



## P Show Commands

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# show param-list

show param-list [ param-list-name <plistname> ] [ show-instance ] [ \_\_readonly\_\_ <param\_list\_header\_flag> <param\_list\_name> <param\_list\_var> <param\_list\_type> <param\_instance\_header\_flag> <param\_instance\_name> <param\_instance\_var> <param\_instance\_val> ]

## Syntax Description

show	Show running system information
param-list	Show param-list
param-list-name	(Optional) param list name
<i>plistname</i>	(Optional) Enter the name of the param-list
show-instance	(Optional) show instances for the param list
<i>__readonly__</i>	(Optional)
<i>param_list_header_flag</i>	(Optional)
<i>param_list_name</i>	(Optional)
<i>param_list_var</i>	(Optional)
<i>param_list_type</i>	(Optional)
<i>param_instance_header_flag</i>	(Optional)
<i>param_instance_name</i>	(Optional)
<i>param_instance_var</i>	(Optional)
<i>param_instance_val</i>	(Optional)

## Command Mode

- /exec

# show password secure-mode

show password secure-mode [ \_\_readonly\_\_ { secure\_mode <secure\_mode\_status> } ]

## Syntax Description

show	Show running system information
password	Password for the user
secure-mode	secure mode for changing passwords
__readonly__	(Optional)
secure_mode	(Optional) run time status about xml
<i>secure_mode_status</i>	(Optional) Run time status about secure mode

## Command Mode

- /exec

# show password strength-check

show password strength-check [ \_\_readonly\_\_ { operation\_status <o\_status> } ]

## Syntax Description

show	Show running system information
password	Password for the user
strength-check	Strength check of password
__readonly__	(Optional)
operation_status	(Optional) run-time information about password strength-check
<i>o_status</i>	(Optional) operational status of password strength check

## Command Mode

- /exec

# show pending

show [ pending ]

## Syntax Description

show	Display region configurations
pending	(Optional) Display the new mst configuration to be applied

## Command Mode

- /exec/configure/spanning-tree/mst/configuration

# show pmap-int-br interface br

```
show pmap-int-br interface br [ __readonly__ { [ TABLE_ifvlanstr <if-vlan-str> <if-status> [ <in-pmap-qos>
] [ <out-pmap-qos> ] [ <in-pmap-que> ] [ <out-pmap-que> ] ] } ]
```

## Syntax Description

show	Show running system information
pmap-int-br	Show policy maps
interface	Show service policy on interface
br	Brief report of all policies attached to interfaces
TABLE_ifvlanstr	(Optional) all interfaces xml sessions
<i>if-vlan-str</i>	(Optional) ifindex or vlan id: xml key
<i>__readonly__</i>	(Optional)
<i>if-status</i>	(Optional) Interface/vlan status [active/inactive]: xml key
<i>in-pmap-qos</i>	(Optional) Input QoS Policy-map name: xml key
<i>out-pmap-qos</i>	(Optional) output QoS Policy-map name: xml key
<i>in-pmap-que</i>	(Optional) Input Que Policy-map name: xml key
<i>out-pmap-que</i>	(Optional) Output Que Policy-map name: xml key

## Command Mode

- /exec

# show pmap-int

show pmap-int { interface [ <iface-list> ] [ input | output ] [ type <qos-or-q> ] |

## Syntax Description

show	Show running system information
pmap-int	Show policy maps
interface	Show service policy on interface
<i>iface-list</i>	(Optional) List of Interface
input	(Optional) Input Service policy
output	(Optional) Output Service policy
type	(Optional) Type of policy
<i>qos-or-q</i>	(Optional)

