst_addr</i>  | (Optional) Destination address             |

### Command Mode

- /exec

## show interface brief

```
show interface <ifpch_brf> brief [ __readonly__ TABLE_interface <interface> [ <vlan> ] <type> <portmode>
<state> <state_rsn_desc> <speed> <ratemode> [ <proto> ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                       |
| interface             | Show interface status and information                 |
| <i>ifpch_brf</i>      | Enter interface type and number in module/slot format |
| brief                 | Show brief info of interface                          |
| <i>__readonly__</i>   | (Optional) Read Only                                  |
| <i>interface</i>      | (Optional) Interface index                            |
| TABLE_interface       | (Optional) show interface                             |
| <i>vlan</i>           | (Optional) Vlan                                       |
| <i>type</i>           | (Optional) Type                                       |
| <i>portmode</i>       | (Optional) Port mode                                  |
| <i>state</i>          | (Optional) Interface state                            |
| <i>state_rsn_desc</i> | (Optional) Interface state reason detailed            |
| <i>speed</i>          | (Optional) Speed                                      |
| <i>ratemode</i>       | (Optional) Interface port speed                       |
| <i>proto</i>          | (Optional) Port Channel Protocol                      |

### Command Mode

- /exec

## show interface brief

```
show interface brief [ controller | cli ] [ __readonly__ TABLE_interface [ <interface> ] [ <vlan> ] [ <type> ]
[ <portmode> ] [ <state> ] [ <state_rsn> ] [ <state_rsn_desc> ] [ <desc> ] [ <vrf> ] [ <ipv6_addr> ] [ <ip_addr>
] [ <speed> ] [ <mtu> ] [ <ratemode> ] [ <portchan> ] [ <proto> ] [ <interface_vfc> ] [ <vsan_brief> ] [
<admin_mode> ] [ <admin_trunk_mode> ] [ <status> ] [ <fcot_info> ] [ <bind_info> ] [ <bind_type> ] [
<port_rate_mode> ] [ <oper_speed> ] [ <port_channel> ] [ <ip_addr1> ] ]
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                  |
| interface             | Show interface status and information            |
| brief                 | Show brief info of interface                     |
| controller            | (Optional) Show controller configured interfaces |
| cli                   | (Optional) Show CLI configured interfaces        |
| <i>__readonly__</i>   | (Optional) Read Only                             |
| <i>interface</i>      | (Optional) Interface index                       |
| TABLE_interface       | (Optional) show interface                        |
| <i>state</i>          | (Optional) Interface state                       |
| <i>state_rsn</i>      | (Optional) Interface state reason                |
| <i>state_rsn_desc</i> | (Optional) Interface state reason detailed       |
| <i>desc</i>           | (Optional) Interface description                 |
| <i>vrf</i>            | (Optional) Vrf membership                        |
| <i>ip_addr</i>        | (Optional) IP address                            |
| <i>mtu</i>            | (Optional) MTU                                   |
| <i>speed</i>          | (Optional) Speed                                 |
| <i>vlan</i>           | (Optional) Vlan                                  |
| <i>type</i>           | (Optional) Type                                  |
| <i>portmode</i>       | (Optional) Port mode                             |
| <i>ratemode</i>       | (Optional) Interface port speed                  |
| <i>portchan</i>       | (Optional) Port Channel Membership               |
| <i>proto</i>          | (Optional) Port Channel Protocol                 |
| <i>interface_vfc</i>  | (Optional) Interface index                       |

|                         |                                |
|-------------------------|--------------------------------|
| <i>vsan_brief</i>       | (Optional) vsan brief          |
| <i>admin_mode</i>       | (Optional) admin mode          |
| <i>admin_trunk_mode</i> | (Optional) admin trunk mode    |
| <i>status</i>           | (Optional) status              |
| <i>fcot_info</i>        | (Optional) fcot info           |
| <i>bind_info</i>        | (Optional) bind interface      |
| <i>bind_type</i>        | (Optional) bind type           |
| <i>port_rate_mode</i>   | (Optional) rate mode           |
| <i>oper_speed</i>       | (Optional) speed               |
| <i>port_channel</i>     | (Optional) port channel number |
| <i>ip_addr1</i>         | (Optional) IP address          |

**Command Mode**

- /exec

# show interface brief

```
show interface <ifloop_brf> brief [ __readonly__ TABLE_interface <interface> <state> [ <desc> ] ]
```

## Syntax Description

|                   |   |
|-------------------|---|
| show              | Show running system information                       |
| interface         | Show interface status and information                 |
| <i>ifloop_brf</i> | Enter interface type and number in module/slot format |
| brief             | Show brief info of interface                          |
| __readonly__      | (Optional) Read Only                                  |
| <i>interface</i>  | (Optional) Interface index                            |
| TABLE_interface   | (Optional) show interface                             |
| <i>state</i>      | (Optional) Interface state                            |
| <i>desc</i>       | (Optional) Interface description                      |

## Command Mode

- /exec

## show interface brief

```
show interface <iftunnel_brf> brief [ __readonly__ TABLE_interface <interface> <state> <admin-state> {
<tunnel-ipv4> | <tunnel-ipv6> } <mtu> <bandwidth> <encap-type> <keepalive-period> <keepalive-retries>
{ <src-ipv4> | <src-ipv6> } <src-intf> { <dest-ipv4> | <dest-ipv6> } <dest-hostname> <vrf_name>
<wccp_header> <ttl_val> <tunnel_pmtud_age_time> <tunnel_pmtud_min_mtu> <tunnel_pmtud>
<tunnel_pgm_mtu> <tunnel_rx_pkt_count> <tunnel_rx_byte_count> <tunnel_rx_rate> <tunnel_tx_pkt_count>
<tunnel_tx_byte_count> <tunnel_tx_rate> <tunnel_clear_counter> ]
```

### Syntax Description

|                          |   |
|--------------------------|---|
| show                     | Show running system information                       |
| interface                | Show interface status and information                 |
| <i>iftunnel_brf</i>      | Enter interface type and number in module/slot format |
| brief                    | Show brief info of interface                          |
| <i>__readonly__</i>      | (Optional) Read Only                                  |
| <i>interface</i>         | (Optional) Interface index                            |
| TABLE_interface          | (Optional) show interface                             |
| <i>state</i>             | (Optional) Interface state                            |
| <i>admin-state</i>       | (Optional)  |
| <i>tunnel-ipv4</i>       | (Optional) interface IPv4 address                     |
| <i>mtu</i>               | (Optional) interface Maximum Transmission Unit        |
| <i>bandwidth</i>         | (Optional) interface Bandwidth in kilobits            |
| <i>encap-type</i>        | (Optional)  |
| <i>keepalive-period</i>  | (Optional) keealive period                            |
| <i>keepalive-retries</i> | (Optional) number of retries                          |
| <i>src-ipv4</i>          | (Optional) tunnel source IPv4 address                 |
| <i>src-intf</i>          | (Optional) tunnel source interface                    |
| <i>dest-ipv4</i>         | (Optional) tunnel destination IPv4 address            |
| <i>dest-hostname</i>     | (Optional) tunnel destination hostname                |
| <i>vrf_name</i>          | (Optional) transport VRF name                         |
| <i>wccp_header</i>       | (Optional) wccp header                                |
| <i>ttl_val</i>           | (Optional) tunnel time to live value                  |

|                              |   |
|------------------------------|---|
| <i>tunnel_pmtud_age_time</i> | (Optional) tunnel path MTU discovery age time       |
| <i>tunnel_pmtud_min_mtu</i>  | (Optional) tunnel path MTU discovery min mtu        |
| <i>tunnel_pmtud</i>          | (Optional) tunnel path MTU discovered               |
| <i>tunnel_pgm_mtu</i>        | (Optional) tunnel actual programmed MTU             |
| <i>tunnel_rx_pkt_count</i>   | (Optional) total number of packets received         |
| <i>tunnel_rx_byte_count</i>  | (Optional) total number of bytes received           |
| <i>tunnel_rx_rate</i>        | (Optional) packets input rate per 5 minutes         |
| <i>tunnel_tx_pkt_count</i>   | (Optional) total number of packets transmitted      |
| <i>tunnel_tx_byte_count</i>  | (Optional) total number of bytes transmitted        |
| <i>tunnel_tx_rate</i>        | (Optional) packets transmitted per 5 minutes        |
| <i>tunnel_clear_counter</i>  | (Optional) Last clearing of show interface counters |

**Command Mode**

- /exec

## show interface brief

```
show interface <ifmgmt_brf> brief [ __readonly__ TABLE_interface <interface> [ <vrf> ] <state> [
<ipv6_addr> ] [ <ip_addr> ] <mtu> <speed> [ <duplex> ] ]
```

### Syntax Description

|                     |   |
|---------------------|---|
| show                | Show running system information                       |
| interface           | Show interface status and information                 |
| <i>ifmgmt_brf</i>   | Enter interface type and number in module/slot format |
| brief               | Show brief info of interface                          |
| <i>__readonly__</i> | (Optional) Read Only                                  |
| <i>interface</i>    | (Optional) Interface index                            |
| TABLE_interface     | (Optional) show interface                             |
| <i>vrf</i>          | (Optional) Vrf membership                             |
| <i>state</i>        | (Optional) Interface state                            |
| <i>ip_addr</i>      | (Optional) IP address                                 |
| <i>mtu</i>          | (Optional) MTU  |
| <i>speed</i>        | (Optional) Speed                                      |
| <i>duplex</i>       | (Optional) Duplex                                     |

### Command Mode

- /exec



## show interface brief

```
show interface <ifeth_brf> brief [ __readonly__ TABLE_interface <interface> [ <vlan> ] <type> <portmode>
<state> <state_rsn_desc> <speed> <ratemode> [ <portchan> ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                       |
| interface             | Show interface status and information                 |
| <i>ifeth_brf</i>      | Enter interface type and number in module/slot format |
| brief                 | Show brief info of interface                          |
| <i>__readonly__</i>   | (Optional) Read Only                                  |
| <i>interface</i>      | (Optional) Interface index                            |
| TABLE_interface       | (Optional) show interface                             |
| <i>vlan</i>           | (Optional) Vlan                                       |
| <i>type</i>           | (Optional) Type                                       |
| <i>portmode</i>       | (Optional) Port mode                                  |
| <i>state</i>          | (Optional) Interface state                            |
| <i>state_rsn_desc</i> | (Optional) Interface state reason detailed            |
| <i>speed</i>          | (Optional) Speed                                      |
| <i>ratemode</i>       | (Optional) Interface port speed                       |
| <i>portchan</i>       | (Optional) Port Channel Membership                    |

### Command Mode

- /exec

## show interface brief

```
show interface <ifrange> brief [ __readonly__ TABLE_interface <interface> <state> [ <state_rsn> ] [
<state_rsn_desc> ] [ <admin_state> ] [ <nve_addr> ] [ <nve_vcid> ] [ <nve_mtu> ] [ <nve_bandwidth> ] [
<nve_vrf> ] [ <nve_src_addr> ] [ <nve_dst_addr> ] ]
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information            |
| interface             | Show interface status and information      |
| <i>ifrange</i>        | Enter interface type and number            |
| brief                 | Show brief info of interface               |
| <i>__readonly__</i>   | (Optional) Read Only                       |
| <i>interface</i>      | (Optional) Interface index                 |
| TABLE_interface       | (Optional) show interface                  |
| <i>state</i>          | (Optional) Interface state                 |
| <i>state_rsn</i>      | (Optional) Interface state reason          |
| <i>state_rsn_desc</i> | (Optional) Interface state reason detailed |
| <i>admin_state</i>    | (Optional) admin state                     |
| <i>nve_addr</i>       | (Optional) Peer address                    |
| <i>nve_vcid</i>       | (Optional) VCID                            |
| <i>nve_mtu</i>        | (Optional) MTU                             |
| <i>nve_bandwidth</i>  | (Optional) Bandwidth                       |
| <i>nve_vrf</i>        | (Optional) VRF                             |
| <i>nve_src_addr</i>   | (Optional) Source address                  |
| <i>nve_dst_addr</i>   | (Optional) Destination address             |

### Command Mode

- /exec

## show interface cable-diagnostics-tdr

```
show interface <ifid_tdr> cable-diagnostics-tdr [ __readonly__ TABLE interface <interface> <speed>
<distance1> <pair1_status> <distance2> <pair2_status> <distance3> <pair3_status> <distance4> <pair4_status>
]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                       |
| interface             | Show interface status and information                 |
| <i>ifid_tdr</i>       | Enter interface type and number in module/slot format |
| cable-diagnostics-tdr | Show interface tdr test information                   |
| <i>__readonly__</i>   | (Optional) Read Only                                  |
| <i>interface</i>      | (Optional) Interface index                            |
| TABLE_interface       | (Optional) show interface                             |
| <i>speed</i>          | (Optional) Speed                                      |
| <i>distance1</i>      | (Optional) Distance to fault for pair 1               |
| <i>distance2</i>      | (Optional) Distance to fault for pair 2               |
| <i>distance3</i>      | (Optional) Distance to fault for pair 3               |
| <i>distance4</i>      | (Optional) Distance to fault for pair 4               |
| <i>pair1_status</i>   | (Optional) Pair1 status                               |
| <i>pair2_status</i>   | (Optional) Pair2 status                               |
| <i>pair3_status</i>   | (Optional) Pair3 status                               |
| <i>pair4_status</i>   | (Optional) Pair4 status                               |

### Command Mode

- /exec

## show interface capabilities

```
show interface capabilities [ __readonly__ TABLE_interface <interface> <model> <type> <speed> <duplex>
<trunk_encap> [ <dce_capable> ] <channel> <bcast_supp> <flo_ctrl> <rate_mode> <port_mode> [ <fast_start>
] <qos_scheduling> <cos_rewrite> <tos_rewrite> [ <inline_power> ] <span> <udld> [ <mdix> ] [ <tdr> ]
<lnk_debounce> <lnk_debounce_time> <fex_fabric> <dot1q_tunnel> [ <pvlan_trunk_mode> ] [ <port_group>
] [ <port_group_members> ] <eee_capable> <pfc_capable> [ <speed_group_capable> ] <buffer_boost_capable>
[ <bkout_capable> ] [ <macsec_capable> ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information         |
| interface             | Show interface status and information   |
| capabilities          | Show interface capabilities information |
| <i>__readonly__</i>   | (Optional) Read Only                    |
| <i>interface</i>      | (Optional) Interface index              |
| TABLE_interface       | (Optional) show interface               |
| <i>model</i>          | (Optional) Model                        |
| <i>type</i>           | (Optional) Type                         |
| <i>speed</i>          | (Optional) Speed                        |
| <i>duplex</i>         | (Optional) Duplex                       |
| <i>trunk_encap</i>    | (Optional) Trunk encap. type            |
| <i>dce_capable</i>    | (Optional) DCE mode capable             |
| <i>channel</i>        | (Optional) Channel                      |
| <i>bcast_supp</i>     | (Optional) Broadcast suppression        |
| <i>flo_ctrl</i>       | (Optional) Flowcontrol                  |
| <i>rate_mode</i>      | (Optional) Rate mode                    |
| <i>port_mode</i>      | (Optional) Port mode                    |
| <i>fast_start</i>     | (Optional) Fast start                   |
| <i>qos_scheduling</i> | (Optional) QOS scheduling               |
| <i>cos_rewrite</i>    | (Optional) CoS rewrite                  |
| <i>tos_rewrite</i>    | (Optional) ToS rewrite                  |
| <i>inline_power</i>   | (Optional) Inline power                 |

|                             |                                    |
|-----------------------------|------------------------------------|
| <i>span</i>                 | (Optional) SPAN                    |
| <i>udld</i>                 | (Optional) UDLD                    |
| <i>mdix</i>                 | (Optional) MDIX                    |
| <i>tdr</i>                  | (Optional) TDR                     |
| <i>lnk_debounce</i>         | (Optional) Link debounce           |
| <i>lnk_debounce_time</i>    | (Optional) Link debounce time      |
| <i>fex_fabric</i>           | (Optional) FEX Fabric              |
| <i>dot1q_tunnel</i>         | (Optional) dot1q-tunnel            |
| <i>pvlan_trunk_mode</i>     | (Optional) Private-vlan trunk mode |
| <i>port_group</i>           | (Optional) Port Group              |
| <i>port_group_members</i>   | (Optional) Port Group Members      |
| <i>eee_capable</i>          | (Optional) EEE (efficient-eth)     |
| <i>pfc_capable</i>          | (Optional) PFC Capable:            |
| <i>bkout_capable</i>        | (Optional) Breakout Capable:       |
| <i>buffer_boost_capable</i> | (Optional) Buffer Boost Capable:   |
| <i>speed_group_capable</i>  | (Optional) Speed group capable     |
| <i>macsec_capable</i>       | (Optional) MACSEC capable          |

### Command Mode

- /exec

## show interface capabilities

```
show interface <ifid_eth_cap> capabilities [ __readonly__ TABLE_interface <interface> <model> <type>
<speed> <duplex> <trunk_encap> [ <dce_capable> ] <channel> <bcast_supp> <flo_ctrl> <rate_mode>
<port_mode> [ <fast_start> ] <qos_scheduling> <cos_rewrite> <tos_rewrite> [ <inline_power> ] <span>
<udld> [ <mdix> ] [ <tdr> ] <lnk_debounce> <lnk_debounce_time> <fex_fabric> <dot1q_tunnel> [
<pvlan_trunk_mode> ] [ <port_group> ] [ <port_group_members> ] <eee_capable> <pfc_capable> [
<speed_group_capable> ] <buffer_boost_capable> [ <bkout_capable> ] [ <macsec_capable> ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                       |
| interface             | Show interface status and information                 |
| <i>ifid_eth_cap</i>   | Enter interface type and number in module/slot format |
| capabilities          | Show interface capabilities information               |
| <u>__readonly__</u>   | (Optional) Read Only                                  |
| <i>interface</i>      | (Optional) Interface index                            |
| TABLE_interface       | (Optional) show interface                             |
| <i>model</i>          | (Optional) Model                                      |
| <i>type</i>           | (Optional) Type                                       |
| <i>speed</i>          | (Optional) Speed                                      |
| <i>duplex</i>         | (Optional) Duplex                                     |
| <i>trunk_encap</i>    | (Optional) Trunk encap. type                          |
| <i>dce_capable</i>    | (Optional) DCE mode capable                           |
| <i>channel</i>        | (Optional) Channel                                    |
| <i>bcast_supp</i>     | (Optional) Broadcast suppression                      |
| <i>flo_ctrl</i>       | (Optional) Flowcontrol                                |
| <i>rate_mode</i>      | (Optional) Rate mode                                  |
| <i>port_mode</i>      | (Optional) Port mode                                  |
| <i>fast_start</i>     | (Optional) Fast start                                 |
| <i>qos_scheduling</i> | (Optional) QOS scheduling                             |
| <i>cos_rewrite</i>    | (Optional) CoS rewrite                                |
| <i>tos_rewrite</i>    | (Optional) ToS rewrite                                |

|                             |                                    |
|-----------------------------|------------------------------------|
| <i>inline_power</i>         | (Optional) Inline power            |
| <i>span</i>                 | (Optional) SPAN                    |
| <i>udld</i>                 | (Optional) UDLD                    |
| <i>mdix</i>                 | (Optional) MDIX                    |
| <i>tdr</i>                  | (Optional) TDR                     |
| <i>lnk_debounce</i>         | (Optional) Link debounce           |
| <i>lnk_debounce_time</i>    | (Optional) Link debounce time      |
| <i>fex_fabric</i>           | (Optional) FEX Fabric              |
| <i>dot1q_tunnel</i>         | (Optional) dot1q-tunnel            |
| <i>pvlan_trunk_mode</i>     | (Optional) Private-vlan trunk mode |
| <i>port_group</i>           | (Optional) Port Group              |
| <i>port_group_members</i>   | (Optional) Port Group Members      |
| <i>eee_capable</i>          | (Optional) EEE (efficient-eth)     |
| <i>pfc_capable</i>          | (Optional) PFC Capable:            |
| <i>bkout_capable</i>        | (Optional) Breakout Capable:       |
| <i>buffer_boost_capable</i> | (Optional) Buffer Boost Capable:   |
| <i>speed_group_capable</i>  | (Optional) Speed group capable     |
| <i>macsec_capable</i>       | (Optional) MACSEC capable          |

**Command Mode**

- /exec

## show interface counters

```
show interface <ifrange> counters [ __readonly__ TABLE_interface <interface> [ <overlay_load_interval>
] [ <overlay_rx_ucastpkts> ] [ <overlay_rx_ucastbytes> ] [ <overlay_rx_mcastpkts> ] [
<overlay_rx_mcastbytes> ] [ <overlay_rx_pkts> ] [ <overlay_rx_bytes> ] [ <overlay_rx_bcastpkts> ] [
<overlay_rx_bcastbytes> ] [ <overlay_rx_bitrate> ] [ <overlay_rx_pktrate> ] [ <overlay_tx_ucastpkts> ] [
<overlay_tx_ucastbytes> ] [ <overlay_tx_mcastpkts> ] [ <overlay_tx_mcastbytes> ] [ <overlay_tx_bcastpkts>
] [ <overlay_tx_bcastbytes> ] [ <overlay_tx_pkts> ] [ <overlay_tx_bytes> ] [ <overlay_tx_bitrate> ] [
<overlay_tx_pktrate> ] ]
```

### Syntax Description

|                              |                                       |
|------------------------------|---------------------------------------|
| show                         | Show running system information       |
| interface                    | Show interface status and information |
| <i>ifrange</i>               | Enter interface type and number       |
| counters                     | Show interface counters               |
| <i>__readonly__</i>          | (Optional) Read Only                  |
| <i>interface</i>             | (Optional) Interface index            |
| TABLE_interface              | (Optional) show interface             |
| <i>overlay_load_interval</i> | (Optional) Load interval              |
| <i>overlay_rx_ucastpkts</i>  | (Optional) Received ucast pkts        |
| <i>overlay_rx_ucastbytes</i> | (Optional) Received ucast bytes       |
| <i>overlay_rx_mcastpkts</i>  | (Optional) Received mcast pkts        |
| <i>overlay_rx_mcastbytes</i> | (Optional) Received mcast bytes       |
| <i>overlay_rx_bcastpkts</i>  | (Optional) Received bcast pkts        |
| <i>overlay_rx_bcastbytes</i> | (Optional) Received bcast bytes       |
| <i>overlay_rx_pkts</i>       | (Optional) Total received pkts        |
| <i>overlay_rx_bytes</i>      | (Optional) Total received bytes       |
| <i>overlay_rx_bitrate</i>    | (Optional) Receive bit rate           |
| <i>overlay_rx_pktrate</i>    | (Optional) Receive pkt rate           |
| <i>overlay_tx_ucastpkts</i>  | (Optional) Trasnmitted ucast pkts     |
| <i>overlay_tx_ucastbytes</i> | (Optional) Trasnmitted ucast bytes    |
| <i>overlay_tx_mcastpkts</i>  | (Optional) Trasnmitted mcast pkts     |
| <i>overlay_tx_mcastbytes</i> | (Optional) Trasnmitted mcast bytes    |



|                              |                                    |
|------------------------------|------------------------------------|
| <i>overlay_tx_bcastpkts</i>  | (Optional) Trasnmitted beast pkts  |
| <i>overlay_tx_bcastbytes</i> | (Optional) Trasnmitted beast bytes |
| <i>overlay_tx_pkts</i>       | (Optional) Total transmitted pkts  |
| <i>overlay_tx_bytes</i>      | (Optional) Total transmitted bytes |
| <i>overlay_tx_bitrate</i>    | (Optional) Transmit bit rate       |
| <i>overlay_tx_pktrate</i>    | (Optional) Transmit pkt rate       |

**Command Mode**

- /exec

## show interface counters

```
show interface <ifid_ctr> counters [ snmp ] [ __readonly__ { TABLE_rx_counters <interface_rx> [
<eth_inpkts> ] [ <eth_inbytes> ] [ <eth_inucast> ] [ <eth_inmcast> ] [ <eth_inbcast> ] } { TABLE_tx_counters
<interface_tx> [ <eth_outpkts> ] [ <eth_outbytes> ] [ <eth_outucast> ] [ <eth_outmcast> ] [ <eth_outbcast>
] } ]
```

### Syntax Description

|                     |   |
|---------------------|---|
| show                | Show running system information                       |
| interface           | Show interface status and information                 |
| <i>ifid_ctr</i>     | Enter interface type and number in module/slot format |
| counters            | Show interface counters                               |
| snmp                | (Optional) Show SNMP MIB values                       |
| <i>__readonly__</i> | (Optional) Read Only                                  |
| <i>interface_rx</i> | (Optional) Interface index rx                         |
| <i>interface_tx</i> | (Optional) Interface index tx                         |
| TABLE_rx_counters   | (Optional) show Rx counters                           |
| <i>eth_inpkts</i>   | (Optional) Packets input                              |
| <i>eth_inbytes</i>  | (Optional) Bytes input                                |
| <i>eth_inucast</i>  | (Optional) Unicasts                                   |
| <i>eth_inmcast</i>  | (Optional) Multicasts                                 |
| <i>eth_inbcast</i>  | (Optional) Broadcasts                                 |
| TABLE_tx_counters   | (Optional) show Tx counters                           |
| <i>eth_outpkts</i>  | (Optional) Packets output                             |
| <i>eth_outbytes</i> | (Optional) Bytes output                               |
| <i>eth_outucast</i> | (Optional) Unicasts                                   |
| <i>eth_outmcast</i> | (Optional) Multicasts                                 |
| <i>eth_outbcast</i> | (Optional) Broadcasts                                 |

### Command Mode

- /exec

# show interface counters

```
show interface counters [ module <module> ] [ __readonly__ { TABLE_rx_counters <interface_rx> [
<eth_inpkts> ] [ <eth_inbytes> ] [ <eth_inucast> ] [ <eth_inmcast> ] [ <eth_inbcast> ] [ <eth_l3in_bytes> ]
[ <eth_l3in_ucastpkts> ] [ <eth_l3in_mcastpkts> ] [ <eth_l3in_bcastpkts> ] } } { TABLE_tx_counters
<interface_tx> [ <eth_outpkts> ] [ <eth_outbytes> ] [ <eth_outucast> ] [ <eth_outmcast> ] [ <eth_outbcast>
] [ <eth_l3out_bytes> ] [ <eth_l3out_ucastpkts> ] [ <eth_l3out_mcastpkts> ] [ <eth_l3out_bcastpkts> ] } }
```

## Syntax Description

|                           |  |
|---------------------------|--|
| show                      | Show running system information                  |
| interface                 | Show interface status and information            |
| counters                  | Show interface counters                          |
| module                    | (Optional) Limit display to interfaces on module |
| <i>module</i>             | (Optional) Enter module number                   |
| <i>__readonly__</i>       | (Optional) Read Only                             |
| <i>interface_rx</i>       | (Optional) Interface index rx                    |
| <i>interface_tx</i>       | (Optional) Interface index tx                    |
| TABLE_rx_counters         | (Optional) show Rx counters                      |
| TABLE_tx_counters         | (Optional) show Tx counters                      |
| <i>eth_inpkts</i>         | (Optional) Packets input                         |
| <i>eth_inbytes</i>        | (Optional) Bytes input                           |
| <i>eth_inucast</i>        | (Optional) Unicasts                              |
| <i>eth_inmcast</i>        | (Optional) Multicasts                            |
| <i>eth_inbcast</i>        | (Optional) Broadcasts                            |
| <i>eth_outpkts</i>        | (Optional) Packets output                        |
| <i>eth_outbytes</i>       | (Optional) Bytes output                          |
| <i>eth_outucast</i>       | (Optional) Unicasts                              |
| <i>eth_outmcast</i>       | (Optional) Multicasts                            |
| <i>eth_outbcast</i>       | (Optional) Broadcasts                            |
| <i>eth_l3in_bytes</i>     | (Optional) L3 Rx bytes                           |
| <i>eth_l3in_ucastpkts</i> | (Optional) L3 Rx Unicast pkts                    |
| <i>eth_l3in_mcastpkts</i> | (Optional) L3 Rx Multicast pkts                  |

|                            |                                 |
|----------------------------|---------------------------------|
| <i>eth_l3in_bcastpkts</i>  | (Optional) L3 Rx Broadcast pkts |
| <i>eth_l3out_bytes</i>     | (Optional) L3 Tx bytes          |
| <i>eth_l3out_ucastpkts</i> | (Optional) L3 Tx Unicast pkts   |
| <i>eth_l3out_mcastpkts</i> | (Optional) L3 Tx Multicast pkts |
| <i>eth_l3out_bcastpkts</i> | (Optional) L3 Tx Broadcast pkts |

**Command Mode**

- /exec

# show interface counters

```
show interface counters [ non-zero ] [ __readonly__ { TABLE_rx_counters <interface_rx> [ <eth_inpkts> ]
[ <eth_inbytes> ] [ <eth_inucast> ] [ <eth_inmcast> ] [ <eth_inbcast> ] [ <eth_l3in_bytes> ] [
<eth_l3in_ucastpkts> ] [ <eth_l3in_mcastpkts> ] [ <eth_l3in_bcastpkts> ] } { TABLE_tx_counters
<interface_tx> [ <eth_outpkts> ] [ <eth_outbytes> ] [ <eth_outucast> ] [ <eth_outmcast> ] [ <eth_outbcast>
] [ <eth_l3out_bytes> ] [ <eth_l3out_ucastpkts> ] [ <eth_l3out_mcastpkts> ] [ <eth_l3out_bcastpkts> ] } ]
```

## Syntax Description

|                           |  |
|---------------------------|--|
| show                      | Show running system information                        |
| interface                 | Show interface status and information                  |
| counters                  | Show interface counters                                |
| non-zero                  | (Optional) To display only the non-zero counter values |
| __readonly__              | (Optional) Read Only                                   |
| <i>interface_rx</i>       | (Optional) Interface index rx                          |
| <i>interface_tx</i>       | (Optional) Interface index tx                          |
| TABLE_rx_counters         | (Optional) show Rx counters                            |
| TABLE_tx_counters         | (Optional) show Tx counters                            |
| <i>eth_inpkts</i>         | (Optional) Packets input                               |
| <i>eth_inbytes</i>        | (Optional) Bytes input                                 |
| <i>eth_inucast</i>        | (Optional) Unicasts                                    |
| <i>eth_inmcast</i>        | (Optional) Multicasts                                  |
| <i>eth_inbcast</i>        | (Optional) Broadcasts                                  |
| <i>eth_outpkts</i>        | (Optional) Packets output                              |
| <i>eth_outbytes</i>       | (Optional) Bytes output                                |
| <i>eth_outucast</i>       | (Optional) Unicasts                                    |
| <i>eth_outmcast</i>       | (Optional) Multicasts                                  |
| <i>eth_outbcast</i>       | (Optional) Broadcasts                                  |
| <i>eth_l3in_bytes</i>     | (Optional) L3 Rx bytes                                 |
| <i>eth_l3in_ucastpkts</i> | (Optional) L3 Rx Unicast pkts                          |
| <i>eth_l3in_mcastpkts</i> | (Optional) L3 Rx Multicast pkts                        |
| <i>eth_l3in_bcastpkts</i> | (Optional) L3 Rx Broadcast pkts                        |

|                            |                                 |
|----------------------------|---------------------------------|
| <i>eth_l3out_bytes</i>     | (Optional) L3 Tx bytes          |
| <i>eth_l3out_ucastpkts</i> | (Optional) L3 Tx Unicast pkts   |
| <i>eth_l3out_mcastpkts</i> | (Optional) L3 Tx Multicast pkts |
| <i>eth_l3out_bcastpkts</i> | (Optional) L3 Tx Broadcast pkts |

**Command Mode**

- /exec

# show interface counters

```
show interface <ifeth_ctr> counters [ snmp ] [ __readonly__ { TABLE_rx_counters <interface_rx> [
<eth_inbytes> ] [ <eth_inucast> ] [ <eth_inmcast> ] [ <eth_inbcast> ] [ <eth_l3in_bytes> ] [
<eth_l3in_ucastpkts> ] [ <eth_l3in_mcastpkts> ] [ <eth_l3in_bcastpkts> ] } { TABLE_tx_counters
<interface_tx> [ <eth_outbytes> ] [ <eth_outucast> ] [ <eth_outmcast> ] [ <eth_outbcast> ] [ <eth_l3out_bytes>
] [ <eth_l3out_ucastpkts> ] [ <eth_l3out_mcastpkts> ] [ <eth_l3out_bcastpkts> ] } }
```

## Syntax Description

|                           |   |
|---------------------------|---|
| show                      | Show running system information                       |
| interface                 | Show interface status and information                 |
| <i>ifeth_ctr</i>          | Enter interface type and number in module/slot format |
| counters                  | Show interface counters                               |
| snmp                      | (Optional) Show SNMP MIB values                       |
| <u>__readonly__</u>       | (Optional) Read Only                                  |
| TABLE_rx_counters         | (Optional) show Rx counters                           |
| <i>interface_rx</i>       | (Optional) Interface index rx                         |
| <i>eth_inbytes</i>        | (Optional) Bytes input                                |
| <i>eth_inucast</i>        | (Optional) Unicasts input                             |
| <i>eth_inmcast</i>        | (Optional) Multicasts input                           |
| <i>eth_inbcast</i>        | (Optional) Broadcasts input                           |
| <i>eth_l3in_bytes</i>     | (Optional) L3 Rx bytes                                |
| <i>eth_l3in_ucastpkts</i> | (Optional) L3 Rx Unicast pkts                         |
| <i>eth_l3in_mcastpkts</i> | (Optional) L3 Rx Multicast pkts                       |
| <i>eth_l3in_bcastpkts</i> | (Optional) L3 Rx Broadcast pkts                       |
| TABLE_tx_counters         | (Optional) show Tx counters                           |
| <i>interface_tx</i>       | (Optional) Interface index tx                         |
| <i>eth_outbytes</i>       | (Optional) Bytes output                               |
| <i>eth_outucast</i>       | (Optional) Unicasts output                            |
| <i>eth_outmcast</i>       | (Optional) Multicasts output                          |
| <i>eth_outbcast</i>       | (Optional) Broadcasts output                          |
| <i>eth_l3out_bytes</i>    | (Optional) L3 Tx bytes                                |

|                            |                                 |
|----------------------------|---------------------------------|
| <i>eth_l3out_ucastpkts</i> | (Optional) L3 Tx Unicast pkts   |
| <i>eth_l3out_mcastpkts</i> | (Optional) L3 Tx Multicast pkts |
| <i>eth_l3out_bcastpkts</i> | (Optional) L3 Tx Broadcast pkts |

**Command Mode**

- /exec



## show interface counters

```
show interface <ifrange> counters [ __readonly__ { TABLE_nve_counters <interface> [ <ucast_inbytes> ]
[ <ucast_inpkts> ] [ <ucast_outbytes> ] [ <ucast_outpkts> ] [ <mcast_inbytes> ] [ <mcast_inpkts> ] [
<mcast_outbytes> ] [ <mcast_outpkts> ] } ]
```

### Syntax Description

|                       |                                       |
|-----------------------|---------------------------------------|
| show                  | Show running system information       |
| interface             | Show interface status and information |
| <i>ifrange</i>        | Enter interface type and number       |
| counters              | Show interface counters               |
| <i>__readonly__</i>   | (Optional) Read Only                  |
| <i>interface</i>      | (Optional) Interface index            |
| TABLE_nve_counters    | (Optional) show interface             |
| <i>ucast_inbytes</i>  | (Optional) ucast bytes input          |
| <i>ucast_inpkts</i>   | (Optional) ucast packets input        |
| <i>ucast_outbytes</i> | (Optional) ucast bytes output         |
| <i>ucast_outpkts</i>  | (Optional) ucast packets output       |
| <i>mcast_inbytes</i>  | (Optional) mcast bytes input          |
| <i>mcast_inpkts</i>   | (Optional) mcast packets input        |
| <i>mcast_outbytes</i> | (Optional) mcast bytes output         |
| <i>mcast_outpkts</i>  | (Optional) mcast packets output       |

### Command Mode

- /exec

## show interface counters brief

```
show interface <ifeth_ctr_brf> counters brief [ <counter_val> ] [ __readonly__ TABLE_interface <interface>
<eth_inrate1> <eth_inframes1> <eth_outrate1> <eth_outframes1> <eth_load_intv1> <eth_inrate2>
<eth_inframes2> <eth_outrate2> <eth_outframes2> <eth_load_intv2> [ <eth_inrate3> <eth_inframes3>
<eth_outrate3> <eth_outframes3> <eth_load_intv3> ] ]
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                                |
| interface             | Show interface status and information                          |
| <i>ifeth_ctr_brf</i>  | Enter interface type and number in module/slot format          |
| counters              | Show interface counters  |
| brief                 | Show interface counters in brief                               |
| <i>counter_val</i>    | (Optional) Specify a single load interval id to show the rates |
| <i>__readonly__</i>   | (Optional) Read Only   |
| TABLE_interface       | (Optional) show interface                                      |
| <i>interface</i>      | (Optional) Interface index                                     |
| <i>eth_inrate1</i>    | (Optional) interval 1 input rate in mbps                       |
| <i>eth_inframes1</i>  | (Optional) interval 1 input rate in frames (pkts)              |
| <i>eth_outrate1</i>   | (Optional) interval 1 output rate in mbps                      |
| <i>eth_outframes1</i> | (Optional) interval 1 output rate in output frames (pkts)      |
| <i>eth_load_intv1</i> | (Optional) interval 1 timer value in sec                       |
| <i>eth_inrate2</i>    | (Optional) interval 2 input rate in mbps                       |
| <i>eth_inframes2</i>  | (Optional) interval 2 input rate in frames (pkts)              |
| <i>eth_outrate2</i>   | (Optional) interval 2 output rate in mbps                      |
| <i>eth_outframes2</i> | (Optional) interval 2 output rate in output frames (pkts)      |
| <i>eth_load_intv2</i> | (Optional) interval 2 timer value in sec                       |
| <i>eth_inrate3</i>    | (Optional) interval 3 input rate in mbps                       |
| <i>eth_inframes3</i>  | (Optional) interval 3 input rate in frames (pkts)              |
| <i>eth_outrate3</i>   | (Optional) interval 3 output rate in mbps                      |
| <i>eth_outframes3</i> | (Optional) interval 3 output rate in output frames (pkts)      |

|                       |  |
|-----------------------|--|
| <i>eth_load_intv3</i> | (Optional) interval 3 timer value in sec |
|-----------------------|--|

**Command Mode**

- /exec

# show interface counters brief

```
show interface counters brief [ <counter_val> ] [ __readonly__ TABLE_interface <interface> <eth_inrate1>
<eth_inframes1> <eth_outrate1> <eth_outframes1> <eth_load_intv1> <eth_inrate2> <eth_inframes2>
<eth_outrate2> <eth_outframes2> <eth_load_intv2> [ <eth_inrate3> <eth_inframes3> <eth_outrate3>
<eth_outframes3> <eth_load_intv3> ] ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                                |
| interface             | Show interface status and information                          |
| counters              | Show interface counters  |
| brief                 | Show interface counters in brief                               |
| <i>counter_val</i>    | (Optional) Specify a single load interval id to show the rates |
| <i>__readonly__</i>   | (Optional) Read Only   |
| <i>interface</i>      | (Optional) Interface index                                     |
| TABLE_interface       | (Optional) show interface                                      |
| <i>eth_inrate1</i>    | (Optional) interval 1 input rate in mbps                       |
| <i>eth_inframes1</i>  | (Optional) interval 1 input rate in frames (pkts)              |
| <i>eth_outrate1</i>   | (Optional) interval 1 output rate in mbps                      |
| <i>eth_outframes1</i> | (Optional) interval 1 output rate in output frames (pkts)      |
| <i>eth_load_intv1</i> | (Optional) interval 1 timer value in sec                       |
| <i>eth_inrate2</i>    | (Optional) interval 2 input rate in mbps                       |
| <i>eth_inframes2</i>  | (Optional) interval 2 input rate in frames (pkts)              |
| <i>eth_outrate2</i>   | (Optional) interval 2 output rate in mbps                      |
| <i>eth_outframes2</i> | (Optional) interval 2 output rate in output frames (pkts)      |
| <i>eth_load_intv2</i> | (Optional) interval 2 timer value in sec                       |
| <i>eth_inrate3</i>    | (Optional) interval 3 input rate in mbps                       |
| <i>eth_inframes3</i>  | (Optional) interval 3 input rate in frames (pkts)              |
| <i>eth_outrate3</i>   | (Optional) interval 3 output rate in mbps                      |
| <i>eth_outframes3</i> | (Optional) interval 3 output rate in output frames (pkts)      |
| <i>eth_load_intv3</i> | (Optional) interval 3 timer value in sec                       |

**Command Mode**

- /exec

## show interface counters detailed

```

show interface counters detailed [ snmp ] [ __readonly__ TABLE_interface <interface> [ <vdc_lvl_in_pkts>
] [ <vdc_lvl_in_bytes> ] [ <vdc_lvl_in_ucast> ] [ <vdc_lvl_in_mcast> ] [ <vdc_lvl_in_bcast> ] [
<vdc_lvl_in_bps> ] [ <vdc_lvl_in_pps> ] [ <vdc_lvl_in_avg_pkts> ] [ <vdc_lvl_in_avg_bytes> ] [
<vdc_lvl_out_pkts> ] [ <vdc_lvl_out_bytes> ] [ <vdc_lvl_out_ucast> ] [ <vdc_lvl_out_mcast> ] [
<vdc_lvl_out_bcast> ] [ <vdc_lvl_out_bps> ] [ <vdc_lvl_out_pps> ] [ <vdc_lvl_out_avg_pkts> ] [
<vdc_lvl_out_avg_bytes> ] [ <mgmt_in_pkts> ] [ <mgmt_in_bytes> ] [ <mgmt_in_mcast> ] [
<mgmt_in_compressed> ] [ <mgmt_in_errors> ] [ <mgmt_in_frame> ] [ <mgmt_in_overrun> ] [
<mgmt_in_fifo> ] [ <mgmt_out_pkts> ] [ <mgmt_out_bytes> ] [ <mgmt_out_underruns> ] [
<mgmt_out_errors> ] [ <mgmt_out_collisions> ] [ <mgmt_out_fifo> ] [ <mgmt_out_carrier> ] [
<mgmt_align_err> ] [ <mgmt_fcs_err> ] [ <mgmt_xmit_err> ] [ <mgmt_rcv_err> ] [ <mgmt_undersize> ] [
<mgmt_outdisc> ] [ <mgmt_single_col> ] [ <mgmt_multi_col> ] [ <mgmt_late_col> ] [ <mgmt_excess_col>
] [ <mgmt_carri_sen> ] [ <mgmt_runts> ] [ <mgmt_giants> ] [ <mgmt_sqetest_err> ] [ <mgmt_deferred_tx>
] [ <mgmt_inmactx_err> ] [ <mgmt_inmacrx_err> ] [ <mgmt_symbol_err> ] [ <loop_in_pkts> ] [
<loop_in_bytes> ] [ <loop_in_mcast> ] [ <loop_in_compressed> ] [ <loop_in_errors> ] [ <loop_in_frame>
] [ <loop_in_overrun> ] [ <loop_in_fifo> ] [ <loop_out_pkts> ] [ <loop_out_bytes> ] [ <loop_out_underruns>
] [ <loop_out_errors> ] [ <loop_out_collisions> ] [ <loop_out_fifo> ] [ <loop_out_carriers> ] [
<eth_load_interval1> ] [ <eth_load_interval1_rx> ] [ <eth_inrate1_bits> ] [ <eth_inrate1_pkts> ] [
<eth_load_interval1_tx> ] [ <eth_outrate1_bits> ] [ <eth_outrate1_pkts> ] [ <eth_load_interval2> ] [
<eth_inrate1_summary_bits> ] [ <eth_inrate1_summary_pkts> ] [ <eth_outrate1_summary_bits> ] [
<eth_outrate1_summary_pkts> ] [ <eth_load_interval2_rx> ] [ <eth_inrate2_bits> ] [ <eth_inrate2_pkts> ] [
<eth_load_interval2_tx> ] [ <eth_outrate2_bits> ] [ <eth_outrate2_pkts> ] [ <eth_load_interval3> ] [
<eth_inrate2_summary_bits> ] [ <eth_inrate2_summary_pkts> ] [ <eth_outrate2_summary_bits> ] [
<eth_outrate2_summary_pkts> ] [ <eth_load_interval3_rx> ] [ <eth_inrate3_bits> ] [ <eth_inrate3_pkts> ] [
<eth_load_interval3_tx> ] [ <eth_outrate3_bits> ] [ <eth_outrate3_pkts> ] [ <eth_inrate3_summary_bits> ]
[ <eth_inrate3_summary_pkts> ] [ <eth_outrate3_summary_bits> ] [ <eth_outrate3_summary_pkts> ] [
<eth_inpkts> ] [ <eth_inucast> ] [ <eth_inmcast> ] [ <eth_inbcast> ] [ <eth_ingiants> ] [ <eth_inbytes> ] [
<eth_storm_supp> ] [ <eth_inb64> ] [ <eth_inb65_127> ] [ <eth_inb128_255> ] [ <eth_inb256_511> ] [
<eth_inb512_1023> ] [ <eth_inb1024_1518> ] [ <eth_inb1519_1548> ] [ <eth_intrunk> ] [ <eth_outpkts> ]
[ <eth_outucast> ] [ <eth_outmcast> ] [ <eth_outbcast> ] [ <eth_outgiants> ] [ <eth_outbytes> ] [ <eth_outb64>
] [ <eth_outb65_127> ] [ <eth_outb128_255> ] [ <eth_outb256_511> ] [ <eth_outb512_1023> ] [
<eth_outb1024_1518> ] [ <eth_outb1519_1548> ] [ <eth_outtrunk> ] [ <eth_nobuf> ] [ <eth_runts> ] [
<eth_crc> ] [ <eth_ecc> ] [ <eth_overrun> ] [ <eth_underrun> ] [ <eth_ignored> ] [ <eth_bad_eth> ] [
<eth_bad_proto> ] [ <eth_in_ifdown_drops> ] [ <eth_coll> ] [ <eth_latecoll> ] [ <eth_lostcarrier> ] [
<eth_nocarrier> ] [ <eth_babbles> ] [ <eth_watchdog> ] [ <eth_dribble> ] [ <eth_inerr> ] [ <eth_outerr> ] [
<eth_deferred> ] [ <eth_jabbers> ] [ <eth_shortframe> ] [ <eth_single_coll> ] [ <eth_multi_coll> ] [
<eth_excess_coll> ] [ <eth_indiscard> ] [ <eth_bad_encap> ] [ <eth_outcrc> ] [ <eth_symbol> ] [
<eth_out_drops> ] [ <eth_bpdu_outlost> ] [ <eth_cos0_outlost> ] [ <eth_cos1_outlost> ] [ <eth_cos2_outlost>
] [ <eth_cos3_outlost> ] [ <eth_cos4_outlost> ] [ <eth_cos5_outlost> ] [ <eth_cos6_outlost> ] [
<eth_cos7_outlost> ] [ <eth_inpause> ] [ <eth_outpause> ] [ <eth_resets> ] [ <eth_sqetest> ] [
<eth_l2_ucastpkts> ] [ <eth_l2_ucastbytes> ] [ <eth_l2_mcastpkts> ] [ <eth_l2_mcastbytes> ] [
<eth_l2_bcastpkts> ] [ <eth_l2_bcastbytes> ] [ <eth_l3in_routed_pkts> ] [ <eth_l3in_routed_bytes> ] [
<eth_l3out_routed_pkts> ] [ <eth_l3out_routed_bytes> ] [ <eth_l3in_ucastpkts> ] [ <eth_l3in_ucastbytes> ]
[ <eth_l3in_mcastpkts> ] [ <eth_l3in_mcastbytes> ] [ <eth_l3in_bcastpkts> ] [ <eth_l3in_bcastbytes> ] [
<eth_l3out_ucastpkts> ] [ <eth_l3out_ucastbytes> ] [ <eth_l3out_mcastpkts> ] [ <eth_l3out_mcastbytes> ] [
<eth_l3out_bcastpkts> ] [ <eth_l3out_bcastbytes> ] [ <eth_l3avg1_inbytes> ] [ <eth_l3avg1_inpkts> ] [
<eth_l3avg1_outbytes> ] [ <eth_l3avg1_outpkts> ] [ <eth_ipmcast> ] [ <eth_inhw_switched> ] [
<eth_insw_switched> ] [ <eth_throtles> ] [ <eth_frame> ] [ <eth_outhw_switched> ] [ <eth_outsw_switched>
] [ <eth_buffail> ] [ <eth_bufswapped> ] [ <eth_arpdrops> ] [ <eth_out_ifdown_drops> ] [ <eth_fcoe_in_pkts>

```

```

][ <eth_fcoe_in_octets> ][ <eth_fcoe_out_pkts> ][ <eth_fcoe_out_octets> ][ <eth_nfcoe_in_pkts> ][
<eth_nfcoe_in_octets> ][ <eth_nfcoe_out_pkts> ][ <eth_nfcoe_out_octets> ][ <svi_routed_pkts_in> ][
<svi_routed_bytes_in> ][ <svi_routed_pkts_out> ][ <svi_routed_bytes_out> ][ <svi_ucast_pkts_in> ][
<svi_ucast_bytes_in> ][ <svi_mcast_pkts_in> ][ <svi_mcast_bytes_in> ][ <svi_ucast_pkts_out> ][
<svi_ucast_bytes_out> ][ <svi_mcast_pkts_out> ][ <svi_mcast_bytes_out> ][ <svi_ipv4_ucast_pkts_in> ][
<svi_ipv4_ucast_bytes_in> ][ <svi_ipv4_ucast_pkts_out> ][ <svi_ipv4_ucast_bytes_out> ][
<svi_ipv4_mcast_pkts_in> ][ <svi_ipv4_mcast_bytes_in> ][ <svi_ipv4_mcast_pkts_out> ][
<svi_ipv4_mcast_bytes_out> ][ <svi_ipv6_ucast_pkts_in> ][ <svi_ipv6_ucast_bytes_in> ][
<svi_ipv6_ucast_pkts_out> ][ <svi_ipv6_ucast_bytes_out> ][ <svi_ipv6_mcast_pkts_in> ][
<svi_ipv6_mcast_bytes_in> ][ <svi_ipv6_mcast_pkts_out> ][ <svi_ipv6_mcast_bytes_out> ][
<svi_average_input_bits> ][ <svi_average_input_packets> ][ <svi_average_output_bits> ][
<svi_average_output_packets> ][ <svi_rate_in_mins> ][ <svi_time_last_cleared> ][ <svi_tx_load> ][
<svi_rx_load> ][ <svi_reliability> ] ]
    
```

**Syntax Description**

|                      |   |
|----------------------|---|
| show                 | Show running system information               |
| interface            | Show interface status and information         |
| counters             | Show interface counters                       |
| detailed             | Show only non-zero counters                   |
| snmp                 | (Optional) Show SNMP MIB values               |
| __readonly__         | (Optional) Read Only                          |
| TABLE_interface      | (Optional) show interface                     |
| interface            | (Optional) Interface index                    |
| vdc_lvl_in_pkts      | (Optional) VDC level input packets            |
| vdc_lvl_in_bytes     | (Optional) VDC level input bytes              |
| vdc_lvl_in_ucast     | (Optional) VDC level input unicast packets    |
| vdc_lvl_in_mcast     | (Optional) VDC level input multicast packets  |
| vdc_lvl_in_bcast     | (Optional) VDC level input broadcast packets  |
| vdc_lvl_in_bps       | (Optional) VDC level input bytes per second   |
| vdc_lvl_in_pps       | (Optional) VDC level input packets per second |
| vdc_lvl_in_avg_pkts  | (Optional) VDC level average input packets    |
| vdc_lvl_in_avg_bytes | (Optional) VDC level average input bytes      |
| vdc_lvl_out_pkts     | (Optional) VDC level output packets           |
| vdc_lvl_out_bytes    | (Optional) VDC level output bytes             |
| vdc_lvl_out_ucast    | (Optional) VDC level output unicast packets   |

|                              |  |
|------------------------------|--|
| <i>vdc_lvl_out_mcast</i>     | (Optional) VDC level output multicast packets  |
| <i>vdc_lvl_out_bcast</i>     | (Optional) VDC level output broadcast packets  |
| <i>vdc_lvl_out_bps</i>       | (Optional) VDC level output bytes per second   |
| <i>vdc_lvl_out_pps</i>       | (Optional) VDC level output packets per second |
| <i>vdc_lvl_out_avg_pkts</i>  | (Optional) VDC level average output packets    |
| <i>vdc_lvl_out_avg_bytes</i> | (Optional) VDC level average output bytes      |
| <i>mgmt_in_pkts</i>          | (Optional) Input packets                       |
| <i>mgmt_in_bytes</i>         | (Optional) Input bytes                         |
| <i>mgmt_in_mcast</i>         | (Optional) Input multicast frames              |
| <i>mgmt_in_compressed</i>    | (Optional) Input compressed                    |
| <i>mgmt_in_errors</i>        | (Optional) Input errors                        |
| <i>mgmt_in_frame</i>         | (Optional) Input frame errors                  |
| <i>mgmt_in_overrun</i>       | (Optional) Input overrun                       |
| <i>mgmt_in_fifo</i>          | (Optional) Input fifo                          |
| <i>mgmt_out_pkts</i>         | (Optional) Output packets                      |
| <i>mgmt_out_bytes</i>        | (Optional) Output bytes                        |
| <i>mgmt_out_underruns</i>    | (Optional) Output overruns                     |
| <i>mgmt_out_errors</i>       | (Optional) Output errors                       |
| <i>mgmt_out_collisions</i>   | (Optional) Output collisions                   |
| <i>mgmt_out_fifo</i>         | (Optional) Output fifo                         |
| <i>mgmt_out_carrier</i>      | (Optional) Output carrier errors               |
| <i>mgmt_align_err</i>        | (Optional) Align error                         |
| <i>mgmt_fcs_err</i>          | (Optional) FCS error                           |
| <i>mgmt_xmit_err</i>         | (Optional) Transmit error                      |
| <i>mgmt_rcv_err</i>          | (Optional) Receive error                       |
| <i>mgmt_undersize</i>        | (Optional) Undersize                           |
| <i>mgmt_outdisc</i>          | (Optional) Out discard                         |
| <i>mgmt_single_col</i>       | (Optional) Single collision                    |
| <i>mgmt_multi_col</i>        | (Optional) Multiple collision                  |



|                              |   |
|------------------------------|---|
| <i>mgmt_late_col</i>         | (Optional) Late collision                 |
| <i>mgmt_excess_col</i>       | (Optional) Excess collision               |
| <i>mgmt_carri_sen</i>        | (Optional) Carrier sense                  |
| <i>mgmt_runts</i>            | (Optional) Runts                          |
| <i>mgmt_giants</i>           | (Optional) Giants                         |
| <i>mgmt_sqetest_err</i>      | (Optional) SQETest error                  |
| <i>mgmt_deferred_tx</i>      | (Optional) Deferred tx                    |
| <i>mgmt_inmactx_err</i>      | (Optional) In MAC tx                      |
| <i>mgmt_inmacrx_err</i>      | (Optional) In MAC rx                      |
| <i>mgmt_symbol_err</i>       | (Optional) Symbol error                   |
| <i>loop_in_pkts</i>          | (Optional) Input packets                  |
| <i>loop_in_bytes</i>         | (Optional) Input bytes                    |
| <i>loop_in_mcast</i>         | (Optional) Input multicast                |
| <i>loop_in_compressed</i>    | (Optional) Input compressed               |
| <i>loop_in_errors</i>        | (Optional) Input errors                   |
| <i>loop_in_frame</i>         | (Optional) Input frame errors             |
| <i>loop_in_overnun</i>       | (Optional) Input overrun                  |
| <i>loop_in_fifo</i>          | (Optional) Input fifo                     |
| <i>loop_out_pkts</i>         | (Optional) Output packets                 |
| <i>loop_out_bytes</i>        | (Optional) Output bytes                   |
| <i>loop_out_underruns</i>    | (Optional) Output underruns               |
| <i>loop_out_errors</i>       | (Optional) Output errors                  |
| <i>loop_out_collisions</i>   | (Optional) Output collisions              |
| <i>loop_out_fifo</i>         | (Optional) Output fifo                    |
| <i>loop_out_carriers</i>     | (Optional) Output carrier errors          |
| <i>eth_load_intervall</i>    | (Optional) interval 1 timer value in sec  |
| <i>eth_load_intervall_rx</i> | (Optional) interval 1 timer value in sec  |
| <i>eth_inrate1_bits</i>      | (Optional) interval 1 input rate bits/sec |
| <i>eth_inrate1_pkts</i>      | (Optional) interval 1 input rate pkts/sec |

|                                  |   |
|----------------------------------|---|
| <i>eth_load_interval1_tx</i>     | (Optional) interval 1 timer value in sec      |
| <i>eth_outrate1_bits</i>         | (Optional) interval 1 output rate bits/sec    |
| <i>eth_outrate1_pkts</i>         | (Optional) interval 1 output rate pkts/sec    |
| <i>eth_load_interval2</i>        | (Optional) interval 2 timer value in sec      |
| <i>eth_inrate1_summary_bits</i>  | (Optional) interval 1 input rate bit summary  |
| <i>eth_inrate1_summary_pkts</i>  | (Optional) interval 1 input rate pkt summary  |
| <i>eth_outrate1_summary_bits</i> | (Optional) interval 1 output rate bit summary |
| <i>eth_outrate1_summary_pkts</i> | (Optional) interval 1 output rate pkt summary |
| <i>eth_load_interval2_rx</i>     | (Optional) interval 2 timer value in sec      |
| <i>eth_inrate2_bits</i>          | (Optional) interval 2 input rate bits/sec     |
| <i>eth_inrate2_pkts</i>          | (Optional) interval 2 input rate pkts/sec     |
| <i>eth_load_interval2_tx</i>     | (Optional) interval 2 timer value in sec      |
| <i>eth_outrate2_bits</i>         | (Optional) interval 2 output rate bits/sec    |
| <i>eth_outrate2_pkts</i>         | (Optional) interval 2 output rate pkts/sec    |
| <i>eth_load_interval3</i>        | (Optional) interval 3 timer value in sec      |
| <i>eth_inrate2_summary_bits</i>  | (Optional) interval 2 input rate bit summary  |
| <i>eth_inrate2_summary_pkts</i>  | (Optional) interval 2 input rate pkt summary  |
| <i>eth_outrate2_summary_bits</i> | (Optional) interval 2 output rate bit summary |
| <i>eth_outrate2_summary_pkts</i> | (Optional) interval 2 output rate pkt summary |
| <i>eth_load_interval3_rx</i>     | (Optional) interval 3 timer value in sec      |
| <i>eth_inrate3_bits</i>          | (Optional) interval 3 input rate bits/sec     |
| <i>eth_inrate3_pkts</i>          | (Optional) interval 3 input rate pkts/sec     |
| <i>eth_load_interval3_tx</i>     | (Optional) interval 3 timer value in sec      |
| <i>eth_outrate3_bits</i>         | (Optional) interval 3 output rate bits/sec    |
| <i>eth_outrate3_pkts</i>         | (Optional) interval 3 output rate pkts/sec    |
| <i>eth_inrate3_summary_bits</i>  | (Optional) interval 3 input rate bit summary  |
| <i>eth_inrate3_summary_pkts</i>  | (Optional) interval 3 input rate pkt summary  |
| <i>eth_outrate3_summary_bits</i> | (Optional) interval 3 output rate bit summary |
| <i>eth_outrate3_summary_pkts</i> | (Optional) interval 3 output rate pkt summary |

|                          |  |
|--------------------------|--|
| <i>eth_inpkts</i>        | (Optional) Packets input                           |
| <i>eth_inucast</i>       | (Optional) Unicasts                                |
| <i>eth_inmcast</i>       | (Optional) Multicasts                              |
| <i>eth_inbcast</i>       | (Optional) Broadcasts                              |
| <i>eth_ingiants</i>      | (Optional) giants                                  |
| <i>eth_inbytes</i>       | (Optional) Bytes input                             |
| <i>eth_storm_supp</i>    | (Optional) storm suppression                       |
| <i>eth_inb64</i>         | (Optional) input pkts between 0 and 64 bytes       |
| <i>eth_inb65_127</i>     | (Optional) input pkts between 65 and 127 bytes     |
| <i>eth_inb128_255</i>    | (Optional) input pkts between 128 and 255 bytes    |
| <i>eth_inb256_511</i>    | (Optional) input pkts between 256 and 511 bytes    |
| <i>eth_inb512_1023</i>   | (Optional) input pkts between 512 and 1023 bytes   |
| <i>eth_inb1024_1518</i>  | (Optional) input pkts between 1024 and 1518 bytes  |
| <i>eth_inb1519_1548</i>  | (Optional) input pkts between 1519 and 1548 bytes  |
| <i>eth_intrunk</i>       | (Optional) input trunk pkts                        |
| <i>eth_outpkts</i>       | (Optional) packets output                          |
| <i>eth_outucast</i>      | (Optional) Unicasts                                |
| <i>eth_outmcast</i>      | (Optional) Multicasts                              |
| <i>eth_outbcast</i>      | (Optional) Broadcasts                              |
| <i>eth_outgiants</i>     | (Optional) giants                                  |
| <i>eth_outbytes</i>      | (Optional) bytes output                            |
| <i>eth_outb64</i>        | (Optional) output pkts between 0 and 64 bytes      |
| <i>eth_outb65_127</i>    | (Optional) output pkts between 65 and 127 bytes    |
| <i>eth_outb128_255</i>   | (Optional) output pkts between 128 and 255 bytes   |
| <i>eth_outb256_511</i>   | (Optional) output pkts between 256 and 511 bytes   |
| <i>eth_outb512_1023</i>  | (Optional) output pkts between 512 and 1023 bytes  |
| <i>eth_outb1024_1518</i> | (Optional) output pkts between 1024 and 1518 bytes |
| <i>eth_outb1519_1548</i> | (Optional) output pkts between 1519 and 1548 bytes |
| <i>eth_outtrunk</i>      | (Optional) output trunk pkts                       |

|                            |   |
|----------------------------|---|
| <i>eth_nobuf</i>           | (Optional) No buffer received                   |
| <i>eth_runts</i>           | (Optional) runts                                |
| <i>eth_crc</i>             | (Optional) CRC                                  |
| <i>eth_ecc</i>             | (Optional) ECC                                  |
| <i>eth_overrun</i>         | (Optional) overrun                              |
| <i>eth_underrun</i>        | (Optional) underruns                            |
| <i>eth_ignored</i>         | (Optional) ignored                              |
| <i>eth_bad_eth</i>         | (Optional) bad ether type drop                  |
| <i>eth_bad_proto</i>       | (Optional) bad protocol drops                   |
| <i>eth_in_ifdown_drops</i> | (Optional) Input if-down drops                  |
| <i>eth_coll</i>            | (Optional) collisions                           |
| <i>eth_latecoll</i>        | (Optional) late collision                       |
| <i>eth_lostcarrier</i>     | (Optional) lost carrier                         |
| <i>eth_nocarrier</i>       | (Optional) no carrier                           |
| <i>eth_babbles</i>         | (Optional) babbles                              |
| <i>eth_watchdog</i>        | (Optional) watchdog                             |
| <i>eth_dribble</i>         | (Optional) input packets with dribble condition |
| <i>eth_inerr</i>           | (Optional) input errors                         |
| <i>eth_outerr</i>          | (Optional) output errors                        |
| <i>eth_deferred</i>        | (Optional) deferred                             |
| <i>eth_jabbers</i>         | (Optional) jabbers                              |
| <i>eth_shortframe</i>      | (Optional) short frames                         |
| <i>eth_single_coll</i>     | (Optional) single collisions                    |
| <i>eth_multi_coll</i>      | (Optional) multi collisions                     |
| <i>eth_excess_coll</i>     | (Optional) excessive collisions                 |
| <i>eth_indiscard</i>       | (Optional) discards                             |
| <i>eth_bad_encap</i>       | (Optional) bad encapsulation                    |
| <i>eth_outcrc</i>          | (Optional) Output CRC                           |
| <i>eth_symbol</i>          | (Optional) symbol errors                        |

|                             |  |
|-----------------------------|--|
| <i>eth_out_drops</i>        | (Optional) output drops                |
| <i>eth_bpdu_outlost</i>     | (Optional) BPDU output lost            |
| <i>eth_cos0_outlost</i>     | (Optional) output pkts                 |
| <i>eth_cos1_outlost</i>     | (Optional) output pkts                 |
| <i>eth_cos2_outlost</i>     | (Optional) output pkts                 |
| <i>eth_cos3_outlost</i>     | (Optional) output pkts                 |
| <i>eth_cos4_outlost</i>     | (Optional) output pkts                 |
| <i>eth_cos5_outlost</i>     | (Optional) output pkts                 |
| <i>eth_cos6_outlost</i>     | (Optional) output pkts                 |
| <i>eth_cos7_outlost</i>     | (Optional) output pkts                 |
| <i>eth_inpause</i>          | (Optional) pause input                 |
| <i>eth_outpause</i>         | (Optional) PAUSE output                |
| <i>eth_resets</i>           | (Optional) interface resets            |
| <i>eth_sqetest</i>          | (Optional) SQE test                    |
| <i>eth_l2_ucastpkts</i>     | (Optional) L2 switched ucast pkts      |
| <i>eth_l2_ucastbytes</i>    | (Optional) L2 switched ucast bytes     |
| <i>eth_l2_mcastpkts</i>     | (Optional) L2 switched mcast pkts      |
| <i>eth_l2_mcastbytes</i>    | (Optional) L2 switched mcast bytes     |
| <i>eth_l2_bcastpkts</i>     | (Optional) L2 switched bcast pkts      |
| <i>eth_l2_bcastbytes</i>    | (Optional) L2 switched bcast bytes     |
| <i>eth_l3in_ucastpkts</i>   | (Optional) L3 in switched ucast pkts   |
| <i>eth_l3in_ucastbytes</i>  | (Optional) L3 in switched ucast bytes  |
| <i>eth_l3in_mcastpkts</i>   | (Optional) L3 in switched mcast pkts   |
| <i>eth_l3in_mcastbytes</i>  | (Optional) L3 in switched mcast bytes  |
| <i>eth_l3in_bcastpkts</i>   | (Optional) L3 in switched bcast pkts   |
| <i>eth_l3in_bcastbytes</i>  | (Optional) L3 in switched bcast bytes  |
| <i>eth_l3out_ucastpkts</i>  | (Optional) L3 out switched ucast pkts  |
| <i>eth_l3out_ucastbytes</i> | (Optional) L3 out switched ucast bytes |
| <i>eth_l3out_mcastpkts</i>  | (Optional) L3 out switched mcast pkts  |

|                               |  |
|-------------------------------|--|
| <i>eth_l3out_mcastbytes</i>   | (Optional) L3 out switched mcast bytes                   |
| <i>eth_l3out_bcastpkts</i>    | (Optional) L3 out switched bcast pkts                    |
| <i>eth_l3out_bcastbytes</i>   | (Optional) L3 out switched bcast bytes                   |
| <i>eth_l3in_routed_pkts</i>   | (Optional) L3 in routed pkts                             |
| <i>eth_l3in_routed_bytes</i>  | (Optional) L3 in routed bytes                            |
| <i>eth_l3out_routed_pkts</i>  | (Optional) L3 out routed pkts                            |
| <i>eth_l3out_routed_bytes</i> | (Optional) L3 out routed bytes                           |
| <i>eth_l3avgl_inbytes</i>     | (Optional) Load interval 1 L3 average in switched bytes  |
| <i>eth_l3avgl_inpkts</i>      | (Optional) Load interval 1 L3 average in switched pkts   |
| <i>eth_l3avgl_outbytes</i>    | (Optional) Load interval 1 L3 average out switched bytes |
| <i>eth_l3avgl_outpkts</i>     | (Optional) Load interval 1 L3 average out switched pkts  |
| <i>eth_ipmcast</i>            | (Optional) IP multicast                                  |
| <i>eth_inhw_switched</i>      | (Optional) Input H/W Switched                            |
| <i>eth_insw_switched</i>      | (Optional) Input S/W Switched                            |
| <i>eth_throtles</i>           | (Optional) throttles                                     |
| <i>eth_frame</i>              | (Optional) frame   |
| <i>eth_outhw_switched</i>     | (Optional) Out H/W Switched                              |
| <i>eth_outsw_switched</i>     | (Optional) Out S/W Switched                              |
| <i>eth_buffail</i>            | (Optional) output buffer failures                        |
| <i>eth_bufswapped</i>         | (Optional) output buffers swapped out                    |
| <i>eth_arpdrops</i>           | (Optional) arp drops                                     |
| <i>eth_out_ifdown_drops</i>   | (Optional) Output if-down drops                          |
| <i>eth_fcoe_in_pkts</i>       | (Optional) fcoe in pkts                                  |
| <i>eth_fcoe_in_octets</i>     | (Optional) fcoe in octets                                |
| <i>eth_fcoe_out_pkts</i>      | (Optional) fcoe out pkts                                 |
| <i>eth_fcoe_out_octets</i>    | (Optional) fcoe out octets                               |
| <i>eth_nfcoe_in_pkts</i>      | (Optional) nfcoe in pkts                                 |
| <i>eth_nfcoe_in_octets</i>    | (Optional) nfcoe in octets                               |
| <i>eth_nfcoe_out_pkts</i>     | (Optional) nfcoe out pkts                                |

|                              |                              |
|------------------------------|------------------------------|
| <i>eth_nfcoe_out_octets</i>  | (Optional) nfcoe out octets  |
| <i>svi_time_last_cleared</i> | (Optional) Time last cleared |
| <i>svi_tx_load</i>           | (Optional) Tx Load           |
| <i>svi_rx_load</i>           | (Optional) Rx Load           |
| <i>svi_reliability</i>       | (Optional) Reliability       |

**Command Mode**

- /exec

## show interface counters detailed

```
show interface <ifmgmt_ctr_dtl> counters detailed [ __readonly__ TABLE_interface <interface> [
<vdc_lvl_in_pkts> ][ <vdc_lvl_in_bytes> ][ <vdc_lvl_in_ucast> ][ <vdc_lvl_in_mcast> ][
<vdc_lvl_in_bcast> ][ <vdc_lvl_in_bps> ][ <vdc_lvl_in_pps> ][ <vdc_lvl_in_avg_pkts> ][
<vdc_lvl_in_avg_bytes> ][ <vdc_lvl_out_pkts> ][ <vdc_lvl_out_bytes> ][ <vdc_lvl_out_ucast> ][
<vdc_lvl_out_mcast> ][ <vdc_lvl_out_bcast> ][ <vdc_lvl_out_bps> ][ <vdc_lvl_out_pps> ][
<vdc_lvl_out_avg_pkts> ][ <vdc_lvl_out_avg_bytes> ][ <mgmt_in_pkts> ][ <mgmt_in_bytes> ][
<mgmt_in_mcast> ][ <mgmt_in_compressed> ][ <mgmt_in_errors> ][ <mgmt_in_frame> ][
<mgmt_in_overrun> ][ <mgmt_in_fifo> ][ <mgmt_out_pkts> ][ <mgmt_out_bytes> ][
<mgmt_out_underruns> ][ <mgmt_out_errors> ][ <mgmt_out_collisions> ][ <mgmt_out_fifo> ][
<mgmt_out_carrier> ][ <mgmt_align_err> ][ <mgmt_fcs_err> ][ <mgmt_xmit_err> ][ <mgmt_rcv_err> ][
<mgmt_undersize> ][ <mgmt_outdisc> ][ <mgmt_single_col> ][ <mgmt_multi_col> ][ <mgmt_late_col>
][ <mgmt_excess_col> ][ <mgmt_carri_sen> ][ <mgmt_runs> ][ <mgmt_giants> ][ <mgmt_sqetest_err>
][ <mgmt_deferred_tx> ][ <mgmt_inmactx_err> ][ <mgmt_inmacrx_err> ][ <mgmt_symbol_err> ] ]
```

### Syntax Description

|                             |   |
|-----------------------------|---|
| show                        | Show running system information                       |
| interface                   | Show interface status and information                 |
| <i>ifmgmt_ctr_dtl</i>       | Enter interface type and number in module/slot format |
| counters                    | Show interface counters                               |
| detailed                    | Show only non-zero counters                           |
| <u>__readonly__</u>         | (Optional) Read Only                                  |
| <i>interface</i>            | (Optional) Interface index                            |
| TABLE_interface             | (Optional) show interface                             |
| <i>vdc_lvl_in_pkts</i>      | (Optional) VDC level input packets                    |
| <i>vdc_lvl_in_bytes</i>     | (Optional) VDC level input bytes                      |
| <i>vdc_lvl_in_ucast</i>     | (Optional) VDC level input unicast packets            |
| <i>vdc_lvl_in_mcast</i>     | (Optional) VDC level input multicast packets          |
| <i>vdc_lvl_in_bcast</i>     | (Optional) VDC level input broadcast packets          |
| <i>vdc_lvl_in_bps</i>       | (Optional) VDC level input bytes per second           |
| <i>vdc_lvl_in_pps</i>       | (Optional) VDC level input packets per second         |
| <i>vdc_lvl_in_avg_pkts</i>  | (Optional) VDC level average input packets            |
| <i>vdc_lvl_in_avg_bytes</i> | (Optional) VDC level average input bytes              |
| <i>vdc_lvl_out_pkts</i>     | (Optional) VDC level output packets                   |



|                              |  |
|------------------------------|--|
| <i>vdc_lvl_out_bytes</i>     | (Optional) VDC level output bytes              |
| <i>vdc_lvl_out_ucast</i>     | (Optional) VDC level output unicast packets    |
| <i>vdc_lvl_out_mcast</i>     | (Optional) VDC level output multicast packets  |
| <i>vdc_lvl_out_bcast</i>     | (Optional) VDC level output broadcast packets  |
| <i>vdc_lvl_out_bps</i>       | (Optional) VDC level output bytes per second   |
| <i>vdc_lvl_out_pps</i>       | (Optional) VDC level output packets per second |
| <i>vdc_lvl_out_avg_pkts</i>  | (Optional) VDC level average output packets    |
| <i>vdc_lvl_out_avg_bytes</i> | (Optional) VDC level average output bytes      |
| <i>mgmt_in_pkts</i>          | (Optional) Input packets                       |
| <i>mgmt_in_bytes</i>         | (Optional) Input bytes                         |
| <i>mgmt_in_mcast</i>         | (Optional) Input multicast frames              |
| <i>mgmt_in_compressed</i>    | (Optional) Input compressed                    |
| <i>mgmt_in_errors</i>        | (Optional) Input errors                        |
| <i>mgmt_in_frame</i>         | (Optional) Input frame errors                  |
| <i>mgmt_in_overrun</i>       | (Optional) Input overrun                       |
| <i>mgmt_in_fifo</i>          | (Optional) Input fifo                          |
| <i>mgmt_out_pkts</i>         | (Optional) Output packets                      |
| <i>mgmt_out_bytes</i>        | (Optional) Output bytes                        |
| <i>mgmt_out_underruns</i>    | (Optional) Output overruns                     |
| <i>mgmt_out_errors</i>       | (Optional) Output errors                       |
| <i>mgmt_out_collisions</i>   | (Optional) Output collisions                   |
| <i>mgmt_out_fifo</i>         | (Optional) Output fifo                         |
| <i>mgmt_out_carrier</i>      | (Optional) Output carrier errors               |
| <i>mgmt_align_err</i>        | (Optional) Align error                         |
| <i>mgmt_fcs_err</i>          | (Optional) FCS error                           |
| <i>mgmt_xmit_err</i>         | (Optional) Transmit error                      |
| <i>mgmt_rcv_err</i>          | (Optional) Receive error                       |
| <i>mgmt_undersize</i>        | (Optional) Undersize                           |
| <i>mgmt_outdisc</i>          | (Optional) Out discard                         |

|                         |                               |
|-------------------------|-------------------------------|
| <i>mgmt_single_col</i>  | (Optional) Single collision   |
| <i>mgmt_multi_col</i>   | (Optional) Multiple collision |
| <i>mgmt_late_col</i>    | (Optional) Late collision     |
| <i>mgmt_excess_col</i>  | (Optional) Excess collision   |
| <i>mgmt_carri_sen</i>   | (Optional) Carrier sense      |
| <i>mgmt_runts</i>       | (Optional) Runts              |
| <i>mgmt_giants</i>      | (Optional) Giants             |
| <i>mgmt_sqetest_err</i> | (Optional) SQETest error      |
| <i>mgmt_deferred_tx</i> | (Optional) Deferred tx        |
| <i>mgmt_inmactx_err</i> | (Optional) In MAC tx          |
| <i>mgmt_inmacrx_err</i> | (Optional) In MAC rx          |
| <i>mgmt_symbol_err</i>  | (Optional) Symbol error       |

**Command Mode**

- /exec

# show interface counters detailed

```
show interface <ifloop_ctr_dtl> counters detailed [ __readonly__ TABLE_interface <interface> [
<loop_in_pkts> ] [ <loop_in_bytes> ] [ <loop_in_mcast> ] [ <loop_in_compressed> ] [ <loop_in_errors> ]
[ <loop_in_frame> ] [ <loop_in_overrun> ] [ <loop_in_fifo> ] [ <loop_out_pkts> ] [ <loop_out_bytes> ] [
<loop_out_underruns> ] [ <loop_out_errors> ] [ <loop_out_collisions> ] [ <loop_out_fifo> ] [
<loop_out_carriers> ] ]
```

## Syntax Description

|                            |   |
|----------------------------|---|
| show                       | Show running system information                       |
| interface                  | Show interface status and information                 |
| <i>ifloop_ctr_dtl</i>      | Enter interface type and number in module/slot format |
| counters                   | Show interface counters                               |
| detailed                   | Show only non-zero counters                           |
| <u>__readonly__</u>        | (Optional) Read Only                                  |
| <i>interface</i>           | (Optional) Interface index                            |
| TABLE_interface            | (Optional) show interface                             |
| <i>loop_in_pkts</i>        | (Optional) Input packets                              |
| <i>loop_in_bytes</i>       | (Optional) Input bytes                                |
| <i>loop_in_mcast</i>       | (Optional) Input multicast                            |
| <i>loop_in_compressed</i>  | (Optional) Input compressed                           |
| <i>loop_in_errors</i>      | (Optional) Input errors                               |
| <i>loop_in_frame</i>       | (Optional) Input frame errors                         |
| <i>loop_in_overrun</i>     | (Optional) Input overrun                              |
| <i>loop_in_fifo</i>        | (Optional) Input fifo                                 |
| <i>loop_out_pkts</i>       | (Optional) Output packets                             |
| <i>loop_out_bytes</i>      | (Optional) Output bytes                               |
| <i>loop_out_underruns</i>  | (Optional) Output underruns                           |
| <i>loop_out_errors</i>     | (Optional) Output errors                              |
| <i>loop_out_collisions</i> | (Optional) Output collisions                          |
| <i>loop_out_fifo</i>       | (Optional) Output fifo                                |
| <i>loop_out_carriers</i>   | (Optional) Output carrier errors                      |

**Command Mode**

- /exec

# show interface counters detailed

```
show interface <ifeth_ctr_dtl> counters detailed [ snmp ] [ __readonly__ TABLE_interface <interface> [
<eth_load_interval1> ] [ <eth_load_interval1_rx> ] [ <eth_inrate1_bits> ] [ <eth_inrate1_pkts> ] [
<eth_load_interval1_tx> ] [ <eth_outrate1_bits> ] [ <eth_outrate1_pkts> ] [ <eth_load_interval2> ] [
<eth_inrate1_summary_bits> ] [ <eth_inrate1_summary_pkts> ] [ <eth_outrate1_summary_bits> ] [
<eth_outrate1_summary_pkts> ] [ <eth_load_interval2_rx> ] [ <eth_inrate2_bits> ] [ <eth_inrate2_pkts> ] [
<eth_load_interval2_tx> ] [ <eth_outrate2_bits> ] [ <eth_outrate2_pkts> ] [ <eth_load_interval3> ] [
<eth_inrate2_summary_bits> ] [ <eth_inrate2_summary_pkts> ] [ <eth_outrate2_summary_bits> ] [
<eth_outrate2_summary_pkts> ] [ <eth_load_interval3_rx> ] [ <eth_inrate3_bits> ] [ <eth_inrate3_pkts> ] [
<eth_load_interval3_tx> ] [ <eth_outrate3_bits> ] [ <eth_outrate3_pkts> ] [ <eth_inrate3_summary_bits> ]
[ <eth_inrate3_summary_pkts> ] [ <eth_outrate3_summary_bits> ] [ <eth_outrate3_summary_pkts> ] [
<eth_inpkts> ] [ <eth_inucast> ] [ <eth_inmcast> ] [ <eth_inbcast> ] [ <eth_ingiants> ] [ <eth_inbytes> ] [
<eth_storm_supp> ] [ <eth_inb64> ] [ <eth_inb65_127> ] [ <eth_inb128_255> ] [ <eth_inb256_511> ] [
<eth_inb512_1023> ] [ <eth_inb1024_1518> ] [ <eth_inb1519_1548> ] [ <eth_intrunk> ] [ <eth_outpkts> ]
[ <eth_outucast> ] [ <eth_outmcast> ] [ <eth_outbcast> ] [ <eth_outgiants> ] [ <eth_outbytes> ] [ <eth_outb64>
] [ <eth_outb65_127> ] [ <eth_outb128_255> ] [ <eth_outb256_511> ] [ <eth_outb512_1023> ] [
<eth_outb1024_1518> ] [ <eth_outb1519_1548> ] [ <eth_outtrunk> ] [ <eth_nobuf> ] [ <eth_runts> ] [
<eth_crc> ] [ <eth_ecc> ] [ <eth_overrun> ] [ <eth_underrun> ] [ <eth_ignored> ] [ <eth_bad_eth> ] [
<eth_bad_proto> ] [ <eth_in_ifdown_drops> ] [ <eth_coll> ] [ <eth_latecoll> ] [ <eth_lostcarrier> ] [
<eth_nocarrier> ] [ <eth_babbles> ] [ <eth_watchdog> ] [ <eth_dribble> ] [ <eth_inerr> ] [ <eth_outerr> ] [
<eth_deferred> ] [ <eth_jabbers> ] [ <eth_shortframe> ] [ <eth_single_coll> ] [ <eth_multi_coll> ] [
<eth_excess_coll> ] [ <eth_indiscard> ] [ <eth_bad_encap> ] [ <eth_outcrc> ] [ <eth_symbol> ] [
<eth_out_drops> ] [ <eth_bpdu_outlost> ] [ <eth_cos0_outlost> ] [ <eth_cos1_outlost> ] [ <eth_cos2_outlost>
] [ <eth_cos3_outlost> ] [ <eth_cos4_outlost> ] [ <eth_cos5_outlost> ] [ <eth_cos6_outlost> ] [
<eth_cos7_outlost> ] [ <eth_inpause> ] [ <eth_outpause> ] [ <eth_resets> ] [ <eth_sqetest> ] [
<eth_l2_ucastpkts> ] [ <eth_l2_ucastbytes> ] [ <eth_l2_mcastpkts> ] [ <eth_l2_mcastbytes> ] [
<eth_l2_bcastpkts> ] [ <eth_l2_bcastbytes> ] [ <eth_l3in_routed_pkts> ] [ <eth_l3in_routed_bytes> ] [
<eth_l3out_routed_pkts> ] [ <eth_l3out_routed_bytes> ] [ <eth_l3in_ucastpkts> ] [ <eth_l3in_ucastbytes> ]
[ <eth_l3in_mcastpkts> ] [ <eth_l3in_mcastbytes> ] [ <eth_l3in_bcastpkts> ] [ <eth_l3in_bcastbytes> ] [
<eth_l3out_ucastpkts> ] [ <eth_l3out_ucastbytes> ] [ <eth_l3out_mcastpkts> ] [ <eth_l3out_mcastbytes> ] [
<eth_l3out_bcastpkts> ] [ <eth_l3out_bcastbytes> ] [ <eth_l3avg1_inbytes> ] [ <eth_l3avg1_inpkts> ] [
<eth_l3avg1_outbytes> ] [ <eth_l3avg1_outpkts> ] [ <eth_ipmcast> ] [ <eth_inhw_switched> ] [
<eth_insw_switched> ] [ <eth_throtles> ] [ <eth_frame> ] [ <eth_outhw_switched> ] [ <eth_outsw_switched>
] [ <eth_buffail> ] [ <eth_bufswapped> ] [ <eth_arpdrops> ] [ <eth_out_ifdown_drops> ] ]
```

## Syntax Description

|                      |   |
|----------------------|---|
| show                 | Show running system information                       |
| interface            | Show interface status and information                 |
| <i>ifeth_ctr_dtl</i> | Enter interface type and number in module/slot format |
| counters             | Show interface counters                               |
| detailed             | Show only non-zero counters                           |
| snmp                 | (Optional) Show SNMP MIB values                       |
| __readonly__         | (Optional) Read Only                                  |

|                                  |   |
|----------------------------------|---|
| <i>interface</i>                 | (Optional) Interface index                    |
| TABLE_interface                  | (Optional) show interface                     |
| <i>eth_load_interval1</i>        | (Optional) interval 1 timer value in sec      |
| <i>eth_load_interval1_rx</i>     | (Optional) interval 1 timer value in sec      |
| <i>eth_inrate1_bits</i>          | (Optional) interval 1 input rate bits/sec     |
| <i>eth_inrate1_pkts</i>          | (Optional) interval 1 input rate pkts/sec     |
| <i>eth_load_interval1_tx</i>     | (Optional) interval 1 timer value in sec      |
| <i>eth_outrate1_bits</i>         | (Optional) interval 1 output rate bits/sec    |
| <i>eth_outrate1_pkts</i>         | (Optional) interval 1 output rate pkts/sec    |
| <i>eth_load_interval2</i>        | (Optional) interval 2 timer value in sec      |
| <i>eth_inrate1_summary_bits</i>  | (Optional) interval 1 input rate bit summary  |
| <i>eth_inrate1_summary_pkts</i>  | (Optional) interval 1 input rate pkt summary  |
| <i>eth_outrate1_summary_bits</i> | (Optional) interval 1 output rate bit summary |
| <i>eth_outrate1_summary_pkts</i> | (Optional) interval 1 output rate pkt summary |
| <i>eth_load_interval2_rx</i>     | (Optional) interval 2 timer value in sec      |
| <i>eth_inrate2_bits</i>          | (Optional) interval 2 input rate bits/sec     |
| <i>eth_inrate2_pkts</i>          | (Optional) interval 2 input rate pkts/sec     |
| <i>eth_load_interval2_tx</i>     | (Optional) interval 2 timer value in sec      |
| <i>eth_outrate2_bits</i>         | (Optional) interval 2 output rate bits/sec    |
| <i>eth_outrate2_pkts</i>         | (Optional) interval 2 output rate pkts/sec    |
| <i>eth_load_interval3</i>        | (Optional) interval 3 timer value in sec      |
| <i>eth_inrate2_summary_bits</i>  | (Optional) interval 2 input rate bit summary  |
| <i>eth_inrate2_summary_pkts</i>  | (Optional) interval 2 input rate pkt summary  |
| <i>eth_outrate2_summary_bits</i> | (Optional) interval 2 output rate bit summary |
| <i>eth_outrate2_summary_pkts</i> | (Optional) interval 2 output rate pkt summary |
| <i>eth_load_interval3_rx</i>     | (Optional) interval 3 timer value in sec      |
| <i>eth_inrate3_bits</i>          | (Optional) interval 3 input rate bits/sec     |
| <i>eth_inrate3_pkts</i>          | (Optional) interval 3 input rate pkts/sec     |
| <i>eth_load_interval3_tx</i>     | (Optional) interval 3 timer value in sec      |

|                                  |   |
|----------------------------------|---|
| <i>eth_outrate3_bits</i>         | (Optional) interval 3 output rate bits/sec        |
| <i>eth_outrate3_pkts</i>         | (Optional) interval 3 output rate pkts/sec        |
| <i>eth_inrate3_summary_bits</i>  | (Optional) interval 3 input rate bit summary      |
| <i>eth_inrate3_summary_pkts</i>  | (Optional) interval 3 input rate pkt summary      |
| <i>eth_outrate3_summary_bits</i> | (Optional) interval 3 output rate bit summary     |
| <i>eth_outrate3_summary_pkts</i> | (Optional) interval 3 output rate pkt summary     |
| <i>eth_inpkts</i>                | (Optional) Packets input                          |
| <i>eth_inucast</i>               | (Optional) Unicasts                               |
| <i>eth_inmcast</i>               | (Optional) Multicasts                             |
| <i>eth_inbcast</i>               | (Optional) Broadcasts                             |
| <i>eth_ingiants</i>              | (Optional) giants                                 |
| <i>eth_inbytes</i>               | (Optional) Bytes input                            |
| <i>eth_storm_supp</i>            | (Optional) storm suppression                      |
| <i>eth_inb64</i>                 | (Optional) input pkts between 0 and 64 bytes      |
| <i>eth_inb65_127</i>             | (Optional) input pkts between 65 and 127 bytes    |
| <i>eth_inb128_255</i>            | (Optional) input pkts between 128 and 255 bytes   |
| <i>eth_inb256_511</i>            | (Optional) input pkts between 256 and 511 bytes   |
| <i>eth_inb512_1023</i>           | (Optional) input pkts between 512 and 1023 bytes  |
| <i>eth_inb1024_1518</i>          | (Optional) input pkts between 1024 and 1518 bytes |
| <i>eth_inb1519_1548</i>          | (Optional) input pkts between 1519 and 1548 bytes |
| <i>eth_intrunk</i>               | (Optional) input trunk pkts                       |
| <i>eth_outpkts</i>               | (Optional) packets output                         |
| <i>eth_outucast</i>              | (Optional) Unicasts                               |
| <i>eth_outmcast</i>              | (Optional) Multicasts                             |
| <i>eth_outbcast</i>              | (Optional) Broadcasts                             |
| <i>eth_outgiants</i>             | (Optional) giants                                 |
| <i>eth_outbytes</i>              | (Optional) bytes output                           |
| <i>eth_outb64</i>                | (Optional) output pkts between 0 and 64 bytes     |
| <i>eth_outb65_127</i>            | (Optional) output pkts between 65 and 127 bytes   |

|                            |  |
|----------------------------|--|
| <i>eth_outb128_255</i>     | (Optional) output pkts between 128 and 255 bytes   |
| <i>eth_outb256_511</i>     | (Optional) output pkts between 256 and 511 bytes   |
| <i>eth_outb512_1023</i>    | (Optional) output pkts between 512 and 1023 bytes  |
| <i>eth_outb1024_1518</i>   | (Optional) output pkts between 1024 and 1518 bytes |
| <i>eth_outb1519_1548</i>   | (Optional) output pkts between 1519 and 1548 bytes |
| <i>eth_outtrunk</i>        | (Optional) output trunk pkts                       |
| <i>eth_nobuf</i>           | (Optional) No buffer received                      |
| <i>eth_runts</i>           | (Optional) runts                                   |
| <i>eth_crc</i>             | (Optional) CRC                                     |
| <i>eth_ecc</i>             | (Optional) ECC                                     |
| <i>eth_omitted</i>         | (Optional) omitted                                 |
| <i>eth_underrun</i>        | (Optional) underruns                               |
| <i>eth_ignored</i>         | (Optional) ignored                                 |
| <i>eth_bad_eth</i>         | (Optional) bad ether type drop                     |
| <i>eth_bad_proto</i>       | (Optional) bad protocol drops                      |
| <i>eth_in_ifdown_drops</i> | (Optional) Input if-down drops                     |
| <i>eth_coll</i>            | (Optional) collisions                              |
| <i>eth_latecoll</i>        | (Optional) late collision                          |
| <i>eth_lostcarrier</i>     | (Optional) lost carrier                            |
| <i>eth_nocarrier</i>       | (Optional) no carrier                              |
| <i>eth_babbles</i>         | (Optional) babbles                                 |
| <i>eth_watchdog</i>        | (Optional) watchdog                                |
| <i>eth_dribble</i>         | (Optional) input packets with dribble condition    |
| <i>eth_inerr</i>           | (Optional) input errors                            |
| <i>eth_outerr</i>          | (Optional) output errors                           |
| <i>eth_deferred</i>        | (Optional) deferred                                |
| <i>eth_jabbers</i>         | (Optional) jabbers                                 |
| <i>eth_shortframe</i>      | (Optional) short frames                            |
| <i>eth_single_coll</i>     | (Optional) single collisions                       |



|                            |                                       |
|----------------------------|---------------------------------------|
| <i>eth_multi_coll</i>      | (Optional) multi collisions           |
| <i>eth_excess_coll</i>     | (Optional) excessive collisions       |
| <i>eth_indiscard</i>       | (Optional) discards                   |
| <i>eth_bad_encap</i>       | (Optional) bad encapsulation          |
| <i>eth_outcrc</i>          | (Optional) Output CRC                 |
| <i>eth_symbol</i>          | (Optional) symbol errors              |
| <i>eth_out_drops</i>       | (Optional) output drops               |
| <i>eth_bpdu_outlost</i>    | (Optional) BPDU output lost           |
| <i>eth_cos0_outlost</i>    | (Optional) output pkts                |
| <i>eth_cos1_outlost</i>    | (Optional) output pkts                |
| <i>eth_cos2_outlost</i>    | (Optional) output pkts                |
| <i>eth_cos3_outlost</i>    | (Optional) output pkts                |
| <i>eth_cos4_outlost</i>    | (Optional) output pkts                |
| <i>eth_cos5_outlost</i>    | (Optional) output pkts                |
| <i>eth_cos6_outlost</i>    | (Optional) output pkts                |
| <i>eth_cos7_outlost</i>    | (Optional) output pkts                |
| <i>eth_inpause</i>         | (Optional) pause input                |
| <i>eth_outpause</i>        | (Optional) PAUSE output               |
| <i>eth_resets</i>          | (Optional) interface resets           |
| <i>eth_sqetest</i>         | (Optional) SQE test                   |
| <i>eth_l2_ucastpkts</i>    | (Optional) L2 switched ucast pkts     |
| <i>eth_l2_ucastbytes</i>   | (Optional) L2 switched ucast bytes    |
| <i>eth_l2_mcastpkts</i>    | (Optional) L2 switched mcast pkts     |
| <i>eth_l2_mcastbytes</i>   | (Optional) L2 switched mcast bytes    |
| <i>eth_l2_bcastpkts</i>    | (Optional) L2 switched bcast pkts     |
| <i>eth_l2_bcastbytes</i>   | (Optional) L2 switched bcast bytes    |
| <i>eth_l3in_ucastpkts</i>  | (Optional) L3 in switched ucast pkts  |
| <i>eth_l3in_ucastbytes</i> | (Optional) L3 in switched ucast bytes |
| <i>eth_l3in_mcastpkts</i>  | (Optional) L3 in switched mcast pkts  |

|                               |  |
|-------------------------------|--|
| <i>eth_l3in_mcastbytes</i>    | (Optional) L3 in switched mcast bytes                    |
| <i>eth_l3in_bcastpkts</i>     | (Optional) L3 in switched bcast pkts                     |
| <i>eth_l3in_bcastbytes</i>    | (Optional) L3 in switched bcast bytes                    |
| <i>eth_l3out_ucastpkts</i>    | (Optional) L3 out switched ucast pkts                    |
| <i>eth_l3out_ucastbytes</i>   | (Optional) L3 out switched ucast bytes                   |
| <i>eth_l3out_mcastpkts</i>    | (Optional) L3 out switched mcast pkts                    |
| <i>eth_l3out_mcastbytes</i>   | (Optional) L3 out switched mcast bytes                   |
| <i>eth_l3out_bcastpkts</i>    | (Optional) L3 out switched bcast pkts                    |
| <i>eth_l3out_bcastbytes</i>   | (Optional) L3 out switched bcast bytes                   |
| <i>eth_l3in_routed_pkts</i>   | (Optional) L3 in routed pkts                             |
| <i>eth_l3in_routed_bytes</i>  | (Optional) L3 in routed bytes                            |
| <i>eth_l3out_routed_pkts</i>  | (Optional) L3 out routed pkts                            |
| <i>eth_l3out_routed_bytes</i> | (Optional) L3 out routed bytes                           |
| <i>eth_l3avg1_inbytes</i>     | (Optional) Load interval 1 L3 average in switched bytes  |
| <i>eth_l3avg1_inpkts</i>      | (Optional) Load interval 1 L3 average in switched pkts   |
| <i>eth_l3avg1_outbytes</i>    | (Optional) Load interval 1 L3 average out switched bytes |
| <i>eth_l3avg1_outpkts</i>     | (Optional) Load interval 1 L3 average out switched pkts  |
| <i>eth_ipmcast</i>            | (Optional) IP multicast                                  |
| <i>eth_inhw_switched</i>      | (Optional) Input H/W Switched                            |
| <i>eth_insw_switched</i>      | (Optional) Input S/W Switched                            |
| <i>eth_throtles</i>           | (Optional) throttles                                     |
| <i>eth_frame</i>              | (Optional) frame   |
| <i>eth_outhw_switched</i>     | (Optional) Out H/W Switched                              |
| <i>eth_outsw_switched</i>     | (Optional) Out S/W Switched                              |
| <i>eth_buffail</i>            | (Optional) output buffer failures                        |
| <i>eth_bufswapped</i>         | (Optional) output buffers swapped out                    |
| <i>eth_arpdrops</i>           | (Optional) arp drops                                     |
| <i>eth_out_ifdown_drops</i>   | (Optional) Output if-down drops                          |

**Command Mode**

- /exec

## show interface counters detailed all

show interface <ifid\_ctr\_dtl\_all> counters detailed all [ snmp ]

### Syntax Description

|                         |   |
|-------------------------|---|
| show                    | Show running system information                       |
| interface               | Show interface status and information                 |
| <i>ifid_ctr_dtl_all</i> | Enter interface type and number in module/slot format |
| counters                | Show interface counters                               |
| detailed                | Show only non-zero counters                           |
| all                     | Show every interface counter                          |
| snmp                    | (Optional) Show SNMP MIB values                       |

### Command Mode

- /exec

# show interface counters detailed all

```
show interface <ifmgmt_ctr_dtl_all> counters detailed all [ __readonly__ TABLE_interface <interface> [
<vdc_lvl_in_pkts> ] [ <vdc_lvl_in_bytes> ] [ <vdc_lvl_in_ucast> ] [ <vdc_lvl_in_mcast> ] [
<vdc_lvl_in_bcast> ] [ <vdc_lvl_in_bps> ] [ <vdc_lvl_in_pps> ] [ <vdc_lvl_in_avg_pkts> ] [
<vdc_lvl_in_avg_bytes> ] [ <vdc_lvl_out_pkts> ] [ <vdc_lvl_out_bytes> ] [ <vdc_lvl_out_ucast> ] [
<vdc_lvl_out_mcast> ] [ <vdc_lvl_out_bcast> ] [ <vdc_lvl_out_bps> ] [ <vdc_lvl_out_pps> ] [
<vdc_lvl_out_avg_pkts> ] [ <vdc_lvl_out_avg_bytes> ] [ <mgmt_in_pkts> ] [ <mgmt_in_bytes> ] [
<mgmt_in_mcast> ] [ <mgmt_out_pkts> ] [ <mgmt_out_bytes> ] [ <mgmt_in_errors> ] [ <mgmt_out_errors> ] [
<mgmt_in_fifo> ] [ <mgmt_out_fifo> ] [ <mgmt_in_compressed> ] [ <mgmt_in_frame> ] [
<mgmt_in_overrun> ] [ <mgmt_out_underruns> ] [ <mgmt_out_collisions> ] [ <mgmt_out_carrier> ] [
<mgmt_align_err> ] [ <mgmt_fcs_err> ] [ <mgmt_xmit_err> ] [ <mgmt_rcv_err> ] [ <mgmt_undersize> ] [
<mgmt_outdisc> ] [ <mgmt_single_col> ] [ <mgmt_multi_col> ] [ <mgmt_late_col> ] [ <mgmt_excess_col> ] [
<mgmt_carri_sen> ] [ <mgmt_runs> ] [ <mgmt_giants> ] [ <mgmt_sqetest_err> ] [ <mgmt_deferred_tx> ] [
<mgmt_inmactx_err> ] [ <mgmt_inmacrx_err> ] [ <mgmt_symbol_err> ] ] ]
```

## Syntax Description

|                             |   |
|-----------------------------|---|
| show                        | Show running system information                       |
| interface                   | Show interface status and information                 |
| <i>ifmgmt_ctr_dtl_all</i>   | Enter interface type and number in module/slot format |
| counters                    | Show interface counters                               |
| detailed                    | Show only non-zero counters                           |
| all                         | Show every interface counter                          |
| <u>__readonly__</u>         | (Optional) Read Only                                  |
| <i>interface</i>            | (Optional) Interface index                            |
| TABLE_interface             | (Optional) show interface                             |
| <i>vdc_lvl_in_pkts</i>      | (Optional) VDC level input packets                    |
| <i>vdc_lvl_in_bytes</i>     | (Optional) VDC level input bytes                      |
| <i>vdc_lvl_in_ucast</i>     | (Optional) VDC level input unicast packets            |
| <i>vdc_lvl_in_mcast</i>     | (Optional) VDC level input multicast packets          |
| <i>vdc_lvl_in_bcast</i>     | (Optional) VDC level input broadcast packets          |
| <i>vdc_lvl_in_bps</i>       | (Optional) VDC level input bytes per second           |
| <i>vdc_lvl_in_pps</i>       | (Optional) VDC level input packets per second         |
| <i>vdc_lvl_in_avg_pkts</i>  | (Optional) VDC level average input packets            |
| <i>vdc_lvl_in_avg_bytes</i> | (Optional) VDC level average input bytes              |

|                              |  |
|------------------------------|--|
| <i>vdc_lvl_out_pkts</i>      | (Optional) VDC level output packets            |
| <i>vdc_lvl_out_bytes</i>     | (Optional) VDC level output bytes              |
| <i>vdc_lvl_out_ucast</i>     | (Optional) VDC level output unicast packets    |
| <i>vdc_lvl_out_mcast</i>     | (Optional) VDC level output multicast packets  |
| <i>vdc_lvl_out_bcast</i>     | (Optional) VDC level output broadcast packets  |
| <i>vdc_lvl_out_bps</i>       | (Optional) VDC level output bytes per second   |
| <i>vdc_lvl_out_pps</i>       | (Optional) VDC level output packets per second |
| <i>vdc_lvl_out_avg_pkts</i>  | (Optional) VDC level average output packets    |
| <i>vdc_lvl_out_avg_bytes</i> | (Optional) VDC level average output bytes      |
| <i>mgmt_in_pkts</i>          | (Optional) Input packets                       |
| <i>mgmt_in_bytes</i>         | (Optional) Input bytes                         |
| <i>mgmt_in_mcast</i>         | (Optional) Input multicast frames              |
| <i>mgmt_out_pkts</i>         | (Optional) Output packets                      |
| <i>mgmt_out_bytes</i>        | (Optional) Output bytes                        |
| <i>mgmt_in_errors</i>        | (Optional) Input errors                        |
| <i>mgmt_out_errors</i>       | (Optional) Output errors                       |
| <i>mgmt_in_fifo</i>          | (Optional) Input fifo                          |
| <i>mgmt_out_fifo</i>         | (Optional) Output fifo                         |
| <i>mgmt_in_compressed</i>    | (Optional) Input compressed                    |
| <i>mgmt_in_frame</i>         | (Optional) Input frame errors                  |
| <i>mgmt_in_overnrun</i>      | (Optional) Input overrun                       |
| <i>mgmt_out_underruns</i>    | (Optional) Output overruns                     |
| <i>mgmt_out_collisions</i>   | (Optional) Output collisions                   |
| <i>mgmt_out_carrier</i>      | (Optional) Output carrier errors               |
| <i>mgmt_align_err</i>        | (Optional) Align error                         |
| <i>mgmt_fcs_err</i>          | (Optional) FCS error                           |
| <i>mgmt_xmit_err</i>         | (Optional) Transmit error                      |
| <i>mgmt_rcv_err</i>          | (Optional) Receive error                       |
| <i>mgmt_undersize</i>        | (Optional) Undersize                           |

|                         |                               |
|-------------------------|-------------------------------|
| <i>mgmt_outdisc</i>     | (Optional) Out discard        |
| <i>mgmt_single_col</i>  | (Optional) Single collision   |
| <i>mgmt_multi_col</i>   | (Optional) Multiple collision |
| <i>mgmt_late_col</i>    | (Optional) Late collision     |
| <i>mgmt_excess_col</i>  | (Optional) Excess collision   |
| <i>mgmt_carri_sen</i>   | (Optional) Carrier sense      |
| <i>mgmt_runts</i>       | (Optional) Runts              |
| <i>mgmt_giants</i>      | (Optional) Giants             |
| <i>mgmt_sqetest_err</i> | (Optional) SQETest error      |
| <i>mgmt_deferred_tx</i> | (Optional) Deferred tx        |
| <i>mgmt_inmactx_err</i> | (Optional) In MAC tx          |
| <i>mgmt_inmacrx_err</i> | (Optional) In MAC rx          |
| <i>mgmt_symbol_err</i>  | (Optional) Symbol error       |

**Command Mode**

- /exec

## show interface counters detailed all

```
show interface <ifloop_ctr_dtl_all> counters detailed all [ __readonly__ TABLE_interface <interface> [
<rx_total_pkts> ] [ <tx_total_pkts> ] [ <rx_mcast_pkts> ] [ <rx_octets> ] [ <tx_octets> ] [ <loop_in_pkts> ]
[ <loop_in_bytes> ] [ <loop_in_mcast> ] [ <loop_in_compressed> ] [ <loop_in_errors> ] [ <loop_in_frame>
] [ <loop_in_overrun> ] [ <loop_in_fifo> ] [ <loop_out_pkts> ] [ <loop_out_bytes> ] [ <loop_out_underruns>
] [ <loop_out_errors> ] [ <loop_out_collisions> ] [ <loop_out_fifo> ] [ <loop_out_carriers> ] ]
```

### Syntax Description

|                           |   |
|---------------------------|---|
| show                      | Show running system information                       |
| interface                 | Show interface status and information                 |
| <i>ifloop_ctr_dtl_all</i> | Enter interface type and number in module/slot format |
| counters                  | Show interface counters                               |
| detailed                  | Show only non-zero counters                           |
| all                       | Show every interface counter                          |
| <u>__readonly__</u>       | (Optional) Read Only                                  |
| <i>interface</i>          | (Optional) Interface index                            |
| TABLE_interface           | (Optional) show interface                             |
| <i>rx_total_pkts</i>      | (Optional) total input packets                        |
| <i>tx_total_pkts</i>      | (Optional) total output packets                       |
| <i>rx_mcast_pkts</i>      | (Optional) input multicasts                           |
| <i>rx_octets</i>          | (Optional) input bytes                                |
| <i>tx_octets</i>          | (Optional) output bytes                               |
| <i>loop_in_pkts</i>       | (Optional) Input packets                              |
| <i>loop_in_bytes</i>      | (Optional) Input bytes                                |
| <i>loop_in_mcast</i>      | (Optional) Input multicast                            |
| <i>loop_in_compressed</i> | (Optional) Input compressed                           |
| <i>loop_in_errors</i>     | (Optional) Input errors                               |
| <i>loop_in_frame</i>      | (Optional) Input frame errors                         |
| <i>loop_in_overrun</i>    | (Optional) Input overrun                              |
| <i>loop_in_fifo</i>       | (Optional) Input fifo                                 |
| <i>loop_out_pkts</i>      | (Optional) Output packets                             |



|                            |                                  |
|----------------------------|----------------------------------|
| <i>loop_out_bytes</i>      | (Optional) Output bytes          |
| <i>loop_out_underruns</i>  | (Optional) Output underruns      |
| <i>loop_out_errors</i>     | (Optional) Output errors         |
| <i>loop_out_collisions</i> | (Optional) Output collisions     |
| <i>loop_out_fifo</i>       | (Optional) Output fifo           |
| <i>loop_out_carriers</i>   | (Optional) Output carrier errors |

**Command Mode**

- /exec

## show interface counters detailed all

```
show interface <ifrange> counters detailed all [ snmp ] [ __readonly__ TABLE_interface <interface> [
<svi_routed_pkts_in> ] [ <svi_routed_bytes_in> ] [ <svi_routed_pkts_out> ] [ <svi_routed_bytes_out> ] [
<svi_ucast_pkts_in> ] [ <svi_ucast_bytes_in> ] [ <svi_mcast_pkts_in> ] [ <svi_mcast_bytes_in> ] [
<svi_ucast_pkts_out> ] [ <svi_ucast_bytes_out> ] [ <svi_mcast_pkts_out> ] [ <svi_mcast_bytes_out> ] [
<svi_ipv4_ucast_pkts_in> ] [ <svi_ipv4_ucast_bytes_in> ] [ <svi_ipv4_ucast_pkts_out> ] [
<svi_ipv4_ucast_bytes_out> ] [ <svi_ipv4_mcast_pkts_in> ] [ <svi_ipv4_mcast_bytes_in> ] [
<svi_ipv4_mcast_pkts_out> ] [ <svi_ipv4_mcast_bytes_out> ] [ <svi_ipv6_ucast_pkts_in> ] [
<svi_ipv6_ucast_bytes_in> ] [ <svi_ipv6_ucast_pkts_out> ] [ <svi_ipv6_ucast_bytes_out> ] [
<svi_ipv6_mcast_pkts_in> ] [ <svi_ipv6_mcast_bytes_in> ] [ <svi_ipv6_mcast_pkts_out> ] [
<svi_ipv6_mcast_bytes_out> ] [ <svi_average_input_bits> ] [ <svi_average_input_packets> ] [
<svi_average_output_bits> ] [ <svi_average_output_packets> ] [ <svi_rate_in_mins> ] [
<svi_time_last_cleared> ] [ <svi_tx_load> ] [ <svi_rx_load> ] [ <svi_reliability> ] ]
```

### Syntax Description

|                              |   |
|------------------------------|---|
| show                         | Show running system information                       |
| interface                    | Show interface status and information                 |
| <i>ifrange</i>               | Enter interface type and number in module/slot format |
| counters                     | Show interface counters                               |
| detailed                     | Show only non-zero counters                           |
| all                          | everything  |
| snmp                         | (Optional) Show SNMP MIB values                       |
| <u>__readonly__</u>          | (Optional) Read Only                                  |
| <i>interface</i>             | (Optional) Interface index                            |
| TABLE_interface              | (Optional) show interface                             |
| <i>svi_time_last_cleared</i> | (Optional) Time last cleared                          |
| <i>svi_tx_load</i>           | (Optional) Tx Load                                    |
| <i>svi_rx_load</i>           | (Optional) Rx Load                                    |
| <i>svi_reliability</i>       | (Optional) Reliability                                |

### Command Mode

- /exec

# show interface counters detailed all

```
show interface <ifeth_ctr_dtl_all> counters detailed all [ snmp ] [ __readonly__ TABLE interface <interface>
[ <rx_total_pkts> ] [ <tx_total_pkts> ] [ <rx_ucast_pkts> ] [ <rx_mcast_pkts> ] [ <rx_bcast_pkts> ] [
<rx_octets> ] [ <tx_ucast_pkts> ] [ <tx_mcast_pkts> ] [ <tx_bcast_pkts> ] [ <tx_octets> ] [
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<rxtx_pkts_256_511octets> ] [ <rxtx_pkts_512_1023octets> ] [ <rxtx_pkts_1024_1518octets> ] [
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[ <eth_l3avg1_inpkts> ] [ <eth_l3avg1_outbytes> ] [ <eth_l3avg1_outpkts> ] [ <eth_l3avg2_inbytes> ] [
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[ <eth_outbcast> ] [ <eth_outmcast> ] [ <eth_outucast> ] [ <eth_outgiants> ] [ <eth_inpause> ] [ <eth_dribble> ]
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[ <eth_single_coll> ] [ <eth_multi_coll> ] [ <eth_excess_coll> ] [ <eth_jabbers> ] [ <eth_shortframe> ] [
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[ <eth_inb1024_1518> ] [ <eth_inb1519_1548> ] [ <eth_intrunk> ] [ <eth_outb64> ] [ <eth_outb65_127> ]
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[ <eth_cos2_outlost> ] [ <eth_cos3_outlost> ] [ <eth_cos4_outlost> ] [ <eth_cos5_outlost> ] [
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[ <eth_eee_atx_lpi_transitions> ] [ <eth_eee_arcv_lpi_transitions> ] [ <eth_phy_ber_count> ] [
<eth_phy_errblks_count> ] ] ]
```

### Syntax Description

|                          |   |
|--------------------------|---|
| show                     | Show running system information                       |
| interface                | Show interface status and information                 |
| <i>ifeth_ctr_dtl_all</i> | Enter interface type and number in module/slot format |
| counters                 | Show interface counters                               |

|                           |   |
|---------------------------|---|
| detailed                  | Show only non-zero counters                     |
| all                       | everything                                      |
| snmp                      | (Optional) Show SNMP MIB values                 |
| __readonly__              | (Optional) Read Only                            |
| interface                 | (Optional) Interface index                      |
| TABLE_interface           | (Optional) show interface                       |
| rx_total_pkts             | (Optional) total input packets                  |
| tx_total_pkts             | (Optional) total output packets                 |
| rx_ucast_pkts             | (Optional) input unicasts                       |
| rx_mcast_pkts             | (Optional) input multicasts                     |
| rx_bcast_pkts             | (Optional) input broadcasts                     |
| rx_octets                 | (Optional) input bytes                          |
| tx_ucast_pkts             | (Optional) output unicasts                      |
| tx_mcast_pkts             | (Optional) output multicasts                    |
| tx_bcast_pkts             | (Optional) output broadcasts                    |
| tx_octets                 | (Optional) output bytes                         |
| rxtx_pkts_64octets        | (Optional) all pkts between 0 and 64 bytes      |
| rxtx_pkts_65_127octets    | (Optional) all pkts between 65 and 127 bytes    |
| rxtx_pkts_128_255octets   | (Optional) all pkts between 128 and 255 bytes   |
| rxtx_pkts_256_511octets   | (Optional) all pkts between 256 and 511 bytes   |
| rxtx_pkts_512_1023octets  | (Optional) all pkts between 512 and 1023 bytes  |
| rxtx_pkts_1024_1518octets | (Optional) all pkts between 1024 and 1518 bytes |
| rxtx_pkts_1519_1548octets | (Optional) all pkts between 1519 and 1548 bytes |
| rx_trunk_frames           | (Optional) input trunk pkts                     |
| tx_trunk_frames           | (Optional) output trunk pkts                    |
| rx_drop_events            | (Optional) dropped pkts                         |
| rxtx_giants               | (Optional) giants                               |
| eth_load_intervall_rx     | (Optional) interval 1 timer value in sec        |
| eth_inrate1_bits          | (Optional) interval 1 input rate bits/sec       |

|                              |   |
|------------------------------|---|
| <i>eth_inrate1_pkts</i>      | (Optional) interval 1 input rate pkts/sec   |
| <i>eth_load_interval1_tx</i> | (Optional) interval 1 timer value in sec    |
| <i>eth_outrate1_bits</i>     | (Optional) interval 1 output rate bits/sec  |
| <i>eth_outrate1_pkts</i>     | (Optional) interval 1 output rate pkts/sec  |
| <i>eth_load_interval2</i>    | (Optional) interval 2 timer value in sec    |
| <i>eth_inrate2_bits</i>      | (Optional) interval 2 input rate bits/sec   |
| <i>eth_inrate2_pkts</i>      | (Optional) interval 2 input rate pkts/sec   |
| <i>eth_outrate2_bits</i>     | (Optional) interval 2 output rate bits/sec  |
| <i>eth_outrate2_pkts</i>     | (Optional) interval 2 output rate pkts/sec  |
| <i>eth_load_interval3</i>    | (Optional) interval 3 timer value in sec    |
| <i>eth_inrate3_bits</i>      | (Optional) interval 3 input rate bits/sec   |
| <i>eth_inrate3_pkts</i>      | (Optional) interval 3 input rate pkts/sec   |
| <i>eth_outrate3_bits</i>     | (Optional) interval 3 output rate bits/sec  |
| <i>eth_outrate3_pkts</i>     | (Optional) interval 3 output rate pkts/sec  |
| <i>eth_l2_ucastpkts</i>      | (Optional) L2 switched ucast pkts           |
| <i>eth_l2_ucastbytes</i>     | (Optional) L2 switched ucast bytes          |
| <i>eth_l2_mcastpkts</i>      | (Optional) L2 switched mcast pkts           |
| <i>eth_l2_mcastbytes</i>     | (Optional) L2 switched mcast bytes          |
| <i>eth_l2_bcastpkts</i>      | (Optional) L2 switched bcast pkts           |
| <i>eth_l2_bcastbytes</i>     | (Optional) L2 switched bcast bytes          |
| <i>eth_l3in_ucastpkts</i>    | (Optional) IPv4 L3 in switched ucast pkts   |
| <i>eth_l3in_ucastbytes</i>   | (Optional) IPv4 L3 in switched ucast bytes  |
| <i>eth_l3in_mcastpkts</i>    | (Optional) IPv4 L3 in switched mcast pkts   |
| <i>eth_l3in_mcastbytes</i>   | (Optional) IPv4 L3 in switched mcast bytes  |
| <i>eth_l3in_bcastpkts</i>    | (Optional) L3 in switched bcast pkts        |
| <i>eth_l3in_bcastbytes</i>   | (Optional) L3 in switched bcast bytes       |
| <i>eth_l3out_ucastpkts</i>   | (Optional) IPv4 L3 out switched ucast pkts  |
| <i>eth_l3out_ucastbytes</i>  | (Optional) IPv4 L3 out switched ucast bytes |
| <i>eth_l3out_mcastpkts</i>   | (Optional) IPv4 L3 out switched mcast pkts  |

|                               |  |
|-------------------------------|--|
| <i>eth_l3out_mcastbytes</i>   | (Optional) IPv4 L3 out switched mcast bytes              |
| <i>eth_l3out_bcastpkts</i>    | (Optional) L3 out switched bcast pkts                    |
| <i>eth_l3out_bcastbytes</i>   | (Optional) L3 out switched bcast bytes                   |
| <i>eth_l3in_routed_pkts</i>   | (Optional) L3 in routed pkts                             |
| <i>eth_l3in_routed_bytes</i>  | (Optional) L3 in routed bytes                            |
| <i>eth_l3out_routed_pkts</i>  | (Optional) L3 out routed pkts                            |
| <i>eth_l3out_routed_bytes</i> | (Optional) L3 out routed bytes                           |
| <i>eth_l3avg1_inbytes</i>     | (Optional) Load interval 1 L3 average in switched bytes  |
| <i>eth_l3avg1_inpkts</i>      | (Optional) Load interval 1 L3 average in switched pkts   |
| <i>eth_l3avg1_outbytes</i>    | (Optional) Load interval 1 L3 average out switched bytes |
| <i>eth_l3avg1_outpkts</i>     | (Optional) Load interval 1 L3 average out switched pkts  |
| <i>eth_l3avg2_inbytes</i>     | (Optional) Load interval 2 L3 average in switched bytes  |
| <i>eth_l3avg2_inpkts</i>      | (Optional) Load interval 2 L3 average in switched pkts   |
| <i>eth_l3avg2_outbytes</i>    | (Optional) Load interval 2 L3 average out switched bytes |
| <i>eth_l3avg2_outpkts</i>     | (Optional) Load interval 2 L3 average out switched pkts  |
| <i>eth_l3avg3_inbytes</i>     | (Optional) Load interval 3 L3 average in switched bytes  |
| <i>eth_l3avg3_inpkts</i>      | (Optional) Load interval 3 L3 average in switched pkts   |
| <i>eth_l3avg3_outbytes</i>    | (Optional) Load interval 3 L3 average out switched bytes |
| <i>eth_l3avg3_outpkts</i>     | (Optional) Load interval 3 L3 average out switched pkts  |
| <i>eth_inpkts</i>             | (Optional) Packets input                                 |
| <i>eth_inbytes</i>            | (Optional) Bytes input                                   |
| <i>eth_nobuf</i>              | (Optional) No buffer received                            |
| <i>eth_inbcast</i>            | (Optional) Broadcasts                                    |
| <i>eth_inmcast</i>            | (Optional) Multicasts                                    |
| <i>eth_inucast</i>            | (Optional) Unicasts                                      |
| <i>eth_ingiants</i>           | (Optional) giants  |
| <i>eth_ipmcast</i>            | (Optional) IP multicast                                  |
| <i>eth_inhw_switched</i>      | (Optional) Input H/W Switched                            |
| <i>eth_insw_switched</i>      | (Optional) Input S/W Switched                            |

|                            |   |
|----------------------------|---|
| <i>eth_runts</i>           | (Optional) runts                                |
| <i>eth_storm_supp</i>      | (Optional) storm suppression                    |
| <i>eth_throtles</i>        | (Optional) throttles                            |
| <i>eth_inerr</i>           | (Optional) input errors                         |
| <i>eth_crc</i>             | (Optional) CRC                                  |
| <i>eth_ecc</i>             | (Optional) ECC                                  |
| <i>eth_frame</i>           | (Optional) frame                                |
| <i>eth_overrun</i>         | (Optional) overrun                              |
| <i>eth_ignored</i>         | (Optional) ignored                              |
| <i>eth_watchdog</i>        | (Optional) watchdog                             |
| <i>eth_outbcast</i>        | (Optional) Broadcasts                           |
| <i>eth_outmcast</i>        | (Optional) Multicasts                           |
| <i>eth_outucast</i>        | (Optional) Unicasts                             |
| <i>eth_outgiants</i>       | (Optional) giants                               |
| <i>eth_inpause</i>         | (Optional) pause input                          |
| <i>eth_dribble</i>         | (Optional) input packets with dribble condition |
| <i>eth_in_ifdown_drops</i> | (Optional) Input if-down drops                  |
| <i>eth_bad_eth</i>         | (Optional) bad ether type drop                  |
| <i>eth_bad_proto</i>       | (Optional) bad protocol drops                   |
| <i>eth_outpkts</i>         | (Optional) packets output                       |
| <i>eth_outbytes</i>        | (Optional) bytes output                         |
| <i>eth_underrun</i>        | (Optional) underruns                            |
| <i>eth_outhw_switched</i>  | (Optional) Out H/W Switched                     |
| <i>eth_outsw_switched</i>  | (Optional) Out S/W Switched                     |
| <i>eth_outerr</i>          | (Optional) output errors                        |
| <i>eth_coll</i>            | (Optional) collisions                           |
| <i>eth_resets</i>          | (Optional) interface resets                     |
| <i>eth_babbles</i>         | (Optional) babbles                              |
| <i>eth_latecoll</i>        | (Optional) late collision                       |

|                             |   |
|-----------------------------|---|
| <i>eth_deferred</i>         | (Optional) deferred                               |
| <i>eth_lostcarrier</i>      | (Optional) lost carrier                           |
| <i>eth_nocarrier</i>        | (Optional) no carrier                             |
| <i>eth_outpause</i>         | (Optional) PAUSE output                           |
| <i>eth_buffail</i>          | (Optional) output buffer failures                 |
| <i>eth_bufswapped</i>       | (Optional) output buffers swapped out             |
| <i>eth_arpdrops</i>         | (Optional) arp drops                              |
| <i>eth_out_ifdown_drops</i> | (Optional) Output if-down drops                   |
| <i>eth_single_coll</i>      | (Optional) single collisions                      |
| <i>eth_multi_coll</i>       | (Optional) multi collisions                       |
| <i>eth_excess_coll</i>      | (Optional) excessive collisions                   |
| <i>eth_jabbers</i>          | (Optional) jabbers                                |
| <i>eth_shortframe</i>       | (Optional) short frames                           |
| <i>eth_indiscard</i>        | (Optional) discards                               |
| <i>eth_bad_encap</i>        | (Optional) bad encapsulation                      |
| <i>eth_outcrc</i>           | (Optional) Output CRC                             |
| <i>eth_symbol</i>           | (Optional) symbol errors                          |
| <i>eth_out_drops</i>        | (Optional) output drops                           |
| <i>eth_sqetest</i>          | (Optional) SQE test                               |
| <i>eth_inb64</i>            | (Optional) input pkts between 0 and 64 bytes      |
| <i>eth_inb65_127</i>        | (Optional) input pkts between 65 and 127 bytes    |
| <i>eth_inb128_255</i>       | (Optional) input pkts between 128 and 255 bytes   |
| <i>eth_inb256_511</i>       | (Optional) input pkts between 256 and 511 bytes   |
| <i>eth_inb512_1023</i>      | (Optional) input pkts between 512 and 1023 bytes  |
| <i>eth_inb1024_1518</i>     | (Optional) input pkts between 1024 and 1518 bytes |
| <i>eth_inb1519_1548</i>     | (Optional) input pkts between 1519 and 1548 bytes |
| <i>eth_intrunk</i>          | (Optional) input trunk pkts                       |
| <i>eth_outb64</i>           | (Optional) output pkts between 0 and 64 bytes     |
| <i>eth_outb65_127</i>       | (Optional) output pkts between 65 and 127 bytes   |



|                                     |  |
|-------------------------------------|--|
| <i>eth_outb128_255</i>              | (Optional) output pkts between 128 and 255 bytes   |
| <i>eth_outb256_511</i>              | (Optional) output pkts between 256 and 511 bytes   |
| <i>eth_outb512_1023</i>             | (Optional) output pkts between 512 and 1023 bytes  |
| <i>eth_outb1024_1518</i>            | (Optional) output pkts between 1024 and 1518 bytes |
| <i>eth_outb1519_1548</i>            | (Optional) output pkts between 1519 and 1548 bytes |
| <i>eth_outtrunk</i>                 | (Optional) output trunk pkts                       |
| <i>eth_bpdu_outlost</i>             | (Optional) BPDU output lost                        |
| <i>eth_cos0_outlost</i>             | (Optional) output pkts                             |
| <i>eth_cos1_outlost</i>             | (Optional) output pkts                             |
| <i>eth_cos2_outlost</i>             | (Optional) output pkts                             |
| <i>eth_cos3_outlost</i>             | (Optional) output pkts                             |
| <i>eth_cos4_outlost</i>             | (Optional) output pkts                             |
| <i>eth_cos5_outlost</i>             | (Optional) output pkts                             |
| <i>eth_cos6_outlost</i>             | (Optional) output pkts                             |
| <i>eth_cos7_outlost</i>             | (Optional) output pkts                             |
| <i>eth_fcoe_in_pkts</i>             | (Optional) fcoe in pkts                            |
| <i>eth_fcoe_in_octets</i>           | (Optional) fcoe in octets                          |
| <i>eth_fcoe_out_pkts</i>            | (Optional) fcoe out pkts                           |
| <i>eth_fcoe_out_octets</i>          | (Optional) fcoe out octets                         |
| <i>eth_nfcoe_in_pkts</i>            | (Optional) nfcoe in pkts                           |
| <i>eth_nfcoe_in_octets</i>          | (Optional) nfcoe in octets                         |
| <i>eth_nfcoe_out_pkts</i>           | (Optional) nfcoe out pkts                          |
| <i>eth_nfcoe_out_octets</i>         | (Optional) nfcoe out octets                        |
| <i>eth_eee_atx_lpi_msec</i>         | (Optional) Tx Lpi usec                             |
| <i>eth_eee_arcv_lpi_msec</i>        | (Optional) Rx Lpi usec                             |
| <i>eth_eee_atx_lpi_transitions</i>  | (Optional) Tx Lpi requests                         |
| <i>eth_eee_arcv_lpi_transitions</i> | (Optional) Rx Lpi indications                      |
| <i>eth_phy_ber_count</i>            | (Optional) Bit error rate counter                  |
| <i>eth_phy_errblks_count</i>        | (Optional) Errored blocks counter                  |

**Command Mode**

- /exec

# show interface counters detailed cached