## Command Mode

- /exec

# show policy-map

```
show policy-map [ { [ type qos ] [ <pmap-name-qos> ] } | { type queuing [ <pmap-name-que> ] } ] [
__readonly__ { [ <display-all> ] [ TABLE_pmap <pmap-key> [ <type-spec> ] [ <yqos-or-q> ] [ <options>
] <pmap-name-out> [ <desc> ] [ TABLE_cmap <cmap-key> [ <type-cmap-spec> ] [ <xqos-or-q> ] [
<cmap-name> ] [ TABLE_action <action-key> [ <serv-pol-type> ] [ <serv-pol-name> ] [ <inner> ] [
<dlb-disable> ] [ <cos> ] [ <exp-val-imposition> ] [ <exp-val-topmost> ] [ <dscp-enum> ] [ <dscp> ] [
<prec-enum> ] [ <prec> ] [ <disc-class> ] [ <qos-group> ] [ <tmap-from> ] [ <tmap-to> ] [ <tmap-name> ] [
<avg-rate-type> ] [ <rate-units> ] [ <shape-rate> ] [ <min-rate-type> ] [ <min-rate-units> ] [ <shape-min-rate>
] [ <max-rate-type> ] [ <max-rate-units> ] [ <shape-max-rate> ] [ <rise-threshold-units> ] [
<fall-threshold-units> ] [ <prio-level> ] [ <qlim-param-type> ] [ <qlim-param-val> ] [ <ooo> ] [ <size-units>
] [ <qlim-size> ] [ <qlim-enum-spec> ] [ <rdet-agg> ] [ <rdet-mode> ] [ TABLE_rdet <rdet-key> [ <rdet-values>
] [ <rdet-min-thresh> ] [ <rdet-size-units> ] [ <rdet-max-thresh> ] [ <rdet-drop-prob> ] [ <rdet-weight> ] [
<rdet-cap-average> ] [ <rdet-ecn> ] [ <rdet-burst-opt> ] [ <rdet-mesh-opt> ] [ <rdet-nonecn-mode> ] [
TABLE_rdet_nonecn <rdet-nonecn-key> [ <rdet-nonecn-min-thresh> ] [ <rdet-nonecn-size-units> ] [
<rdet-nonecn-max-thresh> ] [ <rdet-nonecn-drop-prob> ] [ <afd-mode> ] [ TABLE_afd <afd-key> [
<afd-values> ] [ <afd-queue-desired> ] [ <afd-size-units> ] [ <afd-ecn> ] [ <pause> <size-in-bytes>
<xoff-bytes> <xon-bytes> ] [ <priority-group-number> ] [ <bw-units> ] [ <bw-rate> ] [ <rem-bw-units> ] [
<rem-bw-rate> ] [ <agg-policer-name> ] [ <cir-spec> ] [ <bc-spec> ] [ <be-spec> ] [ <cir-rate-units> ] [ <cir>
] [ <bc-size-units> ] [ <bc> ] [ <pir-rate-units> ] [ <pir> ] [ <be-size-units> ] [ <be> ] [ <cnf-col-cmap> ] [
<exc-col-cmap> ] [ TABLE_police <police-key> [ <cnf-act> ] [ <exc-act> ] [ <vio-act> ] [ <set-type> ] [
<enum-spec> ] [ <set-val> ] [ <ptmap-from> ] [ <ptmap-to> ] [ <ptmap-name> ] ] ] ] ] ] }
```

## Syntax Description

show	Show running system information
policy-map	Show policy maps
type	(Optional) Type of the policy-map
qos	(Optional) type qos
queuing	(Optional) type queuing
<i>pmap-name-qos</i>	(Optional) policy map name (type qos)
<i>pmap-name-que</i>	(Optional) policy map name (type queuing)
<i>__readonly__</i>	(Optional)
<i>display-all</i>	(Optional) Display all kinds of class-maps
TABLE_pmap	(Optional) all pmap xml sessions
<i>pmap-key</i>	(Optional) Policy-map name: xml key
TABLE_rdet	(Optional) all WRED sessions
TABLE_rdet_nonecn	(Optional) all WRED non ECN sessions
TABLE_afd	(Optional) all AFD sessions

TABLE_police	(Optional) all police actions
<i>police-key</i>	(Optional) police actions count: xml key
TABLE_cmap	(Optional) all cmap xml sessions
<i>cmap-key</i>	(Optional) Class-map name: xml key
TABLE_action	(Optional) all actions
<i>action-key</i>	(Optional) Actions count: xml key
<i>yqos-or-q</i>	(Optional)
<i>options</i>	(Optional) match-first option
<i>pmap-name-out</i>	(Optional) Policy-map name
<i>desc</i>	(Optional) Description string
<i>cmap-name</i>	(Optional) Class-map name
<i>xqos-or-q</i>	(Optional)
<i>serv-pol-type</i>	(Optional) Type of service policy referred to
<i>serv-pol-name</i>	(Optional) Name of policy-map referred to within this policy-map
<i>type-spec</i>	(Optional) Type of policy-map specified or not
<i>type-cmap-spec</i>	(Optional) Type of class-map specified or not
<i>inner</i>	(Optional) Specifies if tunnel or inner keywords are mentioned
<i>dlb-disable</i>	(Optional) Disable Dynamic Load Balancing
<i>cos</i>	(Optional) IEEE 802.1Q Class of Service value
<i>exp-val-imposition</i>	(Optional) MPLS EXP value of type imposition
<i>exp-val-topmost</i>	(Optional) MPLS EXP value of type topmost
<i>dscp</i>	(Optional) DSCP in IP(v4) and IPv6 packets
<i>dscp-enum</i>	(Optional)
<i>prec</i>	(Optional) Precedence in IP(v4) and IPv6 packets
<i>prec-enum</i>	(Optional)
<i>disc-class</i>	(Optional) Discard class
<i>qos-group</i>	(Optional) Qos-group
<i>tmap-from</i>	(Optional)
<i>tmap-to</i>	(Optional)