```
show interface <ifeth_ctr_dtl_all> counters detailed cached [ __readonly__ TABLE interface <interface> [
<rx_total_pkts> ][ <tx_total_pkts> ][ <rx_ucast_pkts> ][ <rx_mcast_pkts> ][ <rx_bcast_pkts> ][ <rx_octets> ]
][ <tx_ucast_pkts> ][ <tx_mcast_pkts> ][ <tx_bcast_pkts> ][ <tx_octets> ][ <rxtx_pkts_64octets> ][
<rxtx_pkts_65_127octets> ][ <rxtx_pkts_128_255octets> ][ <rxtx_pkts_256_511octets> ][
<rxtx_pkts_512_1023octets> ][ <rxtx_pkts_1024_1518octets> ][ <rxtx_pkts_1519_1548octets> ][
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][ <eth_inrate1_bits> ][ <eth_inrate1_pkts> ][ <eth_load_interval1_tx> ][ <eth_outrate1_bits> ][
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][ <eth_l3avg1_outpkts> ][ <eth_l3avg2_inbytes> ][ <eth_l3avg2_inpkts> ][ <eth_l3avg2_outbytes> ]
][ <eth_l3avg2_outpkts> ][ <eth_l3avg3_inbytes> ][ <eth_l3avg3_inpkts> ][ <eth_l3avg3_outbytes> ]
][ <eth_l3avg3_outpkts> ][ <eth_inpkts> ][ <eth_inbytes> ][ <eth_nobuf> ][ <eth_inbcast> ][ <eth_inmcast> ]
][ <eth_inucast> ][ <eth_ingiants> ][ <eth_ipmcast> ][ <eth_inhw_switched> ][ <eth_insw_switched> ][
<eth_runs> ][ <eth_storm_supp> ][ <eth_throtles> ][ <eth_inerr> ][ <eth_crc> ][ <eth_ecc> ][ <eth_frame> ]
][ <eth_outrun> ][ <eth_ignored> ][ <eth_watchdog> ][ <eth_outbcast> ][ <eth_outmcast> ][
<eth_outucast> ][ <eth_outgiants> ][ <eth_inpause> ][ <eth_dribble> ][ <eth_in_ifdown_drops> ][
<eth_bad_eth> ][ <eth_bad_proto> ][ <eth_outpkts> ][ <eth_outbytes> ][ <eth_underrun> ][
<eth_outhw_switched> ][ <eth_outsw_switched> ][ <eth_outerr> ][ <eth_coll> ][ <eth_resets> ][
<eth_babbles> ][ <eth_latecoll> ][ <eth_deferred> ][ <eth_lostcarrier> ][ <eth_nocarrier> ][ <eth_outpause> ]
][ <eth_buffail> ][ <eth_bufswapped> ][ <eth_arpdrops> ][ <eth_out_ifdown_drops> ][ <eth_single_coll> ]
][ <eth_multi_coll> ][ <eth_excess_coll> ][ <eth_jabbers> ][ <eth_shortframe> ][ <eth_indiscard> ][
<eth_bad_encap> ][ <eth_outcrc> ][ <eth_symbol> ][ <eth_out_drops> ][ <eth_sqetest> ][ <eth_inb64> ]
][ <eth_inb65_127> ][ <eth_inb128_255> ][ <eth_inb256_511> ][ <eth_inb512_1023> ][
<eth_inb1024_1518> ][ <eth_inb1519_1548> ][ <eth_intrunk> ][ <eth_outb64> ][ <eth_outb65_127> ][
<eth_outb128_255> ][ <eth_outb256_511> ][ <eth_outb512_1023> ][ <eth_outb1024_1518> ][
<eth_outb1519_1548> ][ <eth_outtrunk> ][ <eth_bpdu_outlost> ][ <eth_cos0_outlost> ][ <eth_cos1_outlost> ]
][ <eth_cos2_outlost> ][ <eth_cos3_outlost> ][ <eth_cos4_outlost> ][ <eth_cos5_outlost> ][
<eth_cos6_outlost> ][ <eth_cos7_outlost> ][ <eth_fcoe_in_pkts> ][ <eth_fcoe_in_octets> ][
<eth_fcoe_out_pkts> ][ <eth_fcoe_out_octets> ][ <eth_nfcoe_in_pkts> ][ <eth_nfcoe_in_octets> ][
<eth_nfcoe_out_pkts> ][ <eth_nfcoe_out_octets> ][ <eth_eee_atx_lpi_msec> ][ <eth_eee_arcv_lpi_msec> ]
][ <eth_eee_atx_lpi_transitions> ][ <eth_eee_arcv_lpi_transitions> ][ <eth_phy_ber_count> ][
<eth_phy_errblks_count> ] ]
```

### Syntax Description

|                          |   |
|--------------------------|---|
| show                     | Show running system information                       |
| interface                | Show interface status and information                 |
| <i>ifeth_ctr_dtl_all</i> | Enter interface type and number in module/slot format |
| counters                 | Show interface counters                               |

|  |   |
|--|---|
| <code>detailed</code>                  | Show only non-zero counters                     |
| <code>cached</code>                    | everything cached                               |
| <code>__readonly__</code>              | (Optional) Read Only                            |
| <code>interface</code>                 | (Optional) Interface index                      |
| <code>TABLE_interface</code>           | (Optional) show interface                       |
| <code>rx_total_pkts</code>             | (Optional) total input packets                  |
| <code>tx_total_pkts</code>             | (Optional) total output packets                 |
| <code>rx_ucast_pkts</code>             | (Optional) input unicasts                       |
| <code>rx_mcast_pkts</code>             | (Optional) input multicasts                     |
| <code>rx_bcast_pkts</code>             | (Optional) input broadcasts                     |
| <code>rx_octets</code>                 | (Optional) input bytes                          |
| <code>tx_ucast_pkts</code>             | (Optional) output unicasts                      |
| <code>tx_mcast_pkts</code>             | (Optional) output multicasts                    |
| <code>tx_bcast_pkts</code>             | (Optional) output broadcasts                    |
| <code>tx_octets</code>                 | (Optional) output bytes                         |
| <code>rxtx_pkts_64octets</code>        | (Optional) all pkts between 0 and 64 bytes      |
| <code>rxtx_pkts_65_127octets</code>    | (Optional) all pkts between 65 and 127 bytes    |
| <code>rxtx_pkts_128_255octets</code>   | (Optional) all pkts between 128 and 255 bytes   |
| <code>rxtx_pkts_256_511octets</code>   | (Optional) all pkts between 256 and 511 bytes   |
| <code>rxtx_pkts_512_1023octets</code>  | (Optional) all pkts between 512 and 1023 bytes  |
| <code>rxtx_pkts_1024_1518octets</code> | (Optional) all pkts between 1024 and 1518 bytes |
| <code>rxtx_pkts_1519_1548octets</code> | (Optional) all pkts between 1519 and 1548 bytes |
| <code>rx_trunk_frames</code>           | (Optional) input trunk pkts                     |
| <code>tx_trunk_frames</code>           | (Optional) output trunk pkts                    |
| <code>rx_drop_events</code>            | (Optional) dropped pkts                         |
| <code>rxtx_giants</code>               | (Optional) giants                               |
| <code>eth_load_interval1_rx</code>     | (Optional) interval 1 timer value in sec        |
| <code>eth_inrate1_bits</code>          | (Optional) interval 1 input rate bits/sec       |
| <code>eth_inrate1_pkts</code>          | (Optional) interval 1 input rate pkts/sec       |

|                              |   |
|------------------------------|---|
| <i>eth_load_interval1_tx</i> | (Optional) interval 1 timer value in sec    |
| <i>eth_outrate1_bits</i>     | (Optional) interval 1 output rate bits/sec  |
| <i>eth_outrate1_pkts</i>     | (Optional) interval 1 output rate pkts/sec  |
| <i>eth_load_interval2</i>    | (Optional) interval 2 timer value in sec    |
| <i>eth_inrate2_bits</i>      | (Optional) interval 2 input rate bits/sec   |
| <i>eth_inrate2_pkts</i>      | (Optional) interval 2 input rate pkts/sec   |
| <i>eth_outrate2_bits</i>     | (Optional) interval 2 output rate bits/sec  |
| <i>eth_outrate2_pkts</i>     | (Optional) interval 2 output rate pkts/sec  |
| <i>eth_load_interval3</i>    | (Optional) interval 3 timer value in sec    |
| <i>eth_inrate3_bits</i>      | (Optional) interval 3 input rate bits/sec   |
| <i>eth_inrate3_pkts</i>      | (Optional) interval 3 input rate pkts/sec   |
| <i>eth_outrate3_bits</i>     | (Optional) interval 3 output rate bits/sec  |
| <i>eth_outrate3_pkts</i>     | (Optional) interval 3 output rate pkts/sec  |
| <i>eth_l2_ucastpkts</i>      | (Optional) L2 switched ucast pkts           |
| <i>eth_l2_ucastbytes</i>     | (Optional) L2 switched ucast bytes          |
| <i>eth_l2_mcastpkts</i>      | (Optional) L2 switched mcast pkts           |
| <i>eth_l2_mcastbytes</i>     | (Optional) L2 switched mcast bytes          |
| <i>eth_l2_bcastpkts</i>      | (Optional) L2 switched bcast pkts           |
| <i>eth_l2_bcastbytes</i>     | (Optional) L2 switched bcast bytes          |
| <i>eth_l3in_ucastpkts</i>    | (Optional) IPv4 L3 in switched ucast pkts   |
| <i>eth_l3in_ucastbytes</i>   | (Optional) IPv4 L3 in switched ucast bytes  |
| <i>eth_l3in_mcastpkts</i>    | (Optional) IPv4 L3 in switched mcast pkts   |
| <i>eth_l3in_mcastbytes</i>   | (Optional) IPv4 L3 in switched mcast bytes  |
| <i>eth_l3in_bcastpkts</i>    | (Optional) L3 in switched bcast pkts        |
| <i>eth_l3in_bcastbytes</i>   | (Optional) L3 in switched bcast bytes       |
| <i>eth_l3out_ucastpkts</i>   | (Optional) IPv4 L3 out switched ucast pkts  |
| <i>eth_l3out_ucastbytes</i>  | (Optional) IPv4 L3 out switched ucast bytes |
| <i>eth_l3out_mcastpkts</i>   | (Optional) IPv4 L3 out switched mcast pkts  |
| <i>eth_l3out_mcastbytes</i>  | (Optional) IPv4 L3 out switched mcast bytes |

|                               |  |
|-------------------------------|--|
| <i>eth_l3out_bcastpkts</i>    | (Optional) L3 out switched bcast pkts                    |
| <i>eth_l3out_bcastbytes</i>   | (Optional) L3 out switched bcast bytes                   |
| <i>eth_l3in_routed_pkts</i>   | (Optional) L3 in routed pkts                             |
| <i>eth_l3in_routed_bytes</i>  | (Optional) L3 in routed bytes                            |
| <i>eth_l3out_routed_pkts</i>  | (Optional) L3 out routed pkts                            |
| <i>eth_l3out_routed_bytes</i> | (Optional) L3 out routed bytes                           |
| <i>eth_l3avg1_inbytes</i>     | (Optional) Load interval 1 L3 average in switched bytes  |
| <i>eth_l3avg1_inpkts</i>      | (Optional) Load interval 1 L3 average in switched pkts   |
| <i>eth_l3avg1_outbytes</i>    | (Optional) Load interval 1 L3 average out switched bytes |
| <i>eth_l3avg1_outpkts</i>     | (Optional) Load interval 1 L3 average out switched pkts  |
| <i>eth_l3avg2_inbytes</i>     | (Optional) Load interval 2 L3 average in switched bytes  |
| <i>eth_l3avg2_inpkts</i>      | (Optional) Load interval 2 L3 average in switched pkts   |
| <i>eth_l3avg2_outbytes</i>    | (Optional) Load interval 2 L3 average out switched bytes |
| <i>eth_l3avg2_outpkts</i>     | (Optional) Load interval 2 L3 average out switched pkts  |
| <i>eth_l3avg3_inbytes</i>     | (Optional) Load interval 3 L3 average in switched bytes  |
| <i>eth_l3avg3_inpkts</i>      | (Optional) Load interval 3 L3 average in switched pkts   |
| <i>eth_l3avg3_outbytes</i>    | (Optional) Load interval 3 L3 average out switched bytes |
| <i>eth_l3avg3_outpkts</i>     | (Optional) Load interval 3 L3 average out switched pkts  |
| <i>eth_inpkts</i>             | (Optional) Packets input                                 |
| <i>eth_inbytes</i>            | (Optional) Bytes input                                   |
| <i>eth_nobuf</i>              | (Optional) No buffer received                            |
| <i>eth_inbcast</i>            | (Optional) Broadcasts                                    |
| <i>eth_inmcast</i>            | (Optional) Multicasts                                    |
| <i>eth_inucast</i>            | (Optional) Unicasts                                      |
| <i>eth_ingiants</i>           | (Optional) giants  |
| <i>eth_ipmcast</i>            | (Optional) IP multicast                                  |
| <i>eth_inhw_switched</i>      | (Optional) Input H/W Switched                            |
| <i>eth_insw_switched</i>      | (Optional) Input S/W Switched                            |
| <i>eth_runts</i>              | (Optional) runts   |

|                            |   |
|----------------------------|---|
| <i>eth_storm_supp</i>      | (Optional) storm suppression                    |
| <i>eth_throtles</i>        | (Optional) throttles                            |
| <i>eth_inerr</i>           | (Optional) input errors                         |
| <i>eth_crc</i>             | (Optional) CRC                                  |
| <i>eth_ecc</i>             | (Optional) ECC                                  |
| <i>eth_frame</i>           | (Optional) frame                                |
| <i>eth_overrun</i>         | (Optional) overrun                              |
| <i>eth_ignored</i>         | (Optional) ignored                              |
| <i>eth_watchdog</i>        | (Optional) watchdog                             |
| <i>eth_outbcast</i>        | (Optional) Broadcasts                           |
| <i>eth_outmcast</i>        | (Optional) Multicasts                           |
| <i>eth_outucast</i>        | (Optional) Unicasts                             |
| <i>eth_outgiants</i>       | (Optional) giants                               |
| <i>eth_inpause</i>         | (Optional) pause input                          |
| <i>eth_dribble</i>         | (Optional) input packets with dribble condition |
| <i>eth_in_ifdown_drops</i> | (Optional) Input if-down drops                  |
| <i>eth_bad_eth</i>         | (Optional) bad ether type drop                  |
| <i>eth_bad_proto</i>       | (Optional) bad protocol drops                   |
| <i>eth_outpkts</i>         | (Optional) packets output                       |
| <i>eth_outbytes</i>        | (Optional) bytes output                         |
| <i>eth_underrun</i>        | (Optional) underruns                            |
| <i>eth_outhw_switched</i>  | (Optional) Out H/W Switched                     |
| <i>eth_outsw_switched</i>  | (Optional) Out S/W Switched                     |
| <i>eth_outerr</i>          | (Optional) output errors                        |
| <i>eth_coll</i>            | (Optional) collisions                           |
| <i>eth_resets</i>          | (Optional) interface resets                     |
| <i>eth_babbles</i>         | (Optional) babbles                              |
| <i>eth_latecoll</i>        | (Optional) late collision                       |
| <i>eth_deferred</i>        | (Optional) deferred                             |

|                             |   |
|-----------------------------|---|
| <i>eth_lostcarrier</i>      | (Optional) lost carrier                           |
| <i>eth_nocarrier</i>        | (Optional) no carrier                             |
| <i>eth_outpause</i>         | (Optional) PAUSE output                           |
| <i>eth_buffail</i>          | (Optional) output buffer failures                 |
| <i>eth_bufswapped</i>       | (Optional) output buffers swapped out             |
| <i>eth_arpdrops</i>         | (Optional) arp drops                              |
| <i>eth_out_ifdown_drops</i> | (Optional) Output if-down drops                   |
| <i>eth_single_coll</i>      | (Optional) single collisions                      |
| <i>eth_multi_coll</i>       | (Optional) multi collisions                       |
| <i>eth_excess_coll</i>      | (Optional) excessive collisions                   |
| <i>eth_jabbers</i>          | (Optional) jabbers                                |
| <i>eth_shortframe</i>       | (Optional) short frames                           |
| <i>eth_indiscard</i>        | (Optional) discards                               |
| <i>eth_bad_encap</i>        | (Optional) bad encapsulation                      |
| <i>eth_outcrc</i>           | (Optional) Output CRC                             |
| <i>eth_symbol</i>           | (Optional) symbol errors                          |
| <i>eth_out_drops</i>        | (Optional) output drops                           |
| <i>eth_sqetest</i>          | (Optional) SQE test                               |
| <i>eth_inb64</i>            | (Optional) input pkts between 0 and 64 bytes      |
| <i>eth_inb65_127</i>        | (Optional) input pkts between 65 and 127 bytes    |
| <i>eth_inb128_255</i>       | (Optional) input pkts between 128 and 255 bytes   |
| <i>eth_inb256_511</i>       | (Optional) input pkts between 256 and 511 bytes   |
| <i>eth_inb512_1023</i>      | (Optional) input pkts between 512 and 1023 bytes  |
| <i>eth_inb1024_1518</i>     | (Optional) input pkts between 1024 and 1518 bytes |
| <i>eth_inb1519_1548</i>     | (Optional) input pkts between 1519 and 1548 bytes |
| <i>eth_intrunk</i>          | (Optional) input trunk pkts                       |
| <i>eth_outb64</i>           | (Optional) output pkts between 0 and 64 bytes     |
| <i>eth_outb65_127</i>       | (Optional) output pkts between 65 and 127 bytes   |
| <i>eth_outb128_255</i>      | (Optional) output pkts between 128 and 255 bytes  |



|                                     |  |
|-------------------------------------|--|
| <i>eth_outb256_511</i>              | (Optional) output pkts between 256 and 511 bytes   |
| <i>eth_outb512_1023</i>             | (Optional) output pkts between 512 and 1023 bytes  |
| <i>eth_outb1024_1518</i>            | (Optional) output pkts between 1024 and 1518 bytes |
| <i>eth_outb1519_1548</i>            | (Optional) output pkts between 1519 and 1548 bytes |
| <i>eth_outtrunk</i>                 | (Optional) output trunk pkts                       |
| <i>eth_bpdu_outlost</i>             | (Optional) BPDU output lost                        |
| <i>eth_cos0_outlost</i>             | (Optional) output pkts                             |
| <i>eth_cos1_outlost</i>             | (Optional) output pkts                             |
| <i>eth_cos2_outlost</i>             | (Optional) output pkts                             |
| <i>eth_cos3_outlost</i>             | (Optional) output pkts                             |
| <i>eth_cos4_outlost</i>             | (Optional) output pkts                             |
| <i>eth_cos5_outlost</i>             | (Optional) output pkts                             |
| <i>eth_cos6_outlost</i>             | (Optional) output pkts                             |
| <i>eth_cos7_outlost</i>             | (Optional) output pkts                             |
| <i>eth_fcoe_in_pkts</i>             | (Optional) fcoe in pkts                            |
| <i>eth_fcoe_in_octets</i>           | (Optional) fcoe in octets                          |
| <i>eth_fcoe_out_pkts</i>            | (Optional) fcoe out pkts                           |
| <i>eth_fcoe_out_octets</i>          | (Optional) fcoe out octets                         |
| <i>eth_nfcoe_in_pkts</i>            | (Optional) nfcoe in pkts                           |
| <i>eth_nfcoe_in_octets</i>          | (Optional) nfcoe in octets                         |
| <i>eth_nfcoe_out_pkts</i>           | (Optional) nfcoe out pkts                          |
| <i>eth_nfcoe_out_octets</i>         | (Optional) nfcoe out octets                        |
| <i>eth_eee_atx_lpi_msec</i>         | (Optional) Tx Lpi usec                             |
| <i>eth_eee_arcv_lpi_msec</i>        | (Optional) Rx Lpi usec                             |
| <i>eth_eee_atx_lpi_transitions</i>  | (Optional) Tx Lpi requests                         |
| <i>eth_eee_arcv_lpi_transitions</i> | (Optional) Rx Lpi indications                      |
| <i>eth_phy_ber_count</i>            | (Optional) Bit error rate counter                  |
| <i>eth_phy_errblks_count</i>        | (Optional) Errored blocks counter                  |

**Command Mode**

- /exec

# show interface counters errors

```
show interface <ifeth_ctr_errs> counters errors [ snmp ] [ __readonly__ TABLE_interface <interface> [
<eth_align_err> ] [ <eth_fcs_err> ] [ <eth_xmit_err> ] [ <eth_rcv_err> ] [ <eth_undersize> ] [ <eth_outdisc>
] [ <eth_single_col> ] [ <eth_multi_col> ] [ <eth_late_col> ] [ <eth_excess_col> ] [ <eth_carri_sen> ] [
<eth_runts> ] [ <eth_giants> ] [ <eth_sqetest_err> ] [ <eth_deferred_tx> ] [ <eth_inmactx_err> ] [
<eth_inmacrx_err> ] [ <eth_symbol_err> ] ]
```

## Syntax Description

|                        |   |
|------------------------|---|
| show                   | Show running system information                       |
| interface              | Show interface status and information                 |
| <i>ifeth_ctr_errs</i>  | Enter interface type and number in module/slot format |
| counters               | Show interface counters                               |
| errors                 | Show interface error counters                         |
| snmp                   | (Optional) Show SNMP MIB values                       |
| <i>__readonly__</i>    | (Optional) Read Only                                  |
| <i>interface</i>       | (Optional) Interface index                            |
| TABLE_interface        | (Optional) show interface                             |
| <i>eth_align_err</i>   | (Optional) Align error                                |
| <i>eth_fcs_err</i>     | (Optional) FCS error                                  |
| <i>eth_xmit_err</i>    | (Optional) Transmit error                             |
| <i>eth_rcv_err</i>     | (Optional) Receive error                              |
| <i>eth_undersize</i>   | (Optional) Undersize                                  |
| <i>eth_outdisc</i>     | (Optional) Out discard                                |
| <i>eth_single_col</i>  | (Optional) Single collision                           |
| <i>eth_multi_col</i>   | (Optional) Multiple collision                         |
| <i>eth_late_col</i>    | (Optional) Late collision                             |
| <i>eth_excess_col</i>  | (Optional) Excess collision                           |
| <i>eth_carri_sen</i>   | (Optional) Carrier sense                              |
| <i>eth_runts</i>       | (Optional) Runts                                      |
| <i>eth_giants</i>      | (Optional) Giants                                     |
| <i>eth_sqetest_err</i> | (Optional) SQETest error                              |

|                        |                         |
|------------------------|-------------------------|
| <i>eth_deferred_tx</i> | (Optional) Deferred tx  |
| <i>eth_inmactx_err</i> | (Optional) In MAC tx    |
| <i>eth_inmacrx_err</i> | (Optional) In MAC rx    |
| <i>eth_symbol_err</i>  | (Optional) Symbol error |

**Command Mode**

- /exec

# show interface counters errors

```
show interface counters errors [ module <module> ][ non-zero ][ __readonly__ TABLE_interface <interface>
[ <eth_align_err> ][ <eth_fcs_err> ][ <eth_xmit_err> ][ <eth_rcv_err> ][ <eth_undersize> ][ <eth_outdisc>
][ <eth_single_col> ][ <eth_multi_col> ][ <eth_late_col> ][ <eth_excess_col> ][ <eth_carri_sen> ][
<eth_runs> ][ <eth_giants> ][ <eth_sqetest_err> ][ <eth_deferred_tx> ][ <eth_inmacrx_err> ][
<eth_inmactx_err> ][ <eth_symbol_err> ]]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                   |
| interface             | Show interface status and information             |
| counters              | Show interface counters                           |
| errors                | Show interface error counters                     |
| module                | (Optional) Limit display to interfaces on module  |
| <i>module</i>         | (Optional) Enter module number                    |
| non-zero              | (Optional) Display only the non-zero error values |
| <u>__readonly__</u>   | (Optional) Read Only                              |
| <i>interface</i>      | (Optional) Interface index                        |
| TABLE_interface       | (Optional) show interface                         |
| <i>eth_align_err</i>  | (Optional) Align error                            |
| <i>eth_fcs_err</i>    | (Optional) FCS error                              |
| <i>eth_xmit_err</i>   | (Optional) Transmit error                         |
| <i>eth_rcv_err</i>    | (Optional) Receive error                          |
| <i>eth_undersize</i>  | (Optional) Undersize                              |
| <i>eth_outdisc</i>    | (Optional) Out discard                            |
| <i>eth_single_col</i> | (Optional) Single collision                       |
| <i>eth_multi_col</i>  | (Optional) Multiple collision                     |
| <i>eth_late_col</i>   | (Optional) Late collision                         |
| <i>eth_excess_col</i> | (Optional) Excess collision                       |
| <i>eth_carri_sen</i>  | (Optional) Carrier sense                          |
| <i>eth_runs</i>       | (Optional) Runts                                  |
| <i>eth_giants</i>     | (Optional) Giants                                 |

|                        |                          |
|------------------------|--------------------------|
| <i>eth_sqetest_err</i> | (Optional) SQETest error |
| <i>eth_deferred_tx</i> | (Optional) Deferred tx   |
| <i>eth_inmacrx_err</i> | (Optional) In MAC rx     |
| <i>eth_inmactx_err</i> | (Optional) In MAC tx     |
| <i>eth_symbol_err</i>  | (Optional) Symbol error  |

**Command Mode**

- /exec

# show interface counters errors

show interface <loop\_ctr\_errs> counters errors

## Syntax Description

|                      |   |
|----------------------|---|
| show                 | Show running system information                       |
| interface            | Show interface status and information                 |
| <i>loop_ctr_errs</i> | Enter interface type and number in module/slot format |
| counters             | Show interface counters                               |
| errors               | Show interface error counters                         |

## Command Mode

- /exec

## show interface counters snmp

```
show interface counters snmp [ module <module> ] [ __readonly__ { TABLE_rx_counters <interface_rx> [
<eth_inpkts> ] [ <eth_inbytes> ] [ <eth_inucast> ] [ <eth_inmcast> ] [ <eth_inbcast> ] [ <eth_l3in_bytes> ]
[ <eth_l3in_ucastpkts> ] [ <eth_l3in_mcastpkts> ] [ <eth_l3in_bcastpkts> ] } } { TABLE_tx_counters
<interface_tx> [ <eth_outpkts> ] [ <eth_outbytes> ] [ <eth_outucast> ] [ <eth_outmcast> ] [ <eth_outbcast>
] [ <eth_l3out_bytes> ] [ <eth_l3out_ucastpkts> ] [ <eth_l3out_mcastpkts> ] [ <eth_l3out_bcastpkts> ] } }
```

### Syntax Description

|                           |  |
|---------------------------|--|
| show                      | Show running system information                  |
| interface                 | Show interface status and information            |
| counters                  | Show interface counters                          |
| snmp                      | Show SNMP MIB values                             |
| module                    | (Optional) Limit display to interfaces on module |
| <i>module</i>             | (Optional) Enter module number                   |
| <i>__readonly__</i>       | (Optional) Read Only                             |
| TABLE_rx_counters         | (Optional) show Rx counters                      |
| <i>interface_rx</i>       | (Optional) Interface index                       |
| <i>eth_inpkts</i>         | (Optional) Packets input                         |
| <i>eth_inbytes</i>        | (Optional) Bytes input                           |
| <i>eth_inucast</i>        | (Optional) Unicasts                              |
| <i>eth_inmcast</i>        | (Optional) Multicasts                            |
| <i>eth_inbcast</i>        | (Optional) Broadcasts                            |
| <i>eth_l3in_bytes</i>     | (Optional) L3 Rx bytes                           |
| <i>eth_l3in_ucastpkts</i> | (Optional) L3 Rx Unicast pkts                    |
| <i>eth_l3in_mcastpkts</i> | (Optional) L3 Rx Multicast pkts                  |
| <i>eth_l3in_bcastpkts</i> | (Optional) L3 Rx Broadcast pkts                  |
| TABLE_tx_counters         | (Optional) show Tx counters                      |
| <i>interface_tx</i>       | (Optional) Interface index                       |
| <i>eth_outpkts</i>        | (Optional) Packets output                        |
| <i>eth_outbytes</i>       | (Optional) Bytes output                          |
| <i>eth_outucast</i>       | (Optional) Unicasts                              |



|                            |                                 |
|----------------------------|---------------------------------|
| <i>eth_outmcast</i>        | (Optional) Multicasts           |
| <i>eth_outbcast</i>        | (Optional) Broadcasts           |
| <i>eth_l3out_bytes</i>     | (Optional) L3 Tx bytes          |
| <i>eth_l3out_ucastpkts</i> | (Optional) L3 Tx Unicast pkts   |
| <i>eth_l3out_mcastpkts</i> | (Optional) L3 Tx Multicast pkts |
| <i>eth_l3out_bcastpkts</i> | (Optional) L3 Tx Broadcast pkts |

**Command Mode**

- /exec

## show interface counters storm-control

```
show interface <ifeth_ctr_stm_ctrl> counters storm-control [ __readonly__ TABLE_interface <interface>
<eth_ucast_supp> <eth_mcast_supp> <eth_bcast_supp> <eth_total_supp> <supp_action> ]
```

### Syntax Description

|                           |   |
|---------------------------|---|
| show                      | Show running system information                       |
| interface                 | Show interface status and information                 |
| <i>ifeth_ctr_stm_ctrl</i> | Enter interface type and number in module/slot format |
| counters                  | Show interface counters                               |
| storm-control             | Show interface storm-control counters                 |
| <i>__readonly__</i>       | (Optional) Read Only                                  |
| <i>interface</i>          | (Optional) Interface index                            |
| <i>TABLE_interface</i>    | (Optional) show interface                             |
| <i>eth_ucast_supp</i>     | (Optional) Unicast suppression percentage             |
| <i>eth_mcast_supp</i>     | (Optional) Multicast suppression percentage           |
| <i>eth_bcast_supp</i>     | (Optional) Broadcast suppression percentage           |
| <i>eth_total_supp</i>     | (Optional) Total discarded due to suppression         |
| <i>supp_action</i>        | (Optional) Action to be taken on suppression          |

### Command Mode

- /exec

# show interface counters storm-control

```
show interface counters storm-control [ module <module> ] [ __readonly__ TABLE_interface <interface>
<eth_ucast_supp> <eth_mcast_supp> <eth_bcast_supp> <eth_total_supp> <supp_action> ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                  |
| interface             | Show interface status and information            |
| counters              | Show interface counters                          |
| storm-control         | Show interface storm-control counters            |
| module                | (Optional) Limit display to interfaces on module |
| <i>module</i>         | (Optional) Enter module number                   |
| <i>__readonly__</i>   | (Optional) Read Only                             |
| <i>interface</i>      | (Optional) Interface index                       |
| TABLE_interface       | (Optional) show interface                        |
| <i>eth_ucast_supp</i> | (Optional) Unicast suppression percentage        |
| <i>eth_mcast_supp</i> | (Optional) Multicast suppression percentage      |
| <i>eth_bcast_supp</i> | (Optional) Broadcast suppression percentage      |
| <i>eth_total_supp</i> | (Optional) Total discarded due to suppression    |
| <i>supp_action</i>    | (Optional) Action to be taken on suppression     |

## Command Mode

- /exec

# show interface counters table

show interface counters table [ verbose ]

## Syntax Description

|           |  |
|-----------|--|
| show      | Show running system information              |
| interface | Show interface status and information        |
| counters  | Show interface counters                      |
| table     | format counters in a table                   |
| verbose   | (Optional) show errors counts after counters |

## Command Mode

- /exec

## show interface counters trunk

```
show interface <ifeth_ctr_trnk> counters trunk [ __readonly__ TABLE_interface <interface> [
<eth_trunk_frames_tx> ][ <eth_trunk_frames_rx> ][ <eth_wrong_encap> ] ]
```

### Syntax Description

|                            |   |
|----------------------------|---|
| show                       | Show running system information                       |
| interface                  | Show interface status and information                 |
| <i>ifeth_ctr_trnk</i>      | Enter interface type and number in module/slot format |
| counters                   | Show interface counters                               |
| trunk                      | Show interface trunk counters                         |
| <i>__readonly__</i>        | (Optional) Read Only                                  |
| <i>interface</i>           | (Optional) Interface index                            |
| TABLE_interface            | (Optional) show interface                             |
| <i>eth_trunk_frames_tx</i> | (Optional) Trunk frame transmitted                    |
| <i>eth_trunk_frames_rx</i> | (Optional) Trunk frames received                      |
| <i>eth_wrong_encap</i>     | (Optional) Wrong encapsulation                        |

### Command Mode

- /exec

## show interface debounce

show interface debounce [ *\_\_readonly\_\_* *TABLE\_interface* <interface> <debounce> <debounce\_val> ]

### Syntax Description

|                        |  |
|------------------------|--|
| show                   | Show running system information          |
| interface              | Show interface status and information    |
| debounce               | Show interface debounce time information |
| <i>__readonly__</i>    | (Optional) Read Only                     |
| <i>interface</i>       | (Optional) Interface index               |
| <i>TABLE_interface</i> | (Optional) show interface                |
| <i>debounce</i>        | (Optional) Debounce time                 |
| <i>debounce_val</i>    | (Optional) Value(ms)                     |

### Command Mode

- /exec

# show interface debounce

```
show interface <ifeth_dbnc> debounce [ __readonly__ TABLE_interface <interface> <debounce>
<debounce_val> ]
```

## Syntax Description

|                     |   |
|---------------------|---|
| show                | Show running system information                       |
| interface           | Show interface status and information                 |
| <i>ifeth_dbnc</i>   | Enter interface type and number in module/slot format |
| debounce            | Show interface debounce time information              |
| <i>__readonly__</i> | (Optional) Read Only                                  |
| <i>interface</i>    | (Optional) Interface index                            |
| TABLE_interface     | (Optional) show interface                             |
| <i>debounce</i>     | (Optional) Debounce time                              |
| <i>debounce_val</i> | (Optional) Value(ms)                                  |

## Command Mode

- /exec

## show interface description

show interface <ifid> description [ \_\_readonly\_\_ <start> <if\_index> <LINE> ]

### Syntax Description

|                 |   |
|-----------------|---|
| show            | Show running system information                 |
| interface       | Show interface status and information           |
| <i>ifid</i>     | VLAN ID 1-4094 or range(s): 1-5, 10 or 2-5,7-19 |
| description     | Interface specific description                  |
| __readonly__    | (Optional) Read Only                            |
| <i>start</i>    | (Optional) Start                                |
| <i>if_index</i> | (Optional) Interface                            |
| <i>LINE</i>     | (Optional) Description                          |

### Command Mode

- /exec



# show interface description

```
show interface description [ __readonly__ TABLE_interface <interface> [ <state> ] [ <type> ] [ <speed> ] [ <protocol> ] [ <desc> ] ]
```

## Syntax Description

|                                  |                                       |
|----------------------------------|---------------------------------------|
| <code>show</code>                | Show running system information       |
| <code>interface</code>           | Show interface status and information |
| <code>description</code>         | Show interface description            |
| <code><i>__readonly__</i></code> | (Optional) Read Only                  |
| <code><i>interface</i></code>    | (Optional) Interface index            |
| <code>TABLE_interface</code>     | (Optional) show interface             |
| <code><i>state</i></code>        | (Optional) Interface state            |
| <code><i>type</i></code>         | (Optional) Type                       |
| <code><i>speed</i></code>        | (Optional) Speed                      |
| <code><i>protocol</i></code>     | (Optional) Protocol                   |
| <code><i>desc</i></code>         | (Optional) Description                |

## Command Mode

- /exec

## show interface description

```
show interface <ifid_mgmt_loop> description [ __readonly__ TABLE_interface <interface> [ <state> ] [
<protocol> ] [ <desc> ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                       |
| interface             | Show interface status and information                 |
| <i>ifid_mgmt_loop</i> | Enter interface type and number in module/slot format |
| description           | Show interface description                            |
| <i>__readonly__</i>   | (Optional) Read Only                                  |
| <i>interface</i>      | (Optional) Interface index                            |
| TABLE_interface       | (Optional) show interface                             |
| <i>state</i>          | (Optional) Interface state                            |
| <i>protocol</i>       | (Optional) Protocol                                   |
| <i>desc</i>           | (Optional) Description                                |

### Command Mode

- /exec

# show interface description

```
show interface <ifid_eth> description [ __readonly__ TABLE_interface <interface> [ <state> ] [ <type> ] [ <speed> ] [ <protocol> ] [ <desc> ] ]
```

## Syntax Description

|                              |   |
|------------------------------|---|
| <code>show</code>            | Show running system information                       |
| <code>interface</code>       | Show interface status and information                 |
| <i>ifid_eth</i>              | Enter interface type and number in module/slot format |
| <code>description</code>     | Show interface description                            |
| <code>__readonly__</code>    | (Optional) Read Only                                  |
| <i>interface</i>             | (Optional) Interface index                            |
| <code>TABLE_interface</code> | (Optional) show interface                             |
| <i>state</i>                 | (Optional) Interface state                            |
| <i>type</i>                  | (Optional) Type                                       |
| <i>speed</i>                 | (Optional) Speed                                      |
| <i>protocol</i>              | (Optional) Protocol                                   |
| <i>desc</i>                  | (Optional) Description                                |

## Command Mode

- /exec

# show interface description

```
show interface <iftun_desc> description [ __readonly__ TABLE_interface <interface> <state> <protocol>
<desc> ]
```

## Syntax Description

|                   |                                       |
|-------------------|---------------------------------------|
| show              | Show running system information       |
| interface         | Show interface status and information |
| <i>iftun_desc</i> | Enter tunnel interface number         |
| description       | Show interface description            |
| __readonly__      | (Optional) Read Only                  |
| <i>interface</i>  | (Optional) Interface index            |
| TABLE_interface   | (Optional) show interface             |
| <i>state</i>      | (Optional) Interface state            |
| <i>protocol</i>   | (Optional) Protocol                   |
| <i>desc</i>       | (Optional) Description                |

## Command Mode

- /exec

# show interface description

```
show interface <ifrange> description [ __readonly__ TABLE_interface <interface> <state> <protocol> <desc> ]
```

## Syntax Description

|                  |                                       |
|------------------|---------------------------------------|
| show             | Show running system information       |
| interface        | Show interface status and information |
| <i>ifrange</i>   | Enter tunnel interface number         |
| description      | Show interface description            |
| __readonly__     | (Optional) Read Only                  |
| <i>interface</i> | (Optional) Interface index            |
| TABLE_interface  | (Optional) show interface             |
| <i>state</i>     | (Optional) Interface state            |
| <i>protocol</i>  | (Optional) Protocol                   |
| <i>desc</i>      | (Optional) Description                |

## Command Mode

- /exec

# show interface description

```
show interface <ifrange> description [ __readonly__ TABLE_interface <interface> <state> <protocol> <desc> ]
```

## Syntax Description

|                     |                                       |
|---------------------|---------------------------------------|
| show                | Show running system information       |
| interface           | Show interface status and information |
| <i>ifrange</i>      | Enter tunnel interface number         |
| description         | Show interface description            |
| <i>__readonly__</i> | (Optional) Read Only                  |
| <i>interface</i>    | (Optional) Interface index            |
| TABLE_interface     | (Optional) show interface             |
| <i>state</i>        | (Optional) Interface state            |
| <i>protocol</i>     | (Optional) Protocol                   |
| <i>desc</i>         | (Optional) Description                |

## Command Mode

- /exec

## show interface fcoe

```
show interface <ifeth_fcoe> fcoe [ __readonly__ TABLE_interface <interface> [ <state> ] [ <vfc> ] [ <vfc_bound> ] ]
```

### Syntax Description

|                        |   |
|------------------------|---|
| show                   | Show running system information                       |
| interface              | Show interface status and information                 |
| <i>ifeth_fcoe</i>      | Enter interface type and number in module/slot format |
| fcoe                   | Show interface fcoe information                       |
| <i>__readonly__</i>    | (Optional) Read Only                                  |
| <i>TABLE_interface</i> | (Optional) show interface                             |
| <i>interface</i>       | (Optional) Interface index                            |
| <i>state</i>           | (Optional) State of interface                         |
| <i>vfc</i>             | (Optional) VFC  |
| <i>vfc_bound</i>       | (Optional) Binding information                        |

### Command Mode

- /exec

# show interface flowcontrol

```
show interface <ifeth_fl_ctrl> flowcontrol [ __readonly__ TABLE_interface <interface> <send_admin>
<send_oper> <recv_admin> <recv_oper> <rxpause> <txpause> ]
```

## Syntax Description

|                      |   |
|----------------------|---|
| show                 | Show running system information                       |
| interface            | Show interface status and information                 |
| <i>ifeth_fl_ctrl</i> | Enter interface type and number in module/slot format |
| flowcontrol          | Show interface flowcontrol information                |
| <i>__readonly__</i>  | (Optional) Read Only                                  |
| <i>interface</i>     | (Optional) Interface index                            |
| TABLE_interface      | (Optional) show interface                             |
| <i>send_admin</i>    | (Optional) Send flowcontrol admin                     |
| <i>send_oper</i>     | (Optional) Send flowcontrol oper                      |
| <i>recv_admin</i>    | (Optional) Receive flowcontrol admin                  |
| <i>recv_oper</i>     | (Optional) Receive flowcontrol oper                   |
| <i>rxpause</i>       | (Optional) RxPause                                    |
| <i>txpause</i>       | (Optional) TxPause                                    |

## Command Mode

- /exec



# show interface flowcontrol

```
show interface flowcontrol [ module <module> ] [ __readonly__ TABLE_interface <interface> <send_admin>
<send_oper> <recv_admin> <recv_oper> <rxpause> <txpause> ]
```

## Syntax Description

|                     |  |
|---------------------|--|
| show                | Show running system information                  |
| interface           | Show interface status and information            |
| flowcontrol         | Show interface flowcontrol information           |
| module              | (Optional) Limit display to interfaces on module |
| <i>module</i>       | (Optional) Enter module number                   |
| <i>__readonly__</i> | (Optional) Read Only                             |
| <i>interface</i>    | (Optional) Interface index                       |
| TABLE_interface     | (Optional) show interface                        |
| <i>send_admin</i>   | (Optional) Send flowcontrol admin                |
| <i>send_oper</i>    | (Optional) Send flowcontrol oper                 |
| <i>recv_admin</i>   | (Optional) Receive flowcontrol admin             |
| <i>recv_oper</i>    | (Optional) Receive flowcontrol oper              |
| <i>rxpause</i>      | (Optional) RxPause                               |
| <i>txpause</i>      | (Optional) TxPause                               |

## Command Mode

- /exec

# show interface hardware-mappings

show interface hardware-mappings [ json ]

## Syntax Description

|                   |   |
|-------------------|---|
| show              | Show running system information                               |
| interface         | Interface   |
| hardware-mappings | Show hardware port number and unit information for interfaces |
| json              | (Optional) display the output in json format                  |

## Command Mode

- /exec

## show interface mac-address

```
show interface <ifid_macaddr> mac-address [ __readonly__ TABLE_interface <interface> <address>
<bia_address> ]
```

### Syntax Description

|                     |   |
|---------------------|---|
| show                | Show running system information                       |
| interface           | Show interface status and information                 |
| <i>ifid_macaddr</i> | Enter interface type and number in module/slot format |
| mac-address         | Show interface MAC address                            |
| __readonly__        | (Optional) Read Only                                  |
| TABLE_interface     | (Optional) show interface                             |
| <i>interface</i>    | (Optional) Interface index                            |
| <i>address</i>      | (Optional) MAC Address                                |
| <i>bia_address</i>  | (Optional) Burn-In MAC Address                        |

### Command Mode

- /exec

## show interface mac-address

show interface mac-address [ \_\_readonly\_\_ TABLE\_interface <interface> <address> <bia\_address> ]

### Syntax Description

|                    |                                       |
|--------------------|---------------------------------------|
| show               | Show running system information       |
| interface          | Show interface status and information |
| mac-address        | Show interface MAC address            |
| __readonly__       | (Optional) Read Only                  |
| TABLE_interface    | (Optional) show interface             |
| <i>interface</i>   | (Optional) Interface index            |
| <i>address</i>     | (Optional) MAC Address                |
| <i>bia_address</i> | (Optional) Burn-In MAC Address        |

### Command Mode

- /exec

# show interface priority-flow-control

```
show interface [ <if_list> ] priority-flow-control [ detail ] [ module <module> ] [ __readonly__ [
TABLE_pfc_interface <if_name_str> <admin> <oper> [ <cos-list> ] <rx-stats> <tx-stats> [ <rx_ppp_cos_0>
] [ <rx_ppp_cos_1> ] [ <rx_ppp_cos_2> ] [ <rx_ppp_cos_3> ] [ <rx_ppp_cos_4> ] [ <rx_ppp_cos_5> ] [
<rx_ppp_cos_6> ] [ <rx_ppp_cos_7> ] [ <tx_ppp_cos_0> ] [ <tx_ppp_cos_1> ] [ <tx_ppp_cos_2> ] [
<tx_ppp_cos_3> ] [ <tx_ppp_cos_4> ] [ <tx_ppp_cos_5> ] [ <tx_ppp_cos_6> ] [ <tx_ppp_cos_7> ] ] ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | commands to display  |
| interface             | Interface for displaying pfc information                   |
| <i>if_list</i>        | (Optional) List of interfaces                              |
| module                | (Optional) Slot/module                                     |
| <i>module</i>         | (Optional) Slot/module number                              |
| priority-flow-control | Show interface PFC information                             |
| detail                | (Optional) Show detailed per priority Tx/Rx PFC statistics |
| __readonly__          | (Optional)   |
| <i>if_name_str</i>    | (Optional) interface name                                  |
| TABLE_pfc_interface   | (Optional) PFC information of an interface                 |
| <i>admin</i>          | (Optional) PFC admin                                       |
| <i>oper</i>           | (Optional) PFC oper  |
| <i>cos-list</i>       | (Optional) List of class-of-service values                 |

## Command Mode

- /exec

## show interface private-vlan mapping

```
show interface [ <if> ] private-vlan mapping [ __readonly__ [ <output-filtered> ] [ { TABLE_interf_mapp
<interface-id> [ <secondary-vlan> + ] [ <pvlan-type> } } ] ]
```

### Syntax Description

|                        |   |
|------------------------|---|
| show                   | Show running system information                     |
| interface              | Show interface status and information               |
| <i>if</i>              | (Optional) Vlan Interface number                    |
| private-vlan           | Show interface private vlan information             |
| mapping                | Show interface private vlan information             |
| <i>__readonly__</i>    | (Optional) Read Only                                |
| <i>output-filtered</i> | (Optional) the output is filtered for specified ifs |
| TABLE_interf_mapp      | (Optional) Pvlan interface mapping table            |
| <i>interface-id</i>    | (Optional) Interface                                |
| <i>secondary-vlan</i>  | (Optional) Secondary Vlan                           |
| <i>pvlan-type</i>      | (Optional) PVLAN Type                               |

### Command Mode

- /exec

## show interface pruning

```
show interface pruning [ __readonly__ <start> { TABLE_interface_pruning1 <if_index1> <rx_join> } {
TABLE_interface_pruning2 <if_index2> <cur_join> } ]
```

### Syntax Description

|                          |  |
|--------------------------|--|
| show                     | Show running system information                          |
| interface                | Show interface status and information                    |
| pruning                  | Show interface trunk VTP pruning information             |
| <i>__readonly__</i>      | (Optional) Read Only                                     |
| <i>start</i>             | (Optional) Start   |
| TABLE_interface_pruning1 | (Optional) Interface pruning information in table format |
| <i>if_index1</i>         | (Optional) Trunk   |
| <i>rx_join</i>           | (Optional) Vlans pruned for lack of request by neighbor  |
| TABLE_interface_pruning2 | (Optional) Interface pruning information in table format |
| <i>if_index2</i>         | (Optional) Trunk   |
| <i>cur_join</i>          | (Optional) Vlan traffic requested of neighbor            |

### Command Mode

- /exec

# show interface snmp-ifindex

```
show interface snmp-ifindex [ __readonly__ TABLE_interface <interface> <snmp-ifindex> [ <ifindex-hex> ] ]
```

## Syntax Description

|                     |                                       |
|---------------------|---------------------------------------|
| show                | Show running system information       |
| interface           | Show interface status and information |
| snmp-ifindex        | Show snmp ifindex list                |
| __readonly__        | (Optional) Read Only                  |
| <i>interface</i>    | (Optional) Interface index            |
| TABLE_interface     | (Optional) show interface             |
| <i>ifindex-hex</i>  | (Optional) If Index in Hex            |
| <i>snmp-ifindex</i> | (Optional) If Index in Dec            |

## Command Mode

- /exec



## show interface status

```
show interface <iftun_status> status [ err-disabled ] [ __readonly__ TABLE_interface <interface> <name>
<state> <state_rsn> <state_rsn_desc> ]
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                |
| interface             | Show interface status and information          |
| <i>iftun_status</i>   | Enter tunnel interface number                  |
| status                | Show interface line status                     |
| err-disabled          | (Optional) Show interface error disabled state |
| __readonly__          | (Optional) Read Only                           |
| <i>interface</i>      | (Optional) Interface index                     |
| TABLE_interface       | (Optional) show interface                      |
| <i>name</i>           | (Optional) Name                                |
| <i>state</i>          | (Optional) Interface state                     |
| <i>state_rsn</i>      | (Optional) Interface state reason              |
| <i>state_rsn_desc</i> | (Optional) Interface state reason detailed     |

### Command Mode

- /exec

## show interface status

```
show interface status [ down | inactive | module <module> | up | auto-column ] [ __readonly__ TABLE_interface
<interface> [ <name> ] [ <state> ] [ <state_san> ] [ <state_rsn> ] [ <vlan> ] [ <duplex> ] [ <speed> ] [ <type>
] [ <admin_mode> ] [ <vsan> ] [ <bind_info> ] [ <bind_type> ] [ <bind_mac> ] [ <oper_speed> ] ]
```

### Syntax Description

|                  |   |
|------------------|---|
| show             | Show running system information                       |
| interface        | Show interface status and information                 |
| status           | Show interface line status                            |
| down             | (Optional) Show interface down state                  |
| inactive         | (Optional) Show interface inactive state              |
| auto-column      | (Optional) Show interface status auto-column adjusted |
| module           | (Optional) Limit display to interfaces on module      |
| <i>module</i>    | (Optional) Enter module number                        |
| up               | (Optional) Show interface up state                    |
| __readonly__     | (Optional) Read Only                                  |
| <i>interface</i> | (Optional) Interface index                            |
| TABLE_interface  | (Optional) show interface                             |
| <i>name</i>      | (Optional) Name                                       |
| <i>state</i>     | (Optional) Interface state                            |
| <i>state_san</i> | (Optional) SAN Port State                             |
| <i>vlan</i>      | (Optional) Vlan                                       |
| <i>vsan</i>      | (Optional) Vsan                                       |
| <i>duplex</i>    | (Optional) Duplex                                     |
| <i>speed</i>     | (Optional) Speed                                      |
| <i>type</i>      | (Optional) Type                                       |
| <i>state_rsn</i> | (Optional) Port State Reason                          |
| <i>bind_info</i> | (Optional) bind interface                             |
| <i>bind_type</i> | (Optional) bind type                                  |
| <i>bind_mac</i>  | (Optional) bind mac                                   |

|                   |                       |
|-------------------|-----------------------|
| <i>oper_speed</i> | (Optional) speed      |
| <i>admin_mode</i> | (Optional) admin mode |

**Command Mode**

- /exec

## show interface status

```
show interface <ifid_status> status [ __readonly__ TABLE_interface <interface> [ <name> ] [ <state> ] [
<vlan> ] [ <duplex> ] [ <speed> ] [ <type> ] ]
```

### Syntax Description

|                     |   |
|---------------------|---|
| show                | Show running system information                       |
| interface           | Show interface status and information                 |
| <i>ifid_status</i>  | Enter interface type and number in module/slot format |
| status              | Show interface line status                            |
| <i>__readonly__</i> | (Optional) Read Only                                  |
| <i>interface</i>    | (Optional) Interface index                            |
| TABLE_interface     | (Optional) show interface                             |
| <i>name</i>         | (Optional) Name                                       |
| <i>state</i>        | (Optional) Interface state                            |
| <i>vlan</i>         | (Optional) Vlan                                       |
| <i>duplex</i>       | (Optional) Duplex                                     |
| <i>speed</i>        | (Optional) Speed                                      |
| <i>type</i>         | (Optional) Type                                       |

### Command Mode

- /exec

# show interface status

```
show interface <ifeth_status> status [ __readonly__ TABLE_interface <interface> [ <name> ] [ <state> ] [
<vlan> ] <duplex> <speed> [ <type> ] ]
```

## Syntax Description

|                              |   |
|------------------------------|---|
| <code>show</code>            | Show running system information                       |
| <code>interface</code>       | Show interface status and information                 |
| <i>ifeth_status</i>          | Enter interface type and number in module/slot format |
| <code>status</code>          | Show interface line status                            |
| <code>__readonly__</code>    | (Optional) Read Only                                  |
| <i>interface</i>             | (Optional) Interface index                            |
| <code>TABLE_interface</code> | (Optional) show interface                             |
| <i>name</i>                  | (Optional) Name                                       |
| <i>state</i>                 | (Optional) Interface state                            |
| <i>vlan</i>                  | (Optional) Vlan                                       |
| <i>duplex</i>                | (Optional) Duplex                                     |
| <i>speed</i>                 | (Optional) Speed                                      |
| <i>type</i>                  | (Optional) Type                                       |

## Command Mode

- /exec

## show interface status

```
show interface <ifrange> status [ err-disabled ] [ __readonly__ TABLE_interface <interface> <name> <state>
<state_rsn> <state_rsn_desc> ]
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                |
| interface             | Show interface status and information          |
| <i>ifrange</i>        | Enter tunnel interface number                  |
| status                | Show interface line status                     |
| err-disabled          | (Optional) Show interface error disabled state |
| __readonly__          | (Optional) Read Only                           |
| <i>interface</i>      | (Optional) Interface index                     |
| TABLE_interface       | (Optional) show interface                      |
| <i>name</i>           | (Optional) Name                                |
| <i>state</i>          | (Optional) Interface state                     |
| <i>state_rsn</i>      | (Optional) Interface state reason              |
| <i>state_rsn_desc</i> | (Optional) Interface state reason detailed     |

### Command Mode

- /exec

# show interface status

```
show interface <ifrange> status [ err-disabled ] [ __readonly__ TABLE_interface <interface> <name> <state>
<state_rsn> <state_rsn_desc> <admin_state> ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                |
| interface             | Show interface status and information          |
| <i>ifrange</i>        | Enter tunnel interface number                  |
| status                | Show interface line status                     |
| err-disabled          | (Optional) Show interface error disabled state |
| __readonly__          | (Optional) Read Only                           |
| <i>interface</i>      | (Optional) Interface index                     |
| TABLE_interface       | (Optional) show interface                      |
| <i>name</i>           | (Optional) Name                                |
| <i>state</i>          | (Optional) Interface state                     |
| <i>state_rsn</i>      | (Optional) Interface state reason              |
| <i>state_rsn_desc</i> | (Optional) Interface state reason detailed     |
| <i>admin_state</i>    | (Optional) admin state                         |

## Command Mode

- /exec

## show interface status

show interface <ifid> status [ \_\_readonly\_\_ <start> <if\_index> <admin-state> <line-proto> ]

### Syntax Description

|                    |   |
|--------------------|---|
| show               | Show running system information                 |
| interface          | Show interface status and information           |
| <i>ifid</i>        | VLAN ID 1-4094 or range(s): 1-5, 10 or 2-5,7-19 |
| status             | Interface status                                |
| __readonly__       | (Optional) Read Only                            |
| <i>start</i>       | (Optional) Start                                |
| <i>if_index</i>    | (Optional) Interface                            |
| <i>admin-state</i> | (Optional)                                      |
| <i>line-proto</i>  | (Optional)                                      |

### Command Mode

- /exec



# show interface status err-disabled

```
show interface <ifeth_errdis> status err-disabled [ __readonly__ TABLE_interface <interface> [ <name> ]
<state> [ <state_rsn> ] [ <state_rsn_desc> ] ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                       |
| interface             | Show interface status and information                 |
| status                | Show interface line status                            |
| <i>ifeth_errdis</i>   | Enter interface type and number in module/slot format |
| err-disabled          | Show interface error disabled state                   |
| <i>__readonly__</i>   | (Optional) Read Only                                  |
| <i>interface</i>      | (Optional) Interface index                            |
| TABLE_interface       | (Optional) show interface                             |
| <i>name</i>           | (Optional) Name                                       |
| <i>state</i>          | (Optional) Interface state                            |
| <i>state_rsn</i>      | (Optional) Interface state reason                     |
| <i>state_rsn_desc</i> | (Optional) Interface state reason detailed            |

## Command Mode

- /exec

## show interface status err-disabled

```
show interface status err-disabled [ __readonly__ TABLE_interface <interface> [ <name> ] <state> [
<state_rsn> ] [ <state_rsn_desc> ] ]
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information            |
| interface             | Show interface status and information      |
| status                | Show interface line status                 |
| err-disabled          | Show interface error disabled state        |
| <i>__readonly__</i>   | (Optional) Read Only                       |
| <i>interface</i>      | (Optional) Interface index                 |
| TABLE_interface       | (Optional) show interface                  |
| <i>name</i>           | (Optional) Name                            |
| <i>state</i>          | (Optional) Interface state                 |
| <i>state_rsn</i>      | (Optional) Interface state reason          |
| <i>state_rsn_desc</i> | (Optional) Interface state reason detailed |

### Command Mode

- /exec

## show interface status err-vlans

```
show interface status err-vlans [ __readonly__ TABLE_interface <interface> [ <name> ] { TABLE_vlan
<err_vlan> <err_vlan_status> <err_vlan_syserr> } ]
```

### Syntax Description

|                        |                                       |
|------------------------|---------------------------------------|
| show                   | Show running system information       |
| interface              | Show interface status and information |
| status                 | Show interface line status            |
| err-vlans              | Show errored vlans                    |
| <i>__readonly__</i>    | (Optional) Read Only                  |
| <i>interface</i>       | (Optional) Interface index            |
| <i>TABLE_interface</i> | (Optional) show interface             |
| <i>name</i>            | (Optional) Name                       |
| <i>TABLE_vlan</i>      | (Optional) show vlan                  |
| <i>err_vlan</i>        | (Optional) Errored vlan               |
| <i>err_vlan_status</i> | (Optional) Errored vlan status        |
| <i>err_vlan_syserr</i> | (Optional) Errored vlan syserr name   |

### Command Mode

- /exec

## show interface status err-vlans

```
show interface <ifeth_errvlans> status err-vlans [ __readonly__ TABLE_interface <interface> [ <name> ] [
{ TABLE_vlan [ <err_vlan> ] [ <err_vlan_status> ] [ <err_vlan_syserr> } } ] ]
```

### Syntax Description

|                           |   |
|---------------------------|---|
| show                      | Show running system information                       |
| interface                 | Show interface status and information                 |
| <i>ifeth_errvlans</i>     | Enter interface type and number in module/slot format |
| status                    | Show interface line status                            |
| err-vlans                 | Show errored vlans                                    |
| <code>__readonly__</code> | (Optional) Read Only                                  |
| <i>interface</i>          | (Optional) Interface index                            |
| TABLE_interface           | (Optional) show interface                             |
| <i>name</i>               | (Optional) Name                                       |
| TABLE_vlan                | (Optional) show vlan                                  |
| <i>err_vlan</i>           | (Optional) Errored vlan                               |
| <i>err_vlan_status</i>    | (Optional) Errored vlan status                        |
| <i>err_vlan_syserr</i>    | (Optional) Errored vlan syserr name                   |

### Command Mode

- /exec

# show interface switchport

```
show interface <ifeth_swch> switchport [ __readonly__ TABLE_interface <interface> <switchport> [
<switchport_monitor> ] [ <switchport_isolated> ] [ <switchport_block_multicast> ] [
<switchport_block_unicast> ] [ <oper_mode> ] [ <access_vlan> ] [ <access_vlan_name> ] [ <native_vlan>
] [ <native_vlan_name> ] [ <trunk_vlans> ] [ <fabricpath_topologies> ] [ <pruning_vlans> ] [ <voice_vlan>
] [ <voice_vlan_name> ] [ <extended_trust> ] [ <extended_trust_name> ] [ <admin_pvlan_pri_assoc> ] [
<admin_pvlan_sec_assoc> ] [ <admin_pvlan_pri_mapping> ] [ <admin_pvlan_sec_mapping> ] [
<admin_pvlan_trunk_native> ] [ <admin_pvlan_trunk_encap> ] [ <admin_pvlan_trunk_normal> ] [
<admin_pvlan_trunk_private> ] [ <oper_pvlan> ] [ <autostate_mode> ] ]
```

## Syntax Description

|                                   |   |
|-----------------------------------|---|
| show                              | Show running system information                       |
| interface                         | Show interface status and information                 |
| <i>ifeth_swch</i>                 | Enter interface type and number in module/slot format |
| switchport                        | Show interface switchport information                 |
| <i>__readonly__</i>               | (Optional) Read Only                                  |
| <i>TABLE_interface</i>            | (Optional) show interface                             |
| <i>interface</i>                  | (Optional) Interface index                            |
| <i>switchport</i>                 | (Optional) Switchport enabled                         |
| <i>switchport_monitor</i>         | (Optional) Switchport monitor enabled                 |
| <i>switchport_isolated</i>        | (Optional) Switchport isolated enabled                |
| <i>switchport_block_multicast</i> | (Optional) Switchport monitor enabled                 |
| <i>switchport_block_unicast</i>   | (Optional) Switchport monitor enabled                 |
| <i>oper_mode</i>                  | (Optional) Operational mode                           |
| <i>access_vlan</i>                | (Optional) Access mode VLAN                           |
| <i>access_vlan_name</i>           | (Optional) Access mode VLAN name                      |
| <i>native_vlan</i>                | (Optional) Trunking native mode VLAN                  |
| <i>native_vlan_name</i>           | (Optional) Trunking native mode VLAN name             |
| <i>trunk_vlans</i>                | (Optional) Trunking VLANs Allowed                     |
| <i>fabricpath_topologies</i>      | (Optional) FabricPath Topologies Allowed              |
| <i>pruning_vlans</i>              | (Optional) Pruning eligible VLANs                     |
| <i>voice_vlan</i>                 | (Optional) Voice VLAN                                 |

|                                  |   |
|----------------------------------|---|
| <i>voice_vlan_name</i>           | (Optional) Voice VLAN name  |
| <i>extended_trust</i>            | (Optional) Extended Trust   |
| <i>extended_trust_name</i>       | (Optional) Extended Trust name                                    |
| <i>admin_pvlan_pri_assoc</i>     | (Optional) Administrative private-vlan primary host-association   |
| <i>admin_pvlan_sec_assoc</i>     | (Optional) Administrative private-vlan secondary host-association |
| <i>admin_pvlan_pri_mapping</i>   | (Optional) Administrative private-vlan primary mapping            |
| <i>admin_pvlan_sec_mapping</i>   | (Optional) Administrative private-vlan secondary mapping          |
| <i>admin_pvlan_trunk_native</i>  | (Optional) Administrative private-vlan trunk native VLAN          |
| <i>admin_pvlan_trunk_encap</i>   | (Optional) Administrative private-vlan trunk encapsulation        |
| <i>admin_pvlan_trunk_normal</i>  | (Optional) Administrative private-vlan trunk normal VLANs         |
| <i>admin_pvlan_trunk_private</i> | (Optional) Administrative private-vlan trunk private VLANs        |
| <i>oper_pvlan</i>                | (Optional) Operational private-vlan                               |
| <i>autostate_mode</i>            | (Optional) SVI Autostate Exclude Info                             |

**Command Mode**

- /exec

# show interface switchport

```
show interface switchport [ __readonly__ ] [ TABLE_interface <interface> <switchport> ] [ <switchport_monitor> ] [ <switchport_isolated> ] [ <switchport_block_multicast> ] [ <switchport_block_unicast> ] [ <oper_mode> ] [ <access_vlan> ] [ <access_vlan_name> ] [ <native_vlan> ] [ <native_vlan_name> ] [ <trunk_vlans> ] [ <fabricpath_topologies> ] [ <pruning_vlans> ] [ <voice_vlan> ] [ <voice_vlan_name> ] [ <extended_trust> ] [ <extended_trust_name> ] [ <admin_pvlan_pri_assoc> ] [ <admin_pvlan_sec_assoc> ] [ <admin_pvlan_pri_mapping> ] [ <admin_pvlan_sec_mapping> ] [ <admin_pvlan_trunk_native> ] [ <admin_pvlan_trunk_encap> ] [ <admin_pvlan_trunk_normal> ] [ <admin_pvlan_trunk_private> ] [ <oper_pvlan> ] [ <autostate_mode> ] ]
```

## Syntax Description

|                                   |   |
|-----------------------------------|---|
| show                              | Show running system information           |
| interface                         | Show interface status and information     |
| switchport                        | Show interface switchport information     |
| <i>__readonly__</i>               | (Optional) Read Only                      |
| <i>TABLE_interface</i>            | (Optional) show interface                 |
| <i>interface</i>                  | (Optional) Interface index                |
| <i>switchport</i>                 | (Optional) Switchport enabled             |
| <i>switchport_monitor</i>         | (Optional) Switchport monitor enabled     |
| <i>switchport_isolated</i>        | (Optional) Switchport isolated enabled    |
| <i>switchport_block_multicast</i> | (Optional) Switchport monitor enabled     |
| <i>switchport_block_unicast</i>   | (Optional) Switchport monitor enabled     |
| <i>oper_mode</i>                  | (Optional) Operational mode               |
| <i>access_vlan</i>                | (Optional) Access mode VLAN               |
| <i>access_vlan_name</i>           | (Optional) Access mode VLAN name          |
| <i>native_vlan</i>                | (Optional) Trunking native mode VLAN      |
| <i>native_vlan_name</i>           | (Optional) Trunking native mode VLAN name |
| <i>trunk_vlans</i>                | (Optional) Trunking VLANs Allowed         |
| <i>fabricpath_topologies</i>      | (Optional) FabricPath Topologies Allowed  |
| <i>pruning_vlans</i>              | (Optional) Pruning eligible VLANs         |
| <i>voice_vlan</i>                 | (Optional) Voice VLAN                     |
| <i>voice_vlan_name</i>            | (Optional) Voice VLAN name                |

|                                  |   |
|----------------------------------|---|
| <i>extended_trust</i>            | (Optional) Extended Trust   |
| <i>extended_trust_name</i>       | (Optional) Extended Trust name                                    |
| <i>admin_pvlan_pri_assoc</i>     | (Optional) Administrative private-vlan primary host-association   |
| <i>admin_pvlan_sec_assoc</i>     | (Optional) Administrative private-vlan secondary host-association |
| <i>admin_pvlan_pri_mapping</i>   | (Optional) Administrative private-vlan primary mapping            |
| <i>admin_pvlan_sec_mapping</i>   | (Optional) Administrative private-vlan secondary mapping          |
| <i>admin_pvlan_trunk_native</i>  | (Optional) Administrative private-vlan trunk native VLAN          |
| <i>admin_pvlan_trunk_encap</i>   | (Optional) Administrative private-vlan trunk encapsulation        |
| <i>admin_pvlan_trunk_normal</i>  | (Optional) Administrative private-vlan trunk normal VLANs         |
| <i>admin_pvlan_trunk_private</i> | (Optional) Administrative private-vlan trunk private VLANs        |
| <i>oper_pvlan</i>                | (Optional) Operational private-vlan                               |
| <i>autostate_mode</i>            | (Optional) SVI Autostate Exclude Info                             |

**Command Mode**

- /exec





## Syntax Description

|                         |   |
|-------------------------|---|
| show                    | Show running system information                               |
| interface               | Show interface status and information                         |
| <i>ifid_transceiver</i> | Enter interface type and number in module/slot format         |
| transceiver             | Show interface transceiver information                        |
| calibrations            | (Optional) Show interface transceiver calibration information |
| details                 | (Optional) Show interface transceiver detail information      |
| sprom                   | (Optional) Show interface transceiver sprom information       |
| __readonly__            | (Optional) Read Only  |
| <i>interface</i>        | (Optional) Interface index                                    |
| TABLE_interface         | (Optional) show interface                                     |
| <i>sfp</i>              | (Optional) sfp  |
| <i>qsfp_or_cfp</i>      | (Optional) qsfp_or_cfp  |
| <i>type</i>             | (Optional) type   |
| <i>name</i>             | (Optional) Name   |
| <i>partnum</i>          | (Optional) part number  |
| <i>rev</i>              | (Optional) revision   |
| <i>serialnum</i>        | (Optional) serial number                                      |
| <i>nom_bitrate</i>      | (Optional) Nominal bit rate in MBits/sec                      |
| <i>len_9</i>            | (Optional) Link length supported for 9/125um fiber in Km      |
| <i>len_9_2</i>          | (Optional) Link length supported for 9/125um fiber in m       |
| <i>len_50</i>           | (Optional) Link length supported for 50/125um fiber in m      |
| <i>len_625</i>          | (Optional) Link length supported for 62.5/125um fiber in m    |
| <i>len_cu</i>           | (Optional) Link length supported for copper sfp in m          |
| <i>len_50_OM3</i>       | (Optional) Link length supported for 50/125um fiber in m      |
| <i>txcvr_type</i>       | (Optional)  |
| <i>connector_type</i>   | (Optional)  |
| <i>bit_encoding</i>     | (Optional)  |
| <i>protocol_type</i>    | (Optional)  |

|   |   |
|---|---|
| <i>10gbe_code</i>                       | (Optional)                                  |
| <i>fiber_type_byte0</i>                 | (Optional)                                  |
| <i>fiber_type_byte1</i>                 | (Optional)                                  |
| <i>tx_range</i>                         | (Optional)                                  |
| <i>ciscoid</i>                          | (Optional) Cisco extended id                |
| <i>ciscoid_1</i>                        | (Optional) Cisco extended id number         |
| <i>cisco_part_number</i>                | (Optional) Cisco part number                |
| <i>cisco_product_id</i>                 | (Optional) Cisco product identifier         |
| <i>cisco_vendor_id</i>                  | (Optional) Cisco vendor identifier          |
| <i>firmware_version</i>                 | (Optional) Firmware version                 |
| <i>identifier</i>                       | (Optional) SFP Identifier                   |
| <i>ext_identifier</i>                   | (Optional) SFP Ext Identifier               |
| <i>connector</i>                        | (Optional) SFP connector                    |
| <i>infiniband_compliance_code</i>       | (Optional) SFP Infiniband Compliance Code   |
| <i>sonet_compliance_code</i>            | (Optional) Sonet Compliance Code            |
| <i>gigabit_ethernet_compliance_code</i> | (Optional) Gigabit Ethernet Compliance Code |
| <i>fibre_chan_link_length</i>           | (Optional) Fibre Chan Link Length           |
| <i>fibre_chan_trans_technology</i>      | (Optional) Fibre Chan Trans Technology      |
| <i>fibre_chan_trans_tech_reserved</i>   | (Optional) Fibre Chan Trans Tech Reserved   |
| <i>fibre_chan_transmission_media</i>    | (Optional) Fibre Chan Transmission Media    |
| <i>fibre_chan_speed</i>                 | (Optional) Fibre Chan Speed                 |
| <i>encoding</i>                         | (Optional) Encoding                         |
| <i>br_nominal</i>                       | (Optional) BR Nominal                       |
| <i>reserved1</i>                        | (Optional) Reserved1                        |
| <i>length_smf</i>                       | (Optional) Length_SMF                       |
| <i>length_om3</i>                       | (Optional) Length_OM3                       |
| <i>length_om2</i>                       | (Optional) Length_OM2                       |
| <i>length_om1</i>                       | (Optional) Length_OM1                       |
| <i>length_copper</i>                    | (Optional) Length_Copper                    |

|                                     |   |
|-------------------------------------|---|
| <i>length_9u_1</i>                  | (Optional) Length 9u 1                  |
| <i>length_9u_2</i>                  | (Optional) Length 9u 2                  |
| <i>length_50u</i>                   | (Optional) Length 50u                   |
| <i>length_60u</i>                   | (Optional) Length 60u                   |
| <i>length_copper</i>                | (Optional) Length Copper                |
| <i>reserved3</i>                    | (Optional) Reserved3                    |
| <i>vendor_oui</i>                   | (Optional) Vendor OUI                   |
| <i>vendor_part_no</i>               | (Optional) Vendor Part No               |
| <i>vendor_revision</i>              | (Optional) Vendor Revision              |
| <i>reserved4</i>                    | (Optional) Reserved4                    |
| <i>check_code_id</i>                | (Optional) Check Code ID                |
| <i>options</i>                      | (Optional) Options                      |
| <i>br_max</i>                       | (Optional) BR max                       |
| <i>br_min</i>                       | (Optional) BR min                       |
| <i>vendor_serial_no</i>             | (Optional) Vendor Serial No             |
| <i>data_code</i>                    | (Optional) Data code                    |
| <i>diagnostic_monitoring_type</i>   | (Optional) Diagnostic Monitoring Type   |
| <i>enhanced_options</i>             | (Optional) Enhanced Options             |
| <i>sff8472compliance</i>            | (Optional) SFF8472Compliance            |
| <i>check_code_ext</i>               | (Optional) Check code ext               |
| <i>vendor_specific_data_id_data</i> | (Optional) Vendor Specific Data Id Data |
| <i>temp_slope</i>                   | (Optional) Temperature slope            |
| <i>temp_offset</i>                  | (Optional) Temperature offset           |
| <i>volt_slope</i>                   | (Optional) Voltage slope                |
| <i>volt_offset</i>                  | (Optional) Voltage offset               |
| <i>curr_slope</i>                   | (Optional) Current slope                |
| <i>curr_offset</i>                  | (Optional) Current offset               |
| <i>tx_pwr_slope</i>                 | (Optional) Tx power slope               |
| <i>tx_pwr_offset</i>                | (Optional) Tx power offset              |

|                        |                                     |
|------------------------|-------------------------------------|
| <i>rx_pwr_4</i>        | (Optional) Rx power 4               |
| <i>rx_pwr_3</i>        | (Optional) Rx power 3               |
| <i>rx_pwr_2</i>        | (Optional) Rx power 2               |
| <i>rx_pwr_1</i>        | (Optional) Rx power 1               |
| <i>rx_pwr_0</i>        | (Optional) Rx power 0               |
| TABLE_lane             | (Optional) show lane                |
| <i>lane_number</i>     | (Optional) Lane number              |
| <i>temperature</i>     | (Optional) Temperature              |
| <i>temp_flag</i>       | (Optional) Temperature Flag         |
| <i>temp_alrm_hi</i>    | (Optional) Temperature Alarm High   |
| <i>temp_alrm_lo</i>    | (Optional) Temperature Alarm Low    |
| <i>temp_warn_hi</i>    | (Optional) Temperature Warning High |
| <i>temp_warn_lo</i>    | (Optional) Temperature Warning Low  |
| <i>voltage</i>         | (Optional) Voltage                  |
| <i>volt_flag</i>       | (Optional) Voltage Flag             |
| <i>volt_alrm_hi</i>    | (Optional) Voltage Alarm High       |
| <i>volt_alrm_lo</i>    | (Optional) Voltage Alarm Low        |
| <i>volt_warn_hi</i>    | (Optional) Voltage Warning High     |
| <i>volt_warn_lo</i>    | (Optional) Voltage Warning Low      |
| <i>current</i>         | (Optional) Current                  |
| <i>current_flag</i>    | (Optional) Current Flag             |
| <i>current_alrm_hi</i> | (Optional) Current Alarm High       |
| <i>current_alrm_lo</i> | (Optional) Current Alarm Low        |
| <i>current_warn_hi</i> | (Optional) Current Warning High     |
| <i>current_warn_lo</i> | (Optional) Current Warning Low      |
| <i>tx_pwr</i>          | (Optional) Tx Power                 |
| <i>tx_pwr_flag</i>     | (Optional) Tx Power Flag            |
| <i>tx_pwr_alrm_hi</i>  | (Optional) Tx Power Alarm High      |
| <i>tx_pwr_alrm_lo</i>  | (Optional) Tx Power Alarm Low       |

|                         |   |
|-------------------------|---|
| <i>tx_pwr_warn_hi</i>   | (Optional) Tx Power Warning High          |
| <i>tx_pwr_warn_lo</i>   | (Optional) Tx Power Warning Low           |
| <i>rx_pwr</i>           | (Optional) Rx Power                       |
| <i>rx_pwr_flag</i>      | (Optional) Rx Power Flag                  |
| <i>rx_pwr_alm_hi</i>    | (Optional) Rx Power Alarm High            |
| <i>rx_pwr_alm_lo</i>    | (Optional) Rx Power Alarm Low             |
| <i>rx_pwr_warn_hi</i>   | (Optional) Rx Power Warning High          |
| <i>rx_pwr_warn_lo</i>   | (Optional) Rx Power Warning Low           |
| <i>xmit_faults</i>      | (Optional) Transmit Fault Count           |
| <i>snr</i>              | (Optional) RX Signal-to-Noise Ratio (SNR) |
| <i>snr_flag</i>         | (Optional) SNR Flag                       |
| <i>snr_alm_hi</i>       | (Optional) SNR Alarm High                 |
| <i>snr_alm_lo</i>       | (Optional) SNR Alarm Low                  |
| <i>snr_warn_hi</i>      | (Optional) SNR Warning High               |
| <i>snr_warn_lo</i>      | (Optional) SNR Warning Low                |
| <i>isi</i>              | (Optional) Residual-Dispersion(ISI)       |
| <i>isi_flag</i>         | (Optional) ISI Flag                       |
| <i>isi_alm_hi</i>       | (Optional) ISI alarm high                 |
| <i>isi_alm_lo</i>       | (Optional) ISI alarm low                  |
| <i>isi_warn_hi</i>      | (Optional) ISI warning high               |
| <i>isi_warn_lo</i>      | (Optional) ISI warning low                |
| <i>pam</i>              | (Optional) PAM Transition                 |
| <i>pam_flag</i>         | (Optional) PAM Flag                       |
| <i>pam_alm_hi</i>       | (Optional) PAM alarm high                 |
| <i>pam_alm_lo</i>       | (Optional) PAM alarm low                  |
| <i>pam_warn_hi</i>      | (Optional) PAM warning high               |
| <i>pam_warn_lo</i>      | (Optional) PAM warning low                |
| <i>pre_fec_ber</i>      | (Optional) Pre-FEC BER                    |
| <i>pre_fec_ber_flag</i> | (Optional) Pre-FEC BER flag               |

|                              |   |
|------------------------------|---|
| <i>pre_fec_ber_alm_hi</i>    | (Optional) Pre-FEC BER alarm high         |
| <i>pre_fec_ber_alm_lo</i>    | (Optional) Pre-FEC BER alarm low          |
| <i>pre_fec_ber_warn_hi</i>   | (Optional) Pre-FEC BER warning high       |
| <i>pre_fec_ber_warn_lo</i>   | (Optional) Pre-FEC BER warning low        |
| <i>uncorrect_ber</i>         | (Optional) Uncorrected BER                |
| <i>uncorrect_ber_flag</i>    | (Optional) Uncorrected BER flag           |
| <i>uncorrect_ber_alm_hi</i>  | (Optional) Uncorrected BER alarm high     |
| <i>uncorrect_ber_alm_lo</i>  | (Optional) Uncorrected BER alarm low      |
| <i>uncorrect_ber_warn_hi</i> | (Optional) Uncorrected BER warning high   |
| <i>uncorrect_ber_warn_lo</i> | (Optional) Uncorrected BER warning low    |
| <i>tec_current</i>           | (Optional) TEC Current                    |
| <i>tec_current_flag</i>      | (Optional) TEC Current flag               |
| <i>tec_current_alm_hi</i>    | (Optional) TEC Current Alarm High         |
| <i>tec_current_alm_lo</i>    | (Optional) TEC Current Alarm Low          |
| <i>tec_current_warn_hi</i>   | (Optional) TEC Current Warning High       |
| <i>tec_current_warn_lo</i>   | (Optional) TEC Current Warning Low        |
| <i>laser_freq</i>            | (Optional) Laser Frequency                |
| <i>laser_freq_flag</i>       | (Optional) Laser Frequency flag           |
| <i>laser_freq_alm_hi</i>     | (Optional) Laser Frequency Alarm High     |
| <i>laser_freq_alm_lo</i>     | (Optional) Laser Frequency Alarm Low      |
| <i>laser_freq_warn_hi</i>    | (Optional) Laser Frequency Warning High   |
| <i>laser_freq_warn_lo</i>    | (Optional) Laser Frequency Warning Low    |
| <i>laser_temp</i>            | (Optional) Laser Temperature              |
| <i>laser_temp_flag</i>       | (Optional) Laser Temperature flag         |
| <i>laser_temp_alm_hi</i>     | (Optional) Laser Temperature Alarm High   |
| <i>laser_temp_alm_lo</i>     | (Optional) Laser Temperature Alarm Low    |
| <i>laser_temp_warn_hi</i>    | (Optional) Laser Temperature Warning High |
| <i>laser_temp_warn_lo</i>    | (Optional) Laser Temperature Warning Low  |
| <i>pre_fec_ber_acc</i>       | (Optional) Pre-FEC BER Acc                |

|                                  |   |
|----------------------------------|---|
| <i>pre_fec_ber_acc_flag</i>      | (Optional) Pre-FEC BER Acc flag             |
| <i>pre_fec_ber_acc_alm_hi</i>    | (Optional) Pre-FEC BER Acc alarm high       |
| <i>pre_fec_ber_acc_alm_lo</i>    | (Optional) Pre-FEC BER Acc alarm low        |
| <i>pre_fec_ber_acc_warn_hi</i>   | (Optional) Pre-FEC BER Acc warning high     |
| <i>pre_fec_ber_acc_warn_lo</i>   | (Optional) Pre-FEC BER Acc warning low      |
| <i>pre_fec_ber_min</i>           | (Optional) Pre-FEC BER Min                  |
| <i>pre_fec_ber_min_flag</i>      | (Optional) Pre-FEC BER Min flag             |
| <i>pre_fec_ber_min_alm_hi</i>    | (Optional) Pre-FEC BER Min alarm high       |
| <i>pre_fec_ber_min_alm_lo</i>    | (Optional) Pre-FEC BER Min alarm low        |
| <i>pre_fec_ber_min_warn_hi</i>   | (Optional) Pre-FEC BER Min warning high     |
| <i>pre_fec_ber_min_warn_lo</i>   | (Optional) Pre-FEC BER Min warning low      |
| <i>pre_fec_ber_max</i>           | (Optional) Pre-FEC BER Max                  |
| <i>pre_fec_ber_max_flag</i>      | (Optional) Pre-FEC BER Max flag             |
| <i>pre_fec_ber_max_alm_hi</i>    | (Optional) Pre-FEC BER Max alarm high       |
| <i>pre_fec_ber_max_alm_lo</i>    | (Optional) Pre-FEC BER Max alarm low        |
| <i>pre_fec_ber_max_warn_hi</i>   | (Optional) Pre-FEC BER Max warning high     |
| <i>pre_fec_ber_max_warn_lo</i>   | (Optional) Pre-FEC BER Max warning low      |
| <i>pre_fec_ber_cur</i>           | (Optional) Pre-FEC BER Cur                  |
| <i>pre_fec_ber_cur_flag</i>      | (Optional) Pre-FEC BER Cur flag             |
| <i>pre_fec_ber_cur_alm_hi</i>    | (Optional) Pre-FEC BER Cur alarm high       |
| <i>pre_fec_ber_cur_alm_lo</i>    | (Optional) Pre-FEC BER Cur alarm low        |
| <i>pre_fec_ber_cur_warn_hi</i>   | (Optional) Pre-FEC BER Cur warning high     |
| <i>pre_fec_ber_cur_warn_lo</i>   | (Optional) Pre-FEC BER Cur warning low      |
| <i>uncorrect_ber_acc</i>         | (Optional) Uncorrected BER Acc              |
| <i>uncorrect_ber_acc_flag</i>    | (Optional) Uncorrected BER Acc flag         |
| <i>uncorrect_ber_acc_alm_hi</i>  | (Optional) Uncorrected BER Acc alarm high   |
| <i>uncorrect_ber_acc_alm_lo</i>  | (Optional) Uncorrected BER Acc alarm low    |
| <i>uncorrect_ber_acc_warn_hi</i> | (Optional) Uncorrected BER Acc warning high |
| <i>uncorrect_ber_acc_warn_lo</i> | (Optional) Uncorrected BER Acc warning low  |



|                                  |   |
|----------------------------------|---|
| <i>uncorrect_ber_min</i>         | (Optional) Uncorrected BER Min              |
| <i>uncorrect_ber_min_flag</i>    | (Optional) Uncorrected BER Min flag         |
| <i>uncorrect_ber_min_alrm_hi</i> | (Optional) Uncorrected BER Min alarm high   |
| <i>uncorrect_ber_min_alrm_lo</i> | (Optional) Uncorrected BER Min alarm low    |
| <i>uncorrect_ber_min_warn_hi</i> | (Optional) Uncorrected BER Min warning high |
| <i>uncorrect_ber_min_warn_lo</i> | (Optional) Uncorrected BER Min warning low  |
| <i>uncorrect_ber_max</i>         | (Optional) Uncorrected BER Max              |
| <i>uncorrect_ber_max_flag</i>    | (Optional) Uncorrected BER Max flag         |
| <i>uncorrect_ber_max_alrm_hi</i> | (Optional) Uncorrected BER Max alarm high   |
| <i>uncorrect_ber_max_alrm_lo</i> | (Optional) Uncorrected BER Max alarm low    |
| <i>uncorrect_ber_max_warn_hi</i> | (Optional) Uncorrected BER Max warning high |
| <i>uncorrect_ber_max_warn_lo</i> | (Optional) Uncorrected BER Max warning low  |
| <i>uncorrect_ber_cur</i>         | (Optional) Uncorrected BER Cur              |
| <i>uncorrect_ber_cur_flag</i>    | (Optional) Uncorrected BER Cur flag         |
| <i>uncorrect_ber_cur_alrm_hi</i> | (Optional) Uncorrected BER Cur alarm high   |
| <i>uncorrect_ber_cur_alrm_lo</i> | (Optional) Uncorrected BER Cur alarm low    |
| <i>uncorrect_ber_cur_warn_hi</i> | (Optional) Uncorrected BER Cur warning high |
| <i>uncorrect_ber_cur_warn_lo</i> | (Optional) Uncorrected BER Cur warning low  |

**Command Mode**

- /exec



|                          |  |
|--------------------------|--|
| <i>details</i>           | (Optional) Show interface transceiver detail information |
| <i>inventory</i>         | (Optional) Show interface transceiver inventory          |
| <i>__readonly__</i>      | (Optional) Read Only                                     |
| <i>interface</i>         | (Optional) Interface index                               |
| <i>TABLE_interface</i>   | (Optional) show interface                                |
| <i>sfp</i>               | (Optional) sfp   |
| <i>type</i>              | (Optional) type  |
| <i>name</i>              | (Optional) Name  |
| <i>partnum</i>           | (Optional) part number                                   |
| <i>rev</i>               | (Optional) revision                                      |
| <i>serialnum</i>         | (Optional) serial number                                 |
| <i>nom_bitrate</i>       | (Optional) Nominal bit rate in MBits/sec                 |
| <i>len_9</i>             | (Optional) Link length supported for 9/125um fiber       |
| <i>len_50</i>            | (Optional) Link length supported for 50/125um fiber      |
| <i>len_625</i>           | (Optional) Link length supported for 62.5/125um fiber    |
| <i>len_cu</i>            | (Optional) Link length supported for copper              |
| <i>len_50_OM3</i>        | (Optional) Link length supported for 50/125um fiber in m |
| <i>txcvr_type</i>        | (Optional)   |
| <i>connector_type</i>    | (Optional)   |
| <i>bit_encoding</i>      | (Optional)   |
| <i>protocol_type</i>     | (Optional)   |
| <i>10gbe_code</i>        | (Optional)   |
| <i>fiber_type_byte0</i>  | (Optional)   |
| <i>fiber_type_byte1</i>  | (Optional)   |
| <i>tx_range</i>          | (Optional)   |
| <i>ciscoid</i>           | (Optional) Cisco extended id                             |
| <i>ciscoid_1</i>         | (Optional) Cisco extended id number                      |
| <i>cisco_part_number</i> | (Optional) Cisco part number                             |
| <i>cisco_product_id</i>  | (Optional) Cisco product identifier                      |

|                        |                                     |
|------------------------|-------------------------------------|
| <i>cisco_vendor_id</i> | (Optional) Cisco vendor identifier  |
| <i>temp_slope</i>      | (Optional) Temperature slope        |
| <i>temp_offset</i>     | (Optional) Temperature offset       |
| <i>volt_slope</i>      | (Optional) Voltage slope            |
| <i>volt_offset</i>     | (Optional) Voltage offset           |
| <i>curr_slope</i>      | (Optional) Current slope            |
| <i>curr_offset</i>     | (Optional) Current offset           |
| <i>tx_pwr_slope</i>    | (Optional) Tx power slope           |
| <i>tx_pwr_offset</i>   | (Optional) Tx power offset          |
| <i>rx_pwr_4</i>        | (Optional) Rx power 4               |
| <i>rx_pwr_3</i>        | (Optional) Rx power 3               |
| <i>rx_pwr_2</i>        | (Optional) Rx power 2               |
| <i>rx_pwr_1</i>        | (Optional) Rx power 1               |
| <i>rx_pwr_0</i>        | (Optional) Rx power 0               |
| TABLE_lane             | (Optional) show lane                |
| <i>lane_number</i>     | (Optional) Lane number              |
| <i>temperature</i>     | (Optional) Temperature              |
| <i>temp_flag</i>       | (Optional) Temperature Flag         |
| <i>temp_alarm_hi</i>   | (Optional) Temperature Alarm High   |
| <i>temp_alarm_lo</i>   | (Optional) Temperature Alarm Low    |
| <i>temp_warn_hi</i>    | (Optional) Temperature Warning High |
| <i>temp_warn_lo</i>    | (Optional) Temperature Warning Low  |
| <i>voltage</i>         | (Optional) Voltage                  |
| <i>volt_flag</i>       | (Optional) Voltage Flag             |
| <i>volt_alarm_hi</i>   | (Optional) Voltage Alarm High       |
| <i>volt_alarm_lo</i>   | (Optional) Voltage Alarm Low        |
| <i>volt_warn_hi</i>    | (Optional) Voltage Warning High     |
| <i>volt_warn_lo</i>    | (Optional) Voltage Warning Low      |
| <i>current</i>         | (Optional) Current                  |

|                        |   |
|------------------------|---|
| <i>current_flag</i>    | (Optional) Current Flag                   |
| <i>current_alm_hi</i>  | (Optional) Current Alarm High             |
| <i>current_alm_lo</i>  | (Optional) Current Alarm Low              |
| <i>current_warn_hi</i> | (Optional) Current Warning High           |
| <i>current_warn_lo</i> | (Optional) Current Warning Low            |
| <i>tx_pwr</i>          | (Optional) Tx Power                       |
| <i>tx_pwr_flag</i>     | (Optional) Tx Power Flag                  |
| <i>tx_pwr_alm_hi</i>   | (Optional) Tx Power Alarm High            |
| <i>tx_pwr_alm_lo</i>   | (Optional) Tx Power Alarm Low             |
| <i>tx_pwr_warn_hi</i>  | (Optional) Tx Power Warning High          |
| <i>tx_pwr_warn_lo</i>  | (Optional) Tx Power Warning Low           |
| <i>rx_pwr</i>          | (Optional) Rx Power                       |
| <i>rx_pwr_flag</i>     | (Optional) Rx Power Flag                  |
| <i>rx_pwr_alm_hi</i>   | (Optional) Rx Power Alarm High            |
| <i>rx_pwr_alm_lo</i>   | (Optional) Rx Power Alarm Low             |
| <i>rx_pwr_warn_hi</i>  | (Optional) Rx Power Warning High          |
| <i>rx_pwr_warn_lo</i>  | (Optional) Rx Power Warning Low           |
| <i>xmit_faults</i>     | (Optional) Transmit Fault Count           |
| <i>snr</i>             | (Optional) RX Signal-to-Noise Ratio (SNR) |
| <i>snr_flag</i>        | (Optional) SNR Flag                       |
| <i>snr_alm_hi</i>      | (Optional) SNR Alarm High                 |
| <i>snr_alm_lo</i>      | (Optional) SNR Alarm Low                  |
| <i>snr_warn_hi</i>     | (Optional) SNR Warning High               |
| <i>snr_warn_lo</i>     | (Optional) SNR Warning Low                |
| <i>isi</i>             | (Optional) Residual-Dispersion(ISI)       |
| <i>isi_flag</i>        | (Optional) ISI Flag                       |
| <i>isi_alm_hi</i>      | (Optional) ISI alarm high                 |
| <i>isi_alm_lo</i>      | (Optional) ISI alarm low                  |
| <i>isi_warn_hi</i>     | (Optional) ISI warning high               |

|                              |   |
|------------------------------|---|
| <i>isi_warn_lo</i>           | (Optional) ISI warning low              |
| <i>pam</i>                   | (Optional) PAM Transition               |
| <i>pam_flag</i>              | (Optional) PAM Flag                     |
| <i>pam_alm_hi</i>            | (Optional) PAM alarm high               |
| <i>pam_alm_lo</i>            | (Optional) PAM alarm low                |
| <i>pam_warn_hi</i>           | (Optional) PAM warning high             |
| <i>pam_warn_lo</i>           | (Optional) PAM warning low              |
| <i>pre_fec_ber</i>           | (Optional) Pre-FEC BER                  |
| <i>pre_fec_ber_flag</i>      | (Optional) Pre-FEC BER flag             |
| <i>pre_fec_ber_alm_hi</i>    | (Optional) Pre-FEC BER alarm high       |
| <i>pre_fec_ber_alm_lo</i>    | (Optional) Pre-FEC BER alarm low        |
| <i>pre_fec_ber_warn_hi</i>   | (Optional) Pre-FEC BER warning high     |
| <i>pre_fec_ber_warn_lo</i>   | (Optional) Pre-FEC BER warning low      |
| <i>uncorrect_ber</i>         | (Optional) Uncorrected BER              |
| <i>uncorrect_ber_flag</i>    | (Optional) Uncorrected BER flag         |
| <i>uncorrect_ber_alm_hi</i>  | (Optional) Uncorrected BER alarm high   |
| <i>uncorrect_ber_alm_lo</i>  | (Optional) Uncorrected BER alarm low    |
| <i>uncorrect_ber_warn_hi</i> | (Optional) Uncorrected BER warning high |
| <i>uncorrect_ber_warn_lo</i> | (Optional) Uncorrected BER warning low  |
| <i>tec_current</i>           | (Optional) TEC Current                  |
| <i>tec_current_flag</i>      | (Optional) TEC Current flag             |
| <i>tec_current_alm_hi</i>    | (Optional) TEC Current Alarm High       |
| <i>tec_current_alm_lo</i>    | (Optional) TEC Current Alarm Low        |
| <i>tec_current_warn_hi</i>   | (Optional) TEC Current Warning High     |
| <i>tec_current_warn_lo</i>   | (Optional) TEC Current Warning Low      |
| <i>laser_freq</i>            | (Optional) Laser Frequency              |
| <i>laser_freq_flag</i>       | (Optional) Laser Frequency flag         |
| <i>laser_freq_alm_hi</i>     | (Optional) Laser Frequency Alarm High   |
| <i>laser_freq_alm_lo</i>     | (Optional) Laser Frequency Alarm Low    |

|                                |   |
|--------------------------------|---|
| <i>laser_freq_warn_hi</i>      | (Optional) Laser Frequency Warning High   |
| <i>laser_freq_warn_lo</i>      | (Optional) Laser Frequency Warning Low    |
| <i>laser_temp</i>              | (Optional) Laser Temperature              |
| <i>laser_temp_flag</i>         | (Optional) Laser Temperature flag         |
| <i>laser_temp_alm_hi</i>       | (Optional) Laser Temperature Alarm High   |
| <i>laser_temp_alm_lo</i>       | (Optional) Laser Temperature Alarm Low    |
| <i>laser_temp_warn_hi</i>      | (Optional) Laser Temperature Warning High |
| <i>laser_temp_warn_lo</i>      | (Optional) Laser Temperature Warning Low  |
| <i>pre_fec_ber_acc</i>         | (Optional) Pre-FEC BER Acc                |
| <i>pre_fec_ber_acc_flag</i>    | (Optional) Pre-FEC BER Acc flag           |
| <i>pre_fec_ber_acc_alm_hi</i>  | (Optional) Pre-FEC BER Acc alarm high     |
| <i>pre_fec_ber_acc_alm_lo</i>  | (Optional) Pre-FEC BER Acc alarm low      |
| <i>pre_fec_ber_acc_warn_hi</i> | (Optional) Pre-FEC BER Acc warning high   |
| <i>pre_fec_ber_acc_warn_lo</i> | (Optional) Pre-FEC BER Acc warning low    |
| <i>pre_fec_ber_min</i>         | (Optional) Pre-FEC BER Min                |
| <i>pre_fec_ber_min_flag</i>    | (Optional) Pre-FEC BER Min flag           |
| <i>pre_fec_ber_min_alm_hi</i>  | (Optional) Pre-FEC BER Min alarm high     |
| <i>pre_fec_ber_min_alm_lo</i>  | (Optional) Pre-FEC BER Min alarm low      |
| <i>pre_fec_ber_min_warn_hi</i> | (Optional) Pre-FEC BER Min warning high   |
| <i>pre_fec_ber_min_warn_lo</i> | (Optional) Pre-FEC BER Min warning low    |
| <i>pre_fec_ber_max</i>         | (Optional) Pre-FEC BER Max                |
| <i>pre_fec_ber_max_flag</i>    | (Optional) Pre-FEC BER Max flag           |
| <i>pre_fec_ber_max_alm_hi</i>  | (Optional) Pre-FEC BER Max alarm high     |
| <i>pre_fec_ber_max_alm_lo</i>  | (Optional) Pre-FEC BER Max alarm low      |
| <i>pre_fec_ber_max_warn_hi</i> | (Optional) Pre-FEC BER Max warning high   |
| <i>pre_fec_ber_max_warn_lo</i> | (Optional) Pre-FEC BER Max warning low    |
| <i>pre_fec_ber_cur</i>         | (Optional) Pre-FEC BER Cur                |
| <i>pre_fec_ber_cur_flag</i>    | (Optional) Pre-FEC BER Cur flag           |
| <i>pre_fec_ber_cur_alm_hi</i>  | (Optional) Pre-FEC BER Cur alarm high     |

|                                  |   |
|----------------------------------|---|
| <i>pre_fec_ber_cur_alrm_lo</i>   | (Optional) Pre-FEC BER Cur alarm low        |
| <i>pre_fec_ber_cur_warn_hi</i>   | (Optional) Pre-FEC BER Cur warning high     |
| <i>pre_fec_ber_cur_warn_lo</i>   | (Optional) Pre-FEC BER Cur warning low      |
| <i>uncorrect_ber_acc</i>         | (Optional) Uncorrected BER Acc              |
| <i>uncorrect_ber_acc_flag</i>    | (Optional) Uncorrected BER Acc flag         |
| <i>uncorrect_ber_acc_alrm_hi</i> | (Optional) Uncorrected BER Acc alarm high   |
| <i>uncorrect_ber_acc_alrm_lo</i> | (Optional) Uncorrected BER Acc alarm low    |
| <i>uncorrect_ber_acc_warn_hi</i> | (Optional) Uncorrected BER Acc warning high |
| <i>uncorrect_ber_acc_warn_lo</i> | (Optional) Uncorrected BER Acc warning low  |
| <i>uncorrect_ber_min</i>         | (Optional) Uncorrected BER Min              |
| <i>uncorrect_ber_min_flag</i>    | (Optional) Uncorrected BER Min flag         |
| <i>uncorrect_ber_min_alrm_hi</i> | (Optional) Uncorrected BER Min alarm high   |
| <i>uncorrect_ber_min_alrm_lo</i> | (Optional) Uncorrected BER Min alarm low    |
| <i>uncorrect_ber_min_warn_hi</i> | (Optional) Uncorrected BER Min warning high |
| <i>uncorrect_ber_min_warn_lo</i> | (Optional) Uncorrected BER Min warning low  |
| <i>uncorrect_ber_max</i>         | (Optional) Uncorrected BER Max              |
| <i>uncorrect_ber_max_flag</i>    | (Optional) Uncorrected BER Max flag         |
| <i>uncorrect_ber_max_alrm_hi</i> | (Optional) Uncorrected BER Max alarm high   |
| <i>uncorrect_ber_max_alrm_lo</i> | (Optional) Uncorrected BER Max alarm low    |
| <i>uncorrect_ber_max_warn_hi</i> | (Optional) Uncorrected BER Max warning high |
| <i>uncorrect_ber_max_warn_lo</i> | (Optional) Uncorrected BER Max warning low  |
| <i>uncorrect_ber_cur</i>         | (Optional) Uncorrected BER Cur              |
| <i>uncorrect_ber_cur_flag</i>    | (Optional) Uncorrected BER Cur flag         |
| <i>uncorrect_ber_cur_alrm_hi</i> | (Optional) Uncorrected BER Cur alarm high   |
| <i>uncorrect_ber_cur_alrm_lo</i> | (Optional) Uncorrected BER Cur alarm low    |
| <i>uncorrect_ber_cur_warn_hi</i> | (Optional) Uncorrected BER Cur warning high |
| <i>uncorrect_ber_cur_warn_lo</i> | (Optional) Uncorrected BER Cur warning low  |

**Command Mode**

- /exec



## show interface trunk

```
show interface trunk [ module <module> | vlan <vlan_id> | fex <fex_num> ] [ __readonly__ { TABLE_interface
<interface> <native> <status> <portchannel> } { TABLE_allowed_vlans <interface> <allowedvlans> } {
TABLE_errored_vlans <interface> <erroredvlans> } { TABLE_stp_forward <interface> <stpfwd_vlans> }
[ { TABLE_fabricpath_vlans <interface> <fabricpath_vlans> } ] { TABLE_vtp_pruning <interface>
<vtppruning_vlans> } ]
```

### Syntax Description

|                     |  |
|---------------------|--|
| show                | Show running system information                          |
| interface           | Show interface status and information                    |
| trunk               | Show interface trunk information                         |
| module              | (Optional) Limit display to interfaces on module         |
| <i>module</i>       | (Optional) Enter module number                           |
| fex                 | (Optional) Limit display to interfaces on a FEX          |
| <i>fex_num</i>      | (Optional) Enter FEX number                              |
| vlan                | (Optional) Show per vlan information for trunk           |
| <i>vlan_id</i>      | (Optional) Enter vlan range                              |
| <i>interface</i>    | (Optional) Interface index                               |
| <i>__readonly__</i> | (Optional) Read Only                                     |
| TABLE_interface     | (Optional) show interface                                |
| <i>interface</i>    | (Optional) Interface index                               |
| <i>native</i>       | (Optional) Native VLAN                                   |
| <i>status</i>       | (Optional) Status  |
| <i>portchannel</i>  | (Optional) Port Channel                                  |
| TABLE_allowed_vlans | (Optional) show allowed vlans                            |
| <i>interface</i>    | (Optional) Interface index                               |
| <i>allowedvlans</i> | (Optional) VLANs allowed and active in management domain |
| TABLE_errored_vlans | (Optional) show errored vlans                            |
| <i>interface</i>    | (Optional) Interface index                               |
| <i>erroredvlans</i> | (Optional) Errored VLANs                                 |
| TABLE_stp_forward   | (Optional) show STP forwarding VLANs                     |

|                          |                                   |
|--------------------------|-----------------------------------|
| <i>interface</i>         | (Optional) Interface index        |
| <i>stp fwd_vlans</i>     | (Optional) STP Forwarding VLANs   |
| TABLE_fabricpath_vlans   | (Optional) show fabricpath VLANs  |
| <i>interface</i>         | (Optional) Interface index        |
| <i>fabricpath_vlans</i>  | (Optional) FabricPath VLANs       |
| TABLE_vtp_pruning        | (Optional) show VTP pruning VLANs |
| <i>vtp pruning_vlans</i> | (Optional) VTP Pruning VLANs      |

**Command Mode**

- /exec

# show interface trunk

```
show interface <ifeth_trnk> trunk [ __readonly__ { TABLE_interface <interface> <native> <status>
<portchannel> } { TABLE_allowed_vlans <interface> <allowedvlans> } { TABLE_errored_vlans <interface>
<erroredvlans> } { TABLE_stp_forward <interface> <stpfwd_vlans> } [ { TABLE_fabricpath_vlans
<interface> <fabricpath_vlans> } ] { TABLE_vtp_pruning <interface> <vtppruning_vlans> } ]
```

## Syntax Description

|                         |  |
|-------------------------|--|
| show                    | Show running system information                          |
| interface               | Show interface status and information                    |
| <i>ifeth_trnk</i>       | Enter interface type and number in module/slot format    |
| trunk                   | Show interface trunk information                         |
| __readonly__            | (Optional) Read Only                                     |
| TABLE_interface         | (Optional) show interface                                |
| <i>interface</i>        | (Optional) Interface index                               |
| <i>native</i>           | (Optional) Native VLAN                                   |
| <i>status</i>           | (Optional) Status  |
| <i>portchannel</i>      | (Optional) Port Channel                                  |
| TABLE_allowed_vlans     | (Optional) show allowed vlans                            |
| <i>interface</i>        | (Optional) Interface index                               |
| <i>allowedvlans</i>     | (Optional) VLANs allowed and active in management domain |
| TABLE_errored_vlans     | (Optional) show errored vlans                            |
| <i>interface</i>        | (Optional) Interface index                               |
| <i>erroredvlans</i>     | (Optional) Errored VLANs                                 |
| TABLE_stp_forward       | (Optional) show STP forwarding VLANs                     |
| <i>interface</i>        | (Optional) Interface index                               |
| <i>stpfwd_vlans</i>     | (Optional) STP Forwarding VLANs                          |
| TABLE_fabricpath_vlans  | (Optional) show fabricpath VLANs                         |
| <i>interface</i>        | (Optional) Interface index                               |
| <i>fabricpath_vlans</i> | (Optional) FabricPath VLANs                              |
| TABLE_vtp_pruning       | (Optional) show VTP pruning VLANs                        |

|                          |                              |
|--------------------------|------------------------------|
| <i>interface</i>         | (Optional) Interface index   |
| <i>vtp pruning vlans</i> | (Optional) VTP Pruning VLANs |

**Command Mode**

- /exec

# show interface untagged-cos

```
show interface untagged-cos [ module <mod_num> ] [ __readonly__ <interface> <ucos-value> ]
```

## Syntax Description

|                     |  |
|---------------------|--|
| show                | Show running system information                  |
| interface           | Show interface status and information            |
| untagged-cos        | Show interface untagged CoS information          |
| module              | (Optional) Limit display to interfaces on module |
| <i>mod_num</i>      | (Optional) Enter module number                   |
| <i>__readonly__</i> | (Optional)                                       |
| <i>interface</i>    | (Optional) Interface index                       |
| <i>ucos-value</i>   | (Optional) COS value                             |

## Command Mode

- /exec

# show inventory

```
show inventory [ chassis | fans | power_supply | module [ <module> ] | <s0> [ <santa-cruz-range> ] | all ] [
__readonly__ TABLE_inv <name> <desc> <productid> <vendorid> <serialnum> ]
```

## Syntax Description

|                         |   |
|-------------------------|---|
| show                    | Show running system information                         |
| inventory               | system inventory information                            |
| chassis                 | (Optional) system inventory chassis information         |
| fans                    | (Optional) system inventory fan information             |
| power_supply            | (Optional) system inventory power supply information    |
| module                  | (Optional) system inventory module information          |
| <i>module</i>           | (Optional) please enter the module number               |
| <i>s0</i>               | (Optional) please enter the module number               |
| <i>santa-cruz-range</i> | (Optional) please enter the xbar number                 |
| all                     | (Optional) system and transceiver inventory information |
| <i>__readonly__</i>     | (Optional)  |
| TABLE_inv               | (Optional) Inventory table                              |
| <i>name</i>             | (Optional) Name of inventory                            |
| <i>desc</i>             | (Optional) Description of inventory                     |
| <i>productid</i>        | (Optional) Product ID                                   |
| <i>vendorid</i>         | (Optional) Vendor ID                                    |
| <i>serialnum</i>        | (Optional) Serial Number                                |

## Command Mode

- /exec



|                              |                                      |
|------------------------------|--------------------------------------|
| <i>global_punt_pkt_cnt</i>   | (Optional) Global packet punt count  |
| <i>global_punt_byte_cnt</i>  | (Optional) Global byte punt count    |
| <i>global_glean_pkt_cnt</i>  | (Optional) Global glean packet count |
| <i>global_glean_byte_cnt</i> | (Optional) Global glean byte count   |
| <i>glean_pkt_cnt</i>         | (Optional) Glean packet count        |
| <i>glean_byte_cnt</i>        | (Optional) Glean byte count          |
| <i>normal_pkt_cnt</i>        | (Optional) Packet count              |
| <i>normal_byte_cnt</i>       | (Optional) Byte count                |
| <i>last_updated</i>          | (Optional) Last updated              |
| <i>count-static</i>          | (Optional) Count static              |
| <i>count-dynamic</i>         | (Optional) Count dynamic             |
| <i>count-others</i>          | (Optional) Count others              |
| <i>count-throttle</i>        | (Optional) Count throttle            |
| <i>count-total</i>           | (Optional) Count total               |
| TABLE_afi                    | (Optional) TABLR afi                 |
| <i>afi</i>                   | (Optional) afi                       |
| <i>count</i>                 | (Optional) count                     |
| TABLE_adj                    | (Optional) Adjacency table           |
| <i>intf-out</i>              | (Optional) Interface                 |
| <i>phy-intf</i>              | (Optional) Physical interface        |
| <i>ip-addr-out</i>           | (Optional) IP address                |
| <i>mac</i>                   | (Optional) MAC address               |
| <i>pref</i>                  | (Optional) Preference                |
| <i>owner</i>                 | (Optional) Owner                     |
| <i>pkt-count</i>             | (Optional) Packet count              |
| <i>byte-count</i>            | (Optional) Byte count                |
| <i>is-best</i>               | (Optional) Best                      |
| <i>is-thrtld</i>             | (Optional) Throttled                 |

**Command Mode**



- /exec

# show ip amt relay

```
show { ip | ipv6 } amt relay [ vrf { <vrf-name> | <vrf-known-name> } ] [ __readonly__ TABLE_vrf <vrf>
<tut> <ra> <nds> <ldn> <nts> <lrn> <lra> <lq> <uc> <rc4> <rc6> ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                |
| ip                    | Display IP information                         |
| ipv6                  | Display IPv6 information                       |
| vrf                   | (Optional) Display information for VRF         |
| <i>vrf-name</i>       | (Optional) VRF name                            |
| <i>vrf-known-name</i> | (Optional) Known VRF name                      |
| amt                   | AMT show commands                              |
| relay                 | Display status information about the AMT Relay |
| __readonly__          | (Optional)                                     |
| TABLE_vrf             | (Optional)                                     |
| <i>tut</i>            | (Optional)                                     |
| <i>ra</i>             | (Optional)                                     |
| <i>vrf</i>            | (Optional)                                     |
| <i>nds</i>            | (Optional)                                     |
| <i>ldn</i>            | (Optional)                                     |
| <i>nts</i>            | (Optional)                                     |
| <i>lrn</i>            | (Optional)                                     |
| <i>lra</i>            | (Optional)                                     |
| <i>lq</i>             | (Optional)                                     |
| <i>uc</i>             | (Optional)                                     |
| <i>rc4</i>            | (Optional)                                     |
| <i>rc6</i>            | (Optional)                                     |

## Command Mode

- /exec

# show ip amt route

```
show { ip | ipv6 } amt route [ vrf { <vrf-name> | <vrf-known-name> } ] [ __readonly__ TABLE_vrf <vrf>
<rc4> <rc6> { TABLE_route <addrs> <if> <nbr> <gwa> <gw_exp> } ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information          |
| ip                    | Display IP information                   |
| ipv6                  | Display IPv6 information                 |
| vrf                   | (Optional) Display information for VRF   |
| <i>vrf-name</i>       | (Optional) VRF name                      |
| <i>vrf-known-name</i> | (Optional) Known VRF name                |
| amt                   | AMT show commands                        |
| route                 | Display multicast routes learned via AMT |
| __readonly__          | (Optional)                               |
| TABLE_vrf             | (Optional)                               |
| <i>vrf</i>            | (Optional)                               |
| <i>rc4</i>            | (Optional)                               |
| <i>rc6</i>            | (Optional)                               |
| TABLE_route           | (Optional)                               |
| <i>addrs</i>          | (Optional)                               |
| <i>if</i>             | (Optional)                               |
| <i>nbr</i>            | (Optional)                               |
| <i>gwa</i>            | (Optional)                               |
| <i>gw_exp</i>         | (Optional)                               |

## Command Mode

- /exec

## show ip amt tunnel

```
show ip amt tunnel [ <address4> <port> ] [ detail ] [ vrf { <vrf-name> | <vrf-known-name> } ] [ __readonly__
TABLE_vrf <vrf> <tc4> { TABLE_tunnel <gwa> <gwp> <ut> <ld> <lr> <rc> <exp> { TABLE_route
<source> <group> <rexp> } } ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                     |
| amt                   | AMT show commands                                   |
| ip                    | Display IP information                              |
| tunnel                | Display tunnel information                          |
| vrf                   | (Optional) Display information for VRF              |
| <i>vrf-name</i>       | (Optional) VRF name                                 |
| <i>vrf-known-name</i> | (Optional) Known VRF name                           |
| <i>address4</i>       | (Optional) IP address of tunnel endpoint            |
| <i>port</i>           | (Optional) UDP port number of gateway               |
| detail                | (Optional) Display routes joined by tunnel endpoint |
| __readonly__          | (Optional)  |
| TABLE_vrf             | (Optional)  |
| <i>vrf</i>            | (Optional)  |
| <i>tc4</i>            | (Optional)  |
| TABLE_tunnel          | (Optional)  |
| <i>gwa</i>            | (Optional)  |
| <i>gwp</i>            | (Optional)  |
| <i>ut</i>             | (Optional)  |
| <i>ld</i>             | (Optional)  |
| <i>lr</i>             | (Optional)  |
| <i>rc</i>             | (Optional)  |
| <i>exp</i>            | (Optional)  |
| TABLE_route           | (Optional)  |
| <i>source</i>         | (Optional)  |

|              |            |
|--------------|------------|
| <i>group</i> | (Optional) |
| <i>rexp</i>  | (Optional) |

**Command Mode**

- /exec

## show ip arp

```
show ip arp [ [ [ <ip-address> | [ sync-entries | fhrp-non-active-learn ] [ detail ] | static | summary | [ summary
] <interface> ] ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] ] [ __readonly__ TABLE_vrf <vrf-name-out>
] [ <cnt-resolved> ] [ <cnt-incomplete> ] [ <cnt-thrtld-incomplete> ] [ <cnt-unknown> ] [ <cnt-total> ] [
TABLE_adj <intf-out> <ip-addr-out> [ <time-stamp> ] <mac> [ <phy-intf> ] [ <unknown> ] [ <incomplete>
] [ <flags> ] ] ]
```

### Syntax Description

|                              |   |
|------------------------------|---|
| show                         | Show running system information   |
| ip                           | Display IP information  |
| arp                          | Display ARP table and statistics  |
| summary                      | (Optional) Display ARP adjacency summary  |
| detail                       | (Optional) Display detailed information   |
| sync-entries                 | (Optional) Display ARP table learnt only due to arp table sync                      |
| fhrp-non-active-learn        | (Optional) Display ARP table learnt only due to request for non-active FHRP address |
| <i>interface</i>             | (Optional) ARP interface  |
| <i>ip-address</i>            | (Optional) IP address   |
| vrf                          | (Optional) Display per-VRF information  |
| <i>vrf-name</i>              | (Optional) VRF name   |
| <i>vrf-known-name</i>        | (Optional) Known VRF name   |
| all                          | (Optional) Display ARP entries for all vrfs   |
| static                       | (Optional) Display Static ARP entries   |
| __readonly__                 | (Optional)  |
| TABLE_vrf                    | (Optional) Show VRF table   |
| <i>vrf-name-out</i>          | (Optional) Show VRF name  |
| <i>cnt-resolved</i>          | (Optional) Show total resolved ARP entries  |
| <i>cnt-incomplete</i>        | (Optional) Show total incomplete ARP entreis  |
| <i>cnt-thrtld-incomplete</i> | (Optional) Show total incomplete throttled entries                                  |
| <i>cnt-unknown</i>           | (Optional) Show total unknow entris   |
| <i>cnt-total</i>             | (Optional) Show total   |

|                    |                                    |
|--------------------|------------------------------------|
| <i>TABLE_adj</i>   | (Optional) Show IP ARP             |
| <i>intf-out</i>    | (Optional) Show interface          |
| <i>ip-addr-out</i> | (Optional) Show ip address         |
| <i>time-stamp</i>  | (Optional) Show age of adjacency   |
| <i>mac</i>         | (Optional) Show mac                |
| <i>phy-intf</i>    | (Optional) Show physical interface |
| <i>unknown</i>     | (Optional) Show unknown entry      |
| <i>incomplete</i>  | (Optional) Show incomplete entry   |
| <i>flags</i>       | (Optional) Show flags              |

**Command Mode**

- /exec

## show ip arp anycast topo-info

```
show ip arp anycast topo-info [ <topo-id> ] [ __readonly__ { TABLE_ip_arp_anycast_topo_info [
<ip_arp_anycat_topo_id> ] [ <ip_arp_anycast_feature> ] [ <ip_arp_anycast_mode> ] } ]
```

### Syntax Description

|                                |   |
|--------------------------------|---|
| show                           | Show running system information           |
| ip                             | Configure IP features                     |
| arp                            | Configure ARP parameters                  |
| anycast                        | anycast feature info                      |
| topo-info                      | Per topology specific information         |
| <i>topo-id</i>                 | (Optional) Topology ID (VLAN-ID or BD-ID) |
| <i>__readonly__</i>            | (Optional)                                |
| TABLE_ip_arp_anycast_topo_info | (Optional) Show ip arp anycast topo-info  |
| <i>ip_arp_anycat_topo_id</i>   | (Optional) Show ARP anycast topo-id       |
| <i>ip_arp_anycast_feature</i>  | (Optional) Show ARP anycast feature       |
| <i>ip_arp_anycast_mode</i>     | (Optional) Show ARP anycast mode          |

### Command Mode

- /exec



# show ip arp cache

show ip arp cache { { brief | detail } | { interface [ <intf> ] } } [ operational ]

## Syntax Description

|             |  |
|-------------|--|
| show        | Show running system information  |
| ip          | Display IP information   |
| arp         | arp  |
| cache       | Display ip arp cache   |
| interface   | Display ip arp related interface information                           |
| brief       | Display summary of arp interface status and configuration              |
| detail      | Display detailed information of arp interface status and configuration |
| operational | (Optional) Display only interfaces that are administratively enabled   |
| <i>intf</i> | (Optional) Interface name to display                                   |

## Command Mode

- /exec

# show ip arp client

```
show ip arp client [ __readonly__ { <arp-clients> } [ TABLE_arp_client_list { <arp-cli-uuid> <l2-client-type>
<client-flg> <mts-addr-sap> <cli-msg-cnt> [ <l2-cli-func-name> ] [ <l2-cli-dbg-func> ] [
<l2-cli-dbg-un-init-func> ] } ] ] ]
```

## Syntax Description

|                                |                                   |
|--------------------------------|-----------------------------------|
| show                           | Show running system information   |
| ip                             | Display IP information            |
| arp                            | Display ARP table and statistics  |
| client                         | Display ARP Client table          |
| <i>__readonly__</i>            | (Optional)                        |
| <i>arp-clients</i>             | (Optional) Number of ARP Clients  |
| <i>TABLE_arp_client_list</i>   | (Optional) Show ip arp client     |
| <i>arp-cli-uuid</i>            | (Optional) Protocol uuid          |
| <i>l2-client-type</i>          | (Optional) Client type            |
| <i>client-flg</i>              | (Optional) Flags                  |
| <i>mts-addr-sap</i>            | (Optional) SAP                    |
| <i>cli-msg-cnt</i>             | (Optional) Client message count   |
| <i>l2-cli-func-name</i>        | (Optional) Received function      |
| <i>l2-cli-dbg-func</i>         | (Optional) Debug init function    |
| <i>l2-cli-dbg-un-init-func</i> | (Optional) Debug Un-init function |

## Command Mode

- /exec

## show ip arp controller-statistics

```
show ip arp controller-statistics [ __readonly__ { TABLE_ip_arp_controller_statistics [
<arp_adj_controller_add_count> ] [ <arp_adj_controller_del_count> ] [ <arp_adj_controller_add_err_count>
] [ <arp_adj_controller_del_err> ] } ]
```

### Syntax Description

|   |                                       |
|---|---------------------------------------|
| show                                    | Show running system information       |
| ip                                      | Display IP information                |
| arp                                     | Display ARP table and statistics      |
| controller-statistics                   | Controller statistics                 |
| __readonly__                            | (Optional)                            |
| TABLE_ip_arp_controller_statistics      | (Optional) Show controller-statistics |
| <i>arp_adj_controller_add_count</i>     | (Optional)                            |
| <i>arp_adj_controller_del_count</i>     | (Optional)                            |
| <i>arp_adj_controller_add_err_count</i> | (Optional)                            |
| <i>arp_adj_controller_del_err</i>       | (Optional)                            |

### Command Mode

- /exec

# show ip arp esi

```
show ip arp esi [ __readonly__ { TABLE_ip_arp_esi [ <ip_arp_esi_interface> ] [ <ip_arp_esi_value> ] } ]
```

## Syntax Description

|                             |                                 |
|-----------------------------|---------------------------------|
| show                        | Show running system information |
| ip                          | Configure IP features           |
| arp                         | Configure ARP parameters        |
| esi                         | ESI information                 |
| <i>__readonly__</i>         | (Optional)                      |
| <i>TABLE_ip_arp_esi</i>     | (Optional) Show ip arp esi      |
| <i>ip_arp_esi_interface</i> | (Optional) Interface            |
| <i>ip_arp_esi_value</i>     | (Optional) Values               |

## Command Mode

- /exec

# show ip arp inspection

```
show ip arp inspection [ __readonly__ <src_mac_valid> <dest_mac_valid> <ip_addr_valid> TABLE_entry
<active_vlan_id> <is_insp_enabled> <oper_state> [ <acl_name> ] <is_static_acl> [ [ <acl_logging> ]
<dhcp_logging> ] [ <req_fwded> <res_fwded> <req_dropped> <res_dropped> <dhcp_drops> <acl_drops>
<dhcp_permits> <acl_permits> <req_smac_fails> <res_smac_fails> <res_dmac_fails> <req_ip_fails>
<res_ip_fails> ] ]
```

## Syntax Description

|                        |   |
|------------------------|---|
| show                   | Show running system information   |
| ip                     | Show the IP features of the system  |
| arp                    | IP ARP table  |
| inspection             | Status of ARP Inspection  |
| <i>__readonly__</i>    | (Optional) read only  |
| <i>src_mac_valid</i>   | (Optional) source ethernet address in header must be same as sender mac address in arp payload      |
| <i>dest_mac_valid</i>  | (Optional) destination ethernet address in header must be same as target mac address in arp payload |
| <i>ip_addr_valid</i>   | (Optional) validate the target ip address to filter broadcast/multicast address in arp payload      |
| TABLE_entry            | (Optional)  |
| <i>active_vlan_id</i>  | (Optional) active vlan id   |
| <i>is_insp_enabled</i> | (Optional)  |
| <i>oper_state</i>      | (Optional)  |
| <i>acl_name</i>        | (Optional)  |
| <i>is_static_acl</i>   | (Optional)  |
| <i>acl_logging</i>     | (Optional)  |
| <i>dhcp_logging</i>    | (Optional)  |

## Command Mode

- /exec

# show ip arp inspection interfaces

```
show ip arp inspection interfaces [ <intf1> ] [ __readonly__ <intf_header> [ TABLE_intf <intf2> <trust_state> ] ]
```

## Syntax Description

|                     |                                    |
|---------------------|------------------------------------|
| show                | Show running system information    |
| ip                  | Show the IP features of the system |
| arp                 | IP ARP table                       |
| inspection          | Status of ARP Inspection           |
| interfaces          | Trust status of all interfaces     |
| <i>intf1</i>        | (Optional) interface               |
| <i>__readonly__</i> | (Optional)                         |
| TABLE_intf          | (Optional)                         |
| <i>intf_header</i>  | (Optional)                         |
| <i>intf2</i>        | (Optional)                         |
| <i>trust_state</i>  | (Optional)                         |

## Command Mode

- /exec

# show ip arp inspection log

```
show ip arp inspection log [ __readonly__ <log_buff_size> <log_rate_entries> <log_rate_interval> <log_frame> ]
```

## Syntax Description

|                          |  |
|--------------------------|--|
| show                     | Show running system information                          |
| ip                       | Show the IP features of the system                       |
| arp                      | IP ARP table   |
| inspection               | Status of ARP Inspection                                 |
| log                      | Log Buffer   |
| <i>__readonly__</i>      | (Optional)   |
| <i>log_buff_size</i>     | (Optional) number of entries per log buffer              |
| <i>log_rate_entries</i>  | (Optional) number of entries into log buffer per sec     |
| <i>log_rate_interval</i> | (Optional) time after which log buffer is updated in sec |
| <i>log_frame</i>         | (Optional) log frames in buffer                          |

## Command Mode

- /exec

## show ip arp inspection statistics

```
show ip arp inspection statistics [ vlan <vlan-range> ] [ __readonly__ TABLE_stats <vlanid> <req_fwded>
<res_fwded> <req_dropped> <res_dropped> <dhcp_drops> [ <acl_drops> ] <dhcp_permits> [ <acl_permits>
] <req_smac_fails> <res_smac_fails> <res_dmac_fails> <req_ip_fails> <res_ip_fails> ]
```

### Syntax Description

|                     |  |
|---------------------|--|
| show                | Show running system information                            |
| ip                  | Show the IP features of the system                         |
| arp                 | IP ARP table   |
| inspection          | Status of ARP Inspection                                   |
| statistics          | Status of ARP Inspection                                   |
| vlan                | (Optional) Selected vlan range                             |
| <i>vlan-range</i>   | (Optional) VLAN ID 1-4094 or range(s): 1-5, 10 or 2-5,7-19 |
| <i>__readonly__</i> | (Optional)   |
| TABLE_stats         | (Optional)   |
| <i>vlanid</i>       | (Optional) ip arp inspection vlan id                       |

### Command Mode

- /exec



## show ip arp inspection vlan

```
show ip arp inspection { vlan <vlan-range> } [ __readonly__ <src_vlan_mac_valid> <dest_vlan_mac_valid>
<ip_vlan_addr_valid> TABLE_vlan <active_vlan_id> <is_insp_enabled> <oper_state> [ <dhcp_logging> ]
[ <acl_name> ] [ <acl_logging> ] <is_static_acl> ]
```

### Syntax Description

|                            |  |
|----------------------------|--|
| show                       | Show running system information  |
| ip                         | Show the IP features of the system   |
| arp                        | IP ARP table   |
| inspection                 | Status of ARP Inspection   |
| vlan                       | Selected vlan range  |
| <i>vlan-range</i>          | VLAN ID 1-4094 or range(s): 1-5, 10 or 2-5,7-19  |
| <i>__readonly__</i>        | (Optional)   |
| <i>src_vlan_mac_valid</i>  | (Optional) validates header source mac address with sender mac address in arp payload      |
| <i>dest_vlan_mac_valid</i> | (Optional) validates header destination mac address with target mac address in arp payload |
| <i>ip_vlan_addr_valid</i>  | (Optional) filters invalid ip addresses like multicast/broadcast in arp requests/responses |
| TABLE_vlan                 | (Optional)   |
| <i>active_vlan_id</i>      | (Optional) active vlan id  |
| <i>is_insp_enabled</i>     | (Optional) ip arp inspection on vlan   |
| <i>oper_state</i>          | (Optional) operational on vlan   |
| <i>acl_name</i>            | (Optional) arp inspection access list name   |
| <i>is_static_acl</i>       | (Optional) is arp inspection access list static  |
| <i>acl_logging</i>         | (Optional) acl logging options   |
| <i>dhcp_logging</i>        | (Optional) ip arp inspection dhcp-binding logging options                                  |

### Command Mode

- /exec

## show ip arp multihoming-statistics

```
show ip arp multihoming-statistics [ <interface> ] [ interface-all ] [ vrf { <vrf-name> | <vrf-known-name> |
all } ] [ __readonly__ TABLE_vrf <vrf-name-out2> TABLE_stat <ps-recv-add-l2rib> <ps-proc-add-l2rib>
<ps-recv-del-l2rib> <ps-proc-del-l2rib> <ps-recv-pc-shut-l2rib> <ps-proc-pc-shut-l2rib>
<ps-recv-remote-upd-l2rib> <ps-proc-remote-upd-l2rib> <ps-add-err-invalid-flags> <ps-del-err-invalid-flags>
<ps-add-err-invalid-curr-state> <ps-del-err-invalid-curr-state> <ps-del-err-mac-mismatch> <ps-del-err-sec-del>
<ps-del-err-tl-route> <tl-del-err-psro-route> ]
```

### Syntax Description

|                                 |   |
|---------------------------------|---|
| show                            | Show running system information                                 |
| ip                              | Display IP information  |
| arp                             | Display ARP table and statistics                                |
| multihoming-statistics          | Display ARP Multihoming stats                                   |
| vrf                             | (Optional) Display per-VRF information                          |
| <i>vrf-name</i>                 | (Optional) VRF name   |
| <i>vrf-known-name</i>           | (Optional) Known VRF name                                       |
| all                             | (Optional) Display ARP Multihoming statistics for all vrfs      |
| interface-all                   | (Optional) Display ARP Multihoming statistics for all interface |
| <i>interface</i>                | (Optional) ARP interface  |
| <i>__readonly__</i>             | (Optional)  |
| TABLE_vrf                       | (Optional) VRF table  |
| <i>vrf-name-out2</i>            | (Optional) VRF name   |
| TABLE_stat                      | (Optional) Show ip arp multihoming statistics                   |
| <i>ps-recv-add-l2rib</i>        | (Optional) Received ADD from L2RIB                              |
| <i>ps-recv-del-l2rib</i>        | (Optional) Received DEL from L2RIB                              |
| <i>ps-recv-remote-upd-l2rib</i> | (Optional) Received remote UPD from L2RIB                       |
| <i>ps-recv-pc-shut-l2rib</i>    | (Optional) Received PC shut from L2RIB                          |
| <i>ps-proc-add-l2rib</i>        | (Optional) Processed ADD from L2RIB                             |
| <i>ps-proc-del-l2rib</i>        | (Optional) Processed DEL from L2RIB                             |
| <i>ps-proc-remote-upd-l2rib</i> | (Optional) Processed remote UPD from L2RIB                      |
| <i>ps-proc-pc-shut-l2rib</i>    | (Optional) Processed PC shut from L2RIB                         |

|                                      |  |
|--------------------------------------|--|
| <i>ps-add-err-invalid-flags</i>      | (Optional) Multihoming ADD error invalid flag          |
| <i>ps-del-err-invalid-flags</i>      | (Optional) Multihoming DEL error invalid flag          |
| <i>ps-add-err-invalid-curr-state</i> | (Optional) Multihoming ADD error invalid current state |
| <i>ps-del-err-invalid-curr-state</i> | (Optional) Multihoming DEL error invalid current state |
| <i>ps-del-err-mac-mismatch</i>       | (Optional) Peer sync DEL error MAC mismatch            |
| <i>ps-del-err-tl-route</i>           | (Optional) Peer sync DEL error second delete           |
| <i>tl-del-err-psro-route</i>         | (Optional) True local DEL error deleteing PS RO route  |
| <i>ps-del-err-sec-del</i>            | (Optional) Peer sync DEL error second delete           |

**Command Mode**

- /exec

# show ip arp off-list

```
show ip arp off-list [ { vlan | bdi } <vlan-id> ] [ __readonly__ [ <offlist-vlan-id> <vlan-adj-cnt> ] [ <arp-sync-adj-cnt> ] { TABLE_arp_vlan_list <adj-vlan-id> <off-adj-ip-addr> <time-stamp> <arp-mac-addr> <off-adj-flags> } ]
```

## Syntax Description

|                         |  |
|-------------------------|--|
| show                    | Show running system information                  |
| ip                      | Display IP information                           |
| arp                     | Display ARP table and statistics                 |
| off-list                | Show adjacencies in off-list arp database        |
| vlan                    | (Optional) Vlan id                               |
| bdi                     | (Optional) Bridge Domain Name/Id                 |
| <i>vlan-id</i>          | (Optional) Show information for specified vlan   |
| <i>__readonly__</i>     | (Optional)                                       |
| <i>offlist-vlan-id</i>  | (Optional) Show ip arp offlist vlan-id           |
| <i>vlan-adj-cnt</i>     | (Optional) Show ip arp vlan adjacency count      |
| <i>arp-sync-adj-cnt</i> | (Optional) Show arp sync adjacency count         |
| TABLE_arp_vlan_list     | (Optional) Show ip arp vlan list                 |
| <i>adj-vlan-id</i>      | (Optional) Show ip arp adjacency vlan id         |
| <i>off-adj-ip-addr</i>  | (Optional) Show arp offlist adjacency ip address |
| <i>time-stamp</i>       | (Optional) Show duration                         |
| <i>arp-mac-addr</i>     | (Optional) Show mac address                      |
| <i>off-adj-flags</i>    | (Optional) show offlist adjacencyy flgs          |

## Command Mode

- /exec

# show ip arp open-flow error-statistics

```
show ip arp open-flow error-statistics [ __readonly__ { TABLE_ip_arp_open_flow_error_statistics [
<arp_ofa_total_err_cnt> ] [ <arp_ofa_dp_adj_err_on_del> ] [ <arp_ofa_cp_mac_mismatch_err_on_del> ] [
<arp_ofa_cp_null_mac_err_on_del> ] [ <arp_ofa_cp_no_adj_err_on_del_flag> ] [
<arp_ofa_cp_cp_nh_mismatch_err_on_del> ] [ <arp_ofa_cp_adj_del_failure_err> ] [
<arp_ofa_cp_null_mac_err_on_add> ] [ <arp_ofa_cp_dp_mac_mismatch_err_on_add> ] [
<arp_ofa_cp_cp_mac_mismatch_err_on_add> ] [ <arp_ofa_cp_added_first_err> ] [
<arp_ofa_dp_overwrite_cp_err> ] [ <arp_ofa_dp_cp_nh_mismatch_err_on_add> ] [
<arp_ofa_cp_cp_nh_mismatch_err_on_add> ] [ <arp_ofa_cp_dp_nh_mismatch_err_on_add> ] [
<arp_ofa_cp_adj_add_failure_err> ] [ <arp_ofa_barrier_response_err> ] } ]
```

### Syntax Description

|  |   |
|--|---|
| show   | Show running system information                           |
| ip   | Configure IP features                                     |
| arp  | Configure ARP parameters                                  |
| open-flow                                      | open flow   |
| error-statistics                               | IR mode specific adjacency statistics                     |
| <i>__readonly__</i>                            | (Optional)  |
| <i>TABLE_ip_arp_open_flow_error_statistics</i> | (Optional) ARP Open Flow Error Statistics                 |
| <i>arp_ofa_total_err_cnt</i>                   | (Optional) OFA total error count                          |
| <i>arp_ofa_dp_adj_err_on_del</i>               | (Optional) Controller Deleting DP adjacency error         |
| <i>arp_ofa_cp_mac_mismatch_err_on_del</i>      | (Optional) CP adjacency MAC mismatch error while delete   |
| <i>arp_ofa_cp_null_mac_err_on_del</i>          | (Optional) CP adjacency NULL mac error while delete       |
| <i>arp_ofa_cp_no_adj_err_on_del_flag</i>       | (Optional) No adjacency found while delete                |
| <i>arp_ofa_cp_cp_nh_mismatch_err_on_del</i>    | (Optional) CP adjacency NH mismatch error while delete    |
| <i>arp_ofa_cp_adj_del_failure_err</i>          | (Optional) Other errors while deleting                    |
| <i>arp_ofa_cp_null_mac_err_on_add</i>          | (Optional) CP adjacency NULL mac error while Adding       |
| <i>arp_ofa_cp_dp_mac_mismatch_err_on_add</i>   | (Optional) DP adjacency present with different mac        |
| <i>arp_ofa_cp_cp_mac_mismatch_err_on_add</i>   | (Optional) CP adjacency present with different mac        |
| <i>arp_ofa_cp_added_first_err</i>              | (Optional) CP adjacency added first                       |
| <i>arp_ofa_dp_overwrite_cp_err</i>             | (Optional) Overwriting CP adjacency with DP               |
| <i>arp_ofa_dp_cp_nh_mismatch_err_on_add</i>    | (Optional) DP adjacency already present with different NH |
| <i>arp_ofa_cp_cp_nh_mismatch_err_on_add</i>    | (Optional) CP adjacency already present with different NH |

|   |   |
|---|---|
| <i>arp_ofa_cp_dp_nh_mismatch_err_on_add</i> | (Optional) Overwriting CP adj with DP with different NH |
| <i>arp_ofa_cp_adj_add_failure_err</i>       | (Optional) Other errors while adding                    |
| <i>arp_ofa_barrier_response_err</i>         | (Optional) Barrier responses                            |

**Command Mode**

- /exec

# show ip arp snmp ptree

```
show ip arp snmp ptree { static | dynamic | virtual | typeall } [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                |
| ip                    | Display IP information                         |
| arp                   | Display ARP table and statistics               |
| snmp                  | Show only snmp ptree                           |
| ptree                 | Patricia tree                                  |
| static                | show only static adjacencies in pt tree        |
| dynamic               | show only dynamic adjacencies in pt tree       |
| virtual               | show only virtual adjacencies in pt tree       |
| typeall               | show all adjacencies in pt tree                |
| vrf                   | (Optional) Display per-VRF information         |
| <i>vrf-name</i>       | (Optional) VRF name                            |
| <i>vrf-known-name</i> | (Optional) Known VRF name                      |
| all                   | (Optional) Display ARP statistics for all vrfs |

## Command Mode

- /exec

## show ip arp statistics

```
show ip arp statistics [ <interface> ] [ interface-all ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [
__readonly__ TABLE_vrf <vrf-name-out1> [ TABLE_stat <tx-total> <tx-req> <tx-reply> <tx-req-l2>
<tx-reply-l2> <tx-grat> <tx-tunnel> <tx-drop> [ <tx-srvrport> ] [ <tx-fbrcport> ] [ <tx-fixup-core> ] [
<tx-fixup-server> ] [ <tx-fixup-rarp> ] [ <tx-anycast-glean> ] <tx-mbuf-fail> <tx-ctxt-not-crted> <tx-bad-ctxt-id>
<tx-invalid-ifindex> <tx-invalid-sip> <tx-invalid-dip> <tx-own-ip> <tx-unattached-ip> <tx-adj-create-fail>
<tx-null-sip> <tx-null-smac> <tx-client-enq-fail> <tx-dest-unreachable-proxy-arp>
<tx-dest-unreachable-enhanced-proxy> <tx-dest-l2port-track> <tx-invalid-local-proxy> <tx-invalid-proxy>
<tx-vip-not-active> <rx-total> <rx-req> <rx-reply> <rx-req-l2> <rx-reply-l2> <rx-proxy> <rx-local-proxy>
<rx-enhanced-proxy> <rx-enhanced-proxy-anycast> <rx-enhanced-proxy-l2port-track> <rx-tunnel>
<rx-fastpath> <rx-snoop> <rx-drop> <rx-srvrport> <bad-if> <bad-len> <invalid-prot> <invalid-hrd-type>
<invalid-ctxt> <ctxt-not-crted> <invalid-l2> <invalid-l3> <invalid-sip> <our-sip> <arp-if-no-mem>
<subnet-mismatch> <dir-bcast> <invalid-dip> <non-local-dst> <non-active-fhrp> <invalid-smac> <our-smac>
<not-init> <l2-prxy-en> <l2-port-untrusted> <stdby-fhrp-vip> <grat-prxy-en> <arp-req-ignore> <l2-intf>
<l2fm-query-fail> <tunnel_fail> [ <hsrp-active-vmac> ] [ <rx-intf-down> ] <refresh-req-from-clients>
<l2rib-signals> <adds> <dels> <timeouts> ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                     |
| ip                    | Display IP information                              |
| arp                   | Display ARP table and statistics                    |
| statistics            | Display ARP statistics                              |
| vrf                   | (Optional) Display per-VRF information              |
| <i>vrf-name</i>       | (Optional) VRF name                                 |
| <i>vrf-known-name</i> | (Optional) Known VRF name                           |
| all                   | (Optional) Display ARP statistics for all vrfs      |
| interface-all         | (Optional) Display ARP statistics for all interface |
| <i>interface</i>      | (Optional) ARP interface                            |
| <u>__readonly__</u>   | (Optional)  |
| TABLE_vrf             | (Optional) Table Vrf                                |
| <i>vrf-name-out1</i>  | (Optional) Show VRF name                            |
| TABLE_stat            | (Optional) Show IP ARP statistics                   |
| <i>tx-total</i>       | (Optional) Sent: total                              |
| <i>tx-req</i>         | (Optional) Sent: request                            |
| <i>tx-reply</i>       | (Optional) Sent: reply                              |



|   |  |
|---|--|
| <i>tx-req-l2</i>                          | (Optional) Sent: request on L2                       |
| <i>tx-reply-l2</i>                        | (Optional) Sent: replay on L2                        |
| <i>tx-grat</i>                            | (Optional) Sent: gratuitous                          |
| <i>tx-tunnel</i>                          | (Optional) Sent: tunnel packet                       |
| <i>tx-drop</i>                            | (Optional) Sent:Dropped packet                       |
| <i>tx-srvrport</i>                        | (Optional) Sent from Server Port                     |
| <i>tx-fbrport</i>                         | (Optional) Sent from Fabric Port                     |
| <i>tx-fixup-core</i>                      | (Optional) Sent: fixup core                          |
| <i>tx-fixup-server</i>                    | (Optional) Sent: fixup server                        |
| <i>tx-fixup-rarp</i>                      | (Optional) Sent: fixup rarp                          |
| <i>tx-anycast-glean</i>                   | (Optional) Sent: modified anycast glean              |
| <i>tx-mbuf-fail</i>                       | (Optional) Sent:MBUF operation failed                |
| <i>tx-ctxt-not-crtd</i>                   | (Optional) Sent:Context not yet created              |
| <i>tx-bad-ctxt-id</i>                     | (Optional) Sent:Invalid context                      |
| <i>tx-invalid-ifindex</i>                 | (Optional) Sent:Invalid ifindex                      |
| <i>tx-invalid-sip</i>                     | (Optional) Sent:Invalid SRC IP                       |
| <i>tx-invalid-dip</i>                     | (Optional) Sent:Invalid DEST IP                      |
| <i>tx-own-ip</i>                          | (Optional) Sent:Destination is our own IP            |
| <i>tx-unattached-ip</i>                   | (Optional) Sent:Unattached IP                        |
| <i>tx-adj-create-fail</i>                 | (Optional) Sent:Adjacency Couldn't be added          |
| <i>tx-null-sip</i>                        | (Optional) Sent:Null Source IP                       |
| <i>tx-null-smac</i>                       | (Optional) Sent: Null Source MAC                     |
| <i>tx-client-enq-fail</i>                 | (Optional) Sent: Client Enqueue Failed               |
| <i>tx-dest-unreachable-proxy-arp</i>      | (Optional) Sent: Dest. not reachable for proxy arp   |
| <i>tx-dest-unreachable-enhanced-proxy</i> | (Optional) Sent:Dest. unreachable for enhanced proxy |
| <i>tx-dest-l2port-track</i>               | (Optional) Sent:Dest. on L2 port being tracked       |
| <i>tx-invalid-local-proxy</i>             | (Optional) Sent:Invalid Local proxy arp              |
| <i>tx-invalid-proxy</i>                   | (Optional) Sent:Invalid proxy arp                    |
| <i>tx-vip-not-active</i>                  | (Optional) Sent:VIP is not active                    |

|                                       |  |
|---------------------------------------|--|
| <i>rx-total</i>                       | (Optional) Received: total                     |
| <i>rx-req</i>                         | (Optional) Received: Requests                  |
| <i>rx-reply</i>                       | (Optional) Received: Replies                   |
| <i>rx-req-l2</i>                      | (Optional) Received: Requests on L2            |
| <i>rx-reply-l2</i>                    | (Optional) Received: Replies on L2             |
| <i>rx-proxy</i>                       | (Optional) Received: Proxy arp                 |
| <i>rx-local-proxy</i>                 | (Optional) Received: Local-Proxy arp           |
| <i>rx-enhanced-proxy</i>              | (Optional) Received: Enhanced Proxy arp        |
| <i>rx-enhanced-proxy-anycast</i>      | (Optional) Received: Anycast proxy Proxy arp   |
| <i>rx-enhanced-proxy-l2port-track</i> | (Optional) Received: L2 Port-track Proxy arp   |
| <i>rx-tunnel</i>                      | (Optional) Received: Tunneled                  |
| <i>rx-fastpath</i>                    | (Optional) Received: Fastpath                  |
| <i>rx-snoop</i>                       | (Optional) Received: Snooped                   |
| <i>rx-drop</i>                        | (Optional) Received: Dropped                   |
| <i>rx-srvrport</i>                    | (Optional) Received: on Server Port            |
| <i>bad-if</i>                         | (Optional) Appeared on a wrong interface       |
| <i>bad-len</i>                        | (Optional) Incorrect length                    |
| <i>invalid-prot</i>                   | (Optional) Invalid protocol packet             |
| <i>invalid-hrd-type</i>               | (Optional) Invalid Hardware type               |
| <i>invalid-ctxt</i>                   | (Optional) Invalid context                     |
| <i>ctxt-not-crtd</i>                  | (Optional) Context not yet created             |
| <i>invalid-l2</i>                     | (Optional) Invalid layer 2 address length      |
| <i>invalid-l3</i>                     | (Optional) Invalid layer 3 address length      |
| <i>invalid-sip</i>                    | (Optional) Invalid source IP address           |
| <i>our-sip</i>                        | (Optional) Source IP address is our own        |
| <i>arp-if-no-mem</i>                  | (Optional) No mem to create per intf structure |
| <i>subnet-mismatch</i>                | (Optional) Source address mismatch with subnet |
| <i>dir-bcast</i>                      | (Optional) Directed broadcast source           |
| <i>invalid-dip</i>                    | (Optional) Invalid destination IP address      |

|                                 |  |
|---------------------------------|--|
| <i>non-local-dst</i>            | (Optional) Non-local destination IP address                        |
| <i>non-active-fhrp</i>          | (Optional) Non-active FHRP dest IP address. Learn and drop         |
| <i>invalid-smac</i>             | (Optional) Invalid source MAC address                              |
| <i>our-smac</i>                 | (Optional) Source MAC address is our own                           |
| <i>not-init</i>                 | (Optional) Received before arp initialization                      |
| <i>l2-prxy-en</i>               | (Optional) L2 packet on proxy-arp-enabled interface                |
| <i>l2-port-untrusted</i>        | (Optional) L2 packet on untrusted L2 port                          |
| <i>stdby-fhrp-vip</i>           | (Optional) Packet with VIP on standby FHRP                         |
| <i>grat-prxy-en</i>             | (Optional) Grat arp received on proxy-arp-enabled interface        |
| <i>arp-req-ignore</i>           | (Optional) Requests came for existing entries                      |
| <i>l2-intf</i>                  | (Optional) Requests came on a L2 interface                         |
| <i>l2fm-query-fail</i>          | (Optional) L2FM query failed for a L2 Address                      |
| <i>tunnel_fail</i>              | (Optional) Dropping due to tunneling failures                      |
| <i>hsrp-active-vmac</i>         | (Optional) Dropping due to HSRP standby receiving HSRP active vmac |
| <i>rx-intf-down</i>             | (Optional) Received Interface Down                                 |
| <i>refresh-req-from-clients</i> | (Optional) Refresh requests received from clients                  |
| <i>l2rib-signals</i>            | (Optional) Signals received from L2rib                             |
| <i>adds</i>                     | (Optional) Adds  |
| <i>dels</i>                     | (Optional) Deletes   |
| <i>timeouts</i>                 | (Optional) Timeouts  |

**Command Mode**

- /exec

# show ip arp suppression-cache

```
show ip arp suppression-cache { detail [ vlan <vlan_id> ] | summary | statistics | vlan <vlan_id> | local [ vlan
<vlan_id> ] | remote [ vlan <vlan_id> ] } [ __readonly__ TABLE_arp-suppression [ TABLE_entries <ip-addr>
<age> <mac> <vlan> <physical-iod> <flag> ] [ TABLE_summary <remote-count> <local-count> <total-count>
] [ TABLE_stats TABLE_suppressed <total> <requests> <requests-on-l2> <gratuitous> <gratuitous-on-l2>
TABLE_forwarded <total-sent> <requests-sent> <replies-sent> <requests-on-core-sent> <replies-on-core-sent>
<dropped-sent> <requests-on-l2-sent> <replies-on-l2-sent> <requests-on-core-l2-sent>
<replies-on-core-l2-sent> <dropped-l2-sent> TABLE_received <total-recv> <requests-recv> <replies-recv>
<local-requests-recv> <local-replies-recv> <gratuitous-recv> <dropped-recv> <requests-on-l2-recv>
<replies-on-l2-recv> <gratuitous-l2-recv> <dropped-l2-recv> TABLE_entrystats <adds> <dels> ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ip                    | Display IP information                      |
| arp                   | Display ARP table and statistics            |
| suppression-cache     | arp-suppression-cache                       |
| detail                | show details                                |
| summary               | show summary                                |
| statistics            | show statistics                             |
| local                 | show local entries                          |
| remote                | show remote entries                         |
| vlan                  | (Optional) L2vlan                           |
| <i>vlan_id</i>        | (Optional) Vlan                             |
| <i>__readonly__</i>   | (Optional)                                  |
| TABLE_arp-suppression | (Optional) IP ARP suppression-cache         |
| TABLE_entries         | (Optional) IP ARP suppression entries       |
| <i>ip-addr</i>        | (Optional) IP address                       |
| <i>age</i>            | (Optional) Age                              |
| <i>mac</i>            | (Optional) MAC address                      |
| <i>vlan</i>           | (Optional) vlan id                          |
| <i>physical-iod</i>   | (Optional) Physical iod                     |
| <i>flag</i>           | (Optional) Flags                            |
| TABLE_summary         | (Optional) IP ARP suppression-cache Summary |

|                                 |   |
|---------------------------------|---|
| <i>remote-count</i>             | (Optional) Remote count                       |
| <i>local-count</i>              | (Optional) Local count                        |
| <i>total-count</i>              | (Optional) Total count                        |
| TABLE_stats                     | (Optional) Show IP ARP suppression statistics |
| TABLE_suppressed                | (Optional) Suppressed table                   |
| <i>total</i>                    | (Optional) total                              |
| <i>requests</i>                 | (Optional) request                            |
| <i>requests-on-l2</i>           | (Optional) requests-on-l2                     |
| <i>gratuitous</i>               | (Optional) gratuitous                         |
| <i>gratuitous-on-l2</i>         | (Optional) gratuitous-on-l2                   |
| TABLE_forwarded                 | (Optional) Forwarded table                    |
| <i>total-sent</i>               | (Optional) total                              |
| <i>requests-sent</i>            | (Optional) Requests sent on L3                |
| <i>replies-sent</i>             | (Optional) Replies sent on L3                 |
| <i>requests-on-core-sent</i>    | (Optional) Request on core port               |
| <i>replies-on-core-sent</i>     | (Optional) Reply on core port                 |
| <i>dropped-sent</i>             | (Optional) Dropped                            |
| <i>requests-on-l2-sent</i>      | (Optional) Requests on L2                     |
| <i>replies-on-l2-sent</i>       | (Optional) Replies on L2                      |
| <i>requests-on-core-l2-sent</i> | (Optional) Request on core port L2            |
| <i>replies-on-core-l2-sent</i>  | (Optional) Reply on core port L2              |
| <i>dropped-l2-sent</i>          | (Optional) Dropped on L2                      |
| TABLE_received                  | (Optional) Received                           |
| <i>total-recv</i>               | (Optional) Total                              |
| <i>requests-recv</i>            | (Optional) Requests on L3 mode                |
| <i>replies-recv</i>             | (Optional) Replies on L3 mode                 |
| <i>local-requests-recv</i>      | (Optional) Local Request                      |
| <i>local-replies-recv</i>       | (Optional) Local Responses                    |
| <i>gratuitous-recv</i>          | (Optional) Gratuitous on L3 mode              |

|                            |   |
|----------------------------|---|
| <i>dropped-recv</i>        | (Optional) Dropped on L3 mode                           |
| <i>requests-on-l2-recv</i> | (Optional) Requests on L2 mode                          |
| <i>replies-on-l2-recv</i>  | (Optional) Replies on L2 mode                           |
| <i>gratuitous-l2-recv</i>  | (Optional) Gratuitous on L2 mode                        |
| <i>dropped-l2-recv</i>     | (Optional) Dropped on L2 mode                           |
| TABLE_entrystats           | (Optional) ARP suppression-cache Local entry statistics |
| <i>adds</i>                | (Optional) Adds   |
| <i>dels</i>                | (Optional) Deletes                                      |

**Command Mode**

- /exec

## show ip arp suppression topo-info

```
show ip arp suppression topo-info [ <topo-id> ] [ __readonly__ { TABLE_ip_arp_suppression_topo_info [
<ip_arp_suppression_topo_id> ] [ <ip_arp_suppression_mode> ] } ]
```

### Syntax Description

|                                    |  |
|------------------------------------|--|
| show                               | Show running system information                |
| ip                                 | Configure IP features                          |
| arp                                | Configure ARP parameters                       |
| suppression                        | ARP-suppression based event                    |
| topo-info                          | E-VPN identifier                               |
| <i>topo-id</i>                     | (Optional) E-VPN identifier (VLAN-ID or BD-ID) |
| <i>__readonly__</i>                | (Optional)                                     |
| TABLE_ip_arp_suppression_topo_info | (Optional) Show suppression topo-info          |
| <i>ip_arp_suppression_topo_id</i>  | (Optional) Show ARP suppression topo_id        |
| <i>ip_arp_suppression_mode</i>     | (Optional) Show ARP suppression mode           |

### Command Mode

- /exec

## show ip arp tunnel-statistics

```
show ip arp tunnel-statistics [ __readonly__ { TABLE_ip_arp_tunnel_stat [ <arp-tun-pkt-rcv-cnt> ] [
<arp-tun-pkt-rcv-ing-vpc> ] [ <arp-tun-pkt-rcv-ing-gpc> ] [ <arp-tun-pkt-rcv-ing-orp-vpc> ] [
<arp-tun-pkt-rcv-ing-orp-vpc-pl> ] [ <arp-tun-pkt-snd-cnt> ] [ <arp-tun-pkt-snd-snoop-cnt> ] [
<arp-tun-pkt-snd-non-local-vip-cnt> ] [ <arp-tun-pkt-snd-peer-gate-cnt> ] [ <arp-tun-pkt-snd-ing-vpc> ] [
<arp-tun-pkt-snd-ing-gpc> ] [ <arp-tun-pkt-snd-ing-orp-vpc> ] [ <arp-tun-pkt-snd-ing-orp-vpc-pl> ] [
<arp-tun-pkt-rcv-drp-cnt> ] [ <arp-tun-pkt-snd-drp-cnt> ] [ <arp-tun-pkt-snd-drp-snd-fail-cnt> ] [
<arp-tun-pkt-rcv-drp-ver-cnt> ] [ <arp-tun-pkt-rcv-drp-pl-cnt> ] [ <arp-tun-pkt-rcv-drp-ing-non-mct> ] [
<arp-tun-pkt-rcv-drp-inv-ing-intf> ] [ <arp-tun-pkt-snd-drp-inv-ing-intf> ] [
<arp-tun-pkt-rcvdrp-inv-gpc-core-sw> ] [ <arp-tun-pkt-rcvdrp-inv-gpc-peer-sw> ] [ <arp-tun-pkt-drp-inv-mccc>
] [ <arp-tun-pkt-im-api-fail> ] [ <arp-tun-pkt-drp-ctxt-inv> ] [ <arp-tun-pkt-drp-mct-dwn> ] [
<arp-tun-pkt-rcv-drp-mbuf-op-fail> ] [ <arp-tun-pkt-snd-drp-mbuf-op-fail> ] [ <arp-tun-pkt-snd-drp-tunnel>
] [ <arp-tun-pkt-snd-drp-ce> ] [ <arp-tun-pkt-snd-drp-inv-gpc> ] [ <arp-tun-pkt-rcv-drp-inv-gpc> ] [
<arp-tun-pkt-sys-mcccm-key-not-found> ] } ]
```

### Syntax Description

|  |  |
|--|--|
| show                                     | Show running system information                        |
| ip                                       | Display IP information                                 |
| arp                                      | Display ARP table and statistics                       |
| tunnel-statistics                        | Display ARP statistics for tunneled packets            |
| __readonly__                             | (Optional)   |
| TABLE_ip_arp_tunnel_stat                 | (Optional) ARP Tunnel statistics                       |
| <i>arp-tun-pkt-rcv-cnt</i>               | (Optional) Total tunneled packets received             |
| <i>arp-tun-pkt-rcv-ing-vpc</i>           | (Optional) Tunneled packets rx for ingress vPC         |
| <i>arp-tun-pkt-rcv-ing-gpc</i>           | (Optional) Tunneled packets rx for ingress GPC         |
| <i>arp-tun-pkt-rcv-ing-orp-vpc</i>       | (Optional) Tunneled Packets rx for ingress orphan vPC  |
| <i>arp-tun-pkt-rcv-ing-orp-vpc-pl</i>    | (Optional) Tunneled Packets rx for ingress orphan vPC+ |
| <i>arp-tun-pkt-snd-cnt</i>               | (Optional) Total tunneled packets sent                 |
| <i>arp-tun-pkt-snd-snoop-cnt</i>         | (Optional) Tunneled packets Sent for ARP Snoop         |
| <i>arp-tun-pkt-snd-non-local-vip-cnt</i> | (Optional) Tunneled packets sent for Non-Local VIP     |
| <i>arp-tun-pkt-snd-peer-gate-cnt</i>     | (Optional) Tunneled Packets sent for Peer Gateway      |
| <i>arp-tun-pkt-snd-ing-vpc</i>           | (Optional) Tunneled packets tx for ingress vPC         |
| <i>arp-tun-pkt-snd-ing-gpc</i>           | (Optional) Tunneled packets tx for ingress GPC         |
| <i>arp-tun-pkt-snd-ing-orp-vpc</i>       | (Optional) Tunneled Packets tx for ingress orphan vPC  |



|  |  |
|--|--|
| <i>arp-tun-pkt-snd-ing-orp-vpc-pl</i>      | (Optional) Tunneled Packets tx for ingress orphan vPC+ |
| <i>arp-tun-pkt-rcv-drp-cnt</i>             | (Optional) Total tunnel packets rcv dropped            |
| <i>arp-tun-pkt-snd-drp-cnt</i>             | (Optional) Total tunnel packets send dropped           |
| <i>arp-tun-pkt-snd-drp-snd-fail-cnt</i>    | (Optional) Drops due to send failed                    |
| <i>arp-tun-pkt-rcv-drp-ver-cnt</i>         | (Optional) Received packet with invalid version        |
| <i>arp-tun-pkt-rcv-drp-pl-cnt</i>          | (Optional) Received packet with invalid payload type   |
| <i>arp-tun-pkt-rcv-drp-ing-non-mct</i>     | (Optional) Received packet on non mct interface        |
| <i>arp-tun-pkt-rcv-drp-inv-ing-intf</i>    | (Optional) Received packet with invalid ingress port   |
| <i>arp-tun-pkt-snd-drp-inv-ing-intf</i>    | (Optional) Drop send packets for invalid ingress port  |
| <i>arp-tun-pkt-rcvdrp-inv-gpc-core-sw</i>  | (Optional) Drop rcv pkt, invalid GPC of core switch    |
| <i>arp-tun-pkt-rcvdrp-inv-gpc-peer-sw</i>  | (Optional) Drop rcv pkt, invalid GPC of peer switch    |
| <i>arp-tun-pkt-drp-inv-mcec</i>            | (Optional) Failed to retrieve vPC ID while processing  |
| <i>arp-tun-pkt-im-api-fail</i>             | (Optional) IM api failed while processing              |
| <i>arp-tun-pkt-drp-ctxt-inv</i>            | (Optional) Drop tunnel packet as context is invalid    |
| <i>arp-tun-pkt-drp-mct-dwn</i>             | (Optional) Drop tunnel packet as mct is down           |
| <i>arp-tun-pkt-rcv-drp-mbuf-op-fail</i>    | (Optional) Drop rcv packets as mbuf operation failed   |
| <i>arp-tun-pkt-snd-drp-mbuf-op-fail</i>    | (Optional) Drop send packets as mbuf operation failed  |
| <i>arp-tun-pkt-snd-drp-tunnel</i>          | (Optional) Cannot tunnel a incoming tunneled packet    |
| <i>arp-tun-pkt-snd-drp-ce</i>              | (Optional) Cannot tunnel in a CE network               |
| <i>arp-tun-pkt-snd-drp-inv-gpc</i>         | (Optional) Drop send pkt, failed in retrieving the GPC |
| <i>arp-tun-pkt-rcv-drp-inv-gpc</i>         | (Optional) Drop rcv pkt, failed in retrieving the GPC  |
| <i>arp-tun-pkt-sys-mcecm-key-not-found</i> | (Optional) MCEC_ID to PHY_IF_INDEX not found in DB     |

**Command Mode**

- /exec

# show ip arp unnum-svi-adj

show ip arp unnum-svi-adj

## Syntax Description

|               |                                 |
|---------------|---------------------------------|
| show          | Show running system information |
| ip            | Configure IP features           |
| arp           | Configure ARP parameters        |
| unnum-svi-adj | Ip unnumbered SVI adjacency     |

## Command Mode

- /exec

# show ip arp vaddr

show ip arp vaddr

## Syntax Description

|       |                                  |
|-------|----------------------------------|
| show  | Show running system information  |
| ip    | Display IP information           |
| arp   | Display ARP table and statistics |
| vaddr | Display VADDR ARP table          |

## Command Mode

- /exec

## show ip arp vpc-statistics

```
show ip arp vpc-statistics [ __readonly__ { TABLE_arp_vpc_stats [ <arp-pro-drp-pull-disable> ] [
<arp-pro-drp-push-msg-disable> ] [ <arp-pro-ign-snd-pull-disabe> ] [ <arp-ign-snd-push-disable> ] [
<arp-drp-im-fail> ] [ <arp-drp-mcecm-fail> ] [ <arp-drp-invalid-pc-iod> ] [ <arp-drp-pt-lookup-fail> ] [
<arp-drp-resp-fail-no-mct> ] [ <arp-drp-resp-fail> ] [ <arp-mcecm-ifidx-vpc-fail> ] [
<arp-mcecm-vpc-ifidx-fail> ] [ <arp-periodic-mcecm-ifidx-vpc-fail> ] [ <arp-resp-sent> ] [ <arp-resp-recvd>
] [ <arp-resp-recv-err> ] [ <arp-rcvd-msg> ] [ <arp-send-fail> ] [ <arp-cfs-rel-dlvry-fail> ] [
<arp-cfs-rel-dnvry-suc> ] [ <arp-drp-pt-add-fail> ] [ <arp-drp-no-mem> ] [ <arp-drp-tmr-cre-fail> ] [
<arp-drp-add-adj-fail> ] [ <arp-off-drp-pt-lookup-fail> ] [ <arp-dont-drp-vlan-mismat> ] [ <arp-drp-svi-invalid>
] [ <arp-dont-drop-sv-down> ] [ <arp-drp-mct-down> ] [ <arp-drp-ctxt-invalid> ] [ <arp-drp-vrf-invalid> ] [
<arp-drp-l3addr-invalid> ] [ <arp-drp-l3addr-sanity-fail> ] [ <arp-drp-mac-sanity-fail> ] [ <arp-own-rtr-mac>
] [ <arp-drp-own-ipaddr> ] [ <arp-drp-own-vipaddr> ] [ <arp-drp-adj-fail> ] [ <arp-drp-subnet-mismatch> ] [
<arp-drp-adj-exist> ] [ <arp-dont-drp-ip-not-enable> ] [ <arp-drp-inval-phy-iod> ] [ <arp-drp-total-cnt> ] [
<arp-dont-drop-total-cnt> ] [ <arp-add-adj> ] [ <arp-del-adj> ] [ <arp-adj-already-exist> ] [
<arp-sync-recv-op-add-adj> ] [ <arp-sync-recv-op-del-adj> ] [ <arp-sync-push-msg-adj-cnt> ] [
<arp-sync-send-op-add-adj> ] [ <arp-sync-send-op-del-adj> ] [ <arp-sync-adj-cnt> ] [ <arp-sync-addadj-fail>
] [ <arp-sync-drp-svi-inv> ] [ <arp-sync-drp-svi-dwn> ] [ <arp-sync-drp-ctxt-inv> ] [ <arp-sync-null-adj> ]
] [ <arp-sync-invalid-ip> ] [ <arp-periodic-sync-adj-l2-suppl-cnt> ] } ] ]
```

### Syntax Description

|  |  |
|--|--|
| show                                     | Show running system information                                      |
| ip                                       | Display IP information   |
| arp                                      | Display ARP table and statistics                                     |
| vpc-statistics                           | Show vPC global statistics   |
| __readonly__                             | (Optional)   |
| TABLE_arp_vpc_stats                      | (Optional) Arp Vpc statistics  |
| <i>arp-mcecm-ifidx-vpc-fail</i>          | (Optional) Unable to retrieve VPC id from ifidx                      |
| <i>arp-mcecm-vpc-ifidx-fail</i>          | (Optional) Unable to retrieve ifidx from VPC id                      |
| <i>arp-periodic-mcecm-ifidx-vpc-fail</i> | (Optional) Unable to retrieve ifidx from VPC id during periodic sync |
| <i>arp-sync-recv-op-add-adj</i>          | (Optional) Total adjacencies recieved from peer to add               |
| <i>arp-sync-recv-op-del-adj</i>          | (Optional) Total adjacencies received from peer to delete            |
| <i>arp-sync-push-msg-adj-cnt</i>         | (Optional) Total gross adjacencies sent periodically                 |
| <i>arp-sync-send-op-add-adj</i>          | (Optional) Total adjacencies sent to peer to add                     |
| <i>arp-sync-send-op-del-adj</i>          | (Optional) Total adjacencies sent to peer to delete                  |
| <i>arp-sync-adj-cnt</i>                  | (Optional) Total periodic sync adjacencies                           |
| <i>arp-sync-addadj-fail</i>              | (Optional) Failure in adding adjacencies while periodic sync send    |

|  |  |
|--|--|
| <i>arp-sync-drp-svi-inv</i>              | (Optional) Total drops during periodic sync because of invalid svi       |
| <i>arp-sync-drp-svi-dwn</i>              | (Optional) Total drops during periodic sync because of svi down          |
| <i>arp-sync-drp-ctxt-inv</i>             | (Optional) Total drops during periodic sync because of invalid context   |
| <i>arp-sync-null-adj</i>                 | (Optional) Total drops while processing syne of NULL Adjacencies         |
| <i>arp-sync-invalid-ip</i>               | (Optional) Total drops while processing sync because of NULL IP          |
| <i>arp-periodic-sync-adj-l2-supp-cnt</i> | (Optional) Total periodic sync adjacencies added for L2 suppression case |
| <i>arp-pro-drp-pull-disable</i>          | (Optional) Drop the received CFS pull request                            |
| <i>arp-pro-drp-push-msg-disable</i>      | (Optional) Drop the received CFS push message                            |
| <i>arp-pro-ign-snd-pull-disabe</i>       | (Optional) Ignore to send pull request using CFSOE                       |
| <i>arp-ign-snd-push-disable</i>          | (Optional) Ignore to send push message using CFSOE                       |
| <i>arp-drp-im-fail</i>                   | (Optional) IM api failed while processing CFS payload                    |
| <i>arp-drp-mcecm-fail</i>                | (Optional) MCECM api failed while processing CFS payload                 |
| <i>arp-drp-invalid-pc-iod</i>            | (Optional) Invalid MCT port-channel iod                                  |
| <i>arp-drp-pt-lookup-fail</i>            | (Optional) PT lookup failed while processing CFS payload                 |
| <i>arp-drp-resp-fail-no-mct</i>          | (Optional) Sending CFS response failed due to invalid MCT iod            |
| <i>arp-drp-resp-fail</i>                 | (Optional) Sending CFS response failed                                   |
| <i>arp-resp-sent</i>                     | (Optional) Response sent via CFSOE                                       |
| <i>arp-resp-recvd</i>                    | (Optional) Response received via CFSOE                                   |
| <i>arp-resp-recv-err</i>                 | (Optional) Response received via CFSOE with errors                       |
| <i>arp-rcvd-msg</i>                      | (Optional) Received message via CFSOE                                    |
| <i>arp-send-fail</i>                     | (Optional) Send message failed via CFSOE                                 |
| <i>arp-cfs-rel-dlvry-fail</i>            | (Optional) MCECM send api failed via CFSOE                               |
| <i>arp-cfs-rel-dnvry-suc</i>             | (Optional) Send message succeeded via CFSOE                              |
| <i>arp-drp-pt-add-fail</i>               | (Optional) PT add failed while processing offlist                        |
| <i>arp-drp-no-mem</i>                    | (Optional) Memory alloc failed while processing offlist database         |
| <i>arp-drp-tmr-cre-fail</i>              | (Optional) Timer create failed while processing offlist database         |
| <i>arp-drp-add-adj-fail</i>              | (Optional) Adjacency addition failed while processing offlist database   |
| <i>arp-off-drp-pt-lookup-fail</i>        | (Optional) PT lookup failed while processing offlist database            |

|                                   |   |
|-----------------------------------|---|
| <i>arp-dont-drp-vlan-mismat</i>   | (Optional) VLAN mismatch while processing offlist database        |
| <i>arp-drp-svi-invalid</i>        | (Optional) SVI is invalid while processing offlist database       |
| <i>arp-dont-drop-sv-down</i>      | (Optional) SVI is down while processing offlist database          |
| <i>arp-drp-mct-down</i>           | (Optional) MCT is down while processing offlist database          |
| <i>arp-drp-ctxt-invalid</i>       | (Optional) Ctxt_type is invalid while processing offlist database |
| <i>arp-drp-vrf-invalid</i>        | (Optional) VRF is invalid while processing offlist database       |
| <i>arp-drp-l3addr-invalid</i>     | (Optional) VRF is invalid while processing offlist database       |
| <i>arp-drp-l3addr-sanity-fail</i> | (Optional) IP address sanity failed                               |
| <i>arp-drp-mac-sanity-fail</i>    | (Optional) MAC address sanity failed                              |
| <i>arp-own-rtr-mac</i>            | (Optional) Our own router mac                                     |
| <i>arp-drp-own-ipaddr</i>         | (Optional) Our own ip address                                     |
| <i>arp-drp-own-vipadd</i>         | (Optional) Our own virtual ip address                             |
| <i>arp-drp-adj-fail</i>           | (Optional) Create adjacency failed                                |
| <i>arp-drp-subnet-mismatch</i>    | (Optional) Subnet mismatch  |
| <i>arp-drp-adj-exist</i>          | (Optional) Entry exists   |
| <i>arp-dont-drp-ip-not-enable</i> | (Optional) IP not enabled on interface                            |
| <i>arp-drp-inval-phy-iod</i>      | (Optional) Physical interface invalid                             |
| <i>arp-drp-total-cnt</i>          | (Optional) Total drop count                                       |
| <i>arp-dont-drop-total-cnt</i>    | (Optional) Total don't drop count                                 |
| <i>arp-add-adj</i>                | (Optional) Total adjacency additions                              |
| <i>arp-del-adj</i>                | (Optional) Total adjacency deletions                              |
| <i>arp-adj-already-exist</i>      | (Optional) Total adjacencies ignored as already exist             |

**Command Mode**

- /exec

# show ip as-path-access-list

```
show ip as-path-access-list [ <aspl-name> | <aspl-cfg-name> ] [ __readonly__ TABLE_aspl <name> <action>
<rule> ]
```

## Syntax Description

|                      |   |
|----------------------|---|
| show                 | Show running system information           |
| ip                   | Display IP information                    |
| as-path-access-list  | List AS path access lists                 |
| <i>aspl-name</i>     | (Optional) AS path access list name       |
| <i>aspl-cfg-name</i> | (Optional) Known as-path access-list name |
| <i>__readonly__</i>  | (Optional)                                |
| TABLE_aspl           | (Optional)                                |
| <i>name</i>          | (Optional)                                |
| <i>action</i>        | (Optional)                                |
| <i>rule</i>          | (Optional)                                |

## Command Mode

- /exec

# show ip bgp

```
show { ip mbgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] | ip bgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] all | ip bgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] [ ipv4 { unicast | multicast } ] } { rib-install | rib-uninstall | rib-pending } [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                                 |
| ip                    | Display IP information  |
| bgp                   | Display BGP status and configuration                            |
| mbgp                  | Display MBGP status and configuration                           |
| vrf                   | (Optional) Virtual Router Context                               |
| <i>vrf-name</i>       | (Optional) VRF name   |
| <i>vrf-known-name</i> | (Optional) Known VRF name                                       |
| ipv4                  | (Optional) Display BGP information for IPv4 address family      |
| unicast               | (Optional) Display BGP information for unicast address family   |
| multicast             | (Optional) Display BGP information for multicast address family |
| all                   | Display BGP information for all address families                |
| rib-install           | Routes installed in RIB   |
| rib-uninstall         | Routes not installed in RIB                                     |
| rib-pending           | Routes not acknowledged by RIB                                  |

## Command Mode

- /exec



# show ip cache

```
show ip cache { { brief | detail } | { interface [ <intf> ] } } [ operational ]
```

## Syntax Description

|             |   |
|-------------|---|
| show        | Show running system information                                       |
| ip          | Display IP information  |
| cache       | Display ip cache  |
| brief       | Display summary of ip interface status and configuration              |
| detail      | Display detailed information of ip interface status and configuration |
| operational | (Optional) Display only interfaces that are administratively enabled  |
| interface   | Display ip related interface information                              |
| <i>intf</i> | (Optional) Interface name to display                                  |

## Command Mode

- /exec



# show ip community-list

```
show ip community-list [ <cl_name> ] [ __readonly__ TABLE_cl <name> <action> <rule> ]
```

## Syntax Description

|                     |   |
|---------------------|---|
| show                | Show running system information                     |
| ip                  | Display IP information                              |
| community-list      | List community-list                                 |
| <i>cl_name</i>      | (Optional) Standard or expanded community-list name |
| <i>__readonly__</i> | (Optional)  |
| <i>TABLE_cl</i>     | (Optional)  |
| <i>name</i>         | (Optional)  |
| <i>action</i>       | (Optional)  |
| <i>rule</i>         | (Optional)  |

## Command Mode

- /exec

# show ip debug

show ip debug

## Syntax Description

|       |                                       |
|-------|---------------------------------------|
| show  | Show running system information       |
| ip    | Display IP information                |
| debug | Display IP debug-filter configuration |

## Command Mode

- /exec

## show ip dhcp global statistics

```
show ip dhcp global statistics [ __readonly__ <pkts_processed> <pkts_recvd_through_cfsoe> <pkts_fwded>
<pkts_cfsoe_fwded> <pkts_dropped> <pkts_dropped_from_untrusted_ports>
<pkts_dropped_src_mac_chk_fail> <pkts_dropped_opt82_ins_fail> <pkts_dropped_unknown_op_intf>
<pkts_dropped_unknown_pkt> <pkts_dropped_no_trust_inf> <pkts_dropped_unknown_pkt>
<pkts_dropped_relay_disable> <pkts_dropped_no_binding_entry> <pkts_dropped_interface_error>
<pkts_dropped_max_hops_exceeded> ]
```

### Syntax Description

|  |  |
|--|--|
| show                                     | Show running system information                                |
| ip                                       | Show the IP features of the system                             |
| dhcp                                     | Show information about DHCP                                    |
| global                                   | DHCP global stats  |
| statistics                               | Statistics related to DHCP                                     |
| <i>__readonly__</i>                      | (Optional) Read only   |
| <i>pkts_processed</i>                    | (Optional) Packets processed                                   |
| <i>pkts_recvd_through_cfsoe</i>          | (Optional) Packets received through cfsoe                      |
| <i>pkts_fwded</i>                        | (Optional) Packets forwarded                                   |
| <i>pkts_cfsoe_fwded</i>                  | (Optional) Packets forwarded on cfsoe                          |
| <i>pkts_dropped</i>                      | (Optional) Total packets dropped                               |
| <i>pkts_dropped_from_untrusted_ports</i> | (Optional) Packets dropped from untrusted ports                |
| <i>pkts_dropped_src_mac_chk_fail</i>     | (Optional) Packets dropped due to MAC address check failure    |
| <i>pkts_dropped_opt82_ins_fail</i>       | (Optional) Packets dropped due to Option 82 insertion failure  |
| <i>pkts_dropped_unknown_op_intf</i>      | (Optional) Packets dropped due to o/p intf unknown             |
| <i>pkts_dropped_unknown_pkt</i>          | (Optional) Packets dropped which were unknown                  |
| <i>pkts_dropped_no_trust_inf</i>         | (Optional) Packets dropped due to no trusted ports             |
| <i>pkts_dropped_relay_disable</i>        | (Optional) Packets dropped due to dhcp relay not enabled       |
| <i>pkts_dropped_no_binding_entry</i>     | (Optional) Packets dropped due to no binding entry             |
| <i>pkts_dropped_interface_error</i>      | (Optional) Packets dropped due to interface error/no interface |
| <i>pkts_dropped_max_hops_exceeded</i>    | (Optional) Packets dropped due to max hops exceeded            |

### Command Mode

- /exec

## show ip dhcp option82 suboption info interface

```
show ip dhcp option82 suboption info interface [ <intf> ] [ __readonly__ TABLE_intf_option82 <intf_header>
<intf_name> <option82_status> <suboption_string> <tx_count> ]
```

### Syntax Description

|                            |   |
|----------------------------|---|
| show                       | Show running system information                       |
| ip                         | Show the IP features of the system                    |
| dhcp                       | Show items in DHCP                                    |
| option82                   | DHCP option82   |
| suboption                  | DHCP option82 suboption                               |
| info                       | DHCP option82 suboption information                   |
| interface                  | DHCP option82 suboption information of all interfaces |
| <i>intf</i>                | (Optional) interface                                  |
| <i>__readonly__</i>        | (Optional) Read only                                  |
| <i>TABLE_intf_option82</i> | (Optional)  |
| <i>intf_header</i>         | (Optional)  |
| <i>intf_name</i>           | (Optional)  |
| <i>option82_status</i>     | (Optional)  |
| <i>suboption_string</i>    | (Optional)  |
| <i>tx_count</i>            | (Optional)  |

### Command Mode

- /exec

## show ip dhcp relay

```
show ip dhcp relay [ __readonly__ <relay_service_enable> <relay_opt82_enable> <relay_opt82_customize>
<relay_subopt_VPN_enable> <relay_subopt_type_cisco_enable> <global_smart-relay_enable>
<global_relay_trusted_enable> <relay_trusted_port_enable> <global_src_addr_hsrp_enable>
<smart_relay_intfs_hdr> [ TABLE_intf<smart_relay_enabled_intfs> ] <subnet_bcast_intfs_hdr> [ TABLE_intf
<subnet_bcast_enabled_intfs> ] <trusted_port_intfs_hdr> [ TABLE_intf<trusted_port_enabled_intfs> ]
<relay_src_addr_hsrp_hdr> [ TABLE_intf<src_addr_hsrp_enabled_intfs> ] <relay_address_hdr> [ TABLE_intf
<intf> <relay_address> <vrf_name> ] ]
```

### Syntax Description

|                                       |  |
|---------------------------------------|--|
| show                                  | Show running system information                              |
| ip                                    | Show the IP features of the system                           |
| dhcp                                  | Show items in DHCP   |
| relay                                 | DHCP relay   |
| <i>__readonly__</i>                   | (Optional) Read only   |
| <i>relay_service_enable</i>           | (Optional)   |
| <i>relay_opt82_enable</i>             | (Optional)   |
| <i>relay_opt82_customize</i>          | (Optional)   |
| <i>relay_subopt_VPN_enable</i>        | (Optional)   |
| <i>relay_subopt_type_cisco_enable</i> | (Optional)   |
| <i>global_smart-relay_enable</i>      | (Optional)   |
| <i>global_relay_trusted_enable</i>    | (Optional)   |
| <i>relay_trusted_port_enable</i>      | (Optional)   |
| <i>global_src_addr_hsrp_enable</i>    | (Optional) V4 Relay src-addr hsrp is globally enabled or not |
| <i>smart_relay_intfs_hdr</i>          | (Optional) Smart relay interfaces header                     |
| TABLE_intf                            | (Optional)   |
| <i>smart_relay_enabled_intfs</i>      | (Optional) smart-relay enabled interfaces                    |
| <i>subnet_bcast_intfs_hdr</i>         | (Optional) Subnet broadcast interfaces header                |
| TABLE_intf                            | (Optional)   |
| <i>subnet_bcast_enabled_intfs</i>     | (Optional) subnet_bcast enabled interfaces                   |
| <i>trusted_port_intfs_hdr</i>         | (Optional) Trusted port interfaces header                    |
| TABLE_intf                            | (Optional)   |



|                                    |  |
|------------------------------------|--|
| <i>trusted_port_enabled_intfs</i>  | (Optional) trusted_port enabled interfaces                 |
| <i>relay_src_addr_hsrp_hdr</i>     | (Optional) Header for V4 Relay src-addr enabled interfaces |
| TABLE_intf                         | (Optional)   |
| <i>src_addr_hsrp_enabled_intfs</i> | (Optional) source-address hsrp enabled interfaces          |
| <i>relay_address_hdr</i>           | (Optional) relay address header                            |
| TABLE_intf                         | (Optional) Table for list of interfaces                    |
| <i>intf</i>                        | (Optional) interface name                                  |
| <i>relay_address</i>               | (Optional) helper address                                  |
| <i>vrf_name</i>                    | (Optional) vrf name  |

**Command Mode**

- /exec

# show ip dhcp relay address

```
show ip dhcp relay address [ interface <intf-range> ] [ __readonly__ <intf_header> [ TABLE_intf <intf2>
<relay_address> <vrf_name> ] ]
```

## Syntax Description

|                      |  |
|----------------------|--|
| show                 | Show running system information                |
| ip                   | Show the IP features of the system             |
| dhcp                 | Show DHCP                                      |
| relay                | relay address of the interface                 |
| address              | DHCP relay address                             |
| interface            | (Optional) DHCP relay address of the interface |
| <i>intf-range</i>    | (Optional) interface                           |
| <i>__readonly__</i>  | (Optional) Read only                           |
| <i>intf_header</i>   | (Optional) interface header                    |
| TABLE_intf           | (Optional)                                     |
| <i>intf2</i>         | (Optional) interface name                      |
| <i>relay_address</i> | (Optional) helper address                      |
| <i>vrf_name</i>      | (Optional) VRF name                            |

## Command Mode

- /exec

# show ip dhcp relay information trusted-sources

```
show ip dhcp relay information trusted-sources [ __readonly__ <header> [ TABLE_intf <intf> ] ]
```

## Syntax Description

|                     |                                    |
|---------------------|------------------------------------|
| show                | Show running system information    |
| ip                  | Show the IP features of the system |
| dhcp                | Show DHCP                          |
| relay               | DHCP Relay                         |
| information         | Relay information                  |
| trusted-sources     | Relay Trusted Sources              |
| <i>__readonly__</i> | (Optional) Read only               |
| <i>TABLE_intf</i>   | (Optional) trusted interface table |
| <i>header</i>       | (Optional) interface header        |
| <i>intf</i>         | (Optional) interface name          |

## Command Mode

- /exec

## show ip dhcp relay statistics

```
show ip dhcp relay statistics [ interface <intf> | { interface <intf> serverip <ip-addr-val> [ use-vrf <vrf-name>
] } ] [ __readonly__ [ <msg_stats_hdr> <msg_type_str> <tx_pkts> <rx_pkts> <drops> <msg_type_str_offer>
<offer_rx_pkts> <offer_tx_pkts> <offer_drops> <msg_type_str_request> <request_rx_pkts> <request_tx_pkts>
<request_drops> <msg_type_str_ack> <ack_rx_pkts> <ack_tx_pkts> <ack_drops> <msg_type_str_release>
<release_rx_pkts> <release_tx_pkts> <release_drops> <msg_type_str_decline> <decline_rx_pkts>
<decline_tx_pkts> <decline_drops> <msg_type_str_inform> <inform_rx_pkts> <inform_tx_pkts>
<inform_drops> <msg_type_str_nack> <nack_rx_pkts> <nack_tx_pkts> <nack_drops> <line>
<msg_type_str_total> <total_rx_pkts> <total_tx_pkts> <total_drops> <line_x> ] [ <server_consolidated_hdr>
[ TABLE_server_info <server_helper_addr> <server_vrf> <server_total_request> <server_total_response>
] <line_y> ] [ <l3_fwd_hdr> <l3_fwd_rx_pkts> <l3_fwd_tx_pkts> <l3_fwd_drops> <non_dhcp_hdr>
<non_dhcp_rx_pkts> <non_dhcp_tx_pkts> <non_dhcp_drops> <drop_hdr> <drop_validation_fail>
<drop_relay_disable> <drop_invalid_msg_type> <drop_intf_err> <drop_tx_sock_err>
<drop_tx_fail_client_intf> <drop_unknown_op_intf> <drop_l3_unknown_op_intf> <drop_max_hops>
<drop_opt82_insert_fail> <drop_malformed> <drop_mct_drop> <drop_untrusted_relay_intf> ] [
<server_discover> <server_request> <server_decline> <server_release> <server_inform> <server_ack>
<server_nack> <server_offer> <server_resp_hdr> <drop_unknown> <server_req_hdr> ] <footer> ]
```

### Syntax Description

|                      |   |
|----------------------|---|
| show                 | Show running system information           |
| ip                   | Show the IP features of the system        |
| dhcp                 | Show information about DHCP               |
| relay                | DHCP Relay                                |
| statistics           | Statistics related to DHCP                |
| interface            | (Optional) input interface                |
| <i>intf</i>          | (Optional) interface                      |
| serverip             | (Optional) Helper address                 |
| <i>ip-addr-val</i>   | (Optional) IP address                     |
| use-vrf              | (Optional) helper address VRF membership  |
| <i>vrf-name</i>      | (Optional) VRF name                       |
| __readonly__         | (Optional) Read only                      |
| <i>msg_stats_hdr</i> | (Optional) dhcp message statistics header |
| <i>msg_type_str</i>  | (Optional) dhcp message type              |
| <i>rx_pkts</i>       | (Optional) received dhcp packets          |
| <i>tx_pkts</i>       | (Optional) forwarded dhcp packets         |
| <i>drops</i>         | (Optional) dhcp packet drops              |

|                             |                                   |
|-----------------------------|-----------------------------------|
| <i>msg_type_str_offer</i>   | (Optional) dhcp message type      |
| <i>offer_rx_pkts</i>        | (Optional) received dhcp packets  |
| <i>offer_tx_pkts</i>        | (Optional) forwarded dhcp packets |
| <i>offer_drops</i>          | (Optional) dhcp packet drops      |
| <i>msg_type_str_request</i> | (Optional) dhcp message type      |
| <i>request_rx_pkts</i>      | (Optional) received dhcp packets  |
| <i>request_tx_pkts</i>      | (Optional) forwarded dhcp packets |
| <i>request_drops</i>        | (Optional) dhcp packet drops      |
| <i>msg_type_str_ack</i>     | (Optional) dhcp message type      |
| <i>ack_rx_pkts</i>          | (Optional) received dhcp packets  |
| <i>ack_tx_pkts</i>          | (Optional) forwarded dhcp packets |
| <i>ack_drops</i>            | (Optional) dhcp packet drops      |
| <i>msg_type_str_release</i> | (Optional) dhcp message type      |
| <i>release_rx_pkts</i>      | (Optional) received dhcp packets  |
| <i>release_tx_pkts</i>      | (Optional) forwarded dhcp packets |
| <i>release_drops</i>        | (Optional) dhcp packet drops      |
| <i>msg_type_str_decline</i> | (Optional) dhcp message type      |
| <i>decline_rx_pkts</i>      | (Optional) received dhcp packets  |
| <i>decline_tx_pkts</i>      | (Optional) forwarded dhcp packets |
| <i>decline_drops</i>        | (Optional) dhcp packet drops      |
| <i>msg_type_str_inform</i>  | (Optional) dhcp message type      |
| <i>inform_rx_pkts</i>       | (Optional) received dhcp packets  |
| <i>inform_tx_pkts</i>       | (Optional) forwarded dhcp packets |
| <i>inform_drops</i>         | (Optional) dhcp packet drops      |
| <i>msg_type_str_nack</i>    | (Optional) dhcp message type      |
| <i>nack_rx_pkts</i>         | (Optional) received dhcp packets  |
| <i>nack_tx_pkts</i>         | (Optional) forwarded dhcp packets |
| <i>nack_drops</i>           | (Optional) dhcp packet drops      |
| <i>line</i>                 | (Optional)                        |

|                                 |   |
|---------------------------------|---|
| <i>msg_type_str_total</i>       | (Optional) total dhcp packets of all message types  |
| <i>total_rx_pkts</i>            | (Optional) total forwarded dhcp packets             |
| <i>total_tx_pkts</i>            | (Optional) total forwarded dhcp packets             |
| <i>total_drops</i>              | (Optional) total dhcp drops                         |
| <i>line_x</i>                   | (Optional)  |
| <i>server_consolidated_hdr</i>  | (Optional) DHCP server stats                        |
| TABLE_server_info               | (Optional)  |
| <i>server_helper_addr</i>       | (Optional) dhcp server address                      |
| <i>server_vrf</i>               | (Optional) dhcp server vrf                          |
| <i>server_total_request</i>     | (Optional) total dhcp requests to server            |
| <i>server_total_response</i>    | (Optional) total dhcp responses from server         |
| <i>line_y</i>                   | (Optional)  |
| <i>l3_fwd_hdr</i>               | (Optional) DHCP l3 forward header                   |
| <i>l3_fwd_rx_pkts</i>           | (Optional) DHCP l3 received packets                 |
| <i>l3_fwd_tx_pkts</i>           | (Optional) DHCP l3 forwarded packets                |
| <i>l3_fwd_drops</i>             | (Optional) DHCP l3 forward drops                    |
| <i>non_dhcp_hdr</i>             | (Optional) non dhcp packets header                  |
| <i>non_dhcp_rx_pkts</i>         | (Optional) total non dhcp packets received          |
| <i>non_dhcp_tx_pkts</i>         | (Optional) total non dhcp packets forwarded         |
| <i>non_dhcp_drops</i>           | (Optional) total non dhcp drops                     |
| <i>drop_hdr</i>                 | (Optional) total dhcp drops in various scenarios    |
| <i>drop_validation_fail</i>     | (Optional) drops due to option 82 validation failed |
| <i>drop_relay_disable</i>       | (Optional) drops due to dhcp relay not enabled      |
| <i>drop_invalid_msg_type</i>    | (Optional) drops due to invalid message type        |
| <i>drop_intf_err</i>            | (Optional) drops due to interface error             |
| <i>drop_tx_sock_err</i>         | (Optional) tx failure towards server                |
| <i>drop_tx_fail_client_intf</i> | (Optional) drops due to Tx failure towards client   |
| <i>drop_unknown_op_intf</i>     | (Optional) Unknown output interface                 |
| <i>drop_l3_unknown_op_intf</i>  | (Optional) unknown vrf interface for server         |

|                                  |   |
|----------------------------------|---|
| <i>drop_max_hops</i>             | (Optional) drops due to max hop exceeded            |
| <i>drop_opt82_insert_fail</i>    | (Optional) Insertion of option 82 failed            |
| <i>drop_malformed</i>            | (Optional) drops due to packet malformed            |
| <i>drop_mct_drop</i>             | (Optional) drops through mct                        |
| <i>drop_untrusted_relay_intf</i> | (Optional) drops due to untrusted relay interface   |
| <i>server_discover</i>           | (Optional) DHCP discover messages relayed to server |
| <i>server_request</i>            | (Optional) DHCP request messages relayed to server  |
| <i>server_decline</i>            | (Optional) DHCP decline messages relayed to server  |
| <i>server_release</i>            | (Optional) DHCP release messages relayed to server  |
| <i>server_inform</i>             | (Optional) DHCP inform messages relayed to server   |
| <i>server_ack</i>                | (Optional) DHCP ack messages relayed from server    |
| <i>server_nack</i>               | (Optional) DHCP nack messages relayed from server   |
| <i>server_offer</i>              | (Optional) DHCP offer messages relayed from server  |
| <i>server_resp_hdr</i>           | (Optional) DHCP server response header              |
| <i>drop_unknown</i>              | (Optional) drops due to Unknown Failure             |
| <i>server_req_hdr</i>            | (Optional) DHCP server request header               |
| <i>footer</i>                    | (Optional) footer line                              |

**Command Mode**

- /exec

## show ip dhcp snooping

```
show ip dhcp snooping [ __readonly__ <snoop_service_enable> <snoop_gbl_enable> <snoop_vlan_enable>
<snoop_oper_vlan_enable> <snoop_opt82_enable> <snoop_hwaddr_verify_enable> <snoop_hdr> [ {
TABLE_intf_entry <intf_entry_if_index> <intf_entry_trust_dhcp> <intf_entry_pkt_limit> } ] ]
```

### Syntax Description

|                                   |   |
|-----------------------------------|---|
| show                              | Show running system information                               |
| ip                                | Show the IP features of the system                            |
| dhcp                              | Show items in DHCP  |
| snooping                          | DHCP snooping   |
| <i>__readonly__</i>               | (Optional) Read only  |
| <i>snoop_service_enable</i>       | (Optional)  |
| <i>snoop_gbl_enable</i>           | (Optional)  |
| <i>snoop_vlan_enable</i>          | (Optional)  |
| <i>snoop_oper_vlan_enable</i>     | (Optional)  |
| <i>snoop_opt82_enable</i>         | (Optional)  |
| <i>snoop_hwaddr_verify_enable</i> | (Optional)  |
| <i>snoop_hdr</i>                  | (Optional)  |
| TABLE_intf_entry                  | (Optional)  |
| <i>intf_entry_if_index</i>        | (Optional)  |
| <i>intf_entry_trust_dhcp</i>      | (Optional) is DHCP snooping trusted on the interface          |
| <i>intf_entry_pkt_limit</i>       | (Optional) limit for DHCP packets per second on the interface |

### Command Mode

- /exec



# show ip dhcp snooping binding

show ip dhcp snooping binding [ <ip> | <mac> | vlan <vlan-range> |

## Syntax Description

|                   |  |
|-------------------|--|
| show              | Show running system information                            |
| ip                | Show the IP features of the system                         |
| dhcp              | Show items in DHCP   |
| snooping          | DHCP snooping  |
| binding           | DHCP snooping bindings                                     |
| <i>ip</i>         | (Optional) Binding entry IP address                        |
| <i>mac</i>        | (Optional) Binding entry MAC address                       |
| vlan              | (Optional) Binding entry VLAN                              |
| <i>vlan-range</i> | (Optional) VLAN ID 1-4094 or range(s): 1-5, 10 or 2-5,7-19 |

## Command Mode

- /exec

# show ip dhcp snooping statistics

```
show ip dhcp snooping statistics [ { vlan <vlan-id> interface <intf> } |
```

## Syntax Description

|                |                                    |
|----------------|------------------------------------|
| <i>vlan-id</i> | (Optional) ]                       |
| show           | Show running system information    |
| ip             | Show the IP features of the system |
| dhcp           | Show information about DHCP        |
| snooping       | DHCP snooping                      |
| statistics     | Statistics related to DHCP         |
| vlan           | (Optional) VLAN                    |
| interface      | (Optional) input interface         |
| <i>intf</i>    | (Optional) interface               |

## Command Mode

- /exec

# show ip dhcp status

```
show ip dhcp status [ __readonly__ [ <current_cli_op> ] [ <last_cli_op> <last_cli_stat> ] ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                              |
| ip                    | Show the IP features of the system                           |
| dhcp                  | Show information about DHCP                                  |
| status                | Current CLI command and execution status of the last command |
| <i>__readonly__</i>   | (Optional) Read only   |
| <i>current_cli_op</i> | (Optional) current cli operation                             |
| <i>last_cli_op</i>    | (Optional) last cli operation                                |
| <i>last_cli_stat</i>  | (Optional) last cli status                                   |

## Command Mode

- /exec

# show ip dns source-interface

```
show ip dns source-interface [ vrf { <vrf-name> | <vrf-known-name> } ] [ __readonly__ [ { TABLE_ipdnsvrf
<vrfname> <ifname> } ] ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information              |
| ip                    | Display IP information                       |
| dns                   | Display domain-lookup information            |
| source-interface      | Display source interface information         |
| vrf                   | (Optional) Display per-VRF information       |
| <i>vrf-name</i>       | (Optional) VRF name                          |
| <i>vrf-known-name</i> | (Optional) Known VRF name                    |
| <i>__readonly__</i>   | (Optional)                                   |
| TABLE_ipdnsvrf        | (Optional) source interface of dns given vrf |
| <i>vrfname</i>        | (Optional) vrfname                           |
| <i>ifname</i>         | (Optional) ifname                            |

## Command Mode

- /exec

## show ip dns source-interface vrf all

```
show ip dns source-interface vrf all [ __readonly__ [ { TABLE_ipdns <vrfname> <ifname> } ] ]
```

### Syntax Description

|                  |                                      |
|------------------|--------------------------------------|
| show             | Show running system information      |
| ip               | Display IP information               |
| dns              | Display domain-lookup information    |
| source-interface | Display source interface information |
| vrf              | Display per-VRF information          |
| all              | Display entries for all vrfs         |
| __readonly__     | (Optional)                           |
| TABLE_ipdns      | (Optional) source interface of dns   |
| <i>vrfname</i>   | (Optional) vrfname                   |
| <i>ifname</i>    | (Optional) ifname                    |

### Command Mode

- /exec

## show ip eigrp

```
show { ip | ipv6 } eigrp [ <eigrp-ptag> ] [ detail ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__
TABLE_asn <asn> <router_id> TABLE_vrf <vrf> <state> <authen_md5> <authen_keychain>
<metric_weight_k1> <metric_weight_k2> <metric_weight_k3> <metric_weight_k4> <metric_weight_k5>
[ <metric_weight_k6> <metric_rib scale> ] <metric_version> <eigrp_proto> { <multicast_group> |
<multicast_groupv6> } <int_distance> <ext_distance> <max_paths> <num_interfaces> <num_lo_interfaces>
<num_pass_interfaces> <num_peers> [ { TABLE_redist <redist_srcproto> <redist_routemap> } ]
<graceful_restart> <stub_configured> [ <stub_option_connected> <stub_option_summary>
<stub_option_redist> <stub_option_leak_map> <stub_option_receive_only> ] ]
```

### Syntax Description

|                         |  |
|-------------------------|--|
| show                    | Show running system information              |
| ip                      | Display IP information                       |
| ipv6                    | Display IPv6 information                     |
| eigrp                   | Display EIGRP status and configuration       |
| detail                  | (Optional) Show detailed EIGRP process stats |
| vrf                     | (Optional) Display per-VRF information       |
| <i>vrf-name</i>         | (Optional) VRF name                          |
| <i>vrf-known-name</i>   | (Optional) Known VRF name                    |
| all                     | (Optional) Display information for all VRFs  |
| <i>eigrp-ptag</i>       | (Optional) Process tag                       |
| <u>__readonly__</u>     | (Optional)                                   |
| TABLE_asn               | (Optional) AS Number table                   |
| <i>asn</i>              | (Optional) AS number                         |
| <i>router_id</i>        | (Optional) Router-ID                         |
| TABLE_vrf               | (Optional) VRF table                         |
| <i>vrf</i>              | (Optional) VRF name                          |
| <i>state</i>            | (Optional) EIGRP Process Status              |
| <i>authen_md5</i>       | (Optional) Authentication Mode               |
| <i>authen_keychain</i>  | (Optional) Authentication Key-Chain          |
| <i>metric_weight_k1</i> | (Optional) DUAL metric k1                    |
| <i>metric_weight_k2</i> | (Optional) DUAL metric k2                    |

|                                 |   |
|---------------------------------|---|
| <i>metric_weight_k3</i>         | (Optional) DUAL metric k3   |
| <i>metric_weight_k4</i>         | (Optional) DUAL metric k4   |
| <i>metric_weight_k5</i>         | (Optional) DUAL metric k5   |
| <i>metric_weight_k6</i>         | (Optional) DUAL metric k6   |
| <i>metric_rib_scale</i>         | (Optional) RIB Scale  |
| <i>metric_version</i>           | (Optional) Metric version   |
| <i>eigrp_proto</i>              | (Optional) IP Protocol number   |
| <i>multicast_group</i>          | (Optional) Multicast Group Address                                      |
| <i>int_distance</i>             | (Optional) Internal Administrative Distance                             |
| <i>ext_distance</i>             | (Optional) External Administrative Distance                             |
| <i>max_paths</i>                | (Optional) Maximum paths allowed for a dndb                             |
| <i>num_interfaces</i>           | (Optional) Number of EIGRP interfaces configured under this AS          |
| <i>num_lo_interfaces</i>        | (Optional) Number of EIGRP loopback interfaces configured under this AS |
| <i>num_pass_interfaces</i>      | (Optional) Number of EIGRP Passive interfaces configured under this AS  |
| <i>num_peers</i>                | (Optional) Number of EIGRP peers  |
| TABLE_redist                    | (Optional) Redistribution Table   |
| <i>redist_srcproto</i>          | (Optional) Source protocol of the redistributed route                   |
| <i>redist_routemap</i>          | (Optional) Route-map used in this redistribution                        |
| <i>graceful_restart</i>         | (Optional) Graceful restart configured?                                 |
| <i>stub_configured</i>          | (Optional) Stub-Routing configured?                                     |
| <i>stub_option_connected</i>    | (Optional) Advertise connected routes?                                  |
| <i>stub_option_summary</i>      | (Optional) Advertise summary routes?                                    |
| <i>stub_option_redist</i>       | (Optional) Advertise redistributed routes?                              |
| <i>stub_option_leak_map</i>     | (Optional) Allow routes permitted by leak-map?                          |
| <i>stub_option_receive_only</i> | (Optional) Configured as receive only?                                  |

**Command Mode**

- /exec

## show ip eigrp accounting

```
show { ip | ipv6 } eigrp [ <eigrp-ptag> ] accounting [ vrf { <vrf-name> | <vrf-known-name> | all } ] [
__readonly__ TABLE_asn <asn> <router_id> TABLE_vrf <vrf> <total_prefix> <redist_state> <redist_count>
<restart_count> <acct_timer> [ TABLE_peer { <p_ipaddr> | <p_ipv6addr> } <p_state> <p_ifname>
<p_prefix_count> <p_restart_count> <p_acct_timer> ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                     |
| ip                    | Display IP information                              |
| ipv6                  | Display IPv6 information                            |
| eigrp                 | Display EIGRP status and configuration              |
| vrf                   | (Optional) Display per-VRF information              |
| <i>vrf-name</i>       | (Optional) VRF name                                 |
| <i>vrf-known-name</i> | (Optional) Known VRF name                           |
| all                   | (Optional) Display information for all VRFs         |
| <i>eigrp-ptag</i>     | (Optional) Process tag                              |
| accounting            | IP-EIGRP Accounting                                 |
| <u>__readonly__</u>   | (Optional)  |
| TABLE_asn             | (Optional) AS number table                          |
| <i>asn</i>            | (Optional) AS number                                |
| <i>router_id</i>      | (Optional) Router-ID                                |
| TABLE_vrf             | (Optional) VRF table                                |
| <i>vrf</i>            | (Optional) VRF name                                 |
| <i>total_prefix</i>   | (Optional) Total prefix count (Aggregate)           |
| <i>redist_state</i>   | (Optional) State of redistributed prefixes          |
| <i>redist_count</i>   | (Optional) Number of redistributed prefixes         |
| <i>restart_count</i>  | (Optional) Number of times the prefix was suspended |
| <i>acct_timer</i>     | (Optional) Accounting timer                         |
| TABLE_peer            | (Optional) Peer (Prefix) table                      |
| <i>p_ipaddr</i>       | (Optional) Peer IP addr                             |



|                        |   |
|------------------------|---|
| <i>p_state</i>         | (Optional) Peer state                               |
| <i>p_ifname</i>        | (Optional) Peering interface                        |
| <i>p_prefix_count</i>  | (Optional) Number of Prefixes learnt from the peer  |
| <i>p_restart_count</i> | (Optional) Number of times the prefix was suspended |
| <i>p_acct_timer</i>    | (Optional) Peer accounting timer                    |

**Command Mode**

- /exec

## show ip eigrp event-history

```
show { ip | ipv6 } eigrp [ <eigrp-ptag> ] [ internal ] event-history { fsm | packet | rib }
```

### Syntax Description

|                   |  |
|-------------------|--|
| show              | Show running system information        |
| ip                | Display IP information                 |
| ipv6              | Display IPv6 information               |
| eigrp             | Display EIGRP status and configuration |
| <i>eigrp-ptag</i> | (Optional) Process tag                 |
| internal          | (Optional) Commands for internal use   |
| event-history     | Event History of EIGRP                 |
| fsm               | FSM log of EIGRP                       |
| packet            | Packet log of EIGRP                    |
| rib               | RIB log of EIGRP                       |

### Command Mode

- /exec

# show ip eigrp event-history bfd

```
show { ip | ipv6 } eigrp [ <eigrp-ptag> ] [ internal ] event-history bfd
```

## Syntax Description

|                   |  |
|-------------------|--|
| show              | Show running system information        |
| ip                | Display IP information                 |
| ipv6              | Display IPv6 information               |
| eigrp             | Display EIGRP status and configuration |
| <i>eigrp-ptag</i> | (Optional) Process tag                 |
| internal          | (Optional) Commands for internal use   |
| event-history     | Event History of EIGRP                 |
| bfd               | Show bfd log of EIGRP                  |

## Command Mode

- /exec

## show ip eigrp event

```
show { ip | ipv6 } eigrp [ <eigrp-ptag> ] event [ <start-num> <end-num> ] [ type ] [ vrf { <vrf-name> |
<vrf-known-name> | all } ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ip                    | Display IP information                      |
| ipv6                  | Display IPv6 information                    |
| eigrp                 | Display EIGRP status and configuration      |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| <i>eigrp-ptag</i>     | (Optional) Process tag                      |
| event                 | IP-EIGRP Events                             |
| <i>start-num</i>      | (Optional) Starting event number            |
| <i>end-num</i>        | (Optional) Ending event number              |
| type                  | (Optional) Show Events being logged         |

### Command Mode

- /exec

# show ip eigrp interfaces

```
show { ip | ipv6 } eigrp [ <eigrp-ptag> ] interfaces [ detail ] [ <interface> ] [ brief ] [ vrf { <vrf-name> |
<vrf-known-name> | all } ] [ __readonly__ TABLE_asn <asn> TABLE_vrf <vrf> [ TABLE_if <ifname>
<peer_count> <xmitq_unrel> <xmitq_rel> <mean_srtt> <send_intvl_unrel> <send_intvl_rel>
<mcast_flow_delay> <pending_routes> [ <hello_intvl> <holdtime_intvl> <next_xmit_serno>
<packetize_pending> <mcasts_sent_unrel> <mcasts_sent_rel> <ucasts_sent_unrel> <ucasts_sent_rel>
<mcast_exceptions> <cr_packets> <acks_suppressed> <retrans_sent> <out_of_seq_rcvd> <stub_interface>
<nexthop_self> <auth_mode_md5> <auth_key_chain> ] ] ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                |
| ip                    | Display IP information                         |
| ipv6                  | Display IPv6 information                       |
| eigrp                 | Display EIGRP status and configuration         |
| vrf                   | (Optional) Display per-VRF information         |
| <i>vrf-name</i>       | (Optional) VRF name                            |
| <i>vrf-known-name</i> | (Optional) Known VRF name                      |
| all                   | (Optional) Display information for all VRFs    |
| <i>eigrp-ptag</i>     | (Optional) Process tag                         |
| interfaces            | IP-EIGRP interfaces                            |
| detail                | (Optional) Show detailed interface information |
| <i>interface</i>      | (Optional) Interface                           |
| brief                 | (Optional) Show summary information only       |
| __readonly__          | (Optional)                                     |
| TABLE_asn             | (Optional) AS number table                     |
| <i>asn</i>            | (Optional) AS number                           |
| TABLE_vrf             | (Optional) VRF table                           |
| <i>vrf</i>            | (Optional) VRF name                            |
| TABLE_if              | (Optional) Interface table                     |
| <i>ifname</i>         | (Optional) Interface name                      |
| <i>peer_count</i>     | (Optional) Number of Peer on this interface    |
| <i>xmitq_unrel</i>    | (Optional) Xmit Q (unreliable) count           |

|                          |  |
|--------------------------|--|
| <i>xmitq_rel</i>         | (Optional) Xmit Q (reliable) count                                     |
| <i>mean_srtt</i>         | (Optional) Mean of all peer SRTTs                                      |
| <i>send_intvl_unrel</i>  | (Optional) Base packet gap, per queue (unreliable)                     |
| <i>send_intvl_rel</i>    | (Optional) Base packet gap, per queue (reliable)                       |
| <i>mcast_flow_delay</i>  | (Optional) Last delay for Multicast flow control timer                 |
| <i>pending_routes</i>    | (Optional) Pending routes on the interface                             |
| <i>hello_intvl</i>       | (Optional) Configured hello interval for interface                     |
| <i>holdtime_intvl</i>    | (Optional) Configured holdtime interval for interface                  |
| <i>next_xmit_serno</i>   | (Optional) Next xmit serial number                                     |
| <i>packetize_pending</i> | (Optional) Packetization pending?                                      |
| <i>mcasts_sent_unrel</i> | (Optional) Number of Multicasts sent (unreliable)                      |
| <i>mcasts_sent_rel</i>   | (Optional) Number of Multicasts sent (reliable)                        |
| <i>ucasts_sent_unrel</i> | (Optional) Number of Unicasts sent (unreliable)                        |
| <i>ucasts_sent_rel</i>   | (Optional) Number of Unicasts sent (reliable)                          |
| <i>mcast_exceptions</i>  | (Optional) Multicast exceptions (Count of multicasts sent as unicasts) |
| <i>cr_packets</i>        | (Optional) Count of Multicasts sent with CR                            |
| <i>acks_suppressed</i>   | (Optional) Count of suppressed ACK packets                             |
| <i>retrans_sent</i>      | (Optional) Count of Retransmissions sent                               |
| <i>out_of_seq_rcvd</i>   | (Optional) Count of packets received Out-of-Sequence                   |
| <i>stub_interface</i>    | (Optional) All Peers are stubbed?                                      |
| <i>nexthop_self</i>      | (Optional) should retain next-hop?                                     |
| <i>auth_mode_md5</i>     | (Optional) MD5 Authentication enabled?                                 |
| <i>auth_key_chain</i>    | (Optional) Authentication key-chain                                    |

**Command Mode**

- /exec

# show ip eigrp metric

```
show { ip | ipv6 } eigrp [ <eigrp-ptag> ] metric <bw> <delay> [ <rel> ] [ <load> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information  |
| ip                    | Display IP information   |
| ipv6                  | Display IPv6 information   |
| eigrp                 | Display EIGRP status and configuration                                   |
| vrf                   | (Optional) Display per-VRF information                                   |
| <i>vrf-name</i>       | (Optional) VRF name  |
| <i>vrf-known-name</i> | (Optional) Known VRF name  |
| all                   | (Optional) Display information for all VRFs                              |
| <i>eigrp-ptag</i>     | (Optional) Process tag   |
| metric                | Compute composite metric from vector metric                              |
| <i>bw</i>             | Bandwidth in Kbits per second  |
| <i>delay</i>          | Delay metric   |
| <i>rel</i>            | (Optional) Reliability metric where 255 is 100% reliable                 |
| <i>load</i>           | (Optional) Effective bandwidth metric (Loading) where 255 is 100% loaded |

## Command Mode

- /exec

## show ip eigrp route-map statistics

```
show ip eigrp [ <eigrp-ptag> ] route-map statistics { { redistribute { bgp <as> | { eigrp | isis | ospf | rip } <tag>
| static | direct | amt | lisp } } | table-map } [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__
TABLE_asn <asn> TABLE_vrf <vrf> { TABLE_rmap <name> <action> <seq_num> [ { TABLE_cmd
<command> <compare_count> <match_count> } ] } <total_accept_count> <total_reject_count> ]
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                        |
| ip                    | Display IP information                                 |
| eigrp                 | Display EIGRP status and configuration                 |
| vrf                   | (Optional) Display per-VRF information                 |
| <i>vrf-name</i>       | (Optional) VRF name                                    |
| <i>vrf-known-name</i> | (Optional) Known VRF name                              |
| all                   | (Optional) Display information for all VRFs            |
| <i>eigrp-ptag</i>     | (Optional) Process tag                                 |
| route-map             | Route-map related information                          |
| statistics            | Route-map statistics                                   |
| redistribute          | Redistribute information from another routing protocol |
| table-map             | Tablemap information                                   |
| bgp                   | Border Gateway Protocol (BGP)                          |
| <i>as</i>             | Autonomous system number                               |
| isis                  | IS-IS Routing for IPv4                                 |
| ospf                  | Open Shortest Path First (OSPF)                        |
| rip                   | Routing Information Protocol (RIP)                     |
| eigrp                 | Enhanced Interior Gateway Routing Protocol (EIGRP)     |
| <i>tag</i>            | Process tag  |
| static                | Static routes  |
| direct                | Directly connected                                     |
| amt                   | AMT Anycast prefix                                     |
| lisp                  | LISP EID-prefixes                                      |



|                           |   |
|---------------------------|---|
| <i>__readonly__</i>       | (Optional)  |
| <i>TABLE_asn</i>          | (Optional) AS number table                                |
| <i>asn</i>                | (Optional) AS number                                      |
| <i>TABLE_vrf</i>          | (Optional) VRF table                                      |
| <i>vrf</i>                | (Optional) VRF name                                       |
| <i>TABLE_rmap</i>         | (Optional) Routemap table                                 |
| <i>name</i>               | (Optional) Route-map Name                                 |
| <i>action</i>             | (Optional) Route-map action                               |
| <i>seq_num</i>            | (Optional) Sequence number of the rule in route-map       |
| <i>TABLE_cmd</i>          | (Optional) Route-map command table                        |
| <i>command</i>            | (Optional) Route-map command                              |
| <i>compare_count</i>      | (Optional) Number of comparisons                          |
| <i>match_count</i>        | (Optional) Number of matches                              |
| <i>total_accept_count</i> | (Optional) Total number of packets accepted by the policy |
| <i>total_reject_count</i> | (Optional) Total number of packets rejected by the policy |

**Command Mode**

- /exec

## show ip eigrp sia-event

```
show { ip | ipv6 } eigrp [ <eigrp-ptag> ] sia-event [ <start-num> <end-num> ] [ vrf { <vrf-name> |
<vrf-known-name> | all } ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ip                    | Display IP information                      |
| ipv6                  | Display IPv6 information                    |
| eigrp                 | Display EIGRP status and configuration      |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| <i>eigrp-ptag</i>     | (Optional) Process tag                      |
| sia-event             | IP-EIGRP SIA event                          |
| <i>start-num</i>      | (Optional) Starting event number            |
| <i>end-num</i>        | (Optional) Ending event number              |

### Command Mode

- /exec

## show ip eigrp sia-statistics

```
show { ip | ipv6 } eigrp [ <eigrp-ptag> ] sia-statistics [ <peer> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                 |
| ip                    | Display IP information                          |
| ipv6                  | Display IPv6 information                        |
| eigrp                 | Display EIGRP status and configuration          |
| vrf                   | (Optional) Display per-VRF information          |
| <i>vrf-name</i>       | (Optional) VRF name                             |
| <i>vrf-known-name</i> | (Optional) Known VRF name                       |
| all                   | (Optional) Display information for all VRFs     |
| <i>eigrp-ptag</i>     | (Optional) Process tag                          |
| sia-statistics        | IP-EIGRP SIA Statistics                         |
| <i>peer</i>           | (Optional) Peer ID to display information about |

### Command Mode

- /exec

## show ip eigrp timers

```
show { ip | ipv6 } eigrp [ <eigrp-ptag> ] timers [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ip                    | Display IP information                      |
| ipv6                  | Display IPv6 information                    |
| eigrp                 | Display EIGRP status and configuration      |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| <i>eigrp-ptag</i>     | (Optional) Process tag                      |
| timers                | IP-EIGRP Timers                             |

### Command Mode

- /exec

## show ip eigrp traffic

```
show { ip | ipv6 } eigrp [ <eigrp-ptag> ] traffic [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__
TABLE_asn <asn> TABLE_vrf <vrf> <hellos_sent> <hellos_rcvd> <updates_sent> <updates_rcvd>
<queries_sent> <queries_rcvd> <replies_sent> <replies_rcvd> <acks_sent> <acks_rcvd> <max_inqueue_depth>
<inqueue_drops> <sia_queries_sent> <sia_queries_rcvd> <sia_replies_sent> <sia_replies_rcvd> ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ip                    | Display IP information                      |
| ipv6                  | Display IPv6 information                    |
| eigrp                 | Display EIGRP status and configuration      |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| <i>eigrp-ptag</i>     | (Optional) Process tag                      |
| traffic               | IP-EIGRP Traffic Statistics                 |
| <u>__readonly__</u>   | (Optional)                                  |
| TABLE_asn             | (Optional) AS number table                  |
| <i>asn</i>            | (Optional) AS number                        |
| TABLE_vrf             | (Optional) VRF table                        |
| <i>vrf</i>            | (Optional) VRF name                         |
| <i>hellos_sent</i>    | (Optional) Number of Hellos sent            |
| <i>hellos_rcvd</i>    | (Optional) Number of Hellos received        |
| <i>updates_sent</i>   | (Optional) Number of Updates sent           |
| <i>updates_rcvd</i>   | (Optional) Number of Updates received       |
| <i>queries_sent</i>   | (Optional) Number of Queries sent           |
| <i>queries_rcvd</i>   | (Optional) Number of Queries received       |
| <i>replies_sent</i>   | (Optional) Number of Replies sent           |
| <i>replies_rcvd</i>   | (Optional) Number of Replies received       |

|                          |   |
|--------------------------|---|
| <i>acks_sent</i>         | (Optional) Number of ACKs sent            |
| <i>acks_rcvd</i>         | (Optional) Number of ACKs received        |
| <i>max_inqueue_depth</i> | (Optional) Input queue high water mark    |
| <i>inqueue_drops</i>     | (Optional) Input queue drops              |
| <i>sia_queries_sent</i>  | (Optional) Number of SIA queries sent     |
| <i>sia_queries_rcvd</i>  | (Optional) Number of SIA queries received |
| <i>sia_replies_sent</i>  | (Optional) Number of SIA replies sent     |
| <i>sia_replies_rcvd</i>  | (Optional) Number of SIA replies received |

**Command Mode**

- /exec

# show ip extcommunity-list

```
show ip extcommunity-list [ <extcl_name> ] [ __readonly__ TABLE_extcl <name> <action> <rule> ]
```

## Syntax Description

|                     |   |
|---------------------|---|
| show                | Show running system information                     |
| ip                  | Display IP information                              |
| extcommunity-list   | List extcommunity-list                              |
| <i>extcl_name</i>   | (Optional) Standard or expanded community-list name |
| <i>__readonly__</i> | (Optional)  |
| <i>TABLE_extcl</i>  | (Optional)  |
| <i>name</i>         | (Optional)  |
| <i>action</i>       | (Optional)  |
| <i>rule</i>         | (Optional)  |

## Command Mode

- /exec

# show ip fib adjacency

```
show ip fib adjacency [ <aif> ] [ <anh> ] [ module <module> ] [ __readonly__ <adj-count> <nexthop>
<rewinfo> <interface> ]
```

## Syntax Description

|                  |                                       |
|------------------|---------------------------------------|
| show             |                                       |
| ip               | Display IP information                |
| fib              | Forwarding information                |
| adjacency        | display adjacency information         |
| <i>aif</i>       | (Optional) adjacency output interface |
| <i>anh</i>       | (Optional) adjacency next hop         |
| module           | (Optional) slot                       |
| <i>module</i>    | (Optional) slot number                |
| __readonly__     | (Optional)                            |
| <i>adj-count</i> | (Optional) total adj count            |
| <i>nexthop</i>   | (Optional) next hop address           |
| <i>rewinfo</i>   | (Optional) rewrite information        |
| <i>interface</i> | (Optional) output interface           |

## Command Mode

- /exec



# show ip fib interfaces

show ip fib interfaces [ module <module> ] [ \_\_readonly\_\_ <intf> <v4adjcnt> <v6adjcnt> <rpfmode> ]

## Syntax Description

|                 |                                    |
|-----------------|------------------------------------|
| show            |                                    |
| ip              | Display IP information             |
| fib             | Forwarding information             |
| interfaces      | show fib interface info            |
| __readonly__    | (Optional)                         |
| <i>intf</i>     | (Optional) interface name          |
| module          | (Optional) slot                    |
| <i>module</i>   | (Optional) slot number             |
| <i>v4adjcnt</i> | (Optional) count of v4 adjacencies |
| <i>v6adjcnt</i> | (Optional) count of v6 adjacencies |
| <i>rpfmode</i>  | (Optional) uRPF mode               |

## Command Mode

- /exec

# show ip fib mroute

```
show ip fib mroute [ { <group> | <gprefix> } [ <source> ] ] [ table <table-id> ] [ module <module> ] [
__readonly__ <table_type> <num_groups> <num_sources> <src_len> <grp_len> <df_ordinal> <rpfif>
<rpf_ifindex> <flag> <flag_value> <route_pkts> <route_bytes> <oiflist_id> <platform_id> <oif_count>
<refcount> <oifname> <oifindex> <oif_pkts> <oif_bytes> ]
```

## Syntax Description

|                     |   |
|---------------------|---|
| show                |   |
| ip                  | Display IP information                                    |
| fib                 | Forwarding information                                    |
| mroute              | Multicast IPv4 routes                                     |
| <i>group</i>        | (Optional) Multicast IPv4 Group Address                   |
| <i>gprefix</i>      | (Optional) Multicast IPv4 Group Prefix                    |
| <i>source</i>       | (Optional) Multicast IPv4 Source Address                  |
| table               | (Optional) display info per vpn-id                        |
| <i>table-id</i>     | (Optional) table-id                                       |
| module              | (Optional) slot   |
| <i>module</i>       | (Optional) slot number                                    |
| <i>__readonly__</i> | (Optional)  |
| <i>table_type</i>   | (Optional) Table Type                                     |
| <i>num_groups</i>   | (Optional) Number of group entries in the table           |
| <i>num_sources</i>  | (Optional) Number of (S, G) entries for the group address |
| <i>src_len</i>      | (Optional) Source Address Mask                            |
| <i>grp_len</i>      | (Optional) Group address Mask                             |
| <i>df_ordinal</i>   | (Optional) DF ordinal                                     |
| <i>rpfif</i>        | (Optional) RPF interface                                  |
| <i>rpf_ifindex</i>  | (Optional) RPF Interface ifIndex                          |
| <i>flag</i>         | (Optional) Route type flag                                |
| <i>flag_value</i>   | (Optional) hex value of route flag                        |
| <i>route_pkts</i>   | (Optional) Route packet count                             |

|                    |                                     |
|--------------------|-------------------------------------|
| <i>route_bytes</i> | (Optional) Route bytes              |
| <i>oiflist_id</i>  | (Optional) OIF list Identifier      |
| <i>platform_id</i> | (Optional) Platform-index           |
| <i>oif_count</i>   | (Optional) Number of OIFs           |
| <i>refcount</i>    | (Optional) OIF list Reference Count |
| <i>oifname</i>     | (Optional) OIF Interface name       |
| <i>oifindex</i>    | (Optional) OIF Interface ifIndex    |
| <i>oif_pkts</i>    | (Optional) OIF packets              |
| <i>oif_bytes</i>   | (Optional) OIF bytes                |

**Command Mode**

- /exec

# show ip fib mroute

```
show ip fib mroute [ { <group> | <gprefix> } [ <source> ] ] [ table <table-id> ] [ module <module> ] [
__readonly__ <table_type> <num_groups> <num_sources> <src_len> <grp_len> <df_ordinal> <rpfif>
<rpf_ifindex> <flag> <flag_value> <route_pkts> <route_bytes> <oiflist_id> <platform_id> <oif_count>
<refcount> <oifname> <oifindex> <oif_pkts> <oif_bytes> ]
```

## Syntax Description

|                    |   |
|--------------------|---|
| show               |   |
| ip                 | Display IP information                                    |
| fib                | Forwarding information                                    |
| mroute             | Multicast IPv4 routes                                     |
| <i>group</i>       | (Optional) Multicast IPv4 Group Address                   |
| <i>gprefix</i>     | (Optional) Multicast IPv4 Group Prefix                    |
| <i>source</i>      | (Optional) Multicast IPv4 Source Address                  |
| table              | (Optional) display info per vpn-id                        |
| <i>table-id</i>    | (Optional) table-id                                       |
| module             | (Optional) slot   |
| <i>module</i>      | (Optional) slot number                                    |
| __readonly__       | (Optional)  |
| <i>table_type</i>  | (Optional) Table Type                                     |
| <i>num_groups</i>  | (Optional) Number of group entries in the table           |
| <i>num_sources</i> | (Optional) Number of (S, G) entries for the group address |
| <i>src_len</i>     | (Optional) Source Address Mask                            |
| <i>grp_len</i>     | (Optional) Group address Mask                             |
| <i>df_ordinal</i>  | (Optional) DF ordinal                                     |
| <i>rpfif</i>       | (Optional) RPF interface                                  |
| <i>rpf_ifindex</i> | (Optional) RPF Interface ifIndex                          |
| <i>flag</i>        | (Optional) Route type flag                                |
| <i>flag_value</i>  | (Optional) hex value of route flag                        |
| <i>route_pkts</i>  | (Optional) Route packet count                             |

|                    |                                     |
|--------------------|-------------------------------------|
| <i>route_bytes</i> | (Optional) Route bytes              |
| <i>oiflist_id</i>  | (Optional) OIF list Identifier      |
| <i>platform_id</i> | (Optional) Platform-index           |
| <i>oif_count</i>   | (Optional) Number of OIFs           |
| <i>refcount</i>    | (Optional) OIF list Reference Count |
| <i>oifname</i>     | (Optional) OIF Interface name       |
| <i>oifindex</i>    | (Optional) OIF Interface ifIndex    |
| <i>oif_pkts</i>    | (Optional) OIF packets              |
| <i>oif_bytes</i>   | (Optional) OIF bytes                |

**Command Mode**

- /exec

# show ip fib mroute txlist

show ip fib mroute txlist [ module <module> ]

## Syntax Description

|               |                                |
|---------------|--------------------------------|
| show          |                                |
| ip            | Display IP information         |
| fib           | Forwarding information         |
| mroute        | display IP mcast routing table |
| txlist        | display routes in the txlist   |
| module        | (Optional) slot                |
| <i>module</i> | (Optional) slot number         |

## Command Mode

- /exec



|                        |   |
|------------------------|---|
| <i>anh</i>             | (Optional) adjacency next-hop address         |
| <i>drop</i>            | (Optional) display routes via drop adjacency  |
| <i>glean</i>           | (Optional) display routes via glean adjacency |
| <i>punt</i>            | (Optional) display routes via punt adjacency  |
| <i>module</i>          | (Optional) slot                               |
| <i>module</i>          | (Optional) slot number                        |
| <i>__readonly__</i>    | (Optional)                                    |
| <i>header</i>          | (Optional) header string                      |
| <i>vrfname</i>         | (Optional) VRF name                           |
| <i>tableid</i>         | (Optional) table identifier                   |
| <i>prefix-count</i>    | (Optional) total number of prefix in VRF      |
| <i>px</i>              | (Optional) ipv4 prefix                        |
| <i>nexthop</i>         | (Optional) next hop address                   |
| <i>special</i>         | (Optional) special adjacencies                |
| <i>intf</i>            | (Optional) output interface                   |
| <i>route-count</i>     | (Optional) total number of routes in VRF      |
| <i>path-count</i>      | (Optional) total number of paths in VRF       |
| <i>mask-length</i>     | (Optional) length of mask                     |
| <i>routes-per-mask</i> | (Optional)                                    |
| TABLE_vrf              | (Optional) vrf table                          |
| <i>vrf_name_out</i>    | (Optional) VRF name                           |
| <i>table_name</i>      | (Optional) table name                         |
| TABLE_prefix           | (Optional) all xml prefix entries             |
| <i>px</i>              | (Optional) ipv4 prefix                        |
| TABLE_path             | (Optional) path table                         |
| <i>nexthop</i>         | (Optional) next hop address                   |
| <i>special</i>         | (Optional) special adjacencies                |
| <i>intf</i>            | (Optional) output interface                   |

**Command Mode**



- /exec

# show ip fib route

```
show ip fib route [ vrf { <vrf-name> | <vrf-known-name> | <vrf-all> } ] [ table <table_id> ] [ summary | <prefix>
[ longer-prefixes ] | <address> | interface <interface> | next-hop <nh> | attached | unresolved | adjacency {
<aif> <anh> | drop | glean | punt } ] [ module <module> | vrf { <vrf-name> | <vrf-known-name> | <vrf-all>
} ] + [ __readonly__ <header> <vrfname> <tableid> <prefix-count> <pfx> { <nexthop> | <special> } <intf>
<route-count> <path-count> <mask-length> <routes-per-mask> ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  |   |
| ip                    | Display IP information                              |
| fib                   | Forwarding information                              |
| route                 | display IP routing table                            |
| vrf                   | (Optional) display info per VRF                     |
| <i>vrf-name</i>       | (Optional) VRF name                                 |
| <i>vrf-known-name</i> | (Optional) Known VRF name                           |
| vrf-all               | (Optional) Display information for all VRFs         |
| table                 | (Optional) display info per vpn-id                  |
| <i>table_id</i>       | (Optional) table number                             |
| summary               | (Optional) display route counts                     |
| <i>prefix</i>         | (Optional) display single exact match route         |
| longer-prefixes       | (Optional) display longer prefixes                  |
| <i>address</i>        | (Optional) display single longest match route       |
| interface             | (Optional) display routes with this output i/f only |
| <i>interface</i>      | (Optional) output interface                         |
| next-hop              | (Optional) display routes with this next-hop only   |
| <i>nh</i>             | (Optional) next hop address                         |
| attached              | (Optional) display directly connected routes        |
| unresolved            | (Optional) display unresolved routes                |
| adjacency             | (Optional) display routes via specified adjacency   |
| <i>aif</i>            | (Optional) adjacency output interface               |
| <i>anh</i>            | (Optional) adjacency next-hop address               |

|                        |   |
|------------------------|---|
| <i>drop</i>            | (Optional) display routes via drop adjacency  |
| <i>glean</i>           | (Optional) display routes via glean adjacency |
| <i>punt</i>            | (Optional) display routes via punt adjacency  |
| <i>module</i>          | (Optional) slot                               |
| <i>module</i>          | (Optional) slot number                        |
| <i>__readonly__</i>    | (Optional)                                    |
| <i>header</i>          | (Optional) header string                      |
| <i>vrfname</i>         | (Optional) VRF name                           |
| <i>tableid</i>         | (Optional) table identifier                   |
| <i>prefix-count</i>    | (Optional) total number of prefix in VRF      |
| <i>px</i>              | (Optional) ipv4 prefix                        |
| <i>nexthop</i>         | (Optional) next hop address                   |
| <i>special</i>         | (Optional) special adjacencies                |
| <i>intf</i>            | (Optional) output interface                   |
| <i>route-count</i>     | (Optional) total number of routes in VRF      |
| <i>path-count</i>      | (Optional) total number of paths in VRF       |
| <i>mask-length</i>     | (Optional) length of mask                     |
| <i>routes-per-mask</i> | (Optional)                                    |

**Command Mode**

- /exec

# show ip fib route recovered

show ip fib route recovered

## Syntax Description

|           |   |
|-----------|---|
| show      |   |
| ip        | ipv4  |
| fib       | display fib information                           |
| route     | display IP routing table                          |
| recovered | log of routes recovered after TCAM free condition |

## Command Mode

- /exec

# show ip ftm statistics

show ip ftm statistics

## Syntax Description

|            |                                 |
|------------|---------------------------------|
| show       | Show running system information |
| ip         | Display IP information          |
| ftm        | FTM API                         |
| statistics | Statistics                      |

## Command Mode

- /exec

## show ip ftp source-interface

```
show ip ftp source-interface [ vrf { <vrf-name> | <vrf-known-name> } ] [ __readonly__ [ { TABLE_ipftpvrf
<vrfname> <ifname> } ] ]
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information              |
| ip                    | Display IP information                       |
| ftp                   | Display FTP client information               |
| source-interface      | Display source interface information         |
| vrf                   | (Optional) Display per-VRF information       |
| <i>vrf-name</i>       | (Optional) VRF name                          |
| <i>vrf-known-name</i> | (Optional) Known VRF name                    |
| <i>__readonly__</i>   | (Optional)                                   |
| TABLE_ipftpvrf        | (Optional) source interface of ftp given vrf |
| <i>vrfname</i>        | (Optional) vrfname                           |
| <i>ifname</i>         | (Optional) ifname                            |

### Command Mode

- /exec

## show ip ftp source-interface vrf all

```
show ip ftp source-interface vrf all [ __readonly__ [ { TABLE_ipftp <vrfname> <ifname> } ] ]
```

### Syntax Description

|                  |                                      |
|------------------|--------------------------------------|
| show             | Show running system information      |
| ip               | Display IP information               |
| ftp              | Display FTP client information       |
| source-interface | Display source interface information |
| vrf              | Display per-VRF information          |
| all              | Display entries for all vrfs         |
| __readonly__     | (Optional)                           |
| TABLE_ipftp      | (Optional) source interface of ftp   |
| <i>vrfname</i>   | (Optional) vrfname                   |
| <i>ifname</i>    | (Optional) ifname                    |

### Command Mode

- /exec

## show ip http source-interface

```
show ip http source-interface [ vrf { <vrf-name> | <vrf-known-name> } ] [ __readonly__ [ { TABLE_iphttpvrf
<vrfname> <ifname> } ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information               |
| ip                    | Display IP information                        |
| http                  | Display HTTP client information               |
| source-interface      | Display source interface information          |
| vrf                   | (Optional) Display per-VRF information        |
| <i>vrf-name</i>       | (Optional) VRF name                           |
| <i>vrf-known-name</i> | (Optional) Known VRF name                     |
| <i>__readonly__</i>   | (Optional)                                    |
| TABLE_iphttpvrf       | (Optional) source interface of http given vrf |
| <i>vrfname</i>        | (Optional) vrfname                            |
| <i>ifname</i>         | (Optional) ifname                             |

### Command Mode

- /exec



# show ip http source-interface vrf all

```
show ip http source-interface vrf all [ __readonly__ [ { TABLE_iphttp <vrfname> <ifname> } ] ]
```

## Syntax Description

|                  |                                      |
|------------------|--------------------------------------|
| show             | Show running system information      |
| ip               | Display IP information               |
| http             | Display HTTP client information      |
| source-interface | Display source interface information |
| vrf              | Display per-VRF information          |
| all              | Display entries for all vrfs         |
| __readonly__     | (Optional)                           |
| TABLE_iphttp     | (Optional) source interface of http  |
| <i>vrfname</i>   | (Optional) vrfname                   |
| <i>ifname</i>    | (Optional) ifname                    |

## Command Mode

- /exec

## show ip igmp event-history

```
show ip igmp [ internal ] event-history { errors | msgs | <igmp-event-hist-buf-name> | statistics }
```

### Syntax Description

|                                 |                                       |
|---------------------------------|---------------------------------------|
| show                            | Show running system information       |
| ip                              | Display IP information                |
| igmp                            | Display IGMP status and configuration |
| internal                        | (Optional) Commands for internal use  |
| event-history                   | Show various event logs of IGMP       |
| errors                          | Show error logs of IGMP               |
| msgs                            | Show various message logs of IGMP     |
| <i>igmp-event-hist-buf-name</i> | Show various logs of IGMP             |
| statistics                      | Show state and size of buffer         |

### Command Mode

- /exec

## show ip igmp groups

```
show ip igmp { groups | route } [ <source> [ <group> ] | <group> [ <source> ] ] [ <interface> ] [ summary ]
[ vrf { <vrf-name> | <vrf-known-name> | all } ] [ summary-old ] [ __readonly__ [ TABLE_vrf [ <if-name>
] [ <vrfname> ] [ <entry-count> ] [ <group-addr> ] [ <sourceaddress> ] [ TABLE_group [ <group-addr> ] [
<group-type> ] [ <if-name> ] [ <uptime> ] [ <expires> ] [ <reporter> ] ] [ TABLE_source [ <source-addr> ]
[ <group-type> ] [ <translate> ] [ <if-name> ] [ <uptime> ] [ <expires> ] [ <reporter> ] ] [ <vrf-cntxt> ] [
<g-count> ] [ <sg-count> ] ] ] ]
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                              |
| ip                    | Display IP information                                       |
| igmp                  | Display IGMP status and configuration                        |
| groups                | Display IGMP attached group membership information           |
| route                 | Display IGMP attached group membership information           |
| <i>group</i>          | (Optional) Multicast IP address of single group to display   |
| <i>source</i>         | (Optional) Source IP address                                 |
| vrf                   | (Optional) Display per-VRF information                       |
| <i>vrf-name</i>       | (Optional) VRF name  |
| <i>vrf-known-name</i> | (Optional) Known VRF name                                    |
| all                   | (Optional) Display information for all VRFs                  |
| <i>interface</i>      | (Optional) Display group membership on single interface name |
| summary               | (Optional) Display group summary                             |
| summary-old           | (Optional) Display group summary                             |
| <i>__readonly__</i>   | (Optional)   |
| TABLE_vrf             | (Optional)   |
| <i>vrfname</i>        | (Optional)   |
| <i>if-name</i>        | (Optional)   |
| <i>group-addr</i>     | (Optional)   |
| <i>entry-count</i>    | (Optional)   |
| <i>sourceaddress</i>  | (Optional)   |
| TABLE_group           | (Optional)   |

|                    |            |
|--------------------|------------|
| <i>group-addr</i>  | (Optional) |
| <i>group-type</i>  | (Optional) |
| <i>if-name</i>     | (Optional) |
| <i>uptime</i>      | (Optional) |
| <i>expires</i>     | (Optional) |
| <i>reporter</i>    | (Optional) |
| TABLE_source       | (Optional) |
| <i>source-addr</i> | (Optional) |
| <i>group-type</i>  | (Optional) |
| <i>translate</i>   | (Optional) |
| <i>if-name</i>     | (Optional) |
| <i>uptime</i>      | (Optional) |
| <i>expires</i>     | (Optional) |
| <i>reporter</i>    | (Optional) |
| <i>vrf-cntxt</i>   | (Optional) |
| <i>g-count</i>     | (Optional) |
| <i>sg-count</i>    | (Optional) |

**Command Mode**

- /exec



|                   |            |
|-------------------|------------|
| <i>ver</i>        | (Optional) |
| TABLE_if          | (Optional) |
| <i>if-name</i>    | (Optional) |
| <i>if-status</i>  | (Optional) |
| <i>ip-sum</i>     | (Optional) |
| <i>addr</i>       | (Optional) |
| <i>querier</i>    | (Optional) |
| <i>q-ver</i>      | (Optional) |
| <i>next-query</i> | (Optional) |
| <i>expires</i>    | (Optional) |
| <i>mc</i>         | (Optional) |
| <i>ver</i>        | (Optional) |
| <i>host-ver</i>   | (Optional) |
| <i>qi</i>         | (Optional) |
| <i>cqi</i>        | (Optional) |
| <i>mrt</i>        | (Optional) |
| <i>cmrt</i>       | (Optional) |
| <i>sqi</i>        | (Optional) |
| <i>csqi</i>       | (Optional) |
| <i>sqc</i>        | (Optional) |
| <i>lmmrt</i>      | (Optional) |
| <i>lmqc</i>       | (Optional) |
| <i>gt</i>         | (Optional) |
| <i>cgt</i>        | (Optional) |
| <i>qt</i>         | (Optional) |
| <i>cqt</i>        | (Optional) |
| <i>uri</i>        | (Optional) |
| <i>rv</i>         | (Optional) |
| <i>crv</i>        | (Optional) |

|                         |            |
|-------------------------|------------|
| <i>rll</i>              | (Optional) |
| <i>rc</i>               | (Optional) |
| <i>v1rr</i>             | (Optional) |
| <i>v2qs</i>             | (Optional) |
| <i>v2qr</i>             | (Optional) |
| <i>v2rs</i>             | (Optional) |
| <i>v2rr</i>             | (Optional) |
| <i>v2ls</i>             | (Optional) |
| <i>v2lr</i>             | (Optional) |
| <i>v3qs</i>             | (Optional) |
| <i>v3qr</i>             | (Optional) |
| <i>v3rs</i>             | (Optional) |
| <i>v3rr</i>             | (Optional) |
| <i>v2ggdest</i>         | (Optional) |
| <i>v3ggdest</i>         | (Optional) |
| <i>cse</i>              | (Optional) |
| <i>ple</i>              | (Optional) |
| <i>lsip</i>             | (Optional) |
| <i>scf</i>              | (Optional) |
| <i>qnq</i>              | (Optional) |
| <i>rvm</i>              | (Optional) |
| <i>qvm</i>              | (Optional) |
| <i>uit</i>              | (Optional) |
| <i>v1gdam</i>           | (Optional) |
| <i>v2gdam</i>           | (Optional) |
| <i>v3dai</i>            | (Optional) |
| <i>ra</i>               | (Optional) |
| <i>static-group-map</i> | (Optional) |
| <i>join-group-map</i>   | (Optional) |

|                             |            |
|-----------------------------|------------|
| <i>host-proxy-group-map</i> | (Optional) |
| <i>il</i>                   | (Optional) |
| <i>host-proxy</i>           | (Optional) |
| <i>un-solicited</i>         | (Optional) |
| <i>unsoint</i>              | (Optional) |

**Command Mode**

- /exec



# show ip igmp local-groups

```
show ip igmp local-groups [ <interface> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ [
TABLE_vrf [ <vrf-name> ] [ TABLE_if [ <if-name> ] [ TABLE_grp [ <group-addr> ] [ TABLE_src [
<source-addr> ] [ <last-reported> ] [ <local-group> ] [ <static-oif> ] [ <report-only> ] [ <host-proxy> ] ] ] ]
]]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                              |
| ip                    | Display IP information                                       |
| igmp                  | Display IGMP status and configuration                        |
| local-groups          | Display IGMP local group membership information              |
| <i>interface</i>      | (Optional) Display group membership on single interface name |
| vrf                   | (Optional) Display per-VRF information                       |
| <i>vrf-name</i>       | (Optional) VRF name  |
| <i>vrf-known-name</i> | (Optional) Known VRF name                                    |
| all                   | (Optional) Display information for all VRFs                  |
| <i>__readonly__</i>   | (Optional)   |
| TABLE_vrf             | (Optional)   |
| <i>vrf-name</i>       | (Optional)   |
| TABLE_if              | (Optional)   |
| <i>if-name</i>        | (Optional)   |
| TABLE_grp             | (Optional)   |
| <i>group-addr</i>     | (Optional)   |
| TABLE_src             | (Optional)   |
| <i>source-addr</i>    | (Optional)   |
| <i>last-reported</i>  | (Optional)   |
| <i>local-group</i>    | (Optional)   |
| <i>static-oif</i>     | (Optional)   |
| <i>report-only</i>    | (Optional)   |
| <i>host-proxy</i>     | (Optional)   |

**Command Mode**

- /exec

## show ip igmp policy statistics reports

```
show ip igmp policy statistics reports [ <interface> ] [ __readonly__ [ TABLE_interface [ <if> ] [
TABLE_routemap [ <name> ] [ <action> ] [ <seq_num> ] [ TABLE_cmd [ <command> ] [ <match_count>
] [ <compare_count> ] ] ] [ <total_accept_count> ] [ <total_reject_count> ] ] ]
```

### Syntax Description

|                           |  |
|---------------------------|--|
| show                      | Show running system information                |
| ip                        | Display IP information                         |
| igmp                      | Show IGMP related information                  |
| policy                    | Policy related information                     |
| statistics                | Policy statistics                              |
| reports                   | IGMP reports                                   |
| <i>interface</i>          | (Optional) Interface to display statistics for |
| <i>__readonly__</i>       | (Optional)                                     |
| TABLE_interface           | (Optional)                                     |
| <i>if</i>                 | (Optional)                                     |
| TABLE_routemap            | (Optional)                                     |
| <i>name</i>               | (Optional)                                     |
| <i>action</i>             | (Optional)                                     |
| <i>seq_num</i>            | (Optional)                                     |
| TABLE_cmd                 | (Optional)                                     |
| <i>command</i>            | (Optional)                                     |
| <i>compare_count</i>      | (Optional)                                     |
| <i>match_count</i>        | (Optional)                                     |
| <i>total_accept_count</i> | (Optional)                                     |
| <i>total_reject_count</i> | (Optional)                                     |

### Command Mode

- /exec

## show ip igmp snooping

```
show ip igmp snooping [ { vlan <vlan> | bridge-domain <bdid> } ] [ __readonly__ [ <vdc> ] [ <enabled> ] [ <omf> ] [ <grepsup> ] [ <gv3repsup> ] [ <glinklocalgrpsup> ] { TABLE_vlan <vlan-id> [ <description> ] [ <snoop-on> ] [ <qa> ] [ <qv> ] [ <qi> ] [ <qlmqi> ] [ <rv> ] [ <sq> ] [ <sqr> ] [ <eht> ] [ <fl> ] [ <repsup> ] [ <v3repsup> ] [ <vlinklocalgrpsup> ] [ <rpc> ] [ <gc> ] [ TABLE_active_ports [ <actvports> ] ] [ <lkupmode> ] [ <omf_enabled> ] [ <reportfloodenable> ] [ <reportfloodall> ] [ TABLE_intf <if-name> ] [ <leavegroupaddress> ] } ]
```

### Syntax Description

|                         |  |
|-------------------------|--|
| show                    | Show running system information                              |
| ip                      | Display IP information                                       |
| igmp                    | Display IGMP status and configuration                        |
| snooping                | IGMP Snooping information                                    |
| vlan                    | (Optional) Display VLAN IGMP snooping membership information |
| <i>vlan</i>             | (Optional) Specify VLAN                                      |
| bridge-domain           | (Optional) Display BD IGMP snooping membership information   |
| <i>bdid</i>             | (Optional) Specify BD  |
| <i>__readonly__</i>     | (Optional)   |
| <i>vdc</i>              | (Optional)   |
| <i>enabled</i>          | (Optional)   |
| <i>omf</i>              | (Optional)   |
| <i>grepsup</i>          | (Optional)   |
| <i>gv3repsup</i>        | (Optional)   |
| <i>glinklocalgrpsup</i> | (Optional)   |
| TABLE_vlan              | (Optional)   |
| <i>vlan-id</i>          | (Optional)   |
| <i>description</i>      | (Optional) description, if any                               |
| <i>snoop-on</i>         | (Optional)   |
| <i>qa</i>               | (Optional)   |
| <i>qv</i>               | (Optional)   |
| <i>qi</i>               | (Optional)   |

|                          |            |
|--------------------------|------------|
| <i>qlmqi</i>             | (Optional) |
| <i>rv</i>                | (Optional) |
| <i>sq</i>                | (Optional) |
| <i>sqr</i>               | (Optional) |
| <i>eht</i>               | (Optional) |
| <i>fl</i>                | (Optional) |
| <i>repsup</i>            | (Optional) |
| <i>v3repsup</i>          | (Optional) |
| <i>vlinklocalgrpsup</i>  | (Optional) |
| <i>rpc</i>               | (Optional) |
| <i>gc</i>                | (Optional) |
| TABLE_active_ports       | (Optional) |
| <i>actvports</i>         | (Optional) |
| <i>lkupmode</i>          | (Optional) |
| <i>omf_enabled</i>       | (Optional) |
| <i>reportfloodenable</i> | (Optional) |
| <i>reportfloodall</i>    | (Optional) |
| TABLE_intf               | (Optional) |
| <i>if-name</i>           | (Optional) |
| <i>leavegroupaddress</i> | (Optional) |

**Command Mode**

- /exec

## show ip igmp snooping event-history

show ip igmp snooping [ internal ] event-history { statistics | <igmp-snoop-event-hist-buf-name> }

### Syntax Description

|                                       |   |
|---------------------------------------|---|
| show                                  | Show running system information                       |
| ip                                    | Display IP information                                |
| igmp                                  | Display IGMP status and configuration                 |
| snooping                              | IGMP Snooping information                             |
| internal                              | (Optional) Display IGMP snooping internal information |
| event-history                         | Show various event logs of IGMP Snooping              |
| statistics                            | Show state and size of the buffers                    |
| <i>igmp-snoop-event-hist-buf-name</i> | Show contents of event-history buffer                 |

### Command Mode

- /exec



|                           |            |
|---------------------------|------------|
| <i>expires</i>            | (Optional) |
| <i>cfs-flag</i>           | (Optional) |
| <i>native-flag</i>        | (Optional) |
| <i>delete-pending</i>     | (Optional) |
| <i>cfs-update-pending</i> | (Optional) |

**Command Mode**

- /exec



## show ip igmp snooping filter details