<i>tmap-name</i>	(Optional) Table map name
<i>ptmap-from</i>	(Optional)
<i>ptmap-to</i>	(Optional)
<i>ptmap-name</i>	(Optional) Table map name
<i>avg-rate-type</i>	(Optional) Specifies if average shape rate is specified
<i>rate-units</i>	(Optional) Units of rate - bps, kbps, mbps, gbps, ms, us
<i>min-rate-type</i>	(Optional) Specifies if minimum shape rate is specified
<i>min-rate-units</i>	(Optional) Units of rate - bps, kbps, mbps, gbps, ms, us
<i>max-rate-type</i>	(Optional) Specifies if maximum shape rate is specified
<i>max-rate-units</i>	(Optional) Units of rate - bps, kbps, mbps, gbps, ms, us
<i>cir-rate-units</i>	(Optional) Units of rate - bps, kbps, mbps, gbps, ms, us, pps
<i>pir-rate-units</i>	(Optional) Units of rate - bps, kbps, mbps, gbps, ms, us, pps
<i>prio-level</i>	(Optional) Priority if specified
<i>qlim-param-type</i>	(Optional) Type of parameter for qlim - cos/prec/dscp/disc class/qosgrp
<i>qlim-param-val</i>	(Optional) Parameter value for qlimit
<i>qlim-size</i>	(Optional) Queue size for qlimit
<i>size-units</i>	(Optional) Units of queue size - pkts/bytes/kbytes/mbytes/ms/us/perc
<i>rdet-size-units</i>	(Optional) Units of queue size - pkts/bytes/kbytes/mbytes/ms/us/perc
<i>rdet-nonecn-size-units</i>	(Optional) Units of queue size - pkts/bytes/kbytes/mbytes/ms/us/perc
<i>afd-size-units</i>	(Optional) Units of queue size - bytes/kbytes/mbytes
<i>bc-size-units</i>	(Optional) Units of queue size - pkts/bytes/kbytes/mbytes/ms/us/perc
<i>be-size-units</i>	(Optional) Units of queue size - pkts/bytes/kbytes/mbytes/ms/us/perc
<i>qlim-enum-spec</i>	(Optional) Whether qlimit parameter is specified in enum or not
<i>rdet-mode</i>	(Optional) Random-detect mode
<i>rdet-nonecn-mode</i>	(Optional) Random-detect non-ecn mode
<i>rdet-agg</i>	(Optional) Are the params for aggregate flow
<i>rdet-values</i>	(Optional) List of class-of-service values for random-detect
<i>rdet-drop-prob</i>	(Optional) Random-detect drop probability
<i>rdet-weight</i>	(Optional) Random-detect queue length weight

<i>rdet-cap-average</i>	(Optional) Random-detect cap-average
<i>rdet-ecn</i>	(Optional) Random-detect ECN
<i>rdet-burst-opt</i>	(Optional) Random-detect burst optimized
<i>rdet-mesh-opt</i>	(Optional) Random-detect mesh optimized
<i>rdet-nonecn-drop-prob</i>	(Optional) Random-detect non-ecn drop probability
<i>afd-mode</i>	(Optional) AFD mode
<i>afd-values</i>	(Optional) List of class-of-service values for AFD
<i>afd-ecn</i>	(Optional) AFD ECN
<i>pause</i>	(Optional) Pause value
<i>priority-group-number</i>	(Optional) Priority group value
<i>bw-units</i>	(Optional) Bandwidth units
<i>rem-bw-units</i>	(Optional) Remaining bandwidth units
<i>rem-bw-rate</i>	(Optional) Remaining bandwidth rate
<i>agg-policer-name</i>	(Optional) Aggregate policer name
<i>cir-spec</i>	(Optional) Is CIR keyword specified
<i>bc-spec</i>	(Optional) Is Committed Burst keyword specified
<i>be-spec</i>	(Optional) Is Extended Burst keyword specified
<i>cnf-col-cmap</i>	(Optional) Conforming color class-map name
<i>exc-col-cmap</i>	(Optional) Exceeding color class-map name
<i>enum-spec</i>	(Optional) Is DSCP or PREC enum value specified
<i>cnf-act</i>	(Optional) Conform action (Police)
<i>exc-act</i>	(Optional) Exceed action (Police)
<i>vio-act</i>	(Optional) Violate action (Police)
<i>set-type</i>	(Optional) Type of set in police action
<i>set-val</i>	(Optional) Value of set type in police action
<i>ooo</i>	(Optional) Out-of-Order