```
show ip igmp snooping filter [ vlan <vlan_id> ] details [ __readonly__ { TABLE_vlanid <vlan-id>
<access-group> <group-channels-limit> <igmp-min-ver> } ]
```

### Syntax Description

|                             |  |
|-----------------------------|--|
| show                        | Show running system information        |
| ip                          | Display IP information                 |
| igmp                        | Display IGMP status and configuration  |
| snooping                    | IGMP Snooping information              |
| filter                      | Shows filter policy configuration      |
| vlan                        | (Optional) Only for the specified VLAN |
| <i>vlan_id</i>              | (Optional) VLAN ID                     |
| details                     | Shows different Filter configurations  |
| <i>__readonly__</i>         | (Optional)                             |
| TABLE_vlanid                | (Optional)                             |
| <i>vlan-id</i>              | (Optional)                             |
| <i>access-group</i>         | (Optional)                             |
| <i>group-channels-limit</i> | (Optional)                             |
| <i>igmp-min-ver</i>         | (Optional)                             |

### Command Mode

- /exec

## show ip igmp snooping groups

```
show ip igmp snooping [ otv | remote ] groups [ { <source> [ <group> ] } | { <group> [ <source> ] } ] [ vlan
<vlan> | bridge-domain <bdid> ] [ detail ] [ summary ] [ __readonly__ [ TABLE_vlan [ <vlan-id> ] [ <rports>
] [ <rtrPortFlag> ] [ TABLE_port <if-name> ] [ TABLE_rtrports <rport-if-name> ] [ <raddr> ] [ TABLE_source
<source> ] [ TABLE_group <addr> [ <g-mfdm> ] [ <ver> ] [ <old-host> ] [ <raddr> ] [ <static> ] [ <dynamic>
] [ TABLE_static_ports <static-if-name> ] [ TABLE_v2_ports <v2-if-name> [ <uptime> ] [ <expires> ] [
<gq-missed> ] ] [ TABLE_star_g_ports <star-g-if-name> [ <uptime> ] [ <expires> ] ] [ <g-vpc> ] [ <rsf> ] [
<js> ] [ TABLE_source <source> [ <srsf> ] [ <s-mfdm> ] [ <src-static> ] [ <src-dynamic> ] [
TABLE_src_static_ports <src-static-if-name> ] [ TABLE_src_dynamic [ <oifs> ] <dyn-if-name> [ <src-uptime>
] [ <src-expires> ] ] [ <s-vpc> ] ] ] [ <snoop-enabled> ] [ <omf-enabled> ] [ <group-count> ] [ <s-g-count>
] [ <total_star_g_count> ] [ <total_sg_count> ] ] ] ]
```

### Syntax Description

|                    |  |
|--------------------|--|
| show               | Show running system information                              |
| ip                 | Display IP information                                       |
| igmp               | Display IGMP status and configuration                        |
| snooping           | IGMP Snooping information                                    |
| otv                | (Optional) IGMP Snooping OTV information                     |
| remote             | (Optional) IGMP Snooping remote information                  |
| groups             | Display snooping information for group address               |
| summary            | (Optional) Display snooping group summary                    |
| <i>group</i>       | (Optional) Multicast IP address of single group to display   |
| <i>source</i>      | (Optional) Source IP address                                 |
| vlan               | (Optional) Display VLAN IGMP snooping membership information |
| <i>vlan</i>        | (Optional) Specify VLAN                                      |
| bridge-domain      | (Optional) Display BD IGMP snooping membership information   |
| <i>bdid</i>        | (Optional) Specify BD  |
| detail             | (Optional) Display detailed information for the group        |
| __readonly__       | (Optional)   |
| TABLE_vlan         | (Optional)   |
| <i>vlan-id</i>     | (Optional)   |
| <i>rports</i>      | (Optional)   |
| <i>rtrPortFlag</i> | (Optional)   |

|                           |            |
|---------------------------|------------|
| <i>snoop-enabled</i>      | (Optional) |
| <i>omf-enabled</i>        | (Optional) |
| <i>group-count</i>        | (Optional) |
| <i>s-g-count</i>          | (Optional) |
| <i>total_star_g_count</i> | (Optional) |
| <i>total_sg_count</i>     | (Optional) |
| TABLE_port                | (Optional) |
| <i>if-name</i>            | (Optional) |
| TABLE_rtrports            | (Optional) |
| <i>rport-if-name</i>      | (Optional) |
| <i>raddr</i>              | (Optional) |
| TABLE_group               | (Optional) |
| <i>addr</i>               | (Optional) |
| <i>ver</i>                | (Optional) |
| <i>raddr</i>              | (Optional) |
| TABLE_source              | (Optional) |
| <i>source</i>             | (Optional) |
| <i>rsf</i>                | (Optional) |
| <i>js</i>                 | (Optional) |
| <i>g-mfdm</i>             | (Optional) |
| <i>old-host</i>           | (Optional) |
| <i>g-vpc</i>              | (Optional) |
| <i>static</i>             | (Optional) |
| <i>dynamic</i>            | (Optional) |
| TABLE_static_ports        | (Optional) |
| <i>static-if-name</i>     | (Optional) |
| TABLE_v2_ports            | (Optional) |
| <i>v2-if-name</i>         | (Optional) |
| <i>uptime</i>             | (Optional) |

|                           |            |
|---------------------------|------------|
| <i>expires</i>            | (Optional) |
| <i>gq-missed</i>          | (Optional) |
| TABLE_star_g_ports        | (Optional) |
| <i>star-g-if-name</i>     | (Optional) |
| <i>uptime</i>             | (Optional) |
| <i>expires</i>            | (Optional) |
| TABLE_source              | (Optional) |
| <i>source</i>             | (Optional) |
| <i>srsf</i>               | (Optional) |
| <i>s-mfdm</i>             | (Optional) |
| <i>s-vpc</i>              | (Optional) |
| <i>src-static</i>         | (Optional) |
| <i>src-dynamic</i>        | (Optional) |
| TABLE_src_static_ports    | (Optional) |
| <i>src-static-if-name</i> | (Optional) |
| TABLE_src_dynamic         | (Optional) |
| <i>oifs</i>               | (Optional) |
| <i>dyn-if-name</i>        | (Optional) |
| <i>src-uptime</i>         | (Optional) |
| <i>src-expires</i>        | (Optional) |

**Command Mode**

- /exec

# show ip igmp snooping lookup-mode

```
show ip igmp snooping lookup-mode [ vlan <vlan> | bridge-domain <bidid> ] [ __readonly__ [ <configured> ] [ <operational> ] [ TABLE_vlan [ <vlan-id> ] [ <lookup> ] ] ]
```

## Syntax Description

|                     |                                       |
|---------------------|---------------------------------------|
| show                | Show running system information       |
| ip                  | Display IP information                |
| igmp                | Display IGMP status and configuration |
| snooping            | IGMP Snooping information             |
| lookup-mode         | IGMP Snooping lkup mode information   |
| vlan                | (Optional) Display VLAN information   |
| <i>vlan</i>         | (Optional) Specify VLAN               |
| bridge-domain       | (Optional) Display BD information     |
| <i>bidid</i>        | (Optional) Specify BD                 |
| <i>__readonly__</i> | (Optional)                            |
| <i>configured</i>   | (Optional)                            |
| <i>operational</i>  | (Optional)                            |
| TABLE_vlan          | (Optional)                            |
| <i>vlan-id</i>      | (Optional)                            |
| <i>lookup</i>       | (Optional)                            |

## Command Mode

- /exec

## show ip igmp snooping mac-oif

```
show ip igmp snooping mac-oif [ vlan <vlan> | bridge-domain <bdid> ] [ detail ] [ __readonly__ [ <totaloif>
] [ TABLE_vlan <vlan-id> <count> [ TABLE_mac <mac-addr> [ TABLE_oif <oifs> ] ] ] ]
```

### Syntax Description

|                     |  |
|---------------------|--|
| show                | Show running system information                  |
| ip                  | Display IP information                           |
| igmp                | Display IGMP status and configuration            |
| snooping            | IGMP Snooping information                        |
| mac-oif             | IGMP Snooping static mac oif information         |
| vlan                | (Optional) Display VLAN information              |
| <i>vlan</i>         | (Optional) Specify VLAN                          |
| bridge-domain       | (Optional) Display BD information                |
| <i>bdid</i>         | (Optional) Specify BD                            |
| detail              | (Optional) static mac oif detail, M2RIB oif info |
| <i>__readonly__</i> | (Optional)                                       |
| <i>totaloif</i>     | (Optional)                                       |
| TABLE_vlan          | (Optional)                                       |
| <i>vlan-id</i>      | (Optional)                                       |
| <i>count</i>        | (Optional)                                       |
| TABLE_mac           | (Optional)                                       |
| <i>mac-addr</i>     | (Optional)                                       |
| TABLE_oif           | (Optional)                                       |
| <i>oifs</i>         | (Optional)                                       |

### Command Mode

- /exec

## show ip igmp snooping mrouter

```
show ip igmp snooping mrouter [ otv ] [ vlan <vlan> | bridge-domain <bdid> ] [ detail ] [ __readonly__
TABLE_vlan <vlan-id> TABLE_intf <if-name> <static> <dynamic> <vpc> <fabricpath-core-port>
<co-learned> <user-configured> <learnt-by-peer> <uptime> <expires> <internal> ]
```

### Syntax Description

|                             |  |
|-----------------------------|--|
| show                        | Show running system information                      |
| ip                          | Display IP information                               |
| igmp                        | Display IGMP status and configuration                |
| snooping                    | IGMP Snooping information                            |
| mrouter                     | Display multicast routers detected                   |
| otv                         | (Optional) IGMP Snooping OTV information             |
| vlan                        | (Optional) Display VLAN multicast router information |
| <i>vlan</i>                 | (Optional) Specify VLAN                              |
| bridge-domain               | (Optional) Display BD multicast router information   |
| <i>bdid</i>                 | (Optional) Specify BD                                |
| detail                      | (Optional) Display detailed mrouter information      |
| <i>__readonly__</i>         | (Optional)   |
| TABLE_vlan                  | (Optional)   |
| <i>vlan-id</i>              | (Optional)   |
| TABLE_intf                  | (Optional)   |
| <i>if-name</i>              | (Optional)   |
| <i>uptime</i>               | (Optional)   |
| <i>expires</i>              | (Optional)   |
| <i>static</i>               | (Optional)   |
| <i>dynamic</i>              | (Optional)   |
| <i>internal</i>             | (Optional)   |
| <i>vpc</i>                  | (Optional)   |
| <i>fabricpath-core-port</i> | (Optional)   |
| <i>co-learned</i>           | (Optional)   |

|                        |            |
|------------------------|------------|
| <i>user-configured</i> | (Optional) |
| <i>learnt-by-peer</i>  | (Optional) |

**Command Mode**

- /exec



# show ip igmp snooping pw vlan brief

show ip igmp snooping pw vlan brief [ \_\_readonly\_\_ <vlan-id> ]

## Syntax Description

|                |                                       |
|----------------|---------------------------------------|
| show           | Show running system information       |
| ip             | Display IP information                |
| igmp           | Display IGMP status and configuration |
| snooping       | IGMP Snooping information             |
| pw             | IGMP Snooping PW information          |
| vlan           | Display VLAN/BD information           |
| brief          | Brief output                          |
| __readonly__   | (Optional)                            |
| <i>vlan-id</i> | (Optional)                            |

## Command Mode

- /exec

## show ip igmp snooping querier

```
show ip igmp snooping querier [ vlan <vlan> | bridge-domain <bdid> ] [ detail ] [ __readonly__ [ TABLE_vlan
<vlan-id> <qa> <qv> [ <expires> ] <qiod> <qname> <int> [ <last_member_query_count> ] [
<config_last_member_query_count> ] [ <snooping_version> ] [ <config_qv> ] [ <robust> ] [ <config_robust>
] [ <startup_query_count> ] [ <config_startup_query_count> ] [ <startup_query_interval> ] [
<config_startup_query_interval> ] [ <mbr_query_interval> ] [ <config_mbr_query_interval> ] [
<snooping_query_intvl> ] [ <config_snooping_query_intvl> ] [ <gquery_response_time> ] [
<config_gquery_response_time> ] [ <querier_timeout> ] [ <querier_timeout_flag> ] ] ]
```

### Syntax Description

|                                       |   |
|---------------------------------------|---|
| show                                  | Show running system information                           |
| ip                                    | Display IP information                                    |
| igmp                                  | Display IGMP status and configuration                     |
| snooping                              | IGMP Snooping information                                 |
| querier                               | Display snooping querier information                      |
| vlan                                  | (Optional) Display VLAN IGMP snooping querier information |
| <i>vlan</i>                           | (Optional) Specify VLAN                                   |
| bridge-domain                         | (Optional) Display BD IGMP snooping querier information   |
| <i>bdid</i>                           | (Optional) Specify BD                                     |
| detail                                | (Optional) Display detailed information                   |
| <i>__readonly__</i>                   | (Optional)  |
| TABLE_vlan                            | (Optional)  |
| <i>vlan-id</i>                        | (Optional)  |
| <i>qa</i>                             | (Optional)  |
| <i>expires</i>                        | (Optional)  |
| <i>qv</i>                             | (Optional)  |
| <i>qiod</i>                           | (Optional)  |
| <i>qname</i>                          | (Optional)  |
| <i>int</i>                            | (Optional)  |
| <i>last_member_query_count</i>        | (Optional)  |
| <i>config_last_member_query_count</i> | (Optional)  |
| <i>snooping_version</i>               | (Optional)  |

|                                      |            |
|--------------------------------------|------------|
| <i>config_qv</i>                     | (Optional) |
| <i>robust</i>                        | (Optional) |
| <i>config_robust</i>                 | (Optional) |
| <i>startup_query_count</i>           | (Optional) |
| <i>config_startup_query_count</i>    | (Optional) |
| <i>startup_query_interval</i>        | (Optional) |
| <i>config_startup_query_interval</i> | (Optional) |
| <i>mbr_query_interval</i>            | (Optional) |
| <i>config_mbr_query_interval</i>     | (Optional) |
| <i>snooping_query_intvl</i>          | (Optional) |
| <i>config_snooping_query_intvl</i>   | (Optional) |
| <i>gquery_response_time</i>          | (Optional) |
| <i>config_gquery_response_time</i>   | (Optional) |
| <i>querier_timeout</i>               | (Optional) |
| <i>querier_timeout_flag</i>          | (Optional) |

**Command Mode**

- /exec

## show ip igmp snooping report statistics

```
show ip igmp snooping { report-policy | access-group } statistics [ vlan <vlan> ] [ __readonly__ [
TABLE_vlanid { <vlan-id> <rpm-type> <policy-name> } ] ]
```

### Syntax Description

|                    |   |
|--------------------|---|
| show               | Show running system information                                     |
| ip                 | Display IP information  |
| igmp               | Display IGMP status and configuration                               |
| snooping           | IGMP Snooping information   |
| report-policy      | IGMP Report Policy  |
| access-group       | IGMP access-group   |
| statistics         | Policy statistics   |
| vlan               | (Optional) Display VLAN IGMP snooping policy statistics information |
| <i>vlan</i>        | (Optional) Specify VLAN   |
| __readonly__       | (Optional)  |
| TABLE_vlanid       | (Optional)  |
| <i>vlan-id</i>     | (Optional)  |
| <i>rpm-type</i>    | (Optional)  |
| <i>policy-name</i> | (Optional)  |

### Command Mode

- /exec

# show ip igmp snooping snmp mib adminMode

show ip igmp snooping snmp mib adminMode [ *\_\_readonly\_\_* <cisAdminMode> ]

## Syntax Description

|                     |   |
|---------------------|---|
| show                | Show running system information                                     |
| ip                  | Display IP information  |
| igmp                | Display IGMP status and configuration                               |
| snooping            | IGMP Snooping information   |
| snmp                | Show SNMP   |
| mib                 | Show MIB table  |
| adminMode           | Indicates the administrative snooping mode of IGMP Snooping feature |
| <i>__readonly__</i> | (Optional) Read Only  |
| <i>cisAdminMode</i> | (Optional) mib object cisAdminMode                                  |

## Command Mode

- /exec

## show ip igmp snooping snmp mib aliasingMode

show ip igmp snooping snmp mib aliasingMode [ *\_\_readonly\_\_* <*cisAddressAliasingMode*> ]

### Syntax Description

|                               |  |
|-------------------------------|--|
| show                          | Show running system information                                |
| ip                            | Display IP information   |
| igmp                          | Display IGMP status and configuration                          |
| snooping                      | IGMP Snooping information                                      |
| snmp                          | Show SNMP  |
| mib                           | Show MIB table   |
| aliasingMode                  | Indicates the current IGMP Address Aliasing Mode of the device |
| <i>__readonly__</i>           | (Optional) Read Only   |
| <i>cisAddressAliasingMode</i> | (Optional) mib object <i>cisAddressAliasingMode</i>            |

### Command Mode

- /exec

# show ip igmp snooping snmp mib cisV3ProcessEnableOperStatus

```
show ip igmp snooping snmp mib cisV3ProcessEnableOperStatus [ __readonly__
<cisV3ProcessEnabledOperStatus> ]
```

## Syntax Description

|                                      |  |
|--------------------------------------|--|
| show                                 | Show running system information  |
| ip                                   | Display IP information   |
| igmp                                 | Display IGMP status and configuration  |
| snooping                             | IGMP Snooping information  |
| snmp                                 | Show SNMP  |
| mib                                  | Show MIB table   |
| cisV3ProcessEnableOperStatus         | Indicates the current operational status of IGMP v3 processing in the system |
| __readonly__                         | (Optional) Read Only   |
| <i>cisV3ProcessEnabledOperStatus</i> | (Optional) mib object cisV3ProcessEnabledOperStatus                          |

## Command Mode

- /exec

## show ip igmp snooping snmp mib explicitTrackingTable

```
show ip igmp snooping snmp mib explicitTrackingTable [ vlan <cisVlanIndex-in> ] [ __readonly__
TABLE_cisVlanExplicitTrackingTable <cisVlanIndex-out> <cisVlanExplicitTrackingEnabled>
<cisVlanExplicitTrackingLimit> ]
```

### Syntax Description

|   |   |
|---|---|
| show                                      | Show running system information                                 |
| ip  | Display IP information  |
| igmp                                      | Display IGMP status and configuration                           |
| snooping                                  | IGMP Snooping information                                       |
| snmp                                      | Show SNMP   |
| mib                                       | Show MIB table  |
| explicitTrackingTable                     | Show mib table cisVlanExplicitTrackingTable                     |
| vlan                                      | (Optional) Display VLAN/BD IGMP snooping membership information |
| <i>cisVlanIndex-in</i>                    | (Optional) Specify VLAN/BD                                      |
| <i>__readonly__</i>                       | (Optional)  |
| <i>TABLE_cisVlanExplicitTrackingTable</i> | (Optional)  |
| <i>cisVlanIndex-out</i>                   | (Optional) mib table index cisVlanIndex                         |
| <i>cisVlanExplicitTrackingEnabled</i>     | (Optional) mib object cisVlanExplicitTrackingEnabled            |
| <i>cisVlanExplicitTrackingLimit</i>       | (Optional) mib object cisVlanExplicitTrackingLimit              |

### Command Mode

- /exec



# show ip igmp snooping snmp mib fallBackTime

show ip igmp snooping snmp mib fallBackTime [ \_\_readonly\_\_ <cisFallbackTime> ]

## Syntax Description

|                        |   |
|------------------------|---|
| show                   | Show running system information                               |
| ip                     | Display IP information  |
| igmp                   | Display IGMP status and configuration                         |
| snooping               | IGMP Snooping information                                     |
| snmp                   | Show SNMP   |
| mib                    | Show MIB table  |
| fallBackTime           | Indicates the time the IGMP address aliasing mode is fallback |
| __readonly__           | (Optional) Read Only  |
| <i>cisFallbackTime</i> | (Optional) mib object cisFallbackTime                         |

## Command Mode

- /exec

## show ip igmp snooping snmp mib fastBlockEnabled

show ip igmp snooping snmp mib fastBlockEnabled [ \_\_readonly\_\_ <cisFastBlockEnabled> ]

### Syntax Description

|                            |  |
|----------------------------|--|
| show                       | Show running system information  |
| ip                         | Display IP information   |
| igmp                       | Display IGMP status and configuration                                  |
| snooping                   | IGMP Snooping information  |
| snmp                       | Show SNMP  |
| mib                        | Show MIB table   |
| fastBlockEnabled           | Indicates whether Fast-Block mechanism has been enabled for the system |
| __readonly__               | (Optional) Read Only   |
| <i>cisFastBlockEnabled</i> | (Optional) mib object cisFastBlockEnabled                              |

### Command Mode

- /exec

# show ip igmp snooping snmp mib fastleaveenabled

show ip igmp snooping snmp mib fastleaveenabled [ \_\_readonly\_\_ <cisFastLeaveEnabled> ]

## Syntax Description

|                            |   |
|----------------------------|---|
| show                       | Show running system information           |
| ip                         | Display IP information                    |
| igmp                       | Display IGMP status and configuration     |
| snooping                   | IGMP Snooping information                 |
| snmp                       | Show SNMP                                 |
| mib                        | Show MIB table                            |
| fastleaveenabled           | Check if fastleave is enabled             |
| __readonly__               | (Optional) Read Only                      |
| <i>cisFastLeaveEnabled</i> | (Optional) mib object cisFastLeaveEnabled |

## Command Mode

- /exec

# show ip igmp snooping snmp mib filterStatsTable

```
show ip igmp snooping snmp mib filterStatsTable [ interface <ifIndex-in> vlan <cisFilterStatsVlanNumber-in>
] [ __readonly__ TABLE_cisFilterStatsTable <ifIndex-out> <cisFilterStatsVlanNumber-out>
<cisFilterAccessGroupDenied> <cisFilterLimitDenied> <cisFilterTotalLimitDenied>
<cisFilterMinVersionDenied> ]
```

## Syntax Description

|                                     |   |
|-------------------------------------|---|
| show                                | Show running system information                               |
| ip                                  | Display IP information  |
| igmp                                | Display IGMP status and configuration                         |
| snooping                            | IGMP Snooping information                                     |
| snmp                                | Show SNMP   |
| mib                                 | Show MIB table  |
| filterStatsTable                    | Display VLAN/BD Filter Group                                  |
| interface                           | (Optional) Display interface                                  |
| <i>ifIndex-in</i>                   | (Optional) Interface Index                                    |
| vlan                                | (Optional) Display Interface access group VLAN/BD information |
| <i>cisFilterStatsVlanNumber-in</i>  | (Optional) Specify VLAN/BD                                    |
| <i>__readonly__</i>                 | (Optional)  |
| TABLE_cisFilterStatsTable           | (Optional)  |
| <i>ifIndex-out</i>                  | (Optional) mib table index ifIndex                            |
| <i>cisFilterStatsVlanNumber-out</i> | (Optional) mib table index cisFilterStatsVlanNumber           |
| <i>cisFilterAccessGroupDenied</i>   | (Optional) mib object cisFilterAccessGroupDenied              |
| <i>cisFilterLimitDenied</i>         | (Optional) mib object cisFilterLimitDenied                    |
| <i>cisFilterTotalLimitDenied</i>    | (Optional) mib object cisFilterTotalLimitDenied               |
| <i>cisFilterMinVersionDenied</i>    | (Optional) mib object cisFilterMinVersionDenied               |

## Command Mode

- /exec

# show ip igmp snooping snmp mib ifAccessGroupTable

```
show ip igmp snooping snmp mib ifAccessGroupTable [ interface <ifIndex-in> vlan <cisIfAccessGroupVlan-in>
] [ __readonly__ TABLE_cisIfAccessGroupTable <ifIndex-out> <cisIfAccessGroupVlan-out>
<cisIfAccessGroupsChannelsAllowed> <cisIfAccessGroupStorageType> <cisIfAccessGroupRowStatus> ]
```

## Syntax Description

|   |   |
|---|---|
| show                                    | Show running system information                               |
| ip                                      | Display IP information  |
| igmp                                    | Display IGMP status and configuration                         |
| snooping                                | IGMP Snooping information                                     |
| snmp                                    | Show SNMP   |
| mib                                     | Show MIB table  |
| ifAccessGroupTable                      | Display interface access group                                |
| interface                               | (Optional) Display interface                                  |
| <i>ifIndex-in</i>                       | (Optional) Interface Index                                    |
| vlan                                    | (Optional) Display Interface access group VLAN/BD information |
| <i>cisIfAccessGroupVlan-in</i>          | (Optional) Specify VLAN/BD                                    |
| <i>__readonly__</i>                     | (Optional)  |
| TABLE_cisIfAccessGroupTable             | (Optional)  |
| <i>ifIndex-out</i>                      | (Optional) mib table index ifIndex                            |
| <i>cisIfAccessGroupVlan-out</i>         | (Optional) mib table index cisIfAccessGroupVlan               |
| <i>cisIfAccessGroupsChannelsAllowed</i> | (Optional) mib object cisIfAccessGroupsChannelsAllowed        |
| <i>cisIfAccessGroupStorageType</i>      | (Optional) mib object cisIfAccessGroupStorageType             |
| <i>cisIfAccessGroupRowStatus</i>        | (Optional) mib object cisIfAccessGroupRowStatus               |

## Command Mode

- /exec

# show ip igmp snooping snmp mib ifConfigTable

```
show ip igmp snooping snmp mib ifConfigTable [ interface <ifIndex-in> ] [ __readonly__
TABLE_cisIfConfigTable <ifIndex-out> <cisIfTopoChangeFloodEnabled> ]
```

## Syntax Description

|                                    |   |
|------------------------------------|---|
| show                               | Show running system information                   |
| ip                                 | Display IP information                            |
| igmp                               | Display IGMP status and configuration             |
| snooping                           | IGMP Snooping information                         |
| snmp                               | Show SNMP   |
| mib                                | Show MIB table                                    |
| ifConfigTable                      | Display interface configuration                   |
| interface                          | (Optional) Display interface                      |
| <i>ifIndex-in</i>                  | (Optional) Interface Index                        |
| <i>__readonly__</i>                | (Optional)  |
| <i>TABLE_cisIfConfigTable</i>      | (Optional)  |
| <i>ifIndex-out</i>                 | (Optional) mib table index ifIndex                |
| <i>cisIfTopoChangeFloodEnabled</i> | (Optional) mib object cisIfTopoChangeFloodEnabled |

## Command Mode

- /exec

## show ip igmp snooping snmp mib ifLimitTable

```
show ip igmp snooping snmp mib ifLimitTable [ interface <ifIndex-in> vlan <cisIfLimitVlanNumber-in> ]
[ __readonly__ TABLE_cisIfLimitTable <ifIndex-out> <cisIfLimitVlanNumber-out> <cisIfLimitMax>
<cisIfLimitExcludeAccessGrp> <cisIfLimitStorageType> <cisIfLimitRowStatus> ]
```

### Syntax Description

|                                   |  |
|-----------------------------------|--|
| show                              | Show running system information                        |
| ip                                | Display IP information                                 |
| igmp                              | Display IGMP status and configuration                  |
| snooping                          | IGMP Snooping information                              |
| snmp                              | Show SNMP  |
| mib                               | Show MIB table   |
| ifLimitTable                      | Display interface configuration                        |
| interface                         | (Optional) Display interface                           |
| <i>ifIndex-in</i>                 | (Optional) Interface Index                             |
| vlan                              | (Optional) Display Interface Limit VLAN/BD information |
| <i>cisIfLimitVlanNumber-in</i>    | (Optional) Specify VLAN/BD                             |
| <i>__readonly__</i>               | (Optional)   |
| TABLE_cisIfLimitTable             | (Optional)   |
| <i>ifIndex-out</i>                | (Optional) mib table index ifIndex                     |
| <i>cisIfLimitVlanNumber-out</i>   | (Optional) mib table index cisIfLimitVlanNumber        |
| <i>cisIfLimitMax</i>              | (Optional) mib object cisIfLimitMax                    |
| <i>cisIfLimitExcludeAccessGrp</i> | (Optional) mib object cisIfLimitExcludeAccessGrp       |
| <i>cisIfLimitStorageType</i>      | (Optional) mib object cisIfLimitStorageType            |
| <i>cisIfLimitRowStatus</i>        | (Optional) mib object cisIfLimitRowStatus              |

### Command Mode

- /exec

## show ip igmp snooping snmp mib ifLimitTotalTable

```
show ip igmp snooping snmp mib ifLimitTotalTable [ interface <ifIndex-in> ] [ __readonly__
TABLE_cisIfLimitTotalTable <ifIndex-out> <cisIfLimitTotalLimitMax> <cisIfLimitTotalExcludeAccessGrp>
<cisIfLimitTotalStorageType> <cisIfLimitTotalRowStatus> ]
```

### Syntax Description

|  |   |
|--|---|
| show                                   | Show running system information                       |
| ip                                     | Display IP information                                |
| igmp                                   | Display IGMP status and configuration                 |
| snooping                               | IGMP Snooping information                             |
| snmp                                   | Show SNMP   |
| mib                                    | Show MIB table  |
| ifLimitTotalTable                      | Display interface configuration                       |
| interface                              | (Optional) Display interface                          |
| <i>ifIndex-in</i>                      | (Optional) Interface Index                            |
| <i>__readonly__</i>                    | (Optional)  |
| <i>TABLE_cisIfLimitTotalTable</i>      | (Optional)  |
| <i>ifIndex-out</i>                     | (Optional) mib table index ifIndex                    |
| <i>cisIfLimitTotalLimitMax</i>         | (Optional) mib object cisIfLimitTotalLimitMax         |
| <i>cisIfLimitTotalExcludeAccessGrp</i> | (Optional) mib object cisIfLimitTotalExcludeAccessGrp |
| <i>cisIfLimitTotalStorageType</i>      | (Optional) mib object cisIfLimitTotalStorageType      |
| <i>cisIfLimitTotalRowStatus</i>        | (Optional) mib object cisIfLimitTotalRowStatus        |

### Command Mode

- /exec



# show ip igmp snooping snmp mib igmpsnoopingenabled

show ip igmp snooping snmp mib igmpsnoopingenabled [ \_\_readonly\_\_ <cisIgmpSnoopingEnabled> ]

## Syntax Description

|                               |  |
|-------------------------------|--|
| show                          | Show running system information              |
| ip                            | Display IP information                       |
| igmp                          | Display IGMP status and configuration        |
| snooping                      | IGMP Snooping information                    |
| snmp                          | Show SNMP                                    |
| mib                           | Show MIB table                               |
| igmpsnoopingenabled           | Check if IGMP snooping is enabled            |
| __readonly__                  | (Optional) Read Only                         |
| <i>cisIgmpSnoopingEnabled</i> | (Optional) mib object cisIgmpSnoopingEnabled |

## Command Mode

- /exec

# show ip igmp snooping snmp mib interfaceStatsTable

```
show ip igmp snooping snmp mib interfaceStatsTable [ interface <ifIndex-in> ] [ __readonly__
TABLE_cisInterfaceStatsTable <ifIndex-out> <cisTxGeneralQueries> <cisTxGroupSpecificQueries>
<cisTxReports> <cisTxLeaves> <cisRxGeneralQueries> <cisRxGroupSpecificQueries> <cisRxReports>
<cisRxLeaves> <cisRxValidPackets> <cisRxInvalidPackets> <cisRxOtherPackets>
<cisRxMACGeneralQueries> <cisRxTopoNotifications> <cisV3Allows> <cisV3Blocks> <cisV3IsIncluded>
<cisV3IsExcluded> <cisV3ToIncluded> <cisV3ToExcluded> ]
```

## Syntax Description

|                                     |   |
|-------------------------------------|---|
| show                                | Show running system information                 |
| ip                                  | Display IP information                          |
| igmp                                | Display IGMP status and configuration           |
| snooping                            | IGMP Snooping information                       |
| snmp                                | Show SNMP                                       |
| mib                                 | Show MIB table                                  |
| interfaceStatsTable                 | Display interface stats                         |
| interface                           | (Optional) Display interface information        |
| <i>ifIndex-in</i>                   | (Optional) Interface Index                      |
| <i>__readonly__</i>                 | (Optional)                                      |
| <i>TABLE_cisInterfaceStatsTable</i> | (Optional)                                      |
| <i>ifIndex-out</i>                  | (Optional) mib table index ifIndex              |
| <i>cisTxGeneralQueries</i>          | (Optional) mib object cisTxGeneralQueries       |
| <i>cisTxGroupSpecificQueries</i>    | (Optional) mib object cisTxGroupSpecificQueries |
| <i>cisTxReports</i>                 | (Optional) mib object cisTxReports              |
| <i>cisTxLeaves</i>                  | (Optional) mib object cisTxLeaves               |
| <i>cisRxGeneralQueries</i>          | (Optional) mib object cisRxGeneralQueries       |
| <i>cisRxGroupSpecificQueries</i>    | (Optional) mib object cisRxGroupSpecificQueries |
| <i>cisRxReports</i>                 | (Optional) mib object cisRxReports              |
| <i>cisRxLeaves</i>                  | (Optional) mib object cisRxLeaves               |
| <i>cisRxValidPackets</i>            | (Optional) mib object cisRxValidPackets         |
| <i>cisRxInvalidPackets</i>          | (Optional) mib object cisRxInvalidPackets       |

|                               |  |
|-------------------------------|--|
| <i>cisRxOtherPackets</i>      | (Optional) mib object cisRxOtherPackets      |
| <i>cisRxMACGeneralQueries</i> | (Optional) mib object cisRxMACGeneralQueries |
| <i>cisRxTopoNotifications</i> | (Optional) mib object cisRxTopoNotifications |
| <i>cisV3Allows</i>            | (Optional) mib object cisV3Allows            |
| <i>cisV3Blocks</i>            | (Optional) mib object cisV3Blocks            |
| <i>cisV3IsIncluded</i>        | (Optional) mib object cisV3IsIncluded        |
| <i>cisV3IsExcluded</i>        | (Optional) mib object cisV3IsExcluded        |
| <i>cisV3ToIncluded</i>        | (Optional) mib object cisV3ToIncluded        |
| <i>cisV3ToExcluded</i>        | (Optional) mib object cisV3ToExcluded        |

**Command Mode**

- /exec

# show ip igmp snooping snmp mib lastMemeberQueryCount

```
show ip igmp snooping snmp mib lastMemeberQueryCount [ __readonly__ <cisLastMemberQueryCount> ]
```

## Syntax Description

|                                |  |
|--------------------------------|--|
| show                           | Show running system information                            |
| ip                             | Display IP information                                     |
| igmp                           | Display IGMP status and configuration                      |
| snooping                       | IGMP Snooping information                                  |
| snmp                           | Show SNMP  |
| mib                            | Show MIB table   |
| lastMemeberQueryCount          | Specifies the Last Member Query Count value of this device |
| __readonly__                   | (Optional) Read Only                                       |
| <i>cisLastMemberQueryCount</i> | (Optional) mib object cisLastMemberQueryCount              |

## Command Mode

- /exec

# show ip igmp snooping snmp mib lastMemeberQueryInterval

```
show ip igmp snooping snmp mib lastMemeberQueryInterval [ __readonly__ <cisLastMemberQueryInterval> ]
```

## Syntax Description

|                                   |  |
|-----------------------------------|--|
| show                              | Show running system information                              |
| ip                                | Display IP information                                       |
| igmp                              | Display IGMP status and configuration                        |
| snooping                          | IGMP Snooping information                                    |
| snmp                              | Show SNMP  |
| mib                               | Show MIB table   |
| lastMemeberQueryInterval          | Specifies the IGMP Last Member Query Interval of this device |
| __readonly__                      | (Optional) Read Only   |
| <i>cisLastMemberQueryInterval</i> | (Optional) mib object cisLastMemberQueryInterval             |

## Command Mode

- /exec

## show ip igmp snooping snmp mib leaveQueryType

show ip igmp snooping snmp mib leaveQueryType [ \_\_readonly\_\_ <cisLeaveQueryType> ]

### Syntax Description

|                          |   |
|--------------------------|---|
| show                     | Show running system information         |
| ip                       | Display IP information                  |
| igmp                     | Display IGMP status and configuration   |
| snooping                 | IGMP Snooping information               |
| snmp                     | Show SNMP                               |
| mib                      | Show MIB table                          |
| leaveQueryType           | Indicates type of leave query           |
| __readonly__             | (Optional) Read Only                    |
| <i>cisLeaveQueryType</i> | (Optional) mib object cisLeaveQueryType |

### Command Mode

- /exec

# show ip igmp snooping snmp mib mcastGroupTable

```
show ip igmp snooping snmp mib mcastGroupTable [ vlan <cisMcastGroupVlanIndex-in>
<cisMcastGroupAddressType-in> <cisMcastGroupAddress-in> ] [ __readonly__ TABLE_cisMcastGroupTable
<cisMcastGroupVlanIndex-out> <cisMcastGroupAddressType-out> <cisMcastGroupAddress-out>
<cisMcastGroupFilterMode> <cisMcastGroupIgmpVersion> <cisMcastGroupIncludeHostCount>
<cisMcastGroupExcludeHostCount> <cisMcastGroupPortList> ]
```

## Syntax Description

|                                      |   |
|--------------------------------------|---|
| show                                 | Show running system information                                 |
| ip                                   | Display IP information  |
| igmp                                 | Display IGMP status and configuration                           |
| snooping                             | IGMP Snooping information                                       |
| snmp                                 | Show SNMP   |
| mib                                  | Show MIB table  |
| mcastGroupTable                      | Show mib table cisMcastGroupTable                               |
| vlan                                 | (Optional) Display VLAN/BD IGMP snooping membership information |
| <i>cisMcastGroupVlanIndex-in</i>     | (Optional) Specify VLAN/BD                                      |
| <i>cisMcastGroupAddressType-in</i>   | (Optional) Address type   |
| <i>cisMcastGroupAddress-in</i>       | (Optional) Group address  |
| <i>__readonly__</i>                  | (Optional)  |
| TABLE_cisMcastGroupTable             | (Optional)  |
| <i>cisMcastGroupVlanIndex-out</i>    | (Optional) mib table index cisMcastGroupVlanIndex               |
| <i>cisMcastGroupAddressType-out</i>  | (Optional) mib table index cisMcastGroupAddressType             |
| <i>cisMcastGroupAddress-out</i>      | (Optional) mib table index cisMcastGroupAddress                 |
| <i>cisMcastGroupFilterMode</i>       | (Optional) mib object cisMcastGroupFilterMode                   |
| <i>cisMcastGroupIgmpVersion</i>      | (Optional) mib object cisMcastGroupIgmpVersion                  |
| <i>cisMcastGroupIncludeHostCount</i> | (Optional) mib object cisMcastGroupIncludeHostCount             |
| <i>cisMcastGroupExcludeHostCount</i> | (Optional) mib object cisMcastGroupExcludeHostCount             |
| <i>cisMcastGroupPortList</i>         | (Optional) mib object cisMcastGroupPortList                     |

## Command Mode

- /exec

# show ip igmp snooping snmp mib mcastRouterCfgTable

```
show ip igmp snooping snmp mib mcastRouterCfgTable [ interface <ifIndex-in> vlan
<cisMcastRouterVlanIndex-in> ] [ __readonly__ TABLE_cisMcastRouterCfgTable <ifIndex-out>
<cisMcastRouterVlanIndex-out> <cisMcastRouterType> <cisMcastRouterRowStatus> ]
```

## Syntax Description

|                                    |   |
|------------------------------------|---|
| show                               | Show running system information                                 |
| ip                                 | Display IP information  |
| igmp                               | Display IGMP status and configuration                           |
| snooping                           | IGMP Snooping information                                       |
| snmp                               | Show SNMP   |
| mib                                | Show MIB table  |
| mcastRouterCfgTable                | show mib table cisMcastRouterCfgTable                           |
| interface                          | (Optional) Display Mcast Router Interface Information           |
| <i>ifIndex-in</i>                  | (Optional) Specify the Mcast router interface                   |
| vlan                               | (Optional) Display VLAN/BD IGMP snooping membership information |
| <i>cisMcastRouterVlanIndex-in</i>  | (Optional) Specify VLAN/BD                                      |
| <i>__readonly__</i>                | (Optional)  |
| TABLE_cisMcastRouterCfgTable       | (Optional)  |
| <i>ifIndex-out</i>                 | (Optional) mib table index ifIndex                              |
| <i>cisMcastRouterVlanIndex-out</i> | (Optional) mib table index cisMcastRouterVlanIndex              |
| <i>cisMcastRouterType</i>          | (Optional) mib object cisMcastRouterType                        |
| <i>cisMcastRouterRowStatus</i>     | (Optional) mib object cisMcastRouterRowStatus                   |

## Command Mode

- /exec



# show ip igmp snooping snmp mib mcastRouterConfigTable

```
show ip igmp snooping snmp mib mcastRouterConfigTable [ vlan <cisMcastRouterConfigVlanIndex-in>
interface <ifIndex-in> ] [ __readonly__ TABLE_cisMcastRouterConfigTable <ifIndex-out>
<cisMcastRouterConfigVlanIndex-out> <cisMcastRouterConfigRouterType>
<cisMcastRouterConfigStorageType> <cisMcastRouterConfigRowStatus> ]
```

## Syntax Description

|  |   |
|--|---|
| show                                     | Show running system information                                 |
| ip                                       | Display IP information  |
| igmp                                     | Display IGMP status and configuration                           |
| snooping                                 | IGMP Snooping information                                       |
| snmp                                     | Show SNMP   |
| mib                                      | Show MIB table  |
| mcastRouterConfigTable                   | show mib table cisMcastRouterConfigTable                        |
| vlan                                     | (Optional) Display VLAN/BD IGMP snooping membership information |
| <i>cisMcastRouterConfigVlanIndex-in</i>  | (Optional) Specify VLAN/BD                                      |
| interface                                | (Optional) Display Mcast Router Interface Information           |
| <i>ifIndex-in</i>                        | (Optional) Specify the Mcast router interface index             |
| __readonly__                             | (Optional)  |
| TABLE_cisMcastRouterConfigTable          | (Optional)  |
| <i>cisMcastRouterConfigVlanIndex-out</i> | (Optional) mib table index cisMcastRouterConfigVlanIndex        |
| <i>ifIndex-out</i>                       | (Optional) mib table index ifIndex                              |
| <i>cisMcastRouterConfigRouterType</i>    | (Optional) mib object cisMcastRouterConfigRouterType            |
| <i>cisMcastRouterConfigStorageType</i>   | (Optional) mib object cisMcastRouterConfigStorageType           |
| <i>cisMcastRouterConfigRowStatus</i>     | (Optional) mib object cisMcastRouterConfigRowStatus             |

## Command Mode

- /exec

# show ip igmp snooping snmp mib multicastGroupConfigTable

```
show ip igmp snooping snmp mib multicastGroupConfigTable [ vlan <cisMulticastGroupConfVlanIndex-in>
<cisMulticastGroupConfCeVlanIndex-in> <cisMulticastGroupConfAddressType-in>
<cisMulticastGroupConfAddress-in> <cisMulticastGroupConfSourceAddress-in>
<cisMulticastGroupConfPortRange-in> ] [ __readonly__ TABLE_cisMulticastGroupConfigTable
<cisMulticastGroupConfVlanIndex-out> <cisMulticastGroupConfCeVlanIndex-out>
<cisMulticastGroupConfAddressType-out> <cisMulticastGroupConfAddress-out>
<cisMulticastGroupConfSourceAddress-out> <cisMulticastGroupConfPortRange-out>
<cisMulticastGroupConfPortList> <cisMulticastGroupConfStorageType> <cisMulticastGroupConfRowStatus>
]
```

## Syntax Description

|   |   |
|---|---|
| show  | Show running system information                                 |
| ip  | Display IP information  |
| igmp  | Display IGMP status and configuration                           |
| snooping                                      | IGMP Snooping information                                       |
| snmp  | Show SNMP   |
| mib   | Show MIB table  |
| multicastGroupConfigTable                     | show mib table cisMulticastGroupConfigTable                     |
| vlan  | (Optional) Display VLAN/BD IGMP snooping membership information |
| <i>cisMulticastGroupConfVlanIndex-in</i>      | (Optional) Specify VLAN/BD                                      |
| <i>cisMulticastGroupConfCeVlanIndex-in</i>    | (Optional) Specify consumer edge VLAN/BD                        |
| <i>cisMulticastGroupConfAddressType-in</i>    | (Optional) Group Address Type                                   |
| <i>cisMulticastGroupConfAddress-in</i>        | (Optional) Group address  |
| <i>cisMulticastGroupConfSourceAddress-in</i>  | (Optional) source address                                       |
| <i>cisMulticastGroupConfPortRange-in</i>      | (Optional) port Range   |
| <i>__readonly__</i>                           | (Optional)  |
| <i>TABLE_cisMulticastGroupConfigTable</i>     | (Optional)  |
| <i>cisMulticastGroupConfVlanIndex-out</i>     | (Optional) mib table index cisMulticastGroupConfVlanIndex       |
| <i>cisMulticastGroupConfCeVlanIndex-out</i>   | (Optional) mib table index cisMulticastGroupConfCeVlanIndex     |
| <i>cisMulticastGroupConfAddressType-out</i>   | (Optional) mib table index cisMulticastGroupConfAddressType     |
| <i>cisMulticastGroupConfAddress-out</i>       | (Optional) mib table index cisMulticastGroupConfAddress         |
| <i>cisMulticastGroupConfSourceAddress-out</i> | (Optional) mib table index cisMulticastGroupConfSourceAddress   |

|   |  |
|---|--|
| <i>cisMulticastGroupConfPortRange-out</i> | (Optional) mib table index cisMulticastGroupConfPortRange  |
| <i>cisMulticastGroupConfPortList</i>      | (Optional) mib object cisMulticastGroupConfPortList        |
| <i>cisMulticastGroupConfStorageType</i>   | (Optional) mib object cisMulticastGroupConfStorageType     |
| <i>cisMulticastGroupConfRowStatus</i>     | (Optional) mib object index cisMulticastGroupConfRowStatus |

**Command Mode**

- /exec

# show ip igmp snooping snmp mib multicastGroupPortListTable

```
show ip igmp snooping snmp mib multicastGroupPortListTable [ vlan <cisMulticastGroupVlanIndex-in>
<cisMulticastGroupCeVlanIndex-in> <cisMulticastGroupAddressType-in> <cisMulticastGroupAddress-in>
<cisMulticastGroupSourceAddress-in> <cisMulticastGroupPortRangeIndex-in> ] [ __readonly__
TABLE_<cisMulticastGroupPortListTable <cisMulticastGroupVlanIndex-out>
<cisMulticastGroupCeVlanIndex-out> <cisMulticastGroupAddressType-out> <cisMulticastGroupAddress-out>
<cisMulticastGroupSourceAddress-out> <cisMulticastGroupPortRangeIndex-out> <cisMulticastGroupPortList>
]
```

## Syntax Description

|  |   |
|--|---|
| show                                       | Show running system information                                 |
| ip   | Display IP information  |
| igmp                                       | Display IGMP status and configuration                           |
| snooping                                   | IGMP Snooping information                                       |
| snmp                                       | Show SNMP   |
| mib  | Show MIB table  |
| multicastGroupPortListTable                | show mib table multicastGroupPortListTable                      |
| vlan                                       | (Optional) Display VLAN/BD IGMP snooping membership information |
| <i>cisMulticastGroupVlanIndex-in</i>       | (Optional) Specify VLAN/BD                                      |
| <i>cisMulticastGroupCeVlanIndex-in</i>     | (Optional) Specify consumer edge VLAN/BD                        |
| <i>cisMulticastGroupAddressType-in</i>     | (Optional) Group Address Type                                   |
| <i>cisMulticastGroupAddress-in</i>         | (Optional) Group address  |
| <i>cisMulticastGroupSourceAddress-in</i>   | (Optional) source address                                       |
| <i>cisMulticastGroupPortRangeIndex-in</i>  | (Optional) port Range Index                                     |
| <i>__readonly__</i>                        | (Optional)  |
| TABLE_<cisMulticastGroupPortListTable      | (Optional)  |
| <i>cisMulticastGroupVlanIndex-out</i>      | (Optional) mib table index cisMulticastGroupVlanIndex           |
| <i>cisMulticastGroupCeVlanIndex-out</i>    | (Optional) mib table index cisMulticastGroupCeVlanIndex         |
| <i>cisMulticastGroupAddressType-out</i>    | (Optional) mib table index cisMulticastGroupAddressType         |
| <i>cisMulticastGroupAddress-out</i>        | (Optional) mib table index cisMulticastGroupAddress             |
| <i>cisMulticastGroupSourceAddress-out</i>  | (Optional) mib table index cisMulticastGroupSourceAddress       |
| <i>cisMulticastGroupPortRangeIndex-out</i> | (Optional) mib table index cisMulticastGroupPortRangeIndex      |

|                                  |
|----------------------------------|
| <i>cisMulticastGroupPortList</i> |
|----------------------------------|

|   |
|---|
| (Optional) mib object cisMulticastGroupPortList |
|---|

**Command Mode**

- /exec

# show ip igmp snooping snmp mib multicastGroupTable

```
show ip igmp snooping snmp mib multicastGroupTable [ vlan <cisMulticastGroupVlanIndex-in>
<cisMulticastGroupCeVlanIndex-in> <cisMulticastGroupAddressType-in> <cisMulticastGroupAddress-in>
<cisMulticastGroupSourceAddress-in> ] [ __readonly__ TABLE_cisMulticastGroupTable
<cisMulticastGroupVlanIndex-out> <cisMulticastGroupCeVlanIndex-out>
<cisMulticastGroupAddressType-out> <cisMulticastGroupAddress-out>
<cisMulticastGroupSourceAddress-out> <cisMulticastGroupGroupType> <cisMulticastGroupIcmpVersion>
<cisMulticastGroupSourceUpTime> <cisMulticastGroupSourceExpires> <cisMulticastGroupInclHostCount>
<cisMulticastGroupExclHostCount> ]
```

## Syntax Description

|   |   |
|---|---|
| show                                      | Show running system information                                 |
| ip  | Display IP information  |
| igmp                                      | Display IGMP status and configuration                           |
| snooping                                  | IGMP Snooping information                                       |
| snmp                                      | Show SNMP   |
| mib                                       | Show MIB table  |
| multicastGroupTable                       | show mib table multicastGroupTable                              |
| vlan                                      | (Optional) Display VLAN/BD IGMP snooping membership information |
| <i>cisMulticastGroupVlanIndex-in</i>      | (Optional) Specify VLAN/BD                                      |
| <i>cisMulticastGroupCeVlanIndex-in</i>    | (Optional) Specify consumer edge VLAN/BD                        |
| <i>cisMulticastGroupAddressType-in</i>    | (Optional) Group Address Type                                   |
| <i>cisMulticastGroupAddress-in</i>        | (Optional) Group address  |
| <i>cisMulticastGroupSourceAddress-in</i>  | (Optional) Source address                                       |
| <i>__readonly__</i>                       | (Optional)  |
| TABLE_cisMulticastGroupTable              | (Optional)  |
| <i>cisMulticastGroupVlanIndex-out</i>     | (Optional) mib table index cisMulticastGroupVlanIndex           |
| <i>cisMulticastGroupCeVlanIndex-out</i>   | (Optional) mib table index cisMulticastGroupCeVlanIndex         |
| <i>cisMulticastGroupAddressType-out</i>   | (Optional) mib table index cisMulticastGroupAddressType         |
| <i>cisMulticastGroupAddress-out</i>       | (Optional) mib table index cisMulticastGroupAddress             |
| <i>cisMulticastGroupSourceAddress-out</i> | (Optional) mib table index cisMulticastGroupSourceAddress       |
| <i>cisMulticastGroupGroupType</i>         | (Optional) mib object cisMulticastGroupGroupType                |

|                                       |  |
|---------------------------------------|--|
| <i>cisMulticastGroupIgmpVersion</i>   | (Optional) mib object cisMulticastGroupIgmpVersion   |
| <i>cisMulticastGroupSourceUpTime</i>  | (Optional) mib object cisMulticastGroupSourceUpTime  |
| <i>cisMulticastGroupSourceExpires</i> | (Optional) mib object cisMulticastGroupSourceExpires |
| <i>cisMulticastGroupInclHostCount</i> | (Optional) mib object cisMulticastGroupInclHostCount |
| <i>cisMulticastGroupExclHostCount</i> | (Optional) mib object cisMulticastGroupExclHostCount |

**Command Mode**

- /exec

# show ip igmp snooping snmp mib operMode

show ip igmp snooping snmp mib operMode [ \_\_readonly\_\_ <cisOperMode> ]

## Syntax Description

|                    |   |
|--------------------|---|
| show               | Show running system information                       |
| ip                 | Display IP information                                |
| igmp               | Display IGMP status and configuration                 |
| snooping           | IGMP Snooping information                             |
| snmp               | Show SNMP   |
| mib                | Show MIB table  |
| operMode           | Indicates the operational snooping mode of the device |
| __readonly__       | (Optional) Read Only                                  |
| <i>cisOperMode</i> | (Optional) mib object cisOperMode                     |

## Command Mode

- /exec



# show ip igmp snooping snmp mib querierTable

```
show ip igmp snooping snmp mib querierTable [ vlan <cisIgmpQuerierVlanIndex-in> ] [ __readonly__
TABLE_cisIgmpQuerierTable <cisIgmpQuerierVlanIndex-out> <cisIgmpQuerierEnabled>
<cisIgmpQuerierState> <cisIgmpQuerierVersion> <cisIgmpQuerierAddressType> <cisIgmpQuerierAddress>
<cisIgmpQuerierInterface> <cisIgmpQuerierTcnQueryCount> <cisIgmpQuerierTcnQueryInterval>
<cisIgmpQuerierTimerExpiry> <cisIgmpQuerierMaxResponseTime> <cisIgmpQuerierQueryInterval>
<cisIgmpQuerierAdminAddressType> <cisIgmpQuerierAdminAddress> <cisIgmpQuerierAdminVersion>
<cisIgmpQuerierTcnQueryPending> ]
```

## Syntax Description

|                                       |   |
|---------------------------------------|---|
| show                                  | Show running system information                                 |
| ip                                    | Display IP information  |
| igmp                                  | Display IGMP status and configuration                           |
| snooping                              | IGMP Snooping information                                       |
| snmp                                  | Show SNMP   |
| mib                                   | Show MIB table  |
| querierTable                          | Show mib table cisIgmpQuerierTable                              |
| vlan                                  | (Optional) Display VLAN/BD IGMP snooping membership information |
| <i>cisIgmpQuerierVlanIndex-in</i>     | (Optional) Specify VLAN/BD                                      |
| <i>__readonly__</i>                   | (Optional)  |
| <i>TABLE_cisIgmpQuerierTable</i>      | (Optional)  |
| <i>cisIgmpQuerierVlanIndex-out</i>    | (Optional) mib table index cisIgmpQuerierVlanIndex              |
| <i>cisIgmpQuerierEnabled</i>          | (Optional) mib object cisIgmpQuerierEnabled                     |
| <i>cisIgmpQuerierState</i>            | (Optional) mib object cisIgmpQuerierState                       |
| <i>cisIgmpQuerierVersion</i>          | (Optional) mib object cisIgmpQuerierVersion                     |
| <i>cisIgmpQuerierAddressType</i>      | (Optional) mib object cisIgmpQuerierAddressType                 |
| <i>cisIgmpQuerierAddress</i>          | (Optional) mib object cisIgmpQuerierAddress                     |
| <i>cisIgmpQuerierInterface</i>        | (Optional) mib object cisIgmpQuerierInterface                   |
| <i>cisIgmpQuerierTcnQueryCount</i>    | (Optional) mib object cisIgmpQuerierTcnQueryCount               |
| <i>cisIgmpQuerierTcnQueryInterval</i> | (Optional) mib object cisIgmpQuerierTcnQueryInterval            |
| <i>cisIgmpQuerierTimerExpiry</i>      | (Optional) mib object cisIgmpQuerierTimerExpiry                 |
| <i>cisIgmpQuerierMaxResponseTime</i>  | (Optional) mib object cisIgmpQuerierMaxResponseTime             |

|                                       |  |
|---------------------------------------|--|
| <i>cisIgmpQuerierQueryInterval</i>    | (Optional) mib object cisIgmpQuerierQueryInterval    |
| <i>cisIgmpQuerierAdminAddressType</i> | (Optional) mib object cisIgmpQuerierAdminAddressType |
| <i>cisIgmpQuerierAdminAddress</i>     | (Optional) mib object cisIgmpQuerierAdminAddress     |
| <i>cisIgmpQuerierAdminVersion</i>     | (Optional) mib object cisIgmpQuerierAdminVersion     |
| <i>cisIgmpQuerierTcnQueryPending</i>  | (Optional) mib object cisIgmpQuerierTcnQueryPending  |

**Command Mode**

- /exec

# show ip igmp snooping snmp mib reportsuppressionenabled

```
show ip igmp snooping snmp mib reportsuppressionenabled [ __readonly__ <cisReportSuppressionEnabled>
]
```

## Syntax Description

|                                    |   |
|------------------------------------|---|
| show                               | Show running system information                   |
| ip                                 | Display IP information                            |
| igmp                               | Display IGMP status and configuration             |
| snooping                           | IGMP Snooping information                         |
| snmp                               | Show SNMP   |
| mib                                | Show MIB table                                    |
| reportsuppressionenabled           | Check if reportsuppression is enabled             |
| <i>__readonly__</i>                | (Optional) Read Only                              |
| <i>cisReportSuppressionEnabled</i> | (Optional) mib object cisReportSuppressionEnabled |

## Command Mode

- /exec

## show ip igmp snooping snmp mib robustnessVariable

show ip igmp snooping snmp mib robustnessVariable [ \_\_readonly\_\_ <cisRobustnessVariable> ]

### Syntax Description

|                              |  |
|------------------------------|--|
| show                         | Show running system information                  |
| ip                           | Display IP information                           |
| igmp                         | Display IGMP status and configuration            |
| snooping                     | IGMP Snooping information                        |
| snmp                         | Show SNMP  |
| mib                          | Show MIB table                                   |
| robustnessVariable           | Specifies the Robustness Variable of this device |
| __readonly__                 | (Optional) Read Only                             |
| <i>cisRobustnessVariable</i> | (Optional) mib object cisRobustnessVariable      |

### Command Mode

- /exec

# show ip igmp snooping snmp mib routerAlertCheckEnabled

```
show ip igmp snooping snmp mib routerAlertCheckEnabled [ __readonly__ <cisLastMemberQueryCount> ]
```

## Syntax Description

|                                |   |
|--------------------------------|---|
| show                           | Show running system information   |
| ip                             | Display IP information  |
| igmp                           | Display IGMP status and configuration   |
| snooping                       | IGMP Snooping information   |
| snmp                           | Show SNMP   |
| mib                            | Show MIB table  |
| routerAlertCheckEnabled        | Specifies whether checking of Router-Alert option is enabled for IGMP traffic in the system |
| __readonly__                   | (Optional) Read Only  |
| <i>cisLastMemberQueryCount</i> | (Optional) mib object cisLastMemberQueryCount   |

## Command Mode

- /exec

## show ip igmp snooping snmp mib sourceOnlyEntryAgingTime

```
show ip igmp snooping snmp mib sourceOnlyEntryAgingTime [ __readonly__
<cisSourceOnlyEntryAgingTime> ]
```

### Syntax Description

|                                    |   |
|------------------------------------|---|
| show                               | Show running system information                                       |
| ip                                 | Display IP information  |
| igmp                               | Display IGMP status and configuration                                 |
| snooping                           | IGMP Snooping information   |
| snmp                               | Show SNMP   |
| mib                                | Show MIB table  |
| sourceOnlyEntryAgingTime           | Specifies the aging time in seconds for Source Only multicast entries |
| __readonly__                       | (Optional) Read Only  |
| <i>cisSourceOnlyEntryAgingTime</i> | (Optional) mib object cisSourceOnlyEntryAgingTime                     |

### Command Mode

- /exec

# show ip igmp snooping snmp mib sourceOnlyLearningEnabled

```
show ip igmp snooping snmp mib sourceOnlyLearningEnabled [ __readonly__
<cisSourceOnlyLearningEnabled> ]
```

## Syntax Description

|                                     |   |
|-------------------------------------|---|
| show                                | Show running system information   |
| ip                                  | Display IP information  |
| igmp                                | Display IGMP status and configuration   |
| snooping                            | IGMP Snooping information   |
| snmp                                | Show SNMP   |
| mib                                 | Show MIB table  |
| sourceOnlyLearningEnabled           | Specifies whether Source Only multicast entries are learned by IGMP Snooping or not |
| __readonly__                        | (Optional) Read Only  |
| <i>cisSourceOnlyLearningEnabled</i> | (Optional) mib object cisSourceOnlyLearningEnabled                                  |

## Command Mode

- /exec

# show ip igmp snooping snmp mib tcnFloodQueryCount

```
show ip igmp snooping snmp mib tcnFloodQueryCount [ __readonly__ <cisTopoChangeFloodQueryCount> ]
```

## Syntax Description

|                                     |  |
|-------------------------------------|--|
| show                                | Show running system information  |
| ip                                  | Display IP information   |
| igmp                                | Display IGMP status and configuration  |
| snooping                            | IGMP Snooping information  |
| snmp                                | Show SNMP  |
| mib                                 | Show MIB table   |
| tcnFloodQueryCount                  | Specifies the flooding period for multicast traffic upon receiving Topology Change Notifications |
| __readonly__                        | (Optional) Read Only   |
| <i>cisTopoChangeFloodQueryCount</i> | (Optional) mib object cisTopoChangeFloodQueryCount   |

## Command Mode

- /exec



# show ip igmp snooping snmp mib timeToLiveCheckEnabled

```
show ip igmp snooping snmp mib timeToLiveCheckEnabled [ __readonly__ <cisTimeToLiveCheckEnabled>
]
```

## Syntax Description

|                                  |  |
|----------------------------------|--|
| show                             | Show running system information  |
| ip                               | Display IP information   |
| igmp                             | Display IGMP status and configuration  |
| snooping                         | IGMP Snooping information  |
| snmp                             | Show SNMP  |
| mib                              | Show MIB table   |
| timeToLiveCheckEnabled           | Specifies whether Time-To-Live (TTL) check is enabled when processing IGMP packets in the system |
| __readonly__                     | (Optional) Read Only   |
| <i>cisTimeToLiveCheckEnabled</i> | (Optional) mib object cisTimeToLiveCheckEnabled  |

## Command Mode

- /exec

# show ip igmp snooping snmp mib topoChangeQuerySolicitEnabled

```
show ip igmp snooping snmp mib topoChangeQuerySolicitEnabled [ __readonly__
<cisTopoChangeQuerySolicitEnabled> ]
```

## Syntax Description

|   |  |
|---|--|
| show                                    | Show running system information  |
| ip                                      | Display IP information   |
| igmp                                    | Display IGMP status and configuration  |
| snooping                                | IGMP Snooping information  |
| snmp                                    | Show SNMP  |
| mib                                     | Show MIB table   |
| topoChangeQuerySolicitEnabled           | Specifies whether the device running IGMP Snooping will solicit IGMP General Queries from the Querier upon receiving a TCN |
| __readonly__                            | (Optional) Read Only   |
| <i>cisTopoChangeQuerySolicitEnabled</i> | (Optional) mib object cisTopoChangeQuerySolicitEnabled   |

## Command Mode

- /exec

# show ip igmp snooping snmp mib v3ProcessEnabledAdminStatus

```
show ip igmp snooping snmp mib v3ProcessEnabledAdminStatus [ __readonly__
<cisV3ProcessEnabledAdminStatus> ]
```

## Syntax Description

|                                       |   |
|---------------------------------------|---|
| show                                  | Show running system information   |
| ip                                    | Display IP information  |
| igmp                                  | Display IGMP status and configuration                                   |
| snooping                              | IGMP Snooping information   |
| snmp                                  | Show SNMP   |
| mib                                   | Show MIB table  |
| v3ProcessEnabledAdminStatus           | Indicates the administrative status of IGMP v3 processing in the system |
| __readonly__                          | (Optional) Read Only  |
| <i>cisV3ProcessEnabledAdminStatus</i> | (Optional) mib object cisV3ProcessEnabledAdminStatus                    |

## Command Mode

- /exec

## show ip igmp snooping snmp mib v3SnoopingSupport

show ip igmp snooping snmp mib v3SnoopingSupport [ \_\_readonly\_\_ <cisV3SnoopingSupport> ]

### Syntax Description

|                             |  |
|-----------------------------|--|
| show                        | Show running system information            |
| ip                          | Display IP information                     |
| igmp                        | Display IGMP status and configuration      |
| snooping                    | IGMP Snooping information                  |
| snmp                        | Show SNMP                                  |
| mib                         | Show MIB table                             |
| v3SnoopingSupport           | Indicates IGMP Snooping support for IGMPv3 |
| __readonly__                | (Optional) Read Only                       |
| <i>cisV3SnoopingSupport</i> | (Optional) mib object cisV3SnoopingSupport |

### Command Mode

- /exec

# show ip igmp snooping snmp mib vlanFilterConfigTable

```
show ip igmp snooping snmp mib vlanFilterConfigTable [ vlan <cisVlanIndex-in> ] [ __readonly__
TABLE_cisVlanFilterConfigTable <cisVlanIndex-out> <cisVlanFilterAccessGroup> <cisVlanFilterLimitMax>
<cisVlanFilterLimitExclAccessGrp> <cisVlanFilterMinVersionAllowed> ]
```

## Syntax Description

|  |   |
|--|---|
| show                                   | Show running system information                               |
| ip                                     | Display IP information  |
| igmp                                   | Display IGMP status and configuration                         |
| snooping                               | IGMP Snooping information                                     |
| snmp                                   | Show SNMP   |
| mib                                    | Show MIB table  |
| vlanFilterConfigTable                  | Display VLAN/BD Filter Group                                  |
| vlan                                   | (Optional) Display Interface access group VLAN/BD information |
| <i>cisVlanIndex-in</i>                 | (Optional) Specify VLAN/BD                                    |
| <i>__readonly__</i>                    | (Optional)  |
| <i>TABLE_cisVlanFilterConfigTable</i>  | (Optional)  |
| <i>cisVlanIndex-out</i>                | (Optional) mib talbe index cisVlanIndex>                      |
| <i>cisVlanFilterAccessGroup</i>        | (Optional) mib table index cisVlanFilterAccessGroup           |
| <i>cisVlanFilterLimitMax</i>           | (Optional) mib object cisVlanFilterLimitMax                   |
| <i>cisVlanFilterLimitExclAccessGrp</i> | (Optional) mib object cisVlanFilterLimitExclAccessGrp         |
| <i>cisVlanFilterMinVersionAllowed</i>  | (Optional) mib object cisVlanFilterMinVersionAllowed          |

## Command Mode

- /exec

## show ip igmp snooping snmp mib vlanconfigtable

```
show ip igmp snooping snmp mib vlanconfigtable [ vlan <cisVlanIndex-in> ] [ __readonly__
TABLE_cisVlanConfigTable <cisVlanIndex-out> <cisVlanIgmpSnoopingEnabled>
<cisVlanFastLeaveEnabled> <cisVlanIgmpSnoopingOperMode> <cisVlanIgmpSnoopingLearningMode>
<cisVlanReportSuppressionEnabled> <cisVlanLeaveQueryInterval> <cisVlanLastMemberQueryCount>
<cisVlanRobustnessVariable> <cisVlanTimeToLiveCheckEnabled> <cisVlanRouterAlertCheckEnabled> ]
```

### Syntax Description

|  |   |
|--|---|
| show                                   | Show running system information                                 |
| ip                                     | Display IP information  |
| igmp                                   | Display IGMP status and configuration                           |
| snooping                               | IGMP Snooping information                                       |
| snmp                                   | Show SNMP   |
| mib                                    | Show MIB table  |
| vlanconfigtable                        | Show mib table cisVlanConfigTable                               |
| vlan                                   | (Optional) Display VLAN/BD IGMP snooping membership information |
| <i>cisVlanIndex-in</i>                 | (Optional) Specify VLAN/BD                                      |
| <i>__readonly__</i>                    | (Optional)  |
| <i>TABLE_cisVlanConfigTable</i>        | (Optional)  |
| <i>cisVlanIndex-out</i>                | (Optional) mib table index cisVlanIndex                         |
| <i>cisVlanIgmpSnoopingEnabled</i>      | (Optional) mib object cisVlanIgmpSnoopingEnabled                |
| <i>cisVlanFastLeaveEnabled</i>         | (Optional) mib object cisVlanFastLeaveEnabled                   |
| <i>cisVlanIgmpSnoopingOperMode</i>     | (Optional) mib object cisVlanIgmpSnoopingOperMode               |
| <i>cisVlanIgmpSnoopingLearningMode</i> | (Optional) mib object cisVlanIgmpSnoopingLearningMode           |
| <i>cisVlanReportSuppressionEnabled</i> | (Optional) mib object cisVlanReportSuppressionEnabled           |
| <i>cisVlanLeaveQueryInterval</i>       | (Optional) mib object cisVlanLeaveQueryInterval                 |
| <i>cisVlanLastMemberQueryCount</i>     | (Optional) mib object cisVlanLastMemberQueryCount               |
| <i>cisVlanRobustnessVariable</i>       | (Optional) mib object cisVlanRobustnessVariable                 |
| <i>cisVlanTimeToLiveCheckEnabled</i>   | (Optional) mib object cisVlanTimeToLiveCheckEnabled             |
| <i>cisVlanRouterAlertCheckEnabled</i>  | (Optional) mib object cisVlanRouterAlertCheckEnabled            |

### Command Mode

- /exec

## show ip igmp snooping statistics

```
show ip igmp snooping statistics [ global | vlan <vlan> | bridge-domain <bidid> ] [ __readonly__ [ <pr> ] [
<inv_pkt> ] [ <pnv> ] [ <loopbkpkt> ] [ <mrdloopbk> ] [ <pf> ] [ <vpcdrqs> ] [ <vpcdrqr> ] [ <vpcdrqf> ] [
<vpcdrus> ] [ <vpcdrur> ] [ <vpcdruf> ] [ <vpccfssf> ] [ <vpccfsrc> ] [ <vpccfsrr> ] [ <vpccfsrf> ] [ <vpccfsrpf> ]
] [ <vpccfsurl> ] [ <vpccfsurlr> ] [ <vpccfsurlf> ] [ <vpccfsrsl> ] [ <vpccfsrslr> ] [ <vpccfsrslf> ] [ <inv_iod>
] [ <stptcnr> ] [ <imapif> ] [ <mfreqr> ] [ <mfcmps> ] [ <mfdgcmps> ] [ <bufsnt> ] [ <bufackr> ] [
<vpcmismatch> ] [ { TABLE_vlan [ <vlan-id> ] [ <ut> ] [ <vpr> ] [ <v1rr> ] [ <v2rr> ] [ <v3rr> ] [ <v1qr>
] [ <v2qr> ] [ <v3qr> ] [ <v2lr> ] [ <phr> ] [ <irr> ] [ <iqr> ] [ <v1rs> ] [ <v2rs> ] [ <v2ls> ] [ <v3gs> ] [
<vmr> ] [ <upr> ] [ <qo> ] [ <v2ro> ] [ <v2lo> ] [ <v3ro> ] [ <vpsr> ] [ <str> ] [ <mps> ] [ <mpr> ] [ <mpe>
] [ <cps> ] [ <cpr> ] [ <cpe> ] [ <repflooded> ] [ <repfwded> ] } ] ]
```

### Syntax Description

|                     |   |
|---------------------|---|
| show                | Show running system information         |
| ip                  | Display IP information                  |
| igmp                | Display IGMP status and configuration   |
| snooping            | IGMP Snooping information               |
| statistics          | Display packet/error counter statistics |
| global              | (Optional) Display global statistics    |
| vlan                | (Optional) Display VLAN statistics      |
| <i>vlan</i>         | (Optional) Specify VLAN                 |
| bridge-domain       | (Optional) Display BD statistics        |
| <i>bidid</i>        | (Optional) Specify BD                   |
| <i>__readonly__</i> | (Optional)                              |
| <i>pr</i>           | (Optional)                              |
| <i>inv_pkt</i>      | (Optional)                              |
| <i>pnv</i>          | (Optional)                              |
| <i>loopbkpkt</i>    | (Optional)                              |
| <i>mrdloopbk</i>    | (Optional)                              |
| <i>pf</i>           | (Optional)                              |
| <i>vpcdrqs</i>      | (Optional)                              |
| <i>vpcdrqr</i>      | (Optional)                              |
| <i>vpcdrqf</i>      | (Optional)                              |
| <i>vpcdrus</i>      | (Optional)                              |



|                    |            |
|--------------------|------------|
| <i>vpcdrur</i>     | (Optional) |
| <i>vpcdruf</i>     | (Optional) |
| <i>vpccfssf</i>    | (Optional) |
| <i>vpccfsrs</i>    | (Optional) |
| <i>vpccfsrr</i>    | (Optional) |
| <i>vpccfsrf</i>    | (Optional) |
| <i>vpccfsrfp</i>   | (Optional) |
| <i>vpccfsurls</i>  | (Optional) |
| <i>vpccfsurlr</i>  | (Optional) |
| <i>vpccfsurlf</i>  | (Optional) |
| <i>vpccfsrls</i>   | (Optional) |
| <i>vpccfsrlr</i>   | (Optional) |
| <i>vpccfsrlf</i>   | (Optional) |
| <i>inv_iod</i>     | (Optional) |
| <i>stptcnr</i>     | (Optional) |
| <i>imapif</i>      | (Optional) |
| <i>mfreqr</i>      | (Optional) |
| <i>mfcmps</i>      | (Optional) |
| <i>mfdgcmps</i>    | (Optional) |
| <i>bufsnt</i>      | (Optional) |
| <i>bufackr</i>     | (Optional) |
| <i>vpcmismatch</i> | (Optional) |
| TABLE_vlan         | (Optional) |
| <i>vlan-id</i>     | (Optional) |
| <i>ut</i>          | (Optional) |
| <i>vpr</i>         | (Optional) |
| <i>v1rr</i>        | (Optional) |
| <i>v2rr</i>        | (Optional) |
| <i>v3rr</i>        | (Optional) |

|                   |            |
|-------------------|------------|
| <i>v1qr</i>       | (Optional) |
| <i>v2qr</i>       | (Optional) |
| <i>v3qr</i>       | (Optional) |
| <i>v2lr</i>       | (Optional) |
| <i>phr</i>        | (Optional) |
| <i>irr</i>        | (Optional) |
| <i>iqr</i>        | (Optional) |
| <i>v1rs</i>       | (Optional) |
| <i>v2rs</i>       | (Optional) |
| <i>v2ls</i>       | (Optional) |
| <i>v3gs</i>       | (Optional) |
| <i>vmr</i>        | (Optional) |
| <i>upr</i>        | (Optional) |
| <i>qo</i>         | (Optional) |
| <i>v2ro</i>       | (Optional) |
| <i>v2lo</i>       | (Optional) |
| <i>v3ro</i>       | (Optional) |
| <i>vpsr</i>       | (Optional) |
| <i>str</i>        | (Optional) |
| <i>cps</i>        | (Optional) |
| <i>cpr</i>        | (Optional) |
| <i>cpe</i>        | (Optional) |
| <i>mps</i>        | (Optional) |
| <i>mpr</i>        | (Optional) |
| <i>mpe</i>        | (Optional) |
| <i>repflooded</i> | (Optional) |
| <i>repfwded</i>   | (Optional) |

**Command Mode**

- /exec

# show ip igmp vrf all

```
show ip igmp vrf all [ __readonly__ { TABLE_vrfname <vrf-name> <vrf-id> <instance> <work-in-txlist> }
{ TABLE_vrfid <vrf-name-i> <vrf-id-i> <instance-i> <work-in-txlist-i> } ]
```

## Syntax Description

|                         |                                       |
|-------------------------|---------------------------------------|
| show                    | Show running system information       |
| ip                      | Display IP information                |
| igmp                    | Display IGMP status and configuration |
| vrf                     | Display per-VRF information           |
| all                     | Display information for all VRFs      |
| <i>__readonly__</i>     | (Optional)                            |
| TABLE_vrfname           | (Optional)                            |
| <i>vrf-name</i>         | (Optional)                            |
| <i>vrf-id</i>           | (Optional)                            |
| <i>instance</i>         | (Optional)                            |
| <i>work-in-txlist</i>   | (Optional)                            |
| TABLE_vrfid             | (Optional)                            |
| <i>vrf-name-i</i>       | (Optional)                            |
| <i>vrf-id-i</i>         | (Optional)                            |
| <i>instance-i</i>       | (Optional)                            |
| <i>work-in-txlist-i</i> | (Optional)                            |

## Command Mode

- /exec

# show ip interface

```
show ip interface { { { brief [ include-secondary ] } | [ <interface> ] | [ <ip-addr> ] } [ operational ] [ vaddr ]
[ vrf { <vrf-name> | <vrf-known-name> | all } } [ __readonly__ [ TABLE_vrf <vrf-name-out> ] [ TABLE_intf
<intf-name> <proto-state> <link-state> <admin-state> <iod> [ <first_unnum_iod> ] <prefix> <subnet>
<masklen> [ TABLE_unnuminf <unnum-child-inf> ] [ TABLE_secondary_address <prefix1> <subnet1>
<masklen1> ] [ <num-addr> ] [ <vaddr-client> ] [ <vaddr-prefix> ] [ <vaddr-subnet> ] [ <vaddr-masklen> ]
[ <num-vaddr> ] [ <unnum-intf> ] [ <ip-disabled> ] [ <bcast-addr> ] [ TABLE_maddr <maddr> ] [
<num-maddr> ] [ <mtu> ] [ <pref> ] [ <tag> ] [ <proxy-arp> ] [ <lcl-proxy-arp> ] [ <mrouting> ] [
<icmp-redirect> ] [ <dir-bcast> ] [ <ip-unreach> ] [ <port-unreach> ] [ <urpf-mode> ] [ <ip-ls-type> ] [
<urpf-acl> ] [ <pbr-in> ] [ <pbr-out> ] [ <acl-in> ] [ <acl-out> ] [ <stats-last-reset> ] [ <upkt-sent> ] [
<upkt-recv> ] [ <upkt-fwd> ] [ <upkt-orig> ] [ <upkt-consumed> ] [ <ubyte-sent> ] [ <ubyte-recv> ] [
<ubyte-fwd> ] [ <ubyte-orig> ] [ <ubyte-consumed> ] [ <mpkt-sent> ] [ <mpkt-recv> ] [ <mpkt-fwd> ] [
<mpkt-orig> ] [ <mpkt-consumed> ] [ <mbyte-sent> ] [ <mbyte-recv> ] [ <mbyte-fwd> ] [ <mbyte-orig> ] [
<mbyte-consumed> ] [ <bpkt-sent> ] [ <bpkt-recv> ] [ <bpkt-fwd> ] [ <bpkt-orig> ] [ <bpkt-consumed> ] [
<bbyte-sent> ] [ <bbyte-recv> ] [ <bbyte-fwd> ] [ <bbyte-orig> ] [ <bbyte-consumed> ] [ <lpkt-sent> ] [
<lpkt-recv> ] [ <lpkt-fwd> ] [ <lpkt-orig> ] [ <lpkt-consumed> ] [ <lbyte-sent> ] [ <lbyte-recv> ] [ <lbyte-fwd>
] [ <lbyte-orig> ] [ <lbyte-consumed> ] ] ] ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                                      |
| ip                    | Display IP information   |
| interface             | Display IP related interface information                             |
| brief                 | Display summary of IP interface status and configuration             |
| include-secondary     | (Optional) Display summary of all IP addresses                       |
| operational           | (Optional) Display only interfaces that are administratively enabled |
| <i>interface</i>      | (Optional) Interface name to display                                 |
| <i>ip-addr</i>        | (Optional) Display interface for local IP address                    |
| vrf                   | (Optional) Display per-VRF information                               |
| <i>vrf-name</i>       | (Optional) VRF name  |
| <i>vrf-known-name</i> | (Optional) Known VRF name  |
| all                   | (Optional) Display all VRFs  |
| vaddr                 | (Optional) Display virtual IP addresses as well                      |
| __readonly__          | (Optional)   |
| TABLE_vrf             | (Optional)   |
| <i>vrf-name-out</i>   | (Optional)   |
| TABLE_intf            | (Optional)   |

|                         |            |
|-------------------------|------------|
| <i>intf-name</i>        | (Optional) |
| <i>iod</i>              | (Optional) |
| <i>first_unnum_iod</i>  | (Optional) |
| <i>prefix</i>           | (Optional) |
| <i>proto-state</i>      | (Optional) |
| <i>link-state</i>       | (Optional) |
| <i>admin-state</i>      | (Optional) |
| <i>subnet</i>           | (Optional) |
| <i>masklen</i>          | (Optional) |
| TABLE_unnuminf          | (Optional) |
| <i>unnum-child-inf</i>  | (Optional) |
| TABLE_secondary_address | (Optional) |
| <i>prefix1</i>          | (Optional) |
| <i>subnet1</i>          | (Optional) |
| <i>masklen1</i>         | (Optional) |
| <i>num-addr</i>         | (Optional) |
| <i>vaddr-client</i>     | (Optional) |
| <i>vaddr-prefix</i>     | (Optional) |
| <i>vaddr-subnet</i>     | (Optional) |
| <i>vaddr-masklen</i>    | (Optional) |
| <i>num-vaddr</i>        | (Optional) |
| <i>unnum-intf</i>       | (Optional) |
| <i>ip-disabled</i>      | (Optional) |
| <i>bcast-addr</i>       | (Optional) |
| TABLE_maddr             | (Optional) |
| <i>maddr</i>            | (Optional) |
| <i>num-maddr</i>        | (Optional) |
| <i>mtu</i>              | (Optional) |
| <i>pref</i>             | (Optional) |

|                         |            |
|-------------------------|------------|
| <i>tag</i>              | (Optional) |
| <i>proxy-arp</i>        | (Optional) |
| <i>lcl-proxy-arp</i>    | (Optional) |
| <i>mrouting</i>         | (Optional) |
| <i>icmp-redirect</i>    | (Optional) |
| <i>dir-bcast</i>        | (Optional) |
| <i>ip-unreach</i>       | (Optional) |
| <i>port-unreach</i>     | (Optional) |
| <i>urpf-mode</i>        | (Optional) |
| <i>ip-ls-type</i>       | (Optional) |
| <i>urpf-acl</i>         | (Optional) |
| <i>pbr-in</i>           | (Optional) |
| <i>pbr-out</i>          | (Optional) |
| <i>acl-in</i>           | (Optional) |
| <i>acl-out</i>          | (Optional) |
| <i>stats-last-reset</i> | (Optional) |
| <i>upkt-sent</i>        | (Optional) |
| <i>upkt-recv</i>        | (Optional) |
| <i>upkt-fwd</i>         | (Optional) |
| <i>upkt-orig</i>        | (Optional) |
| <i>upkt-consumed</i>    | (Optional) |
| <i>ubyte-sent</i>       | (Optional) |
| <i>ubyte-recv</i>       | (Optional) |
| <i>ubyte-fwd</i>        | (Optional) |
| <i>ubyte-orig</i>       | (Optional) |
| <i>ubyte-consumed</i>   | (Optional) |
| <i>mpkt-sent</i>        | (Optional) |
| <i>mpkt-recv</i>        | (Optional) |
| <i>mpkt-fwd</i>         | (Optional) |

|                       |            |
|-----------------------|------------|
| <i>mpkt-orig</i>      | (Optional) |
| <i>mpkt-consumed</i>  | (Optional) |
| <i>mbyte-sent</i>     | (Optional) |
| <i>mbyte-recv</i>     | (Optional) |
| <i>mbyte-fwd</i>      | (Optional) |
| <i>mbyte-orig</i>     | (Optional) |
| <i>mbyte-consumed</i> | (Optional) |
| <i>bpkt-sent</i>      | (Optional) |
| <i>bpkt-recv</i>      | (Optional) |
| <i>bpkt-fwd</i>       | (Optional) |
| <i>bpkt-orig</i>      | (Optional) |
| <i>bpkt-consumed</i>  | (Optional) |
| <i>bbyte-sent</i>     | (Optional) |
| <i>bbyte-recv</i>     | (Optional) |
| <i>bbyte-fwd</i>      | (Optional) |
| <i>bbyte-orig</i>     | (Optional) |
| <i>bbyte-consumed</i> | (Optional) |
| <i>lpkt-sent</i>      | (Optional) |
| <i>lpkt-recv</i>      | (Optional) |
| <i>lpkt-fwd</i>       | (Optional) |
| <i>lpkt-orig</i>      | (Optional) |
| <i>lpkt-consumed</i>  | (Optional) |
| <i>lbyte-sent</i>     | (Optional) |
| <i>lbyte-recv</i>     | (Optional) |
| <i>lbyte-fwd</i>      | (Optional) |
| <i>lbyte-orig</i>     | (Optional) |
| <i>lbyte-consumed</i> | (Optional) |

**Command Mode**

- /exec

## show ip lisp

```
show { ip | ipv6 } lisp [ database ] [ vrf { <vrf-name> | <vrf-known-name> } ]
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                  |
| ip                    | Display IP information                           |
| ipv6                  | Display IPv6 information                         |
| lisp                  | LISP show commands                               |
| database              | (Optional) Show EID-prefixes configured for site |
| vrf                   | (Optional) Display information for vrf           |
| <i>vrf-name</i>       | (Optional) VRF name                              |
| <i>vrf-known-name</i> | (Optional) Known VRF name                        |

### Command Mode

- /exec



# show ip lisp data-cache

```
show ip lisp data-cache [ <eid> ] [ vrf { <vrf-name> | <vrf-known-name> } ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                    |
| ip                    | Display IP information                             |
| lisp                  | LISP show commands                                 |
| data-cache            | Display EID-to-RLOC data cache mapping in this ITR |
| <i>eid</i>            | (Optional) Display mapping for IP destination EID  |
| vrf                   | (Optional) Display per-VRF information             |
| <i>vrf-name</i>       | (Optional) VRF name                                |
| <i>vrf-known-name</i> | (Optional) Known VRF name                          |

## Command Mode

- /exec

## show ip lisp locator-hash

```
{ { show ip lisp locator-hash { <eid-prefix> | { <source-eid> <dest-eid> } } [ vrf { <vrf-name> | <vrf-known-name> } ] } | { show ipv6 lisp locator-hash { <eid-prefix6> | { <source-eid6> <dest-eid6> } } [ vrf { <vrf-name> | <vrf-known-name> } ] } }
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information               |
| ip                    | Display IP information                        |
| ipv6                  | Display IPv6 information                      |
| lisp                  | LISP show commands                            |
| locator-hash          | Display source and dest locators for EID pair |
| <i>source-eid</i>     | Source IPv4 endpoint identifier (EID)         |
| <i>dest-eid</i>       | Destination IPv4 endpoint identifier (EID)    |
| <i>eid-prefix</i>     | Display exact match for IP EID-prefix entry   |
| vrf                   | (Optional) Display information for vrf        |
| <i>vrf-name</i>       | (Optional) VRF name                           |
| <i>vrf-known-name</i> | (Optional) Known VRF name                     |

### Command Mode

- /exec

# show ip lisp map-cache

```
{ { show ip lisp map-cache [ <eid> | <eid-prefix> | detail ] [ vrf { <vrf-name> | <vrf-known-name> } ] } | {
show ipv6 lisp map-cache [ <eid6> | <eid-prefix6> | detail ] [ vrf { <vrf-name> | <vrf-known-name> } ] } }
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                        |
| ip                    | Display IP information                                 |
| ipv6                  | Display IPv6 information                               |
| lisp                  | LISP show commands                                     |
| map-cache             | Display EID-to-RLOC cache mapping in this ITR          |
| vrf                   | (Optional) Display information for vrf                 |
| <i>vrf-name</i>       | (Optional) VRF name                                    |
| <i>vrf-known-name</i> | (Optional) Known VRF name                              |
| <i>eid</i>            | (Optional) Display mapping for IP destination EID      |
| <i>eid-prefix</i>     | (Optional) Display exact match for IP EID-prefix entry |
| detail                | (Optional) Display entire map-cache in long format     |

## Command Mode

- /exec

## show ip lisp statistics

show { ip | ipv6 } lisp statistics [ vrf { <vrf-name> | <vrf-known-name> } ]

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                   |
| ip                    | Display IP information                            |
| ipv6                  | Display IPv6 information                          |
| lisp                  | LISP show commands                                |
| statistics            | Display global LISP statistics                    |
| vrf                   | (Optional) Display statistics information for vrf |
| <i>vrf-name</i>       | (Optional) VRF name                               |
| <i>vrf-known-name</i> | (Optional) Known VRF name                         |

### Command Mode

- /exec

# show ip lisp translate-cache

```
{ show ip lisp translate-cache [ <nrEID> ] } | { show ipv6 lisp translate-cache [ <nrEID6> ] }
```

## Syntax Description

|                 |  |
|-----------------|--|
| show            | Show running system information                    |
| ip              | Display IP information                             |
| ipv6            | Display IPv6 information                           |
| lisp            | LISP show commands                                 |
| translate-cache | Display configured translation cache               |
| <i>nrEID</i>    | (Optional) IPv4 address of inside non-routable EID |
| <i>nrEID6</i>   | (Optional) IPv6 address of inside non-routable EID |

## Command Mode

- /exec

## show ip lisp version-hash

```
show { ip | ipv6 } lisp version-hash { <eid-prefix> | <eid-prefix6> }
```

### Syntax Description

|                   |   |
|-------------------|---|
| show              | Show running system information                   |
| ip                | Display IP information                            |
| ipv6              | Display IPv6 information                          |
| lisp              | LISP show commands                                |
| version-hash      | Display version-hash for EID-record               |
| <i>eid-prefix</i> | Local IP EID-prefix from database-mapping command |

### Command Mode

- /exec

# show ip load-sharing

```
show ip load-sharing [ __readonly__ { <univer-id-ran-seed> [ <l3-msg-load> ] [ <l34-msg-load> ] [
<dest-addr-load> ] [ <src-dst-ip-gre> ] [ <bad-load> ] [ <gre-outer-hash> ] [ <concatenation> ] [ <rotate> ] [
<src-dst-ip-gtpu> ] } ]
```

## Syntax Description

|                           |                                 |
|---------------------------|---------------------------------|
| show                      | Show running system information |
| ip                        | Configure IP features           |
| load-sharing              | Display global loadbalance info |
| <i>__readonly__</i>       | (Optional)                      |
| <i>univer-id-ran-seed</i> | (Optional)                      |
| <i>l3-msg-load</i>        | (Optional)                      |
| <i>l34-msg-load</i>       | (Optional)                      |
| <i>dest-addr-load</i>     | (Optional)                      |
| <i>src-dst-ip-gre</i>     | (Optional)                      |
| <i>bad-load</i>           | (Optional)                      |
| <i>gre-outer-hash</i>     | (Optional)                      |
| <i>concatenation</i>      | (Optional)                      |
| <i>rotate</i>             | (Optional)                      |
| <i>src-dst-ip-gtpu</i>    | (Optional)                      |

## Command Mode

- /exec

## show ip local-pt

```
show ip local-pt [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                 |
| ip                    | Display IP information                          |
| local-pt              | Display local ip address ptree                  |
| vrf                   | (Optional) Clear information for particular VRF |
| <i>vrf-name</i>       | (Optional) VRF name                             |
| <i>vrf-known-name</i> | (Optional) Known VRF name                       |
| all                   | (Optional) Display information for all VRFs     |

### Command Mode

- /exec



# show ip local policy

```
show ip local policy [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ { TABLE_pbr [ <interface> ] [ <rmap> ] [ <status> ] [ <vrf_name> ] } ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ip                    | Display IP information                      |
| local                 | IP local options                            |
| policy                | Policy routing                              |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| __readonly__          | (Optional)                                  |
| TABLE_pbr             | (Optional)                                  |
| <i>interface</i>      | (Optional)                                  |
| <i>rmap</i>           | (Optional)                                  |
| <i>status</i>         | (Optional)                                  |
| <i>vrf_name</i>       | (Optional)                                  |

## Command Mode

- /exec

# show ip logging

```
show ip logging [ hash ] [ __readonly__ ]
```

## Syntax Description

|              |                                 |
|--------------|---------------------------------|
| show         | Show running system information |
| ip           | Display IP information          |
| logging      | Display IP policy logging table |
| hash         | (Optional) logging hash data    |
| __readonly__ | (Optional)                      |

## Command Mode

- /exec

# show ip mbgp

```
show ip { mbgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] | { bgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] [ { ipv4 { unicast | multicast } | all } ] } } { route-map { <rmap-name> | <rmap-name> } | filter-list { <fltrlist-name> | <test_pol_name> } | { community-list { <commlist-name> | <test_pol_name> } | extcommunity-list { <extcommlist-name> | <test_pol_name> } } [ exact-match ] } [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
```

## Syntax Description

|                         |   |
|-------------------------|---|
| show                    | Show running system information                                 |
| ip                      | Display IP information  |
| bgp                     | Display BGP status and configuration                            |
| mbgp                    | Display MBGP status and configuration                           |
| vrf                     | (Optional) Virtual Router Context                               |
| <i>vrf-name</i>         | (Optional) VRF name   |
| <i>vrf-known-name</i>   | (Optional) Known VRF name                                       |
| route-map               | Display routes matching the route-map                           |
| <i>rmap-name</i>        | Route-map name  |
| <i>rmap-name</i>        | Known route-map name  |
| filter-list             | Display routes matching the filter-list                         |
| <i>fltrlist-name</i>    | Name of filter-list   |
| community-list          | Display routes matching the community-list                      |
| extcommunity-list       | Display routes matching the extcommunity-list                   |
| <i>commlist-name</i>    | Name of community-list  |
| <i>extcommlist-name</i> | Name of extcommunity-list                                       |
| <i>test_pol_name</i>    | An existing test-list policy                                    |
| ipv4                    | (Optional) Display BGP information for IPv4 address family      |
| unicast                 | (Optional) Display BGP information for unicast address family   |
| multicast               | (Optional) Display BGP information for multicast address family |
| all                     | (Optional) Display BGP information for all address families     |
| exact-match             | (Optional) Exact match of the communities                       |

### Command Mode

- /exec

# show ip mbgp

```
show ip { mbgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] | { bgp [ vrf {
<vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] [ { ipv4 { unicast | multicast | mdt } |
all } ] } } [ <ip-addr> [ <ip-mask> [ longer-prefixes ] ] | <ip-prefix> [ longer-prefixes ] ] [ vrf { <vrf-name>
| <vrf-known-name> | ALL_VRFS_012345678901234 } ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                                    |
| ip                    | Display IP information   |
| bgp                   | Display BGP status and configuration                               |
| mbgp                  | Display MBGP status and configuration                              |
| vrf                   | (Optional) Virtual Router Context                                  |
| <i>vrf-name</i>       | (Optional) VRF name  |
| <i>vrf-known-name</i> | (Optional) Known VRF name  |
| <i>ip-addr</i>        | (Optional) Display one particular network from the BRIB in detail  |
| <i>ip-mask</i>        | (Optional) Mask for one particular prefix in the BRIB              |
| <i>ip-prefix</i>      | (Optional) Display one particular prefix from the BRIB in detail   |
| longer-prefixes       | (Optional) Display route and more specific routes                  |
| ipv4                  | (Optional) Display BGP information for IPv4 address family         |
| unicast               | (Optional) Display BGP information for unicast address family      |
| multicast             | (Optional) Display BGP information for multicast address family    |
| mdt                   | (Optional) Display BGP information for multicast distribution tree |
| all                   | (Optional) Display BGP information for all address families        |

## Command Mode

- /exec

## show ip mbgp community

```
show ip { mbgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] | { bgp [ vrf {
<vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] [ { ipv4 { unicast | multicast } | all }
] } } community { <regexp-str> | { { <comm-id> | <wellknown-id> } + [ exact-match ] } } [ vrf { <vrf-name>
| <vrf-known-name> | ALL_VRFS_012345678901234 } ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                                 |
| ip                    | Display IP information  |
| bgp                   | Display BGP status and configuration                            |
| mbgp                  | Display MBGP status and configuration                           |
| ipv4                  | (Optional) Display BGP information for IPv4 address family      |
| unicast               | (Optional) Display BGP information for unicast address family   |
| multicast             | (Optional) Display BGP information for multicast address family |
| vrf                   | (Optional) Virtual Router Context                               |
| <i>vrf-name</i>       | (Optional) VRF name   |
| <i>vrf-known-name</i> | (Optional) Known VRF name                                       |
| all                   | (Optional) Display BGP information for all address families     |
| community             | Display routes matching the BGP communities                     |
| <i>regexp-str</i>     | Regular expression to match the communities                     |
| <i>comm-id</i>        | BGP community value   |
| <i>wellknown-id</i>   | BGP wellknown community   |
| exact-match           | (Optional) Exact match of the communities                       |

### Command Mode

- /exec

# show ip mbgp dampening

```
show ip { mbgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] | { bgp [ vrf {
<vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] [ { ipv4 { unicast | multicast } | all }
] } } dampening { dampened-paths [ regexp <regexp-str> ] | flap-statistics | parameters | history-paths [ regexp
<regexp-str> ] } [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                                   |
| ip                    | Display IP information  |
| bgp                   | Display BGP status and configuration                              |
| mbgp                  | Display MBGP status and configuration                             |
| vrf                   | (Optional) Virtual Router Context                                 |
| <i>vrf-name</i>       | (Optional) VRF name   |
| <i>vrf-known-name</i> | (Optional) Known VRF name   |
| dampening             | Display dampening info  |
| dampened-paths        | Display all dampened paths  |
| flap-statistics       | Display flap statistics for routes                                |
| parameters            | Display dampening parameters                                      |
| history-paths         | Display all history paths   |
| ipv4                  | (Optional) Display BGP information for IPv4 address family        |
| unicast               | (Optional) Display BGP information for unicast address family     |
| multicast             | (Optional) Display BGP information for multicast address family   |
| all                   | (Optional) Display BGP information for all address families       |
| regexp                | (Optional) Display routes matching the AS path regular expression |
| <i>regexp-str</i>     | (Optional) Regular expression to match the AS paths               |

## Command Mode

- /exec

# show ip mbgp extcommunity

```
show ip { mbgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] | { bgp [ vrf {
<vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] | { ipv4 { unicast | multicast } | all }
] } } extcommunity { <regexp-str> | { { 4byteas-generic { transitive <ext-comm-gen-trans> | non-transitive
<ext-comm-gen-nontrans> } } + [ exact-match ] } } [ vrf { <vrf-name> | <vrf-known-name> |
ALL_VRFS_012345678901234 } ] }
```

## Syntax Description

|                              |   |
|------------------------------|---|
| show                         | Show running system information                                 |
| ip                           | Display IP information  |
| bgp                          | Display BGP status and configuration                            |
| mbgp                         | Display MBGP status and configuration                           |
| ipv4                         | (Optional) Display BGP information for IPv4 address family      |
| unicast                      | (Optional) Display BGP information for unicast address family   |
| multicast                    | (Optional) Display BGP information for multicast address family |
| vrf                          | (Optional) Virtual Router Context                               |
| <i>vrf-name</i>              | (Optional) VRF name   |
| <i>vrf-known-name</i>        | (Optional) Known VRF name                                       |
| all                          | (Optional) Display BGP information for all address families     |
| extcommunity                 | Display routes matching the BGP extcommunities                  |
| 4byteas-generic              | Generic extended community                                      |
| transitive                   | Transitive extcommunity   |
| non-transitive               | Non-Transitive extcommunity                                     |
| <i>regexp-str</i>            | Regular expression to match the extcommunities                  |
| <i>ext-comm-gen-trans</i>    | Extcommunity number aa4:nn format                               |
| <i>ext-comm-gen-nontrans</i> | Extcommunity number aa4:nn format                               |
| exact-match                  | (Optional) Exact match of the extcommunities                    |

## Command Mode

- /exec



# show ip mbgp flap-statistics

```
show ip { mbgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] | { bgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] [ { ipv4 { unicast | multicast } | all } ] } } flap-statistics [ <ip-prefix> | <ip-addr> [ <ip-mask> ] ] [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                                 |
| ip                    | Display IP information  |
| bgp                   | Display BGP status and configuration                            |
| mbgp                  | Display MBGP status and configuration                           |
| vrf                   | (Optional) Virtual Router Context                               |
| <i>vrf-name</i>       | (Optional) VRF name   |
| <i>vrf-known-name</i> | (Optional) Known VRF name                                       |
| flap-statistics       | Display route flap statistics                                   |
| <i>ip-prefix</i>      | (Optional) Display flap statistics for one prefix               |
| <i>ip-addr</i>        | (Optional) Display flap statistics for one network              |
| <i>ip-mask</i>        | (Optional) Network mask   |
| ipv4                  | (Optional) Display BGP information for IPv4 address family      |
| unicast               | (Optional) Display BGP information for unicast address family   |
| multicast             | (Optional) Display BGP information for multicast address family |
| all                   | (Optional) Display BGP information for all address families     |

## Command Mode

- /exec

## show ip mbgp neighbors

```
show ip { mbgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] | { bgp [ vrf {
<vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] [ { ipv4 { unicast | multicast } | all }
] } } neighbors [ [ { <neighbor-id> | <ipv6-neighbor-id> } [ routes [ advertised | received | dampened ] |
advertised-routes | received-routes | paths | flap-statistics ] ] | <neighbor-prefix-id> | <ipv6-neighbor-prefix-id>
} [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] ]
```

### Syntax Description

|                           |   |
|---------------------------|---|
| show                      | Show running system information                                       |
| ip                        | Display IP information  |
| bgp                       | Display BGP status and configuration                                  |
| mbgp                      | Display MBGP status and configuration                                 |
| vrf                       | (Optional) Virtual Router Context                                     |
| <i>vrf-name</i>           | (Optional) VRF name   |
| <i>vrf-known-name</i>     | (Optional) Known VRF name   |
| neighbors                 | Display all configured BGP neighbors                                  |
| <i>neighbor-id</i>        | (Optional) Display one particular BGP neighbor                        |
| <i>neighbor-prefix-id</i> | Display details for a prefix peering                                  |
| ipv4                      | (Optional) Display BGP information for IPv4 address family            |
| unicast                   | (Optional) Display BGP information for unicast address family         |
| multicast                 | (Optional) Display BGP information for multicast address family       |
| all                       | (Optional) Display BGP information for all address families           |
| routes                    | (Optional) Display all routes advertised/received to/from peer        |
| advertised                | (Optional) Display all routes advertised to this peer                 |
| received                  | (Optional) Display all routes received from this peer                 |
| dampened                  | (Optional) Display all dampened routes received from this peer        |
| advertised-routes         | (Optional) Display all the routes advertised to this peer             |
| received-routes           | (Optional) Display all the routes received from this peer             |
| flap-statistics           | (Optional) Display flap statistics for routes received from this peer |
| paths                     | (Optional) Display AS paths learned from this peer                    |

### Command Mode

- /exec

## show ip mbgp nexthop-database

```
show ip { mbgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] | { bgp [ vrf {
<vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] [ { ipv4 { unicast | multicast } | all }
] } } nexthop-database [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                                 |
| ip                    | Display IP information  |
| bgp                   | Display BGP status and configuration                            |
| mbgp                  | Display MBGP status and configuration                           |
| vrf                   | (Optional) Virtual Router Context                               |
| <i>vrf-name</i>       | (Optional) VRF name   |
| <i>vrf-known-name</i> | (Optional) Known VRF name                                       |
| nexthop-database      | Display nexthop database  |
| ipv4                  | (Optional) Display BGP information for IPv4 address family      |
| unicast               | (Optional) Display BGP information for unicast address family   |
| multicast             | (Optional) Display BGP information for multicast address family |
| all                   | (Optional) Display BGP information for all address families     |

### Command Mode

- /exec

## show ip mbgp nexthop

```
show ip { mbgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] | bgp [ vrf {
<vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] [ ipv4 { unicast | multicast } ] } nexthop
<ipnexthop> [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                                 |
| ip                    | Display IP information  |
| bgp                   | Display BGP status and configuration                            |
| mbgp                  | Display MBGP status and configuration                           |
| vrf                   | (Optional) Virtual Router Context                               |
| <i>vrf-name</i>       | (Optional) VRF name   |
| <i>vrf-known-name</i> | (Optional) Known VRF name                                       |
| nexthop               | Display routes matching the nexthop                             |
| <i>ipnexthop</i>      | Nexthop address   |
| ipv4                  | (Optional) Display BGP information for IPv4 address family      |
| unicast               | (Optional) Display BGP information for unicast address family   |
| multicast             | (Optional) Display BGP information for multicast address family |

### Command Mode

- /exec

## show ip mbgp prefix-list

```
show ip { mbgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] | { bgp [ vrf {
<vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] [ ipv4 { unicast | multicast } ] } }
prefix-list { <prfxlist-name> | <test_pol_name> } [ vrf { <vrf-name> | <vrf-known-name> |
ALL_VRFS_012345678901234 } ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                                 |
| ip                    | Display IP information  |
| bgp                   | Display BGP status and configuration                            |
| mbgp                  | Display MBGP status and configuration                           |
| vrf                   | (Optional) Virtual Router Context                               |
| <i>vrf-name</i>       | (Optional) VRF name   |
| <i>vrf-known-name</i> | (Optional) Known VRF name                                       |
| prefix-list           | Display routes matching the prefix-list                         |
| <i>prfxlist-name</i>  | Name of prefix-list   |
| <i>test_pol_name</i>  | An existing test-list policy                                    |
| ipv4                  | (Optional) Display BGP information for IPv4 address family      |
| unicast               | (Optional) Display BGP information for unicast address family   |
| multicast             | (Optional) Display BGP information for multicast address family |

### Command Mode

- /exec

## show ip mbgp received-paths

```
show ip { mbgp [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] | { bgp [ vrf {
<vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] | { ipv4 { unicast | multicast } | all }
] } } received-paths [ private ] [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                                 |
| ip                    | Display IP information  |
| bgp                   | Display BGP status and configuration                            |
| mbgp                  | Display MBGP status and configuration                           |
| vrf                   | (Optional) Virtual Router Context                               |
| <i>vrf-name</i>       | (Optional) VRF name   |
| <i>vrf-known-name</i> | (Optional) Known VRF name                                       |
| received-paths        | Display paths stored for soft-reconfig                          |
| ipv4                  | (Optional) Display BGP information for IPv4 address family      |
| unicast               | (Optional) Display BGP information for unicast address family   |
| multicast             | (Optional) Display BGP information for multicast address family |
| all                   | (Optional) Display BGP information for all address families     |
| private               | (Optional) private  |

### Command Mode

- /exec

## show ip msdp count

```
show ip msdp count [ <asn> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ <out-vrf>
<total-cnt> [ TABLE_asn <out-asn> <src-cnt> <grp-cnt> ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ip                    | Display IP information                      |
| msdp                  | Display MSDP status and configuration       |
| count                 | Display SA cache counters                   |
| <i>asn</i>            | (Optional) AS number                        |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| __readonly__          | (Optional)                                  |
| <i>out-vrf</i>        | (Optional)                                  |
| <i>total-cnt</i>      | (Optional)                                  |
| TABLE_asn             | (Optional)                                  |
| <i>out-asn</i>        | (Optional)                                  |
| <i>src-cnt</i>        | (Optional)                                  |
| <i>grp-cnt</i>        | (Optional)                                  |

### Command Mode

- /exec



## show ip msdp event-history

```
show ip msdp [ <asn> ] [ internal ] event-history { errors | msgs | <msdp-event-hist-buf-name> | statistics }
```

### Syntax Description

|                                 |                                       |
|---------------------------------|---------------------------------------|
| show                            | Show running system information       |
| ip                              | Display IP information                |
| msdp                            | Display MSDP status and configuration |
| <i>asn</i>                      | (Optional) AS number                  |
| internal                        | (Optional) Commands for internal use  |
| event-history                   | Show various event logs of MSDP       |
| errors                          | Error logs of MSDP                    |
| msgs                            | Message logs of MSDP                  |
| <i>msdp-event-hist-buf-name</i> | Buffer                                |
| statistics                      | Buffer state                          |

### Command Mode

- /exec

# show ip msdp mesh-group

```
show ip msdp mesh-group [ <mesh-group> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__
<out-vrf> [ TABLE_meshgroup [ <meshgroup-name> ] [ TABLE_peer [ <peer-ipaddr> ] [ <peer-asn> ] [
<peer-description> ] ] ] ]
```

## Syntax Description

|                         |   |
|-------------------------|---|
| show                    | Show running system information             |
| ip                      | Display IP information                      |
| msdp                    | Display MSDP status and configuration       |
| mesh-group              | Display members of mesh-group               |
| <i>mesh-group</i>       | (Optional) Display single mesh-group        |
| vrf                     | (Optional) Display per-VRF information      |
| <i>vrf-name</i>         | (Optional) VRF name                         |
| <i>vrf-known-name</i>   | (Optional) Known VRF name                   |
| all                     | (Optional) Display information for all VRFs |
| __readonly__            | (Optional)                                  |
| <i>out-vrf</i>          | (Optional)                                  |
| TABLE_meshgroup         | (Optional)                                  |
| <i>meshgroup-name</i>   | (Optional)                                  |
| TABLE_peer              | (Optional)                                  |
| <i>peer-ipaddr</i>      | (Optional)                                  |
| <i>peer-asn</i>         | (Optional)                                  |
| <i>peer-description</i> | (Optional)                                  |

## Command Mode

- /exec

# show ip msdp peer

```
show ip msdp peer [ <peer-address> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ [
TABLE_peer [ <peer-ipaddr> ] [ <out-vrf> ] [ <peer-asn> ] [ <local-ipaddr> ] [ <local-iface> ] [
<fully-configured> ] [ <peer-description> ] [ <connection-status> ] [ <peer-listening> ] [ <state-duration> ]
[ <peer-uptime> ] [ <peer-rr> ] [ <peer-password> ] [ <peer-ki> ] [ <peer-kt> ] [ <peer-ri> ] [ <sa-in-policy>
] [ <sa-out-policy> ] [ <sa-limit> ] [ <mesh-name> ] [ <last-rcvd> ] [ <sa-rcvd> ] [ <sa-sent> ] [ <sa-req-rcvd>
] [ <sa-req-sent> ] [ <sa-resp-rcvd> ] [ <sa-resp-sent> ] [ <in-ctrl-msgs> ] [ <out-ctrl-msgs> ] [ <in-data-msgs>
] [ <out-data-msgs> ] [ <sa-ka-rcvd> ] [ <sa-ka-sent> ] [ <sa-notif-rcvd> ] [ <sa-notif-sent> ] [ <rem-port> ]
[ <local-port> ] [ <rpf-failures> ] [ <cache-lifetime> ] [ <estb-transitions> ] [ <conn-attempts> ] [ <discont-time>
] ] ]
```

## Syntax Description

|                          |   |
|--------------------------|---|
| show                     | Show running system information             |
| ip                       | Display IP information                      |
| msdp                     | Display MSDP status and configuration       |
| vrf                      | (Optional) Display per-VRF information      |
| <i>vrf-name</i>          | (Optional) VRF name                         |
| <i>vrf-known-name</i>    | (Optional) Known VRF name                   |
| all                      | (Optional) Display information for all VRFs |
| peer                     | Display MSDP peer information               |
| <i>peer-address</i>      | (Optional) IP address of MSDP peer          |
| <i>__readonly__</i>      | (Optional)                                  |
| TABLE_peer               | (Optional)                                  |
| <i>peer-ipaddr</i>       | (Optional)                                  |
| <i>out-vrf</i>           | (Optional)                                  |
| <i>peer-asn</i>          | (Optional)                                  |
| <i>local-ipaddr</i>      | (Optional)                                  |
| <i>local-iface</i>       | (Optional)                                  |
| <i>fully-configured</i>  | (Optional)                                  |
| <i>peer-description</i>  | (Optional)                                  |
| <i>connection-status</i> | (Optional)                                  |
| <i>state-duration</i>    | (Optional)                                  |
| <i>peer-listening</i>    | (Optional)                                  |

|                       |            |
|-----------------------|------------|
| <i>peer-uptime</i>    | (Optional) |
| <i>peer-password</i>  | (Optional) |
| <i>peer-ki</i>        | (Optional) |
| <i>peer-kt</i>        | (Optional) |
| <i>peer-ri</i>        | (Optional) |
| <i>peer-rr</i>        | (Optional) |
| <i>sa-in-policy</i>   | (Optional) |
| <i>sa-out-policy</i>  | (Optional) |
| <i>sa-limit</i>       | (Optional) |
| <i>mesh-name</i>      | (Optional) |
| <i>last-rcvd</i>      | (Optional) |
| <i>sa-rcvd</i>        | (Optional) |
| <i>sa-sent</i>        | (Optional) |
| <i>sa-req-rcvd</i>    | (Optional) |
| <i>sa-req-sent</i>    | (Optional) |
| <i>sa-resp-rcvd</i>   | (Optional) |
| <i>sa-resp-sent</i>   | (Optional) |
| <i>out-ctrl-msgs</i>  | (Optional) |
| <i>in-ctrl-msgs</i>   | (Optional) |
| <i>out-data-msgs</i>  | (Optional) |
| <i>in-data-msgs</i>   | (Optional) |
| <i>sa-ka-rcvd</i>     | (Optional) |
| <i>sa-ka-sent</i>     | (Optional) |
| <i>sa-notif-rcvd</i>  | (Optional) |
| <i>sa-notif-sent</i>  | (Optional) |
| <i>rem-port</i>       | (Optional) |
| <i>local-port</i>     | (Optional) |
| <i>rpf-failures</i>   | (Optional) |
| <i>cache-lifetime</i> | (Optional) |

|                         |            |
|-------------------------|------------|
| <i>estb-transitions</i> | (Optional) |
| <i>conn-attempts</i>    | (Optional) |
| <i>discont-time</i>     | (Optional) |

**Command Mode**

- /exec

## show ip msdp policy statistics sa-policy in

```
show ip msdp policy statistics sa-policy <peer-address> { in | out } [ vrf { <vrf-name> | <vrf-known-name>
} ] [ __readonly__ [ TABLE_routemap [ <name> ] [ <seq_num> ] [ <action> ] [ [ TABLE_cmd [ <command>
] [ <match_count> ] [ <compare_count> ] ] ] ] [ <total_accept_count> ] [ <total_reject_count> ] ]
```

### Syntax Description

|                           |  |
|---------------------------|--|
| show                      | Show running system information        |
| ip                        | Display IP information                 |
| msdp                      | MSDP global configuration commands     |
| policy                    | Policy information                     |
| statistics                | Policy statistics                      |
| sa-policy                 | Configured SA policy for MSDP peer     |
| <i>peer-address</i>       | IP address of MSDP peer for SA policy  |
| in                        | Input policy                           |
| out                       | Output policy                          |
| vrf                       | (Optional) Display per-VRF information |
| <i>vrf-name</i>           | (Optional) VRF name                    |
| <i>vrf-known-name</i>     | (Optional) Known VRF name              |
| <i>__readonly__</i>       | (Optional)                             |
| TABLE_routemap            | (Optional)                             |
| <i>name</i>               | (Optional)                             |
| <i>action</i>             | (Optional)                             |
| <i>seq_num</i>            | (Optional)                             |
| TABLE_cmd                 | (Optional)                             |
| <i>command</i>            | (Optional)                             |
| <i>compare_count</i>      | (Optional)                             |
| <i>match_count</i>        | (Optional)                             |
| <i>total_accept_count</i> | (Optional)                             |
| <i>total_reject_count</i> | (Optional)                             |

### Command Mode

- /exec

## show ip msdp rpf

```
show ip msdp rpf <rp-address> [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ <out-rp-address>
<out-vrf> [ TABLE_mesh [ <peer-addr> ] [ <mesh-name> ] ] [ <is-peer-cnt-one> ] [ <is-rp-peer> ] [
<is-bgp-alive> ] [ <bgp-peer-addr> ] [ <peer-asn> ] [ <origin-asn> ] [ <is-mbgp> ] ]
```

### Syntax Description

|                        |   |
|------------------------|---|
| show                   | Show running system information             |
| ip                     | Display IP information                      |
| msdp                   | Display MSDP status and configuration       |
| rpf                    | Display RPF-peer for RP address             |
| <i>rp-address</i>      | IP address of RP                            |
| vrf                    | (Optional) Display per-VRF information      |
| <i>vrf-name</i>        | (Optional) VRF name                         |
| <i>vrf-known-name</i>  | (Optional) Known VRF name                   |
| all                    | (Optional) Display information for all VRFs |
| __readonly__           | (Optional)                                  |
| <i>out-rp-address</i>  | (Optional)                                  |
| <i>out-vrf</i>         | (Optional)                                  |
| TABLE_mesh             | (Optional)                                  |
| <i>peer-addr</i>       | (Optional)                                  |
| <i>mesh-name</i>       | (Optional)                                  |
| <i>is-peer-cnt-one</i> | (Optional)                                  |
| <i>is-rp-peer</i>      | (Optional)                                  |
| <i>is-bgp-alive</i>    | (Optional)                                  |
| <i>bgp-peer-addr</i>   | (Optional)                                  |
| <i>peer-asn</i>        | (Optional)                                  |
| <i>origin-asn</i>      | (Optional)                                  |
| <i>is-mbgp</i>         | (Optional)                                  |

### Command Mode

- /exec



## show ip msdp sa

```
show ip msdp { sa-cache | route } [ { <source> [ <group> ] } | { <group> [ <source> ] } ] [ <asn> ] [ peer
<peer> ] [ detail ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ [ <out-vrf> ] [
<total-sa-count> ] [ TABLE_sa [ <src-addr> ] [ <grp-addr> ] [ <rp-addr> ] [ <out-asn> ] [ <peer-addr> ] [
<uptime> ] [ <expire> ] ] ]
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                      |
| ip                    | Display IP information                               |
| msdp                  | Display MSDP status and configuration                |
| vrf                   | (Optional) Display per-VRF information               |
| <i>vrf-name</i>       | (Optional) VRF name                                  |
| <i>vrf-known-name</i> | (Optional) Known VRF name                            |
| all                   | (Optional) Display information for all VRFs          |
| route                 | Display MSDP SA route cache                          |
| sa-cache              | Display MSDP SA route cache                          |
| <i>source</i>         | (Optional) Display group/source address for SA       |
| <i>group</i>          | (Optional) Display group/source address for SA       |
| <i>asn</i>            | (Optional) AS number                                 |
| detail                | (Optional) Display detailed information              |
| peer                  | (Optional) Display MSDP SA received from single peer |
| <i>peer</i>           | (Optional) IP address of peer for SA                 |
| __readonly__          | (Optional)   |
| <i>out-vrf</i>        | (Optional)   |
| <i>total-sa-count</i> | (Optional)   |
| TABLE_sa              | (Optional)   |
| <i>src-addr</i>       | (Optional)   |
| <i>grp-addr</i>       | (Optional)   |
| <i>rp-addr</i>        | (Optional)   |
| <i>peer-addr</i>      | (Optional)   |

|                |            |
|----------------|------------|
| <i>out-asn</i> | (Optional) |
| <i>uptime</i>  | (Optional) |
| <i>expire</i>  | (Optional) |

**Command Mode**

- /exec

# show ip msdp sources

```
show ip msdp sources [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ [ <out-vrf> ] ] [
TABLE_source [ <source-addr> ] [ <is-count-ge-limit> ] [ <count> ] [ <is-limit-valid> ] [ <limit> ] [
<source-prefix> ] [ <violates> ] ] ]
```

## Syntax Description

|                          |  |
|--------------------------|--|
| show                     | Show running system information                            |
| ip                       | Display IP information                                     |
| msdp                     | Display MSDP status and configuration                      |
| sources                  | Display learned sources with their group counts and limits |
| vrf                      | (Optional) Display per-VRF information                     |
| <i>vrf-name</i>          | (Optional) VRF name  |
| <i>vrf-known-name</i>    | (Optional) Known VRF name                                  |
| all                      | (Optional) Display information for all VRFs                |
| <i>__readonly__</i>      | (Optional)   |
| <i>out-vrf</i>           | (Optional)   |
| TABLE_source             | (Optional)   |
| <i>source-addr</i>       | (Optional)   |
| <i>is-count-ge-limit</i> | (Optional)   |
| <i>count</i>             | (Optional)   |
| <i>is-limit-valid</i>    | (Optional)   |
| <i>limit</i>             | (Optional)   |
| <i>source-prefix</i>     | (Optional)   |
| <i>violates</i>          | (Optional)   |

## Command Mode

- /exec

## show ip msdp statistics

```
show ip msdp statistics [ <peer-address> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__
<out-vrf> <select-err> <recv-sel-err> { TABLE_peer <peer-address> <buffer-full> <recv-buf-full> <fatal-err>
<recv-fat-err> <would-block> <recv-would-block> <sock-exp> <invalid-type> <invalid-len> } ]
```

### Syntax Description

|                         |   |
|-------------------------|---|
| show                    | Show running system information             |
| ip                      | Display IP information                      |
| msdp                    | Display MSDP status and configuration       |
| statistics              | Display internal statistics                 |
| <i>peer-address</i>     | (Optional) IP address of MSDP peer          |
| vrf                     | (Optional) Display per-VRF information      |
| <i>vrf-name</i>         | (Optional) VRF name                         |
| <i>vrf-known-name</i>   | (Optional) Known VRF name                   |
| all                     | (Optional) Display information for all VRFs |
| __readonly__            | (Optional)                                  |
| <i>out-vrf</i>          | (Optional)                                  |
| <i>select-err</i>       | (Optional)                                  |
| <i>recv-sel-err</i>     | (Optional)                                  |
| TABLE_peer              | (Optional)                                  |
| <i>peer-address</i>     | (Optional)                                  |
| <i>buffer-full</i>      | (Optional)                                  |
| <i>recv-buf-full</i>    | (Optional)                                  |
| <i>fatal-err</i>        | (Optional)                                  |
| <i>recv-fat-err</i>     | (Optional)                                  |
| <i>would-block</i>      | (Optional)                                  |
| <i>recv-would-block</i> | (Optional)                                  |
| <i>sock-exp</i>         | (Optional)                                  |
| <i>invalid-type</i>     | (Optional)                                  |
| <i>invalid-len</i>      | (Optional)                                  |

**Command Mode**

- /exec

## show ip msdp summary

```
show ip msdp summary [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ [ <out-vrf> ] [
<local-asn> ] [ <originator-id> ] [ <config-peer-count> ] [ <estb-peer-count> ] [ <shut-peer-count> ] [
TABLE_peer [ <peer-address> ] [ <peer-asn> ] [ <peer-state> ] [ <peer-uptime> ] [ <peer-last-msg> ] [
<peer-sa-rcvd> ] [ <peer-sa-limit> ] ] ] ]
```

### Syntax Description

|                          |   |
|--------------------------|---|
| show                     | Show running system information             |
| ip                       | Display IP information                      |
| msdp                     | Display MSDP status and configuration       |
| vrf                      | (Optional) Display per-VRF information      |
| <i>vrf-name</i>          | (Optional) VRF name                         |
| <i>vrf-known-name</i>    | (Optional) Known VRF name                   |
| all                      | (Optional) Display information for all VRFs |
| summary                  | Display MSDP peer summary                   |
| <i>__readonly__</i>      | (Optional)                                  |
| <i>out-vrf</i>           | (Optional)                                  |
| <i>local-asn</i>         | (Optional)                                  |
| <i>originator-id</i>     | (Optional)                                  |
| <i>config-peer-count</i> | (Optional)                                  |
| <i>estb-peer-count</i>   | (Optional)                                  |
| <i>shut-peer-count</i>   | (Optional)                                  |
| TABLE_peer               | (Optional)                                  |
| <i>peer-address</i>      | (Optional)                                  |
| <i>peer-asn</i>          | (Optional)                                  |
| <i>peer-state</i>        | (Optional)                                  |
| <i>peer-uptime</i>       | (Optional)                                  |
| <i>peer-last-msg</i>     | (Optional)                                  |
| <i>peer-sa-rcvd</i>      | (Optional)                                  |
| <i>peer-sa-limit</i>     | (Optional)                                  |

**Command Mode**

- /exec

## show ip nat max

```
show ip nat max [ __readonly__ <max_dyn_translations> <max_all_host> <static_translations>
<dynamic_translations> <icmp_translations> ]
```

### Syntax Description

|                             |                                     |
|-----------------------------|-------------------------------------|
| show                        | Show running system information     |
| ip                          | Show the IP features of the system  |
| nat                         | IP NAT information                  |
| max                         | IP NAT max values                   |
| <i>__readonly__</i>         | (Optional)                          |
| <i>max_dyn_translations</i> | (Optional) Max Dynamic Translations |
| <i>max_all_host</i>         | (Optional) Max All Hosts            |
| <i>static_translations</i>  | (Optional) No. Static Translations  |
| <i>dynamic_translations</i> | (Optional) No. Dynamic Translations |
| <i>icmp_translations</i>    | (Optional) No. ICMP Translations    |

### Command Mode

- /exec



# show ip nat statistics

show ip nat statistics

## Syntax Description

|            |                                    |
|------------|------------------------------------|
| show       | Show running system information    |
| ip         | Show the IP features of the system |
| nat        | IP NAT information                 |
| statistics | Translation statistics             |

## Command Mode

- /exec

# show ip nat timeout

```
show ip nat timeout [ __readonly__ <tcp_timeout> <udp_timeout> <dynamic_timeout> [ <sampling_timeout> ] ]
```

## Syntax Description

|                         |                                    |
|-------------------------|------------------------------------|
| show                    | Show running system information    |
| ip                      | Show the IP features of the system |
| nat                     | IP NAT information                 |
| timeout                 | IP NAT timeout values              |
| <i>__readonly__</i>     | (Optional)                         |
| <i>tcp_timeout</i>      | (Optional) TCP Timeout             |
| <i>udp_timeout</i>      | (Optional) UDP Timeout             |
| <i>dynamic_timeout</i>  | (Optional) Dynamic Timeout         |
| <i>sampling_timeout</i> | (Optional) Sampling Timeout        |

## Command Mode

- /exec

# show ip nat translations

```
show ip nat translations [ vrf { <vrf-name> | <vrf-known-name> } ] [ verbose ] [ __readonly__ {
TABLE_nat_translation [ <Protocol> ] [ <Inside_global_IP_V4_Address> ] [ <Inside_global_port> ] [
<Inside_local_IP_V4_Address> ] [ <Inside_local_port> ] [ <Outside_local_IP_V4_Address> ] [
<Outside_local_port> ] [ <Outside_global_IP_V4_Address> ] [ <Outside_global_port> ] [ <Flags> ] [
<In_stats_count> ] [ <Out_stats_count> ] [ <Entry_id> ] [ <State> ] [ <Group_id> ] [ <VRF> ] [ <Time_left>
] [ <Syn> ] [ <Fin_rst> } } ]
```

## Syntax Description

|                                     |  |
|-------------------------------------|--|
| show                                | Show running system information        |
| ip                                  | Show the IP features of the system     |
| nat                                 | IP NAT information                     |
| translations                        | Translation entries                    |
| verbose                             | (Optional) Show extra information      |
| vrf                                 | (Optional) Display per-VRF information |
| <i>vrf-name</i>                     | (Optional) VRF name                    |
| <i>vrf-known-name</i>               | (Optional) Known VRF name              |
| <i>__readonly__</i>                 | (Optional) Readonly                    |
| TABLE_nat_translation               | (Optional) NAT Translation Table       |
| <i>Protocol</i>                     | (Optional) Protocol                    |
| <i>Inside_global_IP_V4_Address</i>  | (Optional) Inside global address       |
| <i>Inside_global_port</i>           | (Optional) Inside global port          |
| <i>Inside_local_IP_V4_Address</i>   | (Optional) Inside local address        |
| <i>Inside_local_port</i>            | (Optional) Inside local port           |
| <i>Outside_local_IP_V4_Address</i>  | (Optional) Outside local address       |
| <i>Outside_local_port</i>           | (Optional) Outside local port          |
| <i>Outside_global_IP_V4_Address</i> | (Optional) Outside global address      |
| <i>Outside_global_port</i>          | (Optional) Outside global port         |
| <i>Flags</i>                        | (Optional) Flags                       |
| <i>In_stats_count</i>               | (Optional) In stats count              |
| <i>Out_stats_count</i>              | (Optional) Out stats count             |

|                  |                                 |
|------------------|---------------------------------|
| <i>Entry_id</i>  | (Optional) Entry ID             |
| <i>State</i>     | (Optional) State                |
| <i>Group_id</i>  | (Optional) Group ID             |
| <i>VRF</i>       | (Optional) VRF                  |
| <i>Time_left</i> | (Optional) Time Left (HH:MM:SS) |
| <i>Syn</i>       | (Optional) Syn                  |
| <i>Fin_rst</i>   | (Optional) FIN RESET            |

**Command Mode**

- /exec

# show ip ospf

```
show ip ospf [ <tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ TABLE_ctx <ptag>
<instance_number> <cname> <rid> [ <domain_tag> ] [ <dn_bit_ignore> ] <stateful_ha> <gr_ha> [
<gr_planned_only> ] [ <gr_notify_period> ] [ <gr_grace_period> ] [ <gr_state> ] [ <gr_last_status> ] [
<gr_helper_mode> ] <support_tos0_only> <support_opaque_lsa> [ <low_mem_cond> ] <is_asbr> <is_asbr>
[ <max_lsa_non_self_number> ] [ <max_lsa_state> ] [ <max_lsa_warning_only> ] [
<max_lsa_current_non_self_lsa_number> ] [ <max_lsa_threshold_pct> ] [ <max_lsa_ignore_time> ] [
<max_lsa_reset_time> ] [ <max_lsa_ignore_count> ] [ <max_lsa_current_ignore_count> ] [
<max_lsa_ignore_time_left> ] [ <max_lsa_reset_time_left> ] [ <max_lsa_permanent_ignore> ] [ {
TABLE_redist <proto> [ <max_lsas> ] [ <warning> ] [ <threshold> ] [ <current_count> ] } ] <admin_dist>
<ref_bw> <spf_start_time> <spf_hold_time> <spf_max_time> <lsa_start_time> <lsa_hold_time>
<lsa_max_time> <min_lsa_arr_time> <lsa_aging_pace> <spf_max_paths> <max_metric_adver> [ [
<max_metric_time_left> ] [ <max_metric_wait_bgp> ] [ <max_metric_timeout> ] [ <max_metric_always>
] [ <max_metric_sum_lsa> ] [ <max_metric_ext_lsa> ] ] <asext_lsa_cnt> <asext_lsa_crc> <asopaque_lsa_cnt>
<asopaque_lsa_crc> <area_total> <area_normal> <area_stub> <area_nssa> <act_area_total> <act_area_normal>
<act_area_stub> <act_area_nssa> <no_discard_rt_ext> <no_discard_rt_int> [ <bfd_enabled> ] [ <passive_dflt>
] [ <name_lookup> ] [ { TABLE_area <aname> [ <backbone_active> ] [ <active> ] <age> <total_intf>
<act_intf> <passive_intf> <loopback_intf> [ <gr_nbr_cnt> ] <stub> [ <stub_def_cost> ] <nssa> [ <no_redist>
] [ <nssa_trans> ] <no_summary> <auth_type> <spf_runs> <last_spf_run_time> [ <rtr_lsa_throt> ] [
TABLE_range <addr> <masklen> <state> <nets> <advertise> [ <cost> ] ] [ <filter_in> ] [ <filter_out> ]
<lsa_cnt> <lsa_crc> } ] ]
```

## Syntax Description

|                 |   |
|-----------------|---|
| show            | Show running system information             |
| ip              | Display IP information                      |
| ospf            | Display OSPF status and configuration       |
| tag             | (Optional) Process tag                      |
| vrf             | (Optional) Display per-VRF information      |
| vrf-name        | (Optional) VRF name                         |
| vrf-known-name  | (Optional) Known VRF name                   |
| all             | (Optional) Display information for all VRFs |
| __readonly__    | (Optional)                                  |
| TABLE_ctx       | (Optional)                                  |
| ptag            | (Optional)                                  |
| instance_number | (Optional)                                  |
| cname           | (Optional)                                  |
| rid             | (Optional)                                  |

|  |            |
|--|------------|
| <i>domain_tag</i>                          | (Optional) |
| <i>dn_bit_ignore</i>                       | (Optional) |
| <i>stateful_ha</i>                         | (Optional) |
| <i>gr_ha</i>                               | (Optional) |
| <i>gr_planned_only</i>                     | (Optional) |
| <i>gr_notify_period</i>                    | (Optional) |
| <i>gr_grace_period</i>                     | (Optional) |
| <i>gr_state</i>                            | (Optional) |
| <i>gr_last_status</i>                      | (Optional) |
| <i>gr_helper_mode</i>                      | (Optional) |
| <i>support_tos0_only</i>                   | (Optional) |
| <i>support_opaque_lsa</i>                  | (Optional) |
| <i>low_mem_cond</i>                        | (Optional) |
| <i>is_abr</i>                              | (Optional) |
| <i>is_asbr</i>                             | (Optional) |
| <i>max_lsa_non_self_number</i>             | (Optional) |
| <i>max_lsa_state</i>                       | (Optional) |
| <i>max_lsa_warning_only</i>                | (Optional) |
| <i>max_lsa_current_non_self_lsa_number</i> | (Optional) |
| <i>max_lsa_threshold_pct</i>               | (Optional) |
| <i>max_lsa_ignore_time</i>                 | (Optional) |
| <i>max_lsa_reset_time</i>                  | (Optional) |
| <i>max_lsa_ignore_count</i>                | (Optional) |
| <i>max_lsa_current_ignore_count</i>        | (Optional) |
| <i>max_lsa_ignore_time_left</i>            | (Optional) |
| <i>max_lsa_reset_time_left</i>             | (Optional) |
| <i>max_lsa_permanent_ignore</i>            | (Optional) |
| TABLE_redist                               | (Optional) |
| <i>proto</i>                               | (Optional) |

|                             |            |
|-----------------------------|------------|
| <i>max_lsas</i>             | (Optional) |
| <i>warning</i>              | (Optional) |
| <i>threshold</i>            | (Optional) |
| <i>current_count</i>        | (Optional) |
| <i>admin_dist</i>           | (Optional) |
| <i>ref_bw</i>               | (Optional) |
| <i>spf_start_time</i>       | (Optional) |
| <i>spf_hold_time</i>        | (Optional) |
| <i>spf_max_time</i>         | (Optional) |
| <i>lsa_start_time</i>       | (Optional) |
| <i>lsa_hold_time</i>        | (Optional) |
| <i>lsa_max_time</i>         | (Optional) |
| <i>min_lsa_arr_time</i>     | (Optional) |
| <i>lsa_aging_pace</i>       | (Optional) |
| <i>spf_max_paths</i>        | (Optional) |
| <i>max_metric_adver</i>     | (Optional) |
| <i>max_metric_time_left</i> | (Optional) |
| <i>max_metric_wait_bgp</i>  | (Optional) |
| <i>max_metric_timeout</i>   | (Optional) |
| <i>max_metric_always</i>    | (Optional) |
| <i>max_metric_sum_lsa</i>   | (Optional) |
| <i>max_metric_ext_lsa</i>   | (Optional) |
| <i>asext_lsa_cnt</i>        | (Optional) |
| <i>asext_lsa_crc</i>        | (Optional) |
| <i>asopaque_lsa_cnt</i>     | (Optional) |
| <i>asopaque_lsa_crc</i>     | (Optional) |
| <i>area_total</i>           | (Optional) |
| <i>area_normal</i>          | (Optional) |
| <i>area_stub</i>            | (Optional) |

|                          |            |
|--------------------------|------------|
| <i>area_nssa</i>         | (Optional) |
| <i>act_area_total</i>    | (Optional) |
| <i>act_area_normal</i>   | (Optional) |
| <i>act_area_stub</i>     | (Optional) |
| <i>act_area_nssa</i>     | (Optional) |
| <i>bfd_enabled</i>       | (Optional) |
| <i>name_lookup</i>       | (Optional) |
| <i>passive_dflt</i>      | (Optional) |
| <i>no_discard_rt_ext</i> | (Optional) |
| <i>no_discard_rt_int</i> | (Optional) |
| TABLE_area               | (Optional) |
| <i>aname</i>             | (Optional) |
| <i>backbone_active</i>   | (Optional) |
| <i>active</i>            | (Optional) |
| <i>age</i>               | (Optional) |
| <i>total_intf</i>        | (Optional) |
| <i>act_intf</i>          | (Optional) |
| <i>passive_intf</i>      | (Optional) |
| <i>loopback_intf</i>     | (Optional) |
| <i>gr_nbr_cnt</i>        | (Optional) |
| <i>stub</i>              | (Optional) |
| <i>stub_def_cost</i>     | (Optional) |
| <i>nssa</i>              | (Optional) |
| <i>no_redist</i>         | (Optional) |
| <i>nssa_trans</i>        | (Optional) |
| <i>no_summary</i>        | (Optional) |
| <i>auth_type</i>         | (Optional) |
| <i>spf_runs</i>          | (Optional) |
| <i>last_spf_run_time</i> | (Optional) |



|                      |            |
|----------------------|------------|
| <i>rtr_lsa_throt</i> | (Optional) |
| TABLE_range          | (Optional) |
| <i>addr</i>          | (Optional) |
| <i>masklen</i>       | (Optional) |
| <i>state</i>         | (Optional) |
| <i>nets</i>          | (Optional) |
| <i>advertise</i>     | (Optional) |
| <i>cost</i>          | (Optional) |
| <i>filter_in</i>     | (Optional) |
| <i>filter_out</i>    | (Optional) |
| <i>lsa_cnt</i>       | (Optional) |
| <i>lsa_crc</i>       | (Optional) |

**Command Mode**

- /exec

## show ip ospf border-routers

```
show ip ospf [ <tag> ] border-routers [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__
TABLE_ctx <ptag> <cname> [ TABLE_br <type> <addr> <cost> <asbr> <abr> <area> <spf_inst> [
<vlink_unresolved> ] [ TABLE_br_ubest_nh [ <ubest_nh_addr> ] [ <ubest_nh_intf> ] ] [ TABLE_br_mbest_nh
[ <mbest_nh_addr> ] [ <mbest_nh_intf> ] ] ] ] ]
```

### Syntax Description

|                         |   |
|-------------------------|---|
| show                    | Show running system information             |
| ip                      | Display IP information                      |
| ospf                    | Display OSPF status and configuration       |
| <i>tag</i>              | (Optional) Process tag                      |
| vrf                     | (Optional) Display per-VRF information      |
| <i>vrf-name</i>         | (Optional) VRF name                         |
| <i>vrf-known-name</i>   | (Optional) Known VRF name                   |
| all                     | (Optional) Display information for all VRFs |
| border-routers          | Border routers                              |
| __readonly__            | (Optional)                                  |
| TABLE_ctx               | (Optional)                                  |
| <i>ptag</i>             | (Optional)                                  |
| <i>cname</i>            | (Optional)                                  |
| TABLE_br                | (Optional)                                  |
| <i>type</i>             | (Optional)                                  |
| <i>addr</i>             | (Optional)                                  |
| <i>cost</i>             | (Optional)                                  |
| <i>asbr</i>             | (Optional)                                  |
| <i>abr</i>              | (Optional)                                  |
| <i>area</i>             | (Optional)                                  |
| <i>spf_inst</i>         | (Optional)                                  |
| <i>vlink_unresolved</i> | (Optional)                                  |
| TABLE_br_ubest_nh       | (Optional)                                  |

|                      |            |
|----------------------|------------|
| <i>ubest_nh_addr</i> | (Optional) |
| <i>ubest_nh_intf</i> | (Optional) |
| TABLE_br_mbest_nh    | (Optional) |
| <i>mbest_nh_addr</i> | (Optional) |
| <i>mbest_nh_intf</i> | (Optional) |

**Command Mode**

- /exec

# show ip ospf database

```
show ip ospf [ <tag> ] database [ [ [ network | asbr-summary | summary | router | opaque-link | opaque-area
| nssa-external ] [ area <area-id-ip> ] ] | external [ ext_tag <tag_val> ] | opaque-as ] [ <lsid> ] [ self-originated
| adv-router <adv-id> | adv-router-name <adv-name> ] ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [
__readonly__ TABLE_ctx <rid> <ptag> <cname> [ TABLE_db2_lsa <name> [ <area> ] <id> <advrtr> <age>
<seqno> <cksum> [ <opaque_id> ] [ <corrupt> ] [ <rtr_num_links> ] [ <tag> ] ] ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                        |
| ip                    | Display IP information                                 |
| ospf                  | Display OSPF status and configuration                  |
| <i>tag</i>            | (Optional) Process tag                                 |
| vrf                   | (Optional) Display per-VRF information                 |
| <i>vrf-name</i>       | (Optional) VRF name                                    |
| <i>vrf-known-name</i> | (Optional) Known VRF name                              |
| all                   | (Optional) Display information for all VRFs            |
| database              | Link-state Database Summary                            |
| network               | (Optional) Display network LSAs                        |
| asbr-summary          | (Optional) Display type 4 (asbr-summary) LSAs          |
| external              | (Optional) Display type 5 (external) LSAs              |
| router                | (Optional) Display router LSAs                         |
| nssa-external         | (Optional) Display type 7 (NSSA external) LSAs         |
| opaque-link           | (Optional) Display Opaque Link-Local LSAs              |
| opaque-area           | (Optional) Display Opaque Area LSAs                    |
| opaque-as             | (Optional) Display Opaque AS LSAs                      |
| summary               | (Optional) Display type 3 (network-summary) LSAs       |
| self-originated       | (Optional) Display only self-originated LSAs           |
| <i>lsid</i>           | (Optional) Restrict display by link state ID           |
| adv-router            | (Optional) Restrict display by Advertising router      |
| <i>adv-id</i>         | (Optional) Advertising router ID                       |
| adv-router-name       | (Optional) Restrict display by Advertising router name |

|                      |  |
|----------------------|--|
| <i>adv-name</i>      | (Optional) DNS Name of the Advertising router  |
| <i>area</i>          | (Optional) Display only LSA's in this area     |
| <i>area-id-ip</i>    | (Optional) Area Id as an integer or ip address |
| <i>ext_tag</i>       | (Optional) Restrict display by tag             |
| <i>tag_val</i>       | (Optional) 32-bit tag value                    |
| <i>tag</i>           | (Optional)                                     |
| <i>__readonly__</i>  | (Optional)                                     |
| <i>TABLE_ctx</i>     | (Optional)                                     |
| <i>rid</i>           | (Optional)                                     |
| <i>ptag</i>          | (Optional)                                     |
| <i>cname</i>         | (Optional)                                     |
| <i>TABLE_db2_lsa</i> | (Optional)                                     |
| <i>name</i>          | (Optional)                                     |
| <i>area</i>          | (Optional)                                     |
| <i>id</i>            | (Optional)                                     |
| <i>advrtr</i>        | (Optional)                                     |
| <i>age</i>           | (Optional)                                     |
| <i>seqno</i>         | (Optional)                                     |
| <i>cksum</i>         | (Optional)                                     |
| <i>opaque_id</i>     | (Optional)                                     |
| <i>corrupt</i>       | (Optional)                                     |
| <i>rtr_num_links</i> | (Optional)                                     |

**Command Mode**

- /exec

## show ip ospf database database-summary

```
show ip ospf [ <tag> ] database database-summary [ vrf { <vrf-name> | <vrf-known-name> | all } ] [
__readonly__ TABLE_ctx <rid> <ptag> <cname> [ TABLE_dbsum [ TABLE_dbsum_area <area> [
TABLE_dbsum_area_lsa <area_lsa_name> <area_lsa_count> ] <area_lsa_total> ] [ TABLE_dbsum_all [
TABLE_dbsum_lsa_all <lsa_name> <lsa_count> ] <non_self_lsa_total> <lsa_total> ] ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ip                    | Display IP information                      |
| ospf                  | Display OSPF status and configuration       |
| <i>tag</i>            | (Optional) Process tag                      |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| database              | Link-state Database Summary                 |
| database-summary      | Summary of database                         |
| <i>__readonly__</i>   | (Optional)                                  |
| TABLE_ctx             | (Optional)                                  |
| <i>rid</i>            | (Optional)                                  |
| <i>ptag</i>           | (Optional)                                  |
| <i>cname</i>          | (Optional)                                  |
| TABLE_dbsum           | (Optional)                                  |
| TABLE_dbsum_area      | (Optional)                                  |
| <i>area</i>           | (Optional)                                  |
| TABLE_dbsum_area_lsa  | (Optional)                                  |
| <i>area_lsa_name</i>  | (Optional)                                  |
| <i>area_lsa_count</i> | (Optional)                                  |
| <i>area_lsa_total</i> | (Optional)                                  |
| TABLE_dbsum_all       | (Optional)                                  |

|                           |            |
|---------------------------|------------|
| TABLE_dbsum_lsa_all       | (Optional) |
| <i>lsa_name</i>           | (Optional) |
| <i>lsa_count</i>          | (Optional) |
| <i>non_self_lsa_total</i> | (Optional) |
| <i>lsa_total</i>          | (Optional) |

**Command Mode**

- /exec

## show ip ospf database detail

```
show ip ospf [ <tag> ] database [ [ network | asbr-summary | summary | router | opaque-link | opaque-area |
nssa-external ] [ area <area-id-ip> ] ] | external [ ext_tag <tag_val> ] | opaque-as ] [ <lsid> ] [ self-originated
| adv-router <adv-id> | adv-router-name <adv-name> ] detail [ vrf { <vrf-name> | <vrf-known-name> | all } ]
[ __readonly__ TABLE_ctx <rid> <ptag> <cname> [ TABLE_db2_lsa <name> [ <area> ] [ <rtr_max_metric>
] [ TABLE_lsdb <age> <maxage> <options> <options_str> <wrapping> <dummy> <flush_pending> <type>
<id> <id_str> [ <opaque_type> ] [ <opaque_id> ] <advrtr> <seqno> <cksum> <len> [ <corrupt> ] [ <rtr_abr>
] [ <rtr_asbr> ] [ <rtr_translate> ] [ <rtr_vlink_end> ] [ <rtr_num_links> ] [ <rtr_links_mismatch> ] [
TABLE_rlsa [ <rtr_link_type> ] [ <rtr_link_id_str> ] [ <rtr_link_id> ] [ <rtr_link_data_str> ] [ <rtr_link_data>
] [ <rtr_link_num_tos> ] [ <rtr_link_metric> ] [ TABLE_rlinktos [ <rtr_link_tos_id> ] [ <rtr_link_tos_metric>
] ] ] [ <net_mask> ] [ TABLE_netlsa [ <net_rtr> ] ] [ <sum_mask> ] [ <sum_metric> ] [ TABLE_sumlsa [
<sum_tos_id> ] [ <sum_tos_metric> ] ] [ <nssa_mask> ] [ <nssa_metric_type2> ] [ <nssa_metric> ] [
<nssa_fwd_addr> ] [ <nssa_tag> ] [ TABLE_nssa [ <nssa_tos_metric_type2> ] [ <nssa_tos_id> ] [
<nssa_tos_metric> ] [ <nssa_tos_fwd_addr> ] [ <nssa_tos_tag> ] ] [ <asext_mask> ] [ <asext_metric_type2>
] [ <asext_metric> ] [ <asext_fwd_addr> ] [ <asext_tag> ] [ TABLE_asext [ <asext_tos_metric_type2> ] [
<asext_tos_id> <asext_tos_metric> ] [ <asext_tos_fwd_addr> ] [ <asext_tos_tag> ] ] [ <opaque_link_intf>
] [ <opaque_unknown> ] [ <opaque_data_len> ] [ <opaque_data> ] [ <opaque_corrupt> ] [ <tlv_type> ] [
<tlv_len> ] [ <tlv_data> ] [ <tlv_unknown> ] [ <gr_interval> ] [ <gr_reason> ] [ <gr_addr> ] [ <te_frag_id>
] [ <te_rtr_id> ] [ <te_link_type> ] [ <te_link_id> ] [ <te_link_metric> ] [ <te_link_max_bw> ] [
<te_link_rsv_bw> ] [ <te_link_unrsv_bw> ] [ <te_link_admin> ] [ <te_num_links> ] ] ] ] ] ]
```

### Syntax Description

|                |  |
|----------------|--|
| show           | Show running system information                |
| ip             | Display IP information                         |
| ospf           | Display OSPF status and configuration          |
| tag            | (Optional) Process tag                         |
| vrf            | (Optional) Display per-VRF information         |
| vrf-name       | (Optional) VRF name                            |
| vrf-known-name | (Optional) Known VRF name                      |
| all            | (Optional) Display information for all VRFs    |
| database       | Link-state Database Summary                    |
| network        | (Optional) Display network LSAs                |
| asbr-summary   | (Optional) Display type 4 (asbr-summary) LSAs  |
| external       | (Optional) Display type 5 (external) LSAs      |
| router         | (Optional) Display router LSAs                 |
| nssa-external  | (Optional) Display type 7 (NSSA external) LSAs |
| opaque-link    | (Optional) Display Opaque Link-Local LSAs      |



|                       |  |
|-----------------------|--|
| opaque-area           | (Optional) Display Opaque Area LSAs                    |
| opaque-as             | (Optional) Display Opaque AS LSAs                      |
| summary               | (Optional) Display type 3 (network-summary) LSAs       |
| self-originated       | (Optional) Display only self-originated LSAs           |
| <i>lsid</i>           | (Optional) Restrict display by link state ID           |
| adv-router            | (Optional) Restrict display by Advertising router      |
| <i>adv-id</i>         | (Optional) Advertising router ID                       |
| adv-router-name       | (Optional) Restrict display by Advertising router name |
| <i>adv-name</i>       | (Optional) DNS Name of the Advertising router          |
| area                  | (Optional) Display only LSA's in this area             |
| <i>area-id-ip</i>     | (Optional) Area Id as an integer or ip address         |
| ext_tag               | (Optional) Restrict display by tag                     |
| <i>tag_val</i>        | (Optional) 32-bit tag value                            |
| detail                | Display LSA in detail                                  |
| <u>__readonly__</u>   | (Optional)   |
| TABLE_ctx             | (Optional)   |
| <i>rid</i>            | (Optional)   |
| <i>ptag</i>           | (Optional)   |
| <i>cname</i>          | (Optional)   |
| TABLE_db2_lsa         | (Optional)   |
| <i>name</i>           | (Optional)   |
| <i>area</i>           | (Optional)   |
| <i>rtr_max_metric</i> | (Optional)   |
| TABLE_lsdb            | (Optional)   |
| <i>age</i>            | (Optional)   |
| <i>maxage</i>         | (Optional)   |
| <i>options</i>        | (Optional)   |
| <i>options_str</i>    | (Optional)   |
| <i>wrapping</i>       | (Optional)   |

|                            |            |
|----------------------------|------------|
| <i>dummy</i>               | (Optional) |
| <i>flush_pending</i>       | (Optional) |
| <i>type</i>                | (Optional) |
| <i>id</i>                  | (Optional) |
| <i>id_str</i>              | (Optional) |
| <i>opaque_type</i>         | (Optional) |
| <i>opaque_id</i>           | (Optional) |
| <i>advrtr</i>              | (Optional) |
| <i>seqno</i>               | (Optional) |
| <i>cksum</i>               | (Optional) |
| <i>len</i>                 | (Optional) |
| <i>corrupt</i>             | (Optional) |
| <i>rtr_abr</i>             | (Optional) |
| <i>rtr_asbr</i>            | (Optional) |
| <i>rtr_translate</i>       | (Optional) |
| <i>rtr_vlink_end</i>       | (Optional) |
| <i>rtr_num_links</i>       | (Optional) |
| <i>rtr_links_mismatch</i>  | (Optional) |
| TABLE_rlsa                 | (Optional) |
| <i>rtr_link_type</i>       | (Optional) |
| <i>rtr_link_id_str</i>     | (Optional) |
| <i>rtr_link_id</i>         | (Optional) |
| <i>rtr_link_data_str</i>   | (Optional) |
| <i>rtr_link_data</i>       | (Optional) |
| <i>rtr_link_num_tos</i>    | (Optional) |
| <i>rtr_link_metric</i>     | (Optional) |
| TABLE_rlinktos             | (Optional) |
| <i>rtr_link_tos_id</i>     | (Optional) |
| <i>rtr_link_tos_metric</i> | (Optional) |

|                               |            |
|-------------------------------|------------|
| <i>net_mask</i>               | (Optional) |
| TABLE_netlsa                  | (Optional) |
| <i>net_rtr</i>                | (Optional) |
| <i>sum_mask</i>               | (Optional) |
| <i>sum_metric</i>             | (Optional) |
| TABLE_sumlsa                  | (Optional) |
| <i>sum_tos_id</i>             | (Optional) |
| <i>sum_tos_metric</i>         | (Optional) |
| <i>nssa_mask</i>              | (Optional) |
| <i>nssa_metric_type2</i>      | (Optional) |
| <i>nssa_metric</i>            | (Optional) |
| <i>nssa_fwd_addr</i>          | (Optional) |
| <i>nssa_tag</i>               | (Optional) |
| TABLE_nssa                    | (Optional) |
| <i>nssa_tos_metric_type2</i>  | (Optional) |
| <i>nssa_tos_id</i>            | (Optional) |
| <i>nssa_tos_metric</i>        | (Optional) |
| <i>nssa_tos_fwd_addr</i>      | (Optional) |
| <i>nssa_tos_tag</i>           | (Optional) |
| <i>asext_mask</i>             | (Optional) |
| <i>asext_metric_type2</i>     | (Optional) |
| <i>asext_metric</i>           | (Optional) |
| <i>asext_fwd_addr</i>         | (Optional) |
| <i>asext_tag</i>              | (Optional) |
| TABLE_asext                   | (Optional) |
| <i>asext_tos_metric_type2</i> | (Optional) |
| <i>asext_tos_id</i>           | (Optional) |
| <i>asext_tos_metric</i>       | (Optional) |
| <i>asext_tos_fwd_addr</i>     | (Optional) |

|                         |            |
|-------------------------|------------|
| <i>asext_tos_tag</i>    | (Optional) |
| <i>opaque_link_intf</i> | (Optional) |
| <i>opaque_unknown</i>   | (Optional) |
| <i>opaque_data_len</i>  | (Optional) |
| <i>opaque_data</i>      | (Optional) |
| <i>opaque_corrupt</i>   | (Optional) |
| <i>tlv_type</i>         | (Optional) |
| <i>tlv_len</i>          | (Optional) |
| <i>tlv_data</i>         | (Optional) |
| <i>tlv_unknown</i>      | (Optional) |
| <i>gr_interval</i>      | (Optional) |
| <i>gr_reason</i>        | (Optional) |
| <i>gr_addr</i>          | (Optional) |
| <i>te_frag_id</i>       | (Optional) |
| <i>te_rtr_id</i>        | (Optional) |
| <i>te_link_type</i>     | (Optional) |
| <i>te_link_id</i>       | (Optional) |
| <i>te_link_metric</i>   | (Optional) |
| <i>te_link_max_bw</i>   | (Optional) |
| <i>te_link_rsv_bw</i>   | (Optional) |
| <i>te_link_unrsv_bw</i> | (Optional) |
| <i>te_link_admin</i>    | (Optional) |
| <i>te_num_links</i>     | (Optional) |

**Command Mode**

- /exec

# show ip ospf event-history

```
show ip ospf [ <tag> ] [ internal ] event-history { errors | msgs | statistics | adjacency | event | ha | flooding |
lsa | spf | redistribution | ldp | te | rib | hello | spf-trigger | cli | objstore }
```

## Syntax Description

|                |  |
|----------------|--|
| show           | Show running system information        |
| ip             | Display IP information                 |
| ospf           | Display OSPF status and configuration  |
| <i>tag</i>     | (Optional) Process tag                 |
| internal       | (Optional) Commands for internal use   |
| event-history  | Show various event logs of OSPF        |
| errors         | Error logs                             |
| msgs           | IPC logs                               |
| statistics     | Show the state and size of the buffers |
| adjacency      | Adjacency formation logs               |
| event          | Internal event logs                    |
| ha             | HA and GR logs                         |
| flooding       | LSA flooding logs                      |
| lsa            | LSA generation and database logs       |
| spf            | SPF calculation logs                   |
| redistribution | Redistribution logs                    |
| ldp            | LDP related logs                       |
| te             | MPLS TE related logs                   |
| rib            | RIB related logs                       |
| hello          | Hello related logs                     |
| cli            | Cli logs                               |
| spf-trigger    | SPF TRIGGER related logs               |
| objstore       | DME OBJSTORE related logs              |

## Command Mode

- /exec

# show ip ospf event-history detail

```
show ip ospf [ <tag> ] [ internal ] event-history detail [ statistics ]
```

## Syntax Description

|               |  |
|---------------|--|
| show          | Show running system information                                  |
| ip            | Display IP information   |
| ospf          | Display OSPF status and configuration                            |
| <i>tag</i>    | (Optional) Process tag   |
| internal      | (Optional) Commands for internal use                             |
| event-history | Show event history of OSPF                                       |
| detail        | Show detailed event history information                          |
| statistics    | (Optional) Show the state and size of the verbose history buffer |

## Command Mode

- /exec

# show ip ospf ha

```
show ip ospf [ <tag> ] ha [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ TABLE_ctx <ptag>
<cname> <stateful> <pss_restored> <pss_state> <gr_enabled> <gr_grace_period> <gr_state> <gr_last_status>
<gr_helper_mode> ]
```

## Syntax Description

|                        |   |
|------------------------|---|
| show                   | Show running system information             |
| ip                     | Display IP information                      |
| ospf                   | Display OSPF status and configuration       |
| <i>tag</i>             | (Optional) Process tag                      |
| vrf                    | (Optional) Display per-VRF information      |
| <i>vrf-name</i>        | (Optional) VRF name                         |
| <i>vrf-known-name</i>  | (Optional) Known VRF name                   |
| all                    | (Optional) Display information for all VRFs |
| ha                     | High Availability status                    |
| <i>__readonly__</i>    | (Optional)                                  |
| TABLE_ctx              | (Optional)                                  |
| <i>ptag</i>            | (Optional)                                  |
| <i>cname</i>           | (Optional)                                  |
| <i>stateful</i>        | (Optional)                                  |
| <i>pss_restored</i>    | (Optional)                                  |
| <i>pss_state</i>       | (Optional)                                  |
| <i>gr_enabled</i>      | (Optional)                                  |
| <i>gr_grace_period</i> | (Optional)                                  |
| <i>gr_state</i>        | (Optional)                                  |
| <i>gr_last_status</i>  | (Optional)                                  |
| <i>gr_helper_mode</i>  | (Optional)                                  |

## Command Mode

- /exec



# show ip ospf interface

```
show ip ospf [ <tag> ] interface [ <interface> | vrf { <vrf-name> | <vrf-known-name> | all } ] [ private ] [
__readonly__ TABLE_ctx <ptag> <cname> [ TABLE_intf <ifname> <admin_status> <proto_status> [
<unnumbered> ] <addr> [ <masklen> ] [ <parent_intf> ] <area> [ <if_cfg> ] <state_str> <type_str> <cost>
[ <bfd_enabled> ] [ <ldp_sync> ] <index> [ <passive> ] [ <mpls> ] [ <transmit_delay> ] [ <if_priority> ] [
<dr_rid> ] [ <dr_addr> ] [ <bdr_rid> ] [ <bdr_addr> ] [ <nbr_total> ] [ <nbr_flood> ] [ <nbr_adj> ] [ <gr_nbr>
] [ <hello_interval> ] [ <dead_interval> ] [ <wait_interval> ] [ <rxmt_interval> ] [ <hello_timer> ] [
<wait_timer> ] [ <pacing_timer> ] [ <lsu_timer> ] [ <lsack_timer> ] [ <netlsa_throt_timer> ] [ <auth_type>
] [ <keychain_name> ] [ <keychain_ready> ] [ <auth_md5_keyid> ] [ <auth_keyid> ] [ <auth_algo> ] [
<link_lsa_cnt> ] [ <link_lsa_crc> ] ] ]
```

## Syntax Description

|                |   |
|----------------|---|
| show           | Show running system information             |
| ip             | Display IP information                      |
| ospf           | Display OSPF status and configuration       |
| tag            | (Optional) Process tag                      |
| vrf            | (Optional) Display per-VRF information      |
| vrf-name       | (Optional) VRF name                         |
| vrf-known-name | (Optional) Known VRF name                   |
| all            | (Optional) Display information for all VRFs |
| interface      | OSPF enabled interface                      |
| interface      | (Optional) OSPF enabled interface           |
| private        | (Optional) Developer-only statistics        |
| __readonly__   | (Optional)                                  |
| TABLE_ctx      | (Optional)                                  |
| ptag           | (Optional)                                  |
| cname          | (Optional)                                  |
| TABLE_intf     | (Optional)                                  |
| ifname         | (Optional)                                  |
| admin_status   | (Optional)                                  |
| proto_status   | (Optional)                                  |
| unnumbered     | (Optional)                                  |
| addr           | (Optional)                                  |

|                       |            |
|-----------------------|------------|
| <i>masklen</i>        | (Optional) |
| <i>parent_intf</i>    | (Optional) |
| <i>area</i>           | (Optional) |
| <i>if_cfg</i>         | (Optional) |
| <i>state_str</i>      | (Optional) |
| <i>type_str</i>       | (Optional) |
| <i>cost</i>           | (Optional) |
| <i>bfd_enabled</i>    | (Optional) |
| <i>ldp_sync</i>       | (Optional) |
| <i>index</i>          | (Optional) |
| <i>passive</i>        | (Optional) |
| <i>mpls</i>           | (Optional) |
| <i>transmit_delay</i> | (Optional) |
| <i>if_priority</i>    | (Optional) |
| <i>dr_rid</i>         | (Optional) |
| <i>dr_addr</i>        | (Optional) |
| <i>bdr_rid</i>        | (Optional) |
| <i>bdr_addr</i>       | (Optional) |
| <i>nbr_total</i>      | (Optional) |
| <i>nbr_flood</i>      | (Optional) |
| <i>nbr_adj</i>        | (Optional) |
| <i>gr_nbr</i>         | (Optional) |
| <i>hello_interval</i> | (Optional) |
| <i>dead_interval</i>  | (Optional) |
| <i>wait_interval</i>  | (Optional) |
| <i>rxmt_interval</i>  | (Optional) |
| <i>hello_timer</i>    | (Optional) |
| <i>wait_timer</i>     | (Optional) |
| <i>pacing_timer</i>   | (Optional) |

|                           |            |
|---------------------------|------------|
| <i>lsu_timer</i>          | (Optional) |
| <i>lsack_timer</i>        | (Optional) |
| <i>netlsa_throt_timer</i> | (Optional) |
| <i>auth_type</i>          | (Optional) |
| <i>keychain_name</i>      | (Optional) |
| <i>keychain_ready</i>     | (Optional) |
| <i>auth_md5_keyid</i>     | (Optional) |
| <i>auth_keyid</i>         | (Optional) |
| <i>auth_algo</i>          | (Optional) |
| <i>link_lsa_cnt</i>       | (Optional) |
| <i>link_lsa_crc</i>       | (Optional) |

**Command Mode**

- /exec

## show ip ospf interface brief

```
show ip ospf [ <tag> ] interface brief [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__
TABLE_ctx <ptag> <cname> <intf_count> TABLE_intf <ifname> <index> <area> <cost> <state_str>
<nbr_total> <admin_status> ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ip                    | Display IP information                      |
| ospf                  | Display OSPF status and configuration       |
| <i>tag</i>            | (Optional) Process tag                      |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| interface             | OSPF enabled interface                      |
| brief                 | Display summary of OSPF interfaces          |
| <i>__readonly__</i>   | (Optional)                                  |
| TABLE_ctx             | (Optional)                                  |
| <i>ptag</i>           | (Optional)                                  |
| <i>cname</i>          | (Optional)                                  |
| <i>intf_count</i>     | (Optional)                                  |
| TABLE_intf            | (Optional)                                  |
| <i>ifname</i>         | (Optional)                                  |
| <i>index</i>          | (Optional)                                  |
| <i>area</i>           | (Optional)                                  |
| <i>cost</i>           | (Optional)                                  |
| <i>state_str</i>      | (Optional)                                  |
| <i>nbr_total</i>      | (Optional)                                  |
| <i>admin_status</i>   | (Optional)                                  |

### Command Mode

- /exec

## show ip ospf lsa-content-changed-list

```
show ip ospf [ <tag> ] lsa-content-changed-list { <ip-addr> | <neighbor-name> } <interface> [ __readonly__
[ TABLE_ctx <ptag> <cname> [ TABLE_lschg <nbr_rid> <intf> <nbr_addr> [ TABLE_lsa [ <type> ] [
<lsid> ] [ <advrtr> ] [ <seqno> ] [ <cksum> ] [ <age> ] ] ] ] ] ]
```

### Syntax Description

|                          |                                       |
|--------------------------|---------------------------------------|
| show                     | Show running system information       |
| ip                       | Display IP information                |
| ospf                     | Display OSPF status and configuration |
| <i>tag</i>               | (Optional) Process tag                |
| lsa-content-changed-list | LSAs that changed contents            |
| <i>interface</i>         | OSPF enabled interface                |
| <i>ip-addr</i>           | Neighbor router ID                    |
| <i>neighbor-name</i>     | DNS Name of the neighbor              |
| <i>__readonly__</i>      | (Optional)                            |
| TABLE_ctx                | (Optional)                            |
| <i>ptag</i>              | (Optional)                            |
| <i>cname</i>             | (Optional)                            |
| TABLE_lschg              | (Optional)                            |
| <i>nbr_rid</i>           | (Optional)                            |
| <i>intf</i>              | (Optional)                            |
| <i>nbr_addr</i>          | (Optional)                            |
| TABLE_lsa                | (Optional)                            |
| <i>type</i>              | (Optional)                            |
| <i>lsid</i>              | (Optional)                            |
| <i>advrtr</i>            | (Optional)                            |
| <i>seqno</i>             | (Optional)                            |
| <i>cksum</i>             | (Optional)                            |
| <i>age</i>               | (Optional)                            |

### Command Mode

- /exec

# show ip ospf memory

```
show ip ospf [ <tag> ] memory [ __readonly__ TABLE_mem <ptag> <byte_total> <byte_consumed>
<byte_overhead> <byte_allocated> <alloc_current> <alloc_created> <alloc_failed> <alloc_free> <bf_current>
<bf_created> <bf_failed> <bf_free> <bf_byte_consumed> <bf_32_current> <bf_32_created> <bf_32_failed>
<bf_32_free> <bf_32_byte_consumed> <slab_current> <slab_created> <slab_failed> <slab_free>
<slab_byte_consumed> <if_index_alloc_failed> <nbr_index_alloc_failed> ]
```

## Syntax Description

|                         |                                       |
|-------------------------|---------------------------------------|
| show                    | Show running system information       |
| ip                      | Display IP information                |
| ospf                    | Display OSPF status and configuration |
| <i>tag</i>              | (Optional) Process tag                |
| memory                  | Memory usage statistics               |
| <i>__readonly__</i>     | (Optional)                            |
| <i>TABLE_mem</i>        | (Optional)                            |
| <i>ptag</i>             | (Optional)                            |
| <i>byte_total</i>       | (Optional)                            |
| <i>byte_consumed</i>    | (Optional)                            |
| <i>byte_overhead</i>    | (Optional)                            |
| <i>byte_allocated</i>   | (Optional)                            |
| <i>alloc_current</i>    | (Optional)                            |
| <i>alloc_created</i>    | (Optional)                            |
| <i>alloc_failed</i>     | (Optional)                            |
| <i>alloc_free</i>       | (Optional)                            |
| <i>bf_current</i>       | (Optional)                            |
| <i>bf_created</i>       | (Optional)                            |
| <i>bf_failed</i>        | (Optional)                            |
| <i>bf_free</i>          | (Optional)                            |
| <i>bf_byte_consumed</i> | (Optional)                            |
| <i>bf_32_current</i>    | (Optional)                            |
| <i>bf_32_created</i>    | (Optional)                            |



|                               |            |
|-------------------------------|------------|
| <i>bf_32_failed</i>           | (Optional) |
| <i>bf_32_free</i>             | (Optional) |
| <i>bf_32_byte_consumed</i>    | (Optional) |
| <i>slab_current</i>           | (Optional) |
| <i>slab_created</i>           | (Optional) |
| <i>slab_failed</i>            | (Optional) |
| <i>slab_free</i>              | (Optional) |
| <i>slab_byte_consumed</i>     | (Optional) |
| <i>if_index_alloc_failed</i>  | (Optional) |
| <i>nbr_index_alloc_failed</i> | (Optional) |

**Command Mode**

- /exec

# show ip ospf neighbors

```
show ip ospf [ <tag> ] neighbors [ { { <interface> [ <neighbor> | <neighbor-name> ] } | { [ <neighbor> |
<neighbor-name> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] } } ] [ __readonly__ TABLE_ctx <ptag>
<cname> <nbrcount> [ TABLE_nbr <rid> <priority> <state> <drstate> <uptime> <addr> <intf> [ <multiarea>
] ] ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ip                    | Display IP information                      |
| ospf                  | Display OSPF status and configuration       |
| <i>tag</i>            | (Optional) Process tag                      |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| neighbors             | Neighbor list                               |
| <i>interface</i>      | (Optional) OSPF enabled interface           |
| <i>neighbor</i>       | (Optional) Router ID of neighbor            |
| <i>neighbor-name</i>  | (Optional) DNS Name of the neighbor         |
| <i>__readonly__</i>   | (Optional)                                  |
| TABLE_ctx             | (Optional)                                  |
| <i>ptag</i>           | (Optional)                                  |
| <i>cname</i>          | (Optional)                                  |
| <i>nbrcount</i>       | (Optional)                                  |
| TABLE_nbr             | (Optional)                                  |
| <i>rid</i>            | (Optional)                                  |
| <i>priority</i>       | (Optional)                                  |
| <i>state</i>          | (Optional)                                  |
| <i>drstate</i>        | (Optional)                                  |
| <i>uptime</i>         | (Optional)                                  |

|                  |            |
|------------------|------------|
| <i>addr</i>      | (Optional) |
| <i>intf</i>      | (Optional) |
| <i>multiarea</i> | (Optional) |

**Command Mode**

- /exec

## show ip ospf neighbors detail

```
show ip ospf [ <tag> ] neighbors [ <interface> ] [ <neighbor> | <neighbor-name> ] detail [ vrf { <vrf-name>
| <vrf-known-name> | all } ] [ private ] [ __readonly__ TABLE_ctx <ptag> <cname> [ TABLE_nbr <rid>
<addr> <area> <intf> <state> <transition> <lastchange> [ <bfd_state> ] [ <priority> ] [ <ifid> ] [ <dr> ] [
<dc> ] [ <bdr> ] [ <master> ] [ <seqno> ] [ <dbdallsentacked> ] [ <dbdallsent> ] [ <dbdallacked> ] [
<lsaonreqlist> ] [ <lsafromlastreq> ] [ <lsreqrxmts> ] <hellooptions> <dbdoptions> <lastnonhello> [ <deadtimer>
] [ <pacingtimer> ] [ <dbdrxmtimer> ] [ <reqrxmtimer> ] [ <lsutimer> ] [ <rerxmtimer> ] [ <fastrerxmtimer>
] [ <lsacktimer> ] [ <grtimer> ] [ <helpermode> ] [ <helpercand> ] [ <helperterm> ] [ <senddbd> ] [ <sendlsreq>
] [ <sendlsu> ] [ <sendlsurxmt> ] [ <sendlsack> ] [ <sendlsreqreply> ] ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ip                    | Display IP information                      |
| ospf                  | Display OSPF status and configuration       |
| <i>tag</i>            | (Optional) Process tag                      |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| neighbors             | Neighbor list                               |
| <i>interface</i>      | (Optional) OSPF enabled interface           |
| <i>neighbor</i>       | (Optional) Router ID of neighbor            |
| <i>neighbor-name</i>  | (Optional) DNS Name of the neighbor         |
| detail                | Show detailed neighbor display              |
| private               | (Optional) Developer-only statistics        |
| __readonly__          | (Optional)                                  |
| TABLE_ctx             | (Optional)                                  |
| <i>ptag</i>           | (Optional)                                  |
| <i>cname</i>          | (Optional)                                  |
| TABLE_nbr             | (Optional)                                  |
| <i>rid</i>            | (Optional)                                  |
| <i>addr</i>           | (Optional)                                  |

|                        |            |
|------------------------|------------|
| <i>area</i>            | (Optional) |
| <i>intf</i>            | (Optional) |
| <i>state</i>           | (Optional) |
| <i>transition</i>      | (Optional) |
| <i>lastchange</i>      | (Optional) |
| <i>bfd_state</i>       | (Optional) |
| <i>priority</i>        | (Optional) |
| <i>ifid</i>            | (Optional) |
| <i>dr</i>              | (Optional) |
| <i>bdr</i>             | (Optional) |
| <i>master</i>          | (Optional) |
| <i>seqno</i>           | (Optional) |
| <i>dbdallsentacked</i> | (Optional) |
| <i>dbdallsent</i>      | (Optional) |
| <i>dbdallacked</i>     | (Optional) |
| <i>lsaonreqlist</i>    | (Optional) |
| <i>lsafromlastreq</i>  | (Optional) |
| <i>lsregrxmts</i>      | (Optional) |
| <i>helloptions</i>     | (Optional) |
| <i>dbdoptions</i>      | (Optional) |
| <i>lastmonhello</i>    | (Optional) |
| <i>deadtimer</i>       | (Optional) |
| <i>paddingtimer</i>    | (Optional) |
| <i>dbdrxmtimer</i>     | (Optional) |
| <i>regrxmtimer</i>     | (Optional) |
| <i>lsutimer</i>        | (Optional) |
| <i>rerxmtimer</i>      | (Optional) |
| <i>fastrerxmtimer</i>  | (Optional) |
| <i>lsacktimer</i>      | (Optional) |

|                       |            |
|-----------------------|------------|
| <i>grtimer</i>        | (Optional) |
| <i>helpermode</i>     | (Optional) |
| <i>helpercand</i>     | (Optional) |
| <i>helperterm</i>     | (Optional) |
| <i>senddbd</i>        | (Optional) |
| <i>sendlsreq</i>      | (Optional) |
| <i>sendlsu</i>        | (Optional) |
| <i>sendlsurxmt</i>    | (Optional) |
| <i>sendlsack</i>      | (Optional) |
| <i>sendlsreqreply</i> | (Optional) |
| <i>dc</i>             | (Optional) |

**Command Mode**

- /exec

## show ip ospf neighbors summary

```
show ip ospf [ <tag> ] neighbors [ <interface> ] summary [ vrf { <vrf-name> | <vrf-known-name> | all } ] [
__readonly__ TABLE_ctx <ptag> <cname> TABLE_intf { <ifname> | <total> } <down> <attempt> <init>
<twoway> <exstart> <exchange> <loading> <full> <if_total> ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ip                    | Display IP information                      |
| ospf                  | Display OSPF status and configuration       |
| <i>tag</i>            | (Optional) Process tag                      |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| neighbors             | Neighbor list                               |
| <i>interface</i>      | (Optional) OSPF enabled interface           |
| summary               | Summary of neighbors                        |
| <i>__readonly__</i>   | (Optional)                                  |
| TABLE_ctx             | (Optional)                                  |
| <i>ptag</i>           | (Optional)                                  |
| <i>cname</i>          | (Optional)                                  |
| TABLE_intf            | (Optional)                                  |
| <i>ifname</i>         | (Optional)                                  |
| <i>total</i>          | (Optional)                                  |
| <i>down</i>           | (Optional)                                  |
| <i>attempt</i>        | (Optional)                                  |
| <i>init</i>           | (Optional)                                  |
| <i>twoway</i>         | (Optional)                                  |
| <i>exstart</i>        | (Optional)                                  |
| <i>exchange</i>       | (Optional)                                  |

|                 |            |
|-----------------|------------|
| <i>loading</i>  | (Optional) |
| <i>full</i>     | (Optional) |
| <i>if_total</i> | (Optional) |

**Command Mode**

- /exec



## show ip ospf policy statistics

```
show ip ospf [ <inst> ] policy statistics { { redistribute { { bgp | eigrp } <as> | { isis | ospf | rip } <tag> | static
| direct | amt } } | { area <area-id-ip> filter-list { in | out } } } [ vrf { <vrf-name> | <vrf-known-name> | all }
] [ __readonly__ <ptag> TABLE_ctx <cname> ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ip                    | Display IP information                      |
| ospf                  | Display OSPF status and configuration       |
| <i>inst</i>           | (Optional) Process tag                      |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| policy                | Display Policy related information          |
| statistics            | Display Route Filter statistics             |
| redistribute          | Statistics for redistribution               |
| isis                  | ISO Intermediate-to-Intermediate (IS-IS)    |
| bgp                   | Border Gateway Protocol (BGP)               |
| <i>as</i>             | Autonomous system number                    |
| ospf                  | Open Shortest Path First (OSPFv2)           |
| eigrp                 | Enhanced Interior Gateway Protocol (EIGRP)  |
| rip                   | Routing Information Protocol (RIP)          |
| static                | Static                                      |
| direct                | Directly connected                          |
| amt                   | AMT anycast prefix                          |
| <i>tag</i>            | Source protocol tag                         |
| area                  | Configure area properties                   |
| <i>area-id-ip</i>     | Area Id as an integer or ip address         |
| filter-list           | Filter prefixes between OSPF areas          |

|                           |                                     |
|---------------------------|-------------------------------------|
| <code>in</code>           | Filter networks sent to this area   |
| <code>out</code>          | Filter networks sent from this area |
| <code>__readonly__</code> | (Optional)                          |
| <code>ptag</code>         | (Optional)                          |
| <code>TABLE_ctx</code>    | (Optional)                          |
| <code>cname</code>        | (Optional)                          |

**Command Mode**

- /exec



**Command Mode**

- /exec



|            |            |
|------------|------------|
| <i>age</i> | (Optional) |
|------------|------------|

**Command Mode**

- /exec

## show ip ospf route

```
show ip ospf [ <tag> ] route [ <ip-addr> | <ip-prefix> [ longer-prefixes ] ] [ all_routes ] [ vrf { <vrf-name> |
<vrf-known-name> | all } ] [ __readonly__ TABLE_ctx <ptag> <cname> [ <hdr_addr> ] [ <hdr_masklen> ]
[ TABLE_route <addr> <masklen> <type> <in_rib> <direct> [ <area> ] [ <tag> ] [ <vlink_unresolved> ] [
TABLE_route_ubest_nh [ <ubest_nh_addr> ] [ <ubest_nh_intf> ] [ <ubest_cost> ] [ <distance> ] [
<ubest_nh_direct> ] [ <ubest_nh_in_rib> ] ] [ TABLE_route_mbest_nh [ <mbest_nh_addr> ] [ <mbest_nh_intf>
] [ <mbest_cost> ] [ <mbest_nh_direct> ] [ <mbest_nh_in_rib> ] ] ] ] ]
```

### Syntax Description

|                 |  |
|-----------------|--|
| show            | Show running system information                      |
| ip              | Display IP information                               |
| ospf            | Display OSPF status and configuration                |
| tag             | (Optional) Process tag                               |
| vrf             | (Optional) Display per-VRF information               |
| vrf-name        | (Optional) VRF name                                  |
| vrf-known-name  | (Optional) Known VRF name                            |
| all             | (Optional) Display information for all VRFs          |
| route           | Internal OSPF routes                                 |
| ip-addr         | (Optional) Show single OSPF route                    |
| ip-prefix       | (Optional) Show single exact match OSPF route        |
| longer-prefixes | (Optional) Show exact match and more specific routes |
| all_routes      | (Optional) Display all OSPF routes                   |
| tag             | (Optional)   |
| __readonly__    | (Optional)   |
| TABLE_ctx       | (Optional)   |
| ptag            | (Optional)   |
| cname           | (Optional)   |
| hdr_addr        | (Optional)   |
| hdr_masklen     | (Optional)   |
| TABLE_route     | (Optional)   |
| addr            | (Optional)   |

|                         |            |
|-------------------------|------------|
| <i>masklen</i>          | (Optional) |
| <i>type</i>             | (Optional) |
| <i>in_rib</i>           | (Optional) |
| <i>direct</i>           | (Optional) |
| <i>area</i>             | (Optional) |
| <i>vlink_unresolved</i> | (Optional) |
| TABLE_route_ubest_nh    | (Optional) |
| <i>ubest_nh_addr</i>    | (Optional) |
| <i>ubest_nh_intf</i>    | (Optional) |
| <i>ubest_cost</i>       | (Optional) |
| <i>distance</i>         | (Optional) |
| <i>ubest_nh_direct</i>  | (Optional) |
| <i>ubest_nh_in_rib</i>  | (Optional) |
| TABLE_route_mbest_nh    | (Optional) |
| <i>mbest_nh_addr</i>    | (Optional) |
| <i>mbest_nh_intf</i>    | (Optional) |
| <i>mbest_cost</i>       | (Optional) |
| <i>mbest_nh_direct</i>  | (Optional) |
| <i>mbest_nh_in_rib</i>  | (Optional) |

**Command Mode**

- /exec



## show ip ospf route summary

```
show ip ospf [ <tag> ] route [ <ip-prefix> [ longer-prefixes ] ] summary [ vrf { <vrf-name> | <vrf-known-name>
| all } ] [ __readonly__ TABLE_ctx <ptag> <cname> [ TABLE_route <total_routes> <total_paths> [
TABLE_route_type <path_type> <path_routes> <path_paths> ] [ TABLE_route_masklen <masklen>
<masklen_routes> <masklen_paths> ] ] ]
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                      |
| ip                    | Display IP information                               |
| ospf                  | Display OSPF status and configuration                |
| <i>tag</i>            | (Optional) Process tag                               |
| vrf                   | (Optional) Display per-VRF information               |
| <i>vrf-name</i>       | (Optional) VRF name                                  |
| <i>vrf-known-name</i> | (Optional) Known VRF name                            |
| all                   | (Optional) Display information for all VRFs          |
| route                 | Internal OSPF routes                                 |
| <i>ip-prefix</i>      | (Optional) Show single exact match OSPF route        |
| longer-prefixes       | (Optional) Show exact match and more specific routes |
| summary               | Show route counts                                    |
| <i>__readonly__</i>   | (Optional)   |
| TABLE_ctx             | (Optional)   |
| <i>ptag</i>           | (Optional)   |
| <i>cname</i>          | (Optional)   |
| TABLE_route           | (Optional)   |
| <i>total_routes</i>   | (Optional)   |
| <i>total_paths</i>    | (Optional)   |
| TABLE_route_type      | (Optional)   |
| <i>path_type</i>      | (Optional)   |
| <i>path_routes</i>    | (Optional)   |
| <i>path_paths</i>     | (Optional)   |

|                       |            |
|-----------------------|------------|
| TABLE_route_masklen   | (Optional) |
| <i>masklen</i>        | (Optional) |
| <i>masklen_routes</i> | (Optional) |
| <i>masklen_paths</i>  | (Optional) |

**Command Mode**

- /exec

## show ip ospf sham-links

```
show ip ospf [ <tag> ] sham-links [ brief ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__
TABLE_ctx <ptag> <cname> [ TABLE_slink <name> [ <nbr_rid> ] <if_state> <transit_area> <nh_intf>
<nbr_addr> [ <transit_area_stub> ] [ <transit_area_nssa> ] <addr> [ <masklen> ] <area> [ <if_cfg> ] <state_str>
<type_str> <cost> [ <bfd_enabled> ] <index> [ <passive> ] [ <mpls> ] [ <transmit_delay> ] [ <if_priority>
] [ <dr_rid> ] [ <dr_addr> ] [ <bdr_rid> ] [ <bdr_addr> ] [ <nbr_total> ] [ <nbr_flood> ] [ <nbr_adj> ] [
<gr_nbr> ] [ <hello_interval> ] [ <dead_interval> ] [ <wait_interval> ] [ <rxmt_interval> ] [ <sum_total> ] [
<hello_timer> ] [ <wait_timer> ] [ <pacing_timer> ] [ <lsu_timer> ] [ <lsack_timer> ] [ <netlsa_throt_timer>
] [ <auth_type> ] [ <keychain_name> ] [ <keychain_ready> ] [ <auth_md5_keyid> ] [ <link_lsa_cnt> ] [
<link_lsa_crc> ] [ <dc_enabled> ] [ <dest_ip> ] [ <src_ip> ] [ <ifnum> ] [ <state> ] [ <transition> ] [
<lastchange> ] [ <priority> ] [ <ifid> ] [ <dr> ] [ <bdr> ] [ <master> ] [ <seqno> ] [ <dbdallsentacked> ] [
<dbdallsent> ] [ <dbdallacked> ] [ <lsaonreqlist> ] [ <lsafromlastreq> ] [ <lsreqrxmts> ] [ <hellooptions> ] [
<dbdoptions> ] [ <lastnonhello> ] [ <deadtimer> ] [ <pacingtimer> ] [ <dbdrxmtimer> ] [ <reqrxmtimer> ] [
<lsutimer> ] [ <rtrxmtimer> ] [ <fasttrxmtimer> ] [ <lsacktimer> ] [ <grtimer> ] [ <helpermode> ] [
<helpercand> ] [ <helperterm> ] [ <senddbd> ] [ <sendlsreq> ] [ <sendlsu> ] [ <sendlsurxmt> ] [ <sendlsack>
] [ <sendlsreqreply> ] ] ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information               |
| ip                    | Display IP information                        |
| ospf                  | Display OSPF status and configuration         |
| <i>tag</i>            | (Optional) Process tag                        |
| vrf                   | (Optional) Display per-VRF information        |
| <i>vrf-name</i>       | (Optional) VRF name                           |
| <i>vrf-known-name</i> | (Optional) Known VRF name                     |
| all                   | (Optional) Display information for all VRFs   |
| sham-links            | Sham link information                         |
| brief                 | (Optional) Display summary of OSPF sham links |
| __readonly__          | (Optional)                                    |
| <i>ptag</i>           | (Optional)                                    |
| TABLE_ctx             | (Optional)                                    |
| <i>cname</i>          | (Optional)                                    |
| TABLE_slink           | (Optional)                                    |
| <i>name</i>           | (Optional)                                    |
| <i>nbr_rid</i>        | (Optional)                                    |

|                          |            |
|--------------------------|------------|
| <i>if_state</i>          | (Optional) |
| <i>transit_area</i>      | (Optional) |
| <i>nh_intf</i>           | (Optional) |
| <i>dc_enabled</i>        | (Optional) |
| <i>nbr_addr</i>          | (Optional) |
| <i>sum_total</i>         | (Optional) |
| <i>transit_area_stub</i> | (Optional) |
| <i>transit_area_nssa</i> | (Optional) |
| <i>addr</i>              | (Optional) |
| <i>masklen</i>           | (Optional) |
| <i>area</i>              | (Optional) |
| <i>if_cfg</i>            | (Optional) |
| <i>state_str</i>         | (Optional) |
| <i>type_str</i>          | (Optional) |
| <i>cost</i>              | (Optional) |
| <i>bfd_enabled</i>       | (Optional) |
| <i>index</i>             | (Optional) |
| <i>passive</i>           | (Optional) |
| <i>mpls</i>              | (Optional) |
| <i>transmit_delay</i>    | (Optional) |
| <i>if_priority</i>       | (Optional) |
| <i>dr_rid</i>            | (Optional) |
| <i>dr_addr</i>           | (Optional) |
| <i>bdr_rid</i>           | (Optional) |
| <i>bdr_addr</i>          | (Optional) |
| <i>nbr_total</i>         | (Optional) |
| <i>nbr_flood</i>         | (Optional) |
| <i>nbr_adj</i>           | (Optional) |
| <i>gr_nbr</i>            | (Optional) |

|                           |            |
|---------------------------|------------|
| <i>hello_interval</i>     | (Optional) |
| <i>dead_interval</i>      | (Optional) |
| <i>wait_interval</i>      | (Optional) |
| <i>rxmt_interval</i>      | (Optional) |
| <i>hello_timer</i>        | (Optional) |
| <i>wait_timer</i>         | (Optional) |
| <i>pacing_timer</i>       | (Optional) |
| <i>lsu_timer</i>          | (Optional) |
| <i>lsack_timer</i>        | (Optional) |
| <i>netlsa_throt_timer</i> | (Optional) |
| <i>auth_type</i>          | (Optional) |
| <i>keychain_name</i>      | (Optional) |
| <i>keychain_ready</i>     | (Optional) |
| <i>auth_md5_keyid</i>     | (Optional) |
| <i>link_lsa_cnt</i>       | (Optional) |
| <i>link_lsa_crc</i>       | (Optional) |
| <i>state</i>              | (Optional) |
| <i>transition</i>         | (Optional) |
| <i>lastchange</i>         | (Optional) |
| <i>priority</i>           | (Optional) |
| <i>ifid</i>               | (Optional) |
| <i>dr</i>                 | (Optional) |
| <i>bdr</i>                | (Optional) |
| <i>master</i>             | (Optional) |
| <i>seqno</i>              | (Optional) |
| <i>dbdallsentacked</i>    | (Optional) |
| <i>dbdallsent</i>         | (Optional) |
| <i>dbdallacked</i>        | (Optional) |
| <i>lsaonreqlist</i>       | (Optional) |

|                       |            |
|-----------------------|------------|
| <i>lsafromlastreq</i> | (Optional) |
| <i>lsreqrxmts</i>     | (Optional) |
| <i>helloptions</i>    | (Optional) |
| <i>dbdoptions</i>     | (Optional) |
| <i>lastnonhello</i>   | (Optional) |
| <i>deadtimer</i>      | (Optional) |
| <i>pacingtimer</i>    | (Optional) |
| <i>dbdrxmtimer</i>    | (Optional) |
| <i>reqrxmtimer</i>    | (Optional) |
| <i>lsutimer</i>       | (Optional) |
| <i>rerxmtimer</i>     | (Optional) |
| <i>fastrerxmtimer</i> | (Optional) |
| <i>lsacktimer</i>     | (Optional) |
| <i>grtimer</i>        | (Optional) |
| <i>helpermode</i>     | (Optional) |
| <i>helpercand</i>     | (Optional) |
| <i>helperterm</i>     | (Optional) |
| <i>senddbd</i>        | (Optional) |
| <i>sendlsreq</i>      | (Optional) |
| <i>sendlsu</i>        | (Optional) |
| <i>sendlsurxmt</i>    | (Optional) |
| <i>sendlsack</i>      | (Optional) |
| <i>sendlsreqreply</i> | (Optional) |
| <i>dest_ip</i>        | (Optional) |
| <i>src_ip</i>         | (Optional) |
| <i>ifnum</i>          | (Optional) |

**Command Mode**

- /exec

# show ip ospf statistics

```
show ip ospf [ <tag> ] statistics [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ TABLE_stats
<ptag> <cname> <last_clear> <rid_change> <dr_elections> <older_lsa_recv> <nbr_state_change>
<nbr_dead_postpone> <nbr_dead_expire> <nbr_bad_lsreq> <nbr_seqno_mismatch> <spf_full>
<spf_summary> <spf_external> <spf_extsummary> <rtr_generate> <rtr_refresh> <rtr_flush> <rtr_other_flush>
<net_generate> <net_refresh> <net_flush> <net_other_flush> <sum_generate> <sum_refresh> <sum_flush>
<sum_other_flush> <asbr_generate> <asbr_refresh> <asbr_flush> <asbr_other_flush> <asext_generate>
<asext_refresh> <asext_flush> <asext_other_flush> <opaque_link_generate> <opaque_link_refresh>
<opaque_link_flush> <opaque_link_other_flush> <opaque_area_generate> <opaque_area_refresh>
<opaque_area_flush> <opaque_area_other_flush> <opaque_as_generate> <opaque_as_refresh>
<opaque_as_flush> <opaque_as_other_flush> <limbo_lsa_count> <limbo_lsa_hwm> <limbo_lsa_deleted>
<limbo_lsa_revived> <limbo_runs> <limbo_lsa_last_time_hwm> [ <limbo_timer> ] <helloq_size>
<helloq_max_size> <helloq_hwm> <helloq_drops> <helloq_last_hwm_time> <floodq_size>
<floodq_max_size> <floodq_hwm> <floodq_drops> <floodq_last_hwm_time> <lsdb_add_fail> [
TABLE_buffer_detail [ <buf_size> ] [ <buf_size_huge> ] <buf_in_use> <buf_hwm> <buf_perm> <buf_alloc>
<buf_free> ] ]
```

## Syntax Description

|                |   |
|----------------|---|
| show           | Show running system information             |
| ip             | Display IP information                      |
| ospf           | Display OSPF status and configuration       |
| tag            | (Optional) Process tag                      |
| vrf            | (Optional) Display per-VRF information      |
| vrf-name       | (Optional) VRF name                         |
| vrf-known-name | (Optional) Known VRF name                   |
| all            | (Optional) Display information for all VRFs |
| statistics     | Event counters                              |
| __readonly__   | (Optional)                                  |
| TABLE_stats    | (Optional)                                  |
| ptag           | (Optional)                                  |
| cname          | (Optional)                                  |
| last_clear     | (Optional)                                  |
| rid_change     | (Optional)                                  |
| dr_elections   | (Optional)                                  |
| older_lsa_recv | (Optional)                                  |

|                           |            |
|---------------------------|------------|
| <i>nbr_state_change</i>   | (Optional) |
| <i>nbr_dead_postpone</i>  | (Optional) |
| <i>nbr_dead_expire</i>    | (Optional) |
| <i>nbr_bad_lsreq</i>      | (Optional) |
| <i>nbr_seqno_mismatch</i> | (Optional) |
| <i>spf_full</i>           | (Optional) |
| <i>spf_summary</i>        | (Optional) |
| <i>spf_external</i>       | (Optional) |
| <i>spf_extsummary</i>     | (Optional) |
| <i>rtr_generate</i>       | (Optional) |
| <i>rtr_refresh</i>        | (Optional) |
| <i>rtr_flush</i>          | (Optional) |
| <i>rtr_other_flush</i>    | (Optional) |
| <i>net_generate</i>       | (Optional) |
| <i>net_refresh</i>        | (Optional) |
| <i>net_flush</i>          | (Optional) |
| <i>net_other_flush</i>    | (Optional) |
| <i>sum_generate</i>       | (Optional) |
| <i>sum_refresh</i>        | (Optional) |
| <i>sum_flush</i>          | (Optional) |
| <i>sum_other_flush</i>    | (Optional) |
| <i>asbr_generate</i>      | (Optional) |
| <i>asbr_refresh</i>       | (Optional) |
| <i>asbr_flush</i>         | (Optional) |
| <i>asbr_other_flush</i>   | (Optional) |
| <i>asext_generate</i>     | (Optional) |
| <i>asext_refresh</i>      | (Optional) |
| <i>asext_flush</i>        | (Optional) |
| <i>asext_other_flush</i>  | (Optional) |



|                                |            |
|--------------------------------|------------|
| <i>opaque_link_generate</i>    | (Optional) |
| <i>opaque_link_refresh</i>     | (Optional) |
| <i>opaque_link_flush</i>       | (Optional) |
| <i>opaque_link_other_flush</i> | (Optional) |
| <i>opaque_area_generate</i>    | (Optional) |
| <i>opaque_area_refresh</i>     | (Optional) |
| <i>opaque_area_flush</i>       | (Optional) |
| <i>opaque_area_other_flush</i> | (Optional) |
| <i>opaque_as_generate</i>      | (Optional) |
| <i>opaque_as_refresh</i>       | (Optional) |
| <i>opaque_as_flush</i>         | (Optional) |
| <i>opaque_as_other_flush</i>   | (Optional) |
| <i>limbo_lsa_count</i>         | (Optional) |
| <i>limbo_lsa_hwm</i>           | (Optional) |
| <i>limbo_lsa_deleted</i>       | (Optional) |
| <i>limbo_lsa_revived</i>       | (Optional) |
| <i>limbo_runs</i>              | (Optional) |
| <i>limbo_lsa_last_time_hwm</i> | (Optional) |
| <i>limbo_timer</i>             | (Optional) |
| <i>helloq_size</i>             | (Optional) |
| <i>helloq_max_size</i>         | (Optional) |
| <i>helloq_hwm</i>              | (Optional) |
| <i>helloq_drops</i>            | (Optional) |
| <i>helloq_last_hwm_time</i>    | (Optional) |
| <i>floodq_size</i>             | (Optional) |
| <i>floodq_max_size</i>         | (Optional) |
| <i>floodq_hwm</i>              | (Optional) |
| <i>floodq_drops</i>            | (Optional) |
| <i>floodq_last_hwm_time</i>    | (Optional) |

|                      |            |
|----------------------|------------|
| <i>lsdb_add_fail</i> | (Optional) |
| TABLE_buffer_detail  | (Optional) |
| <i>buf_size</i>      | (Optional) |
| <i>buf_size_huge</i> | (Optional) |
| <i>buf_in_use</i>    | (Optional) |
| <i>buf_hwm</i>       | (Optional) |
| <i>buf_perm</i>      | (Optional) |
| <i>buf_alloc</i>     | (Optional) |
| <i>buf_free</i>      | (Optional) |

**Command Mode**

- /exec

## show ip ospf summary-address

```
show ip ospf [ <tag> ] summary-address [ private ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [
__readonly__ [ TABLE_ctx <ptag> <cname> <rid> [ TABLE_sum <addr> <masklen> [ <metric> ] [ <tag>
] [ <pending> ] ] ] ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ip                    | Display IP information                      |
| ospf                  | Display OSPF status and configuration       |
| <i>tag</i>            | (Optional) Process tag                      |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| summary-address       | Summary-address redistribution information  |
| private               | (Optional) Developer-only statistics        |
| <i>tag</i>            | (Optional)                                  |
| <i>__readonly__</i>   | (Optional)                                  |
| TABLE_ctx             | (Optional)                                  |
| <i>ptag</i>           | (Optional)                                  |
| <i>cname</i>          | (Optional)                                  |
| <i>rid</i>            | (Optional)                                  |
| TABLE_sum             | (Optional)                                  |
| <i>addr</i>           | (Optional)                                  |
| <i>masklen</i>        | (Optional)                                  |
| <i>metric</i>         | (Optional)                                  |
| <i>pending</i>        | (Optional)                                  |

### Command Mode

- /exec

# show ip ospf traffic

```
show ip ospf [ <tag> ] traffic [ <interface> [ detail ] | [ detail ] | [ detail ] vrf { <vrf-name> | <vrf-known-name>
| all } ] [ __readonly__ TABLE_traf <ptag> <cname> <last_clear> [ <ifname> ] <pkt_in> <pkt_out>
<lsu_first_trans> <lsu_retrans> <lsu_for_lsreq> <lsu_nbr_trans> <throttle_out> <throttle_out_token>
<throttle_out_ip> <lsa_ignored> <lsa_dropped_spf> <lsa_dropped_gr> <pkt_drops_in> <pkt_drops_out>
<pkt_errors_in> <pkt_errors_out> <hello_errors_in> <dbds_errors_in> <lsreqs_errors_in> <lsus_errors_in>
<lsacks_errors_in> <pkt_unknown_in> <pkt_unknown_out> <pkt_no_ospf_intf> <bad_version> <bad_crc>
<dup_rtr_id> <dup_src_addr> <invalid_src_addr> <invalid_dst_addr> <non_existing_nbr> <pkt_passive_intf>
<wrong_area> <invalid_pkt_len> <nbr_changed_routerid_ipaddr> <nbr_changed_interfaceid> [ <bad_auth>
] [ <bad_reserved> ] [ <pkt_no_vrf> ] <hellos_in> <dbds_in> <lsreqs_in> <lsus_in> <lsacks_in> <hellos_out>
<dbds_out> <lsreqs_out> <lsus_out> <lsacks_out> [ <hellos_in_hq> <dbds_in_hq> <lsreqs_in_flq>
<lsus_in_flq> <lsacks_in_flq> <lsas_in_dbds_in> <lsas_in_lsreqs_in> <lsas_in_lsus_in> <lsas_in_lsacks_in>
<lsas_in_dbds_out> <lsas_in_lsreqs_out> <lsas_in_lsus_out> <lsas_in_lsacks_out> <lsas_in_rxmt_lsus_out>
] ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ip                    | Display IP information                      |
| ospf                  | Display OSPF status and configuration       |
| <i>tag</i>            | (Optional) Process tag                      |
| <i>interface</i>      | (Optional) OSPF enabled interface           |
| detail                | (Optional) Display detailed information     |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| traffic               | Packet counters                             |
| <i>__readonly__</i>   | (Optional)                                  |
| TABLE_traf            | (Optional)                                  |
| <i>ptag</i>           | (Optional)                                  |
| <i>cname</i>          | (Optional)                                  |
| <i>last_clear</i>     | (Optional)                                  |
| <i>ifname</i>         | (Optional)                                  |
| <i>pkt_in</i>         | (Optional)                                  |

|                           |            |
|---------------------------|------------|
| <i>pkt_out</i>            | (Optional) |
| <i>lsu_first_trans</i>    | (Optional) |
| <i>lsu_retrans</i>        | (Optional) |
| <i>lsu_for_lsreq</i>      | (Optional) |
| <i>lsu_nbr_trans</i>      | (Optional) |
| <i>throttle_out</i>       | (Optional) |
| <i>throttle_out_token</i> | (Optional) |
| <i>throttle_out_ip</i>    | (Optional) |
| <i>lsa_ignored</i>        | (Optional) |
| <i>lsa_dropped_spf</i>    | (Optional) |
| <i>lsa_dropped_gr</i>     | (Optional) |
| <i>pkt_drops_in</i>       | (Optional) |
| <i>pkt_drops_out</i>      | (Optional) |
| <i>pkt_errors_in</i>      | (Optional) |
| <i>pkt_errors_out</i>     | (Optional) |
| <i>hello_errors_in</i>    | (Optional) |
| <i>dbds_errors_in</i>     | (Optional) |
| <i>lsreqs_errors_in</i>   | (Optional) |
| <i>lsus_errors_in</i>     | (Optional) |
| <i>lsacks_errors_in</i>   | (Optional) |
| <i>pkt_unknown_in</i>     | (Optional) |
| <i>pkt_unknown_out</i>    | (Optional) |
| <i>pkt_no_ospf_intf</i>   | (Optional) |
| <i>bad_version</i>        | (Optional) |
| <i>bad_crc</i>            | (Optional) |
| <i>dup_rtr_id</i>         | (Optional) |
| <i>dup_src_addr</i>       | (Optional) |
| <i>invalid_src_addr</i>   | (Optional) |
| <i>invalid_dst_addr</i>   | (Optional) |

|                                    |            |
|------------------------------------|------------|
| <i>non_existing_nbr</i>            | (Optional) |
| <i>pkt_passive_intf</i>            | (Optional) |
| <i>wrong_area</i>                  | (Optional) |
| <i>invalid_pkt_len</i>             | (Optional) |
| <i>nbr_changed_routerid_ipaddr</i> | (Optional) |
| <i>nbr_changed_interfaceid</i>     | (Optional) |
| <i>bad_auth</i>                    | (Optional) |
| <i>bad_reserved</i>                | (Optional) |
| <i>pkt_no_vrf</i>                  | (Optional) |
| <i>hellos_in</i>                   | (Optional) |
| <i>dbds_in</i>                     | (Optional) |
| <i>lsreqs_in</i>                   | (Optional) |
| <i>lsus_in</i>                     | (Optional) |
| <i>lsacks_in</i>                   | (Optional) |
| <i>hellos_out</i>                  | (Optional) |
| <i>dbds_out</i>                    | (Optional) |
| <i>lsreqs_out</i>                  | (Optional) |
| <i>lsus_out</i>                    | (Optional) |
| <i>lsacks_out</i>                  | (Optional) |
| <i>hellos_in_hq</i>                | (Optional) |
| <i>dbds_in_hq</i>                  | (Optional) |
| <i>lsreqs_in_flq</i>               | (Optional) |
| <i>lsus_in_flq</i>                 | (Optional) |
| <i>lsacks_in_flq</i>               | (Optional) |
| <i>lsas_in_dbds_in</i>             | (Optional) |
| <i>lsas_in_lsreqs_in</i>           | (Optional) |
| <i>lsas_in_lsus_in</i>             | (Optional) |
| <i>lsas_in_lsacks_in</i>           | (Optional) |
| <i>lsas_in_dbds_out</i>            | (Optional) |

|                              |            |
|------------------------------|------------|
| <i>lsas_in_lsreqs_out</i>    | (Optional) |
| <i>lsas_in_lsus_out</i>      | (Optional) |
| <i>lsas_in_lsacks_out</i>    | (Optional) |
| <i>lsas_in_rxmt_lsus_out</i> | (Optional) |

**Command Mode**

- /exec

## show ip ospf traps-queue

show ip ospf [ <tag> ] traps-queue

### Syntax Description

|             |  |
|-------------|--|
| show        | Show running system information              |
| ip          | Display IP information                       |
| ospf        | Display OSPF status and configuration        |
| <i>tag</i>  | (Optional) Process tag                       |
| traps-queue | Show all the priority traps queue parameters |

### Command Mode

- /exec



# show ip ospf virtual-links

```
show ip ospf [ <tag> ] virtual-links [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ TABLE_ctx
<ptag> <cname> [ TABLE_vlink <name> <nbr_rid> <if_state> <transit_area> <nh_intf> <nbr_addr> [
<transit_area_stub> ] [ <transit_area_nssa> ] <addr> [ <masklen> ] <area> [ <if_cfg> ] <state_str> <type_str>
<cost> <index> [ <passive> ] [ <mpls> ] [ <transmit_delay> ] [ <if_priority> ] [ <dr_rid> ] [ <dr_addr> ] [
<bdr_rid> ] [ <bdr_addr> ] [ <nbr_total> ] [ <nbr_flood> ] [ <nbr_adj> ] [ <gr_nbr> ] [ <hello_interval> ] [
<dead_interval> ] [ <wait_interval> ] [ <rxmt_interval> ] [ <hello_timer> ] [ <wait_timer> ] [ <pacing_timer>
] [ <lsu_timer> ] [ <lsack_timer> ] [ <netlsa_throt_timer> ] [ <auth_type> ] [ <keychain_name> ] [
<keychain_ready> ] [ <auth_md5_keyid> ] [ <link_lsa_cnt> ] [ <link_lsa_crc> ] [ <dc_enabled> ] [ <state>
] [ <transition> ] [ <lastchange> ] [ <priority> ] [ <ifid> ] [ <dr> ] [ <bdr> ] [ <master> ] [ <seqno> ] [
<dbdallsentacked> ] [ <dbdallsent> ] [ <dbdallacked> ] [ <lsaonreqlist> ] [ <lsafromlastreq> ] [ <lsreqrxmts>
] [ <helloptions> ] [ <dbdoptions> ] [ <lastnonhello> ] [ <deadtimer> ] [ <pacingtimer> ] [ <dbdrxmtimer> ]
[ <reqrxmtimer> ] [ <lsutimer> ] [ <rerxmtimer> ] [ <fastrerxmtimer> ] [ <lsacktimer> ] [ <grtimer> ] [
<helpermode> ] [ <helpercand> ] [ <helperterm> ] [ <senddbd> ] [ <sendlsreq> ] [ <sendlsu> ] [ <sendlsurxmt>
] [ <sendlsack> ] [ <sendlsreqreply> ] ] ]
```

## Syntax Description

|                |   |
|----------------|---|
| show           | Show running system information             |
| ip             | Display IP information                      |
| ospf           | Display OSPF status and configuration       |
| tag            | (Optional) Process tag                      |
| vrf            | (Optional) Display per-VRF information      |
| vrf-name       | (Optional) VRF name                         |
| vrf-known-name | (Optional) Known VRF name                   |
| all            | (Optional) Display information for all VRFs |
| virtual-links  | Virtual link information                    |
| __readonly__   | (Optional)                                  |
| TABLE_ctx      | (Optional)                                  |
| ptag           | (Optional)                                  |
| cname          | (Optional)                                  |
| TABLE_vlink    | (Optional)                                  |
| name           | (Optional)                                  |
| nbr_rid        | (Optional)                                  |
| if_state       | (Optional)                                  |
| transit_area   | (Optional)                                  |

|                          |            |
|--------------------------|------------|
| <i>nh_intf</i>           | (Optional) |
| <i>dc_enabled</i>        | (Optional) |
| <i>nbr_addr</i>          | (Optional) |
| <i>transit_area_stub</i> | (Optional) |
| <i>transit_area_nssa</i> | (Optional) |
| <i>addr</i>              | (Optional) |
| <i>masklen</i>           | (Optional) |
| <i>area</i>              | (Optional) |
| <i>if_cfg</i>            | (Optional) |
| <i>state_str</i>         | (Optional) |
| <i>type_str</i>          | (Optional) |
| <i>cost</i>              | (Optional) |
| <i>index</i>             | (Optional) |
| <i>passive</i>           | (Optional) |
| <i>mpls</i>              | (Optional) |
| <i>transmit_delay</i>    | (Optional) |
| <i>if_priority</i>       | (Optional) |
| <i>dr_rid</i>            | (Optional) |
| <i>dr_addr</i>           | (Optional) |
| <i>bdr_rid</i>           | (Optional) |
| <i>bdr_addr</i>          | (Optional) |
| <i>nbr_total</i>         | (Optional) |
| <i>nbr_flood</i>         | (Optional) |
| <i>nbr_adj</i>           | (Optional) |
| <i>gr_nbr</i>            | (Optional) |
| <i>hello_interval</i>    | (Optional) |
| <i>dead_interval</i>     | (Optional) |
| <i>wait_interval</i>     | (Optional) |
| <i>rxmt_interval</i>     | (Optional) |

|                           |            |
|---------------------------|------------|
| <i>hello_timer</i>        | (Optional) |
| <i>wait_timer</i>         | (Optional) |
| <i>pacing_timer</i>       | (Optional) |
| <i>lsu_timer</i>          | (Optional) |
| <i>lsack_timer</i>        | (Optional) |
| <i>netlsa_throt_timer</i> | (Optional) |
| <i>auth_type</i>          | (Optional) |
| <i>keychain_name</i>      | (Optional) |
| <i>keychain_ready</i>     | (Optional) |
| <i>auth_md5_keyid</i>     | (Optional) |
| <i>link_lsa_cnt</i>       | (Optional) |
| <i>link_lsa_crc</i>       | (Optional) |
| <i>state</i>              | (Optional) |
| <i>transition</i>         | (Optional) |
| <i>lastchange</i>         | (Optional) |
| <i>priority</i>           | (Optional) |
| <i>ifid</i>               | (Optional) |
| <i>dr</i>                 | (Optional) |
| <i>bdr</i>                | (Optional) |
| <i>master</i>             | (Optional) |
| <i>seqno</i>              | (Optional) |
| <i>dbdallsentacked</i>    | (Optional) |
| <i>dbdallsent</i>         | (Optional) |
| <i>dbdallacked</i>        | (Optional) |
| <i>lsaonreqlist</i>       | (Optional) |
| <i>lsafromlastreq</i>     | (Optional) |
| <i>lsreqrxmts</i>         | (Optional) |
| <i>hellooptions</i>       | (Optional) |
| <i>dbdoptions</i>         | (Optional) |

|                       |            |
|-----------------------|------------|
| <i>lastnonhello</i>   | (Optional) |
| <i>deadtimer</i>      | (Optional) |
| <i>paddingtimer</i>   | (Optional) |
| <i>dbdrxmtimer</i>    | (Optional) |
| <i>reqrxmtimer</i>    | (Optional) |
| <i>lsutimer</i>       | (Optional) |
| <i>rerxmtimer</i>     | (Optional) |
| <i>fastrerxmtimer</i> | (Optional) |
| <i>lsacktimer</i>     | (Optional) |
| <i>grtimer</i>        | (Optional) |
| <i>helpermode</i>     | (Optional) |
| <i>helpercand</i>     | (Optional) |
| <i>helperterm</i>     | (Optional) |
| <i>senddbd</i>        | (Optional) |
| <i>sendlsreq</i>      | (Optional) |
| <i>sendlsu</i>        | (Optional) |
| <i>sendlsurxmt</i>    | (Optional) |
| <i>sendlsack</i>      | (Optional) |
| <i>sendlsreqreply</i> | (Optional) |

**Command Mode**

- /exec

## show ip ospf virtual-links brief

```
show ip ospf [ <tag> ] virtual-links brief [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__
TABLE_ctx <ptag> <cname> <vlink_count> [ TABLE_vlink <nbr_rid> <vlink_num> <transit_area> <cost>
<if_state> ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ip                    | Display IP information                      |
| ospf                  | Display OSPF status and configuration       |
| <i>tag</i>            | (Optional) Process tag                      |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| virtual-links         | Virtual link information                    |
| brief                 | Display summary of OSPF virtual links       |
| <i>__readonly__</i>   | (Optional)                                  |
| TABLE_ctx             | (Optional)                                  |
| <i>ptag</i>           | (Optional)                                  |
| <i>cname</i>          | (Optional)                                  |
| <i>vlink_count</i>    | (Optional)                                  |
| TABLE_vlink           | (Optional)                                  |
| <i>nbr_rid</i>        | (Optional)                                  |
| <i>vlink_num</i>      | (Optional)                                  |
| <i>transit_area</i>   | (Optional)                                  |
| <i>cost</i>           | (Optional)                                  |
| <i>if_state</i>       | (Optional)                                  |

### Command Mode

- /exec

# show ip overlay-traffic

show ip overlay-traffic

## Syntax Description

|                 |  |
|-----------------|--|
| show            | Show running system information                          |
| ip              | Display IP information                                   |
| overlay-traffic | Display IP overlay software processed traffic statistics |

## Command Mode

- /exec

# show ip pim bitfield

show ip pim bitfield

## Syntax Description

|          |                                      |
|----------|--------------------------------------|
| show     | Show running system information      |
| ip       | Display IP information               |
| pim      | Display PIM status and configuration |
| bitfield | Display compressed bitfield details  |

## Command Mode

- /exec

# show ip pim config-sanity

```
show ip pim config-sanity [ __readonly__ [ TABLE_vrf <out-context> [ TABLE_RP <rp-addr> [ {
<rperr-count><rp-interface><rp-error> } ] ] [ TABLE_ANYCAST [ { <arperr-count> <anycastrp-addr> [
<arp-interface> ] <arp-error> [ <configure-as-RP> } ] ] [ TABLE_MEMBER [ { <memerr-count> [
<mem-interface> ] <mem-error> } ] ] <found> ] [ TABLE_BSR [ { <rp-cand-count> [ <rp-cand-interface>
] <rp-cand-error> } ] [ { <bsr-cand-count> [ <bsr-cand-interface> ] <bsr-cand-error> } ] ] [ TABLE_AUTORP
[ { <rp-cand-count> [ <rp-cand-interface> ] <rp-cand-error> } ] [ { <auto-cand-count> [ <auto-cand-interface>
] <auto-cand-error> } ] ] ] ]
```

## Syntax Description

|                        |                                      |
|------------------------|--------------------------------------|
| show                   | Show running system information      |
| ip                     | Display IP information               |
| pim                    | Display PIM status and configuration |
| config-sanity          | Configuration Sanity check           |
| <i>__readonly__</i>    | (Optional)                           |
| TABLE_vrf              | (Optional)                           |
| <i>out-context</i>     | (Optional)                           |
| TABLE_RP               | (Optional)                           |
| <i>rp-addr</i>         | (Optional)                           |
| TABLE_ANYCAST          | (Optional)                           |
| <i>arperr-count</i>    | (Optional)                           |
| <i>anycastrp-addr</i>  | (Optional)                           |
| <i>arp-interface</i>   | (Optional)                           |
| <i>arp-error</i>       | (Optional)                           |
| <i>configure-as-RP</i> | (Optional)                           |
| TABLE_MEMBER           | (Optional)                           |
| <i>memerr-count</i>    | (Optional)                           |
| <i>mem-interface</i>   | (Optional)                           |
| <i>mem-error</i>       | (Optional)                           |
| <i>found</i>           | (Optional)                           |
| TABLE_BSR              | (Optional)                           |
| <i>rp-cand-count</i>   | (Optional)                           |



|                            |            |
|----------------------------|------------|
| <i>rp-cand-interface</i>   | (Optional) |
| <i>rp-cand-error</i>       | (Optional) |
| <i>bsr-cand-count</i>      | (Optional) |
| <i>bsr-cand-interface</i>  | (Optional) |
| <i>bsr-cand-error</i>      | (Optional) |
| TABLE_AUTORP               | (Optional) |
| <i>rp-cand-count</i>       | (Optional) |
| <i>rp-cand-interface</i>   | (Optional) |
| <i>rp-cand-error</i>       | (Optional) |
| <i>auto-cand-count</i>     | (Optional) |
| <i>auto-cand-interface</i> | (Optional) |
| <i>auto-cand-error</i>     | (Optional) |

**Command Mode**

- /exec



|                           |            |
|---------------------------|------------|
| TABLE_iod                 | (Optional) |
| <i>if-name</i>            | (Optional) |
| <i>df-winner</i>          | (Optional) |
| <i>df-state</i>           | (Optional) |
| <i>winner-metric-pref</i> | (Optional) |
| <i>winner-metric</i>      | (Optional) |
| <i>uptime</i>             | (Optional) |
| <i>is-rpf</i>             | (Optional) |

**Command Mode**

- /exec

## show ip pim event-history

show ip pim [ internal ] event-history { errors | msgs | <pim-event-hist-buf-name> | statistics }

### Syntax Description

|                                |                                       |
|--------------------------------|---------------------------------------|
| show                           | Show running system information       |
| ip                             | Display IP information                |
| pim                            | PIM global configuration commands     |
| internal                       | (Optional) Commands for internal use  |
| event-history                  | Show various event logs of PIM        |
| errors                         | Show error logs of PIM                |
| msgs                           | Show various message logs of PIM      |
| <i>pim-event-hist-buf-name</i> | Show event hist buffer name           |
| statistics                     | Show the state and size of the buffer |

### Command Mode

- /exec

# show ip pim fabric info

```
show ip pim fabric info [ __readonly__ <switch_role> <fabric_ctrl_addr> <peer_fabric_ctrl_infra>
<vpc_domain_id> <peer_fabric_ctrl_addr> ]
```

## Syntax Description

|                               |                                      |
|-------------------------------|--------------------------------------|
| show                          | Show running system information      |
| ip                            | Display IP information               |
| pim                           | Display PIM status and configuration |
| fabric                        | Fabric functionality                 |
| info                          | show the fabric info                 |
| <i>__readonly__</i>           | (Optional)                           |
| <i>switch_role</i>            | (Optional)                           |
| <i>fabric_ctrl_addr</i>       | (Optional)                           |
| <i>peer_fabric_ctrl_infra</i> | (Optional)                           |
| <i>vpc_domain_id</i>          | (Optional)                           |
| <i>peer_fabric_ctrl_addr</i>  | (Optional)                           |

## Command Mode

- /exec

## show ip pim fabric legacy-vlans

show ip pim fabric legacy-vlans [ *\_\_readonly\_\_* *TABLE\_legacy\_vlan* <*vlan\_id*> ]

### Syntax Description

|                          |                                      |
|--------------------------|--------------------------------------|
| show                     | Show running system information      |
| ip                       | Display IP information               |
| pim                      | Display PIM status and configuration |
| fabric                   | Fabric functionality                 |
| legacy-vlans             | Show legacy VLANs on this switch     |
| <i>__readonly__</i>      | (Optional)                           |
| <i>TABLE_legacy_vlan</i> | (Optional)                           |
| <i>vlan_id</i>           | (Optional)                           |

### Command Mode

- /exec

## show ip pim group-range

```
show ip pim group-range [ <group> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ [
TABLE_vrf <out-context> [ { TABLE_group <grp-addr> [ <invalid-grp> ] [ <action> ] [ <mode> ] [ <rp-addr>
] [ <sh-tree-only-range> ] [ <origin> } ] ] ] ]
```

### Syntax Description

|                           |   |
|---------------------------|---|
| show                      | Show running system information             |
| ip                        | Display IP information                      |
| pim                       | Display PIM status and configuration        |
| group-range               | Display the various group-ranges            |
| <i>group</i>              | (Optional) IP address of group to display   |
| vrf                       | (Optional) Display per-VRF information      |
| <i>vrf-name</i>           | (Optional) VRF name                         |
| <i>vrf-known-name</i>     | (Optional) Known VRF name                   |
| all                       | (Optional) Display information for all VRFs |
| __readonly__              | (Optional)                                  |
| TABLE_vrf                 | (Optional)                                  |
| <i>out-context</i>        | (Optional)                                  |
| TABLE_group               | (Optional)                                  |
| <i>invalid-grp</i>        | (Optional)                                  |
| <i>grp-addr</i>           | (Optional)                                  |
| <i>mode</i>               | (Optional)                                  |
| <i>rp-addr</i>            | (Optional)                                  |
| <i>sh-tree-only-range</i> | (Optional)                                  |
| <i>action</i>             | (Optional)                                  |
| <i>origin</i>             | (Optional)                                  |

### Command Mode

- /exec

# show ip pim host-proxy

show ip pim host-proxy [ \_\_readonly\_\_ TABLE\_intf <intf-name> ]

## Syntax Description

|                  |                                   |
|------------------|-----------------------------------|
| show             | Show running system information   |
| ip               | Display IP information            |
| pim              | PIM global configuration commands |
| host-proxy       | host-proxy                        |
| __readonly__     | (Optional)                        |
| TABLE_intf       | (Optional)                        |
| <i>intf-name</i> | (Optional)                        |

## Command Mode

- /exec



# show ip pim interface

```
show ip pim interface [ <interface> ] [ brief ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ internal ] [
__readonly__ ] [ <is-pim-enabled> ] [ TABLE_vrf [ <out-context> ] [ TABLE_brief [ <if-name> ] [ <if-addr>
] [ <if-dr> ] [ <if-nbr-count> ] [ <if-is-border> ] ] [ TABLE_iod [ <if-name> ] [ <if-status> ] [
<cached_if_status> ] [ <if-addr-summary> ] [ <pim-dr-address> ] [ <dr-priority> ] [ <no-dr-priority> ] [
<nbr-cnt> ] [ <hello-interval-sec> ] [ <hello-interval-msec> ] [ <hello-timer> ] [ <holdtime-msec> ] [
<holdtime-sec> ] [ <if-conf-dr-priority> ] [ <if-conf-delay> ] [ <is-border> ] [ <genid> ] [ <isauth-config> ]
[ <nbr-policy-name> ] [ <jp-in-policy-name> ] [ <jp-out-policy-name> ] [ <jp-interval> ] [ <jp-next-send> ]
[ <pim-bfd-enabled> ] [ <is-passive> ] [ <is-pim-vpc-svi> ] [ <is-auto-enabled> ] [ <vpc-peer-nbr> ] [
<last-cleared> ] [ <hello-sent> ] [ <hello-rcvd> ] [ <hello-early-sent> ] [ <jp-sent> ] [ <jp-rcvd> ] [ <assert-sent>
] [ <assert-rcvd> ] [ <graft-sent> ] [ <graft-rcvd> ] [ <graft-ack-sent> ] [ <graft-ack-rcvd> ] [ <df-offer-sent>
] [ <df-offer-rcvd> ] [ <df-winner-sent> ] [ <df-winner-rcvd> ] [ <df-backoff-sent> ] [ <df-backoff-rcvd> ] [
<pass-sent> ] [ <pass-rcvd> ] [ <cksum-errors> ] [ <invalid-errors> ] [ <invalid-df-errors> ] [ <auth-failed>
] [ <pak-len-errors> ] [ <ver-errors> ] [ <pkts-self> ] [ <pkts-non-nbr> ] [ <pkts-on-passive> ] [ <jp-rcvd-on-rpf>
] [ <jp-rcvd-no-rp> ] [ <jp-rcvd-wrong-rp> ] [ <jp-rcvd-for-ssm> ] [ <jp-rcvd-for-bidir> ] [ <jp-in-policy-filter>
] [ <jp-out-policy-filter> ] [ <ecmp-redirect-sent> ] [ <ecmp-redirect-rcvd> ] ] ] ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                          |
| ip                    | Display IP information                                   |
| pim                   | Display PIM status and configuration                     |
| interface             | Display PIM interface related information                |
| <i>interface</i>      | (Optional) Interface name of single interface to display |
| brief                 | (Optional) Display one line status per interface         |
| vrf                   | (Optional) Display per-VRF information                   |
| <i>vrf-name</i>       | (Optional) VRF name                                      |
| <i>vrf-known-name</i> | (Optional) Known VRF name                                |
| all                   | (Optional) Display information for all VRFs              |
| internal              | (Optional) Commands for internal use                     |
| <i>__readonly__</i>   | (Optional)   |
| <i>is-pim-enabled</i> | (Optional)   |
| TABLE_vrf             | (Optional)   |
| <i>out-context</i>    | (Optional)   |
| TABLE_brief           | (Optional)   |
| <i>if-name</i>        | (Optional)   |

|                            |            |
|----------------------------|------------|
| <i>if-addr</i>             | (Optional) |
| <i>if-dr</i>               | (Optional) |
| <i>if-nbr-count</i>        | (Optional) |
| <i>if-is-border</i>        | (Optional) |
| TABLE_iod                  | (Optional) |
| <i>if-name</i>             | (Optional) |
| <i>if-status</i>           | (Optional) |
| <i>cached_if_status</i>    | (Optional) |
| <i>if-addr-summary</i>     | (Optional) |
| <i>pim-dr-address</i>      | (Optional) |
| <i>dr-priority</i>         | (Optional) |
| <i>no-dr-priority</i>      | (Optional) |
| <i>nbr-cnt</i>             | (Optional) |
| <i>hello-interval-sec</i>  | (Optional) |
| <i>hello-interval-msec</i> | (Optional) |
| <i>hello-timer</i>         | (Optional) |
| <i>holdtime-msec</i>       | (Optional) |
| <i>holdtime-sec</i>        | (Optional) |
| <i>if-conf-dr-priority</i> | (Optional) |
| <i>if-conf-delay</i>       | (Optional) |
| <i>is-border</i>           | (Optional) |
| <i>genid</i>               | (Optional) |
| <i>isauth-config</i>       | (Optional) |
| <i>nbr-policy-name</i>     | (Optional) |
| <i>jp-in-policy-name</i>   | (Optional) |
| <i>jp-out-policy-name</i>  | (Optional) |
| <i>jp-interval</i>         | (Optional) |
| <i>jp-next-send</i>        | (Optional) |
| <i>pim-bfd-enabled</i>     | (Optional) |

|                          |            |
|--------------------------|------------|
| <i>is-passive</i>        | (Optional) |
| <i>is-pim-vpc-svi</i>    | (Optional) |
| <i>is-auto-enabled</i>   | (Optional) |
| <i>vpc-peer-nbr</i>      | (Optional) |
| <i>last-cleared</i>      | (Optional) |
| <i>hello-sent</i>        | (Optional) |
| <i>hello-rcvd</i>        | (Optional) |
| <i>hello-early-sent</i>  | (Optional) |
| <i>jp-sent</i>           | (Optional) |
| <i>jp-rcvd</i>           | (Optional) |
| <i>assert-sent</i>       | (Optional) |
| <i>assert-rcvd</i>       | (Optional) |
| <i>graft-sent</i>        | (Optional) |
| <i>graft-rcvd</i>        | (Optional) |
| <i>graft-ack-sent</i>    | (Optional) |
| <i>graft-ack-rcvd</i>    | (Optional) |
| <i>df-offer-sent</i>     | (Optional) |
| <i>df-offer-rcvd</i>     | (Optional) |
| <i>df-winner-sent</i>    | (Optional) |
| <i>df-winner-rcvd</i>    | (Optional) |
| <i>df-backoff-sent</i>   | (Optional) |
| <i>df-backoff-rcvd</i>   | (Optional) |
| <i>pass-sent</i>         | (Optional) |
| <i>pass-rcvd</i>         | (Optional) |
| <i>cksum-errors</i>      | (Optional) |
| <i>invalid-errors</i>    | (Optional) |
| <i>invalid-df-errors</i> | (Optional) |
| <i>auth-failed</i>       | (Optional) |
| <i>pak-len-errors</i>    | (Optional) |

|                             |            |
|-----------------------------|------------|
| <i>ver-errors</i>           | (Optional) |
| <i>pkts-self</i>            | (Optional) |
| <i>pkts-non-nbr</i>         | (Optional) |
| <i>pkts-on-passive</i>      | (Optional) |
| <i>jp-rcvd-on-rpf</i>       | (Optional) |
| <i>jp-rcvd-no-rp</i>        | (Optional) |
| <i>jp-rcvd-wrong-rp</i>     | (Optional) |
| <i>jp-rcvd-for-ssm</i>      | (Optional) |
| <i>jp-rcvd-for-bidir</i>    | (Optional) |
| <i>jp-in-policy-filter</i>  | (Optional) |
| <i>jp-out-policy-filter</i> | (Optional) |
| <i>ecmp-redirect-sent</i>   | (Optional) |
| <i>ecmp-redirect-recv</i>   | (Optional) |

**Command Mode**

- /exec

## show ip pim mdt

```
show ip pim mdt [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ TABLE_vrf <out_context>
<mti> <mti_status> <default_mdt_grp> <grp_mode> <asm_shared_tree> <mti_config_mtu> <mti_active_mtu>
<cfg_tunnel_src_if> <bgp_update_src_if> <hello_interval> <jp_interval> <data_mdt_join_interval>
<data_switchover_interval> <data_holddown_interval> <data_timeout_interval> <mdt_src> <mdt_src_if>
<bgp_rd> <bgp_rd_set> <send_join_count> <rcvd_join_count> { TABLE_data_mdt <grange_prefix>
<grange_mask_len> <threshold> [ <policy_name> ] } ]
```

### Syntax Description

|                          |   |
|--------------------------|---|
| show                     | Show running system information             |
| ip                       | Display IP information                      |
| pim                      | Display PIM status and configuration        |
| mdt                      | Display MDT information                     |
| vrf                      | (Optional) Display per-VRF information      |
| <i>vrf-name</i>          | (Optional) VRF name                         |
| <i>vrf-known-name</i>    | (Optional) Known VRF name                   |
| all                      | (Optional) Display information for all VRFs |
| <i>__readonly__</i>      | (Optional)                                  |
| TABLE_vrf                | (Optional)                                  |
| <i>out_context</i>       | (Optional)                                  |
| <i>mti</i>               | (Optional)                                  |
| <i>mti_status</i>        | (Optional)                                  |
| <i>default_mdt_grp</i>   | (Optional)                                  |
| <i>grp_mode</i>          | (Optional)                                  |
| <i>asm_shared_tree</i>   | (Optional)                                  |
| <i>mti_config_mtu</i>    | (Optional)                                  |
| <i>mti_active_mtu</i>    | (Optional)                                  |
| <i>cfg_tunnel_src_if</i> | (Optional)                                  |
| <i>bgp_update_src_if</i> | (Optional)                                  |
| <i>hello_interval</i>    | (Optional)                                  |
| <i>jp_interval</i>       | (Optional)                                  |

|                                 |            |
|---------------------------------|------------|
| <i>data_mdt_join_interval</i>   | (Optional) |
| <i>data_switchover_interval</i> | (Optional) |
| <i>data_holddown_interval</i>   | (Optional) |
| <i>data_timeout_interval</i>    | (Optional) |
| <i>mdt_src</i>                  | (Optional) |
| <i>mdt_src_if</i>               | (Optional) |
| <i>bgp_rd</i>                   | (Optional) |
| <i>bgp_rd_set</i>               | (Optional) |
| <i>send_join_count</i>          | (Optional) |
| <i>rcvd_join_count</i>          | (Optional) |
| TABLE_data_mdt                  | (Optional) |
| <i>grange_prefix</i>            | (Optional) |
| <i>grange_mask_len</i>          | (Optional) |
| <i>threshold</i>                | (Optional) |
| <i>policy_name</i>              | (Optional) |

**Command Mode**

- /exec

# show ip pim mdt bgp

```
show ip pim mdt bgp [ mdt-source <src-addr> ] [ __readonly__ { TABLE_entry <bgp_rd> <mdt_src>
<mdt_grp> <local> } ]
```

## Syntax Description

|                     |  |
|---------------------|--|
| show                | Show running system information            |
| ip                  | Display IP information                     |
| pim                 | Display PIM status and configuration       |
| mdt                 | Display MDT information                    |
| bgp                 | Display BGP related information            |
| mdt-source          | (Optional) Source address of MVPN neighbor |
| <i>src-addr</i>     | (Optional) Source Address                  |
| <i>__readonly__</i> | (Optional)                                 |
| TABLE_entry         | (Optional)                                 |
| <i>bgp_rd</i>       | (Optional)                                 |
| <i>mdt_src</i>      | (Optional)                                 |
| <i>mdt_grp</i>      | (Optional)                                 |
| <i>local</i>        | (Optional)                                 |

## Command Mode

- /exec

## show ip pim mdt history interval

```
show ip pim mdt history interval <min> [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__
TABLE_vrf <out_context> [ { TABLE_entry <csrc> <cgrp> <psrc> <pgrp> <uptime> <send_count> } ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ip                    | Display IP information                      |
| pim                   | Display PIM status and configuration        |
| mdt                   | Display MDT information                     |
| history               | Display MDT Data Join Send Histoy           |
| interval              | Display in specified interval               |
| <i>min</i>            | Minutes                                     |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| __readonly__          | (Optional)                                  |
| TABLE_vrf             | (Optional)                                  |
| <i>out_context</i>    | (Optional)                                  |
| TABLE_entry           | (Optional)                                  |
| <i>csrc</i>           | (Optional)                                  |
| <i>cgrp</i>           | (Optional)                                  |
| <i>psrc</i>           | (Optional)                                  |
| <i>pgrp</i>           | (Optional)                                  |
| <i>uptime</i>         | (Optional)                                  |
| <i>send_count</i>     | (Optional)                                  |

### Command Mode

- /exec



# show ip pim mdt receive

```
show ip pim mdt receive [ detail ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ TABLE_vrf
<out_context> [ { TABLE_entry <csrc> <cgrp> <psrc> <pgrp> <uptime> [ <expires> ] [ <recv_count> } ]
] ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ip                    | Display IP information                      |
| pim                   | Display PIM status and configuration        |
| mdt                   | Display MDT information                     |
| receive               | Display Received Data Joins Information     |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| detail                | (Optional) Display detailed information     |
| <i>__readonly__</i>   | (Optional)                                  |
| TABLE_vrf             | (Optional)                                  |
| <i>out_context</i>    | (Optional)                                  |
| TABLE_entry           | (Optional)                                  |
| <i>csrc</i>           | (Optional)                                  |
| <i>cgrp</i>           | (Optional)                                  |
| <i>psrc</i>           | (Optional)                                  |
| <i>pgrp</i>           | (Optional)                                  |
| <i>uptime</i>         | (Optional)                                  |
| <i>expires</i>        | (Optional)                                  |
| <i>recv_count</i>     | (Optional)                                  |

## Command Mode

- /exec

# show ip pim mdt send

```
show ip pim mdt send [ detail ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ TABLE_vrf
<out_context> [ { TABLE_entry <csrc> <cgrp> <psrc> <pgrp> <uptime> <send_count> } ] ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ip                    | Display IP information                      |
| pim                   | Display PIM status and configuration        |
| mdt                   | Display MDT information                     |
| send                  | Display MDT Data Join Send Information      |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| detail                | (Optional) Display detailed information     |
| <i>__readonly__</i>   | (Optional)                                  |
| TABLE_vrf             | (Optional)                                  |
| <i>out_context</i>    | (Optional)                                  |
| TABLE_entry           | (Optional)                                  |
| <i>csrc</i>           | (Optional)                                  |
| <i>cgrp</i>           | (Optional)                                  |
| <i>psrc</i>           | (Optional)                                  |
| <i>pgrp</i>           | (Optional)                                  |
| <i>uptime</i>         | (Optional)                                  |
| <i>send_count</i>     | (Optional)                                  |

## Command Mode

- /exec

# show ip pim neighbor

```
show ip pim neighbor { [ <interface> ] | [ <ipaddr> ] } [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ detail
| internal ] [ __readonly__ [ TABLE_vrf <out-context> [ TABLE_neighbor
<nbr-addr><if-name><uptime><expires> [ <dr-priority> ] <bidir-capable><bfd-state> [
<longest-hello-intvl><non-hello-pkts> ] [ <ecmp-redirect-capable> ] ] ] ]
```

## Syntax Description

|                              |   |
|------------------------------|---|
| show                         | Show running system information                       |
| ip                           | Display IP information                                |
| pim                          | Display PIM status and configuration                  |
| neighbor                     | Display PIM neighbor related information              |
| <i>interface</i>             | (Optional) Display neighbors on single interface name |
| <i>ipaddr</i>                | (Optional) IP address of single neighbor to display   |
| vrf                          | (Optional) Display per-VRF information                |
| <i>vrf-name</i>              | (Optional) VRF name                                   |
| <i>vrf-known-name</i>        | (Optional) Known VRF name                             |
| all                          | (Optional) Display information for all VRFs           |
| detail                       | (Optional) Display detailed information               |
| internal                     | (Optional) Commands for internal use                  |
| <i>__readonly__</i>          | (Optional)  |
| TABLE_vrf                    | (Optional)  |
| <i>out-context</i>           | (Optional)  |
| TABLE_neighbor               | (Optional)  |
| <i>dr-priority</i>           | (Optional)  |
| <i>ecmp-redirect-capable</i> | (Optional)  |

## Command Mode

- /exec

## show ip pim oif-list

```
show ip pim oif-list <group> [ <source> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__
TABLE_vrf <vrf-name> { TABLE_grp <mcast-addr> <incoming-intf> <rpf-nbr> <timeout-interval>
<oif-list-count> [ { TABLE_oiflist <oif-name> } ] <timeout-list-count> [ { TABLE_timeoutlist
<timeoutoif-name> } ] <immediate-list-count> [ { TABLE_immediatelist <immediateoif-name> } ]
<immediate-timeout-list-count> [ { TABLE_immediatettimeoutlist <immediatettimeoutoif-name> } ]
<sgr-prune-list-count> [ { TABLE_sgrprunelist <sgrprunelstoif-name> } ] ] ]
```

### Syntax Description

|                           |  |
|---------------------------|--|
| show                      | Show running system information              |
| ip                        | Display IP information                       |
| pim                       | Display PIM status and configuration         |
| oif-list                  | Display interfaces for oif-list of PIM route |
| <i>source</i>             | (Optional) Source address to display         |
| <i>group</i>              | Group address to display                     |
| vrf                       | (Optional) Display per-VRF information       |
| <i>vrf-name</i>           | (Optional) VRF name                          |
| <i>vrf-known-name</i>     | (Optional) Known VRF name                    |
| all                       | (Optional) Display information for all VRFs  |
| <i>__readonly__</i>       | (Optional)                                   |
| TABLE_vrf                 | (Optional)                                   |
| <i>vrf-name</i>           | (Optional)                                   |
| TABLE_grp                 | (Optional)                                   |
| <i>mcast-addr</i>         | (Optional)                                   |
| <i>incoming-intf</i>      | (Optional)                                   |
| <i>rpf-nbr</i>            | (Optional)                                   |
| <i>timeout-interval</i>   | (Optional)                                   |
| <i>oif-list-count</i>     | (Optional)                                   |
| TABLE_oiflist             | (Optional)                                   |
| <i>oif-name</i>           | (Optional)                                   |
| <i>timeout-list-count</i> | (Optional)                                   |

|                                     |            |
|-------------------------------------|------------|
| TABLE_timeoutlist                   | (Optional) |
| <i>timeoutoif-name</i>              | (Optional) |
| <i>immediate-list-count</i>         | (Optional) |
| TABLE_immediatelist                 | (Optional) |
| <i>immediateoif-name</i>            | (Optional) |
| <i>immediate-timeout-list-count</i> | (Optional) |
| TABLE_immediatettimeoutlist         | (Optional) |
| <i>immediatettimeoutoif-name</i>    | (Optional) |
| <i>sgr-prune-list-count</i>         | (Optional) |
| TABLE_sgrprunelist                  | (Optional) |
| <i>sgrprunelistoif-name</i>         | (Optional) |

**Command Mode**

- /exec

## show ip pim policy statistics

```
show ip pim policy statistics { register-policy | bsr { bsr-policy | rp-candidate-policy } | auto-rp {
rp-candidate-policy | mapping-agent-policy } } [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__
{ TABLE_routemap <name> <action> <seq_num> [ { TABLE_cmd <command> <match_count>
<compare_count> } ] } <total_accept_count> <total_reject_count> ]
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                |
| ip                    | Display IP information                         |
| pim                   | PIM global configuration commands              |
| policy                | Policy related information                     |
| statistics            | Policy statistics                              |
| register-policy       | Show statistics for register-policy            |
| bsr                   | Bootstrap protocol RP-distribution policy      |
| bsr-policy            | Statistics for filtered BSR messages           |
| rp-candidate-policy   | Statistics for filtered RP candidate messages  |
| auto-rp               | Statistics for auto-rp messages                |
| rp-candidate-policy   | Statistics for filtered RP candidate messages  |
| mapping-agent-policy  | Statistics for filtered mapping agent messages |
| vrf                   | (Optional) Display per-VRF information         |
| <i>vrf-name</i>       | (Optional) VRF name                            |
| <i>vrf-known-name</i> | (Optional) Known VRF name                      |
| all                   | (Optional) Display information for all VRFs    |
| __readonly__          | (Optional)                                     |
| TABLE_routemap        | (Optional)                                     |
| <i>name</i>           | (Optional)                                     |
| <i>action</i>         | (Optional)                                     |
| <i>seq_num</i>        | (Optional)                                     |
| TABLE_cmd             | (Optional)                                     |
| <i>command</i>        | (Optional)                                     |

|                           |            |
|---------------------------|------------|
| <i>compare_count</i>      | (Optional) |
| <i>match_count</i>        | (Optional) |
| <i>total_accept_count</i> | (Optional) |
| <i>total_reject_count</i> | (Optional) |

**Command Mode**

- /exec

## show ip pim policy statistics jp

```
show ip pim policy statistics { jp-policy | neighbor-policy } <interface> [ __readonly__ { TABLE_routemap
<name> <action> <seq_num> [ { TABLE_cmd <command> <match_count> <compare_count> } ] }
<total_accept_count> <total_reject_count> ]
```

### Syntax Description

|                           |  |
|---------------------------|--|
| show                      | Show running system information            |
| ip                        | Display IP information                     |
| pim                       | PIM global configuration commands          |
| policy                    | Policy related information                 |
| statistics                | Policy statistics                          |
| jp-policy                 | Statistics for jp-policy                   |
| neighbor-policy           | Statistics for neighbor-policy             |
| <i>interface</i>          | Interface to display policy statistics for |
| <i>__readonly__</i>       | (Optional)                                 |
| TABLE_routemap            | (Optional)                                 |
| <i>name</i>               | (Optional)                                 |
| <i>action</i>             | (Optional)                                 |
| <i>seq_num</i>            | (Optional)                                 |
| TABLE_cmd                 | (Optional)                                 |
| <i>command</i>            | (Optional)                                 |
| <i>compare_count</i>      | (Optional)                                 |
| <i>match_count</i>        | (Optional)                                 |
| <i>total_accept_count</i> | (Optional)                                 |
| <i>total_reject_count</i> | (Optional)                                 |

### Command Mode

- /exec



# show ip pim route

```
show ip pim route [ [ <source> [ <group> ] ] ] [ <group> [ <source> ] ] [ bitfield ] [ vrf { <vrf-name> |
<vrf-known-name> | all } ] [ __readonly__ [ TABLE_vrf [ <context-name> ] [ <route-count> ] [
TABLE_one_route [ <mcast-addr> ] [ <rp-addr> ] [ <rp-local> ] [ <bidir> ] [ <sgexpire> ] [ <sgexpire> ]
[ <timeleft> ] [ <rp-bit> ] [ <register> ] [ <intf-name> ] [ <rpf-nbr-1> ] [ <rpf-nbr-addr> ] [ <intf-name-2> ]
[ <rpf-nbr-2> ] [ <uptime> ] [ <is-attached> ] [ <is-static> ] [ <zero-nonpim-oifs> ] [ <is-external> ] [
<otv-decap> ] [ <otv-router-mode> ] [ <non-dr-oifs-only> ] [ <data-created> ] [ <mdt-encap> ] [ <mdt-decap>
] [ <vxlan-decap> ] [ <vxlan-encap> ] [ <sw-pkts> ] [ <sw-bytes> ] [ <hw-pkts> ] [ <hw-bytes> ] [ <rpf-src>
] [ <mrib-rpf-notify> ] [ <add-pending> ] [ <aged-route> ] [ <sg-expiry-cfg> ] [ <jp-holdtime> ] [
<route-metric-internal> ] [ <metric-pref-internal> ] [ <delay-register-stop> ] [ <register-stop-rcvd> ] [
<lisp-src-rloc> ] [ TABLE_lisp_encap [ <encap-src-rloc> ] [ <encap-dst-rloc> ] [ <timeout-count> ] [
<add-pending> ] [ <del-pending> ] ] [ <oif-count> ] [ <oif-bf-str> ] [ <timeout-count> ] [ <timeout-bf-str> ]
[ <immediate-count> ] [ <immediate-bf-str> ] [ <immediate-timeout-count> ] [ <immediate-timeout-bf-str>
] [ <sgr-prune-list-count> ] [ <sgr-prune-list-bf-str> ] [ <timeout-interval> ] [ <jp-holdtime-rndup> ] [
<mdt-encap-index> ] ] ] ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                           |
| ip                    | Display IP information                                    |
| pim                   | Display PIM status and configuration                      |
| route                 | Display PIM specific route information                    |
| <i>group</i>          | (Optional) Group address to display                       |
| <i>source</i>         | (Optional) Source address to display                      |
| bitfield              | (Optional) Display details of each bitfield for PIM route |
| vrf                   | (Optional) Display per-VRF information                    |
| <i>vrf-name</i>       | (Optional) VRF name                                       |
| <i>vrf-known-name</i> | (Optional) Known VRF name                                 |
| all                   | (Optional) Display information for all VRFs               |
| __readonly__          | (Optional)  |
| TABLE_vrf             | (Optional)  |
| <i>context-name</i>   | (Optional)  |
| <i>route-count</i>    | (Optional)  |
| TABLE_one_route       | (Optional)  |
| <i>mcast-addr</i>     | (Optional)  |
| <i>rp-addr</i>        | (Optional)  |

|                         |            |
|-------------------------|------------|
| <i>rp-local</i>         | (Optional) |
| <i>bidir</i>            | (Optional) |
| <i>sgexpire</i>         | (Optional) |
| <i>sgrexpire</i>        | (Optional) |
| <i>timeleft</i>         | (Optional) |
| <i>rp-bit</i>           | (Optional) |
| <i>register</i>         | (Optional) |
| <i>intf-name</i>        | (Optional) |
| <i>rpf-nbr-1</i>        | (Optional) |
| <i>rpf-nbr-addr</i>     | (Optional) |
| <i>intf-name-2</i>      | (Optional) |
| <i>rpf-nbr-2</i>        | (Optional) |
| <i>uptime</i>           | (Optional) |
| <i>is-attached</i>      | (Optional) |
| <i>is-static</i>        | (Optional) |
| <i>zero-nonpim-oifs</i> | (Optional) |
| <i>is-external</i>      | (Optional) |
| <i>otv-decap</i>        | (Optional) |
| <i>otv-router-mode</i>  | (Optional) |
| <i>non-dr-oifs-only</i> | (Optional) |
| <i>data-created</i>     | (Optional) |
| <i>mdt-encap</i>        | (Optional) |
| <i>mdt-decap</i>        | (Optional) |
| <i>vxlan-decap</i>      | (Optional) |
| <i>vxlan-encap</i>      | (Optional) |
| <i>sw-pkts</i>          | (Optional) |
| <i>sw-bytes</i>         | (Optional) |
| <i>hw-pkts</i>          | (Optional) |
| <i>hw-bytes</i>         | (Optional) |

|                                 |            |
|---------------------------------|------------|
| <i>rpf-src</i>                  | (Optional) |
| <i>mrrib-rpf-notify</i>         | (Optional) |
| <i>add-pending</i>              | (Optional) |
| <i>aged-route</i>               | (Optional) |
| <i>sg-expiry-cfg</i>            | (Optional) |
| <i>jp-holdtime</i>              | (Optional) |
| <i>route-metric-internal</i>    | (Optional) |
| <i>metric-pref-internal</i>     | (Optional) |
| <i>delay-register-stop</i>      | (Optional) |
| <i>register-stop-rcvd</i>       | (Optional) |
| <i>lisp-src-rloc</i>            | (Optional) |
| TABLE_lisp_encap                | (Optional) |
| <i>encap-src-rloc</i>           | (Optional) |
| <i>encap-dst-rloc</i>           | (Optional) |
| <i>timeout-count</i>            | (Optional) |
| <i>add-pending</i>              | (Optional) |
| <i>del-pending</i>              | (Optional) |
| <i>oif-count</i>                | (Optional) |
| <i>oif-bf-str</i>               | (Optional) |
| <i>timeout-count</i>            | (Optional) |
| <i>timeout-bf-str</i>           | (Optional) |
| <i>immediate-count</i>          | (Optional) |
| <i>immediate-bf-str</i>         | (Optional) |
| <i>immediate-timeout-count</i>  | (Optional) |
| <i>immediate-timeout-bf-str</i> | (Optional) |
| <i>sgr-prune-list-count</i>     | (Optional) |
| <i>sgr-prune-list-bf-str</i>    | (Optional) |
| <i>timeout-interval</i>         | (Optional) |
| <i>jp-holdtime-rndup</i>        | (Optional) |

|                        |            |
|------------------------|------------|
| <i>mdt-encap-index</i> | (Optional) |
|------------------------|------------|

**Command Mode**

- /exec

## show ip pim rp-hash

```
show ip pim rp-hash <group> [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ <out-context>
[ <rp-found> ] [ <is-rp-bsr-learned> ] [ <out-group1> <rp-addr1> ] [ <out-group> <hash-length> <out-bsr> ]
[ { TABLE_rp <rp-addr> <hash> <isbest_hash> } ] ]
```

### Syntax Description

|                          |   |
|--------------------------|---|
| show                     | Show running system information             |
| ip                       | Display IP information                      |
| pim                      | Display PIM status and configuration        |
| rp-hash                  | Display RP hash value for group             |
| <i>group</i>             | Group address for RP lookup                 |
| vrf                      | (Optional) Display per-VRF information      |
| <i>vrf-name</i>          | (Optional) VRF name                         |
| <i>vrf-known-name</i>    | (Optional) Known VRF name                   |
| all                      | (Optional) Display information for all VRFs |
| __readonly__             | (Optional)                                  |
| <i>out-context</i>       | (Optional)                                  |
| <i>rp-found</i>          | (Optional)                                  |
| <i>is-rp-bsr-learned</i> | (Optional)                                  |
| <i>out-group1</i>        | (Optional)                                  |
| <i>rp-addr1</i>          | (Optional)                                  |
| <i>out-group</i>         | (Optional)                                  |
| <i>hash-length</i>       | (Optional)                                  |
| <i>out-bsr</i>           | (Optional)                                  |
| TABLE_rp                 | (Optional)                                  |
| <i>rp-addr</i>           | (Optional)                                  |
| <i>hash</i>              | (Optional)                                  |
| <i>isbest_hash</i>       | (Optional)                                  |