### Command Mode

- /exec

## show policy-map interface control-plane

```
show policy-map interface control-plane { [ module <slot-no-in> [ class <cmap-name> ] ] [ class <cmap-name>
[ module <slot-no-in> ] ] } [ __readonly__ [ <scale-factor-cmd> ] <pmap-name> [ TABLE_cmap <cmap-key>
<cmap-name-out> <opt_any_or_all> [ TABLE_match <match-key> { [ access_grp <acc_grp_name> ] [
redirect <opt_match_redirect> ] [ exception <opt_match_except> ] [ protocol <opt_match_protocol> ] } + ] [
<class-off-rate> <class-drop-rate> <class-pkts> <class-bytes> ] [ [ <set_vld_flg> ] { { cos [ inner ] <cos-val>
} | { dscp [ tunnel ] <dscp-val> } | { precedence [ tunnel1 ] <prec-val> } } ] [ <threshold> <level> ] [ [
<policer_show_flags> ] [ <cir> <opt_kbps_mbps_gbps_pps_cir> ] [ { percent <cir-perc> } ] [ <bc>
<opt_kbytes_mbytes_gbytes_bc> ] [ <pir> <opt_kbps_mbps_gbps_pps_pir> ] [ { percent1 <pir-perc> } ] [
<be> <opt_kbytes_mbytes_gbytes_be> ] ] [ TABLE_slot { <slot-no-out> { [ [ <conform-pkts> ]
<conform-bytes> ] [ [ <opt_drop_transmit_conform> ] | { set-cos-transmit <set-cos-val> } | { set-dscp-transmit
<set-dscp-val> } | { set-prec-transmit <set-prec-val> } ] [ [ [ <exceed-pkts> ] <exceed-bytes> ] { {
<opt_drop_transmit_exceed> } | { set dscp1 dscp2 table cir-markdown-map } } ] [ [ [ <violate-pkts> ]
<violate-bytes> ] { { <opt_drop_transmit_violate> } | { set1 dscp3 dscp4 table1 pir-markdown-map } } } }
} ] ] ] }
```

### Syntax Description

show	Show running system information
policy-map	Show policy maps
interface	Show service policy on interface
control-plane	command is for copp policy
module	(Optional) module number for statistics
class	(Optional) class-name name
<i>cmap-name</i>	(Optional) Name of the class-map
<i>pmap-name</i>	(Optional) Name of the Policy-map
__readonly__	(Optional)
<i>scale-factor-cmd</i>	(Optional) Scale factor command
TABLE_cmap	(Optional) all cmap xml sessions
<i>cmap-key</i>	(Optional) Class-map key : XML output
<i>cmap-name-out</i>	(Optional) Name of the output class-map
<i>opt_any_or_all</i>	(Optional) Enter match-any or match-all
TABLE_match	(Optional) all match xml sessions
<i>match-key</i>	(Optional) Match key : XML output
access_grp	(Optional)
<i>acc_grp_name</i>	(Optional)

redirect	(Optional)
<i>opt_match_redirect</i>	(Optional) Match criteria for redirected packets
exception	(Optional)
<i>opt_match_except</i>	(Optional) Match criteria for exception packets
protocol	(Optional)
<i>opt_match_protocol</i>	(Optional) Match criteria for protocol packets
<i>set_vld_flg</i>	(Optional) Set valid flag
cos	(Optional)
inner	(Optional)
<i>cos-val</i>	(Optional) Set cos val
dscp	(Optional)
tunnel	(Optional)
<i>dscp-val</i>	(Optional) Set dscp val
precedence	(Optional)
tunnel1	(Optional)
<i>prec-val</i>	(Optional) Set prec val
<i>policer_show_flags</i>	(Optional) Policer show flags
<i>level</i>	(Optional) syslog severity level
<i>opt_kbps_mbps_gbps_pps_cir</i>	(Optional) Units
percent	(Optional)
<i>opt_kbps_mbps_gbps_pps_pir</i>	(Optional) Units
percent1	(Optional)
<i>opt_kbytes_mbytes_gbytes_bc</i>	(Optional) Units
<i>opt_kbytes_mbytes_gbytes_be</i>	(Optional) Units
TABLE_slot	(Optional) all slot-num : XML output
<i>slot-no-in</i>	(Optional) input slot no
<i>slot-no-out</i>	(Optional) output slot no
<i>opt_drop_transmit_conform</i>	(Optional) Set the action
set-cos-transmit	(Optional)

<i>set-cos-val</i>	(Optional) Conform action cos val
set-dscp-transmit	(Optional)
<i>set-dscp-val</i>	(Optional) Conform action dscp val
set-prec-transmit	(Optional)
<i>set-prec-val</i>	(Optional) Conform action prec val
<i>opt_drop_transmit_exceed</i>	(Optional) Set the action
set	(Optional)
dscp1	(Optional)
dscp2	(Optional)
table	(Optional)
cir-markdown-map	(Optional)
<i>opt_drop_transmit_violate</i>	(Optional) Set the action
set1	(Optional)
dscp3	(Optional)
dscp4	(Optional)
table1	(Optional)
pir-markdown-map	(Optional)