### Command Mode

- /exec



|                                 |            |
|---------------------------------|------------|
| <i>bsr-hash-masklen</i>         | (Optional) |
| <i>bs-timer</i>                 | (Optional) |
| <i>bsr-uptime</i>               | (Optional) |
| <i>bsr-expires</i>              | (Optional) |
| <i>is-autorp-enabled</i>        | (Optional) |
| <i>is-autorp-listen-only</i>    | (Optional) |
| <i>is-autorp-forward-only</i>   | (Optional) |
| <i>auto-rp-addr</i>             | (Optional) |
| <i>autorp-cand-address</i>      | (Optional) |
| <i>is-autorp-local</i>          | (Optional) |
| <i>autorp-dis-timer</i>         | (Optional) |
| <i>autorp-up-time</i>           | (Optional) |
| <i>autorp-expire-time</i>       | (Optional) |
| <i>rp-cand-policy-name</i>      | (Optional) |
| <i>bsr-policy-name</i>          | (Optional) |
| <i>rp-announce-policy-name</i>  | (Optional) |
| <i>rp-discovery-policy-name</i> | (Optional) |
| TABLE_anycast_rp                | (Optional) |
| <i>anycast-rp-addr</i>          | (Optional) |
| TABLE_arp_rp                    | (Optional) |
| <i>arp-rp-addr</i>              | (Optional) |
| <i>is-rpaddr-local</i>          | (Optional) |
| TABLE_rp                        | (Optional) |
| <i>rp-addr</i>                  | (Optional) |
| <i>is-rp-local</i>              | (Optional) |
| <i>df-ordinal</i>               | (Optional) |
| <i>rp-uptime</i>                | (Optional) |
| <i>rp-priority</i>              | (Optional) |
| <i>rp-source</i>                | (Optional) |

|                            |            |
|----------------------------|------------|
| <i>static-rp-group-map</i> | (Optional) |
| TABLE_grange               | (Optional) |
| <i>grange-grp</i>          | (Optional) |
| <i>grange-masklen</i>      | (Optional) |
| <i>grange-is-deny</i>      | (Optional) |
| <i>is-bidir-grp</i>        | (Optional) |
| <i>autorp-expires</i>      | (Optional) |
| <i>bsr-rp-expires</i>      | (Optional) |
| <i>rp-owner-flags</i>      | (Optional) |
| <i>bidir-ordinal</i>       | (Optional) |
| <i>df-bits-recovered</i>   | (Optional) |
| <i>rpf-nbr-address</i>     | (Optional) |
| <i>metric</i>              | (Optional) |
| <i>metric-preference</i>   | (Optional) |

**Command Mode**

- /exec



## show ip pim statistics

```
show ip pim statistics [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ TABLE_vrf <vrf-name>
[ <uptime> <reg-sent> <reg-rcvd> <null-reg-sent> <null-reg-rcvd> <reg-stop-sent> <reg-stop-rcvd>
<reg-rcvd-not-rp> <reg-rcvd-for-ssm> <reg-rcvd-for-bidir> <bootstrap-sent> <bootstrap-rcvd> <cand-rp-sent>
<cand-rp-rcvd> <bs-no-nbr> <bs-border-deny> <bs-len-errors> <bs-rpf-failed> <bs-no-listen>
<candrp-border-deny> <candrp-no-listen> <autorp-announce-sent> <autorp-announce-rcvd>
<autorp-discovery-sent> <autorp-discovery-rcvd> <autorp-rpf-failed> <autorp-border-deny>
<autorp-invalid-type> <autorp-ttl-expired> <autorp-no-listen> <ctrl-no-route> <data-no-route> <no-state>
<create-state> ] ]
```

### Syntax Description

|                           |   |
|---------------------------|---|
| show                      | Show running system information             |
| ip                        | Display IP information                      |
| pim                       | Display PIM status and configuration        |
| statistics                | Packet counter statistics                   |
| vrf                       | (Optional) Display per-VRF information      |
| <i>vrf-name</i>           | (Optional) VRF name                         |
| <i>vrf-known-name</i>     | (Optional) Known VRF name                   |
| all                       | (Optional) Display information for all VRFs |
| <i>__readonly__</i>       | (Optional)                                  |
| TABLE_vrf                 | (Optional)                                  |
| <i>vrf-name</i>           | (Optional)                                  |
| <i>uptime</i>             | (Optional)                                  |
| <i>reg-sent</i>           | (Optional)                                  |
| <i>reg-rcvd</i>           | (Optional)                                  |
| <i>null-reg-sent</i>      | (Optional)                                  |
| <i>null-reg-rcvd</i>      | (Optional)                                  |
| <i>reg-stop-sent</i>      | (Optional)                                  |
| <i>reg-stop-rcvd</i>      | (Optional)                                  |
| <i>reg-rcvd-not-rp</i>    | (Optional)                                  |
| <i>reg-rcvd-for-ssm</i>   | (Optional)                                  |
| <i>reg-rcvd-for-bidir</i> | (Optional)                                  |

|                              |            |
|------------------------------|------------|
| <i>bootstrap-sent</i>        | (Optional) |
| <i>bootstrap-rcvd</i>        | (Optional) |
| <i>cand-rp-sent</i>          | (Optional) |
| <i>cand-rp-rcvd</i>          | (Optional) |
| <i>bs-no-nbr</i>             | (Optional) |
| <i>bs-border-deny</i>        | (Optional) |
| <i>bs-len-errors</i>         | (Optional) |
| <i>bs-rpf-failed</i>         | (Optional) |
| <i>bs-no-listen</i>          | (Optional) |
| <i>candrp-border-deny</i>    | (Optional) |
| <i>candrp-no-listen</i>      | (Optional) |
| <i>autorp-announce-sent</i>  | (Optional) |
| <i>autorp-announce-rcvd</i>  | (Optional) |
| <i>autorp-discovery-sent</i> | (Optional) |
| <i>autorp-discovery-rcvd</i> | (Optional) |
| <i>autorp-rpf-failed</i>     | (Optional) |
| <i>autorp-border-deny</i>    | (Optional) |
| <i>autorp-invalid-type</i>   | (Optional) |
| <i>autorp-ttl-expired</i>    | (Optional) |
| <i>autorp-no-listen</i>      | (Optional) |
| <i>ctrl-no-route</i>         | (Optional) |
| <i>data-no-route</i>         | (Optional) |
| <i>no-state</i>              | (Optional) |
| <i>create-state</i>          | (Optional) |

**Command Mode**

- /exec

# show ip pim vrf

```
show ip pim vrf [ { <vrf-name> | <vrf-known-name> | all } ] [ detail | internal ] [ __readonly__ {
TABLE_context <out-context> <context-id> <table-id> <count> <bfd> <mvpn> } ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                   |
| ip                    | Display IP information                            |
| pim                   | Display PIM status and configuration              |
| vrf                   | Display per-VRF information                       |
| <i>vrf-name</i>       | (Optional) VRF name                               |
| <i>vrf-known-name</i> | (Optional) Known VRF name                         |
| all                   | (Optional) Display all VRFs PIM is configured for |
| detail                | (Optional) Display detailed information           |
| internal              | (Optional) VRF related internal information       |
| __readonly__          | (Optional)  |
| TABLE_context         | (Optional)  |
| <i>out-context</i>    | (Optional)  |
| <i>context-id</i>     | (Optional)  |
| <i>table-id</i>       | (Optional)  |
| <i>count</i>          | (Optional)  |
| <i>bfd</i>            | (Optional)  |
| <i>mvpn</i>           | (Optional)  |

## Command Mode

- /exec

# show ip ping source-interface

```
show ip ping source-interface [ vrf { <vrf-name> | <vrf-known-name> } ] [ __readonly__ [ { TABLE_ippingvrf
<vrfname> <ifname> } ] ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information        |
| ip                    | Display IP information                 |
| ping                  | Display ping client information        |
| source-interface      | Display source interface information   |
| vrf                   | (Optional) Display per-VRF information |
| <i>vrf-name</i>       | (Optional) VRF name                    |
| <i>vrf-known-name</i> | (Optional) Known VRF name              |
| <i>__readonly__</i>   | (Optional)                             |
| TABLE_ippingvrf       | (Optional) source interface of ping    |
| <i>vrfname</i>        | (Optional) vrfname                     |
| <i>ifname</i>         | (Optional) ifname                      |

## Command Mode

- /exec

## show ip ping source-interface vrf all

```
show ip ping source-interface vrf all [ __readonly__ [ { TABLE_ipping <vrfname> <ifname> } ] ]
```

### Syntax Description

|                  |                                      |
|------------------|--------------------------------------|
| show             | Show running system information      |
| ip               | Display IP information               |
| ping             | Display ping client information      |
| source-interface | Display source interface information |
| vrf              | Display per-VRF information          |
| all              | Display entries for all vrfs         |
| __readonly__     | (Optional)                           |
| TABLE_ipping     | (Optional) source interface of ping  |
| <i>vrfname</i>   | (Optional) vrfname                   |
| <i>ifname</i>    | (Optional) ifname                    |

### Command Mode

- /exec

# show ip policy

```
show ip policy [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ detail ] [ __readonly__ { TABLE_pbr [ <interface> ] [ <rmap> ] [ <status> ] [ <vrf_name> ] } ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ip                    | Display IP information                      |
| policy                | Policy routing                              |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| detail                | (Optional) Detailed information             |
| __readonly__          | (Optional)                                  |
| TABLE_pbr             | (Optional)                                  |
| <i>interface</i>      | (Optional)                                  |
| <i>rmap</i>           | (Optional)                                  |
| <i>status</i>         | (Optional)                                  |
| <i>vrf_name</i>       | (Optional)                                  |

## Command Mode

- /exec

# show ip prefix-list

```
show ip prefix-list { { [ detail | summary ] [ <ipv4-pfl-name> | <ipv4-pfl-cfg-name> ] } | { { <ipv4-pfl-name>
| <ipv4-pfl-cfg-name> } seq <seq-no> } | { { <ipv4-pfl-name> | <ipv4-pfl-cfg-name> } <prefix> [ first-match
| longer ] } } [ __readonly__ TABLE_ip_pfl <name> <seq> <action> <rule> ]
```

## Syntax Description

|                          |  |
|--------------------------|--|
| show                     | Show running system information            |
| ip                       | Display IP information                     |
| detail                   | (Optional) Show detailed information       |
| summary                  | (Optional) Show summarized information     |
| prefix-list              | List IP prefix lists                       |
| <i>ipv4-pfl-name</i>     | (Optional) Name of prefix-list             |
| <i>ipv4-pfl-cfg-name</i> | (Optional) Known prefix-list name          |
| seq                      | Sequence number                            |
| <i>seq-no</i>            | Sequence number                            |
| <i>prefix</i>            | IP prefix network/length, e.g., 35.0.0.0/8 |
| first-match              | (Optional) Find the first match            |
| longer                   | (Optional) Find the more specific entries  |
| <i>__readonly__</i>      | (Optional)                                 |
| TABLE_ip_pfl             | (Optional)                                 |
| <i>name</i>              | (Optional)                                 |
| <i>seq</i>               | (Optional)                                 |
| <i>action</i>            | (Optional)                                 |
| <i>rule</i>              | (Optional)                                 |

## Command Mode

- /exec

## show ip process

```
show ip process [ api ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ [ TABLE_ip_pro_vrf
[ { <pro-cntxt-name> <pro-cntxt-id> <pro-base-tid> <pro-auto-disc> <pro-atuo-add> <pro-null-bcast>
<auto-punt-bcast> <static-disc> <static-def-route> <ip-unreach> } ] [ TABLE_pro_api [ <api-vrf>
<api-cntxt-id> <api-base-tid> <api-ip-addr> <api-rtr-id-iod> ] ] [ TABLE_iod [ { <entry-iod> } ] ] [
TABLE_local_addr [ { <local-addr> } ] ] ] [ TABLE_ip_pro_all { <all-pro-cntxt-name> <all-pro-cntxt-id>
} ] ]
```

### Syntax Description

|                         |  |
|-------------------------|--|
| show                    | Show running system information        |
| ip                      | Display IP information                 |
| process                 | Display IP global information          |
| api                     | (Optional) Show api values             |
| vrf                     | (Optional) Display per-VRF information |
| all                     | (Optional) Display all VRFs            |
| <i>vrf-name</i>         | (Optional) VRF name                    |
| <i>vrf-known-name</i>   | (Optional) Known VRF name              |
| <i>__readonly__</i>     | (Optional)                             |
| TABLE_ip_pro_vrf        | (Optional)                             |
| <i>pro-cntxt-name</i>   | (Optional)                             |
| <i>pro-cntxt-id</i>     | (Optional)                             |
| <i>pro-base-tid</i>     | (Optional)                             |
| <i>pro-auto-disc</i>    | (Optional)                             |
| <i>pro-atuo-add</i>     | (Optional)                             |
| <i>pro-null-bcast</i>   | (Optional)                             |
| <i>auto-punt-bcast</i>  | (Optional)                             |
| <i>static-disc</i>      | (Optional)                             |
| <i>static-def-route</i> | (Optional)                             |
| <i>ip-unreach</i>       | (Optional)                             |
| TABLE_pro_api           | (Optional)                             |
| <i>api-vrf</i>          | (Optional)                             |



|                           |            |
|---------------------------|------------|
| <i>api-cntxt-id</i>       | (Optional) |
| <i>api-base-tid</i>       | (Optional) |
| <i>api-ip-addr</i>        | (Optional) |
| <i>api-rtr-id-iod</i>     | (Optional) |
| TABLE_iod                 | (Optional) |
| <i>entry-iod</i>          | (Optional) |
| TABLE_local_addr          | (Optional) |
| <i>local-addr</i>         | (Optional) |
| TABLE_ip_pro_all          | (Optional) |
| <i>all-pro-cntxt-name</i> | (Optional) |
| <i>all-pro-cntxt-id</i>   | (Optional) |

**Command Mode**

- /exec

# show ip rip

```
show { ipv6 | ip } rip [ instance <inst> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__
TABLE_inst <inst-name> TABLE_vrf <vrf> <port> <mcast-grp> <admin-dist> <update-tmr> <expire-tmr>
<garbage-tmr> <def-metric> <max-paths> <def-rt-distrib> <def-distrib-always> <process-disabled>
<out-of-mem> [ TABLE_afi <af> { TABLE_interface <if-name> } TABLE_redistrib <redistributing> {
TABLE_clients <pibname> <policy> } ] ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ipv6                  | Display IPv6 information                    |
| ip                    | Display IP information                      |
| rip                   | Display RIP routing protocol status         |
| instance              | (Optional) Process ID                       |
| <i>inst</i>           | (Optional) Process ID                       |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| __readonly__          | (Optional)                                  |
| TABLE_inst            | (Optional)                                  |
| <i>inst-name</i>      | (Optional)                                  |
| TABLE_vrf             | (Optional)                                  |
| <i>vrf</i>            | (Optional)                                  |
| <i>port</i>           | (Optional)                                  |
| <i>mcast-grp</i>      | (Optional)                                  |
| <i>admin-dist</i>     | (Optional)                                  |
| <i>update-tmr</i>     | (Optional)                                  |
| <i>expire-tmr</i>     | (Optional)                                  |
| <i>garbage-tmr</i>    | (Optional)                                  |
| <i>def-metric</i>     | (Optional)                                  |
| <i>max-paths</i>      | (Optional)                                  |

|                           |            |
|---------------------------|------------|
| <i>def-rt-distrib</i>     | (Optional) |
| <i>def-distrib-always</i> | (Optional) |
| <i>process-disabled</i>   | (Optional) |
| <i>out-of-mem</i>         | (Optional) |
| TABLE_afi                 | (Optional) |
| <i>af</i>                 | (Optional) |
| TABLE_interface           | (Optional) |
| <i>if-name</i>            | (Optional) |
| TABLE_redistrib           | (Optional) |
| <i>redistributing</i>     | (Optional) |
| TABLE_clients             | (Optional) |
| <i>pidname</i>            | (Optional) |
| <i>policy</i>             | (Optional) |

**Command Mode**

- /exec

## show ip rip interface

```
show { ipv6 | ip } rip [ instance <inst> ] interface [ <interface> ] [ detail ] [ vrf { <vrf-name> |
<vrf-known-name> | all } ] [ __readonly__ TABLE_inst <inst-name> TABLE_vrf <vrf> [ TABLE_inter
<if-name> <if-status> <protocol-up> <local-only> <no-addr-conf> <if-addr> <if-mask> <if-metric>
<poison-reverse> <if-passive> <route-dist-filter> <in-policy> <out-policy> [ { TABLE_auth <auth-ena>
<auth-type> <auth-keychain> } ] [ TABLE_detail <import-routes> <periodic-updates> <trigger-updates>
<out-mcast-request> <out-ucast-update> <out-ucast-request> <in-mcast-update> <in-mcast-request>
<in-ucast-update> <in-ucast-request> <bad-pkt> <bad-route> ] ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ipv6                  | Display IPv6 information                    |
| ip                    | Display IP information                      |
| rip                   | Display RIP routing protocol status         |
| instance              | (Optional) Process ID                       |
| <i>inst</i>           | (Optional) Process ID                       |
| interface             | RIP interface                               |
| <i>interface</i>      | (Optional) RIP interface                    |
| detail                | (Optional) Detailed information             |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| <i>__readonly__</i>   | (Optional)                                  |
| TABLE_inst            | (Optional)                                  |
| <i>inst-name</i>      | (Optional)                                  |
| TABLE_vrf             | (Optional)                                  |
| <i>vrf</i>            | (Optional)                                  |
| TABLE_inter           | (Optional)                                  |
| <i>if-name</i>        | (Optional)                                  |
| <i>if-status</i>      | (Optional)                                  |
| <i>protocol-up</i>    | (Optional)                                  |

|                          |            |
|--------------------------|------------|
| <i>local-only</i>        | (Optional) |
| <i>no-addr-conf</i>      | (Optional) |
| <i>if-addr</i>           | (Optional) |
| <i>if-mask</i>           | (Optional) |
| <i>if-metric</i>         | (Optional) |
| <i>poison-reverse</i>    | (Optional) |
| <i>if-passive</i>        | (Optional) |
| <i>route-dist-filter</i> | (Optional) |
| <i>in-policy</i>         | (Optional) |
| <i>out-policy</i>        | (Optional) |
| TABLE_auth               | (Optional) |
| <i>auth-ena</i>          | (Optional) |
| <i>auth-type</i>         | (Optional) |
| <i>auth-keychain</i>     | (Optional) |
| TABLE_detail             | (Optional) |
| <i>import-routes</i>     | (Optional) |
| <i>periodic-updates</i>  | (Optional) |
| <i>trigger-updates</i>   | (Optional) |
| <i>out-mcast-request</i> | (Optional) |
| <i>out-ucast-update</i>  | (Optional) |
| <i>out-ucast-request</i> | (Optional) |
| <i>in-mcast-update</i>   | (Optional) |
| <i>in-mcast-request</i>  | (Optional) |
| <i>in-ucast-update</i>   | (Optional) |
| <i>in-ucast-request</i>  | (Optional) |
| <i>bad-pkt</i>           | (Optional) |
| <i>bad-route</i>         | (Optional) |

**Command Mode**

- /exec

# show ip rip memory

```
show { ipv6 | ip } rip [ instance <inst> ] memory [ __readonly__ TABLE_inst <inst-name> <type> <size>
<count> <hwm> <slab> <overhead> <total> TABLE_total <total-overhead> <total-total> ]
```

## Syntax Description

|                       |                                      |
|-----------------------|--------------------------------------|
| show                  | Show running system information      |
| ip                    | Display IP information               |
| ipv6                  | Display IPv6 information             |
| rip                   | Display RIP status and configuration |
| instance              | (Optional) Process ID                |
| <i>inst</i>           | (Optional) Process ID                |
| memory                | Display RIP memory usage information |
| <i>__readonly__</i>   | (Optional)                           |
| TABLE_inst            | (Optional)                           |
| <i>inst-name</i>      | (Optional)                           |
| <i>type</i>           | (Optional)                           |
| <i>size</i>           | (Optional)                           |
| <i>count</i>          | (Optional)                           |
| <i>hwm</i>            | (Optional)                           |
| <i>slab</i>           | (Optional)                           |
| <i>overhead</i>       | (Optional)                           |
| <i>total</i>          | (Optional)                           |
| TABLE_total           | (Optional)                           |
| <i>total-overhead</i> | (Optional)                           |
| <i>total-total</i>    | (Optional)                           |

## Command Mode

- /exec

# show ip rip neighbor

```
show { ipv6 | ip } rip [ instance <inst> ] neighbor [ <interface> ] [ vrf { <vrf-name> | <vrf-known-name> |
all } ] [ __readonly__ TABLE_inst <inst-name> TABLE_vrf <vrf> <numberof-adj> <dead-timer-seconds>
{ TABLE_adj <adj-addr> <if-name> <last-response-sent> <last-response-rcvd> <last-request-sent>
<last-request-rcvd> <last-response-sent-state> <last-response-rcvd-state> <last-request-sent-state>
<last-request-rcvd-state> <in-bad-packets> <in-bad-routes> } ]
```

## Syntax Description

|                                 |   |
|---------------------------------|---|
| show                            | Show running system information             |
| ipv6                            | Display IPv6 information                    |
| ip                              | Display IP information                      |
| rip                             | Display RIP status and configuration        |
| instance                        | (Optional) Process ID                       |
| <i>inst</i>                     | (Optional) Process ID                       |
| neighbor                        | RIP neighbor                                |
| <i>interface</i>                | (Optional) RIP interface                    |
| vrf                             | (Optional) Display per-VRF information      |
| <i>vrf-name</i>                 | (Optional) VRF name                         |
| <i>vrf-known-name</i>           | (Optional) Known VRF name                   |
| all                             | (Optional) Display information for all VRFs |
| <i>__readonly__</i>             | (Optional)                                  |
| TABLE_inst                      | (Optional)                                  |
| <i>inst-name</i>                | (Optional)                                  |
| TABLE_vrf                       | (Optional)                                  |
| <i>vrf</i>                      | (Optional)                                  |
| <i>numberof-adj</i>             | (Optional)                                  |
| <i>dead-timer-seconds</i>       | (Optional)                                  |
| TABLE_adj                       | (Optional)                                  |
| <i>adj-addr</i>                 | (Optional)                                  |
| <i>if-name</i>                  | (Optional)                                  |
| <i>last-response-sent-state</i> | (Optional)                                  |

|                                 |            |
|---------------------------------|------------|
| <i>last-response-sent</i>       | (Optional) |
| <i>last-response-rcvd-state</i> | (Optional) |
| <i>last-response-rcvd</i>       | (Optional) |
| <i>last-request-sent-state</i>  | (Optional) |
| <i>last-request-sent</i>        | (Optional) |
| <i>last-request-rcvd-state</i>  | (Optional) |
| <i>last-request-rcvd</i>        | (Optional) |
| <i>in-bad-packets</i>           | (Optional) |
| <i>in-bad-routes</i>            | (Optional) |

**Command Mode**

- /exec



# show ip rip policy statistics redistribute

```
show ip rip [ instance <inst> ] policy statistics redistribute { bgp <as> | { eigrp | isis | <src-rip> | ospf } <tag>
| direct | static } [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ TABLE_asn <asn> TABLE_vrf
<vrf> { TABLE_rmap <name> <action> <seq_num> [ { TABLE_cmd <command> <compare_count>
<match_count> } ] } <total_accept_count> <total_reject_count> ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                     |
| ip                    | Display IP information                              |
| rip                   | Display RIP routing protocol status                 |
| instance              | (Optional) Process ID                               |
| <i>inst</i>           | (Optional) Process ID                               |
| policy                | Policy related information                          |
| statistics            | Policy statistics                                   |
| redistribute          | RIP redistribute routes from other routing protocol |
| bgp                   | Border Gateway Protocol (BGP)                       |
| eigrp                 | Enhanced Interior Gateway Routing Protocol (EIGRP)  |
| <i>as</i>             | Autonomous system number                            |
| isis                  | Intermediate-to-intermediate (ISIS)                 |
| src-rip               | Routing Information Protocol (RIP)                  |
| ospf                  | Open Shortest Path First (OSPFv2)                   |
| <i>tag</i>            | Process tag   |
| direct                | Directly connected routes                           |
| static                | Static routes                                       |
| vrf                   | (Optional) Display per-VRF information              |
| <i>vrf-name</i>       | (Optional) VRF name                                 |
| <i>vrf-known-name</i> | (Optional) Known VRF name                           |
| all                   | (Optional) Display information for all VRFs         |
| __readonly__          | (Optional)  |
| TABLE_asn             | (Optional) AS number table                          |

|                           |   |
|---------------------------|---|
| <i>asn</i>                | (Optional) AS number                                      |
| TABLE_vrf                 | (Optional) VRF table                                      |
| <i>vrf</i>                | (Optional) VRF name                                       |
| TABLE_rmap                | (Optional) Routemap table                                 |
| <i>name</i>               | (Optional) Route-map Name                                 |
| <i>action</i>             | (Optional) Route-map action                               |
| <i>seq_num</i>            | (Optional) Sequence number of the rule in route-map       |
| TABLE_cmd                 | (Optional) Route-map command table                        |
| <i>command</i>            | (Optional) Route-map command                              |
| <i>compare_count</i>      | (Optional) Number of comparisons                          |
| <i>match_count</i>        | (Optional) Number of matches                              |
| <i>total_accept_count</i> | (Optional) Total number of packets accepted by the policy |
| <i>total_reject_count</i> | (Optional) Total number of packets rejected by the policy |

**Command Mode**

- /exec

# show ip rip route

```
show { ipv6 | ip } rip [ instance <inst> ] route [ { <ipv6-prefix> | <ip-prefix> } [ { longer-prefixes |
shorter-prefixes } ] ] [ summary ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ TABLE_inst
<inst-name> TABLE_vrf <vrf> [ { TABLE_route <best-route> <rt-prefix> <rt-mask> <rt-numnh> {
TABLE_nexthop <nh-direct> <nh-redistrib> <nh-addr> <nh-interface> <nh-metric> <nh-tag> <nh-state>
<nh-state-timer> } } ] [ { TABLE_summary <is-summary> <total-num-rts> <total-best-rts> <total-paths> {
TABLE_rtspermask <mask-length> <rts-per-mask> } } ] ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                 |
| ipv6                  | Display IPv6 information                        |
| ip                    | Display IP information                          |
| rip                   | Display RIP routing protocol status             |
| instance              | (Optional) Process ID                           |
| <i>inst</i>           | (Optional) Process ID                           |
| route                 | RIP routes                                      |
| summary               | (Optional) route counts                         |
| <i>ip-prefix</i>      | (Optional) Exact prefix                         |
| longer-prefixes       | (Optional) exact match and more specific routes |
| shorter-prefixes      | (Optional) exact match and less specific routes |
| vrf                   | (Optional) Display per-VRF information          |
| <i>vrf-name</i>       | (Optional) VRF name                             |
| <i>vrf-known-name</i> | (Optional) Known VRF name                       |
| all                   | (Optional) Display information for all VRFs     |
| __readonly__          | (Optional)                                      |
| TABLE_inst            | (Optional)                                      |
| <i>inst-name</i>      | (Optional)                                      |
| TABLE_vrf             | (Optional)                                      |
| <i>vrf</i>            | (Optional)                                      |
| TABLE_route           | (Optional)                                      |
| <i>best-route</i>     | (Optional)                                      |

|                       |            |
|-----------------------|------------|
| <i>rt-prefix</i>      | (Optional) |
| <i>rt-mask</i>        | (Optional) |
| <i>rt-numnh</i>       | (Optional) |
| TABLE_nexthop         | (Optional) |
| <i>nh-direct</i>      | (Optional) |
| <i>nh-redistrib</i>   | (Optional) |
| <i>nh-addr</i>        | (Optional) |
| <i>nh-interface</i>   | (Optional) |
| <i>nh-metric</i>      | (Optional) |
| <i>nh-tag</i>         | (Optional) |
| <i>nh-state</i>       | (Optional) |
| <i>nh-state-timer</i> | (Optional) |
| TABLE_summary         | (Optional) |
| <i>is-summary</i>     | (Optional) |
| <i>total-num-rts</i>  | (Optional) |
| <i>total-best-rts</i> | (Optional) |
| <i>total-paths</i>    | (Optional) |
| TABLE_rtspermask      | (Optional) |
| <i>mask-length</i>    | (Optional) |
| <i>rts-per-mask</i>   | (Optional) |

**Command Mode**

- /exec

## show ip rip statistics

```
show { ipv6 | ip } rip [ instance <inst> ] statistics [ * | <interface> ] [ __readonly__ TABLE_inst <inst-name>
TABLE_interface <if-name> <periodic-updates> <trigger-updates> <out-mcast-request> <out-ucast-update>
<out-ucast-request> <in-mcast-update> <in-mcast-request> <in-ucast-update> <in-ucast-request> <bad-pkt>
<bad-route> ]
```

### Syntax Description

|                          |  |
|--------------------------|--|
| show                     | Show running system information              |
| ipv6                     | Display IPv6 information                     |
| ip                       | Display IP information                       |
| rip                      | Display RIP status and configuration         |
| instance                 | (Optional) Process ID                        |
| <i>inst</i>              | (Optional) Process ID                        |
| statistics               | RIP statistics                               |
| <i>interface</i>         | (Optional) RIP interface                     |
| *                        | (Optional) RIP statistics for all interfaces |
| __readonly__             | (Optional)                                   |
| TABLE_inst               | (Optional)                                   |
| <i>inst-name</i>         | (Optional)                                   |
| TABLE_interface          | (Optional)                                   |
| <i>if-name</i>           | (Optional)                                   |
| <i>periodic-updates</i>  | (Optional)                                   |
| <i>trigger-updates</i>   | (Optional)                                   |
| <i>out-mcast-request</i> | (Optional)                                   |
| <i>out-ucast-update</i>  | (Optional)                                   |
| <i>out-ucast-request</i> | (Optional)                                   |
| <i>in-mcast-update</i>   | (Optional)                                   |
| <i>in-mcast-request</i>  | (Optional)                                   |
| <i>in-ucast-update</i>   | (Optional)                                   |
| <i>in-ucast-request</i>  | (Optional)                                   |

|                  |            |
|------------------|------------|
| <i>bad-pkt</i>   | (Optional) |
| <i>bad-route</i> | (Optional) |

**Command Mode**

- /exec

# show ip route

```
show ip route [ ip | ipv4 ] [ unicast ] [ topology <topology-name> ] [ l3vm-info ] [ rpf ] [ <ip-addr> | {
<ip-prefix> [ { longer-prefixes | shorter-prefixes } ] } ] [ { <protocol> [ all ] } | { next-hop <next-hop> |
next-hop-v6 <next-hop-v6> } | { interface <interface> } | { updated { [ since <stime> ] [ until <utime> ] } }
] + [ summary | detail ] [ vrf { <vrf-name> | <vrf-known-name> | <vrf-all> } ] [ __readonly__ TABLE_vrf
<vrf-name-out> TABLE_addrf <addrf> [ TABLE_prefix <ipprefix> <ucast-nhops> <mcast-nhops> <attached>
TABLE_path [ <ipnexthop> ] [ <ifname> ] <uptime> <pref> <metric> <clientname> [ <type> ] [ <tag> ] [
<stale> ] [ <unres> ] [ <hidden> ] [ <stale-label> ] [ <ubest> ] [ <mbest> ] ] [ TABLE_summary <routes>
<paths> [ <multicast_paths> ] [ TABLE_unicast [ <clientnameuni> ] [ <best-paths> ] [ <backup-paths> ] ] [
TABLE_multicast [ <clientnamemulti> ] [ <best-paths> ] [ <backup-paths> ] ] [ TABLE_route_count [
<mask_len> ] [ <count> ] ] ] ]
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                                    |
| ip                    | Display IP information   |
| route                 | Display routing information  |
| vrf                   | (Optional) Display per-VRF information                             |
| <i>vrf-name</i>       | (Optional) VRF name  |
| <i>vrf-known-name</i> | (Optional) Known VRF name  |
| vrf-all               | (Optional) Display information for all VRFs                        |
| ipv4                  | (Optional) Display IP information                                  |
| unicast               | (Optional) Display unicast information                             |
| topology              | (Optional) Display per-topology information                        |
| <i>topology-name</i>  | (Optional) topology name   |
| l3vm-info             | (Optional) Display corresponding L3VM information                  |
| rpf                   | (Optional) Display RPF information for multicast source            |
| <i>ip-addr</i>        | (Optional) Display single route longest match lookup               |
| <i>ip-prefix</i>      | (Optional) Display single exact match route                        |
| longer-prefixes       | (Optional) Display matching routes with mask-lengths $\geq$ prefix |
| shorter-prefixes      | (Optional) Display matching routes with mask-lengths $\leq$ prefix |
| <i>protocol</i>       | (Optional) Display routes for protocol (or route type)             |
| all                   | (Optional) Display routes for protocol for backup next-hops too    |
| next-hop              | (Optional) Display routes with this next-hop only                  |

|                     |   |
|---------------------|---|
| <i>next-hop</i>     | (Optional) Next hop address                                 |
| <i>next-hop-v6</i>  | (Optional) Display routes with this V6 next-hop only        |
| <i>interface</i>    | (Optional) Display routes with this output interface only   |
| <i>interface</i>    | (Optional) Interface Name                                   |
| <i>updated</i>      | (Optional) Display routes filtered by last updated time     |
| <i>since</i>        | (Optional) Display those routes updated since this time     |
| <i>stime</i>        | (Optional) Since this date/time [[CC]YY-][MM-DD-]HH:MM[:SS] |
| <i>until</i>        | (Optional) Display those routes updated until this time     |
| <i>utime</i>        | (Optional) Until this date/time [[CC]YY-][MM-DD-]HH:MM[:SS] |
| <i>summary</i>      | (Optional) Display route counts                             |
| <i>detail</i>       | (Optional) Display routes in full detail                    |
| <i>__readonly__</i> | (Optional)  |
| <i>TABLE_vrf</i>    | (Optional)  |
| <i>vrf-name-out</i> | (Optional)  |
| <i>TABLE_addrf</i>  | (Optional)  |
| <i>addrf</i>        | (Optional)  |
| <i>TABLE_prefix</i> | (Optional)  |
| <i>ipprefix</i>     | (Optional)  |
| <i>ucast-nhops</i>  | (Optional)  |
| <i>mcast-nhops</i>  | (Optional)  |
| <i>attached</i>     | (Optional)  |
| <i>TABLE_path</i>   | (Optional)  |
| <i>ipnexthop</i>    | (Optional)  |
| <i>ifname</i>       | (Optional)  |
| <i>uptime</i>       | (Optional)  |
| <i>pref</i>         | (Optional)  |
| <i>metric</i>       | (Optional)  |
| <i>clientname</i>   | (Optional)  |
| <i>type</i>         | (Optional)  |



|                        |            |
|------------------------|------------|
| <i>tag</i>             | (Optional) |
| <i>stale</i>           | (Optional) |
| <i>unres</i>           | (Optional) |
| <i>hidden</i>          | (Optional) |
| <i>stale-label</i>     | (Optional) |
| <i>ubest</i>           | (Optional) |
| <i>mbest</i>           | (Optional) |
| TABLE_summary          | (Optional) |
| <i>routes</i>          | (Optional) |
| <i>paths</i>           | (Optional) |
| <i>multicast_paths</i> | (Optional) |
| TABLE_unicast          | (Optional) |
| <i>clientnameuni</i>   | (Optional) |
| <i>best-paths</i>      | (Optional) |
| <i>backup-paths</i>    | (Optional) |
| TABLE_multicast        | (Optional) |
| <i>clientnamemulti</i> | (Optional) |
| <i>best-paths</i>      | (Optional) |
| <i>backup-paths</i>    | (Optional) |
| TABLE_route_count      | (Optional) |
| <i>mask_len</i>        | (Optional) |
| <i>count</i>           | (Optional) |

**Command Mode**

- /exec

# show ip router-id

```
show ip router-id [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information        |
| ip                    | Display IP information                 |
| router-id             | Display IP router identification       |
| vrf                   | (Optional) Display per-VRF information |
| all                   | (Optional) Display all VRFs            |
| <i>vrf-name</i>       | (Optional) VRF name                    |
| <i>vrf-known-name</i> | (Optional) Known VRF name              |

## Command Mode

- /exec

# show ip rsvp

```
show ip rsvp [ __readonly__ [ <sup-state> <start-type> <restart-type> <ha-ena> <gr-ena> <hst-ena>
<glb-router-id> <psr-ena> <local-epoch> ] [ TABLE_clients <clnt-name> <clnt-sap> <clnt-type>
<clnt-batch-time> [ <clnt-lxsb> ] ] [ <bundle-ena> <bundle-time> <bundle-maxsz> ] [ <refresh-intvl>
<refresh-miss> ] [ <refred-ena> <rr-init-rexmit-delay> <rr-rapid-rexmit-ena> <rr-ack-delay> ] [ <rate-limit-ena>
<rate-limit-cap> <rate-limit-pace-intvl> ] [ <gr-tmr> [ <gr-tmr-expiry> ] ] [ <auth-ena> [ <key-src> ] [ <digest>
] [ <seq-winsize> ] [ <challenge> ] [ <lifetime> ] ] ]
```

## Syntax Description

|                             |                                 |
|-----------------------------|---------------------------------|
| show                        | Show running system information |
| ip                          | Display IP information          |
| rsvp                        | Display RSVP status             |
| <i>__readonly__</i>         | (Optional)                      |
| <i>sup-state</i>            | (Optional)                      |
| <i>start-type</i>           | (Optional)                      |
| <i>restart-type</i>         | (Optional)                      |
| <i>ha-ena</i>               | (Optional)                      |
| <i>gr-ena</i>               | (Optional)                      |
| <i>hst-ena</i>              | (Optional)                      |
| <i>glb-router-id</i>        | (Optional)                      |
| <i>psr-ena</i>              | (Optional)                      |
| <i>local-epoch</i>          | (Optional)                      |
| <i>bundle-ena</i>           | (Optional)                      |
| <i>bundle-time</i>          | (Optional)                      |
| <i>bundle-maxsz</i>         | (Optional)                      |
| <i>refresh-intvl</i>        | (Optional)                      |
| <i>refresh-miss</i>         | (Optional)                      |
| <i>refred-ena</i>           | (Optional)                      |
| <i>rr-rapid-rexmit-ena</i>  | (Optional)                      |
| <i>rr-init-rexmit-delay</i> | (Optional)                      |
| <i>rr-ack-delay</i>         | (Optional)                      |

|                              |            |
|------------------------------|------------|
| <i>rate-limit-ena</i>        | (Optional) |
| <i>rate-limit-cap</i>        | (Optional) |
| <i>rate-limit-pace-intvl</i> | (Optional) |
| <i>gr-tmr</i>                | (Optional) |
| <i>gr-tmr-expiry</i>         | (Optional) |
| <i>auth-ena</i>              | (Optional) |
| <i>key-src</i>               | (Optional) |
| <i>digest</i>                | (Optional) |
| <i>seq-winsize</i>           | (Optional) |
| <i>challenge</i>             | (Optional) |
| <i>lifetime</i>              | (Optional) |
| TABLE_clients                | (Optional) |
| <i>clnt-name</i>             | (Optional) |
| <i>clnt-sap</i>              | (Optional) |
| <i>clnt-type</i>             | (Optional) |
| <i>clnt-batch-time</i>       | (Optional) |
| <i>clnt-lxsb</i>             | (Optional) |

**Command Mode**

- /exec

## show ip sla application

```
show ip sla application [ __readonly__ <version> [ <line-length> ] <type-name> <feature-name>
<lowmemorymark> <max-entries> <probe-cap> <entries-config> <entries-active> <entries-pending>
<entries-inactive> <last-change-time> <rttMonApplReset> [ <rttMonApplTimeOfLastSet> ] ]
```

### Syntax Description

|                                |                               |
|--------------------------------|-------------------------------|
| show                           |                               |
| ip                             |                               |
| sla                            | Service Level Agreement (SLA) |
| application                    | IP SLAs Application           |
| <i>__readonly__</i>            | (Optional)                    |
| <i>version</i>                 | (Optional)                    |
| <i>line-length</i>             | (Optional)                    |
| <i>type-name</i>               | (Optional)                    |
| <i>feature-name</i>            | (Optional)                    |
| <i>lowmemorymark</i>           | (Optional)                    |
| <i>max-entries</i>             | (Optional)                    |
| <i>probe-cap</i>               | (Optional)                    |
| <i>entries-config</i>          | (Optional)                    |
| <i>entries-active</i>          | (Optional)                    |
| <i>entries-pending</i>         | (Optional)                    |
| <i>entries-inactive</i>        | (Optional)                    |
| <i>last-change-time</i>        | (Optional)                    |
| <i>rttMonApplReset</i>         | (Optional) Appl Reset         |
| <i>rttMonApplTimeOfLastSet</i> | (Optional)                    |

### Command Mode

- /exec

# show ip sla configuration

```
show ip sla configuration [ <entry-num> ] [ __readonly__ { TABLE_configuration [ <index> ] [ <owner> ]
[ <tag> ] [ <timeout> ] [ <oper-type> ] [ <dest-ip> ] [ <source-int> ] [ <source-ip> ] [ <dest-port> ] [
<source-port> ] [ <dns-source-port> ] [ <traffic-class> ] [ <tos> ] [ <dns-name-server> ] [ <flow-label> ] [
<data-pattern> ] [ <switch-id> ] [ <profile-id> ] [ <interface> ] [ <packet-size> ] [ <packet-interval> ] [
<num-packets> ] [ <codec-type> ] [ <codec-num-packets> ] [ <codec-packet-size> ] [ <codec-packet-interval>
] [ <codec-adv-factor> ] [ <verify-data> ] [ <precision> ] [ <packet-priority> ] [ <ntp-sync-tolerance> ] [
<ntp-sync-toltype> ] [ <vrf-name> ] [ <control-enabled> ] [ <http-oper> ] [ <http-version> ] [ <url> ] [ <proxy>
] [ <raw-strings> ] [ <cache-control> ] [ <http-vrf-name> ] [ <http-owner> ] [ <http-tag> ] [ <http-timeout>
] [ <frequency> ] [ <secondary-freq-timeout> ] [ <secondary-freq-loss> ] [ <next-start-time> ] [
<group-scheduled> ] [ <randomly-scheduled> ] [ <low-frequency> ] [ <high-frequency> ] [ <life> ] [ <ageout>
] [ <recurring> ] [ <status-of-entry> ] [ <threshold> ] [ <hours> ] [ <buckets> ] [ <interval> ] [ <einterval> ]
[ <ebuckets> ] [ <lives> ] [ <hsbuckets> ] [ <filter> ] }
```

## Syntax Description

|                        |  |
|------------------------|--|
| show                   |  |
| ip                     |  |
| sla                    | Service Level Agreement (SLA)                    |
| configuration          | IP SLA configurtaion                             |
| <i>entry-num</i>       | (Optional) Entry Number                          |
| <i>__readonly__</i>    | (Optional)                                       |
| TABLE_configuration    | (Optional) show ip sla configuration information |
| <i>index</i>           | (Optional)                                       |
| <i>owner</i>           | (Optional)                                       |
| <i>tag</i>             | (Optional)                                       |
| <i>timeout</i>         | (Optional)                                       |
| <i>oper-type</i>       | (Optional)                                       |
| <i>dest-ip</i>         | (Optional)                                       |
| <i>source-int</i>      | (Optional)                                       |
| <i>source-ip</i>       | (Optional)                                       |
| <i>dest-port</i>       | (Optional)                                       |
| <i>source-port</i>     | (Optional)                                       |
| <i>dns-source-port</i> | (Optional)                                       |
| <i>traffic-class</i>   | (Optional)                                       |

|                              |            |
|------------------------------|------------|
| <i>tos</i>                   | (Optional) |
| <i>dns-name-server</i>       | (Optional) |
| <i>flow-label</i>            | (Optional) |
| <i>data-pattern</i>          | (Optional) |
| <i>profile-id</i>            | (Optional) |
| <i>switch-id</i>             | (Optional) |
| <i>interface</i>             | (Optional) |
| <i>packet-size</i>           | (Optional) |
| <i>packet-interval</i>       | (Optional) |
| <i>num-packets</i>           | (Optional) |
| <i>codec-type</i>            | (Optional) |
| <i>codec-num-packets</i>     | (Optional) |
| <i>codec-packet-size</i>     | (Optional) |
| <i>codec-packet-interval</i> | (Optional) |
| <i>codec-adv-factor</i>      | (Optional) |
| <i>verify-data</i>           | (Optional) |
| <i>precision</i>             | (Optional) |
| <i>packet-priority</i>       | (Optional) |
| <i>ntp-sync-tolerance</i>    | (Optional) |
| <i>ntp-sync-toctype</i>      | (Optional) |
| <i>vrf-name</i>              | (Optional) |
| <i>control-enabled</i>       | (Optional) |
| <i>http-oper</i>             | (Optional) |
| <i>http-version</i>          | (Optional) |
| <i>url</i>                   | (Optional) |
| <i>proxy</i>                 | (Optional) |
| <i>raw-strings</i>           | (Optional) |
| <i>cache-control</i>         | (Optional) |
| <i>http-vrf-name</i>         | (Optional) |

|                               |            |
|-------------------------------|------------|
| <i>http-owner</i>             | (Optional) |
| <i>http-tag</i>               | (Optional) |
| <i>http-timeout</i>           | (Optional) |
| <i>frequency</i>              | (Optional) |
| <i>secondary-freq-timeout</i> | (Optional) |
| <i>secondary-freq-loss</i>    | (Optional) |
| <i>next-start-time</i>        | (Optional) |
| <i>group-scheduled</i>        | (Optional) |
| <i>randomly-scheduled</i>     | (Optional) |
| <i>low-frequency</i>          | (Optional) |
| <i>high-frequency</i>         | (Optional) |
| <i>life</i>                   | (Optional) |
| <i>ageout</i>                 | (Optional) |
| <i>recurring</i>              | (Optional) |
| <i>status-of-entry</i>        | (Optional) |
| <i>threshold</i>              | (Optional) |
| <i>hours</i>                  | (Optional) |
| <i>buckets</i>                | (Optional) |
| <i>interval</i>               | (Optional) |
| <i>einterval</i>              | (Optional) |
| <i>ebuckets</i>               | (Optional) |
| <i>lives</i>                  | (Optional) |
| <i>hsbuckets</i>              | (Optional) |
| <i>filter</i>                 | (Optional) |

**Command Mode**

- /exec



# show ip sla enhanced-history collection-statistics

```
show ip sla enhanced-history collection-statistics [ <operation-number> [ interval <interval-in-secs> ] ] [
__readonly__ [ { TABLE_generic [ <entry-num> ] [ <aggregate-interval> ] [ { TABLE_bkt [ <bkt-index> ]
[ <agg-sti> ] [ <tgt-addr> ] [ <oper-type> ] [ <nofod> ] [ <nofot> ] [ <nofob> ] [ <nofonc> ] [ <nofoie> ] [
<nofose> ] [ <nofove> ] [ <ntp-state> ] [ <icpif> ] [ <mos-score> ] [ <rtt-values> ] [ <num-rtt> ] [ <rtt-avg>
] [ <rtt-min> ] [ <rtt-max> ] [ <rtt-sum> ] [ <rtt-sum2> ] [ <num-out-sync-rtt> ] [ <plsd> ] [ <plds> ] [ <pos>
] [ <pl-mia> ] [ <pla> ] [ <int-err> ] [ <busies> ] [ <pkt-skipped> ] [ <jitter-value-precision> ] [ <min-pos-sd>
] [ <max-pos-sd> ] [ <num-pos-sd> ] [ <sum-pos-sd> ] [ <sum2-pos-sd> ] [ <min-neg-sd> ] [ <max-neg-sd>
] [ <num-neg-sd> ] [ <sum-neg-sd> ] [ <sum2-neg-sd> ] [ <min-pos-ds> ] [ <max-pos-ds> ] [ <num-pos-ds>
] [ <sum-pos-ds> ] [ <sum2-pos-ds> ] [ <min-neg-ds> ] [ <max-neg-ds> ] [ <num-neg-ds> ] [ <sum-neg-ds>
] [ <sum2-neg-ds> ] [ <jitter-avg> ] [ <jitter-sd-avg> ] [ <jitter-ds-avg> ] [ <inter-jit-out> ] [ <inter-jit-in> ]
[ <ow-precision> ] [ <num-ow> ] [ <ow-min-sd> ] [ <ow-max-sd> ] [ <ow-sum-sd> ] [ <ow-sum2-sd> ] [
<ow-min-ds> ] [ <ow-max-ds> ] [ <ow-sum-ds> ] [ <ow-sum2-ds> ] [ <avg-ow-sd> ] [ <avg-ow-ds> ] } ] [
<outstring> } } ] ]
```

### Syntax Description

|                           |  |
|---------------------------|--|
| show                      |  |
| ip                        |  |
| sla                       | Service Level Agreement (SLA)              |
| enhanced-history          | IP SLAs Enhanced History                   |
| collection-statistics     | IP SLAs Collection Statistics              |
| <i>operation-number</i>   | (Optional) Entry Number                    |
| interval                  | (Optional) Aggregation Interval            |
| <i>interval-in-secs</i>   | (Optional) Interval in seconds             |
| <i>__readonly__</i>       | (Optional)                                 |
| TABLE_generic             | (Optional) Show History Information        |
| <i>entry-num</i>          | (Optional)                                 |
| <i>aggregate-interval</i> | (Optional)                                 |
| TABLE_bkt                 | (Optional) Show bucket History Information |
| <i>bkt-index</i>          | (Optional)                                 |
| <i>agg-sti</i>            | (Optional)                                 |
| <i>tgt-addr</i>           | (Optional)                                 |
| <i>oper-type</i>          | (Optional)                                 |
| <i>nofod</i>              | (Optional)                                 |

|                               |            |
|-------------------------------|------------|
| <i>nofot</i>                  | (Optional) |
| <i>nofob</i>                  | (Optional) |
| <i>nofonc</i>                 | (Optional) |
| <i>nofoie</i>                 | (Optional) |
| <i>nofose</i>                 | (Optional) |
| <i>nofove</i>                 | (Optional) |
| <i>ntp-state</i>              | (Optional) |
| <i>icpif</i>                  | (Optional) |
| <i>mos-score</i>              | (Optional) |
| <i>rtt-values</i>             | (Optional) |
| <i>num-rtt</i>                | (Optional) |
| <i>rtt-avg</i>                | (Optional) |
| <i>rtt-min</i>                | (Optional) |
| <i>rtt-max</i>                | (Optional) |
| <i>rtt-sum</i>                | (Optional) |
| <i>rtt-sum2</i>               | (Optional) |
| <i>num-out-sync-rtt</i>       | (Optional) |
| <i>plsd</i>                   | (Optional) |
| <i>plds</i>                   | (Optional) |
| <i>pos</i>                    | (Optional) |
| <i>pl-mia</i>                 | (Optional) |
| <i>pla</i>                    | (Optional) |
| <i>int-err</i>                | (Optional) |
| <i>busies</i>                 | (Optional) |
| <i>pkt-skipped</i>            | (Optional) |
| <i>jitter-value-precision</i> | (Optional) |
| <i>min-pos-sd</i>             | (Optional) |
| <i>max-pos-sd</i>             | (Optional) |
| <i>num-pos-sd</i>             | (Optional) |

|                      |            |
|----------------------|------------|
| <i>sum-pos-sd</i>    | (Optional) |
| <i>sum2-pos-sd</i>   | (Optional) |
| <i>min-neg-sd</i>    | (Optional) |
| <i>max-neg-sd</i>    | (Optional) |
| <i>num-neg-sd</i>    | (Optional) |
| <i>sum-neg-sd</i>    | (Optional) |
| <i>sum2-neg-sd</i>   | (Optional) |
| <i>min-pos-ds</i>    | (Optional) |
| <i>max-pos-ds</i>    | (Optional) |
| <i>num-pos-ds</i>    | (Optional) |
| <i>sum-pos-ds</i>    | (Optional) |
| <i>sum2-pos-ds</i>   | (Optional) |
| <i>min-neg-ds</i>    | (Optional) |
| <i>max-neg-ds</i>    | (Optional) |
| <i>num-neg-ds</i>    | (Optional) |
| <i>sum-neg-ds</i>    | (Optional) |
| <i>sum2-neg-ds</i>   | (Optional) |
| <i>jitter-avg</i>    | (Optional) |
| <i>jitter-sd-avg</i> | (Optional) |
| <i>jitter-ds-avg</i> | (Optional) |
| <i>inter-jit-out</i> | (Optional) |
| <i>inter-jit-in</i>  | (Optional) |
| <i>ow-precision</i>  | (Optional) |
| <i>num-ow</i>        | (Optional) |
| <i>ow-min-sd</i>     | (Optional) |
| <i>ow-max-sd</i>     | (Optional) |
| <i>ow-sum-sd</i>     | (Optional) |
| <i>ow-sum2-sd</i>    | (Optional) |
| <i>ow-min-ds</i>     | (Optional) |

|                   |            |
|-------------------|------------|
| <i>ow-max-ds</i>  | (Optional) |
| <i>ow-sum-ds</i>  | (Optional) |
| <i>ow-sum2-ds</i> | (Optional) |
| <i>avg-ow-sd</i>  | (Optional) |
| <i>avg-ow-ds</i>  | (Optional) |
| <i>oustring</i>   | (Optional) |

**Command Mode**

- /exec

## show ip sla enhanced-history distribution-statistics

```
show ip sla enhanced-history distribution-statistics [ <operation-number> [ interval <interval-in-secs> ] ] [
__readonly__ [ <hdr> ] [ { TABLE_generic [ <col1> ] [ <col2> ] [ <col3> } } ] ]
```

### Syntax Description

|                         |                                     |
|-------------------------|-------------------------------------|
| show                    |                                     |
| ip                      |                                     |
| sla                     | Service Level Agreement (SLA)       |
| enhanced-history        | IP SLAs Enhanced History            |
| distribution-statistics | IP SLAs Distribution Statistics     |
| <i>operation-number</i> | (Optional) Entry Number             |
| interval                | (Optional) Aggregation Interval     |
| <i>interval-in-secs</i> | (Optional) Interval in seconds      |
| <i>__readonly__</i>     | (Optional)                          |
| <i>hdr</i>              | (Optional)                          |
| TABLE_generic           | (Optional) Show History Information |
| <i>col1</i>             | (Optional)                          |
| <i>col2</i>             | (Optional)                          |
| <i>col3</i>             | (Optional)                          |

### Command Mode

- /exec

## show ip sla group schedule

```
show ip sla group schedule [ <group-operation-number> ] [ __readonly__ [ <entry-number> ] [ <probe-list>
] [ <num-probes> ] [ <sched-period> ] [ <mode> ] [ <low-freq> ] [ <high-freq> ] [ <freq> ] [ <snmp-status>
] [ <next-start-time> ] [ <life> ] [ <ageout> ] ]
```

### Syntax Description

|                               |  |
|-------------------------------|--|
| show                          |  |
| ip                            |  |
| sla                           | Service Level Agreement (SLA)          |
| group                         | IP SLAs Group Scheduling/Configuration |
| schedule                      | Group Scheduling                       |
| <i>group-operation-number</i> | (Optional) Group Schedule Entry Number |
| <i>__readonly__</i>           | (Optional)                             |
| <i>entry-number</i>           | (Optional)                             |
| <i>probe-list</i>             | (Optional)                             |
| <i>num-probes</i>             | (Optional)                             |
| <i>sched-period</i>           | (Optional)                             |
| <i>mode</i>                   | (Optional)                             |
| <i>low-freq</i>               | (Optional)                             |
| <i>high-freq</i>              | (Optional)                             |
| <i>freq</i>                   | (Optional)                             |
| <i>snmp-status</i>            | (Optional)                             |
| <i>next-start-time</i>        | (Optional)                             |
| <i>life</i>                   | (Optional)                             |
| <i>ageout</i>                 | (Optional)                             |

### Command Mode

- /exec

# show ip sla history

```
show ip sla history [ <operation-number> ] [ tabular | full | interval-statistics ] [ __readonly__ [ <outstring> ] ] [ { TABLE_generic [ <index> ] [ <life-index> ] [ <bucket-index> ] [ <col1> ] [ <addr> ] [ <dest-id> ] [ <nsr> ] [ <st> ] [ <latest-rtt> ] [ <latest-ret-code> ] [ <col2> ] } ] [ <error> ] ]
```

## Syntax Description

|                         |                                       |
|-------------------------|---------------------------------------|
| show                    |                                       |
| ip                      |                                       |
| sla                     | Service Level Agreement (SLA)         |
| history                 | IP SLAs History                       |
| <i>operation-number</i> | (Optional) Entry Number               |
| tabular                 | (Optional) Compact Output             |
| full                    | (Optional) Listed Output              |
| interval-statistics     | (Optional) Interval statistics output |
| <i>__readonly__</i>     | (Optional)                            |
| <i>outstring</i>        | (Optional)                            |
| TABLE_generic           | (Optional) Show History Information   |
| <i>index</i>            | (Optional)                            |
| <i>life-index</i>       | (Optional)                            |
| <i>bucket-index</i>     | (Optional)                            |
| <i>col1</i>             | (Optional)                            |
| <i>addr</i>             | (Optional)                            |
| <i>dest-id</i>          | (Optional)                            |
| <i>nsr</i>              | (Optional)                            |
| <i>st</i>               | (Optional)                            |
| <i>latest-rtt</i>       | (Optional)                            |
| <i>latest-ret-code</i>  | (Optional)                            |
| <i>col2</i>             | (Optional)                            |
| <i>error</i>            | (Optional)                            |

## Command Mode

- /exec



# show ip sla reaction-configuration

```
show ip sla reaction-configuration [ <entry-num> ] [ __readonly__ [ { TABLE_reaction <entry-number> [
<index> ] [ <reaction> ] [ <threshold-type> ] [ <rising-value> ] [ <falling-value> ] [ <threshold-countX> ] [
<threshold-countY> ] [ <action-type> ] [ <unconfigured> ] } ] ]
```

## Syntax Description

|                         |                                |
|-------------------------|--------------------------------|
| show                    |                                |
| ip                      |                                |
| sla                     | Service Level Agreement (SLA)  |
| reaction-configuration  | IP SLAs Reaction Configuration |
| <i>entry-num</i>        | (Optional) Entry Number        |
| <i>__readonly__</i>     | (Optional)                     |
| <i>TABLE_reaction</i>   | (Optional)                     |
| <i>entry-number</i>     | (Optional)                     |
| <i>index</i>            | (Optional)                     |
| <i>reaction</i>         | (Optional)                     |
| <i>threshold-type</i>   | (Optional)                     |
| <i>rising-value</i>     | (Optional)                     |
| <i>falling-value</i>    | (Optional)                     |
| <i>threshold-countX</i> | (Optional)                     |
| <i>threshold-countY</i> | (Optional)                     |
| <i>action-type</i>      | (Optional)                     |
| <i>unconfigured</i>     | (Optional)                     |

## Command Mode

- /exec

# show ip sla reaction-trigger

```
show ip sla reaction-trigger [ <entry-num> ] [ __readonly__ [ { TABLE_trigger <entry-number> [ <index>
] [ <target-entry> ] [ <snmp-status> ] [ <operational-state> ] [ <unconfigured> } } ] ] ]
```

## Syntax Description

|                          |                               |
|--------------------------|-------------------------------|
| show                     |                               |
| ip                       |                               |
| sla                      | Service Level Agreement (SLA) |
| reaction-trigger         | IP SLAs Reaction Trigger      |
| <i>entry-num</i>         | (Optional) Entry Number       |
| <i>__readonly__</i>      | (Optional)                    |
| TABLE_trigger            | (Optional)                    |
| <i>entry-number</i>      | (Optional)                    |
| <i>index</i>             | (Optional)                    |
| <i>target-entry</i>      | (Optional)                    |
| <i>snmp-status</i>       | (Optional)                    |
| <i>operational-state</i> | (Optional)                    |
| <i>unconfigured</i>      | (Optional)                    |

## Command Mode

- /exec

# show ip sla responder

```
show ip sla responder [ __readonly__ <rttMonAppIResponder> <gen-enabled> [ <ctrl-msg-count> ] [ <errors>
] [ { TABLE_recent [ <print-recent-hdr> ] [ <print-recent-err-hdr> ] [ <recent-addr> ] [ <recent-time> ] [
<recent-error> ] } ] <perm-enabled> [ { TABLE_permanent_udp [ <print-udp-hdr> ] [ <address> ] [ <port>
] } ] [ { TABLE_permanent_tcp [ <print-tcp-hdr> ] [ <address> ] [ <port> ] } ] ]
```

## Syntax Description

|                             |  |
|-----------------------------|--|
| show                        |  |
| ip                          |  |
| sla                         | Service Level Agreement (SLA)                          |
| responder                   | IP SLAs Responder Information                          |
| <i>__readonly__</i>         | (Optional)   |
| <i>rttMonAppIResponder</i>  | (Optional) rttMonAppIResponder                         |
| <i>gen-enabled</i>          | (Optional)   |
| <i>ctrl-msg-count</i>       | (Optional)   |
| <i>errors</i>               | (Optional)   |
| TABLE_recent                | (Optional) Show recent control message information     |
| <i>print-recent-hdr</i>     | (Optional)   |
| <i>print-recent-err-hdr</i> | (Optional)   |
| <i>recent-addr</i>          | (Optional)   |
| <i>recent-time</i>          | (Optional)   |
| <i>recent-error</i>         | (Optional)   |
| <i>perm-enabled</i>         | (Optional)   |
| TABLE_permanent_udp         | (Optional) Show UDP permanent port/address information |
| <i>print-udp-hdr</i>        | (Optional)   |
| <i>address</i>              | (Optional)   |
| <i>port</i>                 | (Optional)   |
| TABLE_permanent_tcp         | (Optional) Show TCP permanent port/address information |
| <i>print-tcp-hdr</i>        | (Optional)   |
| <i>address</i>              | (Optional)   |

|             |            |
|-------------|------------|
| <i>port</i> | (Optional) |
|-------------|------------|

**Command Mode**

- /exec



|                           |  |
|---------------------------|--|
| <i>top</i>                | (Optional)   |
| TABLE_detail              | (Optional) Show ip sla statistics detail information |
| <i>sti</i>                | (Optional)   |
| <i>operation-type</i>     | (Optional)   |
| <i>MINICPIF</i>           | (Optional)   |
| <i>MAXICPIF</i>           | (Optional)   |
| <i>MINMOS</i>             | (Optional)   |
| <i>MAXMOS</i>             | (Optional)   |
| <i>update-count</i>       | (Optional)   |
| <i>micro-accuracy</i>     | (Optional)   |
| <i>nano-accuracy</i>      | (Optional)   |
| <i>latest-RTT</i>         | (Optional)   |
| <i>latest-return-code</i> | (Optional)   |
| <i>latest-start-time</i>  | (Optional)   |
| <i>http-dns-rtt</i>       | (Optional)   |
| <i>http-tcp-rtt</i>       | (Optional)   |
| <i>http-ttfb</i>          | (Optional)   |
| <i>http-rtt</i>           | (Optional)   |
| <i>http-status</i>        | (Optional)   |
| <i>http-recvlen</i>       | (Optional)   |
| <i>http-bodysize</i>      | (Optional)   |
| <i>http-dns-timeout</i>   | (Optional)   |
| <i>http-tcp-timeout</i>   | (Optional)   |
| <i>http-t-timeout</i>     | (Optional)   |
| <i>http-dns-error</i>     | (Optional)   |
| <i>http-tcp-error</i>     | (Optional)   |
| <i>http-t-error</i>       | (Optional)   |
| <i>ntp-sync-state</i>     | (Optional)   |
| <i>rtt-count</i>          | (Optional)   |

|                           |            |
|---------------------------|------------|
| <i>rtt-min</i>            | (Optional) |
| <i>rtt-avg</i>            | (Optional) |
| <i>rtt-max</i>            | (Optional) |
| <i>lat-ow-samples</i>     | (Optional) |
| <i>sd-lat-ow-min</i>      | (Optional) |
| <i>sd-lat-ow-avg</i>      | (Optional) |
| <i>sd-lat-ow-max</i>      | (Optional) |
| <i>ds-lat-ow-min</i>      | (Optional) |
| <i>ds-lat-ow-avg</i>      | (Optional) |
| <i>ds-lat-ow-max</i>      | (Optional) |
| <i>sd-lat-sum</i>         | (Optional) |
| <i>sd-lat-sum2</i>        | (Optional) |
| <i>ds-lat-sum</i>         | (Optional) |
| <i>ds-lat-sum2</i>        | (Optional) |
| <i>sd-jitter-count</i>    | (Optional) |
| <i>ds-jitter-count</i>    | (Optional) |
| <i>sd-jitter-min</i>      | (Optional) |
| <i>sd-jitter-avg</i>      | (Optional) |
| <i>sd-jitter-max</i>      | (Optional) |
| <i>ds-jitter-min</i>      | (Optional) |
| <i>ds-jitter-avg</i>      | (Optional) |
| <i>ds-jitter-max</i>      | (Optional) |
| <i>sd-pos-jitter-min</i>  | (Optional) |
| <i>sd-pos-jitter-avg</i>  | (Optional) |
| <i>sd-pos-jitter-max</i>  | (Optional) |
| <i>sd-pos-jitter-num</i>  | (Optional) |
| <i>sd-pos-jitter-sum</i>  | (Optional) |
| <i>sd-pos-jitter-sum2</i> | (Optional) |
| <i>sd-neg-jitter-min</i>  | (Optional) |

|                           |            |
|---------------------------|------------|
| <i>sd-neg-jitter-avg</i>  | (Optional) |
| <i>sd-neg-jitter-max</i>  | (Optional) |
| <i>sd-neg-jitter-num</i>  | (Optional) |
| <i>sd-neg-jitter-sum</i>  | (Optional) |
| <i>sd-neg-jitter-sum2</i> | (Optional) |
| <i>ds-pos-jitter-min</i>  | (Optional) |
| <i>ds-pos-jitter-avg</i>  | (Optional) |
| <i>ds-pos-jitter-max</i>  | (Optional) |
| <i>ds-pos-jitter-num</i>  | (Optional) |
| <i>ds-pos-jitter-sum</i>  | (Optional) |
| <i>ds-pos-jitter-sum2</i> | (Optional) |
| <i>ds-neg-jitter-min</i>  | (Optional) |
| <i>ds-neg-jitter-avg</i>  | (Optional) |
| <i>ds-neg-jitter-max</i>  | (Optional) |
| <i>ds-neg-jitter-num</i>  | (Optional) |
| <i>ds-neg-jitter-sum</i>  | (Optional) |
| <i>ds-neg-jitter-sum2</i> | (Optional) |
| <i>pkt-unprocessed</i>    | (Optional) |
| <i>pkt-loss</i>           | (Optional) |
| <i>pkt-loss-per</i>       | (Optional) |
| <i>pkt-loss-min</i>       | (Optional) |
| <i>pkt-loss-max</i>       | (Optional) |
| <i>pkt-loss-inter-min</i> | (Optional) |
| <i>pkt-loss-inter-max</i> | (Optional) |
| <i>inter-jitter-out</i>   | (Optional) |
| <i>inter-jitter-in</i>    | (Optional) |
| <i>jitter-avg</i>         | (Optional) |
| <i>pkt-loss-sd</i>        | (Optional) |
| <i>pkt-loss-sd-per</i>    | (Optional) |



|                              |            |
|------------------------------|------------|
| <i>pkt-loss-sd-min</i>       | (Optional) |
| <i>pkt-loss-sd-max</i>       | (Optional) |
| <i>pkt-loss-sd-inter-min</i> | (Optional) |
| <i>pkt-loss-sd-inter-max</i> | (Optional) |
| <i>pkt-loss-ds</i>           | (Optional) |
| <i>pkt-loss-ds-per</i>       | (Optional) |
| <i>pkt-loss-ds-min</i>       | (Optional) |
| <i>pkt-loss-ds-max</i>       | (Optional) |
| <i>pkt-loss-ds-inter-min</i> | (Optional) |
| <i>pkt-loss-ds-inter-max</i> | (Optional) |
| <i>pkt-oos</i>               | (Optional) |
| <i>pkt-oos-sd</i>            | (Optional) |
| <i>pkt-oos-ds</i>            | (Optional) |
| <i>pkt-oos-both</i>          | (Optional) |
| <i>pkt-mia</i>               | (Optional) |
| <i>pkt-late</i>              | (Optional) |
| <i>pkt-skipped</i>           | (Optional) |
| <i>voice-icpif</i>           | (Optional) |
| <i>voice-mos</i>             | (Optional) |
| <i>dnobs</i>                 | (Optional) |
| <i>dmam</i>                  | (Optional) |
| <i>dtoo</i>                  | (Optional) |
| <i>dmin</i>                  | (Optional) |
| <i>dmax</i>                  | (Optional) |
| <i>pnobs</i>                 | (Optional) |
| <i>pmam</i>                  | (Optional) |
| <i>ptoo</i>                  | (Optional) |
| <i>pmin</i>                  | (Optional) |
| <i>pmax</i>                  | (Optional) |

|                         |                                   |
|-------------------------|-----------------------------------|
| <i>nnobs</i>            | (Optional)                        |
| <i>nmam</i>             | (Optional)                        |
| <i>ntoo</i>             | (Optional)                        |
| <i>nmin</i>             | (Optional)                        |
| <i>nmax</i>             | (Optional)                        |
| <i>oustring1</i>        | (Optional)                        |
| <i>oustring2</i>        | (Optional)                        |
| <i>nos</i>              | (Optional)                        |
| <i>nof</i>              | (Optional)                        |
| <i>noot</i>             | (Optional)                        |
| <i>nofo1</i>            | (Optional)                        |
| <i>nofo2</i>            | (Optional)                        |
| TABLE_br                | (Optional) Bin range related info |
| <i>br</i>               | (Optional)                        |
| <i>avg-lat</i>          | (Optional)                        |
| <i>potc</i>             | (Optional)                        |
| <i>noc-by-lat</i>       | (Optional)                        |
| <i>sortthigh-by-low</i> | (Optional)                        |
| <i>operot</i>           | (Optional)                        |
| <i>life-left</i>        | (Optional)                        |
| <i>oper-state</i>       | (Optional)                        |
| <i>reset-time</i>       | (Optional)                        |
| <i>nob</i>              | (Optional)                        |
| <i>bbh</i>              | (Optional)                        |
| <i>bbv</i>              | (Optional)                        |

**Command Mode**

- /exec

# show ip ssh source-interface

```
show ip ssh source-interface [ vrf { <vrf-name> | <vrf-known-name> } ] [ __readonly__ [ { TABLE_ipsshvrf
<vrfname> <ifname> } ] ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information              |
| ip                    | Display IP information                       |
| ssh                   | Display SSH client information               |
| source-interface      | Display source interface information         |
| vrf                   | (Optional) Display per-VRF information       |
| <i>vrf-name</i>       | (Optional) VRF name                          |
| <i>vrf-known-name</i> | (Optional) Known VRF name                    |
| <i>__readonly__</i>   | (Optional)                                   |
| TABLE_ipsshvrf        | (Optional) source interface of ssh given vrf |
| <i>vrfname</i>        | (Optional) vrfname                           |
| <i>ifname</i>         | (Optional) ifname                            |

## Command Mode

- /exec

# show ip ssh source-interface vrf all

```
show ip ssh source-interface vrf all [ __readonly__ [ { TABLE_ipssh <vrfname> <ifname> } ] ]
```

## Syntax Description

|                  |                                      |
|------------------|--------------------------------------|
| show             | Show running system information      |
| ip               | Display IP information               |
| ssh              | Display SSH client information       |
| source-interface | Display source interface information |
| vrf              | Display per-VRF information          |
| all              | Display entries for all vrfs         |
| __readonly__     | (Optional)                           |
| TABLE_ipssh      | (Optional) source interface of ssh   |
| <i>vrfname</i>   | (Optional) vrfname                   |
| <i>ifname</i>    | (Optional) ifname                    |

## Command Mode

- /exec

# show ip static-route

```
show ip static-route [ multicast ] [ internal ] [ track-table ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [
__readonly__ [ <count> <unres-count> ] [ TABLE_vrf_all { <cntxt_name> <cntxt_id> [ TABLE_each_vrf
{ <prefix_addr_msk> <nhop_addr_msk> <nhop_vrf_info> <nhop_intr_info> <urib_stat> [ <seg_id> ] [
<tunnel_id> <urib_encap_type> ] <nhop_urib_stat> [ <track_obj_num> <track_obj_state> ] } ] ] [
TABLE_multicast <multicast> ] [ TABLE_track-table ] [ TABLE_route <prefix> <masklen> <nhop>
<nhop-masklen> <intf> <real-nhop> <iod> <pref> <tag> <unres> ] ]
```

## Syntax Description

|                        |   |
|------------------------|---|
| show                   | Show running system information                                       |
| ip                     | Display IP information  |
| static-route           | Display configured static routes                                      |
| multicast              | (Optional) Display only multicast routes                              |
| internal               | (Optional) Display internal data structure info                       |
| track-table            | (Optional) Display track object details associated with static routes |
| vrf                    | (Optional) Display per-VRF information                                |
| all                    | (Optional) Display all VRFs   |
| <i>vrf-name</i>        | (Optional) VRF name   |
| <i>vrf-known-name</i>  | (Optional) Known VRF name   |
| <i>__readonly__</i>    | (Optional)  |
| TABLE_vrf_all          | (Optional)  |
| <i>cntxt_name</i>      | (Optional)  |
| <i>cntxt_id</i>        | (Optional)  |
| TABLE_each_vrf         | (Optional)  |
| <i>prefix_addr_msk</i> | (Optional)  |
| <i>nhop_addr_msk</i>   | (Optional)  |
| <i>nhop_vrf_info</i>   | (Optional)  |
| <i>nhop_intr_info</i>  | (Optional)  |
| <i>urib_stat</i>       | (Optional)  |
| <i>seg_id</i>          | (Optional)  |
| <i>tunnel_id</i>       | (Optional)  |

|                        |            |
|------------------------|------------|
| <i>urib_encap_type</i> | (Optional) |
| <i>nhop_urib_stat</i>  | (Optional) |
| <i>track_obj_num</i>   | (Optional) |
| <i>track_obj_state</i> | (Optional) |
| TABLE_multicast        | (Optional) |
| <i>multicast</i>       | (Optional) |
| TABLE_track-table      | (Optional) |
| TABLE_route            | (Optional) |
| <i>prefix</i>          | (Optional) |
| <i>masklen</i>         | (Optional) |
| <i>nhop</i>            | (Optional) |
| <i>nhop-masklen</i>    | (Optional) |
| <i>intf</i>            | (Optional) |
| <i>real-nhop</i>       | (Optional) |
| <i>iod</i>             | (Optional) |
| <i>pref</i>            | (Optional) |
| <i>tag</i>             | (Optional) |
| <i>unres</i>           | (Optional) |
| <i>count</i>           | (Optional) |
| <i>unres-count</i>     | (Optional) |

**Command Mode**

- /exec

# show ip stats

show ip stats

## Syntax Description

|       |                                 |
|-------|---------------------------------|
| show  | Show running system information |
| ip    | Display IP information          |
| stats | Display IP internal stats       |

## Command Mode

- /exec

## show ip telnet source-interface

```
show ip telnet source-interface [ vrf { <vrf-name> | <vrf-known-name> } ] [ __readonly__ [ {
TABLE_iptelnetvrf <vrfname> <ifname> } ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                 |
| ip                    | Display IP information                          |
| telnet                | Display telnet information                      |
| source-interface      | Display source interface information            |
| vrf                   | (Optional) Display per-VRF information          |
| <i>vrf-name</i>       | (Optional) VRF name                             |
| <i>vrf-known-name</i> | (Optional) Known VRF name                       |
| <i>__readonly__</i>   | (Optional)                                      |
| TABLE_iptelnetvrf     | (Optional) source interface of telnet given vrf |
| <i>vrfname</i>        | (Optional) vrfname                              |
| <i>ifname</i>         | (Optional) ifname                               |

### Command Mode

- /exec



## show ip telnet source-interface vrf all

```
show ip telnet source-interface vrf all [ __readonly__ [ { TABLE iptelnet <vrfname> <ifname> } ] ]
```

### Syntax Description

|                  |                                       |
|------------------|---------------------------------------|
| show             | Show running system information       |
| ip               | Display IP information                |
| telnet           | Display telnet information            |
| source-interface | Display source interface information  |
| vrf              | Display per-VRF information           |
| all              | Display entries for all vrfs          |
| __readonly__     | (Optional)                            |
| TABLE iptelnet   | (Optional) source interface of telnet |
| <i>vrfname</i>   | (Optional) vrfname                    |
| <i>ifname</i>    | (Optional) ifname                     |

### Command Mode

- /exec

## show ip tftp source-interface

```
show ip tftp source-interface [ vrf { <vrf-name> | <vrf-known-name> } ] [ __readonly__ [ { TABLE_iptftpvrf
<vrfname> <ifname> } ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information               |
| ip                    | Display IP information                        |
| tftp                  | Display TFTP client information               |
| source-interface      | Display source interface information          |
| vrf                   | (Optional) Display per-VRF information        |
| <i>vrf-name</i>       | (Optional) VRF name                           |
| <i>vrf-known-name</i> | (Optional) Known VRF name                     |
| <i>__readonly__</i>   | (Optional)                                    |
| TABLE_iptftpvrf       | (Optional) source interface of tftp given vrf |
| <i>vrfname</i>        | (Optional) vrfname                            |
| <i>ifname</i>         | (Optional) ifname                             |

### Command Mode

- /exec

# show ip tftp source-interface vrf all

```
show ip tftp source-interface vrf all [ __readonly__ [ { TABLE_iptftp <vrfname> <ifname> } ] ]
```

## Syntax Description

|                  |                                      |
|------------------|--------------------------------------|
| show             | Show running system information      |
| ip               | Display IP information               |
| tftp             | Display TFTP client information      |
| source-interface | Display source interface information |
| vrf              | Display per-VRF information          |
| all              | Display entries for all vrfs         |
| __readonly__     | (Optional)                           |
| TABLE_iptftp     | (Optional) source interface of tftp  |
| <i>vrfname</i>   | (Optional) vrfname                   |
| <i>ifname</i>    | (Optional) ifname                    |

## Command Mode

- /exec

## show ip traceroute source-interface

```
show ip traceroute source-interface [ vrf { <vrf-name> | <vrf-known-name> } ] [ __readonly__ [ {
TABLE_iptraceroutevrf <vrfname> <ifname> } ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information           |
| ip                    | Display IP information                    |
| traceroute            | Display traceroute client information     |
| source-interface      | Display source interface information      |
| vrf                   | (Optional) Display per-VRF information    |
| <i>vrf-name</i>       | (Optional) VRF name                       |
| <i>vrf-known-name</i> | (Optional) Known VRF name                 |
| <i>__readonly__</i>   | (Optional)                                |
| TABLE_iptraceroutevrf | (Optional) source interface of traceroute |
| <i>vrfname</i>        | (Optional) vrfname                        |
| <i>ifname</i>         | (Optional) ifname                         |

### Command Mode

- /exec

# show ip traceroute source-interface vrf all

```
show ip traceroute source-interface vrf all [ __readonly__ [ { TABLE_iptraceroute <vrfname> <ifname> } ] ]
```

## Syntax Description

|                    |   |
|--------------------|---|
| show               | Show running system information           |
| ip                 | Display IP information                    |
| traceroute         | Display traceroute client information     |
| source-interface   | Display source interface information      |
| vrf                | Display per-VRF information               |
| all                | Display entries for all vrfs              |
| __readonly__       | (Optional)                                |
| TABLE_iptraceroute | (Optional) source interface of traceroute |
| <i>vrfname</i>     | (Optional) vrfname                        |
| <i>ifname</i>      | (Optional) ifname                         |

## Command Mode

- /exec



|                                 |            |
|---------------------------------|------------|
| <i>vrf-name-out</i>             | (Optional) |
| TABLE_ip_soft_processed_traffic | (Optional) |
| TABLE_trans_and_reception       | (Optional) |
| <i>rcvd</i>                     | (Optional) |
| <i>sent</i>                     | (Optional) |
| <i>consumed</i>                 | (Optional) |
| <i>fwd-ucast</i>                | (Optional) |
| <i>fwd-mcast</i>                | (Optional) |
| <i>fwd-label</i>                | (Optional) |
| <i>ingress-mcecfwd</i>          | (Optional) |
| TABLE_opts                      | (Optional) |
| <i>opts-end</i>                 | (Optional) |
| <i>opts-nop</i>                 | (Optional) |
| <i>opts-bsec</i>                | (Optional) |
| <i>opts-loosesrc-route</i>      | (Optional) |
| <i>opts-timestamp</i>           | (Optional) |
| <i>opts-esec</i>                | (Optional) |
| <i>opts-record-route</i>        | (Optional) |
| <i>opts-ump</i>                 | (Optional) |
| <i>opts-stid</i>                | (Optional) |
| <i>opts-strsrc-route</i>        | (Optional) |
| <i>opts-alert</i>               | (Optional) |
| <i>opts-cipso</i>               | (Optional) |
| <i>opts-other</i>               | (Optional) |
| TABLE_errors                    | (Optional) |
| <i>bad-csum</i>                 | (Optional) |
| <i>too-small</i>                | (Optional) |
| <i>bad-ver</i>                  | (Optional) |
| <i>bad-hlen</i>                 | (Optional) |

|                             |            |
|-----------------------------|------------|
| <i>bad-len</i>              | (Optional) |
| <i>bad-dest</i>             | (Optional) |
| <i>bad-ttl</i>              | (Optional) |
| <i>cant-fwd</i>             | (Optional) |
| <i>out-drop</i>             | (Optional) |
| <i>bad-encap</i>            | (Optional) |
| <i>no-route</i>             | (Optional) |
| <i>no-proto</i>             | (Optional) |
| <i>bad-options</i>          | (Optional) |
| <i>vinci</i>                | (Optional) |
| <i>snoop</i>                | (Optional) |
| <i>svi</i>                  | (Optional) |
| <i>restart-recovery</i>     | (Optional) |
| <i>mbuf-fail</i>            | (Optional) |
| <i>bad-context</i>          | (Optional) |
| <i>rpf-drops</i>            | (Optional) |
| <i>bad-gw-mac</i>           | (Optional) |
| <i>ing-ips-option-fail</i>  | (Optional) |
| <i>nat-in-drop</i>          | (Optional) |
| <i>nat-out-drop</i>         | (Optional) |
| <i>ing-option-proc-fail</i> | (Optional) |
| <i>ing-mfrwd-fail</i>       | (Optional) |
| <i>ing-lisp-drop</i>        | (Optional) |
| <i>ing-lisp-decap-drop</i>  | (Optional) |
| <i>ing-lisp-encap-drop</i>  | (Optional) |
| <i>ing-lisp-encap</i>       | (Optional) |
| <i>ing-mfwd-copy-drop</i>   | (Optional) |
| <i>ing-ra-reass-drop</i>    | (Optional) |
| <i>ing-icmp-redirect</i>    | (Optional) |



|                                  |            |
|----------------------------------|------------|
| <i>ing-drop-ifmgr-init</i>       | (Optional) |
| <i>ing-drop-invl-d-filter</i>    | (Optional) |
| <i>ing-drop-invl-d-l2-msg</i>    | (Optional) |
| <i>ingress</i>                   | (Optional) |
| <i>egrees</i>                    | (Optional) |
| <i>directed_bdcast</i>           | (Optional) |
| TABLE_fragment                   | (Optional) |
| <i>frag</i>                      | (Optional) |
| <i>fragmented</i>                | (Optional) |
| <i>out-frag</i>                  | (Optional) |
| <i>frag-drop</i>                 | (Optional) |
| <i>cant-frag</i>                 | (Optional) |
| <i>reasm</i>                     | (Optional) |
| <i>frag-to</i>                   | (Optional) |
| TABLE_icmp_software_proc_traffic | (Optional) |
| TABLE_transmission               | (Optional) |
| <i>tx-redirect</i>               | (Optional) |
| <i>tx-unreach</i>                | (Optional) |
| <i>tx-echo-req</i>               | (Optional) |
| <i>tx-echo-reply</i>             | (Optional) |
| <i>tx-mask-req</i>               | (Optional) |
| <i>tx-mask-reply</i>             | (Optional) |
| <i>tx-info-req</i>               | (Optional) |
| <i>tx-info-reply</i>             | (Optional) |
| <i>tx-param-prob</i>             | (Optional) |
| <i>tx-source-quench</i>          | (Optional) |
| <i>tx-tstamp-req</i>             | (Optional) |
| <i>tx-tstamp-reply</i>           | (Optional) |
| <i>tx-time-exceeded</i>          | (Optional) |

|                               |            |
|-------------------------------|------------|
| <i>tx-router-solicit</i>      | (Optional) |
| <i>tx-router-advert</i>       | (Optional) |
| <i>out-drop-badlen</i>        | (Optional) |
| <i>encap-fail</i>             | (Optional) |
| <i>xmit-fail</i>              | (Optional) |
| <i>icmp-originate</i>         | (Optional) |
| <i>redirect-originate-req</i> | (Optional) |
| <i>originate-deny</i>         | (Optional) |
| <i>short-ip</i>               | (Optional) |
| <i>old-icmp</i>               | (Optional) |
| <i>error-drop</i>             | (Optional) |
| TABLE_reception               | (Optional) |
| <i>rx-redirect</i>            | (Optional) |
| <i>rx-unreach</i>             | (Optional) |
| <i>rx-echo-req</i>            | (Optional) |
| <i>rx-echo-reply</i>          | (Optional) |
| <i>rx-mask-req</i>            | (Optional) |
| <i>rx-mask-rep</i>            | (Optional) |
| <i>rx-info-req</i>            | (Optional) |
| <i>rx-info-reply</i>          | (Optional) |
| <i>rx-param-prob</i>          | (Optional) |
| <i>rx-source-quench</i>       | (Optional) |
| <i>rx-tstamp-req</i>          | (Optional) |
| <i>rx-tstamp-reply</i>        | (Optional) |
| <i>rx-time-exceeded</i>       | (Optional) |
| <i>rx-router-solicit</i>      | (Optional) |
| <i>rx-router-advert</i>       | (Optional) |
| <i>rx-format-errors</i>       | (Optional) |
| <i>rx-csum-errors</i>         | (Optional) |

|                                    |            |
|------------------------------------|------------|
| <i>lisp-processed</i>              | (Optional) |
| <i>lisp-noclient</i>               | (Optional) |
| <i>lisp-consumed</i>               | (Optional) |
| <i>icmp-replies</i>                | (Optional) |
| <i>icmp-reply-drop</i>             | (Optional) |
| <i>icmp-inactive-addr</i>          | (Optional) |
| TABLE_stat_last_never              | (Optional) |
| <i>stat-last-never</i>             | (Optional) |
| TABLE_rfc4293_ip_soft_proc_traffic | (Optional) |
| TABLE_rfc_reception                | (Optional) |
| <i>inrcv</i>                       | (Optional) |
| <i>inoctet</i>                     | (Optional) |
| <i>inhdrrr</i>                     | (Optional) |
| <i>innoroutes</i>                  | (Optional) |
| <i>inaddrerr</i>                   | (Optional) |
| <i>innoproto</i>                   | (Optional) |
| <i>intruncated</i>                 | (Optional) |
| <i>inforw</i>                      | (Optional) |
| <i>reasmreqds</i>                  | (Optional) |
| <i>reasmoks</i>                    | (Optional) |
| <i>reasmfails</i>                  | (Optional) |
| <i>indiscards</i>                  | (Optional) |
| <i>indelivers</i>                  | (Optional) |
| <i>inmcastpkts</i>                 | (Optional) |
| <i>inmcastbytes</i>                | (Optional) |
| <i>inbastpkts</i>                  | (Optional) |
| TABLE_rfc_transmission             | (Optional) |
| <i>tr-pkt-sent</i>                 | (Optional) |
| <i>tr-bytes-sent</i>               | (Optional) |

|                          |            |
|--------------------------|------------|
| <i>tr-out-req</i>        | (Optional) |
| <i>tr-outno-routes</i>   | (Optional) |
| <i>tr-out-frwdgrams</i>  | (Optional) |
| <i>tr-outdiscards</i>    | (Optional) |
| <i>tr-outfragreqds</i>   | (Optional) |
| <i>tr-outfragoks</i>     | (Optional) |
| <i>tr-outfragfails</i>   | (Optional) |
| <i>tr-outfragcreates</i> | (Optional) |
| <i>tr-outtransmits</i>   | (Optional) |
| <i>tr-bytes-sent-end</i> | (Optional) |
| <i>tr-outmcast-pkts</i>  | (Optional) |
| <i>tr-outmcast-bytes</i> | (Optional) |
| <i>tr-outbcastpkts</i>   | (Optional) |
| <i>tr-outbcastbytes</i>  | (Optional) |

**Command Mode**

- /exec

# show ip txlist list

```
show ip txlist { list | member }
```

## Syntax Description

|        |   |
|--------|---|
| show   | Show running system information         |
| ip     | Display IP information                  |
| txlist | Display IP txlist information           |
| list   | Display IP txlist main linkage          |
| member | Display IP txlist active member linkage |

## Command Mode

- /exec

# show ip udp relay

```
show ip udp relay [ __readonly__ [ <udp_relay_service_enable> <udp_relay_hdr> TABLE_default_ports
<port_name> <udp_relay_port_enable> ] [ <udp_ports_hdr> TABLE_ports <udp_port_num> ] [ <udp_intf_hdr>
TABLE_intf <udp_intf_idx> <udp_sub_bcast> <udp_objgrp> ] ]
```

## Syntax Description

|                                 |                                    |
|---------------------------------|------------------------------------|
| show                            | Show running system information    |
| ip                              | Show the IP features of the system |
| udp                             | Show items in UDP relay            |
| relay                           | UDP relay                          |
| <i>__readonly__</i>             | (Optional) Read only               |
| <i>udp_relay_service_enable</i> | (Optional)                         |
| <i>udp_relay_hdr</i>            | (Optional)                         |
| TABLE_default_ports             | (Optional)                         |
| <i>port_name</i>                | (Optional) UDP Port Name           |
| <i>udp_relay_port_enable</i>    | (Optional)                         |
| <i>udp_ports_hdr</i>            | (Optional)                         |
| TABLE_ports                     | (Optional)                         |
| <i>udp_port_num</i>             | (Optional)                         |
| <i>udp_intf_hdr</i>             | (Optional)                         |
| TABLE_intf                      | (Optional)                         |
| <i>udp_intf_idx</i>             | (Optional) UDP relay interfaces    |
| <i>udp_sub_bcast</i>            | (Optional)                         |
| <i>udp_objgrp</i>               | (Optional) Object-group            |

## Command Mode

- /exec

# show ip udp relay interface

```
show ip udp relay interface [ <intf_range> ] [ __readonly__ <udp_intf_hdr> [ TABLE_intf <udp_intf_idx>
<udp_sub_bcast> <udp_objgrp> ] ]
```

## Syntax Description

|                      |                                    |
|----------------------|------------------------------------|
| show                 | Show running system information    |
| ip                   | Show the IP features of the system |
| udp                  | Show items in UDP relay            |
| relay                | UDP relay                          |
| interface            | Interface ID                       |
| <i>intf_range</i>    | (Optional) interface               |
| <i>__readonly__</i>  | (Optional) Read only               |
| <i>udp_intf_hdr</i>  | (Optional)                         |
| TABLE_intf           | (Optional)                         |
| <i>udp_intf_idx</i>  | (Optional) UDP relay interfaces    |
| <i>udp_sub_bcast</i> | (Optional)                         |
| <i>udp_objgrp</i>    | (Optional) Object-group            |

## Command Mode

- /exec

## show ip udp relay object-group

```
show ip udp relay object-group [ <obj-grp-name> ] [ __readonly__ [ TABLE_objgrp_list [ <udp_objgrp> ]
[ TABLE_objgrp [ <host_addr> ] [ <net_addr> <net_mask> ] [ <prefix_addr> <prefix_len> ] ] <udp_intf_hdr>
[ TABLE_intf <udp_intf_idx> ] ] ]
```

### Syntax Description

|                     |                                    |
|---------------------|------------------------------------|
| show                | Show running system information    |
| ip                  | Show the IP features of the system |
| udp                 | Show items in UDP relay            |
| relay               | UDP relay                          |
| object-group        | Object-group                       |
| <i>obj-grp-name</i> | (Optional) object-group name       |
| <i>__readonly__</i> | (Optional) Read only               |
| TABLE_objgrp_list   | (Optional)                         |
| <i>udp_objgrp</i>   | (Optional) Object-group            |
| TABLE_objgrp        | (Optional)                         |
| <i>host_addr</i>    | (Optional) Host Address            |
| <i>net_addr</i>     | (Optional) Network Address         |
| <i>net_mask</i>     | (Optional) Network Mask            |
| <i>prefix_addr</i>  | (Optional) Network Address         |
| <i>prefix_len</i>   | (Optional) IP Prefix Length        |
| <i>udp_intf_hdr</i> | (Optional)                         |
| TABLE_intf          | (Optional)                         |
| <i>udp_intf_idx</i> | (Optional) UDP relay interfaces    |

### Command Mode

- /exec



# show ip verify source

```
show ip verify source [ interface <intf6> ] [ __readonly__ [ <verify_intf_ipsg_val> | <verify_ipsg_enable_intf> ] [ <verify_hdr> ] [ TABLE_verify_entry <verify_intf> <verify_filter_mode> <verify_ip_addr> <verify_mac_addr> <verify_vlan> ] <verify_ipsg_exclude_vlans> ]
```

## Syntax Description

|                                  |   |
|----------------------------------|---|
| show                             | Show running system information                       |
| ip                               | Show the IP features of the system                    |
| verify                           | Verify IPSG information                               |
| source                           | IPSG source   |
| interface                        | (Optional) Interface                                  |
| <i>intf6</i>                     | (Optional) interface                                  |
| <i>__readonly__</i>              | (Optional) Read only                                  |
| <i>verify_intf_ipsg_val</i>      | (Optional) IP source guard value (enabled or disable) |
| <i>verify_ipsg_enable_intf</i>   | (Optional) IP source guard enabled interfaces names   |
| TABLE_verify_entry               | (Optional)  |
| <i>verify_filter_mode</i>        | (Optional)  |
| <i>verify_intf</i>               | (Optional)  |
| <i>verify_hdr</i>                | (Optional) IP source guard operational entries        |
| <i>verify_ip_addr</i>            | (Optional) verify ip address                          |
| <i>verify_mac_addr</i>           | (Optional) verify mac address                         |
| <i>verify_vlan</i>               | (Optional) vlan for interface                         |
| <i>verify_ipsg_exclude_vlans</i> | (Optional)  |

## Command Mode

- /exec



|                              |                                      |
|------------------------------|--------------------------------------|
| <i>global_punt_pkt_cnt</i>   | (Optional) Global punt packet count  |
| <i>global_punt_byte_cnt</i>  | (Optional) Global punt byte count    |
| <i>global_glean_pkt_cnt</i>  | (Optional) Global glean packet count |
| <i>global_glean_byte_cnt</i> | (Optional) Global glean byte count   |
| <i>glean_pkt_cnt</i>         | (Optional) Glean packet count        |
| <i>glean_byte_cnt</i>        | (Optional) Glean byte count          |
| <i>normal_pkt_cnt</i>        | (Optional) Packet count              |
| <i>normal_byte_cnt</i>       | (Optional) Byte count                |
| <i>last_updated</i>          | (Optional) Lat updated               |
| <i>count-static</i>          | (Optional) Static count              |
| <i>count-dynamic</i>         | (Optional) Dynamic count             |
| <i>count-others</i>          | (Optional) Others count              |
| <i>count-throttle</i>        | (Optional) Throttled count           |
| <i>count-total</i>           | (Optional) Total count               |
| TABLE_afi                    | (Optional) AFI table                 |
| <i>afi</i>                   | (Optional) AFI                       |
| <i>count</i>                 | (Optional) Count                     |
| TABLE_adj                    | (Optional) Adjacency table for IPV6  |
| <i>intf-out</i>              | (Optional) Interface                 |
| <i>phy-intf</i>              | (Optional) Physical interface        |
| <i>time-stamp</i>            | (Optional) Age                       |
| <i>mac</i>                   | (Optional) MAC address               |
| <i>pref</i>                  | (Optional) Preference                |
| <i>owner</i>                 | (Optional) Owner                     |
| <i>pkt-count</i>             | (Optional) Packet count              |
| <i>byte-count</i>            | (Optional) Byte count                |
| <i>is-best</i>               | (Optional) Best                      |
| <i>is-thrtld</i>             | (Optional) Throttled                 |

**Command Mode**

- /exec

# show ipv6 amt tunnel

```
show ipv6 amt tunnel [ <address6> <port> ] [ detail ] [ vrf { <vrf-name> | <vrf-known-name> } ] [ __readonly__
TABLE_vrf <vrf> <tc6> { TABLE_tunnel <gwa> <gwp> <ut> <ld> <lr> <rc> <exp> { TABLE_route
<source> <group> <rexp> } } ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                     |
| amt                   | AMT show commands                                   |
| ipv6                  | Display IPv6 information                            |
| tunnel                | Display tunnel information                          |
| vrf                   | (Optional) Display information for VRF              |
| <i>vrf-name</i>       | (Optional) VRF name                                 |
| <i>vrf-known-name</i> | (Optional) Known VRF name                           |
| <i>port</i>           | (Optional) UDP port number of gateway               |
| detail                | (Optional) Display routes joined by tunnel endpoint |
| __readonly__          | (Optional)  |
| TABLE_vrf             | (Optional)  |
| <i>vrf</i>            | (Optional)  |
| <i>tc6</i>            | (Optional)  |
| TABLE_tunnel          | (Optional)  |
| <i>gwa</i>            | (Optional)  |
| <i>gwp</i>            | (Optional)  |
| <i>ut</i>             | (Optional)  |
| <i>ld</i>             | (Optional)  |
| <i>lr</i>             | (Optional)  |
| <i>rc</i>             | (Optional)  |
| <i>exp</i>            | (Optional)  |
| TABLE_route           | (Optional)  |
| <i>source</i>         | (Optional)  |
| <i>group</i>          | (Optional)  |

|             |            |
|-------------|------------|
| <i>rexp</i> | (Optional) |
|-------------|------------|

**Command Mode**

- /exec

# show ipv6 bgp

```
show ipv6 { bgp | mbgp } [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] {
  rib-install | rib-uninstall | rib-pending } [ vrf { <vrf-name> | <vrf-known-name> |
  ALL_VRFS_012345678901234 } ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                 |
| bgp                   | Display BGP status and configuration            |
| mbgp                  | Display MBGP status and configuration           |
| vrf                   | (Optional) Virtual Router Context               |
| <i>vrf-name</i>       | (Optional) VRF name                             |
| <i>vrf-known-name</i> | (Optional) Known VRF name                       |
| ipv6                  | Display BGP information for IPv6 address family |
| rib-install           | Routes installed in RIB                         |
| rib-uninstall         | Routes not installed in RIB                     |
| rib-pending           | Routes not acknowledged by RIB                  |

## Command Mode

- /exec

# show ipv6 bgp

```
show ipv6 { bgp | mbgp } [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] [
<ipv6-prefix> [ longer-prefixes ] ] [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234
} ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                   |
| ipv6                  | Display BGP information for IPv6 address family   |
| bgp                   | Display BGP status and configuration              |
| mbgp                  | Display MBGP status and configuration             |
| vrf                   | (Optional) Virtual Router Context                 |
| <i>vrf-name</i>       | (Optional) VRF name                               |
| <i>vrf-known-name</i> | (Optional) Known VRF name                         |
| longer-prefixes       | (Optional) Display route and more specific routes |

## Command Mode

- /exec



# show ipv6 bgp

```
show ipv6 { bgp | mbgp } { route-map { <rmap-name> | <rmap-name> } | prefix-list { <prfxlist-name> |
<test_pol_name> } | filter-list { <fltrlist-name> | <test_pol_name> } | community-list { <commlist-name> |
<test_pol_name> } | extcommunity-list { <extcommlist-name> | <test_pol_name> } [ exact-match ] }
```

## Syntax Description

|                         |   |
|-------------------------|---|
| show                    | Show running system information                 |
| ipv6                    | Display BGP information for IPv6 address family |
| bgp                     | Display BGP status and configuration            |
| mbgp                    | Display MBGP status and configuration           |
| route-map               | Display routes matching the route-map           |
| <i>rmap-name</i>        | Route-map name                                  |
| <i>rmap-name</i>        | Known route-map name                            |
| prefix-list             | Display routes matching the prefix-list         |
| <i>prfxlist-name</i>    | Name of prefix-list                             |
| filter-list             | Display routes matching the filter-list         |
| <i>fltrlist-name</i>    | Name of filter-list                             |
| community-list          | Display routes matching the community-list      |
| <i>commlist-name</i>    | Name of community-list                          |
| extcommunity-list       | Display routes matching the extcommunity-list   |
| <i>extcommlist-name</i> | Name of extcommunity-list                       |
| <i>test_pol_name</i>    | An existing test-list policy                    |
| exact-match             | (Optional) Exact match of the communities       |

## Command Mode

- /exec

## show ipv6 bgp community

```
show ipv6 { bgp | mbgp } [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
community { <regex-str> | { { <comm-id> | <wellknown-id> } + [ exact-match ] } } [ vrf { <vrf-name> |
<vrf-known-name> | ALL_VRFS_012345678901234 } ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                 |
| bgp                   | Display BGP status and configuration            |
| mbgp                  | Display MBGP status and configuration           |
| ipv6                  | Display BGP information for IPv6 address family |
| vrf                   | (Optional) Virtual Router Context               |
| <i>vrf-name</i>       | (Optional) VRF name                             |
| <i>vrf-known-name</i> | (Optional) Known VRF name                       |
| community             | Display routes matching the BGP communities     |
| <i>regex-str</i>      | Regular expression to match the communities     |
| <i>comm-id</i>        | BGP community value                             |
| <i>wellknown-id</i>   | BGP wellknown community                         |
| exact-match           | (Optional) Exact match of the communities       |

### Command Mode

- /exec

# show ipv6 bgp dampening

```
show ipv6 { bgp | mbgp } [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
dampening { dampened-paths [ regexp <regexp-str> ] | history-paths [ regexp <regexp-str> ] | parameters |
flap-statistics } [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                                   |
| bgp                   | Display BGP status and configuration                              |
| mbgp                  | Display MBGP status and configuration                             |
| vrf                   | (Optional) Virtual Router Context                                 |
| <i>vrf-name</i>       | (Optional) VRF name   |
| <i>vrf-known-name</i> | (Optional) Known VRF name   |
| dampening             | Display dampening info  |
| parameters            | Display dampening parameters                                      |
| dampened-paths        | Display all dampened paths  |
| history-paths         | Display all history paths   |
| flap-statistics       | Display flap statistics for routes                                |
| ipv6                  | Display BGP information for IPv6 address family                   |
| regexp                | (Optional) Display routes matching the AS path regular expression |
| <i>regexp-str</i>     | (Optional) Regular expression to match the AS paths               |

## Command Mode

- /exec

## show ipv6 bgp extcommunity

```
show ipv6 { bgp | mbgp } [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
extcommunity { <regexp-str> | { { 4byteas-generic { transitive <ext-comm-gen-trans> | non-transitive
<ext-comm-gen-nontrans> } } + [ exact-match ] } } [ vrf { <vrf-name> | <vrf-known-name> |
ALL_VRFS_012345678901234 } ]
```

### Syntax Description

|                              |   |
|------------------------------|---|
| show                         | Show running system information                 |
| ipv6                         | Display BGP information for IPv6 address family |
| bgp                          | Display BGP status and configuration            |
| mbgp                         | Display MBGP status and configuration           |
| vrf                          | (Optional) Virtual Router Context               |
| <i>vrf-name</i>              | (Optional) VRF name                             |
| <i>vrf-known-name</i>        | (Optional) Known VRF name                       |
| extcommunity                 | Display routes matching the BGP extcommunities  |
| 4byteas-generic              | Generic extended community                      |
| transitive                   | Transitive extcommunity                         |
| non-transitive               | Non-Transitive extcommunity                     |
| <i>regexp-str</i>            | Regular expression to match the extcommunities  |
| <i>ext-comm-gen-trans</i>    | Extcommunity number aa4:nn format               |
| <i>ext-comm-gen-nontrans</i> | Extcommunity number aa4:nn format               |
| exact-match                  | (Optional) Exact match of the extcommunities    |

### Command Mode

- /exec

## show ipv6 bgp flap-statistics

```
show ipv6 { bgp | mbgp } [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
flap-statistics [ <ipv6-prefix> ] [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                 |
| bgp                   | Display BGP status and configuration            |
| mbgp                  | Display MBGP status and configuration           |
| vrf                   | (Optional) Virtual Router Context               |
| <i>vrf-name</i>       | (Optional) VRF name                             |
| <i>vrf-known-name</i> | (Optional) Known VRF name                       |
| flap-statistics       | Display route flap statistics                   |
| ipv6                  | Display BGP information for IPv6 address family |

### Command Mode

- /exec

## show ipv6 bgp neighbors

```
show ipv6 { bgp | mbgp } [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
neighbors { [ { <neighbor-id> | <ipv6-neighbor-id> } [ routes [ advertised | received | dampened ] |
advertised-routes | paths | received-routes | flap-statistics ] ] | <neighbor-prefix-id> | <ipv6-neighbor-prefix-id>
} [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
```

### Syntax Description

|                           |   |
|---------------------------|---|
| show                      | Show running system information                                       |
| bgp                       | Display BGP status and configuration                                  |
| mbgp                      | Display MBGP status and configuration                                 |
| neighbors                 | Display all configured BGP neighbors                                  |
| vrf                       | (Optional) Virtual Router Context                                     |
| <i>vrf-name</i>           | (Optional) VRF name   |
| <i>vrf-known-name</i>     | (Optional) Known VRF name   |
| <i>neighbor-id</i>        | (Optional) Display one particular BGP neighbor                        |
| <i>neighbor-prefix-id</i> | Display details for a prefix peering                                  |
| ipv6                      | Display BGP information for IPv6 address family                       |
| routes                    | (Optional) Display all routes advertised/received to/from peer        |
| advertised                | (Optional) Display all routes advertised to this peer                 |
| received                  | (Optional) Display all routes received from this peer                 |
| dampened                  | (Optional) Display all dampened routes received from this peer        |
| advertised-routes         | (Optional) Display all the routes advertised to this peer             |
| received-routes           | (Optional) Display all the routes received from this peer             |
| flap-statistics           | (Optional) Display flap statistics for routes received from this peer |
| paths                     | (Optional) Display AS paths learned from this peer                    |

### Command Mode

- /exec

# show ipv6 bgp nexthop-database

```
show ipv6 { bgp | mbgp } [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
nexthop-database [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                 |
| bgp                   | Display BGP status and configuration            |
| mbgp                  | Display MBGP status and configuration           |
| vrf                   | (Optional) Virtual Router Context               |
| <i>vrf-name</i>       | (Optional) VRF name                             |
| <i>vrf-known-name</i> | (Optional) Known VRF name                       |
| nexthop-database      | Display nexthop database                        |
| ipv6                  | Display BGP information for IPv6 address family |

## Command Mode

- /exec

# show ipv6 bgp nexthop

show ipv6 { bgp | mbgp } nexthop <ipv6nexthop>

## Syntax Description

|         |   |
|---------|---|
| show    | Show running system information                 |
| ipv6    | Display BGP information for IPv6 address family |
| bgp     | Display BGP status and configuration            |
| mbgp    | Display MBGP status and configuration           |
| nexthop | Display routes matching the nexthop             |

## Command Mode

- /exec



## show ipv6 bgp received-paths

```
show ipv6 { bgp | mbgp } [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
received-paths [ private ] [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                 |
| ipv6                  | Display BGP information for IPv6 address family |
| bgp                   | Display BGP status and configuration            |
| mbgp                  | Display MBGP status and configuration           |
| vrf                   | (Optional) Virtual Router Context               |
| <i>vrf-name</i>       | (Optional) VRF name                             |
| <i>vrf-known-name</i> | (Optional) Known VRF name                       |
| received-paths        | Display paths stored for soft-reconfig          |
| private               | (Optional) private                              |

### Command Mode

- /exec

## show ipv6 bgp regexp

```
show ipv6 { bgp | mbgp } [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ] regexp
<regexp-str> [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                        |
| bgp                   | Display BGP status and configuration                   |
| mbgp                  | Display MBGP status and configuration                  |
| vrf                   | (Optional) Virtual Router Context                      |
| <i>vrf-name</i>       | (Optional) VRF name                                    |
| <i>vrf-known-name</i> | (Optional) Known VRF name                              |
| ipv6                  | Display BGP information for IPv6 address family        |
| regexp                | Display routes matching the AS path regular expression |
| <i>regexp-str</i>     | Regular expression to match the AS paths               |

### Command Mode

- /exec

# show ipv6 bgp summary

```
show ipv6 { bgp | mbgp } [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
summary [ vrf { <vrf-name> | <vrf-known-name> | ALL_VRFS_012345678901234 } ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                 |
| bgp                   | Display BGP status and configuration            |
| mbgp                  | Display MBGP status and configuration           |
| vrf                   | (Optional) Virtual Router Context               |
| <i>vrf-name</i>       | (Optional) VRF name                             |
| <i>vrf-known-name</i> | (Optional) Known VRF name                       |
| summary               | Display summarized information of BGP state     |
| ipv6                  | Display BGP information for IPv6 address family |

## Command Mode

- /exec

# show ipv6 cache

show ipv6 cache { { brief | detail } | { interface [ <intf> ] } } [ operational ]

## Syntax Description

|             |   |
|-------------|---|
| show        | Show running system information   |
| ipv6        | Display IPv6 information  |
| cache       | Display ipv6 cache  |
| interface   | Display ipv6 related interface information                              |
| brief       | Display summary of ipv6 interface status and configuration              |
| detail      | Display detailed information of ipv6 interface status and configuration |
| operational | (Optional) Display only interfaces that are administratively enabled    |
| <i>intf</i> | (Optional) Interface name to display                                    |

## Command Mode

- /exec

# show ipv6 client

```
show ipv6 client [ <client-name> ] [ __readonly__ { TABLE_ipv6_client { <cli-name> <cli-stat> <cli-pid>
<cli-ext-pid> [ <protocol> ] <pib-index> <cli-uuid> <rou-vrf> <rou-flg> <ctrl-sap> <data-sap> <ipc-ctrl-mq>
<ipc-ctrl-fail> <ipc-data-mq> <ipc-data-fail> [ <if-ext-ind> ] [ <recv-fn> <recv-hex> ] } } ]
```

## Syntax Description

|                      |   |
|----------------------|---|
| show                 | Show running system information                         |
| ipv6                 | Display IPv6 information                                |
| client               | Display clients registered with the IPv6 process        |
| <i>client-name</i>   | (Optional) Display information for a single IPv6 client |
| <i>__readonly__</i>  | (Optional)  |
| TABLE_ipv6_client    | (Optional) IPV6 client table                            |
| <i>cli-name</i>      | (Optional) client name                                  |
| <i>cli-stat</i>      | (Optional) client state                                 |
| <i>cli-pid</i>       | (Optional) client pid                                   |
| <i>cli-ext-pid</i>   | (Optional) client ext-pid                               |
| <i>protocol</i>      | (Optional) ipv6 client protocol                         |
| <i>pib-index</i>     | (Optional) client pib-index                             |
| <i>cli-uuid</i>      | (Optional) client uuid                                  |
| <i>rou-vrf</i>       | (Optional) client route vrf                             |
| <i>rou-flg</i>       | (Optional) client route flag                            |
| <i>ctrl-sap</i>      | (Optional) client control sap                           |
| <i>data-sap</i>      | (Optional) client data sap                              |
| <i>ipc-ctrl-mq</i>   | (Optional) client ipc control message queue             |
| <i>ipc-ctrl-fail</i> | (Optional) client ipc control fail                      |
| <i>ipc-data-mq</i>   | (Optional) client ipc data message queue                |
| <i>ipc-data-fail</i> | (Optional) client ipc data fail                         |
| <i>if-ext-ind</i>    | (Optional) client if ext indes                          |
| <i>recv-fn</i>       | (Optional) client receive fn name                       |
| <i>recv-hex</i>      | (Optional) receive-hexadecimal address                  |

**Command Mode**

- /exec

# show ipv6 dhcp-ldra

```
show ipv6 dhcp-ldra [ __readonly__ <ldra_gbl_enable> [ <cli_fac_disable_hdr>
TABLE_intf_entry_cli_fac_disable <cli_fac_disable_intf> ] [ <cli_fac_trusted_hdr>
TABLE_intf_entry_cli_fac_trusted <cli_fac_trusted_intf> ] [ <cli_fac_untrusted_hdr>
TABLE_intf_entry_cli_fac_untrusted <cli_fac_untrusted_intf> ] [ <srv_fac_hdr> TABLE_intf_entry_srv_fac
<srv_fac_intf> ] ]
```

## Syntax Description

|                                    |  |
|------------------------------------|--|
| show                               | Show running system information                                  |
| ipv6                               | Show the IPv6 features of the system                             |
| dhcp-ldra                          | Show DHCPv6 LDRA   |
| <i>__readonly__</i>                | (Optional) Read only   |
| <i>ldra_gbl_enable</i>             | (Optional) is DHCPv6 LDRA service enabled                        |
| <i>cli_fac_disable_hdr</i>         | (Optional) DHCPv6 LDRA policy client-facing-disable              |
| TABLE_intf_entry_cli_fac_disable   | (Optional)   |
| <i>cli_fac_disable_intf</i>        | (Optional) DHCPv6 LDRA policy client-facing-disable interfaces   |
| <i>cli_fac_trusted_hdr</i>         | (Optional) DHCPv6 LDRA policy client-facing-trusted              |
| TABLE_intf_entry_cli_fac_trusted   | (Optional)   |
| <i>cli_fac_trusted_intf</i>        | (Optional) DHCPv6 LDRA policy client-facing-trusted interfaces   |
| <i>cli_fac_untrusted_hdr</i>       | (Optional) DHCPv6 LDRA policy client-facing-untrusted            |
| TABLE_intf_entry_cli_fac_untrusted | (Optional)   |
| <i>cli_fac_untrusted_intf</i>      | (Optional) DHCPv6 LDRA policy client-facing-untrusted interfaces |
| <i>srv_fac_hdr</i>                 | (Optional) DHCPv6 LDRA policy server-facing                      |
| TABLE_intf_entry_srv_fac           | (Optional)   |
| <i>srv_fac_intf</i>                | (Optional) DHCPv6 LDRA policy server-facing interfaces           |

## Command Mode

- /exec

## show ipv6 dhcp-ldra statistics

```
show ipv6 dhcp-ldra statistics [ __readonly__ { <cf_total_msg_received> <cf_total_msg_sent>
<cf_total_msg_drops> } [ <rx_msg_stats_hdr> TABLE_rx_entry <rx_msg_type_str> <rx_pkts> ] [
<tx_msg_stats_hdr> TABLE_tx_entry <tx_msg_type_str> <tx_pkts> ] [ <drop_msg_stats_hdr>
TABLE_drop_entry <msg_discard_reason_str> <drops> ] { <sf_total_msg_received> <sf_total_msg_sent>
<sf_total_msg_drops> } [ <sf_rx_msg_stats_hdr> TABLE_sf_rx_entry <sf_rx_msg_type_str> <sf_rx_pkts>
] [ <sf_tx_msg_stats_hdr> TABLE_sf_tx_entry <sf_tx_msg_type_str> <sf_tx_pkts> ] [
<sf_drop_msg_stats_hdr> TABLE_sf_drop_entry <sf_msg_discard_reason_str> <sf_drops> ] ]
```

### Syntax Description

|                               |   |
|-------------------------------|---|
| show                          | Show running system information                       |
| ipv6                          | Show the IPv6 features of the system                  |
| dhcp-ldra                     | Show information about DHCPv6 LDRA                    |
| statistics                    | Statistics related to DHCPv6 LDRA                     |
| <i>__readonly__</i>           | (Optional) Read only                                  |
| <i>cf_total_msg_received</i>  | (Optional) client facing statistics messages received |
| <i>cf_total_msg_sent</i>      | (Optional) client facing statistics messages sent     |
| <i>cf_total_msg_drops</i>     | (Optional) client facing statistics message drops     |
| <i>rx_msg_stats_hdr</i>       | (Optional) received message statistics header         |
| TABLE_rx_entry                | (Optional)  |
| <i>rx_msg_type_str</i>        | (Optional) received dhcpv6 message type               |
| <i>rx_pkts</i>                | (Optional) received dhcpv6 packets                    |
| <i>tx_msg_stats_hdr</i>       | (Optional) forwarded message statistics header        |
| TABLE_tx_entry                | (Optional)  |
| <i>tx_msg_type_str</i>        | (Optional) forwarded dhcpv6 message type              |
| <i>tx_pkts</i>                | (Optional) forwarded dhcpv6 packets                   |
| <i>drop_msg_stats_hdr</i>     | (Optional) drops message statistics header            |
| TABLE_drop_entry              | (Optional)  |
| <i>msg_discard_reason_str</i> | (Optional) message discarded reason                   |
| <i>drops</i>                  | (Optional) dhcpv6 packet drops                        |
| <i>sf_total_msg_received</i>  | (Optional) server facing statistics messages received |
| <i>sf_total_msg_sent</i>      | (Optional) server facing statistics messages sent     |



|                                  |   |
|----------------------------------|---|
| <i>sf_total_msg_drops</i>        | (Optional) server facing statistics message drops     |
| <i>sf_rx_msg_stats_hdr</i>       | (Optional) received message statistics header         |
| TABLE_sf_rx_entry                | (Optional)  |
| <i>sf_rx_msg_type_str</i>        | (Optional) received dhcpv6 message type               |
| <i>sf_rx_pkts</i>                | (Optional) received dhcpv6 packets                    |
| <i>sf_tx_msg_stats_hdr</i>       | (Optional) server forwarded message statistics header |
| TABLE_sf_tx_entry                | (Optional)  |
| <i>sf_tx_msg_type_str</i>        | (Optional) server forwarded dhcpv6 message type       |
| <i>sf_tx_pkts</i>                | (Optional) server forwarded dhcpv6 packets            |
| <i>sf_drop_msg_stats_hdr</i>     | (Optional) server drops message statistics header     |
| TABLE_sf_drop_entry              | (Optional)  |
| <i>sf_msg_discard_reason_str</i> | (Optional) server message discarded reason            |
| <i>sf_drops</i>                  | (Optional) server dhcpv6 packet drops                 |

**Command Mode**

- /exec

# show ipv6 dhcp guard policy

```
show ipv6 dhcp guard policy [ <pname> ] [ __readonly__ { TABLE_dhcp_guard_policy <name> <role> [
<target> ] [ <max_pref> ] [ <min_pref> ] [ <match_src_list> ] [ <match_prefix_list> ] } ]
```

## Syntax Description

|                          |   |
|--------------------------|---|
| show                     | Show running system information               |
| ipv6                     | Show the IPv6 features of the system          |
| <i>pname</i>             | (Optional) Policy name for dhcp guard feature |
| <i>__readonly__</i>      | (Optional)                                    |
| TABLE_dhcp_guard_policy  | (Optional) IPv6 DHCP guard policy             |
| <i>name</i>              | (Optional) Policy Name                        |
| <i>role</i>              | (Optional) Role                               |
| <i>target</i>            | (Optional) Target                             |
| <i>max_pref</i>          | (Optional) Max preference                     |
| <i>min_pref</i>          | (Optional) Min preference                     |
| <i>match_src_list</i>    | (Optional) Source Address Match Access List   |
| <i>match_prefix_list</i> | (Optional) Prefix List Match Prefix List      |

## Command Mode

- /exec

# show ipv6 dhcp relay

```
show ipv6 dhcp relay [ interface <intf-range> ] [ __readonly__ [ <relay_service_enable> [ <gbl_src_intf> ]
<relay_vpn_enable> <relay_cisco_option_enable> ] [ TABLE_intf <interface-name> [ <intf_src_intf> ]
<intf_header> [ TABLE_addr <relay_address> <dst_intf> <vrf_name> ] ] ]
```

## Syntax Description

|                                  |   |
|----------------------------------|---|
| show                             | Show running system information                                 |
| ipv6                             | Show the IPv6 features of the system                            |
| dhcp                             | Show DHCPv6   |
| relay                            | DHCPv6 relay address of the interface                           |
| interface                        | (Optional) DHCPv6 relay address of the interface                |
| <i>intf-range</i>                | (Optional) interface  |
| <i>__readonly__</i>              | (Optional) Read only  |
| <i>relay_service_enable</i>      | (Optional) is dhcpv6 relay service enabled                      |
| <i>gbl_src_intf</i>              | (Optional) interface name                                       |
| <i>relay_vpn_enable</i>          | (Optional) is dhcpv6 relay insertion of vpn sub options enabled |
| <i>relay_cisco_option_enable</i> | (Optional) is dhcpv6 relay cisco option enabled                 |
| TABLE_intf                       | (Optional)  |
| <i>interface-name</i>            | (Optional) interface name                                       |
| <i>intf_src_intf</i>             | (Optional) interface name                                       |
| <i>intf_header</i>               | (Optional) interface header                                     |
| TABLE_addr                       | (Optional)  |
| <i>dst_intf</i>                  | (Optional) interface name                                       |
| <i>vrf_name</i>                  | (Optional) VRF name   |

## Command Mode

- /exec

## show ipv6 dhcp relay statistics

```
show ipv6 dhcp relay statistics [ interface <intf> [[ server-ip <ip-addr-val> [ use-vrf <vrf-name> ] [ interface
<dest-interface> ] ] ] [ server-ip <ip-addr-val> [ interface <dest-interface> ] [ use-vrf <vrf-name> ] ] ] ] [
__readonly__ [ <msg_stats_hdr> <msg_type_str> <rx_pkts> <tx_pkts> <drops> <msg_type_str_advertise>
<rx_pkts_advertise> <tx_pkts_advertise> <drops_advertise> <msg_type_str_request> <rx_pkts_request>
<tx_pkts_request> <drops_request> <msg_type_str_confirm> <rx_pkts_confirm> <tx_pkts_confirm>
<drops_confirm> <msg_type_str_renew> <rx_pkts_renew> <tx_pkts_renew> <drops_renew>
<msg_type_str_rebind> <rx_pkts_rebind> <tx_pkts_rebind> <drops_rebind> <msg_type_str_reply>
<rx_pkts_reply> <tx_pkts_reply> <drops_reply> <msg_type_str_release> <rx_pkts_release> <tx_pkts_release>
<drops_release> <msg_type_str_decline> <rx_pkts_decline> <tx_pkts_decline> <drops_decline>
<msg_type_str_reconfigure> <rx_pkts_reconfigure> <tx_pkts_reconfigure> <drops_reconfigure>
<msg_type_str_inforeq> <rx_pkts_inforeq> <tx_pkts_inforeq> <drops_inforeq> <msg_type_str_relay_fwd>
<rx_pkts_relay_fwd> <tx_pkts_relay_fwd> <drops_relay_fwd> <msg_type_str_relay_reply>
<rx_pkts_relay_reply> <tx_pkts_relay_reply> <drops_relay_reply> <msg_type_str_unknown>
<rx_pkts_unknown> <tx_pkts_unknown> <drops_unknown> <msg_type_str_total> ] [ <server_stats_hdr>
[ TABLE_server <server_helper_addr> <server_vrf> <server_intf> <server_requests> <server_responses>
] ] [ <drop_hdr> <drop_relay_disable> <drop_max_hops> <drop_validation_fails> <drop_unknown_op_intf>
<drop_bad_context> <drop_opt_insert_fail> <drop_server_direct_reply> <drop_no_ipv6_addr>
<drop_intf_error> <drop_vpn_disabled> <drop_ipv6_extn_hdrs_presence> <drop_mct_drop> ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                         |
| ipv6                  | Show the IPv6 features of the system                    |
| dhcp                  | Show information about DHCPv6                           |
| relay                 | DHCPv6 Relay  |
| statistics            | Statistics related to DHCPv6                            |
| interface             | (Optional) input interface                              |
| <i>intf</i>           | (Optional) interface                                    |
| server-ip             | (Optional) Server address                               |
| use-vrf               | (Optional) server address VRF membership                |
| <i>vrf-name</i>       | (Optional) VRF name                                     |
| interface             | (Optional) Destination interface for the server address |
| <i>dest-interface</i> | (Optional) Destination interface                        |
| <i>__readonly__</i>   | (Optional) Read only                                    |
| <i>msg_stats_hdr</i>  | (Optional) dhcpv6 message statistics header             |
| <i>msg_type_str</i>   | (Optional) dhcpv6 message type                          |

|                               |                                     |
|-------------------------------|-------------------------------------|
| <i>rx_pkts</i>                | (Optional) dhcpv6 received packets  |
| <i>tx_pkts</i>                | (Optional) dhcpv6 forwarded packets |
| <i>drops</i>                  | (Optional) dhcpv6 packet drops      |
| <i>msg_type_str_advertise</i> | (Optional)                          |
| <i>rx_pkts_advertise</i>      | (Optional)                          |
| <i>tx_pkts_advertise</i>      | (Optional)                          |
| <i>drops_advertise</i>        | (Optional)                          |
| <i>msg_type_str_request</i>   | (Optional)                          |
| <i>rx_pkts_request</i>        | (Optional)                          |
| <i>tx_pkts_request</i>        | (Optional)                          |
| <i>drops_request</i>          | (Optional)                          |
| <i>msg_type_str_confirm</i>   | (Optional)                          |
| <i>rx_pkts_confirm</i>        | (Optional)                          |
| <i>tx_pkts_confirm</i>        | (Optional)                          |
| <i>drops_confirm</i>          | (Optional)                          |
| <i>msg_type_str_renew</i>     | (Optional)                          |
| <i>rx_pkts_renew</i>          | (Optional)                          |
| <i>tx_pkts_renew</i>          | (Optional)                          |
| <i>drops_renew</i>            | (Optional)                          |
| <i>msg_type_str_rebind</i>    | (Optional)                          |
| <i>rx_pkts_rebind</i>         | (Optional)                          |
| <i>tx_pkts_rebind</i>         | (Optional)                          |
| <i>drops_rebind</i>           | (Optional)                          |
| <i>msg_type_str_reply</i>     | (Optional)                          |
| <i>rx_pkts_reply</i>          | (Optional)                          |
| <i>tx_pkts_reply</i>          | (Optional)                          |
| <i>drops_reply</i>            | (Optional)                          |
| <i>msg_type_str_release</i>   | (Optional)                          |
| <i>rx_pkts_release</i>        | (Optional)                          |

|                                 |  |
|---------------------------------|--|
| <i>tx_pkts_release</i>          | (Optional)                                   |
| <i>drops_release</i>            | (Optional)                                   |
| <i>msg_type_str_decline</i>     | (Optional)                                   |
| <i>rx_pkts_decline</i>          | (Optional)                                   |
| <i>tx_pkts_decline</i>          | (Optional)                                   |
| <i>drops_decline</i>            | (Optional)                                   |
| <i>msg_type_str_reconfigure</i> | (Optional)                                   |
| <i>rx_pkts_reconfigure</i>      | (Optional)                                   |
| <i>tx_pkts_reconfigure</i>      | (Optional)                                   |
| <i>drops_reconfigure</i>        | (Optional)                                   |
| <i>msg_type_str_inforeq</i>     | (Optional)                                   |
| <i>rx_pkts_inforeq</i>          | (Optional)                                   |
| <i>tx_pkts_inforeq</i>          | (Optional)                                   |
| <i>drops_inforeq</i>            | (Optional)                                   |
| <i>msg_type_str_relay_fwd</i>   | (Optional)                                   |
| <i>rx_pkts_relay_fwd</i>        | (Optional)                                   |
| <i>tx_pkts_relay_fwd</i>        | (Optional)                                   |
| <i>drops_relay_fwd</i>          | (Optional)                                   |
| <i>msg_type_str_relay_reply</i> | (Optional)                                   |
| <i>rx_pkts_relay_reply</i>      | (Optional)                                   |
| <i>tx_pkts_relay_reply</i>      | (Optional)                                   |
| <i>drops_relay_reply</i>        | (Optional)                                   |
| <i>msg_type_str_unknown</i>     | (Optional)                                   |
| <i>rx_pkts_unknown</i>          | (Optional)                                   |
| <i>tx_pkts_unknown</i>          | (Optional)                                   |
| <i>drops_unknown</i>            | (Optional)                                   |
| <i>msg_type_str_total</i>       | (Optional) total of all dhcpv6 message types |
| <i>server_stats_hdr</i>         | (Optional) per-server statistics header      |
| TABLE_server                    | (Optional)                                   |

|                                     |                              |
|-------------------------------------|------------------------------|
| <i>server_vrf</i>                   | (Optional) dhcpv6 server vrf |
| <i>server_intf</i>                  | (Optional) interface name    |
| <i>server_requests</i>              | (Optional)                   |
| <i>server_responses</i>             | (Optional)                   |
| <i>drop_hdr</i>                     | (Optional)                   |
| <i>drop_relay_disable</i>           | (Optional)                   |
| <i>drop_max_hops</i>                | (Optional)                   |
| <i>drop_validation_fails</i>        | (Optional)                   |
| <i>drop_unknown_op_intf</i>         | (Optional)                   |
| <i>drop_bad_context</i>             | (Optional)                   |
| <i>drop_opt_insert_fail</i>         | (Optional)                   |
| <i>drop_server_direct_reply</i>     | (Optional)                   |
| <i>drop_no_ipv6_addr</i>            | (Optional)                   |
| <i>drop_intf_error</i>              | (Optional)                   |
| <i>drop_vpn_disabled</i>            | (Optional)                   |
| <i>drop_ipv6_extn_hdrs_presence</i> | (Optional)                   |
| <i>drop_mct_drop</i>                | (Optional) drops through mct |

### Command Mode

- /exec

## show ipv6 eigrp route-map statistics

```
show ipv6 eigrp [ <eigrp-ptag> ] route-map statistics { { redistribute { bgp <as> | { eigrp | isis | ospfv3 | rip
} <tag> | static | direct | amt } } | table-map } [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__
TABLE_asn <asn> TABLE_vrf <vrf> { TABLE_rmap <name> <action> <seq_num> [ { TABLE_cmd
<command> <compare_count> <match_count> } ] } <total_accept_count> <total_reject_count> ]
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                        |
| ipv6                  | Display IPv6 information                               |
| eigrp                 | Display EIGRP status and configuration                 |
| vrf                   | (Optional) Display per-VRF information                 |
| <i>vrf-name</i>       | (Optional) VRF name                                    |
| <i>vrf-known-name</i> | (Optional) Known VRF name                              |
| all                   | (Optional) Display information for all VRFs            |
| <i>eigrp-ptag</i>     | (Optional) Process tag                                 |
| route-map             | Route-map related information                          |
| statistics            | Route-map statistics                                   |
| redistribute          | Redistribute information from another routing protocol |
| table-map             | Tablemap information                                   |
| bgp                   | Border Gateway Protocol (BGP)                          |
| <i>as</i>             | Autonomous system number                               |
| isis                  | IS-IS Routing for IPv4                                 |
| ospfv3                | Open Shortest Path First (OSPF) V3                     |
| rip                   | Routing Information Protocol (RIP)                     |
| eigrp                 | Enhanced Interior Gateway Routing Protocol (EIGRP)     |
| <i>tag</i>            | Process tag  |
| static                | Static routes  |
| direct                | Directly connected                                     |
| amt                   | AMT Anycast prefix                                     |
| __readonly__          | (Optional)   |



|                           |  |
|---------------------------|--|
| TABLE_asn                 | (Optional) AS number table                                 |
| <i>asn</i>                | (Optional) AS number                                       |
| TABLE_vrf                 | (Optional) VRF table                                       |
| <i>vrf</i>                | (Optional) VRF name  |
| TABLE_rmap                | (Optional) Route-map table                                 |
| <i>name</i>               | (Optional) Route-map name                                  |
| <i>action</i>             | (Optional) Route-map action                                |
| <i>seq_num</i>            | (Optional) Sequence number of the clause                   |
| TABLE_cmd                 | (Optional) Route-map command table                         |
| <i>command</i>            | (Optional) Route-map command                               |
| <i>compare_count</i>      | (Optional) Number of comparisons                           |
| <i>match_count</i>        | (Optional) Number of matches                               |
| <i>total_accept_count</i> | (Optional) Total number of packets accepted by this policy |
| <i>total_reject_count</i> | (Optional) Total number of packets rejected by this policy |

**Command Mode**

- /exec

# show ipv6 fragments

```
show ipv6 fragments [ <source-addr> ] [ __readonly__ [ TABLE_ipv6_frag [ TABLE_ipv6_each_q {
<ipv6-src> <ipv6-dest> <frag-id> <frag-off> <m-flag> <nxt-header> <pay-load> <expires> } ] ] ]
```

## Syntax Description

|                   |   |
|-------------------|---|
| show              | Show running system information           |
| ipv6              | Display IPv6 information                  |
| fragments         | Display queued fragments                  |
| __readonly__      | (Optional)                                |
| TABLE_ipv6_frag   | (Optional) IPV6 fragment table            |
| TABLE_ipv6_each_q | (Optional) IPV6 each fragment queue table |
| <i>frag-id</i>    | (Optional) fragment id                    |
| <i>frag-off</i>   | (Optional) fragment offset                |
| <i>m-flag</i>     | (Optional) m flag                         |
| <i>nxt-header</i> | (Optional) next header                    |
| <i>pay-load</i>   | (Optional) fargment payload               |
| <i>expires</i>    | (Optional) expiry time                    |

## Command Mode

- /exec

# show ipv6 icmp

```
show ipv6 icmp { adjacency | neighbor | sync-entries } [ <interface> ] [ detail ] [ vrf { <vrf-name> |
<vrf-known-name> | all } ] [ __readonly__ { <icmpv6-vrftype> <icmpv6-cxt-name> } [ TABLE_icmpv6_all_int
{ TABLE_icmpv6_one_int { <icmpv6-ipv6-addr> <time-stamp-icmpv6> <icmpv6-mac> <icmpv6-state>
<icmpv6-short-name> [ <phy-int-short-name> ] } } ] ] ]
```

## Syntax Description

|                           |   |
|---------------------------|---|
| show                      | Show running system information               |
| ipv6                      | Display IPv6 information                      |
| icmp                      | Display ICMPv6 information                    |
| adjacency                 | Show IPv6 dynamic learnt adjacency entry      |
| neighbor                  | Show IPv6 dynamic learnt neighbor entry       |
| sync-entries              | Show IPv6 table learnt only due to table sync |
| <i>interface</i>          | (Optional) Interface name to display          |
| detail                    | (Optional) Display detailed information       |
| vrf                       | (Optional) Display per-VRF information        |
| <i>vrf-name</i>           | (Optional) VRF name                           |
| <i>vrf-known-name</i>     | (Optional) Known VRF name                     |
| all                       | (Optional) Display information for all VRFs   |
| <i>__readonly__</i>       | (Optional)                                    |
| <i>icmpv6-vrftype</i>     | (Optional)                                    |
| <i>icmpv6-cxt-name</i>    | (Optional)                                    |
| TABLE_icmpv6_all_int      | (Optional)                                    |
| TABLE_icmpv6_one_int      | (Optional)                                    |
| <i>time-stamp-icmpv6</i>  | (Optional)                                    |
| <i>icmpv6-mac</i>         | (Optional)                                    |
| <i>icmpv6-state</i>       | (Optional)                                    |
| <i>icmpv6-short-name</i>  | (Optional)                                    |
| <i>phy-int-short-name</i> | (Optional)                                    |

## Command Mode

- /exec

# show ipv6 icmp global traffic

```
show ipv6 { icmp | nd } global traffic [ __readonly__ [ { TABLE_icmpv6_global_stat [ <st-total> ] [ <rv-total> ] [ <st-err> ] [ <rv-err> ] [ <st-int-drp-cnt> ] [ <rv-int-drp-cnt> ] [ <st-adj-nt-recov-am-ha> ] [ <rv-adj-nt-recov-am-ha> ] [ <st-pkt-allow-inv-ttl-vpc> ] [ <rv-pkt-allow-inv-ttl-vpc> ] [ <st-drp-src-mac-own> ] [ <rv-drp-src-mac-own> ] [ <st-drp-tgt-ip-not-own> ] [ <rv-drp-tgt-ip-not-own> ] [ <st-drp-src-ip-not-own> ] [ <rv-drp-src-ip-not-own> ] [ <st-dest-unreach> ] [ <rv-dest-unreach> ] [ <st-admin-prohibit> ] [ <rv-admin-prohibit> ] [ <st-time-exceed> ] [ <rv-time-exceed> ] [ <st-para-pbms> ] [ <rv-para-pbms> ] [ <st-echo-req> ] [ <rv-echo-req> ] [ <st-echo-reply> ] [ <rv-echo-reply> ] [ <st-redirect> ] [ <rv-redirect> ] [ <st-pkt-too-big> ] [ <rv-pkt-too-big> ] [ <st-rtr-adver> ] [ <rv-rtr-adver> ] [ <st-rtr-solicit> ] [ <rv-rtr-solicit> ] [ <st-nei-adver> ] [ <rv-nei-adver> ] [ <st-nei-solicit> ] [ <rv-nei-solicit> ] [ <fast-path-pkts> ] [ <fastpath-disable> ] [ <ign-fastpath-pkts> ] [ <dup-rtr-ra-recvd> ] [ <rv-dup-rtr-ra-recvd> ] } ] [ { TABLE_icmpv6_mld_stat <st-v1-queries> <rv-v1-queries> <st-v2-queries> <rv-v2-queries> <st-v1-reports> <rv-v1-reports> <st-v2-reports> <rv-v2-reports> <st-v1-leaves> <rv-v1-leaves> } ] ]
```

### Syntax Description

|                          |   |
|--------------------------|---|
| show                     | Show running system information                           |
| ipv6                     | Display IPv6 information                                  |
| icmp                     | Display ICMPv6 information                                |
| nd                       | ICMPv6 Neighbor Discovery commands                        |
| global                   | Show ICMPv6/ND global variables                           |
| traffic                  | Display ICMPv6 software processed traffic statistics      |
| __readonly__             | (Optional)  |
| TABLE_icmpv6_global_stat | (Optional) ICMPV6 global statistics                       |
| st-total                 | (Optional) total sent messages                            |
| rv-total                 | (Optional) total receive messages                         |
| st-err                   | (Optional) total sent error message                       |
| rv-err                   | (Optional) total receive error message                    |
| st-int-drp-cnt           | (Optional) sent interface down drop count                 |
| rv-int-drp-cnt           | (Optional) receive interface down drop count              |
| st-adj-nt-recov-am-ha    | (Optional) sent Adjacency not recovered from AM aft HA    |
| rv-adj-nt-recov-am-ha    | (Optional) receive Adjacency not recovered from AM aft HA |
| st-pkt-allow-inv-ttl-vpc | (Optional) sent Pkts allowed due to inv ttl on vPC-MCT    |
| rv-pkt-allow-inv-ttl-vpc | (Optional) receive Pkts allowed due to inv ttl on vPC-MCT |
| st-drp-src-mac-own       | (Optional) sent packet drop source mac address own        |

|                              |   |
|------------------------------|---|
| <i>rv-drp-src-mac-own</i>    | (Optional) receive packet drop source mac address own |
| <i>st-drp-tgt-ip-not-own</i> | (Optional) sent drop tgt ip address not own           |
| <i>rv-drp-tgt-ip-not-own</i> | (Optional) receive drop tgt ip address not own        |
| <i>st-drp-src-ip-not-own</i> | (Optional) sent dropped source ip address             |
| <i>rv-drp-src-ip-not-own</i> | (Optional) receive dropped source ip address          |
| <i>st-dest-unreach</i>       | (Optional) sent destination unreachable               |
| <i>rv-dest-unreach</i>       | (Optional) receive destination unreachable            |
| <i>st-admin-prohibit</i>     | (Optional) sent Administratively Prohibited           |
| <i>rv-admin-prohibit</i>     | (Optional) receive Administratively Prohibited        |
| <i>st-time-exceed</i>        | (Optional) sent time exceeded                         |
| <i>rv-time-exceed</i>        | (Optional) receive time exceeded                      |
| <i>st-para-pbms</i>          | (Optional) sent parameter problems                    |
| <i>rv-para-pbms</i>          | (Optional) receive parameter problems                 |
| <i>st-echo-req</i>           | (Optional) sent echo request                          |
| <i>rv-echo-req</i>           | (Optional) receive echo request                       |
| <i>st-echo-reply</i>         | (Optional) sent echo replies                          |
| <i>rv-echo-reply</i>         | (Optional) receive echo replies                       |
| <i>st-redirect</i>           | (Optional) sent redirects                             |
| <i>rv-redirect</i>           | (Optional) receive redirects                          |
| <i>st-pkt-too-big</i>        | (Optional) sent packet too big                        |
| <i>rv-pkt-too-big</i>        | (Optional) receive packet too big                     |
| <i>st-rtr-adver</i>          | (Optional) sent router advertisements                 |
| <i>rv-rtr-adver</i>          | (Optional) receive router advertisements              |
| <i>st-rtr-solicit</i>        | (Optional) sent router solicitations                  |
| <i>rv-rtr-solicit</i>        | (Optional) receive router solicitations               |
| <i>st-nei-adver</i>          | (Optional) sent neighbor advertisements               |
| <i>rv-nei-adver</i>          | (Optional) receive neighbor advertisements            |
| <i>st-nei-solicit</i>        | (Optional) sent neighbor solicitations                |
| <i>rv-nei-solicit</i>        | (Optional) receive neighbor solicitations             |

|                            |  |
|----------------------------|--|
| <i>fast-path-pkts</i>      | (Optional) fastpath packets                  |
| <i>fastpath-disable</i>    | (Optional) [fastpath disabled / others]      |
| <i>ign-fastpath-pkts</i>   | (Optional) Packets drop request ignore count |
| <i>dup-rtr-ra-recvd</i>    | (Optional) Duplicate router RA sent          |
| <i>rv-dup-rtr-ra-recvd</i> | (Optional) Duplicate router RA received      |
| TABLE_icmpv6_mld_stat      | (Optional) ICMPv6 MLD Statistics             |
| <i>st-v1-queries</i>       | (Optional) V1 Queries sent                   |
| <i>rv-v1-queries</i>       | (Optional) V1 Queries recieved               |
| <i>st-v2-queries</i>       | (Optional) V2 Queries sent                   |
| <i>rv-v2-queries</i>       | (Optional) V2 Queries received               |
| <i>st-v1-reports</i>       | (Optional) V1 Reports sent                   |
| <i>rv-v1-reports</i>       | (Optional) V1 Reports received               |
| <i>st-v2-reports</i>       | (Optional) V2 Reports sent                   |
| <i>rv-v2-reports</i>       | (Optional) V2 Reports received               |
| <i>st-v1-leaves</i>        | (Optional) V1 Leaves sent                    |
| <i>rv-v1-leaves</i>        | (Optional) V1 Leaves received                |

**Command Mode**

- /exec

## show ipv6 icmp interface

```
{ show ipv6 { icmp | nd } interface [ <interface> ] { [ prefix [ full ] ] [ route ] [ detail ] } [ vrf { <vrf-name> | <vrf-known-name> | all } ] } | { show ipv6 [ icmp ] mld interface [ brief ] [ detail ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] } | { show ipv6 [ icmp ] mld interface <interface> } [ __readonly__ TABLE_vrf <vrf-name-out> TABLE_intf <intf-name> <proto-state> <link-state> <admin-state> [ TABLE_addr <addr> ] <subnet> <link-local-addr> <icmpv6-disabled> <last-ns-sent> <last-na-sent> <last-ra-sent> <next-na-sent> <ra-min-interval> <ra-interval> <set-m-flag> <set-o-flag> <current-hop-limit> <mtu> <router-lifetime> <reachable-time> <retrans-timer> <ns-interval> <send-redirect> <send-unreachables> <mld-disabled> <mld-querier> <mld-entry-count> <mld-config-version> <mld-querier-version> <mld-host-version> <mld-query-timer> <mld-querier-expiry> <mld-qi> <mld-config-qi> <mld-query-mrt> <mld-config-query-mrt> <mld-startup-qi> <mld-config-startup-qi> <mld-startup-qc> <mld-config-last-member-mrt> <mld-last-member-qc> <mld-group-timeout> <mld-config-group-timeout> <mld-querier-timeout> <mld-config-querier-timeout> <mld-config-unsol-rpt-interval> <mld-qrv> <mld-config-robustness-variable> <mld-config-rpt-link-local> <mld-refcount> <static-group-map> <join-group-map> <ra-sent> <ra-rec> <rs-sent> <rs-rec> <na-sent> <na-rec> <ns-sent> <ns-rec> <redirect-sent> <redirect-rec> <msg-sent> <msg-rec> <errors-sent> <erros-rec> <ifdown-sent> <ifdown-rec> <am-ha-not-ready> <allow-mct-ttl> <our-own-mac> <tgt-not-us> <dest-unreachs-sent> <dest-unreachs-rec> <admin-prohibs-sent> <admin-prohibs-rec> <time-excds-sent> <time-excds-rec> <parm-problems-sent> <parm-problems-rec> <echos-sent> <echos-rec> <echo-replies-sent> <echo-replies-rec> <pkt-toobigs-sent> <pkt-toobigs-rec> <fastpath-pkt-recv> <fastpath-disable-pkt-recv> <fastpath-ignore-pkt-recv> <v1-queries-sent> <v1-queries-rec> <v2-queries-sent> <v2-queries-rec> <v1-reports-sent> <v1-reports-rec> <v2-reports-sent> <v2-reports-rec> <v1-leaves-sent> <v1-leaves-rec> <v2-leaves-sent> <v2-leaves-rec> <uptime> <mld-config-il> [ TABLE_one_int <grp-id> <protocol-one-int> <client-uuid> <client-state-act> <client-in-use> TABLE_vip_list <virt-ipv6> <virt-mac> <context_name> <context_id> <last-solocit-st> <last-nei-ad-st> <last-rtr-adv-st> <nxt-rtr-ad-st> ] <max-dad-attempts> <current-dad-attempts> [ TABLE_route <route> <preference> <lifetime> <info-option> <reachability-verify-enabled> <adv-route-info> <route-zero-lifetime> ] [ TABLE_prefix <prefix> <enabled> <vlaidlife-time> <preferredlife-time> <on-link> <off-link> <autonomous> ] ]
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                  |
| ipv6                  | Display IPv6 information                         |
| icmp                  | Display ICMPv6 information                       |
| vrf                   | (Optional) Display per-VRF information           |
| <i>vrf-name</i>       | (Optional) VRF name                              |
| <i>vrf-known-name</i> | (Optional) Known VRF name                        |
| all                   | (Optional) Display information for all VRFs      |
| nd                    | ICMPv6 Neighbor Discovery commands               |
| mld                   | Display Multicast Listener Discovery information |
| interface             | Display ICMPv6 related interface information     |
| prefix                | (Optional) Display List of ICMPv6 RA prefix      |



|                          |   |
|--------------------------|---|
| route                    | (Optional) Display List of ICMPv6 RA routes                       |
| full                     | (Optional) Display Complete prefix information                    |
| detail                   | (Optional) Display ICMPv6 related interface information in detail |
| brief                    | (Optional) Display ICMPv6 related interface information in brief  |
| <i>interface</i>         | (Optional) Interface name to show                                 |
| <i>__readonly__</i>      | (Optional)  |
| TABLE_vrf                | (Optional)  |
| <i>vrf-name-out</i>      | (Optional)  |
| TABLE_intf               | (Optional)  |
| <i>intf-name</i>         | (Optional)  |
| <i>proto-state</i>       | (Optional)  |
| <i>link-state</i>        | (Optional)  |
| <i>admin-state</i>       | (Optional)  |
| TABLE_addr               | (Optional)  |
| <i>icmpv6-disabled</i>   | (Optional)  |
| <i>last-ns-sent</i>      | (Optional)  |
| <i>last-na-sent</i>      | (Optional)  |
| <i>last-ra-sent</i>      | (Optional)  |
| <i>next-na-sent</i>      | (Optional)  |
| <i>ra-min-interval</i>   | (Optional)  |
| <i>ra-interval</i>       | (Optional)  |
| <i>set-m-flag</i>        | (Optional)  |
| <i>set-o-flag</i>        | (Optional)  |
| <i>current-hop-limit</i> | (Optional)  |
| <i>mtu</i>               | (Optional)  |
| <i>router-lifetime</i>   | (Optional)  |
| <i>reachable-time</i>    | (Optional)  |
| <i>retrans-timer</i>     | (Optional)  |
| <i>ns-interval</i>       | (Optional)  |

|                                       |            |
|---------------------------------------|------------|
| <i>send-redirect</i>                  | (Optional) |
| <i>send-unreachables</i>              | (Optional) |
| <i>mld-disabled</i>                   | (Optional) |
| <i>mld-entry-count</i>                | (Optional) |
| <i>mld-config-version</i>             | (Optional) |
| <i>mld-querier-version</i>            | (Optional) |
| <i>mld-host-version</i>               | (Optional) |
| <i>mld-query-timer</i>                | (Optional) |
| <i>mld-querier-expiry</i>             | (Optional) |
| <i>mld-qi</i>                         | (Optional) |
| <i>mld-config-qi</i>                  | (Optional) |
| <i>mld-query-mrt</i>                  | (Optional) |
| <i>mld-config-query-mrt</i>           | (Optional) |
| <i>mld-startup-qi</i>                 | (Optional) |
| <i>mld-config-startup-qi</i>          | (Optional) |
| <i>mld-startup-qc</i>                 | (Optional) |
| <i>mld-config-last-member-mrt</i>     | (Optional) |
| <i>mld-last-member-qc</i>             | (Optional) |
| <i>mld-group-timeout</i>              | (Optional) |
| <i>mld-config-group-timeout</i>       | (Optional) |
| <i>mld-querier-timeout</i>            | (Optional) |
| <i>mld-config-querier-timeout</i>     | (Optional) |
| <i>mld-config-unsol-rpt-interval</i>  | (Optional) |
| <i>mld-grv</i>                        | (Optional) |
| <i>mld-config-robustness-variable</i> | (Optional) |
| <i>mld-config-rpt-link-local</i>      | (Optional) |
| <i>mld-refcount</i>                   | (Optional) |
| <i>static-group-map</i>               | (Optional) |
| <i>join-group-map</i>                 | (Optional) |

|                           |            |
|---------------------------|------------|
| <i>ra-sent</i>            | (Optional) |
| <i>ra-rec</i>             | (Optional) |
| <i>rs-sent</i>            | (Optional) |
| <i>rs-rec</i>             | (Optional) |
| <i>na-sent</i>            | (Optional) |
| <i>na-rec</i>             | (Optional) |
| <i>ns-sent</i>            | (Optional) |
| <i>ns-rec</i>             | (Optional) |
| <i>redirect-sent</i>      | (Optional) |
| <i>redirect-rec</i>       | (Optional) |
| <i>msg-sent</i>           | (Optional) |
| <i>msg-rec</i>            | (Optional) |
| <i>errors-sent</i>        | (Optional) |
| <i>erros-rec</i>          | (Optional) |
| <i>ifdown-sent</i>        | (Optional) |
| <i>ifdown-rec</i>         | (Optional) |
| <i>am-ha-not-ready</i>    | (Optional) |
| <i>allow-mct-ttl</i>      | (Optional) |
| <i>our-own-mac</i>        | (Optional) |
| <i>tgt-not-us</i>         | (Optional) |
| <i>dest-unreachs-sent</i> | (Optional) |
| <i>dest-unreachs-rec</i>  | (Optional) |
| <i>admin-prohibs-sent</i> | (Optional) |
| <i>admin-prohibs-rec</i>  | (Optional) |
| <i>time-excds-sent</i>    | (Optional) |
| <i>time-excds-rec</i>     | (Optional) |
| <i>parm-problems-sent</i> | (Optional) |
| <i>parm-problems-rec</i>  | (Optional) |
| <i>echos-sent</i>         | (Optional) |

|                                  |            |
|----------------------------------|------------|
| <i>echos-rec</i>                 | (Optional) |
| <i>echo-replies-sent</i>         | (Optional) |
| <i>echo-replies-rec</i>          | (Optional) |
| <i>pkt-toobigs-sent</i>          | (Optional) |
| <i>pkt-toobigs-rec</i>           | (Optional) |
| <i>fastpath-pkt-recv</i>         | (Optional) |
| <i>fastpath-disable-pkt-recv</i> | (Optional) |
| <i>fastpath-ignore-pkt-recv</i>  | (Optional) |
| <i>v1-queries-sent</i>           | (Optional) |
| <i>v1-queries-rec</i>            | (Optional) |
| <i>v2-queries-sent</i>           | (Optional) |
| <i>v2-queries-rec</i>            | (Optional) |
| <i>v1-reports-sent</i>           | (Optional) |
| <i>v1-reports-rec</i>            | (Optional) |
| <i>v2-reports-sent</i>           | (Optional) |
| <i>v2-reports-rec</i>            | (Optional) |
| <i>v1-leaves-sent</i>            | (Optional) |
| <i>v1-leaves-rec</i>             | (Optional) |
| <i>v2-leaves-sent</i>            | (Optional) |
| <i>v2-leaves-rec</i>             | (Optional) |
| <i>uptime</i>                    | (Optional) |
| <i>mld-config-il</i>             | (Optional) |
| TABLE_one_int                    | (Optional) |
| <i>grp-id</i>                    | (Optional) |
| <i>protocol-one-int</i>          | (Optional) |
| <i>client-uuid</i>               | (Optional) |
| <i>client-state-act</i>          | (Optional) |
| <i>client-in-use</i>             | (Optional) |
| TABLE_vip_list                   | (Optional) |

|                                    |            |
|------------------------------------|------------|
| <i>virt-mac</i>                    | (Optional) |
| <i>context_name</i>                | (Optional) |
| <i>context_id</i>                  | (Optional) |
| <i>last-solocit-st</i>             | (Optional) |
| <i>last-nei-ad-st</i>              | (Optional) |
| <i>last-rtr-adv-st</i>             | (Optional) |
| <i>nxt-rtr-ad-st</i>               | (Optional) |
| <i>max-dad-attempts</i>            | (Optional) |
| <i>current-dad-attempts</i>        | (Optional) |
| TABLE_route                        | (Optional) |
| <i>preference</i>                  | (Optional) |
| <i>lifetime</i>                    | (Optional) |
| <i>info-option</i>                 | (Optional) |
| <i>reachability-verify-enabled</i> | (Optional) |
| <i>adv-route-info</i>              | (Optional) |
| <i>route-zero-lifetime</i>         | (Optional) |
| TABLE_prefix                       | (Optional) |
| <i>enabled</i>                     | (Optional) |
| <i>vlaidlif-time</i>               | (Optional) |
| <i>preferredlif-time</i>           | (Optional) |
| <i>on-link</i>                     | (Optional) |
| <i>off-link</i>                    | (Optional) |
| <i>autonomous</i>                  | (Optional) |

**Command Mode**

- /exec

# show ipv6 icmp ndp

show ipv6 icmp ndp

## Syntax Description

|      |   |
|------|---|
| show | Show running system information                       |
| ipv6 | Display IPv6 information                              |
| icmp | Display ICMPv6 information                            |
| ndp  | Displays ipv6 neighbor by looking at the top level pt |

## Command Mode

- /exec

## show ipv6 icmp off-list

```
show ipv6 icmp off-list [ vlan <vlan-id> ] [ __readonly__ [ <vlan-adj-cnt> ] [ <icmpv6-sync-adj-cnt> ] {
TABLE_ icmpv6_vlan_list <adj-vlan-id> <off-adj-ip-addr> <icmpv6-time-stamp> <icmpv6-mac-addr>
<off-adj-flags> } ]
```

### Syntax Description

|                            |  |
|----------------------------|--|
| show                       | Show running system information                |
| ipv6                       | Display IPv6 information                       |
| icmp                       | Display ICMPv6 information                     |
| off-list                   | Show adjacencies in off-list icmpv6 database   |
| vlan                       | (Optional) Vlan id                             |
| <i>vlan-id</i>             | (Optional) Show information for specified vlan |
| <i>__readonly__</i>        | (Optional)                                     |
| <i>vlan-adj-cnt</i>        | (Optional) vlan adjacency count                |
| <i>icmpv6-sync-adj-cnt</i> | (Optional) icmpv6 sync adjacency count         |
| TABLE_ icmpv6_vlan_list    | (Optional) icmpv6 vlan list table              |
| <i>adj-vlan-id</i>         | (Optional) adjacency vlan id                   |
| <i>icmpv6-time-stamp</i>   | (Optional) icmpv6 time stamp                   |
| <i>icmpv6-mac-addr</i>     | (Optional) icmpv6 mac address                  |
| <i>off-adj-flags</i>       | (Optional) offlist adjacency flags             |

### Command Mode

- /exec

# show ipv6 icmp process sdb

show ipv6 icmp process sdb

## Syntax Description

|         |                                 |
|---------|---------------------------------|
| show    | Show running system information |
| ipv6    | Display IPv6 information        |
| icmp    | Display ICMPv6 information      |
| process | Display process information     |
| sdb     | Dump IPv6 sdb in a file         |

## Command Mode

- /exec





|                         |            |
|-------------------------|------------|
| TABLE_glo_vrf           | (Optional) |
| <i>group-id</i>         | (Optional) |
| <i>protocol-vrf</i>     | (Optional) |
| <i>cli-uuid</i>         | (Optional) |
| <i>vaddr-action</i>     | (Optional) |
| <i>vrf-interface</i>    | (Optional) |
| <i>vaddr-mac</i>        | (Optional) |
| <i>cxt-name</i>         | (Optional) |
| <i>cxt-id</i>           | (Optional) |
| TABLE_one_int           | (Optional) |
| <i>lcache-inter</i>     | (Optional) |
| <i>cxt-name-int</i>     | (Optional) |
| <i>cxt_id-int</i>       | (Optional) |
| <i>grp-id</i>           | (Optional) |
| <i>protocol-one-int</i> | (Optional) |
| <i>client-uuid</i>      | (Optional) |
| <i>client-state-act</i> | (Optional) |
| <i>client-in-use</i>    | (Optional) |
| <i>client-state</i>     | (Optional) |
| TABLE_vip_list          | (Optional) |
| <i>virt-mac</i>         | (Optional) |
| <i>cxt_name</i>         | (Optional) |
| <i>cxt_id</i>           | (Optional) |
| <i>last-solocit-st</i>  | (Optional) |
| <i>last-nei-ad-st</i>   | (Optional) |
| <i>last-rtr-adv-st</i>  | (Optional) |
| <i>nxt-rtr-ad-st</i>    | (Optional) |
| <i>vmac-addr</i>        | (Optional) |
| <i>st-total</i>         | (Optional) |

|                               |            |
|-------------------------------|------------|
| <i>rv-total</i>               | (Optional) |
| <i>st-err</i>                 | (Optional) |
| <i>rv-err</i>                 | (Optional) |
| <i>st-int-dwn-drp</i>         | (Optional) |
| <i>rv-int-dwn-drp</i>         | (Optional) |
| <i>st-adj-nt-recov-am</i>     | (Optional) |
| <i>rv-adj-nt-recov-am</i>     | (Optional) |
| <i>st-pkt-allow-inv-ttl</i>   | (Optional) |
| <i>rv-pkt-allow-inv-ttl</i>   | (Optional) |
| <i>st-pkt-drp-src-mac-own</i> | (Optional) |
| <i>rv-pkt-drp-src-mac-own</i> | (Optional) |
| <i>st-pkt-drp-tgt-not-own</i> | (Optional) |
| <i>rv-pkt-drp-tgt-not-own</i> | (Optional) |
| <i>st-pkt-drp-src-not-own</i> | (Optional) |
| <i>rv-pkt-drp-src-not-own</i> | (Optional) |
| <i>st-dest-unreach</i>        | (Optional) |
| <i>rv-dest-unreach</i>        | (Optional) |
| <i>st-admin-prohi</i>         | (Optional) |
| <i>rv-admin-prohi</i>         | (Optional) |
| <i>st-time-exceed</i>         | (Optional) |
| <i>rv-time-exceed</i>         | (Optional) |
| <i>st-patr-pbm</i>            | (Optional) |
| <i>rv-patr-pbm</i>            | (Optional) |
| <i>st-echo-req</i>            | (Optional) |
| <i>rv-echo-req</i>            | (Optional) |
| <i>st-echo-reply</i>          | (Optional) |
| <i>rv-echo-reply</i>          | (Optional) |
| <i>st-dup-ra</i>              | (Optional) |
| <i>rv-dup-ra</i>              | (Optional) |

|                       |            |
|-----------------------|------------|
| <i>st-redirect</i>    | (Optional) |
| <i>rv-redirect</i>    | (Optional) |
| <i>st-pkt-too-big</i> | (Optional) |
| <i>rv-pkt-too-big</i> | (Optional) |
| <i>st-rtr-adver</i>   | (Optional) |
| <i>rv-rtr-adver</i>   | (Optional) |
| <i>st-rtr-solicit</i> | (Optional) |
| <i>rv-rtr-solicit</i> | (Optional) |
| <i>st-nei-adver</i>   | (Optional) |
| <i>rv-nei-adver</i>   | (Optional) |
| <i>st-nei-solicit</i> | (Optional) |
| <i>rv-nei-solicit</i> | (Optional) |

**Command Mode**

- /exec



|  |  |
|--|--|
| <i>icmpv6-vpc-id-ifindx-sending-pushmsg</i>    | (Optional) Unable to retrieve VPC id ifindex while sending push message                          |
| <i>icmpv6-vpc-id-proc-cfs-payload</i>          | (Optional) Unable to retrieve ifindex from vpc id  |
| <i>icmpv6-vpc-id-periodic-sync</i>             | (Optional) unable to retrieve vpc id ifindex for periodic sync                                   |
| <i>icmpv6-vpc-id-cfs-payload-periodic-sync</i> | (Optional) unable to retrieve ifindex from vpc id while processing cfs payload for periodic sync |
| <i>icmpv6-resp-sent</i>                        | (Optional) Response sent via CFSOE   |
| <i>icmpv6-resp-recvd</i>                       | (Optional) Response received via CFSOE   |
| <i>icmpv6-resp-recv-err</i>                    | (Optional) Response received via CFSOE with errors   |
| <i>icmpv6-rcvd-msg</i>                         | (Optional) Received message via CFSOE  |
| <i>icmpv6-send-fail</i>                        | (Optional) Send message failed via CFSOE   |
| <i>icmpv6-cfs-rel-dlvry-fail</i>               | (Optional) MCECM send api failed via CFSOE   |
| <i>icmpv6-cfs-rel-dnvry-suc</i>                | (Optional) Send message succeeded via CFSOE  |
| <i>icmpv6-drp-pt-add-fail</i>                  | (Optional) PT add failed while processing offlist database                                       |
| <i>icmpv6-drp-no-mem</i>                       | (Optional) Memory alloc failed while processing offlist database                                 |
| <i>icmpv6-drp-tmr-cre-fail</i>                 | (Optional) Timer create failed while processing offlist database                                 |
| <i>icmpv6-drp-add-adj-fail</i>                 | (Optional) Adjacency addition failed while processing offlist database                           |
| <i>icmpv6-off-drp-pt-lookup-fail</i>           | (Optional) PT lookup failed while processing offlist database                                    |
| <i>icmpv6-dont-drp-vlan-mismat</i>             | (Optional) VLAN mismatch while processing offlist database                                       |
| <i>icmpv6-drp-svi-invalid</i>                  | (Optional) SVI is invalid while processing offlist database                                      |
| <i>icmpv6-dont-drop-sv-down</i>                | (Optional) SVI is down while processing offlist database   |
| <i>icmpv6-drp-mct-down</i>                     | (Optional) MCT is down while processing offlist database   |
| <i>icmpv6-drp-ctxt-invalid</i>                 | (Optional) Ctxt_type is invalid while processing offlist database                                |
| <i>icmpv6-drp-vrf-invalid</i>                  | (Optional) VRF is invalid while processing offlist database                                      |
| <i>icmpv6-drp-l3addr-invalid</i>               | (Optional) IP address is invalid while processing offlist database                               |
| <i>icmpv6-drp-l3addr-sanity-fail</i>           | (Optional) IP address sanity failed while processing offlist database                            |
| <i>icmpv6-drp-mac-sanity-fail</i>              | (Optional) MAC address sanity failed while processing offlist database                           |
| <i>icmpv6-own-rtr-mac</i>                      | (Optional) Our own router mac while processing offlist database                                  |
| <i>icmpv6-drp-own-ipv6addr</i>                 | (Optional) Our own ip address while processing offlist database                                  |
| <i>icmpv6-drp-own-vipv6add</i>                 | (Optional) Our own virtual ip address while processing offlist database                          |

|                                      |   |
|--------------------------------------|---|
| <i>icmpv6-drp-adj-fail</i>           | (Optional) Create adjacency failed while processing offlist database            |
| <i>icmpv6-drp-subnet-mismatch</i>    | (Optional) Subnet mismatch while processing offlist database                    |
| <i>icmpv6-drp-adj-exist</i>          | (Optional) Entry exists while processing offlist database                       |
| <i>icmpv6-dont-drp-ip-not-enable</i> | (Optional) IPv6 not enabled on interface while processing offlist database      |
| <i>icmpv6-drp-total-cnt</i>          | (Optional) Total drop count while processing offlist database                   |
| <i>icmpv6-dont-drop-total-cnt</i>    | (Optional) Total don't drop count while processing offlist database             |
| <i>icmpv6-add-adj</i>                | (Optional) Total adjacency additions in offlist database                        |
| <i>icmpv6-del-adj</i>                | (Optional) Total adjacency deletions in offlist database                        |
| <i>icmpv6-adj-already-exist</i>      | (Optional) Total adjacencies ignored as they already exists in offlist database |

**Command Mode**

- /exec

## show ipv6 interface

```
show ipv6 interface { [ brief [ include-secondary ] | [ <interface> | <ipv6-addr> ] [ detail ] } [ vrf { <vrf-name>
| <vrf-known-name> | all } ] [ __readonly__ [ TABLE_intf <vrf-name-out> <intf-name> [ <proto-state> ] [
<link-state> ] [ <admin-state> ] [ <iod> ] [ TABLE_addr <addr> ] [ <prefix> ] [ { TABLE_sec_addr [
<sec-prefix> ] } ] [ <linklocal-addr> ] [ <linklocal-configured> ] [ { TABLE_vaddr [ <v-addr> ] } ] [
<ipv6-disabled> ] [ <mrouting-enabled> ] [ <mgroup-locally-joined> ] [ { TABLE_maddr <m-addr> [
<m-addr-refcnt> ] } ] [ { TABLE_sg [ <sg-saddr> ] [ <sg-maddr> ] [ <sg-refcnt> ] } ] [ <mtu> ] [
<global-in-pcl-configured> ] [ <global-in-pcl-name> ] [ <global-in-pcl-pending> ] [ <global-out-pcl-configured>
] [ <global-out-pcl-name> ] [ <global-out-pcl-pending> ] [ <in-pcl-configured> ] [ <in-pcl-name> ] [
<in-pcl-pending> ] [ <out-pcl-configured> ] [ <out-pcl-name> ] [ <out-pcl-pending> ] [ <urpf-mode> ] [
<ipv6-lstype> ] [ <stats-last-reset> ] [ <acl-in> ] [ <acl-out> ] [ <upkt-fwd> ] [ <upkt-orig> ] [ <upkt-consumed>
] [ <ubyte-fwd> ] [ <ubyte-orig> ] [ <ubyte-consumed> ] [ <mpkt-fwd> ] [ <mpkt-orig> ] [ <mpkt-consumed>
] [ <mbyte-fwd> ] [ <mbyte-orig> ] [ <mbyte-consumed> ] [ <upkt-in-acc> ] [ <upkt-in-rej> ] [ <ubyte-in-acc>
] [ <ubyte-in-rej> ] [ <mpkt-in-acc> ] [ <mpkt-in-rej> ] [ <mbyte-in-acc> ] [ <mbyte-in-rej> ] [ <upkt-out-acc>
] [ <upkt-out-rej> ] [ <ubyte-out-acc> ] [ <ubyte-out-rej> ] [ <mpkt-out-acc> ] [ <mpkt-out-rej> ] [
<mbyte-out-acc> ] [ <mbyte-out-rej> ] [ <hw-upkt-sent> ] [ <hw-upkt-recv> ] [ <hw-ubyte-sent> ] [
<hw-ubyte-recv> ] [ <hw-mpkt-sent> ] [ <hw-mpkt-recv> ] [ <hw-mbyte-sent> ] [ <hw-mbyte-recv> ] [
<hw-upkt-drop> ] [ <hw-ubyte-drop> ] [ <hw-mpkt-drop> ] [ <hw-mbyte-drop> ] [ <hw-mpkt-rpdrop> ] [
<hw-mbyte-rpdrop> ] [ <hw-mpkt-dfdrop> ] [ <hw-mbyte-dfdrop> ] [ <unspecified-src> ] [
<total-pkt-recv-tent-addr> ] [ <total-pkts-recv-invalid-addr-state> ] [ <total-pkt-recv-dup-state> ] [
<anycast-pkt-arrived-tcp> ] [ <deliver-intf-down> ] ] ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                             |
| ipv6                  | Display IPv6 information                                    |
| interface             | Display IPv6 related interface information                  |
| brief                 | (Optional) Display summary of IPv6 status and configuration |
| include-secondary     | (Optional) Display summary of all IPv6 addresses            |
| <i>interface</i>      | (Optional) Interface name to display                        |
| detail                | (Optional) Display detailed IPv6 interface information      |
| vrf                   | (Optional) Display per-VRF information                      |
| <i>vrf-name</i>       | (Optional) VRF name   |
| <i>vrf-known-name</i> | (Optional) Known VRF name                                   |
| all                   | (Optional) Display all VRFs                                 |
| __readonly__          | (Optional)  |
| TABLE_addr            | (Optional)  |
| <i>vrf-name-out</i>   | (Optional)  |



|                                  |            |
|----------------------------------|------------|
| TABLE_intf                       | (Optional) |
| <i>intf-name</i>                 | (Optional) |
| <i>proto-state</i>               | (Optional) |
| <i>link-state</i>                | (Optional) |
| <i>admin-state</i>               | (Optional) |
| <i>iod</i>                       | (Optional) |
| <i>addr</i>                      | (Optional) |
| <i>prefix</i>                    | (Optional) |
| TABLE_sec_addr                   | (Optional) |
| <i>sec-prefix</i>                | (Optional) |
| <i>linklocal-configured</i>      | (Optional) |
| TABLE_vaddr                      | (Optional) |
| <i>ipv6-disabled</i>             | (Optional) |
| <i>mrouting-enabled</i>          | (Optional) |
| <i>mgroup-locally-joined</i>     | (Optional) |
| TABLE_maddr                      | (Optional) |
| <i>m-addr-refcnt</i>             | (Optional) |
| TABLE_sg                         | (Optional) |
| <i>sg-refcnt</i>                 | (Optional) |
| <i>mtu</i>                       | (Optional) |
| <i>global-in-pcl-configured</i>  | (Optional) |
| <i>global-in-pcl-name</i>        | (Optional) |
| <i>global-in-pcl-pending</i>     | (Optional) |
| <i>global-out-pcl-configured</i> | (Optional) |
| <i>global-out-pcl-name</i>       | (Optional) |
| <i>global-out-pcl-pending</i>    | (Optional) |
| <i>in-pcl-configured</i>         | (Optional) |
| <i>in-pcl-name</i>               | (Optional) |
| <i>in-pcl-pending</i>            | (Optional) |

|                           |            |
|---------------------------|------------|
| <i>out-pcl-configured</i> | (Optional) |
| <i>out-pcl-name</i>       | (Optional) |
| <i>out-pcl-pending</i>    | (Optional) |
| <i>urpf-mode</i>          | (Optional) |
| <i>ipv6-lstype</i>        | (Optional) |
| <i>stats-last-reset</i>   | (Optional) |
| <i>acl-in</i>             | (Optional) |
| <i>acl-out</i>            | (Optional) |
| <i>upkt-fwd</i>           | (Optional) |
| <i>upkt-orig</i>          | (Optional) |
| <i>upkt-consumed</i>      | (Optional) |
| <i>ubyte-fwd</i>          | (Optional) |
| <i>ubyte-orig</i>         | (Optional) |
| <i>ubyte-consumed</i>     | (Optional) |
| <i>mpkt-fwd</i>           | (Optional) |
| <i>mpkt-orig</i>          | (Optional) |
| <i>mpkt-consumed</i>      | (Optional) |
| <i>mbyte-fwd</i>          | (Optional) |
| <i>mbyte-orig</i>         | (Optional) |
| <i>mbyte-consumed</i>     | (Optional) |
| <i>upkt-in-acc</i>        | (Optional) |
| <i>upkt-in-rej</i>        | (Optional) |
| <i>ubyte-in-acc</i>       | (Optional) |
| <i>ubyte-in-rej</i>       | (Optional) |
| <i>mpkt-in-acc</i>        | (Optional) |
| <i>mpkt-in-rej</i>        | (Optional) |
| <i>mbyte-in-acc</i>       | (Optional) |
| <i>mbyte-in-rej</i>       | (Optional) |
| <i>upkt-out-acc</i>       | (Optional) |

|   |            |
|---|------------|
| <i>upkt-out-rej</i>                       | (Optional) |
| <i>ubyte-out-acc</i>                      | (Optional) |
| <i>ubyte-out-rej</i>                      | (Optional) |
| <i>mpkt-out-acc</i>                       | (Optional) |
| <i>mpkt-out-rej</i>                       | (Optional) |
| <i>mbyte-out-acc</i>                      | (Optional) |
| <i>mbyte-out-rej</i>                      | (Optional) |
| <i>hw-upkt-sent</i>                       | (Optional) |
| <i>hw-upkt-recv</i>                       | (Optional) |
| <i>hw-ubyte-sent</i>                      | (Optional) |
| <i>hw-ubyte-recv</i>                      | (Optional) |
| <i>hw-mpkt-sent</i>                       | (Optional) |
| <i>hw-mpkt-recv</i>                       | (Optional) |
| <i>hw-mbyte-sent</i>                      | (Optional) |
| <i>hw-mbyte-recv</i>                      | (Optional) |
| <i>hw-upkt-drop</i>                       | (Optional) |
| <i>hw-ubyte-drop</i>                      | (Optional) |
| <i>hw-mpkt-drop</i>                       | (Optional) |
| <i>hw-mbyte-drop</i>                      | (Optional) |
| <i>hw-mpkt-rpdrop</i>                     | (Optional) |
| <i>hw-mbyte-rpdrop</i>                    | (Optional) |
| <i>hw-mpkt-dfdrop</i>                     | (Optional) |
| <i>hw-mbyte-dfdrop</i>                    | (Optional) |
| <i>unspecified-src</i>                    | (Optional) |
| <i>total-pkt-recv-tent-addr</i>           | (Optional) |
| <i>total-pkts-recv-invalid-addr-state</i> | (Optional) |
| <i>total-pkt-recv-dup-state</i>           | (Optional) |
| <i>anycast-pkt-arrived-tcp</i>            | (Optional) |
| <i>deliver-intf-down</i>                  | (Optional) |

**Command Mode**

- /exec

# show ipv6 interface global

show ipv6 interface global

## Syntax Description

|           |  |
|-----------|--|
| show      | Show running system information            |
| ipv6      | Display IPv6 information                   |
| interface | Display IPv6 related interface information |
| global    | Show IPv6 global parameters                |

## Command Mode

- /exec

## show ipv6 lisp data-cache

```
show ipv6 lisp data-cache [ <eid> ] [ vrf { <vrf-name> | <vrf-known-name> } ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                     |
| ipv6                  | Display IPv6 information                            |
| lisp                  | LISP show commands                                  |
| data-cache            | Display EID-to-RLOC data cache mapping in this ITR  |
| <i>eid</i>            | (Optional) Display mapping for IPv6 destination EID |
| vrf                   | (Optional) Display per-VRF information              |
| <i>vrf-name</i>       | (Optional) VRF name                                 |
| <i>vrf-known-name</i> | (Optional) Known VRF name                           |

### Command Mode

- /exec

# show ipv6 local-pt

```
show ipv6 local-pt [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information              |
| ipv6                  | Display IPv6 information                     |
| local-pt              | Display IPv6 local address pt data structure |
| vrf                   | (Optional) Display per-VRF information       |
| <i>vrf-name</i>       | (Optional) VRF name                          |
| <i>vrf-known-name</i> | (Optional) Known VRF name                    |
| all                   | (Optional) Display all VRFs                  |

## Command Mode

- /exec

# show ipv6 local policy

```
show ipv6 local policy [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ { TABLE_pbr [
<interface> ] [ <rmap> ] [ <status> ] [ <vrf_name> ] } ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ipv6                  | Display IPv6 information                    |
| local                 | IPv6 local options                          |
| policy                | Policy routing                              |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| __readonly__          | (Optional)                                  |
| TABLE_pbr             | (Optional)                                  |
| <i>interface</i>      | (Optional)                                  |
| <i>rmap</i>           | (Optional)                                  |
| <i>status</i>         | (Optional)                                  |
| <i>vrf_name</i>       | (Optional)                                  |

## Command Mode

- /exec



## show ipv6 mld groups

```
show ipv6 [ icmp ] mld groups [ { <source> [ <group> ] } | { <group> [ <source> ] } ] [ <interface> ] [ vrf {
<vrf-name> | <vrf-known-name> | all } ] [ __readonly__ TABLE_vrf <vrf-name-out> <entry-count>
TABLE_group <group-out> TABLE_intf <intf-name> <icmpv6-disabled> <mld-source> <mld-group>
<mld-source-unspec> <mld-static> <mld-local-group> <mld-translated> <mld-uptime> <mld-expire> ]
```

### Syntax Description

|                          |   |
|--------------------------|---|
| show                     | Show running system information                       |
| ipv6                     | Display IPv6 information                              |
| icmp                     | (Optional) Display ICMPv6 information                 |
| mld                      | Display Multicast Listener Discovery information      |
| groups                   | Display MLD attached group membership information     |
| vrf                      | (Optional) Display per-VRF information                |
| <i>vrf-name</i>          | (Optional) VRF name                                   |
| <i>vrf-known-name</i>    | (Optional) Known VRF name                             |
| all                      | (Optional) Display information for all VRFs           |
| <i>interface</i>         | (Optional) Display group membership on interface name |
| <i>__readonly__</i>      | (Optional)  |
| TABLE_vrf                | (Optional) vrf table                                  |
| <i>vrf-name-out</i>      | (Optional) vrf name                                   |
| <i>entry-count</i>       | (Optional) entry count                                |
| TABLE_group              | (Optional) group table                                |
| TABLE_intf               | (Optional) interface table                            |
| <i>intf-name</i>         | (Optional) interface name                             |
| <i>icmpv6-disabled</i>   | (Optional) icmpv6 disabled                            |
| <i>mld-source-unspec</i> | (Optional) mld source unspecified                     |
| <i>mld-static</i>        | (Optional) mld static                                 |
| <i>mld-local-group</i>   | (Optional) mld local group                            |
| <i>mld-translated</i>    | (Optional) mld translated                             |
| <i>mld-uptime</i>        | (Optional) mld uptime                                 |

|                   |                       |
|-------------------|-----------------------|
| <i>mld-expire</i> | (Optional) mld expire |
|-------------------|-----------------------|

**Command Mode**

- /exec

# show ipv6 mld local-groups

```
show ipv6 [ icmp ] mld local-groups [ <interface> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [
__readonly__ TABLE_vrf <vrf> { TABLE_entry <group-addr> <source-addr> <static-oif> <local-group>
<if-name> <last-reported> } ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                       |
| ipv6                  | Display IPv6 information                              |
| icmp                  | (Optional) Display ICMPv6 information                 |
| mld                   | Display Multicast Listener Discovery information      |
| local-groups          | Display MLD local group membership information        |
| <i>interface</i>      | (Optional) Display group membership on interface name |
| vrf                   | (Optional) Display per-VRF information                |
| <i>vrf-name</i>       | (Optional) VRF name                                   |
| <i>vrf-known-name</i> | (Optional) Known VRF name                             |
| all                   | (Optional) Display information for all VRFs           |
| <i>__readonly__</i>   | (Optional)  |
| TABLE_vrf             | (Optional) vrf table                                  |
| <i>vrf</i>            | (Optional) vrf  |
| TABLE_entry           | (Optional) entry table                                |
| <i>static-oif</i>     | (Optional) static oif                                 |
| <i>local-group</i>    | (Optional) local group                                |
| <i>if-name</i>        | (Optional) interface name                             |
| <i>last-reported</i>  | (Optional) last reported                              |

## Command Mode

- /exec

# show ipv6 mld vrf all

show ipv6 [ icmp ] mld vrf all

## Syntax Description

|      |  |
|------|--|
| show | Show running system information                  |
| ipv6 | Display IPv6 information                         |
| icmp | (Optional) Display ICMPv6 information            |
| mld  | Display Multicast Listener Discovery information |
| vrf  | Display per-VRF information                      |
| all  | Display MLD VRFs                                 |

## Command Mode

- /exec

# show ipv6 mtu

```
show ipv6 mtu [ statistics | vrf { <vrf-name> | <vrf-known-name> | all [ detail ] } ] [ __readonly__ [
TABLE_mtu_stat <out-ent> <exp-ent> <purge-ent> <int-err> <pkt-too-big> <cache-miss> <cache-upd>
<mtu-small> <cache-no-upd> ] [ TABLE_mtu_vrf [ <tot-ipv6-mtu> ] [ TABLE_one_mtu [ <pmtu-cntxt> ]
[ { <mtu-ipv6> <mtu-cache> <up-time> <iod-lcache> } ] ] ] ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                    |
| ipv6                  | Display IPV6 information                           |
| mtu                   | Display IPV6 Path MTU Cache                        |
| statistics            | (Optional) Display non-TCP Path MTU Statistics     |
| vrf                   | (Optional) Clear information for particular VRF    |
| <i>vrf-name</i>       | (Optional) VRF name                                |
| <i>vrf-known-name</i> | (Optional) Known VRF name                          |
| all                   | (Optional) Display information for all VRFs        |
| detail                | (Optional) Display IPV6 Path MTU Cache with detail |
| __readonly__          | (Optional)   |
| TABLE_mtu_stat        | (Optional) mtu statistic table                     |
| <i>out-ent</i>        | (Optional) outstanding entries                     |
| <i>exp-ent</i>        | (Optional) expired entries                         |
| <i>purge-ent</i>      | (Optional) purge entries                           |
| <i>int-err</i>        | (Optional) internal entries                        |
| <i>pkt-too-big</i>    | (Optional) packets too big messages received       |
| <i>cache-miss</i>     | (Optional) cache misses                            |
| <i>cache-upd</i>      | (Optional) cache updates                           |
| <i>mtu-small</i>      | (Optional) too small mtu advertised                |
| <i>cache-no-upd</i>   | (Optional) cache no update                         |
| TABLE_mtu_vrf         | (Optional) MTU vrf table                           |
| <i>tot-ipv6-mtu</i>   | (Optional) total ipv6 mtu messages                 |
| TABLE_one_mtu         | (Optional) MTU table                               |

|                   |                         |
|-------------------|-------------------------|
| <i>pmtu-cntxt</i> | (Optional) pmtu context |
| <i>mtu-cache</i>  | (Optional) mtu cache    |
| <i>up-time</i>    | (Optional) up time      |
| <i>iod-lcache</i> | (Optional) iod lcache   |

**Command Mode**

- /exec

## show ipv6 nd ra dns search-list

```
show ipv6 nd ra dns search-list [ interface <interface> ] [ __readonly__ { TABLE_intf <intf_name>
<dns_supress_server_list> [ { TABLE_list <list_no> <list_name> [ { <finite> | <infinite> } ] <seq_no> } ]
} ]
```

### Syntax Description

|                                |   |
|--------------------------------|---|
| show                           | Show running system information                             |
| ipv6                           | Display IPv6 information                                    |
| nd                             | ICMPv6 Neighbor Discovery commands                          |
| ra                             | Router Advertisement  |
| dns                            | Domain Name System  |
| search-list                    | DNS Search List   |
| interface                      | (Optional) Display DNS Search List information on interface |
| <i>interface</i>               | (Optional) Interface name to display                        |
| <i>__readonly__</i>            | (Optional)  |
| TABLE_intf                     | (Optional) IPV6 Interface name                              |
| <i>intf_name</i>               | (Optional) Interface name                                   |
| <i>dns_supress_server_list</i> | (Optional) DNS Supress server list                          |
| TABLE_list                     | (Optional) Search list                                      |
| <i>list_no</i>                 | (Optional) Search list number                               |
| <i>list_name</i>               | (Optional) Search list name                                 |
| <i>finite</i>                  | (Optional) Search list life time                            |
| <i>infinite</i>                | (Optional) Search list infinte time                         |
| <i>seq_no</i>                  | (Optional) Search list sequence number                      |

### Command Mode

- /exec

# show ipv6 nd ra dns server

```
show ipv6 nd ra dns server [ interface <interface> ] [ __readonly__ [ { TABLE_intf_name [ <inf-name> ] } ] [ { TABLE_intf [ <dns-recursion-server-list> ] [ <dns-suppression-server-list> ] [ { TABLE_dns_server [ <dns-server-index> ] [ <dns-server-list> ] [ <lifetime> ] [ <second-seqno> ] } ] [ { TABLE_dns_seq [ <dns-server> ] [ <dns-addr> ] [ <infinite-seq-no> ] } ] } ] ] ] ] ]
```

## Syntax Description

|                                    |   |
|------------------------------------|---|
| show                               | Show running system information                                       |
| ipv6                               | Display IPv6 information  |
| nd                                 | ICMPv6 Neighbor Discovery commands                                    |
| ra                                 | Router Advertisement  |
| dns                                | Domain Name System  |
| server                             | Domain Name System Server   |
| interface                          | (Optional) Display Recursive DNS Server List information on interface |
| <i>interface</i>                   | (Optional) Interface name to display                                  |
| <i>__readonly__</i>                | (Optional)  |
| TABLE_intf_name                    | (Optional) interface table  |
| <i>inf-name</i>                    | (Optional) interface name   |
| TABLE_intf                         | (Optional)  |
| <i>dns-recursion-server-list</i>   | (Optional) DNS recursion server list                                  |
| <i>dns-suppression-server-list</i> | (Optional) DNS suppression server list                                |
| TABLE_dns_server                   | (Optional) DNS server table   |
| <i>dns-server-index</i>            | (Optional) dns server index   |
| <i>dns-server-list</i>             | (Optional) dns server list  |
| <i>lifetime</i>                    | (Optional) server lifetime  |
| <i>second-seqno</i>                | (Optional) second sequence number                                     |
| TABLE_dns_seq                      | (Optional) DNS sequence table   |
| <i>dns-server</i>                  | (Optional) dns server   |
| <i>dns-addr</i>                    | (Optional) dns address  |
| <i>infinite-seq-no</i>             | (Optional) infinite sequence number                                   |



### Command Mode

- /exec

## show ipv6 nd rguard policy

```
show ipv6 nd rguard policy [ <name> ] [ __readonly__ { TABLE_rguard_policy <policy> [ <port_type>
] <device_role> [ <min_hop_limit> ] [ <max_hop_limit> ] [ <mgd_conf_flag> ] [ <other_conf_flag> ] [
<rtr_pref_max> ] [ <ra_prefix_list> ] [ <ipv6_acl> ] [ { TABLE_rguard_targets <target> <target_type>
<target_policy> <feature> <target_range> } } ]
```

### Syntax Description

|                        |   |
|------------------------|---|
| <i>name</i>            | (Optional) Policy name for feature RA guard |
| <i>__readonly__</i>    | (Optional)                                  |
| TABLE_rguard_policy    | (Optional) IPv6 RA guard policy             |
| <i>policy</i>          | (Optional) Policy Name                      |
| <i>port_type</i>       | (Optional) Port type                        |
| <i>device_role</i>     | (Optional) Device role                      |
| <i>min_hop_limit</i>   | (Optional) Minimum hop limit                |
| <i>max_hop_limit</i>   | (Optional) Minimum hop limit                |
| <i>mgd_conf_flag</i>   | (Optional) Check managed config flag        |
| <i>other_conf_flag</i> | (Optional) Check other config flag          |
| <i>rtr_pref_max</i>    | (Optional) Router-preference maximum        |
| <i>ra_prefix_list</i>  | (Optional) Match RA prefix list             |
| <i>ipv6_acl</i>        | (Optional) Match IPv6 access list           |
| TABLE_rguard_targets   | (Optional) RA Guard Targets table           |
| <i>target</i>          | (Optional) Target Name                      |
| <i>target_type</i>     | (Optional) Target Type                      |
| <i>target_policy</i>   | (Optional) Policy Name                      |
| <i>feature</i>         | (Optional) Feature                          |
| <i>target_range</i>    | (Optional) Target Range                     |

### Command Mode

- /exec

# show ipv6 nd rt-pref global pt

show ipv6 nd rt-pref global pt

## Syntax Description

|         |                                    |
|---------|------------------------------------|
| show    | Show running system information    |
| ipv6    | Display IPv6 information           |
| nd      | ICMPv6 Neighbor Discovery commands |
| rt-pref | Router Preference                  |
| global  | Global                             |
| pt      | PTREE                              |

## Command Mode

- /exec

# show ipv6 ndp

show ipv6 ndp

## Syntax Description

|      |                                   |
|------|-----------------------------------|
| show | Show running system information   |
| ipv6 | Display IPv6 information          |
| ndp  | Show IPv6 neighbors from netstack |

## Command Mode

- /exec

# show ipv6 neighbor binding

```
show ipv6 neighbor binding [ { { vlan <vlanid> [ details ] } | { { address { <ipv6-addr> | all } } { interface <intfid> vlan <vlanid> [ details ] } }
```

## Syntax Description

|               |                                      |
|---------------|--------------------------------------|
| <i>intfid</i> | (Optional) [details]                 |
| show          | Show running system information      |
| ipv6          | Show the IPv6 features of the system |
| <i>vlanid</i> | (Optional) Vlan number               |

## Command Mode

- /exec

## show ipv6 neighbor binding mac

```
show ipv6 neighbor binding mac <macaddr> { interface <intfid> vlan <vlanid> [ details ] }
```

### Syntax Description

|                |                                      |
|----------------|--------------------------------------|
| <i>intfid</i>  | [details]                            |
| show           | Show running system information      |
| ipv6           | Show the IPv6 features of the system |
| <i>macaddr</i> | 48-bit hardware address              |
| <i>vlanid</i>  | Vlan number                          |

### Command Mode

- /exec

## show ipv6 neighbor static

```
show ipv6 neighbor static [ interface <interface> ] [ __readonly__ [ TABLE_i6_nei { <nei-ipv6> <nei-mac>
<nei-iod> <nei-if-iod> } ] [ <tot-nei-ent> ] [ TABLE_nei_cnt { <nei-ipv6-tot> <nei-mac-tot> <nei-iod-tot>
<nei-if-iod-tot> } ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                       |
| ipv6                  | Display IPv6 information                              |
| neighbor              | Show IPv6 neighbor entry                              |
| static                | Displays only static neighbors                        |
| interface             | (Optional) Display IPv6 related interface information |
| <i>interface</i>      | (Optional) Interface name to display                  |
| <i>__readonly__</i>   | (Optional)  |
| TABLE_i6_nei          | (Optional) ipv6 neighbor table                        |
| <i>nei-mac</i>        | (Optional) neighbor mac address                       |
| <i>nei-iod</i>        | (Optional) neighbor iod                               |
| <i>nei-if-iod</i>     | (Optional) neighbor interface iod                     |
| <i>tot-nei-ent</i>    | (Optional) total neighbor entries                     |
| TABLE_nei_cnt         | (Optional) neighbor count table                       |
| <i>nei-mac-tot</i>    | (Optional) neighbor mac address                       |
| <i>nei-iod-tot</i>    | (Optional) neighbor iod                               |
| <i>nei-if-iod-tot</i> | (Optional) neighbor physical interface iod            |

### Command Mode

- /exec

# show ipv6 pim bitfield

show ipv6 pim bitfield

## Syntax Description

|          |                                       |
|----------|---------------------------------------|
| show     | Show running system information       |
| ipv6     | Display IPv6 information              |
| pim      | Display PIM6 status and configuration |
| bitfield | Display compressed bitfield details   |

## Command Mode

- /exec



# show ipv6 pim df

```
show ipv6 pim df [ <rp-or-group> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__
<out-context> { TABLE_rp <rp-addr> <df-ordinal> <df-bits> <df-bits-count> <metric-pref> <metric> {
TABLE_grange <grange-grp> <grange-masklen> } { TABLE_iod <if-name> <df-winner> <df-state>
<winner-metric-pref> <winner-metric> <uptime> <is-rpf> } } ]
```

## Syntax Description

|                           |   |
|---------------------------|---|
| show                      | Show running system information             |
| ipv6                      | Display IPv6 information                    |
| pim                       | Display PIM6 status and configuration       |
| df                        | Display Bidir Designated Forwarders         |
| vrf                       | (Optional) Display per-VRF information      |
| <i>vrf-name</i>           | (Optional) VRF name                         |
| <i>vrf-known-name</i>     | (Optional) Known VRF name                   |
| all                       | (Optional) Display information for all VRFs |
| <i>__readonly__</i>       | (Optional)                                  |
| <i>out-context</i>        | (Optional)                                  |
| TABLE_rp                  | (Optional)                                  |
| <i>df-ordinal</i>         | (Optional)                                  |
| <i>df-bits</i>            | (Optional)                                  |
| <i>df-bits-count</i>      | (Optional)                                  |
| <i>metric-pref</i>        | (Optional)                                  |
| <i>metric</i>             | (Optional)                                  |
| TABLE_grange              | (Optional)                                  |
| <i>grange-masklen</i>     | (Optional)                                  |
| TABLE_iod                 | (Optional)                                  |
| <i>if-name</i>            | (Optional)                                  |
| <i>df-state</i>           | (Optional)                                  |
| <i>winner-metric-pref</i> | (Optional)                                  |
| <i>winner-metric</i>      | (Optional)                                  |

|               |            |
|---------------|------------|
| <i>uptime</i> | (Optional) |
| <i>is-rpf</i> | (Optional) |

**Command Mode**

- /exec

# show ipv6 pim embed-rp

show ipv6 pim embed-rp <group>

## Syntax Description

|          |  |
|----------|--|
| show     | Show running system information        |
| ipv6     | Display IPv6 information               |
| pim      | Display PIM6 status and configuration  |
| embed-rp | Display Embed-RP group address mapping |

## Command Mode

- /exec

## show ipv6 pim event-history

show ipv6 pim [ internal ] event-history { errors | msgs | <pim6-event-hist-buf-name> | statistics }

### Syntax Description

|                                 |                                      |
|---------------------------------|--------------------------------------|
| show                            | Show running system information      |
| ipv6                            | Display IPv6 information             |
| pim                             | PIM6 global configuration commands   |
| internal                        | (Optional) Commands for internal use |
| event-history                   | Show various event logs of PIM6      |
| errors                          | Show error logs of PIM6              |
| msgs                            | Show various message logs of PIM6    |
| <i>pim6-event-hist-buf-name</i> | Show logs of event-hist buffer       |
| statistics                      | Show state and size of buffers       |

### Command Mode

- /exec

# show ipv6 pim fabric info

show ipv6 pim fabric info [ *\_\_readonly\_\_* <*switch\_role*> ]

## Syntax Description

|                     |                                       |
|---------------------|---------------------------------------|
| show                | Show running system information       |
| ipv6                | Display IPv6 information              |
| pim                 | Display PIM6 status and configuration |
| fabric              | Fabric functionality                  |
| info                | show the fabric info                  |
| <i>__readonly__</i> | (Optional)                            |
| <i>switch_role</i>  | (Optional)                            |

## Command Mode

- /exec

## show ipv6 pim fabric legacy-vlans

show ipv6 pim fabric legacy-vlans [ *\_\_readonly\_\_* *TABLE\_legacy\_vlan* *<vlan\_id>* ]

### Syntax Description

|                          |                                       |
|--------------------------|---------------------------------------|
| show                     | Show running system information       |
| ipv6                     | Display IPv6 information              |
| pim                      | Display PIM6 status and configuration |
| fabric                   | Fabric functionality                  |
| legacy-vlans             | Show legacy VLANs on this switch      |
| <i>__readonly__</i>      | (Optional)                            |
| <i>TABLE_legacy_vlan</i> | (Optional)                            |
| <i>vlan_id</i>           | (Optional)                            |

### Command Mode

- /exec

## show ipv6 pim group-range

```
show ipv6 pim group-range [ <group> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__
<out-context> { TABLE_group <grp-addr> <invalid-grp> <mode> <rp-addr> <sh-tree-only-range> } ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ipv6                  | Display IPv6 information                    |
| pim                   | Display PIM6 status and configuration       |
| group-range           | Display the various group ranges            |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| __readonly__          | (Optional)                                  |
| <i>out-context</i>    | (Optional)                                  |
| TABLE_group           | (Optional)                                  |
| <i>invalid-grp</i>    | (Optional)                                  |
| <i>mode</i>           | (Optional)                                  |

### Command Mode

- /exec

## show ipv6 pim interface show ipv6 pim interface

```
show ipv6 pim interface <interface> | show ipv6 pim interface [ brief ] [ vrf { <vrf-name> | <vrf-known-name>
| all } ] [ __readonly__ <out-context> { TABLE_iod <if-name> <if-addr> <dr> <nbr-cnt> <is-border>
<is-iface-in-cib> <is-pim-enabled> <if-addr-summary> <if-status> <dr-priority> <no-dr-priority>
<hello-interval-sec> <hello-interval-msec> <hello-timer> <holdtime-sec> <holdtime-msec> <genid>
<isauth-config> <is-passive> <nbr-policy-name> <jp-in-policy-name> <jp-out-policy-name> <last-cleared>
<hello-sent> <hello-rcvd> <jp-sent> <jp-rcvd> <assert-sent> <assert-rcvd> <graft-sent> <graft-rcvd>
<graft-ack-sent> <graft-ack-rcvd> <df-offer-sent> <df-offer-rcvd> <df-winner-sent> <df-winner-rcvd>
<df-backoff-sent> <df-backoff-rcvd> <pass-sent> <pass-rcvd> <cksum-errors> <invalid-errors>
<invalid-df-errors> <auth-failed> <pak-len-errors> <ver-errors> <pkts-self> <pkts-non-nbr> <pkts-on-passive>
<jp-rcvd-on-rpf> <jp-rcvd-no-rpf> <jp-rcvd-wrong-rpf> <jp-rcvd-for-ssm> <jp-rcvd-for-bidir>
<jp-in-policy-filter> <jp-out-policy-filter> } ]
```

### Syntax Description

|                        |  |
|------------------------|--|
| show                   | Show running system information                  |
| ipv6                   | Display IPv6 information                         |
| pim                    | Display PIM6 status and configuration            |
| interface              | Display PIM6 interface related information       |
| <i>interface</i>       | Interface name of single interface to display    |
| brief                  | (Optional) Display one line status per interface |
| vrf                    | (Optional) Display per-VRF information           |
| <i>vrf-name</i>        | (Optional) VRF name                              |
| <i>vrf-known-name</i>  | (Optional) Known VRF name                        |
| all                    | (Optional) Display information for all VRFs      |
| <i>__readonly__</i>    | (Optional)                                       |
| <i>out-context</i>     | (Optional)                                       |
| TABLE_iod              | (Optional)                                       |
| <i>if-name</i>         | (Optional)                                       |
| <i>nbr-cnt</i>         | (Optional)                                       |
| <i>is-iface-in-cib</i> | (Optional)                                       |
| <i>is-pim-enabled</i>  | (Optional)                                       |
| <i>is-border</i>       | (Optional)                                       |
| <i>if-addr-summary</i> | (Optional)                                       |



|                            |            |
|----------------------------|------------|
| <i>if-status</i>           | (Optional) |
| <i>dr-priority</i>         | (Optional) |
| <i>no-dr-priority</i>      | (Optional) |
| <i>hello-interval-sec</i>  | (Optional) |
| <i>hello-interval-msec</i> | (Optional) |
| <i>hello-timer</i>         | (Optional) |
| <i>holdtime-sec</i>        | (Optional) |
| <i>holdtime-msec</i>       | (Optional) |
| <i>genid</i>               | (Optional) |
| <i>isauth-config</i>       | (Optional) |
| <i>is-passive</i>          | (Optional) |
| <i>nbr-policy-name</i>     | (Optional) |
| <i>jp-in-policy-name</i>   | (Optional) |
| <i>jp-out-policy-name</i>  | (Optional) |
| <i>last-cleared</i>        | (Optional) |
| <i>hello-sent</i>          | (Optional) |
| <i>hello-rcvd</i>          | (Optional) |
| <i>jp-sent</i>             | (Optional) |
| <i>jp-rcvd</i>             | (Optional) |
| <i>assert-sent</i>         | (Optional) |
| <i>assert-rcvd</i>         | (Optional) |
| <i>graft-sent</i>          | (Optional) |
| <i>graft-rcvd</i>          | (Optional) |
| <i>graft-ack-sent</i>      | (Optional) |
| <i>graft-ack-rcvd</i>      | (Optional) |
| <i>df-offer-sent</i>       | (Optional) |
| <i>df-offer-rcvd</i>       | (Optional) |
| <i>df-winner-sent</i>      | (Optional) |
| <i>df-winner-rcvd</i>      | (Optional) |

|                             |            |
|-----------------------------|------------|
| <i>df-backoff-sent</i>      | (Optional) |
| <i>df-backoff-rcvd</i>      | (Optional) |
| <i>pass-sent</i>            | (Optional) |
| <i>pass-rcvd</i>            | (Optional) |
| <i>cksum-errors</i>         | (Optional) |
| <i>invalid-errors</i>       | (Optional) |
| <i>invalid-df-errors</i>    | (Optional) |
| <i>auth-failed</i>          | (Optional) |
| <i>pak-len-errors</i>       | (Optional) |
| <i>ver-errors</i>           | (Optional) |
| <i>pkts-self</i>            | (Optional) |
| <i>pkts-non-nbr</i>         | (Optional) |
| <i>pkts-on-passive</i>      | (Optional) |
| <i>jp-rcvd-on-rpf</i>       | (Optional) |
| <i>jp-rcvd-no-rp</i>        | (Optional) |
| <i>jp-rcvd-wrong-rp</i>     | (Optional) |
| <i>jp-rcvd-for-ssm</i>      | (Optional) |
| <i>jp-rcvd-for-bidir</i>    | (Optional) |
| <i>jp-in-policy-filter</i>  | (Optional) |
| <i>jp-out-policy-filter</i> | (Optional) |

**Command Mode**

- /exec

## show ipv6 pim neighbor

```
show ipv6 pim neighbor { [ <interface> ] | [ <ipv6addr> ] } [ vrf { <vrf-name> | <vrf-known-name> | all } ]
[ __readonly__ [ TABLE_vrf <out-context> [ TABLE_neighbor <nbr-addr><if-name><uptime><expires>
[ <dr-priority> ] <bidir-capable> <bfd-state><name> [ TABLE_secondary <sec-addr> ] ] ] ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                       |
| ipv6                  | Display IPv6 information                              |
| pim                   | Display PIM6 status and configuration                 |
| neighbor              | Display PIM6 neighbor related information             |
| <i>interface</i>      | (Optional) Display neighbors on single interface name |
| vrf                   | (Optional) Display per-VRF information                |
| <i>vrf-name</i>       | (Optional) VRF name                                   |
| <i>vrf-known-name</i> | (Optional) Known VRF name                             |
| all                   | (Optional) Display information for all VRFs           |
| __readonly__          | (Optional)  |
| TABLE_vrf             | (Optional)  |
| <i>out-context</i>    | (Optional)  |
| TABLE_neighbor        | (Optional)  |
| <i>dr-priority</i>    | (Optional)  |
| <i>bidir-capable</i>  | (Optional)  |
| TABLE_secondary       | (Optional)  |

### Command Mode

- /exec

## show ipv6 pim oif-list

```
show ipv6 pim oif-list <group> [ <source> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__
TABLE_vrf <vrf-name> { TABLE_grp <mcast-addr> <incoming-intf> <rpf-nbr> <timeout-interval>
<oif-list-count> [ { TABLE_oiflist <oif-name> } ] <timeout-list-count> [ { TABLE_timeoutlist
<timeoutoif-name> } ] <immediate-list-count> [ { TABLE_immediatelist <immediateoif-name> } ]
<immediate-timeout-list-count> [ { TABLE_immediatettimeoutlist <immediatettimeoutoif-name> } ]
<sgr-prune-list-count> [ { TABLE_sgrprunelist <sgrprunelisoif-name> } ] ] ]
```

### Syntax Description

|                             |   |
|-----------------------------|---|
| show                        | Show running system information               |
| ipv6                        | Display IPv6 information                      |
| pim                         | Display PIM6 status and configuration         |
| oif-list                    | Display interfaces for oif-list of PIM6 route |
| vrf                         | (Optional) Display per-VRF information        |
| <i>vrf-name</i>             | (Optional) VRF name                           |
| <i>vrf-known-name</i>       | (Optional) Known VRF name                     |
| all                         | (Optional) Display information for all VRFs   |
| __readonly__                | (Optional)                                    |
| TABLE_vrf                   | (Optional)                                    |
| <i>vrf-name</i>             | (Optional)                                    |
| TABLE_grp                   | (Optional)                                    |
| <i>mcast-addr</i>           | (Optional)                                    |
| <i>incoming-intf</i>        | (Optional)                                    |
| <i>timeout-interval</i>     | (Optional)                                    |
| <i>oif-list-count</i>       | (Optional)                                    |
| TABLE_oiflist               | (Optional)                                    |
| <i>oif-name</i>             | (Optional)                                    |
| <i>timeout-list-count</i>   | (Optional)                                    |
| TABLE_timeoutlist           | (Optional)                                    |
| <i>timeoutoif-name</i>      | (Optional)                                    |
| <i>immediate-list-count</i> | (Optional)                                    |

|                                     |            |
|-------------------------------------|------------|
| TABLE_immediatelist                 | (Optional) |
| <i>immediateoif-name</i>            | (Optional) |
| <i>immediate-timeout-list-count</i> | (Optional) |
| TABLE_immediatettimeoutlist         | (Optional) |
| <i>immediatettimeoutoif-name</i>    | (Optional) |
| <i>sgr-prune-list-count</i>         | (Optional) |
| TABLE_sgrprunelist                  | (Optional) |
| <i>sgrprunelisoif-name</i>          | (Optional) |

**Command Mode**

- /exec

# show ipv6 pim policy statistics jp

```
show ipv6 pim policy statistics { jp-policy | neighbor-policy } <interface> [ __readonly__ { TABLE_routemap
<name> <action> <seq_num> [ { TABLE_cmd <command> <match_count> <compare_count> } ] }
<total_accept_count> <total_reject_count> ]
```

## Syntax Description

|                           |  |
|---------------------------|--|
| show                      | Show running system information            |
| ipv6                      | Display IPv6 information                   |
| pim                       | PIM6 global configuration commands         |
| policy                    | Policy related information                 |
| statistics                | Policy statistics                          |
| jp-policy                 | Statistics for jp-policy                   |
| neighbor-policy           | Statistics for neighbor-policy             |
| <i>interface</i>          | Interface to display policy statistics for |
| <i>__readonly__</i>       | (Optional)                                 |
| TABLE_routemap            | (Optional)                                 |
| <i>name</i>               | (Optional)                                 |
| <i>action</i>             | (Optional)                                 |
| <i>seq_num</i>            | (Optional)                                 |
| TABLE_cmd                 | (Optional)                                 |
| <i>command</i>            | (Optional)                                 |
| <i>compare_count</i>      | (Optional)                                 |
| <i>match_count</i>        | (Optional)                                 |
| <i>total_accept_count</i> | (Optional)                                 |
| <i>total_reject_count</i> | (Optional)                                 |

## Command Mode

- /exec

# show ipv6 pim route

```
show ipv6 pim route { [ bitfield ] | <source> <group> | <group> [ <source> ] [ bitfield ] } [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ TABLE_vrf <context-name> <route-count> [ TABLE_one_route <mcast-addr> [ <rp-addr> <rp-local> ] <bidir> <sgexpire> <is-fabricowned> [ <sgexpire> ] [ <timeleft> ] <rp-bit> [ <register> ] [ <assert-timeout> ] <intf-name> <rpf-nbr-1> <rpf-nbr-addr> <rpf-nbr-2> [ <metric-pref> <route-metric> ] [ <oif-count> ] [ <oif-bf-str> ] [ <timeout-count> ] [ <timeout-bf-str> ] [ <immediate-count> ] [ <immediate-bf-str> ] [ <immediate-timeout-count> ] [ <immediate-timeout-bf-str> ] [ <sgr-prune-list-count> ] [ <sgr-prune-list-bf-str> ] [ <timeout-interval> <jp-holdtime-rndup> ] ] ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                            |
| ipv6                  | Display IPv6 information                                   |
| pim                   | Display PIM6 status and configuration                      |
| route                 | Display PIM6 specific route information                    |
| bitfield              | (Optional) Display details of each bitfield for PIM6 route |
| vrf                   | (Optional) Display per-VRF information                     |
| <i>vrf-name</i>       | (Optional) VRF name  |
| <i>vrf-known-name</i> | (Optional) Known VRF name                                  |
| all                   | (Optional) Display information for all VRFs                |
| __readonly__          | (Optional)   |
| TABLE_vrf             | (Optional)   |
| <i>context-name</i>   | (Optional)   |
| <i>route-count</i>    | (Optional)   |
| TABLE_one_route       | (Optional)   |
| <i>mcast-addr</i>     | (Optional)   |
| <i>rp-addr</i>        | (Optional)   |
| <i>rp-local</i>       | (Optional)   |
| <i>bidir</i>          | (Optional)   |
| <i>sgexpire</i>       | (Optional)   |
| <i>is-fabricowned</i> | (Optional)   |
| <i>sgexpire</i>       | (Optional)   |
| <i>timeleft</i>       | (Optional)   |

|                                 |            |
|---------------------------------|------------|
| <i>rp-bit</i>                   | (Optional) |
| <i>register</i>                 | (Optional) |
| <i>assert-timeout</i>           | (Optional) |
| <i>intf-name</i>                | (Optional) |
| <i>rpf-nbr-1</i>                | (Optional) |
| <i>rpf-nbr-addr</i>             | (Optional) |
| <i>rpf-nbr-2</i>                | (Optional) |
| <i>metric-pref</i>              | (Optional) |
| <i>route-metric</i>             | (Optional) |
| <i>oif-count</i>                | (Optional) |
| <i>oif-bf-str</i>               | (Optional) |
| <i>timeout-count</i>            | (Optional) |
| <i>timeout-bf-str</i>           | (Optional) |
| <i>immediate-count</i>          | (Optional) |
| <i>immediate-bf-str</i>         | (Optional) |
| <i>immediate-timeout-count</i>  | (Optional) |
| <i>immediate-timeout-bf-str</i> | (Optional) |
| <i>sgr-prune-list-count</i>     | (Optional) |
| <i>sgr-prune-list-bf-str</i>    | (Optional) |
| <i>timeout-interval</i>         | (Optional) |
| <i>jp-holdtime-rndup</i>        | (Optional) |

**Command Mode**

- /exec



## show ipv6 pim rp-hash

```
show ipv6 pim rp-hash <group> [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ <out-context>
<rp-found> <is-rp-bsr-learnt> <out-group> <hash-length> <out-bsr> { TABLE_rp <rp-addr> <hash>
<isbest_hash> } ]
```

### Syntax Description

|                         |   |
|-------------------------|---|
| show                    | Show running system information             |
| ipv6                    | Display IPv6 information                    |
| pim                     | Display PIM6 status and configuration       |
| rp-hash                 | Display RP hash value for group             |
| vrf                     | (Optional) Display per-VRF information      |
| <i>vrf-name</i>         | (Optional) VRF name                         |
| <i>vrf-known-name</i>   | (Optional) Known VRF name                   |
| all                     | (Optional) Display information for all VRFs |
| <i>__readonly__</i>     | (Optional)                                  |
| <i>out-context</i>      | (Optional)                                  |
| <i>rp-found</i>         | (Optional)                                  |
| <i>is-rp-bsr-learnt</i> | (Optional)                                  |
| <i>hash-length</i>      | (Optional)                                  |
| TABLE_rp                | (Optional)                                  |
| <i>hash</i>             | (Optional)                                  |
| <i>isbest_hash</i>      | (Optional)                                  |

### Command Mode

- /exec

## show ipv6 pim rp

```
show ipv6 pim rp [ <group> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ <out-context>
<is-bsr-enabled> <is-bsr-listen-only> <is-bsr-forward-only> <are-we-bsr> <bsr-address> <is-bsr-address>
<bsr-priority> <bsr-hash-masklen> <bs-timer> <bsr-uptime> <bsr-expires> <is-autorp-enabled>
<is-autorp-listen-only> <is-autorp-forward-only> <are-we-autorp> <autorp-address> <is-autorp-address>
<autorp-dis-timer> <autorp-up-time> <autorp-expire-time> <rp-cand-policy-name> <bsr-policy-name>
<rp-announce-policy-name> <rp-discovery-policy-name> { TABLE_anycast_rp <anycast-rp-addr> {
TABLE_arp_rp <arp-rp-addr> <is-rpaddr-local> } } { TABLE_rp <rp-addr> <is-rp-in-cib> <df-ordinal>
<rp-uptime> <rp-priority> <autorp-expires> <bsr-rp-expires> <autorp-info-src> <bsr-info-src> <is-rp-static>
<static-rp-group-map> { TABLE_grange <grange-grp> <grange-masklen> <is-bidir-grp> <is-autorp-rp-owner>
<is-bsr-rp-owner> <is-static-rp-owner> } } ]
```

### Syntax Description

|                            |   |
|----------------------------|---|
| show                       | Show running system information                       |
| ipv6                       | Display IPv6 information                              |
| pim                        | Display PIM6 status and configuration                 |
| rp                         | Display PIM6 RP, Auto-RP, and BSR related information |
| vrf                        | (Optional) Display per-VRF information                |
| <i>vrf-name</i>            | (Optional) VRF name                                   |
| <i>vrf-known-name</i>      | (Optional) Known VRF name                             |
| all                        | (Optional) Display information for all VRFs           |
| <i>__readonly__</i>        | (Optional)  |
| <i>out-context</i>         | (Optional)  |
| <i>is-bsr-enabled</i>      | (Optional)  |
| <i>is-bsr-listen-only</i>  | (Optional)  |
| <i>is-bsr-forward-only</i> | (Optional)  |
| <i>are-we-bsr</i>          | (Optional)  |
| <i>is-bsr-address</i>      | (Optional)  |
| <i>bsr-priority</i>        | (Optional)  |
| <i>bsr-hash-masklen</i>    | (Optional)  |
| <i>bs-timer</i>            | (Optional)  |
| <i>bsr-uptime</i>          | (Optional)  |
| <i>bsr-expires</i>         | (Optional)  |

|                                 |            |
|---------------------------------|------------|
| <i>is-atorp-enabled</i>         | (Optional) |
| <i>is-atorp-listen-only</i>     | (Optional) |
| <i>is-atorp-forward-only</i>    | (Optional) |
| <i>are-we-atorp</i>             | (Optional) |
| <i>is-atorp-address</i>         | (Optional) |
| <i>atorp-dis-timer</i>          | (Optional) |
| <i>atorp-up-time</i>            | (Optional) |
| <i>atorp-expire-time</i>        | (Optional) |
| <i>rp-cand-policy-name</i>      | (Optional) |
| <i>bsr-policy-name</i>          | (Optional) |
| <i>rp-announce-policy-name</i>  | (Optional) |
| <i>rp-discovery-policy-name</i> | (Optional) |
| TABLE_anycast_rp                | (Optional) |
| TABLE_arp_rp                    | (Optional) |
| <i>is-rpaddr-local</i>          | (Optional) |
| TABLE_rp                        | (Optional) |
| <i>is-rp-in-cib</i>             | (Optional) |
| <i>df-ordinal</i>               | (Optional) |
| <i>rp-uptime</i>                | (Optional) |
| <i>rp-priority</i>              | (Optional) |
| <i>atorp-expires</i>            | (Optional) |
| <i>bsr-rp-expires</i>           | (Optional) |
| <i>is-rp-static</i>             | (Optional) |
| <i>static-rp-group-map</i>      | (Optional) |
| TABLE_grange                    | (Optional) |
| <i>grange-masklen</i>           | (Optional) |
| <i>is-bidir-grp</i>             | (Optional) |
| <i>is-atorp-rp-owner</i>        | (Optional) |
| <i>is-bsr-rp-owner</i>          | (Optional) |

|                           |            |
|---------------------------|------------|
| <i>is-static-rp-owner</i> | (Optional) |
|---------------------------|------------|

**Command Mode**

- /exec

# show ipv6 pim statistics

```
show ipv6 pim statistics [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ <uptime> <reg-sent>
<reg-rcvd> <null-reg-sent> <null-reg-rcvd> <reg-stop-sent> <reg-stop-rcvd> <reg-rcvd-not-rp>
<reg-rcvd-for-ssm> <reg-rcvd-for-bidir> <bootstrap-sent> <bootstrap-rcvd> <cand-rp-sent> <cand-rp-rcvd>
<bs-no-nbr> <bs-border-deny> <bs-len-errors> <bs-rpf-failed> <bs-no-listen> <candrp-border-deny>
<candrp-no-listen> <autorp-announce-sent> <autorp-announce-rcvd> <autorp-discovery-sent>
<autorp-discovery-rcvd> <autorp-rpf-failed> <autorp-border-deny> <autorp-invalid-type> <autorp-ttl-expired>
<autorp-no-listen> <ctrl-no-route> <data-no-route> <no-state> <create-state> ]
```

## Syntax Description

|                           |   |
|---------------------------|---|
| show                      | Show running system information             |
| ipv6                      | Display IPv6 information                    |
| pim                       | Display PIM6 status and configuration       |
| statistics                | Packet counter statistics                   |
| vrf                       | (Optional) Display per-VRF information      |
| <i>vrf-name</i>           | (Optional) VRF name                         |
| <i>vrf-known-name</i>     | (Optional) Known VRF name                   |
| all                       | (Optional) Display information for all VRFs |
| <i>__readonly__</i>       | (Optional)                                  |
| <i>uptime</i>             | (Optional)                                  |
| <i>reg-sent</i>           | (Optional)                                  |
| <i>reg-rcvd</i>           | (Optional)                                  |
| <i>null-reg-sent</i>      | (Optional)                                  |
| <i>null-reg-rcvd</i>      | (Optional)                                  |
| <i>reg-stop-sent</i>      | (Optional)                                  |
| <i>reg-stop-rcvd</i>      | (Optional)                                  |
| <i>reg-rcvd-not-rp</i>    | (Optional)                                  |
| <i>reg-rcvd-for-ssm</i>   | (Optional)                                  |
| <i>reg-rcvd-for-bidir</i> | (Optional)                                  |
| <i>bootstrap-sent</i>     | (Optional)                                  |
| <i>bootstrap-rcvd</i>     | (Optional)                                  |
| <i>cand-rp-sent</i>       | (Optional)                                  |

|                              |            |
|------------------------------|------------|
| <i>cand-rp-rcvd</i>          | (Optional) |
| <i>bs-no-nbr</i>             | (Optional) |
| <i>bs-border-deny</i>        | (Optional) |
| <i>bs-len-errors</i>         | (Optional) |
| <i>bs-rpf-failed</i>         | (Optional) |
| <i>bs-no-listen</i>          | (Optional) |
| <i>candrp-border-deny</i>    | (Optional) |
| <i>candrp-no-listen</i>      | (Optional) |
| <i>autorp-announce-sent</i>  | (Optional) |
| <i>autorp-announce-rcvd</i>  | (Optional) |
| <i>autorp-discovery-sent</i> | (Optional) |
| <i>autorp-discovery-rcvd</i> | (Optional) |
| <i>autorp-rpf-failed</i>     | (Optional) |
| <i>autorp-border-deny</i>    | (Optional) |
| <i>autorp-invalid-type</i>   | (Optional) |
| <i>autorp-ttl-expired</i>    | (Optional) |
| <i>autorp-no-listen</i>      | (Optional) |
| <i>ctrl-no-route</i>         | (Optional) |
| <i>data-no-route</i>         | (Optional) |
| <i>no-state</i>              | (Optional) |
| <i>create-state</i>          | (Optional) |

**Command Mode**

- /exec

# show ipv6 pim vrf

```
show ipv6 pim vrf [ { <vrf-name> | <vrf-known-name> | all } ] [ detail ] [ __readonly__ TABLE_context
<out-context> <context-id> <table-id> <count> ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                    |
| ipv6                  | Display IPv6 information                           |
| pim                   | Display PIM6 status and configuration              |
| vrf                   | Display per-VRF information                        |
| <i>vrf-name</i>       | (Optional) VRF name                                |
| <i>vrf-known-name</i> | (Optional) Known VRF name                          |
| all                   | (Optional) Display all VRFs PIM6 is configured for |
| detail                | (Optional) Display detailed information            |
| <i>__readonly__</i>   | (Optional)   |
| TABLE_context         | (Optional)   |
| <i>out-context</i>    | (Optional)   |
| <i>context-id</i>     | (Optional)   |
| <i>table-id</i>       | (Optional)   |
| <i>count</i>          | (Optional)   |

## Command Mode

- /exec

## show ipv6 policy

```
show ipv6 policy [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ { TABLE_pbr [ <interface> ] [ <rmap> ] [ <status> ] [ <vrf_name> ] } ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| ipv6                  | Display IPv6 information                    |
| policy                | Policy routing                              |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| __readonly__          | (Optional)                                  |
| TABLE_pbr             | (Optional)                                  |
| <i>interface</i>      | (Optional)                                  |
| <i>rmap</i>           | (Optional)                                  |
| <i>status</i>         | (Optional)                                  |
| <i>vrf_name</i>       | (Optional)                                  |

### Command Mode

- /exec



## show ipv6 prefix-list

```
show ipv6 prefix-list { { [ detail | summary ] [ <ipv6-pfl-name> | <ipv6-pfl-cfg-name> ] } | { { <ipv6-pfl-name>
| <ipv6-pfl-cfg-name> } seq <seq-no> } | { { <ipv6-pfl-name> | <ipv6-pfl-cfg-name> } <prefix> [ first-match
| longer ] } } [ __readonly__ TABLE_ipv6_pfl <name> <seq> <action> <rule> ]
```

### Syntax Description

|                          |   |
|--------------------------|---|
| show                     | Show running system information           |
| ipv6                     | Display IPv6 information                  |
| detail                   | (Optional) Show detailed information      |
| summary                  | (Optional) Show summarized information    |
| prefix-list              | List IPv6 prefix lists                    |
| <i>ipv6-pfl-name</i>     | (Optional) Name of prefix-list            |
| <i>ipv6-pfl-cfg-name</i> | (Optional) Known prefix-list name         |
| seq                      | Sequence number                           |
| <i>seq-no</i>            | Sequence number                           |
| first-match              | (Optional) Find the first match           |
| longer                   | (Optional) Find the more specific entries |
| <i>__readonly__</i>      | (Optional)                                |
| TABLE_ipv6_pfl           | (Optional)                                |
| <i>name</i>              | (Optional)                                |
| <i>seq</i>               | (Optional)                                |
| <i>action</i>            | (Optional)                                |
| <i>rule</i>              | (Optional)                                |

### Command Mode

- /exec

## show ipv6 process

```
show ipv6 process [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ [ TABLE_ipv6_all {
<cnxt-name> <cnxt-id> } ] [ TABLE_ipv6 { <ipv6-vrf> <ipv6-vrf-id> <auto-disc> <auto-add> <sta-disc>
<sta-def> [ <ipv6-unreach> } ] [ TABLE_iod { <iod-val> <iod-ifind> } ] [ TABLE_ipv6_nxt { <ipv6-nxt>
} ] ] ]
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information        |
| ipv6                  | Display IPv6 information               |
| process               | Display IPv6 global information        |
| vrf                   | (Optional) Display per-VRF information |
| <i>vrf-name</i>       | (Optional) VRF name                    |
| <i>vrf-known-name</i> | (Optional) Known VRF name              |
| all                   | (Optional) Display all VRFs            |
| <i>__readonly__</i>   | (Optional)                             |
| TABLE_ipv6_all        | (Optional) IPV6 process table          |
| <i>cnxt-name</i>      | (Optional) context name                |
| <i>cnxt-id</i>        | (Optional) context name                |
| TABLE_ipv6            | (Optional) ipv6 table                  |
| <i>ipv6-vrf</i>       | (Optional) vrf name                    |
| <i>ipv6-vrf-id</i>    | (Optional) vrf id                      |
| <i>auto-disc</i>      | (Optional) auto discard                |
| <i>auto-add</i>       | (Optional) auto add                    |
| <i>sta-disc</i>       | (Optional) static discard              |
| <i>sta-def</i>        | (Optional) static def                  |
| <i>ipv6-unreach</i>   | (Optional) ipv6 unreachable            |
| TABLE_iod             | (Optional) IOD table                   |
| <i>iod-val</i>        | (Optional) iod value                   |
| <i>iod-ifind</i>      | (Optional) iod if index                |
| TABLE_ipv6_nxt        | (Optional) ipv6 next hop table         |

### Command Mode

- /exec

# show ipv6 process sdb

show ipv6 process sdb

## Syntax Description

|         |                                 |
|---------|---------------------------------|
| show    | Show running system information |
| ipv6    | Display IPv6 information        |
| process | Display IPv6 global information |
| sdb     | Dump IPv6 sdb in a file         |

## Command Mode

- /exec

# show ipv6 raguard statistics

```
show ipv6 raguard statistics [ interface <intf-range> ] [ __readonly__ <msg_stats_hdr> <intf2> <rx_pkts>
<drop_count> ]
```

## Syntax Description

|                      |                                       |
|----------------------|---------------------------------------|
| show                 | Show running system information       |
| ipv6                 | Show the IPv6 features of the system  |
| raguard              | IPV6 raguard                          |
| statistics           | RA packet drop count                  |
| interface            | (Optional) Raguard enabled interfaces |
| <i>intf-range</i>    | (Optional) interface                  |
| <i>__readonly__</i>  | (Optional) Read only                  |
| <i>msg_stats_hdr</i> | (Optional)                            |
| <i>intf2</i>         | (Optional) interface name             |
| <i>rx_pkts</i>       | (Optional)                            |
| <i>drop_count</i>    | (Optional)                            |

## Command Mode

- /exec

## show ipv6 rip policy statistics redistribute

```
show ipv6 rip [ instance <inst> ] policy statistics redistribute { bgp <as> | { eigrp | isis | <src-rip> | ospfv3 |
lisp } <tag> | direct | static } [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ TABLE_asn
<asn> TABLE_vrf <vrf> { TABLE_rmap <name> <action> <seq_num> [ { TABLE_cmd <command>
<compare_count> <match_count> } ] } <total_accept_count> <total_reject_count> ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                     |
| ipv6                  | Display IPv6 information                            |
| rip                   | Display RIP routing protocol status                 |
| instance              | (Optional) Process ID                               |
| <i>inst</i>           | (Optional) Process ID                               |
| policy                | Policy related information                          |
| statistics            | Policy statistics                                   |
| redistribute          | RIP redistribute routes from other routing protocol |
| bgp                   | Border Gateway Protocol (BGP)                       |
| <i>as</i>             | Autonomous system number                            |
| eigrp                 | Enhanced Interior Gateway Routing Protocol (EIGRP)  |
| isis                  | Intermediate-to-intermediate (ISIS)                 |
| src-rip               | Routing Information Protocol (RIP)                  |
| ospfv3                | Open Shortest Path First (OSPFv3)                   |
| lisp                  | LISP EID-prefixes                                   |
| <i>tag</i>            | Process tag   |
| direct                | Directly connected routes                           |
| static                | Static routes                                       |
| vrf                   | (Optional) Display per-VRF information              |
| <i>vrf-name</i>       | (Optional) VRF name                                 |
| <i>vrf-known-name</i> | (Optional) Known VRF name                           |
| all                   | (Optional) Display information for all VRFs         |
| __readonly__          | (Optional)  |

|                           |   |
|---------------------------|---|
| TABLE_asn                 | (Optional) AS number table                                |
| <i>asn</i>                | (Optional) AS number                                      |
| TABLE_vrf                 | (Optional) VRF table                                      |
| <i>vrf</i>                | (Optional) VRF name                                       |
| TABLE_rmap                | (Optional) Routemap table                                 |
| <i>name</i>               | (Optional) Route-map Name                                 |
| <i>action</i>             | (Optional) Route-map action                               |
| <i>seq_num</i>            | (Optional) Sequence number of the rule in route-map       |
| TABLE_cmd                 | (Optional) Route-map command table                        |
| <i>command</i>            | (Optional) Route-map command                              |
| <i>compare_count</i>      | (Optional) Number of comparisons                          |
| <i>match_count</i>        | (Optional) Number of matches                              |
| <i>total_accept_count</i> | (Optional) Total number of packets accepted by the policy |
| <i>total_reject_count</i> | (Optional) Total number of packets rejected by the policy |

**Command Mode**

- /exec

# show ipv6 route

```
show ipv6 route [ unicast ] [ topology <topology-name> ] [ l3vm-info ] [ rpf ] [ <ipv6-addr> | { <ipv6-prefix>
[ { longer-prefixes | shorter-prefixes } ] } ] [ { <ipv6-protocol> [ all ] } | { next-hop <next-hop> } | { interface
<interface> } | { updated { [ since <stime> ] [ until <utime> ] } } ] + [ summary | { [ detail ] [ deleted ] } ] [
vrf { <vrf-name> | <vrf-known-name> | <vrf-all> } ] [ _readonly_ TABLE_vrf <vrf-name-out> TABLE_addrf
<addrf> [ TABLE_prefix <ipprefix> <ucast-nhops> <mcast-nhops> <attached> TABLE_path [ <ubest> ] [
<mbest> ] [ <ipnexthop> ] [ <ifname> ] <uptime> <pref> <metric> <clientname> [ <type> ] [ <tag> ] [ <stale>
] [ <stalelbl> ] [ <hidden> ] ] [ TABLE_summary <routes> <paths> [ <multicast_paths> ] [ TABLE_unicast
[ <clientnameuni> ] [ <best-paths> ] [ <backup-paths> ] ] [ TABLE_multicast [ <clientnamemulti> ] [
<best-paths> ] [ <backup-paths> ] ] [ TABLE_route_count [ <mask_len> ] [ <count> ] ] ] ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                                 |
| ipv6                  | Display IPv6 information  |
| route                 | Display IPv6 routing table                                      |
| vrf                   | (Optional) Display per-VRF information                          |
| <i>vrf-name</i>       | (Optional) VRF name   |
| <i>vrf-known-name</i> | (Optional) Known VRF name                                       |
| vrf-all               | (Optional) Display information for all VRFs                     |
| unicast               | (Optional) Display unicast information                          |
| topology              | (Optional) Display per-topology information                     |
| <i>topology-name</i>  | (Optional) topology name  |
| l3vm-info             | (Optional) Display corresponding L3VM information               |
| rpf                   | (Optional) Display RPF information for multicast source         |
| longer-prefixes       | (Optional) Display matching routes with mask-lengths >= prefix  |
| shorter-prefixes      | (Optional) Display matching routes with mask-lengths <= prefix  |
| <i>ipv6-protocol</i>  | (Optional) Display routes for protocol (or route type)          |
| all                   | (Optional) Display routes for protocol for backup next-hops too |
| next-hop              | (Optional) Display routes with this next-hop only               |
| interface             | (Optional) Display routes with this output interface only       |
| <i>interface</i>      | (Optional) Interface Name                                       |
| updated               | (Optional) Display routes filtered by last updated time         |
| since                 | (Optional) Display those routes updated since this time         |



|                     |   |
|---------------------|---|
| <i>stime</i>        | (Optional) Since this date/time [[CC]YY-][MM-DD-]HH:MM[:SS] |
| <i>until</i>        | (Optional) Display those routes updated until this time     |
| <i>utime</i>        | (Optional) Until this date/time [[CC]YY-][MM-DD-]HH:MM[:SS] |
| <i>summary</i>      | (Optional) Display route counts                             |
| <i>deleted</i>      | (Optional) Display delete-pending routes also               |
| <i>detail</i>       | (Optional) Display routes in full detail                    |
| <i>__readonly__</i> | (Optional)  |
| TABLE_vrf           | (Optional)  |
| <i>vrf-name-out</i> | (Optional)  |
| TABLE_addrf         | (Optional)  |
| <i>addrf</i>        | (Optional)  |
| TABLE_prefix        | (Optional)  |
| <i>ucast-nhops</i>  | (Optional)  |
| <i>mcast-nhops</i>  | (Optional)  |
| <i>attached</i>     | (Optional)  |
| TABLE_path          | (Optional)  |
| <i>ubest</i>        | (Optional)  |
| <i>mbest</i>        | (Optional)  |
| <i>ifname</i>       | (Optional)  |
| <i>pref</i>         | (Optional)  |
| <i>tag</i>          | (Optional)  |
| <i>metric</i>       | (Optional)  |
| <i>uptime</i>       | (Optional)  |
| <i>clientname</i>   | (Optional)  |
| <i>type</i>         | (Optional)  |
| <i>stale</i>        | (Optional)  |
| <i>stalelbl</i>     | (Optional)  |
| <i>hidden</i>       | (Optional)  |
| TABLE_summary       | (Optional)  |

|                        |            |
|------------------------|------------|
| <i>routes</i>          | (Optional) |
| <i>paths</i>           | (Optional) |
| <i>multicast_paths</i> | (Optional) |
| TABLE_unicast          | (Optional) |
| <i>clientnameuni</i>   | (Optional) |
| <i>best-paths</i>      | (Optional) |
| <i>backup-paths</i>    | (Optional) |
| TABLE_multicast        | (Optional) |
| <i>clientnamemulti</i> | (Optional) |
| <i>best-paths</i>      | (Optional) |
| <i>backup-paths</i>    | (Optional) |
| TABLE_route_count      | (Optional) |
| <i>mask_len</i>        | (Optional) |
| <i>count</i>           | (Optional) |

**Command Mode**

- /exec

# show ipv6 routers

```
show ipv6 routers [ all-routers ] [ [ interface <interface> ] | [ vrf { <vrf-name> | <vrf-known-name> | all } ] ] [ __readonly__ { TABLE_ipv6_routers [ TABLE_interface_ipv6 { <rtr-ipv6> <ipv6-int-addr> <rtr-flo-time> <curr-hop-lmt> <life-time> <addr-flag> <other-flg> <mtu-rtr> <hm-agent-flg> <preference> <reach-time> <retrans-time> [ TABLE_prefix_ipv6 { <ipv6-prefix> <buf-ipv6> <buf-autono> <valid-life-time> <prefer-life> } ] } ] } ] ] ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                             |
| ipv6                  | Display IPv6 information                                    |
| routers               | Display neighbor router information                         |
| all-routers           | (Optional) All routers even on down interface               |
| interface             | (Optional) Display neighbor router information on interface |
| <i>interface</i>      | (Optional) Interface name to display                        |
| vrf                   | (Optional) Display per-VRF information                      |
| <i>vrf-name</i>       | (Optional) VRF name   |
| <i>vrf-known-name</i> | (Optional) Known VRF name                                   |
| all                   | (Optional) Display information for all VRFs                 |
| <u>__readonly__</u>   | (Optional)  |
| TABLE_ipv6_routers    | (Optional) ipv6 router table                                |
| TABLE_interface_ipv6  | (Optional) ipv6 interface table                             |
| <i>ipv6-int-addr</i>  | (Optional) ipv6 interface address                           |
| <i>rtr-flo-time</i>   | (Optional) last updated time                                |
| <i>curr-hop-lmt</i>   | (Optional) current hop limit                                |
| <i>life-time</i>      | (Optional) life time  |
| <i>addr-flag</i>      | (Optional) address flag                                     |
| <i>other-flg</i>      | (Optional) other flag                                       |
| <i>mtu-rtr</i>        | (Optional) router MTU                                       |
| <i>hm-agent-flg</i>   | (Optional) home agent flag                                  |
| <i>preference</i>     | (Optional) preference                                       |
| <i>reach-time</i>     | (Optional) reachable time                                   |

|                        |  |
|------------------------|--|
| <i>retrans-time</i>    | (Optional) retransmission time         |
| TABLE_prefix_ipv6      | (Optional) ipv6 prefix table           |
| <i>ipv6-prefix</i>     | (Optional) ipv6 prefix                 |
| <i>buf-ipv6</i>        | (Optional) ipv6 buffer                 |
| <i>buf-autono</i>      | (Optional) ipv6 buffer autonomous flag |
| <i>valid-life-time</i> | (Optional) ipv6 valid life time        |
| <i>prefer-life</i>     | (Optional) ipv6 preferred life time    |

**Command Mode**

- /exec

# show ipv6 snooping capture-policy

```
show ipv6 snooping capture-policy [ vlan <vlanid> ] [ interface <intf> ] [ __readonly__ <cmdout> ]
```

## Syntax Description

|                           |                                      |
|---------------------------|--------------------------------------|
| <code>show</code>         | Show running system information      |
| <code>ipv6</code>         | Show the IPv6 features of the system |
| <i>vlanid</i>             | (Optional) VLAN ID                   |
| <i>intf</i>               | (Optional) interface                 |
| <code>__readonly__</code> | (Optional)                           |
| <i>cmdout</i>             | (Optional)                           |

## Command Mode

- /exec

## show ipv6 snooping counters vlan

```
show ipv6 snooping counters { { vlan <vlanid> } | { interface <intf> } } [ __readonly__ [ {
TABLE_target_counters <target> [ { TABLE_protocol_msgs <protocol_name> [ { TABLE_sub_protocol_msgs
[ <subfield_name> ] [ <msg_count> ] } ] } ] [ { TABLE_bridged_msgs <protocol_name> [ {
TABLE_sub_protocol_msgs [ <subfield_name> ] [ <msg_count> ] } ] } ] [ { TABLE_dropped_msgs
<feature_name> <protocol_name> [ { TABLE_sub_protocol_msgs [ <subfield_name> ] [ <msg_count> ] [
<drop_reason> ] } ] } ] } ] }
```

### Syntax Description

|                         |  |
|-------------------------|--|
| show                    | Show running system information        |
| ipv6                    | Show the IPv6 features of the system   |
| <i>vlanid</i>           | VLAN ID                                |
| <i>intf</i>             | interface                              |
| <i>__readonly__</i>     | (Optional)                             |
| TABLE_target_counters   | (Optional) Policy counters per target  |
| <i>target</i>           | (Optional) Target Name                 |
| TABLE_protocol_msgs     | (Optional) Protocol messages table     |
| <i>protocol_name</i>    | (Optional) Protocol name               |
| TABLE_sub_protocol_msgs | (Optional) Protocol sub-messages table |
| <i>subfield_name</i>    | (Optional) Sub-field name              |
| <i>msg_count</i>        | (Optional) Message count               |
| TABLE_bridged_msgs      | (Optional) Bridged messages table      |
| <i>protocol_name</i>    | (Optional) Protocol name               |
| TABLE_sub_protocol_msgs | (Optional) Protocol sub-messages table |
| <i>subfield_name</i>    | (Optional) Sub-field name              |
| <i>msg_count</i>        | (Optional) Message count               |
| TABLE_dropped_msgs      | (Optional) Bridged messages table      |
| <i>feature_name</i>     | (Optional) Feature name                |
| <i>protocol_name</i>    | (Optional) Protocol name               |
| TABLE_sub_protocol_msgs | (Optional) Protocol sub-messages table |
| <i>subfield_name</i>    | (Optional) Sub-field name              |

|                    |                          |
|--------------------|--------------------------|
| <i>msg_count</i>   | (Optional) Message count |
| <i>drop_reason</i> | (Optional) Drop reason   |

**Command Mode**

- /exec

# show ipv6 snooping events

show ipv6 snooping events [ \_\_readonly\_\_ <cmdout> ]

## Syntax Description

|               |                                      |
|---------------|--------------------------------------|
| show          | Show running system information      |
| ipv6          | Show the IPv6 features of the system |
| __readonly__  | (Optional)                           |
| <i>cmdout</i> | (Optional)                           |

## Command Mode

- /exec



# show ipv6 snooping features

```
show ipv6 snooping features [ __readonly__ { TABLE_features <name> <priority> <state> } ]
```

## Syntax Description

|                 |                                      |
|-----------------|--------------------------------------|
| show            | Show running system information      |
| ipv6            | Show the IPv6 features of the system |
| __readonly__    | (Optional)                           |
| TABLE_features  | (Optional) IPv6 Snooping Features    |
| <i>name</i>     | (Optional) Name                      |
| <i>priority</i> | (Optional) Priority                  |
| <i>state</i>    | (Optional) State                     |

## Command Mode

- /exec

## show ipv6 snooping messages

show ipv6 snooping messages [ detailed <count> ] [ \_\_readonly\_\_ <cmdout> ]

### Syntax Description

|                     |  |
|---------------------|--|
| show                | Show running system information          |
| ipv6                | Show the IPv6 features of the system     |
| <i>count</i>        | (Optional) Number of messages to display |
| <i>__readonly__</i> | (Optional)                               |
| <i>cmdout</i>       | (Optional)                               |

### Command Mode

- /exec

# show ipv6 snooping policies

```
show ipv6 snooping policies { [ vlan <vlanid> ] | [ interface <intf> ] } [ __readonly__ { TABLE_policies
<target> <target_type> <policy> <feature> <target_range> } ]
```

## Syntax Description

|                     |                                      |
|---------------------|--------------------------------------|
| show                | Show running system information      |
| ipv6                | Show the IPv6 features of the system |
| <i>vlanid</i>       | (Optional) VLAN ID                   |
| <i>intf</i>         | (Optional) interface                 |
| <i>__readonly__</i> | (Optional)                           |
| TABLE_policies      | (Optional) IPv6 Snooping Policies    |
| <i>target</i>       | (Optional) Target Name               |
| <i>target_type</i>  | (Optional) Target Type               |
| <i>policy</i>       | (Optional) Policy Name               |
| <i>feature</i>      | (Optional) Feature                   |
| <i>target_range</i> | (Optional) Target Range              |

## Command Mode

- /exec

## show ipv6 snooping policy

```
show ipv6 snooping policy [ <policy_name> ] [ __readonly__ { [ TABLE_glean_policy <policy> [ <port_type>
] <sec_lvl> <device_role> [ <data_glean> ] [ <dest_glean> ] [ <glean_type> ] [ <reachable_lifetime> ] [
<stale_lifetime> ] } [ [ TABLE_non_glean_protocols | TABLE_glean_protocols # 394
../feature/sisf/core/nxos/src/sisf_glean_dme.cmd <protocol> [ <prefix_list> ] ] } [ <limit_address_cnt> ] [
<limit_address_cnt_v4_per_mac> ] [ <limit_address_cnt_v4_per_target> ] [ <tracking> ] { [ TABLE_targets
<target> <target_type> <target_policy> <feature> <target_range> ] } } ] }
```

### Syntax Description

|  |  |
|--|--|
| show                                   | Show running system information              |
| ipv6                                   | Show the IPv6 features of the system         |
| <i>policy_name</i>                     | (Optional) Policy name for feature snooping  |
| <i>__readonly__</i>                    | (Optional)                                   |
| TABLE_glean_policy                     | (Optional) IPv6 DHCP guard policy            |
| <i>policy</i>                          | (Optional) Policy Name                       |
| <i>port_type</i>                       | (Optional) Port type                         |
| <i>sec_lvl</i>                         | (Optional) Security level                    |
| <i>device_role</i>                     | (Optional) Device role                       |
| <i>data_glean</i>                      | (Optional) Data glean                        |
| <i>dest_glean</i>                      | (Optional) Destination glean                 |
| <i>glean_type</i>                      | (Optional) Glean type                        |
| <i>reachable_lifetime</i>              | (Optional) Reachable lifetime                |
| <i>stale_lifetime</i>                  | (Optional) Stale lifetime                    |
| TABLE_non_glean_protocols              | (Optional) Non Glean protocols               |
| <i>protocol</i>                        | (Optional) Protocol                          |
| TABLE_glean_protocols                  | (Optional) Glean protocols                   |
| <i>prefix_list</i>                     | (Optional) Prefix list                       |
| <i>limit_address_cnt</i>               | (Optional) Limit address count               |
| <i>limit_address_cnt_v4_per_mac</i>    | (Optional) Limit address count v4 per mac    |
| <i>limit_address_cnt_v4_per_target</i> | (Optional) Limit address count v4 per target |
| <i>tracking</i>                        | (Optional) Tracking                          |

|                      |                          |
|----------------------|--------------------------|
| TABLE_targets        | (Optional) Targets table |
| <i>target</i>        | (Optional) Target Name   |
| <i>target_type</i>   | (Optional) Target Type   |
| <i>target_policy</i> | (Optional) Policy Name   |
| <i>feature</i>       | (Optional) Feature       |
| <i>target_range</i>  | (Optional) Target Range  |

**Command Mode**

- /exec

# show ipv6 snooping pss database

show ipv6 snooping pss database [ \_\_readonly\_\_ <cmdout> ]

## Syntax Description

|               |                                      |
|---------------|--------------------------------------|
| show          | Show running system information      |
| ipv6          | Show the IPv6 features of the system |
| __readonly__  | (Optional)                           |
| <i>cmdout</i> | (Optional)                           |

## Command Mode

- /exec

# show ipv6 static-route

```
show ipv6 static-route [ <prefix> ] [ multicast ] [ track-table ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ [ TABLE_vrf <vrf-name-out> ] [ TABLE_route [ <prefix-out> ] [ <next-hop> ] [ <intf-name> ] [ <pref> ] [ <next-hop-vrf> ] [ <reslv-tid> ] [ <real-nh> ] [ <has-real-intf> ] [ <real-intf-name> ] [ <track-id> ] [ <track-status> ] [ <rnh-status> ] [ <bfd-status> ] ] ] ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                                       |
| ipv6                  | Display IPv6 information  |
| static-route          | Display configured static routes                                      |
| multicast             | (Optional) Display configured static mroutes                          |
| track-table           | (Optional) Display track object details associated with static routes |
| all                   | (Optional) Display all VRFs   |
| vrf                   | (Optional) Display per-VRF information                                |
| <i>vrf-name</i>       | (Optional) VRF name   |
| <i>vrf-known-name</i> | (Optional) Known VRF name   |
| <i>__readonly__</i>   | (Optional)  |
| TABLE_vrf             | (Optional) VRF table  |
| <i>vrf-name-out</i>   | (Optional) vrf name   |
| TABLE_route           | (Optional) Route table  |
| <i>intf-name</i>      | (Optional) interface name   |
| <i>pref</i>           | (Optional) interface prefix   |
| <i>next-hop-vrf</i>   | (Optional) next hop vrf   |
| <i>reslv-tid</i>      | (Optional) reslv tid  |
| <i>has-real-intf</i>  | (Optional) has real interface   |
| <i>real-intf-name</i> | (Optional) real interface name  |
| <i>track-id</i>       | (Optional) interface track id   |
| <i>track-status</i>   | (Optional) interface track status                                     |
| <i>rnh-status</i>     | (Optional) interface rn timer status                                  |
| <i>bfd-status</i>     | (Optional) interface bfd status                                       |

**Command Mode**

- /exec



# show ipv6 statistics

show ipv6 statistics

## Syntax Description

|            |                                 |
|------------|---------------------------------|
| show       | Show running system information |
| ipv6       | Display IPv6 information        |
| statistics | Display IPv6 global statistics  |

## Command Mode

- /exec

## show ipv6 traffic

```
show ipv6 traffic [ detail ] [ vrf { <vrf-name> | <vrf-known-name> } ] [ __readonly__ [ TABLE_vrf
<vrf-name-out> ] TABLE_ipv6_traffic <uptime> <upkt-fwd> <mpkt-fwd> <ubyte-fwd> <mbyte-fwd>
<upkt-orig> <mpkt-orig> <ubyte-orig> <mbyte-orig> <upkt-consumed> <mpkt-consumed> <ubyte-consumed>
<mbyte-consumed> <ufrag-orig> <mfra-orig> <ufrag-consumed> <mfrag-consumed> <bad-version>
<rt-lookup-fail> <hoplimit-excd> <opt-header-error> <pld-length-too-small> <pm-failed> <mbuf-error>
<could-not-enc> <dest-if-down> <rx-pkts-recv> <rx-bytes-recv> <rx-inhdrrors> <rx-innoroutes>
<rx-inaddrerrors> <rx-inunknownprotos> <rx-intruncatedpkts> <rx-inforwdgrams> <rx-reasmreqds>
<rx-reasmoks> <rx-reasmfails> <rx-indiscards> <rx-indelivers> <rx-inmcastpkts> <rx-inmcastbytes>
<tx-pkts-sent> <tx-bytes-sent> <tx-outrequests> <tx-outnoroutes> <tx-outforwdgrams> <tx-outdiscards>
<tx-outfragreqds> <tx-outfragoks> <tx-outfragfails> <tx-outfragcreates> <tx-outtransmits> <tx-outmcastpkts>
<tx-outmcastbytes> ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                 |
| ipv6                  | Display IPv6 information                        |
| traffic               | Display IPv6 traffic statistics                 |
| detail                | (Optional) Display per protocol IPv6 statistics |
| vrf                   | (Optional) Display per-VRF information          |
| <i>vrf-name</i>       | (Optional) VRF name                             |
| <i>vrf-known-name</i> | (Optional) Known VRF name                       |
| <i>__readonly__</i>   | (Optional)                                      |
| TABLE_vrf             | (Optional) VRF table                            |
| <i>vrf-name-out</i>   | (Optional) vrf name                             |
| TABLE_ipv6_traffic    | (Optional) ipv6 traffic table                   |
| <i>uptime</i>         | (Optional) up time                              |
| <i>upkt-fwd</i>       | (Optional) unicast packets forward              |
| <i>mpkt-fwd</i>       | (Optional) multicast packets forward            |
| <i>ubyte-fwd</i>      | (Optional) unicast byte forward                 |
| <i>mbyte-fwd</i>      | (Optional) multicast byte forward               |
| <i>upkt-orig</i>      | (Optional) unicast packet origin                |
| <i>mpkt-orig</i>      | (Optional) multicast packet origin              |
| <i>ubyte-orig</i>     | (Optional) unicast byte origin                  |

|                             |  |
|-----------------------------|--|
| <i>mbyte-orig</i>           | (Optional) multicast byte origin       |
| <i>upkt-consumed</i>        | (Optional) unicast packet consumed     |
| <i>mpkt-consumed</i>        | (Optional) multicast packet consumed   |
| <i>ubyte-consumed</i>       | (Optional) unicast byte consumed       |
| <i>mbyte-consumed</i>       | (Optional) multicast byte consumed     |
| <i>ufrag-orig</i>           | (Optional) unicast fragment origin     |
| <i>mfra-orig</i>            | (Optional) multicast fragment origin   |
| <i>ufrag-consumed</i>       | (Optional) unicast fragment consumed   |
| <i>mfrag-consumed</i>       | (Optional) multicast fragment consumed |
| <i>bad-version</i>          | (Optional) bad version                 |
| <i>rt-lookup-fail</i>       | (Optional) route lookup fail           |
| <i>hoplimit-excd</i>        | (Optional) hoplimit exceeded           |
| <i>opt-header-error</i>     | (Optional) opt header error            |
| <i>pld-length-too-small</i> | (Optional) pld length too small        |
| <i>pm-failed</i>            | (Optional) packet manager failed       |
| <i>mbuf-error</i>           | (Optional) m-buffer error              |
| <i>could-not-enc</i>        | (Optional) could not encode            |
| <i>dest-if-down</i>         | (Optional) destination if down         |
| <i>rx-pkts-recv</i>         | (Optional) packets received            |
| <i>rx-bytes-recv</i>        | (Optional) bytes received              |
| <i>rx-inhdrerrors</i>       | (Optional) inhdr error                 |
| <i>rx-innoroutes</i>        | (Optional) in-no routes                |
| <i>rx-inaddrerrors</i>      | (Optional) in-address error            |
| <i>rx-inunknownprotos</i>   | (Optional) in-unknown protocol         |
| <i>rx-intruncatedpkts</i>   | (Optional) in-truncated packets        |
| <i>rx-inforwdgrams</i>      | (Optional) in-forward                  |
| <i>rx-reasmreqds</i>        | (Optional) reasm request               |
| <i>rx-reasmoks</i>          | (Optional) reasm ok                    |
| <i>rx-reasmfails</i>        | (Optional) reasm fail                  |

|                          |                                  |
|--------------------------|----------------------------------|
| <i>rx-indiscards</i>     | (Optional) in-discards           |
| <i>rx-indelivers</i>     | (Optional) in-delivers           |
| <i>rx-inmcastpkts</i>    | (Optional) in multicast packets  |
| <i>rx-inmcastbytes</i>   | (Optional) in multicast bytes    |
| <i>tx-pkts-sent</i>      | (Optional) packets sent          |
| <i>tx-bytes-sent</i>     | (Optional) bytes sent            |
| <i>tx-outrequests</i>    | (Optional) out request           |
| <i>tx-outnoroutes</i>    | (Optional) out no routes         |
| <i>tx-outforwgrams</i>   | (Optional) out forwardgrams      |
| <i>tx-outdiscards</i>    | (Optional) out discards          |
| <i>tx-outfragreqds</i>   | (Optional) out fragment request  |
| <i>tx-outfragoks</i>     | (Optional) out fragment oks      |
| <i>tx-outfragfails</i>   | (Optional) out fragment fails    |
| <i>tx-outfragcreates</i> | (Optional) out fragment creates  |
| <i>tx-outtransmits</i>   | (Optional) out transmits         |
| <i>tx-outmcastpkts</i>   | (Optional) out multicast packets |
| <i>tx-outmcastbytes</i>  | (Optional) out multicast bytes   |