**Command Mode**

- /exec

## show policy-map interface type psp

```
show policy-map interface { [ <ifnum> ] } type psp { [ <pmap-name> [ client <clienttype> <clientID> ] ] [
handle <ppf_id> ] } { [ class-map-list { [ <cmap-name-plc> + ] [ class-map-handle <ppf_id1> + ] } ] [
__readonly__ { [ <number-of-classes> ] [ <display-all> ] [ TABLE_pmap <pmap-key> <id> <pmap-name-out>
[ <desc> ] [ TABLE_cmap <cmap-key> [ <cmap-name-out> ] [ TABLE_interface <interface> <byte-count>
] ] ] }
```

### Syntax Description

show	Show running system information
policy-map	Show policy maps
interface	Show stats for interface
<i>ifnum</i>	(Optional) Interface type and number
type	Type of the policy-map
psp	type psp
<i>pmap-name</i>	(Optional) Policy-map name
client	(Optional) set client type
<i>clienttype</i>	(Optional) cli/onep
<i>clientID</i>	(Optional) client appID
handle	(Optional) Handle
<i>ppf_id</i>	(Optional) PPF ID
class-map-list	(Optional) Class-map list
<i>cmap-name-plc</i>	(Optional) Class-map name
class-map-handle	(Optional) Class-map Handle/s
<i>ppf_id1</i>	(Optional) PPF ID
__readonly__	(Optional)
<i>display-all</i>	(Optional) Display all kinds of policymaps
<i>number-of-classes</i>	(Optional) Total number of classes for which stats are returned
TABLE_pmap	(Optional) all pmap xml sessions
<i>id</i>	(Optional) Policy-map ID
<i>pmap-key</i>	(Optional) Policy-map name: xml key
<i>pmap-name-out</i>	(Optional) Policy-map name

<i>desc</i>	(Optional) Description string
TABLE_cmap	(Optional) all cmap xml sessions
<i>cmap-key</i>	(Optional) Class-map name: xml key
<i>cmap-name-out</i>	(Optional) Class-map name
TABLE_interface	(Optional) all interface xml sessions
<i>interface</i>	(Optional) Interface type and number
<i>byte-count</i>	(Optional) Byte Count Statistic

**Command Mode**

- /exec

## show policy-map system

```
show policy-map system [ type { network-qos | qos [ input2 ] | queuing [ input | output ] } ] [ __readonly__
{ [ <display-all> ] [ <desc> ] [ <xpmap-name> ] [ <xcmmap-name> ] [ <cos-list> ] [ <qos-group-list> ] [
<protocol> ] [ <timeout> ] [ <pause> <size-in-bytes> <xoff-bytes> <xon-bytes> ] [ <pfc-cos-list> ] [ <cc> ]
[ <thresh-units> ] [ <min-thresh> ] [ <max-thresh> ] [ <drop-prob> ] [ <iod> ] [ <mtu> ] [ <set-cos> ] [ <dpp>
] [ <stat-en-dis-enum> ] [ TABLE_pmap <pmap-key> <pmap-inner-outer> <in-or-out> <yqos-or-q> [ <options>
] <pmap-name> [ <stat-status-enum> ] [ TABLE_cmap <cmap-key> [ <xqos-or-q> ] <match-opts>
<cmap-name> [ TABLE_match <match-key> [ <not> ] [ <inner> ] [ <cos-list> ] [ <match-cmap-xqos-or-q>
] [ <match-cmap-opts> ] [ <match-cmap-name> ] ] [ TABLE_action <action-key> [ <set-inner> ] [ <cos> ]
[ <serv-pol-type> ] [ <serv-pol-name> ] [ <serv-pol-return-inout> ] [ <rate-units> ] [ <shape-rate> ] [
<min-rate-type> ] [ <min-rate-units> ] [ <shape-min-rate> ] [ <max-rate-type> ] [ <max-rate-units> ] [
<shape-max-rate> ] [ <prio-level> ] [ <qlim-param-type> ] [ <qlim-param-val> ] [ <size-units> ] [ <qlim-size>
] [ <qlim-enum-spec> ] [ <bw-units> ] [ <bw-rate> ] [ <rem-bw-units> ] [ <rem-bw-rate> ] [
<rise-threshold-units> ] [ <fall-threshold-units> ] [ TABLE_rdet <rdet-key> [ <rdet-values> ] [
<rdet-min-thresh> ] [ <rdet-size-units> ] [ <rdet-max-thresh> ] [ <rdet-drop-prob> ] [ <rdet-weight> ] [
<rdet-ecn> ] [ <rdet-cap-average> ] [ <rdet-burst-opt> ] [ <rdet-mesh-opt> ] ] [ TABLE_afd <afd-key> [
<afd-values> ] [ <afd-queue-desired> ] [ <afd-size-units> ] [ <afd-ecn> ] ] [ <pause> <size-in-bytes>
<xoff-bytes> <xon-bytes> ] ] ] ] }
```

### Syntax Description

show	Show running system information
policy-map	Show policy maps
type	(Optional) Type of the policy-map
system	Active policy in the system
network-qos	(Optional) type network-qos
qos	(Optional) type qos
input2	(Optional) input policy
queuing	(Optional) type queuing
input	(Optional) input policy
output	(Optional) output policy
__readonly__	(Optional)
<i>display-all</i>	(Optional) Display all network-qos policy-maps
<i>xpmap-name</i>	(Optional) Policy-map name
<i>desc</i>	(Optional) Description string
<i>xcmmap-name</i>	(Optional) Class-map name
<i>thresh-units</i>	(Optional) Units of threshold - pkts/bytes/kbytes/mbytes/ms/us/perc

<i>drop-prob</i>	(Optional) Drop Probability at Maximum Threshold value
<i>pause</i>	(Optional) Pause value
<i>pfc-cos-list</i>	(Optional) List of class-of-service values
<i>timeout</i>	(Optional) timeout value
<i>cc</i>	(Optional) congestion control protocol
<i>iod</i>	(Optional) IOD value
<i>mtu</i>	(Optional) MTU value
<i>set-cos</i>	(Optional) Set CoS value
<i>dpp</i>	(Optional) Dynamic Packet Prioritization Class
<i>protocol</i>	(Optional) protocol
<i>cos-list</i>	(Optional) List of class-of-service values
<i>qos-group-list</i>	(Optional) List of qos-group values
TABLE_pmap	(Optional) all pmap xml sessions
pmap-key	(Optional) Policy-map name: xml key
TABLE_cmap	(Optional) all cmap xml sessions
cmap-key	(Optional) Class-map name: xml key
TABLE_action	(Optional) all actions
action-key	(Optional) Actions count: xml key
TABLE_match	(Optional) all match xml sessions
match-key	(Optional) match count: xml key
TABLE_rdet	(Optional) all WRED sessions
TABLE_afd	(Optional) all AFD sessions
<i>stat-en-dis-enum</i>	(Optional)
<i>in-or-out</i>	(Optional)
<i>yqos-or-q</i>	(Optional)
<i>stat-status-enum</i>	(Optional)
<i>options</i>	(Optional) match-first option
<i>pmap-name</i>	(Optional) Policy-map name
<i>pmap-inner-outer</i>	(Optional) Inner or Outer policy-map

<i>serv-pol-return-inout</i>	(Optional) Inner or Outer policy-map
<i>cmap-name</i>	(Optional) Class-map name
<i>xqos-or-q</i>	(Optional)
<i>match-opts</i>	(Optional) Type of match in class-map
<i>match-cmap-xqos-or-q</i>	(Optional)
<i>match-cmap-opts</i>	(Optional) Type of match in class-map
<i>not</i>	(Optional) Negate this match result
<i>inner</i>	(Optional) Specifies if tunnel or inner keywords are mentioned
<i>cos-list</i>	(Optional) List of class-of-service values
<i>match-cmap-name</i>	(Optional) class-map name
<i>serv-pol-type</i>	(Optional) Type of service policy referred to
<i>serv-pol-name</i>	(Optional) Name of policy-map referred to within this policy-map
<i>set-inner</i>	(Optional) Specifies if tunnel or inner keywords are mentioned
<i>cos</i>	(Optional) IEEE 802.1Q Class of Service value
<i>rate-units</i>	(Optional) Units of rate - bps, kbps, mbps, gbps, ms, us
<i>min-rate-type</i>	(Optional) Specifies if minimum shape rate is specified
<i>min-rate-units</i>	(Optional) Units of rate - bps, kbps, mbps, gbps, ms, us
<i>max-rate-type</i>	(Optional) Specifies if maximum shape rate is specified
<i>max-rate-units</i>	(Optional) Units of rate - bps, kbps, mbps, gbps, ms, us
<i>prio-level</i>	(Optional) Priority if specified
<i>qlim-param-type</i>	(Optional) Type of parameter for qlim - cos/prec/dscp/disc class/qosgrp
<i>qlim-param-val</i>	(Optional) Parameter value for qlimit
<i>qlim-size</i>	(Optional) Queue size for qlimit
<i>size-units</i>	(Optional) Units of queue size - pkts/bytes/kbytes/mbytes/ms/us/perc
<i>qlim-enum-spec</i>	(Optional) Whether qlimit parameter is specified in enum or not
<i>rdet-size-units</i>	(Optional) Units of queue size - pkts/bytes/kbytes/mbytes/ms/us/perc
<i>afd-size-units</i>	(Optional) Units of queue size - bytes/kbytes/mbytes
<i>bw-units</i>	(Optional) Bandwidth units
<i>rem-bw-units</i>	(Optional) Remaining bandwidth units