**Command Mode**

- /exec

# show isis

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ process | protocol ] [ vrf { <vrf-name>
| <vrf-known-name> | all } ] [ __readonly__ TABLE_process_tag <process-tag-out> <instance_num> <uuid>
<process-id> <vrf-name-out> <system-id-out> <is-type-out> <sap-out> <qh-out> <mtu-out> [ <gr-status-out>
] [ <gr-state-active-out> ] [ <gr-state-inactive-out> ] [ <last-gr-status-fail-out> ] [ <last-gr-status-success-out>
] [ <last-gr-status-none-out> ] [ <gr-status-disable-out> ] [ TABLE_afi_safi <af-ix> <af-bfd-config>
<af-pib-tag> ] <metric-style> <accept-metric> [ <net-set-none> ] [ TABLE_area_addr <area-addr-nsap> ] [
<proc-state-not-config> ] [ <proc-state-admin-down> ] [ <proc-state-l3vm-down> ] [
<proc-state-unknown-down> ] [ <proc-state-not-specified> ] [ <proc-state-no-net> ] [ <proc-state-no-vrf-id>
] [ <proc-state-out-memory> ] [ <proc-state-restart> ] [ <proc-state-running> ] <vrf-id-out> [ TABLE_te
<te-lvl-out> <te-lvl-active> ] [ <te-ted-out> ] [ <mpls-te-out> ] [ TABLE_mpls_te [ <mpls-te-lvl-out> ] [
<mpls-te-rtrid-intf-out> ] [ <mpls-te-fa-lvl-out> ] [ TABLE_te_fa <te-fa-sysid-out> <te-fa-intf-out> ] [
<te-stat-sys-id-out> ] [ <te-stat-rtr-id-out> ] [ TABLE_te_stat_lvl <te-stat-lvl-out> <te-stat-up-out>
<te-stat-down-out> ] [ TABLE_segment_routing <af-out> <ptag-out> <cfg-out> <enable-out> [ <exp-null-cfg>
] ] [ TABLE_iib_list_yeild <intf-name-out> ] [ TABLE_auth <auth-lvl-out> [ <auth-type-no-type> ] [
<auth-type-cleartext> ] [ <auth-type-md5> ] [ <auth-type-key-chain> ] [ <auth-type-none> ] [ <auth-check>
] [ <auth-no-check> ] ] [ TABLE_spf <spf-lvl-out> [ <spf-timer> ] ] ]
```

## Syntax Description

|                        |  |
|------------------------|--|
| show                   | Show running system information              |
| isis                   | Display IS-IS status and configuration       |
| <i>isis-tag</i>        | (Optional) Routing process tag               |
| vrf                    | (Optional) Display per-VRF information       |
| <i>vrf-name</i>        | (Optional) VRF name                          |
| <i>vrf-known-name</i>  | (Optional) Known VRF name                    |
| all                    | (Optional) Display information for all VRFs  |
| process                | (Optional) Display IS-IS process information |
| protocol               | (Optional) Display IS-IS process information |
| __readonly__           | (Optional)                                   |
| TABLE_process_tag      | (Optional)                                   |
| <i>process-tag-out</i> | (Optional)                                   |
| <i>instance_num</i>    | (Optional)                                   |
| <i>uuid</i>            | (Optional)                                   |
| <i>process-id</i>      | (Optional)                                   |
| <i>vrf-name-out</i>    | (Optional)                                   |
| <i>system-id-out</i>   | (Optional)                                   |

|                                   |            |
|-----------------------------------|------------|
| <i>is-type-out</i>                | (Optional) |
| <i>sap-out</i>                    | (Optional) |
| <i>qh-out</i>                     | (Optional) |
| <i>mtu-out</i>                    | (Optional) |
| <i>gr-status-out</i>              | (Optional) |
| <i>gr-state-active-out</i>        | (Optional) |
| <i>gr-state-inactive-out</i>      | (Optional) |
| <i>last-gr-status-fail-out</i>    | (Optional) |
| <i>last-gr-status-success-out</i> | (Optional) |
| <i>last-gr-status-none-out</i>    | (Optional) |
| <i>gr-status-disable-out</i>      | (Optional) |
| TABLE_afi_safi                    | (Optional) |
| <i>af-ix</i>                      | (Optional) |
| <i>af-bfd-config</i>              | (Optional) |
| <i>af-pib-tag</i>                 | (Optional) |
| <i>metric-style</i>               | (Optional) |
| <i>accept-metric</i>              | (Optional) |
| <i>net-set-none</i>               | (Optional) |
| TABLE_area_addr                   | (Optional) |
| <i>area-addr-nsap</i>             | (Optional) |
| <i>proc-state-not-config</i>      | (Optional) |
| <i>proc-state-admin-down</i>      | (Optional) |
| <i>proc-state-l3vm-down</i>       | (Optional) |
| <i>proc-state-unknown-down</i>    | (Optional) |
| <i>proc-state-not-specified</i>   | (Optional) |
| <i>proc-state-no-net</i>          | (Optional) |
| <i>proc-state-no-vrf-id</i>       | (Optional) |
| <i>proc-state-out-memory</i>      | (Optional) |
| <i>proc-state-restart</i>         | (Optional) |

|                               |            |
|-------------------------------|------------|
| <i>proc-state-running</i>     | (Optional) |
| <i>vrf-id-out</i>             | (Optional) |
| TABLE_te                      | (Optional) |
| <i>te-lvl-out</i>             | (Optional) |
| <i>te-lvl-active</i>          | (Optional) |
| <i>te-ted-out</i>             | (Optional) |
| <i>mpls-te-out</i>            | (Optional) |
| TABLE_mpls_te                 | (Optional) |
| <i>mpls-te-lvl-out</i>        | (Optional) |
| <i>mpls-te-rtrid-intf-out</i> | (Optional) |
| <i>mpls-te-fa-lvl-out</i>     | (Optional) |
| TABLE_te_fa                   | (Optional) |
| <i>te-fa-sysid-out</i>        | (Optional) |
| <i>te-fa-intf-out</i>         | (Optional) |
| <i>te-stat-sys-id-out</i>     | (Optional) |
| <i>te-stat-rtr-id-out</i>     | (Optional) |
| TABLE_te_stat_lvl             | (Optional) |
| <i>te-stat-lvl-out</i>        | (Optional) |
| <i>te-stat-up-out</i>         | (Optional) |
| <i>te-stat-down-out</i>       | (Optional) |
| TABLE_segment_routing         | (Optional) |
| <i>af-out</i>                 | (Optional) |
| <i>ptag-out</i>               | (Optional) |
| <i>cfg-out</i>                | (Optional) |
| <i>enable-out</i>             | (Optional) |
| <i>exp-null-cfg</i>           | (Optional) |
| TABLE_iib_list_yeild          | (Optional) |
| <i>intf-name-out</i>          | (Optional) |
| TABLE_auth                    | (Optional) |

|                            |            |
|----------------------------|------------|
| <i>auth-lvl-out</i>        | (Optional) |
| <i>auth-type-no-type</i>   | (Optional) |
| <i>auth-type-cleartext</i> | (Optional) |
| <i>auth-type-md5</i>       | (Optional) |
| <i>auth-type-key-chain</i> | (Optional) |
| <i>auth-type-none</i>      | (Optional) |
| <i>auth-check</i>          | (Optional) |
| <i>auth-no-check</i>       | (Optional) |
| TABLE_spf                  | (Optional) |
| <i>spf-lvl-out</i>         | (Optional) |
| <i>spf-timer</i>           | (Optional) |

**Command Mode**

- /exec



## show isis adjacency

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] adjacency [ <interface> [ p2p-level-1-2
] ] [ { system-id <sid> } | [ detail ] | [ summary ] } ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [
__readonly__ { TABLE_process_tag <process-tag-out> { TABLE_vrf <vrf-name-out> <adj-summary-out>
<adj-interface-out> [ <adj-interface-name-out> ] [ { TABLE_process_adj <adj-sys-name-out> <adj-sys-id-out>
[ <adj-usage-out> ] [ <adj-level-out> ] <adj-state-out> <adj-hold-time-out> <adj-intf-name-out>
<adj-detail-set-out> [ { <adj-transitions-out> <adj-flap-out> [ <adj-flap-time-out> ] <adj-ckt-type-out>
<adj-ipv4-addr-out> <adj-ipv6-addr-out> <adj-bcast-out> [ { <adj-ckt-id-out> <adj-lan-prio-out> } ]
<adj-bfd-ipv4-establish-out> <adj-bfd-ipv6-establish-out> <adj-resurrect-out> [ { <adj-resurrect-count-out>
<adj-resurrect-hwm-out> } ] <adj-restart-capable-out> <adj-restart-ack-out> [ { <adj-restart-mode-out>
<adj-restart-adj-seen-ra-out> <adj-restart-adj-seen-csnp-out> <adj-restart-adj-seen-l1-csnp-out>
<adj-restart-adj-seen-l2-csnp-out> <adj-restart-suppress-adj-out> } ] [ { TABLE_adj_sid <adj-sid-value>
<adj-sid-f-flag> <adj-sid-b-flag> <adj-sid-v-flag> <adj-sid-l-flag> <adj-sid-s-flag> <adj-sid-p-flag>
<adj-sid-weight> } } ] } ] [ { TABLE_p2p_adj_sum <adj-summ-p2p-level-out> <adj-summ-p2p-state-out>
<adj-summ-p2p-count-out> } ] [ { TABLE_lan_adj_sum <adj-summ-lan-level-out> <adj-summ-lan-state-out>
<adj-summ-lan-count-out> } } ] }
```

### Syntax Description

|                        |   |
|------------------------|---|
| show                   | Show running system information                                     |
| isis                   | Display IS-IS status and configuration                              |
| <i>isis-tag</i>        | (Optional) Routing process tag                                      |
| vrf                    | (Optional) Display per-VRF information                              |
| <i>vrf-name</i>        | (Optional) VRF name   |
| <i>vrf-known-name</i>  | (Optional) Known VRF name   |
| all                    | (Optional) Display information for all VRFs                         |
| adjacency              | Display IS-IS adjacency information                                 |
| <i>interface</i>       | (Optional) IS-IS interface  |
| system-id              | (Optional) Hostname or System ID                                    |
| <i>sid</i>             | (Optional) Hostname or System ID (in the form of<br>XXXX.XXXX.XXXX) |
| detail                 | (Optional) Display IS-IS adjacency detail information               |
| p2p-level-1-2          | (Optional) Display IS-IS point-to-point information at level-1-2    |
| summary                | (Optional) Display IS-IS adjacency summary information              |
| <i>__readonly__</i>    | (Optional)  |
| TABLE_process_tag      | (Optional)  |
| <i>process-tag-out</i> | (Optional)  |

|                                   |            |
|-----------------------------------|------------|
| TABLE_vrf                         | (Optional) |
| <i>vrf-name-out</i>               | (Optional) |
| <i>adj-summary-out</i>            | (Optional) |
| <i>adj-interface-out</i>          | (Optional) |
| <i>adj-interface-name-out</i>     | (Optional) |
| TABLE_process_adj                 | (Optional) |
| <i>adj-sys-name-out</i>           | (Optional) |
| <i>adj-sys-id-out</i>             | (Optional) |
| <i>adj-usage-out</i>              | (Optional) |
| <i>adj-level-out</i>              | (Optional) |
| <i>adj-state-out</i>              | (Optional) |
| <i>adj-hold-time-out</i>          | (Optional) |
| <i>adj-intf-name-out</i>          | (Optional) |
| <i>adj-detail-set-out</i>         | (Optional) |
| <i>adj-transitions-out</i>        | (Optional) |
| <i>adj-flap-out</i>               | (Optional) |
| <i>adj-flap-time-out</i>          | (Optional) |
| <i>adj-ckt-type-out</i>           | (Optional) |
| <i>adj-ipv4-addr-out</i>          | (Optional) |
| <i>adj-ipv6-addr-out</i>          | (Optional) |
| <i>adj-bcast-out</i>              | (Optional) |
| <i>adj-ckt-id-out</i>             | (Optional) |
| <i>adj-lan-prio-out</i>           | (Optional) |
| <i>adj-bfd-ipv4-establish-out</i> | (Optional) |
| <i>adj-bfd-ipv6-establish-out</i> | (Optional) |
| <i>adj-resurrect-out</i>          | (Optional) |
| <i>adj-resurrect-count-out</i>    | (Optional) |
| <i>adj-resurrect-hwm-out</i>      | (Optional) |
| <i>adj-restart-capable-out</i>    | (Optional) |

|   |            |
|---|------------|
| <i>adj-restart-ack-out</i>              | (Optional) |
| <i>adj-restart-mode-out</i>             | (Optional) |
| <i>adj-restart-adj-seen-ra-out</i>      | (Optional) |
| <i>adj-restart-adj-seen-csnp-out</i>    | (Optional) |
| <i>adj-restart-adj-seen-l1-csnp-out</i> | (Optional) |
| <i>adj-restart-adj-seen-l2-csnp-out</i> | (Optional) |
| <i>adj-restart-suppress-adj-out</i>     | (Optional) |
| TABLE_adj_sid                           | (Optional) |
| <i>adj-sid-value</i>                    | (Optional) |
| <i>adj-sid-f-flag</i>                   | (Optional) |
| <i>adj-sid-b-flag</i>                   | (Optional) |
| <i>adj-sid-v-flag</i>                   | (Optional) |
| <i>adj-sid-l-flag</i>                   | (Optional) |
| <i>adj-sid-s-flag</i>                   | (Optional) |
| <i>adj-sid-p-flag</i>                   | (Optional) |
| <i>adj-sid-weight</i>                   | (Optional) |
| TABLE_p2p_adj_sum                       | (Optional) |
| <i>adj-summ-p2p-level-out</i>           | (Optional) |
| <i>adj-summ-p2p-state-out</i>           | (Optional) |
| <i>adj-summ-p2p-count-out</i>           | (Optional) |
| TABLE_lan_adj_sum                       | (Optional) |
| <i>adj-summ-lan-level-out</i>           | (Optional) |
| <i>adj-summ-lan-state-out</i>           | (Optional) |
| <i>adj-summ-lan-count-out</i>           | (Optional) |

### Command Mode

- /exec

# show isis csnp

```
show isis [ <isis-tag> ] csnp [ detail ] [ __readonly__ TABLE_process_tag <process-tag-out> [ {
TABLE_CSNPLEVEL <csnp-level> <csnp-cache-valid> <csnp-cache-hit> <cscnp-cache-miss> <csnp-hit-rate>
[ { TABLE_CSNPLSPS <csnp-start-lsp-id> <csnp-end-lsp-id> <csnp-entry-valid> <csnp-pdu-lengh> [ {
TABLE_CSNPONELSP <csnp-lsp-id> <csnp-lsp-seq-num> <csnp-lsp-chk-sum> <csnp-lsp-life-time> } ] }
] } ] }
```

## Syntax Description

|                          |   |
|--------------------------|---|
| show                     | Show running system information               |
| isis                     | Display IS-IS status and configuration        |
| <i>isis-tag</i>          | (Optional) Routing process tag                |
| csnp                     | Display IS-IS CSNP cache contents             |
| detail                   | (Optional) Display detailed IS-IS information |
| <i>__readonly__</i>      | (Optional)                                    |
| TABLE_process_tag        | (Optional)                                    |
| <i>process-tag-out</i>   | (Optional)                                    |
| TABLE_CSNPLEVEL          | (Optional)                                    |
| <i>csnp-level</i>        | (Optional)                                    |
| <i>csnp-cache-valid</i>  | (Optional)                                    |
| <i>csnp-cache-hit</i>    | (Optional)                                    |
| <i>cscnp-cache-miss</i>  | (Optional)                                    |
| <i>csnp-hit-rate</i>     | (Optional)                                    |
| TABLE_CSNPLSPS           | (Optional)                                    |
| <i>csnp-start-lsp-id</i> | (Optional)                                    |
| <i>csnp-end-lsp-id</i>   | (Optional)                                    |
| <i>csnp-entry-valid</i>  | (Optional)                                    |
| <i>csnp-pdu-lengh</i>    | (Optional)                                    |
| TABLE_CSNPONELSP         | (Optional)                                    |
| <i>csnp-lsp-id</i>       | (Optional)                                    |
| <i>csnp-lsp-seq-num</i>  | (Optional)                                    |
| <i>csnp-lsp-chk-sum</i>  | (Optional)                                    |

|                           |            |
|---------------------------|------------|
| <i>csnp-lsp-life-time</i> | (Optional) |
|---------------------------|------------|

**Command Mode**

- /exec

# show isis database

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] database [ <level> ] [ detail | advertise
| summary ] [ <lid> ] { [ zero-sequence ] | [ ip prefix <ip-prefix> ] | [ ipv6 prefix <ipv6-prefix> ] | [ router-id
<rid> ] | [ adjacency <adj-id> ] } [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ {
TABLE_process_tag <process-tag-out> { TABLE_vrf <vrf-name-out> [ <dbase-hname-absent-out> ] [ {
TABLE_process_lvl <dbase-level-out> [ { TABLE_process_lsp <dbase-lsp-name-out> <dbase-lsp-status-out>
<dbase-lsp-absent-out> [ { <dbase-lsp-seqnum-out> <dbase-lsp-cksum-out> [ <dbase-lsp-lifetime-str-out> ] [
<dbase-lsp-lifetime-out> ] <dbase-att-out> <dbase-partition-out> <dbase-overload-out> <dbase-istype-out>
} ] [ <dbase-lsp-instance-out> [ { TABLE_process_tlv <dbase-lsp-tlv-name-out> [ <dbase-lsp-area-addr-out>
] [ <dbase-lsp-is-nbr-name-out> ] [ <dbase-lsp-is-nbr-metric-out> ] [ <dbase-lsp-is-nbr-ext-metric-out> ] [
<dbase-lsp-es-nbr-name-out> ] [ <dbase-lsp-es-nbr-metric-out> ] [ <dbase-lsp-es-nbr-ext-metric-out> ] [
<dbase-lsp-auth-type-out> ] [ <dbase-lsp-auth-len-out> ] [ <dbase-lsp-ext-is-name-out> ] [
<dbase-lsp-ext-is-metric-out> ] [ <dbase-lsp-ip-ri-addr-out> ] [ <dbase-lsp-ip-ri-mask-out> ] [
<dbase-lsp-ip-ri-metric-out> ] [ <dbase-lsp-ip-ri-ext-metric-out> ] [ <dbase-lsp-ip-ri-up-down-out> ] [
<dbase-lsp-cap-rtrid> ] [ <dbase-lsp-cap-flags> ] [ { TABLE_process_nlpid <dbase-lsp-prot-support-out> }
] [ <dbase-lsp-ip-addr-out> ] [ <dbase-lsp-ipv6-addr-out> ] [ { TABLE_process_extip
<dbase-lsp-extip-addr-out> <dbase-lsp-extip-prefix-len-out> <dbase-lsp-extip-metric-out>
<dbase-lsp-extip-up-down-out> [ <dbase-lsp-extip-pfxsid> ] [ <dbase-lsp-extip-pfxsid-flags> ] [
<dbase-lsp-extip-unknown-out> ] } ] [ <dbase-lsp-hname-out> ] [ <dbase-lsp-hname-len-out> ] [ {
TABLE_process_extipv6 <dbase-lsp-extipv6-addr-out> <dbase-lsp-extipv6-prefix-len-out>
<dbase-lsp-extipv6-metric-out> <dbase-lsp-extipv6-up-down-out> <dbase-lsp-extipv6-ext-origin-out> [
<dbase-lsp-extipv6-pfxsid> ] [ <dbase-lsp-extipv6-pfxsid-flags> ] [ <dbase-lsp-extipv6-unknown-out> ] } ]
[ { TABLE_process_subtlv <dbase-lsp-subtlv-name-out> [ <dbase-lsp-extis-admin-group-out> ] [
<dbase-lsp-subtlv-ip-addr-out> ] [ <dbase-lsp-extis-bw-out> ] [ <dbase-lsp-extis-pri1-out> ] [
<dbase-lsp-extis-pri1-val-out> ] [ <dbase-lsp-extis-pri2-out> ] [ <dbase-lsp-extis-pri2-val-out> ] [
<dbase-lsp-extis-te-metric-out> ] [ <dbase-lsp-extis-p2p-adjsid-out> ] [ <dbase-lsp-extis-p2p-adjsid-flags> ]
[ <dbase-lsp-extis-p2p-adjsid-weight> ] [ <dbase-lsp-extis-lan-adjsid-out> ] [ <dbase-lsp-extis-lan-adjsid-sysid>
] [ <dbase-lsp-extis-lan-adjsid-flags> ] [ <dbase-lsp-extis-lan-adjsid-weight> ] [
<dbase-lsp-cap-subtlv-sr-start-sid> ] [ <dbase-lsp-cap-subtlv-sr-end-sid> ] [ <dbase-lsp-cap-subtlv-sr-range>
] [ <dbase-lsp-cap-subtlv-sr-flags> ] [ <dbase-lsp-subtlv-len-out> ] [ <dbase-lsp-subtlv-unknown-out> ] } ]
[ <dbase-lsp-tlv-len-out> ] [ <dbase-lsp-tlv-unknown-out> ] } ] <dbase-lsp-digest-out> } ] } ] [ {
<dbase-lsp-total-out> [ { <dbase-lsp-empty-out> <dbase-lsp-zeroseq-out> } ] } ] } ] }
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| isis                  | Display IS-IS status and configuration      |
| <i>isis-tag</i>       | (Optional) Routing process tag              |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| database              | Display IS-IS database information          |

|                                   |   |
|-----------------------------------|---|
| <i>level</i>                      | (Optional) IS-IS level                                  |
| <i>lid</i>                        | (Optional) LSP ID in the form of XXXX.XXXX.XXXX.XX-XX   |
| <i>detail</i>                     | (Optional) Display detailed IS-IS information           |
| <i>advertise</i>                  | (Optional) Display advertise tlv lsp-memory information |
| <i>summary</i>                    | (Optional) Display summary IS-IS information            |
| <i>zero-sequence</i>              | (Optional) LSP with zero sequence number                |
| <i>ip</i>                         | (Optional) IP attribute filter                          |
| <i>ipv6</i>                       | (Optional) IPv6 attribute filter                        |
| <i>prefix</i>                     | (Optional) Prefix filter                                |
| <i>ip-prefix</i>                  | (Optional) Single exact match IP prefix filter          |
| <i>adjacency</i>                  | (Optional) Adjacency filter                             |
| <i>adj-id</i>                     | (Optional) Single exact match adjacency filter          |
| <i>router-id</i>                  | (Optional) Router-id filter                             |
| <i>rid</i>                        | (Optional) single exact match router-id filter          |
| <i>__readonly__</i>               | (Optional)  |
| <i>TABLE_process_tag</i>          | (Optional)  |
| <i>process-tag-out</i>            | (Optional)  |
| <i>TABLE_vrf</i>                  | (Optional)  |
| <i>vrf-name-out</i>               | (Optional)  |
| <i>dbase-hname-absent-out</i>     | (Optional)  |
| <i>TABLE_process_lvl</i>          | (Optional)  |
| <i>dbase-level-out</i>            | (Optional)  |
| <i>TABLE_process_lsp</i>          | (Optional)  |
| <i>dbase-lsp-name-out</i>         | (Optional)  |
| <i>dbase-lsp-status-out</i>       | (Optional)  |
| <i>dbase-lsp-absent-out</i>       | (Optional)  |
| <i>dbase-lsp-seqnum-out</i>       | (Optional)  |
| <i>dbase-lsp-cksum-out</i>        | (Optional)  |
| <i>dbase-lsp-lifetime-str-out</i> | (Optional)  |

|  |            |
|--|------------|
| <i>dbase-lsp-lifetime-out</i>          | (Optional) |
| <i>dbase-att-out</i>                   | (Optional) |
| <i>dbase-partition-out</i>             | (Optional) |
| <i>dbase-overload-out</i>              | (Optional) |
| <i>dbase-istype-out</i>                | (Optional) |
| <i>dbase-lsp-instance-out</i>          | (Optional) |
| TABLE_process_tlv                      | (Optional) |
| <i>dbase-lsp-tlv-name-out</i>          | (Optional) |
| <i>dbase-lsp-area-addr-out</i>         | (Optional) |
| <i>dbase-lsp-is-nbr-name-out</i>       | (Optional) |
| <i>dbase-lsp-is-nbr-metric-out</i>     | (Optional) |
| <i>dbase-lsp-is-nbr-ext-metric-out</i> | (Optional) |
| <i>dbase-lsp-es-nbr-name-out</i>       | (Optional) |
| <i>dbase-lsp-es-nbr-metric-out</i>     | (Optional) |
| <i>dbase-lsp-es-nbr-ext-metric-out</i> | (Optional) |
| <i>dbase-lsp-auth-type-out</i>         | (Optional) |
| <i>dbase-lsp-auth-len-out</i>          | (Optional) |
| <i>dbase-lsp-ext-is-name-out</i>       | (Optional) |
| <i>dbase-lsp-ext-is-metric-out</i>     | (Optional) |
| <i>dbase-lsp-ip-ri-addr-out</i>        | (Optional) |
| <i>dbase-lsp-ip-ri-mask-out</i>        | (Optional) |
| <i>dbase-lsp-ip-ri-metric-out</i>      | (Optional) |
| <i>dbase-lsp-ip-ri-ext-metric-out</i>  | (Optional) |
| <i>dbase-lsp-ip-ri-up-down-out</i>     | (Optional) |
| TABLE_process_nlpid                    | (Optional) |
| <i>dbase-lsp-prot-support-out</i>      | (Optional) |
| <i>dbase-lsp-ip-addr-out</i>           | (Optional) |
| <i>dbase-lsp-ipv6-addr-out</i>         | (Optional) |
| TABLE_process_extip                    | (Optional) |



|   |            |
|---|------------|
| <i>dbase-lsp-extip-addr-out</i>         | (Optional) |
| <i>dbase-lsp-extip-prefix-len-out</i>   | (Optional) |
| <i>dbase-lsp-extip-metric-out</i>       | (Optional) |
| <i>dbase-lsp-extip-up-down-out</i>      | (Optional) |
| <i>dbase-lsp-extip-pfxsid</i>           | (Optional) |
| <i>dbase-lsp-extip-pfxsid-flags</i>     | (Optional) |
| <i>dbase-lsp-extip-unknown-out</i>      | (Optional) |
| <i>dbase-lsp-hname-out</i>              | (Optional) |
| <i>dbase-lsp-hname-len-out</i>          | (Optional) |
| TABLE_process_extipv6                   | (Optional) |
| <i>dbase-lsp-extipv6-addr-out</i>       | (Optional) |
| <i>dbase-lsp-extipv6-prefix-len-out</i> | (Optional) |
| <i>dbase-lsp-extipv6-metric-out</i>     | (Optional) |
| <i>dbase-lsp-extipv6-up-down-out</i>    | (Optional) |
| <i>dbase-lsp-extipv6-ext-origin-out</i> | (Optional) |
| <i>dbase-lsp-extipv6-pfxsid</i>         | (Optional) |
| <i>dbase-lsp-extipv6-pfxsid-flags</i>   | (Optional) |
| <i>dbase-lsp-extipv6-unknown-out</i>    | (Optional) |
| <i>dbase-lsp-tlv-len-out</i>            | (Optional) |
| <i>dbase-lsp-tlv-unknown-out</i>        | (Optional) |
| TABLE_process_subtlv                    | (Optional) |
| <i>dbase-lsp-subtlv-name-out</i>        | (Optional) |
| <i>dbase-lsp-extis-admin-group-out</i>  | (Optional) |
| <i>dbase-lsp-subtlv-ip-addr-out</i>     | (Optional) |
| <i>dbase-lsp-extis-bw-out</i>           | (Optional) |
| <i>dbase-lsp-extis-pri1-out</i>         | (Optional) |
| <i>dbase-lsp-extis-pri1-val-out</i>     | (Optional) |
| <i>dbase-lsp-extis-pri2-out</i>         | (Optional) |
| <i>dbase-lsp-extis-pri2-val-out</i>     | (Optional) |

|  |            |
|--|------------|
| <i>dbase-lsp-extis-te-metric-out</i>     | (Optional) |
| <i>dbase-lsp-extis-p2p-adjsid-out</i>    | (Optional) |
| <i>dbase-lsp-extis-p2p-adjsid-flags</i>  | (Optional) |
| <i>dbase-lsp-extis-p2p-adjsid-weight</i> | (Optional) |
| <i>dbase-lsp-extis-lan-adjsid-out</i>    | (Optional) |
| <i>dbase-lsp-extis-lan-adjsid-sysid</i>  | (Optional) |
| <i>dbase-lsp-extis-lan-adjsid-flags</i>  | (Optional) |
| <i>dbase-lsp-extis-lan-adjsid-weight</i> | (Optional) |
| <i>dbase-lsp-subtlv-len-out</i>          | (Optional) |
| <i>dbase-lsp-subtlv-unknown-out</i>      | (Optional) |
| <i>dbase-lsp-digest-out</i>              | (Optional) |
| <i>dbase-lsp-total-out</i>               | (Optional) |
| <i>dbase-lsp-empty-out</i>               | (Optional) |
| <i>dbase-lsp-zeroseq-out</i>             | (Optional) |
| <i>dbase-lsp-cap-rtrid</i>               | (Optional) |
| <i>dbase-lsp-cap-flags</i>               | (Optional) |
| <i>dbase-lsp-cap-subtlv-sr-start-sid</i> | (Optional) |
| <i>dbase-lsp-cap-subtlv-sr-end-sid</i>   | (Optional) |
| <i>dbase-lsp-cap-subtlv-sr-range</i>     | (Optional) |
| <i>dbase-lsp-cap-subtlv-sr-flags</i>     | (Optional) |

**Command Mode**

- /exec

# show isis distribute-ls

```
show isis [ <isis-tag> ] distribute-ls { [ system-id <sid> ] [ lsp-id <lid> ] } [ brief ] [ vrf { <vrf-name> |
<vrf-known-name> | all } ] [ __readonly__ { TABLE_process_tag <process-tag-out> <vrf-name-out>
<vrf-id-out> <lslib-connection-out> <client-type-out> <protocol-instance-out> <nxd-instance-out>
<ha-recovery-out> [ <queue-all-out> ] <update-timer-sec-out> <update-timer-msec-out>
<update-timer-running-out> [ <update-timer-due-in> ] [ { TABLE_process_lvl <level-out>
<level-distributing-out> [ { TABLE_ls_node <node-id-out> <node-name-out> [ { TABLE_ls_lsp <lsp-id-out>
<lsp-name-out> <lsp-purged-out> <node-grpid-out> <prefix-grpid-out> <link-grpid-out>
<node-attr-bitfield-out> <node-flags-out> [ <attached-bit-out> ] [ <overloaded-bit-out> ] [ <area-id-out> ] [
<area-length-out> ] [ <name-out> ] [ <ipv4-id-out> ] [ { TABLE_srgb <number-out> <start-out> <size-out>
} ] [ <sr-algo-count-out> ] [ { TABLE_sr_algo <algo-out> } ] [ { TABLE_ls_link <nbr-node-out>
<local-ip-out> <remote-ip-out> <link-attr-bitfield-out> [ <metric-out> ] <local-ip-attr-out> <remote-ip-attr-out>
[ <max-link-bw-out> ] [ <max-resv-bw-out> ] [ { TABLE_unresv_bw <number-out> <bw-out> } ] [
<metric-te-out> ] [ { TABLE-adj-sid <asid-out> <flag-out> <weight-out> } ] } ] [ { TABLE_ls_prefix
<prefix-out> <prefix-len-out> <prefix-attr-bitfield-out> [ <metric-out> ] [ { TABLE-sid <sid-out> <algo-out>
<flags-out> } ] } ] } ] }
```

## Syntax Description

|                        |  |
|------------------------|--|
| show                   | Show running system information                                  |
| isis                   | Display IS-IS status and configuration                           |
| <i>isis-tag</i>        | (Optional) Routing process tag                                   |
| distribute-ls          | Link-state distribution database                                 |
| system-id              | (Optional) Hostname or System ID                                 |
| <i>sid</i>             | (Optional) Hostname or System ID (in the form of XXXX.XXXX.XXXX) |
| lsp-id                 | (Optional) LSP ID in the form of XXXX.XXXX.XXXX.XX-XX            |
| <i>lid</i>             | (Optional) LSP ID in the form of XXXX.XXXX.XXXX.XX-XX            |
| brief                  | (Optional) Short output  |
| vrf                    | (Optional) Display per-VRF information                           |
| <i>vrf-name</i>        | (Optional) VRF name  |
| <i>vrf-known-name</i>  | (Optional) Known VRF name  |
| all                    | (Optional) Display information for all VRFs                      |
| __readonly__           | (Optional)   |
| TABLE_process_tag      | (Optional)   |
| <i>process-tag-out</i> | (Optional)   |
| <i>vrf-name-out</i>    | (Optional)   |

|                                 |            |
|---------------------------------|------------|
| <i>vrf-id-out</i>               | (Optional) |
| <i>lslib-connection-out</i>     | (Optional) |
| <i>client-type-out</i>          | (Optional) |
| <i>protocol-instance-out</i>    | (Optional) |
| <i>nxos-instance-out</i>        | (Optional) |
| <i>ha-recovery-out</i>          | (Optional) |
| <i>queue-all-out</i>            | (Optional) |
| <i>update-timer-sec-out</i>     | (Optional) |
| <i>update-timer-msec-out</i>    | (Optional) |
| <i>update-timer-running-out</i> | (Optional) |
| <i>update-timer-due-in</i>      | (Optional) |
| TABLE_process_lvl               | (Optional) |
| <i>level-out</i>                | (Optional) |
| <i>level-distributing-out</i>   | (Optional) |
| TABLE_ls_node                   | (Optional) |
| <i>node-id-out</i>              | (Optional) |
| <i>node-name-out</i>            | (Optional) |
| TABLE_ls_lsp                    | (Optional) |
| <i>lsp-id-out</i>               | (Optional) |
| <i>lsp-name-out</i>             | (Optional) |
| <i>lsp-purged-out</i>           | (Optional) |
| <i>node-grpid-out</i>           | (Optional) |
| <i>prefix-grpid-out</i>         | (Optional) |
| <i>link-grpid-out</i>           | (Optional) |
| <i>node-attr-bitfield-out</i>   | (Optional) |
| <i>node-flags-out</i>           | (Optional) |
| <i>attached-bit-out</i>         | (Optional) |
| <i>overloaded-bit-out</i>       | (Optional) |
| <i>area-id-out</i>              | (Optional) |

|                               |            |
|-------------------------------|------------|
| <i>area-length-out</i>        | (Optional) |
| <i>name-out</i>               | (Optional) |
| <i>ipv4-id-out</i>            | (Optional) |
| TABLE_srgb                    | (Optional) |
| <i>number-out</i>             | (Optional) |
| <i>start-out</i>              | (Optional) |
| <i>size-out</i>               | (Optional) |
| <i>sr-algo-count-out</i>      | (Optional) |
| TABLE_sr_algo                 | (Optional) |
| <i>algo-out</i>               | (Optional) |
| TABLE_ls_link                 | (Optional) |
| <i>nbr-node-out</i>           | (Optional) |
| <i>local-ip-out</i>           | (Optional) |
| <i>remote-ip-out</i>          | (Optional) |
| <i>link-attr-bitfield-out</i> | (Optional) |
| <i>metric-out</i>             | (Optional) |
| <i>local-ip-attr-out</i>      | (Optional) |
| <i>remote-ip-attr-out</i>     | (Optional) |
| <i>max-link-bw-out</i>        | (Optional) |
| <i>max-resv-bw-out</i>        | (Optional) |
| TABLE_unresv_bw               | (Optional) |
| <i>number-out</i>             | (Optional) |
| <i>bw-out</i>                 | (Optional) |
| <i>metric-te-out</i>          | (Optional) |
| TABLE-adj-sid                 | (Optional) |
| <i>asid-out</i>               | (Optional) |
| <i>flag-out</i>               | (Optional) |
| <i>weight-out</i>             | (Optional) |
| TABLE_ls_prefix               | (Optional) |

|                                 |            |
|---------------------------------|------------|
| <i>prefix-out</i>               | (Optional) |
| <i>prefix-len-out</i>           | (Optional) |
| <i>prefix-attr-bitfield-out</i> | (Optional) |
| <i>metric-out</i>               | (Optional) |
| TABLE-sid                       | (Optional) |
| <i>sid-out</i>                  | (Optional) |
| <i>algo-out</i>                 | (Optional) |
| <i>flags-out</i>                | (Optional) |

**Command Mode**

- /exec

# show isis event-history

```
show isis [ <isis-tag> ] [ internal ] event-history { errors | msgs | <isis-event-hist-buf-name> | statistics }
```

## Syntax Description

|                                 |  |
|---------------------------------|--|
| show                            | Show running system information        |
| isis                            | Display IS-IS status and configuration |
| <i>isis-tag</i>                 | (Optional) Routing process tag         |
| internal                        | (Optional) Commands for internal use   |
| event-history                   | Display IS-IS event history            |
| errors                          | Error history                          |
| msgs                            | Message history                        |
| <i>isis-event-hist-buf-name</i> | Event history buffer                   |
| statistics                      | Show the state and size of the buffer  |

## Command Mode

- /exec

# show isis hostname

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] { hostname | hostname-table } [ detail
] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ TABLE_vrf <vrf-name-out> <tag-out>
<hname-enabled-out> <hname-detail-out> [ TABLE_hostname <hname-id-out> <hname-level-out>
<hname-id-mine-out> <hname-name-out> ] ]
```

## Syntax Description

|                           |   |
|---------------------------|---|
| show                      | Show running system information               |
| isis                      | Display IS-IS status and configuration        |
| <i>isis-tag</i>           | (Optional) Routing process tag                |
| vrf                       | (Optional) Display per-VRF information        |
| <i>vrf-name</i>           | (Optional) VRF name                           |
| <i>vrf-known-name</i>     | (Optional) Known VRF name                     |
| all                       | (Optional) Display information for all VRFs   |
| hostname                  | Display IS-IS hostname table information      |
| hostname-table            | Display IS-IS hostname table information      |
| detail                    | (Optional) Display detailed IS-IS information |
| <code>__readonly__</code> | (Optional)                                    |
| TABLE_vrf                 | (Optional)                                    |
| <i>vrf-name-out</i>       | (Optional)                                    |
| <i>tag-out</i>            | (Optional)                                    |
| <i>hname-enabled-out</i>  | (Optional)                                    |
| <i>hname-detail-out</i>   | (Optional)                                    |
| TABLE_hostname            | (Optional)                                    |
| <i>hname-id-out</i>       | (Optional)                                    |
| <i>hname-level-out</i>    | (Optional)                                    |
| <i>hname-id-mine-out</i>  | (Optional)                                    |
| <i>hname-name-out</i>     | (Optional)                                    |

## Command Mode

- /exec



# show isis interface

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] interface [ brief | <interface> ] [ level-1
| level-2 ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ { TABLE_process_tag
<process-tag-out> { TABLE_vrf <vrf-name-out> [ { TABLE_interface [ { <intfb-name-out> <intfb-type-out>
<intfb-ix-out> <intfb-state-out> <intfb-ready-state-out> <intfb-cid-out> <intfb-ckt-type-out> <intfb-mtu-out>
[ { <intf-p2p-metric-lvl-1-out> <intf-p2p-metric-lvl-2-out> <intf-p2p-prio-lvl-1-out> <intf-p2p-prio-lvl-2-out>
<intf-p2p-adj-count-lvl-1-out> <intf-p2p-adj-up-count-lvl-1-out> <intf-p2p-adj-count-lvl-2-out>
<intf-p2p-adj-up-count-lvl-2-out> } ] [ { <intf-loopback-metric-lvl-1-out> <intf-loopback-metric-lvl-2-out>
<intf-loopback-prio-lvl-1-out> <intf-loopback-prio-lvl-2-out> <intf-loopback-adj-count-lvl-1-out>
<intf-loopback-adj-up-count-lvl-1-out> <intf-loopback-adj-count-lvl-2-out>
<intf-loopback-adj-up-count-lvl-2-out> } ] [ { <intf-bcast-metric-lvl-1-out> <intf-bcast-metric-lvl-2-out>
<intf-bcast-prio-lvl-1-out> <intf-bcast-prio-lvl-2-out> <intf-bcast-adj-count-lvl-1-out>
<intf-bcast-adj-up-count-lvl-1-out> <intf-bcast-adj-count-lvl-2-out> <intf-bcast-adj-up-count-lvl-2-out> } ]
} ] [ { <intf-name-out> <intf-status-out> } ] [ { <intf-state-out> <intf-internal-state-out> [
<intf-cib-disabled-out> ] [ <intf-cid-invalid-out> ] } ] [ { TABLE_auth [ { <intf-auth-info-out> [
<intf-auth-kchain-out> ] <intf-auth-chk-info-out> } ] } ] [ { <intf-ix-out> <intf-cid-out> <intf-ckt-type-out>
} ] [ { TABLE_bfd [ <intf-bfd-ipv4-state-out> ] [ <intf-bfd-ipv6-state-out> ] } ] [ <intf-passive-mask-out> ]
[ <intf-passive-mask-lvl-out> ] [ <intf-mgrp-set-out> ] [ <intf-mgrp-state-out> ] [ <intf-mgrp-id-out> ] [
<intf-p2p-type-out> ] [ { <intf-p2p-ext-local-cid-out> <intf-p2p-cid-out> <intf-retx-intv-out>
<intf-retx-throttle-out> } ] [ <intf-loopback-type-out> ] [ { <intf-lsp-intv-out> <intf-mtu-out> [
<intf-hpad-state-out> ] } ] [ { [ <intf-p2p-pad-ts-out> ] <intf-p2p-adj-count-out> <intf-p2p-adj-up-count-out>
<intf-p2p-prio-out> <intf-p2p-hello-intv-out> <intf-p2p-hello-multi-out> <intf-p2p-hello-next-out> [ {
TABLE_p2p <intf-p2p-lvl-out> <intf-p2p-adj-lvl-out> <intf-p2p-adj-up-lvl-out> <intf-p2p-metric-lvl-out>
<intf-p2p-csnp-lvl-out> <intf-p2p-csnp-nxt-lvl-out> <intf-p2p-lspid-last-lvl-out> } ] } ] [ { <intf-bcast-type-out>
[ { TABLE_bcast_pad [ { <intf-bcast-lvl-out> <intf-bcast-pad-ts-out> } ] } ] [ { TABLE_bcast_dis [ {
<intf-bcast-lvl-dis-out> <intf-bcast-dis-ts-out> } ] } ] [ { TABLE_bcast_pkt <intf-bcast-lvl-info-out>
<intf-bcast-lvl-metric-0-out> <intf-bcast-lvl-metric-2-out> <intf-bcast-lvl-csnp-intv-out>
<intf-bcast-lvl-csnp-next-out> <intf-bcast-lvl-iih-intv-out> <intf-bcast-lvl-iih-multi-out>
<intf-bcast-lvl-iih-next-out> } ] [ { TABLE_bcast_adj <intf-bcast-lvl-value-out> <intf-bcast-lvl-adj-out>
<intf-bcast-lvl-adj-up-out> <intf-bcast-lvl-prio-out> <intf-bcast-lvl-ctid-out> <intf-bcast-lvl-ctid-ts-out>
} ] } ] [ { TABLE_loopback <intf-loopback-lvl-out> <intf-loopback-lvl-metric-out> } ] [ <intf-unknown-out>
} ] } ] }
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information              |
| isis                  | Display IS-IS status and configuration       |
| <i>isis-tag</i>       | (Optional) Routing process tag               |
| vrf                   | (Optional) Display per-VRF information       |
| <i>vrf-name</i>       | (Optional) VRF name                          |
| <i>vrf-known-name</i> | (Optional) Known VRF name                    |
| all                   | (Optional) Display information for all VRFs  |
| brief                 | (Optional) Brief display of IS-IS interfaces |

|                                     |                                       |
|-------------------------------------|---------------------------------------|
| interface                           | Display IS-IS interface information   |
| level-1                             | (Optional) Display Level-1 interfaces |
| level-2                             | (Optional) Display level-2 interfaces |
| <i>interface</i>                    | (Optional) IS-IS interface            |
| <i>__readonly__</i>                 | (Optional)                            |
| TABLE_process_tag                   | (Optional)                            |
| <i>process-tag-out</i>              | (Optional)                            |
| TABLE_vrf                           | (Optional)                            |
| <i>vrf-name-out</i>                 | (Optional)                            |
| TABLE_interface                     | (Optional)                            |
| <i>intf-status-out</i>              | (Optional)                            |
| <i>intf-name-out</i>                | (Optional)                            |
| <i>intf-ix-out</i>                  | (Optional)                            |
| <i>intf-state-out</i>               | (Optional)                            |
| <i>intf-cid-out</i>                 | (Optional)                            |
| <i>intf-ckt-type-out</i>            | (Optional)                            |
| <i>intfb-name-out</i>               | (Optional)                            |
| <i>intfb-type-out</i>               | (Optional)                            |
| <i>intfb-ix-out</i>                 | (Optional)                            |
| <i>intfb-state-out</i>              | (Optional)                            |
| <i>intfb-ready-state-out</i>        | (Optional)                            |
| <i>intfb-cid-out</i>                | (Optional)                            |
| <i>intfb-ckt-type-out</i>           | (Optional)                            |
| <i>intf-p2p-metric-lvl-1-out</i>    | (Optional)                            |
| <i>intf-p2p-metric-lvl-2-out</i>    | (Optional)                            |
| <i>intf-p2p-prio-lvl-1-out</i>      | (Optional)                            |
| <i>intf-p2p-prio-lvl-2-out</i>      | (Optional)                            |
| <i>intf-p2p-adj-count-lvl-1-out</i> | (Optional)                            |
| <i>intf-p2p-adj-count-lvl-2-out</i> | (Optional)                            |

|   |            |
|---|------------|
| <i>intf-p2p-adj-up-count-lvl-1-out</i>      | (Optional) |
| <i>intf-p2p-adj-up-count-lvl-2-out</i>      | (Optional) |
| <i>intf-loopback-metric-lvl-1-out</i>       | (Optional) |
| <i>intf-loopback-metric-lvl-2-out</i>       | (Optional) |
| <i>intf-loopback-prio-lvl-1-out</i>         | (Optional) |
| <i>intf-loopback-prio-lvl-2-out</i>         | (Optional) |
| <i>intf-loopback-adj-count-lvl-1-out</i>    | (Optional) |
| <i>intf-loopback-adj-count-lvl-2-out</i>    | (Optional) |
| <i>intf-loopback-adj-up-count-lvl-1-out</i> | (Optional) |
| <i>intf-loopback-adj-up-count-lvl-2-out</i> | (Optional) |
| <i>intf-bcast-metric-lvl-1-out</i>          | (Optional) |
| <i>intf-bcast-metric-lvl-2-out</i>          | (Optional) |
| <i>intf-bcast-prio-lvl-1-out</i>            | (Optional) |
| <i>intf-bcast-prio-lvl-2-out</i>            | (Optional) |
| <i>intf-bcast-adj-count-lvl-1-out</i>       | (Optional) |
| <i>intf-bcast-adj-count-lvl-2-out</i>       | (Optional) |
| <i>intf-bcast-adj-up-count-lvl-1-out</i>    | (Optional) |
| <i>intf-bcast-adj-up-count-lvl-2-out</i>    | (Optional) |
| <i>intf-internal-state-out</i>              | (Optional) |
| <i>intf-cib-disabled-out</i>                | (Optional) |
| <i>intf-cid-invalid-out</i>                 | (Optional) |
| TABLE_auth                                  | (Optional) |
| <i>intf-auth-info-out</i>                   | (Optional) |
| <i>intf-auth-kchain-out</i>                 | (Optional) |
| <i>intf-auth-chk-info-out</i>               | (Optional) |
| TABLE_bfd                                   | (Optional) |
| <i>intf-bfd-ipv4-state-out</i>              | (Optional) |
| <i>intf-bfd-ipv6-state-out</i>              | (Optional) |
| <i>intf-passive-mask-out</i>                | (Optional) |

|                                    |            |
|------------------------------------|------------|
| <i>intf-passive-mask-lvl-out</i>   | (Optional) |
| <i>intf-mgrp-set-out</i>           | (Optional) |
| <i>intf-mgrp-state-out</i>         | (Optional) |
| <i>intf-mgrp-id-out</i>            | (Optional) |
| <i>intf-p2p-type-out</i>           | (Optional) |
| <i>intf-p2p-ext-local-cid-out</i>  | (Optional) |
| <i>intf-p2p-cid-out</i>            | (Optional) |
| <i>intf-retx-intv-out</i>          | (Optional) |
| <i>intf-retx-throttle-out</i>      | (Optional) |
| <i>intf-loopback-type-out</i>      | (Optional) |
| <i>intf-lsp-intv-out</i>           | (Optional) |
| <i>intf-mtu-out</i>                | (Optional) |
| <i>intfb-mtu-out</i>               | (Optional) |
| <i>intf-hpad-state-out</i>         | (Optional) |
| <i>intf-p2p-pad-ts-out</i>         | (Optional) |
| <i>intf-p2p-adj-count-out</i>      | (Optional) |
| <i>intf-p2p-adj-up-count-out</i>   | (Optional) |
| <i>intf-p2p-prio-out</i>           | (Optional) |
| <i>intf-p2p-hello-intv-out</i>     | (Optional) |
| <i>intf-p2p-hello-multi-out</i>    | (Optional) |
| <i>intf-p2p-hello-next-out</i>     | (Optional) |
| TABLE_p2p                          | (Optional) |
| <i>intf-p2p-lvl-out</i>            | (Optional) |
| <i>intf-p2p-adj-lvl-out</i>        | (Optional) |
| <i>intf-p2p-adj-up-lvl-out</i>     | (Optional) |
| <i>intf-p2p-metric-lvl-out</i>     | (Optional) |
| <i>intf-p2p-csnp-lvl-out</i>       | (Optional) |
| <i>intf-p2p-csnp-nxt-lvl-out</i>   | (Optional) |
| <i>intf-p2p-lspid-last-lvl-out</i> | (Optional) |

|                                     |            |
|-------------------------------------|------------|
| <i>intf-bcast-type-out</i>          | (Optional) |
| TABLE_bcast_pad                     | (Optional) |
| <i>intf-bcast-lvl-out</i>           | (Optional) |
| <i>intf-bcast-pad-ts-out</i>        | (Optional) |
| TABLE_bcast_dis                     | (Optional) |
| <i>intf-bcast-lvl-dis-out</i>       | (Optional) |
| <i>intf-bcast-dis-ts-out</i>        | (Optional) |
| TABLE_bcast_pkt                     | (Optional) |
| <i>intf-bcast-lvl-info-out</i>      | (Optional) |
| <i>intf-bcast-lvl-metric-0-out</i>  | (Optional) |
| <i>intf-bcast-lvl-metric-2-out</i>  | (Optional) |
| <i>intf-bcast-lvl-csnp-intv-out</i> | (Optional) |
| <i>intf-bcast-lvl-csnp-next-out</i> | (Optional) |
| <i>intf-bcast-lvl-iih-intv-out</i>  | (Optional) |
| <i>intf-bcast-lvl-iih-multi-out</i> | (Optional) |
| <i>intf-bcast-lvl-iih-next-out</i>  | (Optional) |
| TABLE_bcast_adj                     | (Optional) |
| <i>intf-bcast-lvl-value-out</i>     | (Optional) |
| <i>intf-bcast-lvl-adj-out</i>       | (Optional) |
| <i>intf-bcast-lvl-adj-up-out</i>    | (Optional) |
| <i>intf-bcast-lvl-prio-out</i>      | (Optional) |
| <i>intf-bcast-lvl-ctid-out</i>      | (Optional) |
| <i>intf-bcast-lvl-ctid-ts-out</i>   | (Optional) |
| TABLE_loopback                      | (Optional) |
| <i>intf-loopback-lvl-out</i>        | (Optional) |
| <i>intf-loopback-lvl-metric-out</i> | (Optional) |
| <i>intf-unknown-out</i>             | (Optional) |

**Command Mode**

- /exec

## show isis ipv6 redistribute route

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] ipv6 redistribute route [ summary |
<ipv6-addr> | <ipv6-prefix> [ longer-prefixes [ summary ] ] ] [ direct-mask ] [ vrf { <vrf-name> |
<vrf-known-name> | all } ] [ __readonly__ TABLE_process_tag <process-tag-out> <redist-route-ipv6-vrf>
[ <redist-route-ipv6-af-ix> ] [ { TABLE_one_route <redist-route-ipv6-prefix> [ <redist-route-ipv6-mask-len>
] [ <redist-route-ipv6-pib-name> ] [ <redist-route-ipv6-direct-mask> ] [ <redist-route-ipv6-route-type> ] [ {
TABLE_redist <redist-route-ipv6-status> <redist-route-ipv6-level> [ <redist-route-ipv6-metric> ] [
<redist-route-ipv6-sum-addr-prefix> ] [ <redist-route-ipv6-sum-addr-mask-len> ] } ] } ] [
<redist-route-ipv6-summary-addr-prefix> ] [ <redist-route-ipv6-summary-addr-mask-len> ] [
<redist-route-ipv6-summary-route-total> ] [ { TABLE_protocol <redist-route-ipv6-summary-pib-name> [
<redist-route-ipv6-summary-prot-route-total> ] } ] [ <redist-route-ipv6-summary-pending-total> ] [ {
TABLE_mask_len <redist-route-ipv6-summary-mask-len-ix> [ <redist-route-ipv6-summary-mask-len> ] }
] ]
```

### Syntax Description

|                                |   |
|--------------------------------|---|
| show                           | Show running system information                         |
| isis                           | Display IS-IS status and configuration                  |
| <i>isis-tag</i>                | (Optional) Routing process tag                          |
| vrf                            | (Optional) Display per-VRF information                  |
| <i>vrf-name</i>                | (Optional) VRF name                                     |
| <i>vrf-known-name</i>          | (Optional) Known VRF name                               |
| all                            | (Optional) Display information for all VRFs             |
| redistribute                   | Display IS-IS redistribute information                  |
| route                          | Display ISIS redistribute route                         |
| ipv6                           | Display IS-IS IPv6 information                          |
| longer-prefixes                | (Optional) Display exact match and more specific routes |
| summary                        | (Optional) Display route counts                         |
| direct-mask                    | (Optional) Display routes with direct-mask set          |
| __readonly__                   | (Optional)  |
| TABLE_process_tag              | (Optional)  |
| <i>process-tag-out</i>         | (Optional)  |
| <i>redist-route-ipv6-vrf</i>   | (Optional)  |
| <i>redist-route-ipv6-af-ix</i> | (Optional)  |
| TABLE_one_route                | (Optional)  |

|   |            |
|---|------------|
| <i>redist-route-ipv6-prefix</i>                   | (Optional) |
| <i>redist-route-ipv6-mask-len</i>                 | (Optional) |
| <i>redist-route-ipv6-pib-name</i>                 | (Optional) |
| <i>redist-route-ipv6-direct-mask</i>              | (Optional) |
| <i>redist-route-ipv6-route-type</i>               | (Optional) |
| TABLE_redist                                      | (Optional) |
| <i>redist-route-ipv6-status</i>                   | (Optional) |
| <i>redist-route-ipv6-level</i>                    | (Optional) |
| <i>redist-route-ipv6-metric</i>                   | (Optional) |
| <i>redist-route-ipv6-sum-addr-prefix</i>          | (Optional) |
| <i>redist-route-ipv6-sum-addr-mask-len</i>        | (Optional) |
| <i>redist-route-ipv6-summary-addr-prefix</i>      | (Optional) |
| <i>redist-route-ipv6-summary-addr-mask-len</i>    | (Optional) |
| <i>redist-route-ipv6-summary-route-total</i>      | (Optional) |
| TABLE_protocol                                    | (Optional) |
| <i>redist-route-ipv6-summary-pib-name</i>         | (Optional) |
| <i>redist-route-ipv6-summary-prot-route-total</i> | (Optional) |
| <i>redist-route-ipv6-summary-pending-total</i>    | (Optional) |
| TABLE_mask_len                                    | (Optional) |
| <i>redist-route-ipv6-summary-mask-len-ix</i>      | (Optional) |
| <i>redist-route-ipv6-summary-mask-len</i>         | (Optional) |

### Command Mode

- /exec

## show isis ipv6 route-map statistics

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] ipv6 route-map statistics { { redistribute
{ static | direct | amt | bgp <as> | { <src-isis> | eigrp | ospfv3 | rip } <tag> } } | { distribute <src-level> into
<dst-level> } } [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ TABLE_process_tag [
<process-tag-out> ] [ <route-map-stat-vrf> ] [ { TABLE_process_route_map [ <name> ] [ <action> ] [ <seq>
] [ { TABLE_cmd [ <str> ] [ <compare-count> ] [ <match-count> } ] ] <accept-count> <reject-count> } ] ]
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                        |
| isis                  | Display IS-IS status and configuration                 |
| <i>isis-tag</i>       | (Optional) Routing process tag                         |
| vrf                   | (Optional) Display per-VRF information                 |
| <i>vrf-name</i>       | (Optional) VRF name                                    |
| <i>vrf-known-name</i> | (Optional) Known VRF name                              |
| all                   | (Optional) Display information for all VRFs            |
| ipv6                  | Display IS-IS IPv6 information                         |
| route-map             | Display IS-IS route-map information                    |
| statistics            | Display IS-IS route-map statistics                     |
| redistribute          | Redistribute information from another routing protocol |
| static                | Static routes  |
| direct                | Directly connected                                     |
| amt                   | AMT anycast prefix                                     |
| bgp                   | Border Gateway Protocol (BGP)                          |
| <i>as</i>             | Autonomous system number                               |
| eigrp                 | Enhanced Interior Gateway Protocol                     |
| src-isis              | IS-IS Routing for IPv6                                 |
| ospfv3                | Open Shortest Path First (OSPF) V3                     |
| rip                   | RIP for IPv6 (RIPNG)                                   |
| <i>tag</i>            | Process tag  |
| distribute            | Distribute routes between ISIS levels                  |
| into                  | from level-n into level-m                              |



|                           |   |
|---------------------------|---|
| <i>src-level</i>          | Route-distribution between levels                         |
| <i>dst-level</i>          | Route-distribution between levels                         |
| <i>__readonly__</i>       | (Optional)  |
| TABLE_process_tag         | (Optional)  |
| <i>process-tag-out</i>    | (Optional)  |
| <i>route-map-stat-vrf</i> | (Optional)  |
| TABLE_process_route_map   | (Optional) Routemap table                                 |
| <i>name</i>               | (Optional) Route-map Name                                 |
| <i>action</i>             | (Optional) Route-map action                               |
| <i>seq</i>                | (Optional) Sequence number of the rule in route-map       |
| TABLE_cmd                 | (Optional) Route-map command table                        |
| <i>str</i>                | (Optional) Route-map command                              |
| <i>compare-count</i>      | (Optional) Number of comparisons                          |
| <i>match-count</i>        | (Optional) Number of matches                              |
| <i>accept-count</i>       | (Optional) Total number of packets accepted by the policy |
| <i>reject-count</i>       | (Optional) Total number of packets rejected by the policy |

**Command Mode**

- /exec



|  |   |
|--|---|
| detail                                 | (Optional) Display detail route information     |
| private                                | (Optional) Show detail and internal information |
| <u>__readonly__</u>                    | (Optional)                                      |
| TABLE_process_tag                      | (Optional)                                      |
| <i>process-tag-out</i>                 | (Optional)                                      |
| TABLE_vrf                              | (Optional)                                      |
| <i>vrf-name-out</i>                    | (Optional)                                      |
| <i>afi-safi-out</i>                    | (Optional)                                      |
| TABLE_prefix                           | (Optional)                                      |
| <i>route-prefix-out</i>                | (Optional)                                      |
| <i>route-mask-len-out</i>              | (Optional)                                      |
| <i>route-level-out</i>                 | (Optional)                                      |
| <i>route-summ-discard-addr-out</i>     | (Optional)                                      |
| <i>route-summ-discard-mask-len-out</i> | (Optional)                                      |
| <i>route-discard-addr-out</i>          | (Optional)                                      |
| <i>route-discard-mask-len-out</i>      | (Optional)                                      |
| <i>route-addr-print-out</i>            | (Optional)                                      |
| <i>route-mask-len-print-out</i>        | (Optional)                                      |
| <i>route-direct-print-out</i>          | (Optional)                                      |
| TABLE_direct_path                      | (Optional)                                      |
| <i>route-direct-out</i>                | (Optional)                                      |
| <i>route-direct-via-out</i>            | (Optional)                                      |
| <i>route-direct-if-name-out</i>        | (Optional)                                      |
| <i>route-direct-metric-out</i>         | (Optional)                                      |
| <i>route-direct-level-out</i>          | (Optional)                                      |
| <i>route-direct-instance-out</i>       | (Optional)                                      |
| TABLE_best_path                        | (Optional)                                      |
| <i>route-no-def-prefix-out</i>         | (Optional)                                      |
| <i>route-def-prefix-out</i>            | (Optional)                                      |

|                                  |            |
|----------------------------------|------------|
| <i>route-addr-valid-out</i>      | (Optional) |
| <i>route-marker-out</i>          | (Optional) |
| <i>route-ifname-out</i>          | (Optional) |
| <i>route-metric-out</i>          | (Optional) |
| <i>route-pref-out</i>            | (Optional) |
| <i>route-instance-out</i>        | (Optional) |
| <i>route-discard-mask-out</i>    | (Optional) |
| <i>route-sum-prefix-out</i>      | (Optional) |
| <i>route-sum-prefix-len-out</i>  | (Optional) |
| <i>route-total-out</i>           | (Optional) |
| <i>route-paths-total-out</i>     | (Optional) |
| <i>route-paths-best-out</i>      | (Optional) |
| <i>route-paths-backup-out</i>    | (Optional) |
| TABLE_sum_best_route             | (Optional) |
| <i>route-sum-lvl-out</i>         | (Optional) |
| <i>route-sum-total-out</i>       | (Optional) |
| <i>route-sum-direct-out</i>      | (Optional) |
| <i>route-sum-normal-out</i>      | (Optional) |
| <i>route-sum-missing-out</i>     | (Optional) |
| <i>route-best-pend-num-out</i>   | (Optional) |
| <i>route-bestpaths-out</i>       | (Optional) |
| TABLE_sum_best_path              | (Optional) |
| <i>route-path-sum-lvl-out</i>    | (Optional) |
| <i>route-path-sum-total-out</i>  | (Optional) |
| <i>route-path-sum-direct-out</i> | (Optional) |
| <i>route-path-sum-normal-out</i> | (Optional) |
| <i>route-backuppaths-out</i>     | (Optional) |
| TABLE_sum_backup_path            | (Optional) |
| <i>backup-path-sum-lvl-out</i>   | (Optional) |

|                                      |            |
|--------------------------------------|------------|
| <i>backup-path-sum-total-out</i>     | (Optional) |
| <i>backup-path-sum-direct-out</i>    | (Optional) |
| <i>backup-path-sum-normal-out</i>    | (Optional) |
| <i>route-bestroutes-per-mask-out</i> | (Optional) |
| TABLE_best_mask                      | (Optional) |
| <i>route-best-mask-val-out</i>       | (Optional) |
| <i>route-best-mask-count-out</i>     | (Optional) |
| <i>route-pend-q-count-out</i>        | (Optional) |

**Command Mode**

- /exec

# show isis lslib

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] lslib [ cache [ nodes | links | prefixes
| node <s0> | link <s1> | prefix <s2> | links-of-node <s3> | prefixes-of-node <s4> ] [ detail ] ] [ vrf { <vrf-name>
| <vrf-known-name> | all } ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information               |
| isis                  | Display IS-IS status and configuration        |
| <i>isis-tag</i>       | (Optional) Routing process tag                |
| lslib                 | LSLIB client information                      |
| cache                 | (Optional) Link-state cache in LSLIB          |
| nodes                 | (Optional) All Node objects                   |
| links                 | (Optional) All Link objects                   |
| prefixes              | (Optional) All Prefix objects                 |
| node                  | (Optional) One node object information        |
| <i>s0</i>             | (Optional) Node information                   |
| link                  | (Optional) One link object information        |
| <i>s1</i>             | (Optional) Link information                   |
| prefix                | (Optional) One prefix object information      |
| <i>s2</i>             | (Optional) Prefix information                 |
| links-of-node         | (Optional) All links information of a node    |
| <i>s3</i>             | (Optional) Node information                   |
| prefixes-of-node      | (Optional) All prefixes information of a node |
| <i>s4</i>             | (Optional) Node information                   |
| detail                | (Optional) Detailed info                      |
| vrf                   | (Optional) Display per-VRF information        |
| <i>vrf-name</i>       | (Optional) VRF name                           |
| <i>vrf-known-name</i> | (Optional) Known VRF name                     |
| all                   | (Optional) Display information for all VRFs   |

## Command Mode

- /exec

## show isis lsp free-list

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] { non-pseudonode | pseudonode {
<interface> | orphan } } lsp free-list [ summary ] [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| isis                  | Display IS-IS status and configuration      |
| <i>isis-tag</i>       | (Optional) Routing process tag              |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| non-pseudonode        | Display IS-IS non-pseudo-node information   |
| pseudonode            | Display IS-IS pseudo-node information       |
| <i>interface</i>      | IS-IS interface                             |
| orphan                | Display orphan LSP information              |
| lsp                   | Display IS-IS LSP information               |
| free-list             | Display free-list information               |
| summary               | (Optional) Display LSP count per free-list  |

### Command Mode

- /exec



## show isis mesh-group

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] mesh-group [ <mesh-id> ] [ vrf {
<vrf-name> | <vrf-known-name> | all } ] [ __readonly__ <tag-out> TABLE_vrf <vrf-name-out>
<mesh-id-set-out> <mesh-id-out> <mesh-set-id-out> <mesh-id-intf-name-out> <mesh-id-none-out> ]
```

### Syntax Description

|                              |   |
|------------------------------|---|
| show                         | Show running system information             |
| isis                         | Display IS-IS status and configuration      |
| <i>isis-tag</i>              | (Optional) Routing process tag              |
| vrf                          | (Optional) Display per-VRF information      |
| <i>vrf-name</i>              | (Optional) VRF name                         |
| <i>vrf-known-name</i>        | (Optional) Known VRF name                   |
| all                          | (Optional) Display information for all VRFs |
| mesh-group                   | Display IS-IS mesh-groups                   |
| <i>mesh-id</i>               | (Optional) Display a single mesh-group      |
| __readonly__                 | (Optional)                                  |
| <i>tag-out</i>               | (Optional)                                  |
| TABLE_vrf                    | (Optional)                                  |
| <i>vrf-name-out</i>          | (Optional)                                  |
| <i>mesh-id-set-out</i>       | (Optional)                                  |
| <i>mesh-id-out</i>           | (Optional)                                  |
| <i>mesh-set-id-out</i>       | (Optional)                                  |
| <i>mesh-id-intf-name-out</i> | (Optional)                                  |
| <i>mesh-id-none-out</i>      | (Optional)                                  |

### Command Mode

- /exec

## show isis non tlv overflow-list

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] { non-pseudonode | pseudonode
<interface> } tlv overflow-list [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| isis                  | Display IS-IS status and configuration      |
| <i>isis-tag</i>       | (Optional) Routing process tag              |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |
| non-pseudonode        | Display IS-IS non-pseudo-node information   |
| pseudonode            | Display IS-IS pseudo-node information       |
| <i>interface</i>      | IS-IS interface                             |
| tlv                   | Display IS-IS TLV information               |
| overflow-list         | Display ISIS TLV overflow-list information  |

### Command Mode

- /exec

# show isis redistribute route

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ ip ] redistribute route [ summary |
<ip-addr> | <ip-prefix> [ longer-prefixes [ summary ] ] ] [ direct-mask ] [ vrf { <vrf-name> | <vrf-known-name>
| all } ] [ __readonly__ TABLE_process_tag <process-tag-out> <redist-route-vrf> [ <redist-route-af-ix> ] [
{ TABLE_one_route <redist-route-prefix> [ <redist-route-mask-len> ] [ <redist-route-pib-name> ] [
<redist-route-direct-mask> ] [ <redist-route-route-type> ] [ { TABLE_redist <redist-route-status>
<redist-route-level> [ <redist-route-metric> ] [ <redist-route-sum-addr-prefix> ] [
<redist-route-sum-addr-mask-len> ] } ] [ <redist-route-summary-addr-prefix> ] [
<redist-route-summary-addr-mask-len> ] [ <redist-route-summary-route-total> ] [ { TABLE_protocol
<redist-route-summary-pib-name> [ <redist-route-summary-prot-route-total> } ] ] [
<redist-route-summary-pending-total> ] [ { TABLE_mask_len <redist-route-summary-mask-len-ix> [
<redist-route-summary-mask-len> ] } ] ] ]
```

### Syntax Description

|                         |   |
|-------------------------|---|
| show                    | Show running system information                             |
| isis                    | Display IS-IS status and configuration                      |
| <i>isis-tag</i>         | (Optional) Routing process tag                              |
| vrf                     | (Optional) Display per-VRF information                      |
| <i>vrf-name</i>         | (Optional) VRF name   |
| <i>vrf-known-name</i>   | (Optional) Known VRF name                                   |
| all                     | (Optional) Display information for all VRFs                 |
| redistribute            | Display IS-IS redistribute information                      |
| route                   | Display ISIS redistribute route                             |
| ip                      | (Optional) Display IS-IS IPv4 information                   |
| <i>ip-addr</i>          | (Optional) Display single IP redistribute route             |
| <i>ip-prefix</i>        | (Optional) Display single exact match IP redistribute route |
| longer-prefixes         | (Optional) Display exact match and more specific routes     |
| summary                 | (Optional) Display route counts                             |
| direct-mask             | (Optional) Display routes with direct-mask set              |
| <i>__readonly__</i>     | (Optional)  |
| TABLE_process_tag       | (Optional)  |
| <i>process-tag-out</i>  | (Optional)  |
| <i>redist-route-vrf</i> | (Optional)  |

|  |            |
|--|------------|
| <i>redist-route-af-ix</i>                    | (Optional) |
| TABLE_one_route                              | (Optional) |
| <i>redist-route-prefix</i>                   | (Optional) |
| <i>redist-route-mask-len</i>                 | (Optional) |
| <i>redist-route-pib-name</i>                 | (Optional) |
| <i>redist-route-direct-mask</i>              | (Optional) |
| <i>redist-route-route-type</i>               | (Optional) |
| TABLE_redist                                 | (Optional) |
| <i>redist-route-status</i>                   | (Optional) |
| <i>redist-route-level</i>                    | (Optional) |
| <i>redist-route-metric</i>                   | (Optional) |
| <i>redist-route-sum-addr-prefix</i>          | (Optional) |
| <i>redist-route-sum-addr-mask-len</i>        | (Optional) |
| <i>redist-route-summary-addr-prefix</i>      | (Optional) |
| <i>redist-route-summary-addr-mask-len</i>    | (Optional) |
| <i>redist-route-summary-route-total</i>      | (Optional) |
| TABLE_protocol                               | (Optional) |
| <i>redist-route-summary-pib-name</i>         | (Optional) |
| <i>redist-route-summary-prot-route-total</i> | (Optional) |
| <i>redist-route-summary-pending-total</i>    | (Optional) |
| TABLE_mask_len                               | (Optional) |
| <i>redist-route-summary-mask-len-ix</i>      | (Optional) |
| <i>redist-route-summary-mask-len</i>         | (Optional) |

**Command Mode**

- /exec

## show isis route-map statistics

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ ip ] route-map statistics { { redistribute
{ static | direct | amt | bgp <as> | { <src-isis> | eigrp | ospf | rip } <tag> } } | { distribute <src-level> into
<dst-level> } } [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ { TABLE_process_tag
<process-tag-out> { TABLE_vrf <route-map-stat-vrf> [ { TABLE_process_route_map [ <name> ] [ <action>
] [ <seq> ] [ { TABLE_cmd [ <str> ] [ <compare-count> ] [ <match-count> ] } ] <accept-count> <reject-count>
} } } ]
```

### Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                        |
| isis                  | Display IS-IS status and configuration                 |
| <i>isis-tag</i>       | (Optional) Routing process tag                         |
| vrf                   | (Optional) Display per-VRF information                 |
| <i>vrf-name</i>       | (Optional) VRF name                                    |
| <i>vrf-known-name</i> | (Optional) Known VRF name                              |
| all                   | (Optional) Display information for all VRFs            |
| ip                    | (Optional) Display IS-IS IPv4 information              |
| route-map             | Display IS-IS route-map information                    |
| statistics            | Display IS-IS route-map statistics                     |
| redistribute          | Redistribute information from another routing protocol |
| static                | Static routes  |
| direct                | Directly connected                                     |
| amt                   | AMT anycast prefix                                     |
| bgp                   | Border Gateway Protocol (BGP)                          |
| <i>as</i>             | Autonomous system number                               |
| eigrp                 | Enhanced Interior Gateway Protocol                     |
| src-isis              | IS-IS Routing for IPv4                                 |
| ospf                  | Open Shortest Path First (OSPF)                        |
| rip                   | RIP for IPv4   |
| <i>tag</i>            | Process tag  |
| distribute            | Distribute routes between ISIS levels                  |

|                           |   |
|---------------------------|---|
| <i>into</i>               | from level-n into level-m                                 |
| <i>src-level</i>          | Route-distribution between levels                         |
| <i>dst-level</i>          | Route-distribution between levels                         |
| <i>__readonly__</i>       | (Optional)  |
| TABLE_process_tag         | (Optional)  |
| <i>process-tag-out</i>    | (Optional)  |
| TABLE_vrf                 | (Optional)  |
| <i>route-map-stat-vrf</i> | (Optional)  |
| TABLE_process_route_map   | (Optional) Routemap table                                 |
| <i>name</i>               | (Optional) Route-map Name                                 |
| <i>action</i>             | (Optional) Route-map action                               |
| <i>seq</i>                | (Optional) Sequence number of the rule in route-map       |
| TABLE_cmd                 | (Optional) Route-map command table                        |
| <i>str</i>                | (Optional) Route-map command                              |
| <i>compare-count</i>      | (Optional) Number of comparisons                          |
| <i>match-count</i>        | (Optional) Number of matches                              |
| <i>accept-count</i>       | (Optional) Total number of packets accepted by the policy |
| <i>reject-count</i>       | (Optional) Total number of packets rejected by the policy |

**Command Mode**

- /exec

# show isis route

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ ip ] route [ summary | detail | private
| <ip-addr> [ detail | private ] | <ip-prefix> [ detail | private | longer-prefixes [ summary | detail | private ] ] ]
[ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ { TABLE_process_tag <process-tag-out> {
TABLE_vrf <vrf-name-out> <afi-safi-out> [ TABLE_prefix [ <route-prefix-out> <route-mask-len-out>
<route-level-out> ] [ <route-summ-discard-addr-out> <route-summ-discard-mask-len-out> ] [
<route-discard-addr-out> <route-discard-mask-len-out> ] [ <route-addr-print-out> <route-mask-len-print-out>
<route-direct-print-out> ] [ TABLE_direct_path [ <route-direct-out> <route-direct-via-out>
<route-direct-if-name-out> <route-direct-metric-out> <route-direct-level-out> ] [ <route-direct-instance-out>
] ] [ TABLE_best_path [ <route-no-def-prefix-out> ] [ <route-def-prefix-out> ] <route-addr-valid-out>
<route-marker-out> <route-ifname-out> <route-metric-out> <route-pref-out> [ <route-instance-out> ] ] [
<route-discard-mask-out> ] [ [ <route-sum-prefix-out> <route-sum-prefix-len-out> ] <route-total-out>
<route-paths-total-out> <route-paths-best-out> <route-paths-backup-out> [ TABLE_sum_best_route
<route-sum-lvl-out> <route-sum-total-out> [ <route-sum-direct-out> ] [ <route-sum-normal-out> ] [
<route-sum-missing-out> ] ] [ <route-best-pend-num-out> ] <route-bestpaths-out> [ TABLE_sum_best_path
<route-path-sum-lvl-out> <route-path-sum-total-out> [ <route-path-sum-direct-out> ] [
<route-path-sum-normal-out> ] ] <route-backuppaths-out> [ TABLE_sum_backup_path
<backup-path-sum-lvl-out> <backup-path-sum-total-out> [ <backup-path-sum-direct-out> ] [
<backup-path-sum-normal-out> ] ] <route-bestroutes-per-mask-out> [ TABLE_best_mask
<route-best-mask-val-out> <route-best-mask-count-out> ] [ <route-pend-q-count-out> ] ] ] ] }
```

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information                         |
| isis                  | Display IS-IS status and configuration                  |
| <i>isis-tag</i>       | (Optional) Routing process tag                          |
| vrf                   | (Optional) Display per-VRF information                  |
| <i>vrf-name</i>       | (Optional) VRF name                                     |
| <i>vrf-known-name</i> | (Optional) Known VRF name                               |
| all                   | (Optional) Display information for all VRFs             |
| ip                    | (Optional) Display IS-IS IPv4 information               |
| route                 | Display IS-IS route information                         |
| <i>ip-addr</i>        | (Optional) Display single IP route                      |
| <i>ip-prefix</i>      | (Optional) Display single exact match IP route          |
| longer-prefixes       | (Optional) Display exact match and more specific routes |
| summary               | (Optional) Display route counts                         |
| detail                | (Optional) Display detail route information             |
| private               | (Optional) Show detail and internal information         |

|  |            |
|--|------------|
| <code>__readonly__</code>                    | (Optional) |
| <code>TABLE_process_tag</code>               | (Optional) |
| <code>process-tag-out</code>                 | (Optional) |
| <code>TABLE_vrf</code>                       | (Optional) |
| <code>vrf-name-out</code>                    | (Optional) |
| <code>afi-safi-out</code>                    | (Optional) |
| <code>TABLE_prefix</code>                    | (Optional) |
| <code>route-prefix-out</code>                | (Optional) |
| <code>route-mask-len-out</code>              | (Optional) |
| <code>route-level-out</code>                 | (Optional) |
| <code>route-summ-discard-addr-out</code>     | (Optional) |
| <code>route-summ-discard-mask-len-out</code> | (Optional) |
| <code>route-discard-addr-out</code>          | (Optional) |
| <code>route-discard-mask-len-out</code>      | (Optional) |
| <code>route-addr-print-out</code>            | (Optional) |
| <code>route-mask-len-print-out</code>        | (Optional) |
| <code>route-direct-print-out</code>          | (Optional) |
| <code>TABLE_direct_path</code>               | (Optional) |
| <code>route-direct-out</code>                | (Optional) |
| <code>route-direct-via-out</code>            | (Optional) |
| <code>route-direct-if-name-out</code>        | (Optional) |
| <code>route-direct-metric-out</code>         | (Optional) |
| <code>route-direct-level-out</code>          | (Optional) |
| <code>route-direct-instance-out</code>       | (Optional) |
| <code>TABLE_best_path</code>                 | (Optional) |
| <code>route-no-def-prefix-out</code>         | (Optional) |
| <code>route-def-prefix-out</code>            | (Optional) |
| <code>route-addr-valid-out</code>            | (Optional) |
| <code>route-marker-out</code>                | (Optional) |



|                                   |            |
|-----------------------------------|------------|
| <i>route-ifname-out</i>           | (Optional) |
| <i>route-metric-out</i>           | (Optional) |
| <i>route-pref-out</i>             | (Optional) |
| <i>route-instance-out</i>         | (Optional) |
| <i>route-discard-mask-out</i>     | (Optional) |
| <i>route-sum-prefix-out</i>       | (Optional) |
| <i>route-sum-prefix-len-out</i>   | (Optional) |
| <i>route-total-out</i>            | (Optional) |
| <i>route-paths-total-out</i>      | (Optional) |
| <i>route-paths-best-out</i>       | (Optional) |
| <i>route-paths-backup-out</i>     | (Optional) |
| TABLE_sum_best_route              | (Optional) |
| <i>route-sum-lvl-out</i>          | (Optional) |
| <i>route-sum-total-out</i>        | (Optional) |
| <i>route-sum-direct-out</i>       | (Optional) |
| <i>route-sum-normal-out</i>       | (Optional) |
| <i>route-sum-missing-out</i>      | (Optional) |
| <i>route-best-pend-num-out</i>    | (Optional) |
| <i>route-bestpaths-out</i>        | (Optional) |
| TABLE_sum_best_path               | (Optional) |
| <i>route-path-sum-lvl-out</i>     | (Optional) |
| <i>route-path-sum-total-out</i>   | (Optional) |
| <i>route-path-sum-direct-out</i>  | (Optional) |
| <i>route-path-sum-normal-out</i>  | (Optional) |
| <i>route-backuppaths-out</i>      | (Optional) |
| TABLE_sum_backup_path             | (Optional) |
| <i>backup-path-sum-lvl-out</i>    | (Optional) |
| <i>backup-path-sum-total-out</i>  | (Optional) |
| <i>backup-path-sum-direct-out</i> | (Optional) |

|                                      |            |
|--------------------------------------|------------|
| <i>backup-path-sum-normal-out</i>    | (Optional) |
| <i>route-bestroutes-per-mask-out</i> | (Optional) |
| TABLE_best_mask                      | (Optional) |
| <i>route-best-mask-val-out</i>       | (Optional) |
| <i>route-best-mask-count-out</i>     | (Optional) |
| <i>route-pend-q-count-out</i>        | (Optional) |

**Command Mode**

- /exec

# show isis route is

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] route is [ topology { [ base ] | mt-ipv6 } ] [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

|                       |  |
|-----------------------|--|
| show                  | Show running system information                        |
| isis                  | Display IS-IS status and configuration                 |
| <i>isis-tag</i>       | (Optional) Routing process tag                         |
| vrf                   | (Optional) Display per-VRF information                 |
| <i>vrf-name</i>       | (Optional) VRF name                                    |
| <i>vrf-known-name</i> | (Optional) Known VRF name                              |
| all                   | (Optional) Display information for all VRFs            |
| route                 | Display IS-IS route information                        |
| is                    | Display IS route                                       |
| topology              | (Optional) Display routes for a topology               |
| base                  | (Optional) Display routes for BASE topology            |
| mt-ipv6               | (Optional) Display routes for MT-IPV6-UNICAST topology |

## Command Mode

- /exec

## show isis rrm

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] rrm <interface> [ vrf { <vrf-name> |
<vrf-known-name> | all } ] [ __readonly__ { TABLE_process_tag <process-tag-out> <rrm-if-name> [ {
TABLE_rrm <rrm-level> <rrm-retx-interval> <rrm-retx-throttle-interval> <rrm-retx-queue-length>
<rrm-next-retx> <rrm-retx-queue-hwm> <rrm-retx-queue-exceed> <rrm-dbase-hdr> [ <rrm-timestamp> ] [
<rrm-lsp-retx-instance> ] [ <rrm-lsp-db-instance> ] [ <rrm-rrm-set> ] [ <rrm-srm-set> ] } } ]
```

### Syntax Description

|                                   |  |
|-----------------------------------|--|
| show                              | Show running system information                      |
| isis                              | Display IS-IS status and configuration               |
| <i>isis-tag</i>                   | (Optional) Routing process tag                       |
| vrf                               | (Optional) Display per-VRF information               |
| <i>vrf-name</i>                   | (Optional) VRF name                                  |
| <i>vrf-known-name</i>             | (Optional) Known VRF name                            |
| all                               | (Optional) Display information for all VRFs          |
| rrm                               | Display IS-IS Retransmit-Routing-Message information |
| <i>interface</i>                  | IS-IS interface                                      |
| __readonly__                      | (Optional)   |
| TABLE_process_tag                 | (Optional)   |
| <i>process-tag-out</i>            | (Optional)   |
| <i>rrm-if-name</i>                | (Optional)   |
| TABLE_rrm                         | (Optional)   |
| <i>rrm-level</i>                  | (Optional)   |
| <i>rrm-retx-interval</i>          | (Optional)   |
| <i>rrm-retx-throttle-interval</i> | (Optional)   |
| <i>rrm-retx-queue-length</i>      | (Optional)   |
| <i>rrm-next-retx</i>              | (Optional)   |
| <i>rrm-retx-queue-hwm</i>         | (Optional)   |
| <i>rrm-retx-queue-exceed</i>      | (Optional)   |
| <i>rrm-dbase-hdr</i>              | (Optional)   |
| <i>rrm-timestamp</i>              | (Optional)   |

|                              |            |
|------------------------------|------------|
| <i>rrm-lsp-retx-instance</i> | (Optional) |
| <i>rrm-lsp-db-instance</i>   | (Optional) |
| <i>rrm-rrm-set</i>           | (Optional) |
| <i>rrm-srm-set</i>           | (Optional) |

**Command Mode**

- /exec

## show isis segment-routing local-mapcache

show isis [ <isis-tag> ] segment-routing local-mapcache [ vrf { <vrf-name> | <vrf-known-name> | all } ]

### Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| isis                  | Display IS-IS status and configuration      |
| <i>isis-tag</i>       | (Optional) Routing process tag              |
| segment-routing       | show segment-routing information            |
| local-mapcache        | local prefix-sid mappings                   |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |

### Command Mode

- /exec

## show isis segment-routing mapcache

```
show isis [ <isis-tag> ] segment-routing mapcache [ level-1 | level-2 ] [ <ipv4-prefix> ] [ sid <sr-sid> ] [ vrf
{ <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ { TABLE_process_tag <process-tag-out> {
TABLE_vrf <vrf-name-out> <srmap-v4-state> <srmap-v6-state> [ { TABLE_srmap_level <srmap-level> [
{ TABLE_srmap_pfxsid <srmap-pfxsid> <srmap-lsp-id> <srmap-pfxsid-valid> <srmap-pfxsid-flags>
<srmap-prefix> } ] } ] } ] }
```

### Syntax Description

|                        |   |
|------------------------|---|
| show                   | Show running system information                   |
| isis                   | Display IS-IS status and configuration            |
| <i>isis-tag</i>        | (Optional) Routing process tag                    |
| segment-routing        | show segment-routing information                  |
| mapcache               | prefix-sid mappings                               |
| level-1                | (Optional) show information for level 1 only      |
| level-2                | (Optional) show information for level 2 only      |
| <i>ipv4-prefix</i>     | (Optional) Display single exact match IP route    |
| sid                    | (Optional) show information for this SR SID value |
| <i>sr-sid</i>          | (Optional) SR SID value                           |
| vrf                    | (Optional) Display per-VRF information            |
| <i>vrf-name</i>        | (Optional) VRF name                               |
| <i>vrf-known-name</i>  | (Optional) Known VRF name                         |
| all                    | (Optional) Display information for all VRFs       |
| <i>__readonly__</i>    | (Optional)  |
| TABLE_process_tag      | (Optional)  |
| <i>process-tag-out</i> | (Optional)  |
| TABLE_vrf              | (Optional)  |
| <i>vrf-name-out</i>    | (Optional)  |
| <i>srmap-v4-state</i>  | (Optional)  |
| <i>srmap-v6-state</i>  | (Optional)  |
| TABLE_srmap_level      | (Optional)  |
| <i>srmap-level</i>     | (Optional)  |

|                           |            |
|---------------------------|------------|
| TABLE_srmap_pfxsid        | (Optional) |
| <i>srmap-pfxsid</i>       | (Optional) |
| <i>srmap-lsp-id</i>       | (Optional) |
| <i>srmap-pfxsid-valid</i> | (Optional) |
| <i>srmap-pfxsid-flags</i> | (Optional) |
| <i>srmap-prefix</i>       | (Optional) |

**Command Mode**

- /exec



## show isis segment-routing remote-srgb

```
show isis [ <isis-tag> ] segment-routing remote-srgb [ vrf { <vrf-name> | <vrf-known-name> | all } ] [
__readonly__ { TABLE_process_tag <process-tag-out> { TABLE_vrf <vrf-name-out> <sr-v4-state>
<sr-v6-state> [ { TABLE_srgb_lsp <srgb-level> <srgb-lspid> <srgb-num-entries> <srgb-flags> [ {
TABLE_srgb_label <srgb-start-label> <srgb-range> } ] } ] } ] }
```

### Syntax Description

|                         |   |
|-------------------------|---|
| show                    | Show running system information             |
| isis                    | Display IS-IS status and configuration      |
| <i>isis-tag</i>         | (Optional) Routing process tag              |
| segment-routing         | show segment-routing information            |
| remote-srgb             | remote SR ranges                            |
| vrf                     | (Optional) Display per-VRF information      |
| <i>vrf-name</i>         | (Optional) VRF name                         |
| <i>vrf-known-name</i>   | (Optional) Known VRF name                   |
| all                     | (Optional) Display information for all VRFs |
| <i>__readonly__</i>     | (Optional)                                  |
| TABLE_process_tag       | (Optional)                                  |
| <i>process-tag-out</i>  | (Optional)                                  |
| TABLE_vrf               | (Optional)                                  |
| <i>vrf-name-out</i>     | (Optional)                                  |
| <i>sr-v4-state</i>      | (Optional)                                  |
| <i>sr-v6-state</i>      | (Optional)                                  |
| TABLE_srgb_lsp          | (Optional)                                  |
| <i>srgb-level</i>       | (Optional)                                  |
| <i>srgb-lspid</i>       | (Optional)                                  |
| <i>srgb-num-entries</i> | (Optional)                                  |
| <i>srgb-flags</i>       | (Optional)                                  |
| TABLE_srgb_label        | (Optional)                                  |
| <i>srgb-start-label</i> | (Optional)                                  |

|                   |            |
|-------------------|------------|
| <i>srgb-range</i> | (Optional) |
|-------------------|------------|

**Command Mode**

- /exec

# show isis segment-routing sids

```
show isis [ <isis-tag> ] segment-routing sids [ vrf { <vrf-name> | <vrf-known-name> | all } ]
```

## Syntax Description

|                       |   |
|-----------------------|---|
| show                  | Show running system information             |
| isis                  | Display IS-IS status and configuration      |
| <i>isis-tag</i>       | (Optional) Routing process tag              |
| segment-routing       | show segment-routing information            |
| sids                  | sid database                                |
| vrf                   | (Optional) Display per-VRF information      |
| <i>vrf-name</i>       | (Optional) VRF name                         |
| <i>vrf-known-name</i> | (Optional) Known VRF name                   |
| all                   | (Optional) Display information for all VRFs |

## Command Mode

- /exec

## show isis spf-adjacency

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] spf-adjacency [ vrf { <vrf-name> |
<vrf-known-name> | all } ] [ __readonly__ TABLE_process_tag <process-tag-out> <spf-adjacency-vrf> [
<spf-adjacency-system-name> ] [ <spf-adjacency-refcount> ] [ <spf-adjacency-if-name> ] [
<spf-adjacency-rib-addr> ] [ <spf-adjacency-rib-addr-valid> ] [ <spf-adjacency-rib-ipv6-addr> ] [
<spf-adjacency-rib-ipv6-addr-valid> ] [ <spf-adjacency-spf-addr> ] [ <spf-adjacency-spf-ipv6-addr> ] [ {
TABLE_SPFADJLEVEL <spf-adjacency-level> } ] ]
```

### Syntax Description

|  |   |
|--|---|
| show                                     | Show running system information             |
| isis                                     | Display IS-IS status and configuration      |
| <i>isis-tag</i>                          | (Optional) Routing process tag              |
| vrf                                      | (Optional) Display per-VRF information      |
| <i>vrf-name</i>                          | (Optional) VRF name                         |
| <i>vrf-known-name</i>                    | (Optional) Known VRF name                   |
| all                                      | (Optional) Display information for all VRFs |
| spf-adjacency                            | Display IS-IS SPF adjacency information     |
| __readonly__                             | (Optional)                                  |
| TABLE_process_tag                        | (Optional)                                  |
| <i>process-tag-out</i>                   | (Optional)                                  |
| <i>spf-adjacency-vrf</i>                 | (Optional)                                  |
| <i>spf-adjacency-system-name</i>         | (Optional)                                  |
| <i>spf-adjacency-refcount</i>            | (Optional)                                  |
| <i>spf-adjacency-if-name</i>             | (Optional)                                  |
| <i>spf-adjacency-rib-addr</i>            | (Optional)                                  |
| <i>spf-adjacency-rib-addr-valid</i>      | (Optional)                                  |
| <i>spf-adjacency-rib-ipv6-addr</i>       | (Optional)                                  |
| <i>spf-adjacency-rib-ipv6-addr-valid</i> | (Optional)                                  |
| <i>spf-adjacency-spf-addr</i>            | (Optional)                                  |
| <i>spf-adjacency-spf-ipv6-addr</i>       | (Optional)                                  |
| TABLE_SPFADJLEVEL                        | (Optional)                                  |

|                            |            |
|----------------------------|------------|
| <i>spf-adjacency-level</i> | (Optional) |
|----------------------------|------------|

**Command Mode**

- /exec

# show isis spf-log

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] spf-log [ detail ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ <tag-out> TABLE_vrf <vrf-name-out> <spflog-calc-out> <spflog-size-out> <spflog-maxsize-out> <spflog-ago-time-out> <spflog-lvl-out> <spflog-reason-out> <spflog-count-out> <spflog-elapsed-ts-out> <spflog-log-num-out> <spflog-ts-detail-out> <spflog-date-detail-out> <spflog-lvl-detail-out> <spflog-instance-detail-out> <spflog-init-ts-detail-out> <spflog-spf-ts-detail-out> <spflog-detail-ts-is-out> <spflog-detail-ts-urib-out> <spflog-detail-ts-elapsed-out> <spflog-detail-lvl-out> <spflog-detail-spf-cnt-out> <spflog-detail-sync-cnt-out> <spflog-detail-spf-reason-out> ]
```

## Syntax Description

|                              |  |
|------------------------------|--|
| show                         | Show running system information                |
| isis                         | Display IS-IS status and configuration         |
| <i>isis-tag</i>              | (Optional) Routing process tag                 |
| vrf                          | (Optional) Display per-VRF information         |
| <i>vrf-name</i>              | (Optional) VRF name                            |
| <i>vrf-known-name</i>        | (Optional) Known VRF name                      |
| all                          | (Optional) Display information for all VRFs    |
| spf-log                      | Display IS-IS SPF information                  |
| detail                       | (Optional) Display detail ISIS SPF information |
| __readonly__                 | (Optional)                                     |
| <i>tag-out</i>               | (Optional)                                     |
| TABLE_vrf                    | (Optional)                                     |
| <i>vrf-name-out</i>          | (Optional)                                     |
| <i>spflog-calc-out</i>       | (Optional)                                     |
| <i>spflog-size-out</i>       | (Optional)                                     |
| <i>spflog-maxsize-out</i>    | (Optional)                                     |
| <i>spflog-ago-time-out</i>   | (Optional)                                     |
| <i>spflog-lvl-out</i>        | (Optional)                                     |
| <i>spflog-reason-out</i>     | (Optional)                                     |
| <i>spflog-count-out</i>      | (Optional)                                     |
| <i>spflog-elapsed-ts-out</i> | (Optional)                                     |

|                                     |            |
|-------------------------------------|------------|
| <i>spflog-log-num-out</i>           | (Optional) |
| <i>spflog-ts-detail-out</i>         | (Optional) |
| <i>spflog-date-detail-out</i>       | (Optional) |
| <i>spflog-lvl-detail-out</i>        | (Optional) |
| <i>spflog-instance-detail-out</i>   | (Optional) |
| <i>spflog-init-ts-detail-out</i>    | (Optional) |
| <i>spflog-spf-ts-detail-out</i>     | (Optional) |
| <i>spflog-detail-ts-is-out</i>      | (Optional) |
| <i>spflog-detail-ts-urib-out</i>    | (Optional) |
| <i>spflog-detail-ts-elapsed-out</i> | (Optional) |
| <i>spflog-detail-lvl-out</i>        | (Optional) |
| <i>spflog-detail-spf-cnt-out</i>    | (Optional) |
| <i>spflog-detail-sync-cnt-out</i>   | (Optional) |
| <i>spflog-detail-spf-reason-out</i> | (Optional) |

**Command Mode**

- /exec

# show isis srm

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] srm <interface> [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ { TABLE_process_tag <process-tag-out> <srm-if-name> [ { TABLE_srm <srm-level> <srm-if-eligible> <srm-if-not-on-srm-list> <srm-lsp-interval> <srm-next-lsp> <srm-dbase-hdr> } } ] ]
```

## Syntax Description

|                               |  |
|-------------------------------|--|
| show                          | Show running system information                |
| isis                          | Display IS-IS status and configuration         |
| <i>isis-tag</i>               | (Optional) Routing process tag                 |
| vrf                           | (Optional) Display per-VRF information         |
| <i>vrf-name</i>               | (Optional) VRF name                            |
| <i>vrf-known-name</i>         | (Optional) Known VRF name                      |
| all                           | (Optional) Display information for all VRFs    |
| srm                           | Display IS-IS Send-Routing-Message information |
| <i>interface</i>              | IS-IS interface                                |
| __readonly__                  | (Optional)                                     |
| TABLE_process_tag             | (Optional)                                     |
| <i>process-tag-out</i>        | (Optional)                                     |
| <i>srm-if-name</i>            | (Optional)                                     |
| TABLE_srm                     | (Optional)                                     |
| <i>srm-level</i>              | (Optional)                                     |
| <i>srm-if-eligible</i>        | (Optional)                                     |
| <i>srm-if-not-on-srm-list</i> | (Optional)                                     |
| <i>srm-lsp-interval</i>       | (Optional)                                     |
| <i>srm-next-lsp</i>           | (Optional)                                     |
| <i>srm-dbase-hdr</i>          | (Optional)                                     |

## Command Mode

- /exec



## show isis ssn

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] ssn <interface> [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ { TABLE_process_tag <process-tag-out> <snn-if-name> [ { TABLE_ssn <snn-level> <snn-psnp-eligible> <snn-next-psnp> <snn-dbase_hdr> } ] } ]
```

### Syntax Description

|                          |  |
|--------------------------|--|
| show                     | Show running system information                |
| isis                     | Display IS-IS status and configuration         |
| <i>isis-tag</i>          | (Optional) Routing process tag                 |
| vrf                      | (Optional) Display per-VRF information         |
| <i>vrf-name</i>          | (Optional) VRF name                            |
| <i>vrf-known-name</i>    | (Optional) Known VRF name                      |
| all                      | (Optional) Display information for all VRFs    |
| ssn                      | Display IS-IS Send-Sequence-Number information |
| <i>interface</i>         | IS-IS interface                                |
| <i>__readonly__</i>      | (Optional)                                     |
| TABLE_process_tag        | (Optional)                                     |
| <i>process-tag-out</i>   | (Optional)                                     |
| <i>snn-if-name</i>       | (Optional)                                     |
| TABLE_ssn                | (Optional)                                     |
| <i>snn-level</i>         | (Optional)                                     |
| <i>snn-psnp-eligible</i> | (Optional)                                     |
| <i>snn-next-psnp</i>     | (Optional)                                     |
| <i>snn-dbase_hdr</i>     | (Optional)                                     |

### Command Mode

- /exec

# show isis statistics

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] statistics [ <interface> ] [ vrf {
<vrf-name> | <vrf-known-name> | all } ] [ __readonly__ <tag-out> TABLE_vrf <vrf-name-out> <stat-if-out>
<stat-if-name-out> <stat-spf-calc-out> <stat-lsp-sourced-out> <stat-lsp-refresh-out> <stat-lsp-purge-out>
<stat-dis-elections-out> ]
```

## Syntax Description

|                               |   |
|-------------------------------|---|
| show                          | Show running system information             |
| isis                          | Display IS-IS status and configuration      |
| <i>isis-tag</i>               | (Optional) Routing process tag              |
| vrf                           | (Optional) Display per-VRF information      |
| <i>vrf-name</i>               | (Optional) VRF name                         |
| <i>vrf-known-name</i>         | (Optional) Known VRF name                   |
| all                           | (Optional) Display information for all VRFs |
| statistics                    | Display IS-IS protocol statistics           |
| <i>interface</i>              | (Optional) IS-IS interface                  |
| <i>__readonly__</i>           | (Optional)                                  |
| <i>tag-out</i>                | (Optional)                                  |
| TABLE_vrf                     | (Optional)                                  |
| <i>vrf-name-out</i>           | (Optional)                                  |
| <i>stat-if-out</i>            | (Optional)                                  |
| <i>stat-if-name-out</i>       | (Optional)                                  |
| <i>stat-spf-calc-out</i>      | (Optional)                                  |
| <i>stat-lsp-sourced-out</i>   | (Optional)                                  |
| <i>stat-lsp-refresh-out</i>   | (Optional)                                  |
| <i>stat-lsp-purge-out</i>     | (Optional)                                  |
| <i>stat-dis-elections-out</i> | (Optional)                                  |

## Command Mode

- /exec

# show isis summary-address show isis ipv6 summary-address

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ ip ] summary-address [ <ip-addr> | <ip-prefix> [ longer-prefixes ] ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] | show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] ipv6 summary-address [ <ipv6-addr> | <ipv6-prefix> [ longer-prefixes ] ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ <tag-out> TABLE_vrf <vrf-name-out> <afi-safi-out> <addr-absent-out> <addr-prefix-out> <addr-mask-len-out> <addr-level-out> <addr-num-out> <addr-lvl-out> <addr-metric-absent-out> <addr-metric-out> <addr-route-count-out> ]
```

## Syntax Description

|                          |  |
|--------------------------|--|
| show                     | Show running system information                                  |
| isis                     | Display IS-IS status and configuration                           |
| <i>isis-tag</i>          | (Optional) Routing process tag                                   |
| vrf                      | (Optional) Display per-VRF information                           |
| <i>vrf-name</i>          | (Optional) VRF name  |
| <i>vrf-known-name</i>    | (Optional) Known VRF name  |
| all                      | (Optional) Display information for all VRFs                      |
| ip                       | (Optional) Display IS-IS IPv4 information                        |
| ipv6                     | Display IS-IS IPv6 information                                   |
| summary-address          | Display IS-IS summary address                                    |
| <i>ip-addr</i>           | (Optional) Display single IP summary address                     |
| <i>ip-prefix</i>         | (Optional) Display single exact match IP summary address         |
| longer-prefixes          | (Optional) Display exact match and more specific summary address |
| <i>isis-tag</i>          | (Optional)   |
| <i>__readonly__</i>      | (Optional)   |
| <i>tag-out</i>           | (Optional)   |
| TABLE_vrf                | (Optional)   |
| <i>vrf-name-out</i>      | (Optional)   |
| <i>afi-safi-out</i>      | (Optional)   |
| <i>addr-absent-out</i>   | (Optional)   |
| <i>addr-prefix-out</i>   | (Optional)   |
| <i>addr-mask-len-out</i> | (Optional)   |

|                               |            |
|-------------------------------|------------|
| <i>addr-level-out</i>         | (Optional) |
| <i>addr-num-out</i>           | (Optional) |
| <i>addr-lvl-out</i>           | (Optional) |
| <i>addr-metric-absent-out</i> | (Optional) |
| <i>addr-metric-out</i>        | (Optional) |
| <i>addr-route-count-out</i>   | (Optional) |

**Command Mode**

- /exec

# show isis topology

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] topology [ vrf { <vrf-name> |
<vrf-known-name> | all } ] [ __readonly__ TABLE_process_tag <process-tag-out> <topology-vrf> [ {
TABLE_LEVEL <topology-level> [ { TABLE_ONE_ROUTE <topology-one-route-node-name> [
<topology-one-route-spf-instance> ] [ <topology-one-route-on-path> ] [ <topology-one-route-mt-id> ] [ {
TABLE_ONE_ROUTE_NH <topology-one-route-nh-system-name> [ <topology-one-route-nh-if-name> ] [
<topology-one-route-nh-metric> ] } ] [ { TABLE_ONE_ROUTE_MBEST
<topology-one-route-mbest-system-name> [ <topology-one-route-mbest-if-name> ] [
<topology-one-route-mbest-metric> ] } ] } ] [ <topology-default-spf-instance> ] [ { TABLE_NH
<topology-nh-system-name> [ <topology-nh-if-name> ] [ <topology-nh-metric> ] } ] [ { TABLE_MBEST
<topology-mbest-system-name> [ <topology-mbest-if-name> ] [ <topology-mbest-metric> ] } ] } ] }
```

## Syntax Description

|  |   |
|--|---|
| show                                   | Show running system information             |
| isis                                   | Display IS-IS status and configuration      |
| <i>isis-tag</i>                        | (Optional) Routing process tag              |
| topology                               | Display IS-IS Topology information          |
| vrf                                    | (Optional) Display per-VRF information      |
| <i>vrf-name</i>                        | (Optional) VRF name                         |
| <i>vrf-known-name</i>                  | (Optional) Known VRF name                   |
| all                                    | (Optional) Display information for all VRFs |
| <i>__readonly__</i>                    | (Optional)                                  |
| TABLE_process_tag                      | (Optional)                                  |
| <i>process-tag-out</i>                 | (Optional)                                  |
| <i>topology-vrf</i>                    | (Optional)                                  |
| TABLE_LEVEL                            | (Optional)                                  |
| <i>topology-level</i>                  | (Optional)                                  |
| TABLE_ONE_ROUTE                        | (Optional)                                  |
| <i>topology-one-route-node-name</i>    | (Optional)                                  |
| <i>topology-one-route-spf-instance</i> | (Optional)                                  |
| <i>topology-one-route-on-path</i>      | (Optional)                                  |
| <i>topology-one-route-mt-id</i>        | (Optional)                                  |
| TABLE_ONE_ROUTE_NH                     | (Optional)                                  |

|   |            |
|---|------------|
| <i>topology-one-route-nh-system-name</i>    | (Optional) |
| <i>topology-one-route-nh-if-name</i>        | (Optional) |
| <i>topology-one-route-nh-metric</i>         | (Optional) |
| TABLE_ONE_ROUTE_MBEST                       | (Optional) |
| <i>topology-one-route-mbest-system-name</i> | (Optional) |
| <i>topology-one-route-mbest-if-name</i>     | (Optional) |
| <i>topology-one-route-mbest-metric</i>      | (Optional) |
| <i>topology-default-spf-instance</i>        | (Optional) |
| TABLE_NH                                    | (Optional) |
| <i>topology-nh-system-name</i>              | (Optional) |
| <i>topology-nh-if-name</i>                  | (Optional) |
| <i>topology-nh-metric</i>                   | (Optional) |
| TABLE_MBEST                                 | (Optional) |
| <i>topology-mbest-system-name</i>           | (Optional) |
| <i>topology-mbest-if-name</i>               | (Optional) |
| <i>topology-mbest-metric</i>                | (Optional) |

**Command Mode**

- /exec

## show isis traffic

```
show isis [ <isis-tag> ] [ vrf { <vrf-name> | <vrf-known-name> | all } ] traffic [ <interface> ] [ mbuf-priority
] [ vrf { <vrf-name> | <vrf-known-name> | all } ] [ __readonly__ { TABLE_process_tag <process-tag-out>
{ TABLE_vrf <vrf-name-out> <traffic-if-out> [ <traffic-if-name-out> ] <traffic-lan-iih-out>
<traffic-lan-iih-rcv-out> <traffic-lan-iih-xmit-out> <traffic-lan-iih-rcv-auth-err-out> <traffic-lan-iih-rcv-err-out>
<traffic-p2p-iih-out> <traffic-p2p-iih-rcv-out> <traffic-p2p-iih-xmit-out> <traffic-p2p-iih-rcv-auth-err-out>
<traffic-p2p-iih-rcv-err-out> <traffic-csnp-out> <traffic-csnp-rcv-out> <traffic-csnp-xmit-out>
<traffic-csnp-rcv-auth-err-out> <traffic-csnp-rcv-err-out> <traffic-psnp-out> <traffic-psnp-rcv-out>
<traffic-psnp-xmit-out> <traffic-psnp-rcv-auth-err-out> <traffic-psnp-rcv-err-out> <traffic-lsp-out>
<traffic-lsp-rcv-out> <traffic-lsp-flood-out> <traffic-lsp-rcv-auth-err-out> <traffic-lsp-rcv-err-out>
<traffic-lsp-rexmit-out> [ <traffic-xmit-err-out> ] [ <traffic-unknown-pdu-rcv-out> } } ]
```

### Syntax Description

|                                 |  |
|---------------------------------|--|
| show                            | Show running system information                      |
| isis                            | Display IS-IS status and configuration               |
| <i>isis-tag</i>                 | (Optional) Routing process tag                       |
| vrf                             | (Optional) Display per-VRF information               |
| <i>vrf-name</i>                 | (Optional) VRF name                                  |
| <i>vrf-known-name</i>           | (Optional) Known VRF name                            |
| all                             | (Optional) Display information for all VRFs          |
| traffic                         | Display IS-IS traffic information                    |
| <i>interface</i>                | (Optional) IS-IS interface                           |
| mbuf-priority                   | (Optional) Display mbuf priorities for received PDUs |
| <u>__readonly__</u>             | (Optional)   |
| TABLE_process_tag               | (Optional)   |
| <i>process-tag-out</i>          | (Optional)   |
| TABLE_vrf                       | (Optional)   |
| <i>vrf-name-out</i>             | (Optional)   |
| <i>traffic-if-out</i>           | (Optional)   |
| <i>traffic-if-name-out</i>      | (Optional)   |
| <i>traffic-lan-iih-out</i>      | (Optional)   |
| <i>traffic-lan-iih-rcv-out</i>  | (Optional)   |
| <i>traffic-lan-iih-xmit-out</i> | (Optional)   |

|   |            |
|---|------------|
| <i>traffic-lan-iih-rcv-auth-err-out</i> | (Optional) |
| <i>traffic-lan-iih-rcv-err-out</i>      | (Optional) |
| <i>traffic-p2p-iih-out</i>              | (Optional) |
| <i>traffic-p2p-iih-rcv-out</i>          | (Optional) |
| <i>traffic-p2p-iih-xmit-out</i>         | (Optional) |
| <i>traffic-p2p-iih-rcv-auth-err-out</i> | (Optional) |
| <i>traffic-p2p-iih-rcv-err-out</i>      | (Optional) |
| <i>traffic-csnp-out</i>                 | (Optional) |
| <i>traffic-csnp-rcv-out</i>             | (Optional) |
| <i>traffic-csnp-xmit-out</i>            | (Optional) |
| <i>traffic-csnp-rcv-auth-err-out</i>    | (Optional) |
| <i>traffic-csnp-rcv-err-out</i>         | (Optional) |
| <i>traffic-psnp-out</i>                 | (Optional) |
| <i>traffic-psnp-rcv-out</i>             | (Optional) |
| <i>traffic-psnp-xmit-out</i>            | (Optional) |
| <i>traffic-psnp-rcv-auth-err-out</i>    | (Optional) |
| <i>traffic-psnp-rcv-err-out</i>         | (Optional) |
| <i>traffic-lsp-out</i>                  | (Optional) |
| <i>traffic-lsp-rcv-out</i>              | (Optional) |
| <i>traffic-lsp-flood-out</i>            | (Optional) |
| <i>traffic-lsp-rcv-auth-err-out</i>     | (Optional) |
| <i>traffic-lsp-rcv-err-out</i>          | (Optional) |
| <i>traffic-lsp-rexmit-out</i>           | (Optional) |
| <i>traffic-xmit-err-out</i>             | (Optional) |
| <i>traffic-unknown-pdu-rcv-out</i>      | (Optional) |

**Command Mode**

- /exec





|                            |                                    |
|----------------------------|------------------------------------|
| <i>reason</i>              | (Optional) inactive reason         |
| <i>vrf_name</i>            | (Optional) VRF-Name                |
| <i>userACL</i>             | (Optional) user access-list        |
| <i>peer_status</i>         | (Optional) peer status             |
| TABLE_device               | (Optional)                         |
| <i>device_grp</i>          | (Optional) service device group    |
| <i>dg_probe</i>            | (Optional) device-group probe type |
| <i>dg_probe_port</i>       | (Optional) device-group probe port |
| TABLE_route_map            | (Optional)                         |
| <i>route_map</i>           | (Optional) service route map       |
| <i>interface</i>           | (Optional) interface               |
| <i>r_status</i>            | (Optional) route map status        |
| <i>int_track_id</i>        | (Optional) interface track id      |
| TABLE_vip                  | (Optional)                         |
| <i>vip_ip</i>              | (Optional) vip ip                  |
| <i>vip_probe</i>           | (Optional) vip protocol            |
| <i>vip_port</i>            | (Optional) vip port                |
| <i>vip_dgname</i>          | (Optional) vip device group        |
| TABLE_vip_node             | (Optional)                         |
| <i>vip_node</i>            | (Optional) service node ip         |
| <i>vip_nodev6</i>          | (Optional) service node IPv6       |
| <i>vip_config</i>          | (Optional) node config             |
| <i>vip_weight</i>          | (Optional) node weight             |
| <i>vip_status</i>          | (Optional) node status             |
| <i>vip_node_probe</i>      | (Optional) node probe type         |
| <i>vip_node_probe_port</i> | (Optional) node probe port         |
| <i>vip_node_probe_ip</i>   | (Optional) node probe ip           |
| <i>vip_track_id</i>        | (Optional) node track id           |
| <i>vip_ip_sla_id</i>       | (Optional) node ip sla id          |

|                               |                                    |
|-------------------------------|------------------------------------|
| TABLE_vip_standby             | (Optional)                         |
| <i>vip_standby_ip</i>         | (Optional) standby node ip         |
| <i>vip_standby_ipv6</i>       | (Optional) standby node ipv6       |
| <i>vip_standby_config</i>     | (Optional) standby node config     |
| <i>vip_standby_weight</i>     | (Optional) standby node weight     |
| <i>vip_standby_status</i>     | (Optional) standby node status     |
| <i>vip_standby_probe</i>      | (Optional) standby node probe type |
| <i>vip_standby_probe_port</i> | (Optional) standby node probe port |
| <i>vip_standby_probe_ip</i>   | (Optional) standby node probe ip   |
| <i>vip_standby_track_id</i>   | (Optional) standby node track id   |
| <i>vip_standby_sla_id</i>     | (Optional) standby node sla id     |
| TABLE_vip_acl                 | (Optional)                         |
| <i>vip_access_list</i>        | (Optional) access list             |
| TABLE_node                    | (Optional)                         |
| <i>node</i>                   | (Optional) service node ip         |
| <i>nodev6</i>                 | (Optional) service node IPv6       |
| <i>config</i>                 | (Optional) node config             |
| <i>weight</i>                 | (Optional) node weight             |
| <i>status</i>                 | (Optional) node status             |
| <i>node_probe</i>             | (Optional) node probe type         |
| <i>node_probe_port</i>        | (Optional) node probe port         |
| <i>node_probe_ip</i>          | (Optional) node probe ip           |
| <i>track_id</i>               | (Optional) node track id           |
| <i>ip_sla_id</i>              | (Optional) node ip sla id          |
| TABLE_standby                 | (Optional)                         |
| <i>standby_ip</i>             | (Optional) standby node ip         |
| <i>standby_ipv6</i>           | (Optional) standby node ipv6       |
| <i>standby_config</i>         | (Optional) standby node config     |
| <i>standby_weight</i>         | (Optional) standby node weight     |

|                           |                                    |
|---------------------------|------------------------------------|
| <i>standby_status</i>     | (Optional) standby node status     |
| <i>standby_probe</i>      | (Optional) standby node probe type |
| <i>standby_probe_port</i> | (Optional) standby node probe port |
| <i>standby_probe_ip</i>   | (Optional) standby node probe ip   |
| <i>standby_track_id</i>   | (Optional) standby node track id   |
| <i>standby_sla_id</i>     | (Optional) standby node sla id     |
| TABLE_acl                 | (Optional)                         |
| <i>access_list</i>        | (Optional) access list             |

**Command Mode**

- /exec



|                      |                                 |
|----------------------|---------------------------------|
| <i>state</i>         | (Optional) state                |
| <i>buckets</i>       | (Optional) buckets              |
| <i>reason</i>        | (Optional) inactive reason      |
| <i>vrf_name</i>      | (Optional) VRF-Name             |
| <i>userACL</i>       | (Optional) user access-list     |
| <i>peer_status</i>   | (Optional) peer status          |
| TABLE_device         | (Optional)                      |
| <i>device_grp</i>    | (Optional) service device group |
| <i>dg_probe</i>      | (Optional) probe type           |
| <i>dg_probe_port</i> | (Optional) probe port           |
| TABLE_route_map      | (Optional)                      |
| <i>route_map</i>     | (Optional) service route map    |
| <i>interface</i>     | (Optional) interface            |
| <i>r_status</i>      | (Optional) route map status     |
| <i>int_track_id</i>  | (Optional) interface track id   |
| TABLE_vip            | (Optional)                      |
| <i>vip_ip</i>        | (Optional) vip ip               |
| <i>vip_probe</i>     | (Optional) vip protocol         |
| <i>vip_port</i>      | (Optional) vip port             |
| <i>vip_dgname</i>    | (Optional) vip device group     |
| <i>ace_name</i>      | (Optional) ace information      |
| <i>ace_seq</i>       | (Optional) ace information      |
| <i>ace_ip</i>        | (Optional) ace information      |
| <i>ace_protocol</i>  | (Optional) ace information      |
| <i>ace_port</i>      | (Optional) ace information      |
| TABLE_vip_node       | (Optional)                      |
| <i>vip_node</i>      | (Optional) service node ip      |
| <i>vip_nodev6</i>    | (Optional) service node IPv6    |
| <i>vip_config</i>    | (Optional) node config          |

|                               |                                    |
|-------------------------------|------------------------------------|
| <i>vip_weight</i>             | (Optional) node weight             |
| <i>vip_status</i>             | (Optional) node status             |
| <i>vip_node_probe</i>         | (Optional) node probe type         |
| <i>vip_node_probe_port</i>    | (Optional) node probe port         |
| <i>vip_node_probe_ip</i>      | (Optional) node probe ip           |
| <i>vip_track_id</i>           | (Optional) node track id           |
| <i>vip_ip_sla_id</i>          | (Optional) node ip sla id          |
| TABLE_vip_standby             | (Optional)                         |
| <i>vip_standby_ip</i>         | (Optional) standby node ip         |
| <i>vip_standby_ipv6</i>       | (Optional) standby node ipv6       |
| <i>vip_standby_config</i>     | (Optional) standby node config     |
| <i>vip_standby_weight</i>     | (Optional) standby node weight     |
| <i>vip_standby_status</i>     | (Optional) standby node status     |
| <i>vip_standby_probe</i>      | (Optional) standby node probe type |
| <i>vip_standby_probe_port</i> | (Optional) standby node probe port |
| <i>vip_standby_probe_ip</i>   | (Optional) standby node probe ip   |
| <i>vip_standby_track_id</i>   | (Optional) standby node track id   |
| <i>vip_standby_sla_id</i>     | (Optional) standby node sla id     |
| TABLE_vip_acl                 | (Optional)                         |
| <i>vip_access_list</i>        | (Optional) access list             |
| TABLE_node                    | (Optional)                         |
| <i>node</i>                   | (Optional) service node ip         |
| <i>nodev6</i>                 | (Optional) service node IPv6       |
| <i>config</i>                 | (Optional) node config             |
| <i>weight</i>                 | (Optional) node weight             |
| <i>status</i>                 | (Optional) node status             |
| <i>node_probe</i>             | (Optional) node probe type         |
| <i>node_probe_port</i>        | (Optional) node probe port         |
| <i>node_probe_ip</i>          | (Optional) node probe ip           |

|                           |                                    |
|---------------------------|------------------------------------|
| <i>track_id</i>           | (Optional) node track id           |
| <i>ip_sla_id</i>          | (Optional) node ip sla id          |
| TABLE_standby             | (Optional)                         |
| <i>standby_ip</i>         | (Optional) standby node ip         |
| <i>standby_ipv6</i>       | (Optional) standby node ipv6       |
| <i>standby_config</i>     | (Optional) standby node config     |
| <i>standby_weight</i>     | (Optional) standby node weight     |
| <i>standby_status</i>     | (Optional) standby node status     |
| <i>standby_probe</i>      | (Optional) standby node probe type |
| <i>standby_probe_port</i> | (Optional) standby node probe port |
| <i>standby_probe_ip</i>   | (Optional) standby node probe ip   |
| <i>standby_track_id</i>   | (Optional) standby node track id   |
| <i>standby_sla_id</i>     | (Optional) standby node sla id     |
| TABLE_acl                 | (Optional)                         |
| <i>access_list</i>        | (Optional) access list             |

**Command Mode**

- /exec



## show itd session device-group

```
show itd session device-group [ <name> ] [ __readonly__ <first_entry> [ TABLE_svc <node> ] ]
```

### Syntax Description

|                     |                                     |
|---------------------|-------------------------------------|
| show                | Show running system information     |
| itd                 | ITD service                         |
| session             | ITD service session                 |
| device-group        | ITD service session device-group    |
| <i>name</i>         | (Optional) ITD Service session name |
| <i>__readonly__</i> | (Optional) Read Only                |
| <i>first_entry</i>  | (Optional)                          |
| TABLE_svc           | (Optional)                          |
| <i>node</i>         | (Optional) node                     |

### Command Mode

- /exec

## show itd statistics

```
show itd { <service_name> | all } [ src { <src-ip> | <src-IPv6> } | dst { <dst-ip> | <dst-IPv6> } ] statistics [
brief ] [ __readonly__ <is_firstentry_node> <is_firstentry_acl> <is_for_ace> [ TABLE_nice <service_name>
[ <vip> ] [ <ace_seq> ] [ <ace_ip> ] [ <vip_pkt> ] <dev_grp> <node> <node_pkt> [ <acl> ] [ <acl_pkt> ]
<mode> <percentage> ] ]
```

### Syntax Description

|                           |   |
|---------------------------|---|
| show                      | Show running system information                 |
| itd                       | ITD service                                     |
| statistics                | ITD statistics                                  |
| brief                     | (Optional) brief                                |
| __readonly__              | (Optional) Read Only                            |
| <i>is_firstentry_node</i> | (Optional)                                      |
| <i>is_firstentry_acl</i>  | (Optional)                                      |
| <i>is_for_ace</i>         | (Optional)                                      |
| TABLE_nice                | (Optional)                                      |
| <i>service_name</i>       | service_name                                    |
| all                       | All ITD services                                |
| src                       | (Optional) Statistics for src ip                |
| <i>src-ip</i>             | (Optional) Provide statistics for src ip        |
| dst                       | (Optional) Statistics for dst ip                |
| <i>dst-ip</i>             | (Optional) Provide statistics for dst ip        |
| <i>vip</i>                | (Optional) service virtual ip                   |
| <i>ace_seq</i>            | (Optional) service ACE name and sequence number |
| <i>ace_ip</i>             | (Optional) service ACE ip/mask/prefix           |
| <i>vip_pkt</i>            | (Optional) virtual ip pkt_count                 |
| <i>dev_grp</i>            | (Optional) device group                         |
| <i>node</i>               | (Optional) service node ip                      |
| <i>node_pkt</i>           | (Optional) node pkt count                       |
| <i>acl</i>                | (Optional) access list                          |

|                   |                              |
|-------------------|------------------------------|
| <i>acl_pkt</i>    | (Optional) acl pkt count     |
| <i>mode</i>       | (Optional) Redirect mode     |
| <i>percentage</i> | (Optional) Packet percentage |

**Command Mode**

- /exec

## show itd vrf

```
show itd vrf [ <name> ] [ __readonly__ <first_entry> [ TABLE_svc <service_name> <vrf_name> <vrf_id> ] ]
```

### Syntax Description

|                     |                                 |
|---------------------|---------------------------------|
| show                | Show running system information |
| itd                 | ITD service                     |
| vrf                 | ITD service vrf                 |
| <i>name</i>         | (Optional) ITD Service VRF name |
| <i>__readonly__</i> | (Optional) Read Only            |
| <i>first_entry</i>  | (Optional)                      |
| TABLE_svc           | (Optional)                      |
| <i>service_name</i> | (Optional) itd service name     |
| <i>vrf_name</i>     | (Optional) vrf name             |
| <i>vrf_id</i>       | (Optional) vrf id               |

### Command Mode

- /exec