<i>rem-bw-rate</i>	(Optional) Remaining bandwidth rate
<i>rdet-values</i>	(Optional) List of class-of-service values for random-detect
<i>rdet-drop-prob</i>	(Optional) Random-detect drop probability
<i>rdet-weight</i>	(Optional) Random-detect queue length weight
<i>rdet-cap-average</i>	(Optional) Random-detect cap-average
<i>rdet-ecn</i>	(Optional) Random-detect ECN
<i>rdet-burst-opt</i>	(Optional) Random-detect burst optimized
<i>rdet-mesh-opt</i>	(Optional) Random-detect mesh optimized
<i>afd-values</i>	(Optional) List of class-of-service values for afd
<i>afd-ecn</i>	(Optional) AFD ECN
<i>pause</i>	(Optional) Pause value

**Command Mode**

- /exec

## show policy-map type control-plane

```

show policy-map type control-plane [ expand ] [ { name <pmap-name> } ] [ __readonly__ [ { TABLE_pmap
<pmap-name1> [ { TABLE_cmap <cmap-name> [ <opt_any_or_all> ] [ TABLE_match <match_key> [ {
access_grp <acc_grp_name> ] ] [ redirect <opt_match_redirect> ] ] [ exception <opt_match_excpt> ] ] [ protocol
<opt_match_protocol> } ] ] [ { TABLE_set_action <set_vld_flg> { { cos [ inner ] <cos-val> } | { dscp [ tunnel
] <dscp-val> } | { precedence [ tunnel1 ] <prec-val> } } } ] [ <threshold> <level> ] [ [ <policer_show_flags>
] [ <cir> <opt_kbps_mbps_gbps_pps_cir> ] [ percent <cir-perc> ] [ <pir> <opt_kbps_mbps_gbps_pps_pir>
] [ percent1 <pir-perc> ] [ <bc> <opt_kbytes_mbytes_gbytes_bc> ] [ <be> <opt_kbytes_mbytes_gbytes_be>
] [ [ <opt_drop_transmit_conform> } ] | { set-cos-transmit <set-cos-val> } | { set-dscp-transmit <set-dscp-val>
} ] | { set-prec-transmit <set-prec-val> } ] ] [ { <opt_drop_transmit_exceed> } | { set dscp1 dscp2 table
cir-markdown-map } ] [ { <opt_drop_transmit_violate> } | { set1 dscp3 dscp4 table1 pir-markdown-map } ]
] ] ] ] ]

```

## Syntax Description

show	Show running system information
policy-map	Show policy maps
type	Type of the policy-map
control-plane	command is for copp policy
expand	(Optional) Display the match-criterias along with class-map
name	(Optional) policy-map name
<i>pmap-name</i>	(Optional) Name of the Policy-map
__readonly__	(Optional)
TABLE_pmap	(Optional) Table of policy-map
<i>pmap-name1</i>	(Optional) Name of the Policy-map
TABLE_cmap	(Optional) Table of class-map
<i>cmap-name</i>	(Optional) Name of the class-map
<i>opt_any_or_all</i>	(Optional) Enter match-any or match-all
TABLE_match	(Optional) Table of match statement
<i>match_key</i>	(Optional) Match key : XML output
access_grp	(Optional)
<i>acc_grp_name</i>	(Optional)
redirect	(Optional)
<i>opt_match_redirect</i>	(Optional) Match criteria for redirected packets

exception	(Optional)
<i>opt_match_excpt</i>	(Optional) Match criteria for exception packets
protocol	(Optional)
<i>opt_match_protocol</i>	(Optional) Match criteria for protocol packets
TABLE_set_action	(Optional) Table of set action
<i>set_vld_flg</i>	(Optional) Set valid flag
<i>level</i>	(Optional) syslog severity level
<i>opt_kbps_mbps_gbps_pps_cir</i>	(Optional) Units
percent	(Optional)
<i>opt_kbps_mbps_gbps_pps_pir</i>	(Optional) Units
percent1	(Optional)
<i>opt_kbytes_mbytes_gbytes_bc</i>	(Optional) Units
<i>opt_kbytes_mbytes_gbytes_be</i>	(Optional) Units
<i>opt_drop_transmit_conform</i>	(Optional) Set the action
set-cos-transmit	(Optional)
<i>set-cos-val</i>	(Optional) Conform action cos val
set-dscp-transmit	(Optional)
<i>set-dscp-val</i>	(Optional) Conform action dscp val
set-prec-transmit	(Optional)
<i>set-prec-val</i>	(Optional) Conform action prec val
<i>opt_drop_transmit_exceed</i>	(Optional) Set the action
set	(Optional)
dscp1	(Optional)
dscp2	(Optional)
table	(Optional)
cir-markdown-map	(Optional)
<i>opt_drop_transmit_violate</i>	(Optional) Set the action
set1	(Optional)
dscp3	(Optional)

dscp4	(Optional)
table1	(Optional)
pir-markdown-map	(Optional)
cos	(Optional)
inner	(Optional)
<i>cos-val</i>	(Optional) Set cos val
dscp	(Optional)
tunnel	(Optional)
<i>dscp-val</i>	(Optional) Set dscp val
precedence	(Optional)
tunnel1	(Optional)
<i>prec-val</i>	(Optional) Set prec val
<i>policer_show_flags</i>	(Optional) Policer show flags

**Command Mode**

- /exec

# show policy-map type network-qos

```
show policy-map type network-qos [ <pmap-name-nq> ] [ __readonly__ { <display-all> <desc> <xpmap-name>
<xcmap-name> <pause> <timeout> <size-in-bytes> <xoff-bytes> <xon-bytes> <pfc-cos-list> <cc>
<thresh-units> <min-thresh> <max-thresh> <drop-prob> <iod> <mtu> <set-cos> <dpp> } ]
```

## Syntax Description

show	Show running system information
policy-map	Show policy maps
type	Type of the policy-map
<i>pmap-name-nq</i>	(Optional) Policy-map name
network-qos	type network-qos
<i>__readonly__</i>	(Optional)
<i>display-all</i>	(Optional) Display all network-qos policy-maps
<i>xpmap-name</i>	(Optional) Policy-map name
<i>desc</i>	(Optional) Description string
<i>xcmap-name</i>	(Optional) Class-map name
<i>pause</i>	(Optional) Pause value
<i>timeout</i>	(Optional) timeout value
<i>pfc-cos-list</i>	(Optional) List of class-of-service values
<i>cc</i>	(Optional) congestion control protocol
<i>thresh-units</i>	(Optional) Units of threshold - pkts/bytes/kbytes/mbytes/ms/us/perc
<i>drop-prob</i>	(Optional) Drop Probability at Maximum Threshold value
<i>iod</i>	(Optional) IOD value
<i>mtu</i>	(Optional) MTU value
<i>set-cos</i>	(Optional) Set CoS value
<i>dpp</i>	(Optional) Dynamic Packet Prioritization Class

## Command Mode

- /exec

## show policy-map type psp

```
show policy-map type psp { [ <pmap-name> [ client <clienttype> <clientID> ] [ cfg-mode <cfgmode> ] ] [
handle <ppf_id> ] [ __readonly__ { [ <display-all> ] [ TABLE_pmap <pmap-key> <id> <pmap-name-out>
[ <desc> ] [ TABLE_cmap <cmap-key> <if-else-id> <cmap-id> [ class-default ] [ <cmap-name-out> ] [
TABLE_action <action-key> [ <cos-val> ] [ <src-mac-addr> ] [ <dest-mac-addr> ] [ <vlan-number> ] [
<ip-tos-value> ] [ <interface-name> ] [ action-strip-vlan ] [ action-drop-pkt ] [ divert-action ] [ copy-action ]
[ forward-normal ] [ <goto-pmap-handle> ] [ action-decrement-ttl ] ] ] ] }
```

### Syntax Description

show	Show running system information
policy-map	Show policy maps
type	Type of the policy-map
psp	type psp
<i>pmap-name</i>	(Optional) Policy-map name
client	(Optional) set client type
<i>clienttype</i>	(Optional) cli/onep
<i>clientID</i>	(Optional) client appID
cfg-mode	(Optional) cfg-mode
<i>cfgmode</i>	(Optional) persistent/transient
handle	(Optional) Handle
<i>ppf_id</i>	(Optional) PPF ID
__readonly__	(Optional)
<i>display-all</i>	(Optional) Display all kinds of policymaps
TABLE_pmap	(Optional) all pmap xml sessions
<i>id</i>	(Optional) Policy-map ID
<i>pmap-key</i>	(Optional) Policy-map name: xml key
<i>pmap-name-out</i>	(Optional) Policy-map name
<i>desc</i>	(Optional) Description string
TABLE_cmap	(Optional) all cmap xml sessions
<i>cmap-key</i>	(Optional) Class-map name: xml key
<i>if-else-id</i>	(Optional) If-Else ID

<i>cmap-id</i>	(Optional) Class-map ID
<i>class-default</i>	(Optional)
<i>cmap-name-out</i>	(Optional) Class-map name
TABLE_action	(Optional) all action xml sessions
<i>action-key</i>	(Optional) action count: xml key
<i>cos-val</i>	(Optional) 802.1Q Class of Service value
<i>src-mac-addr</i>	(Optional) Layer 2 MAC Address
<i>dest-mac-addr</i>	(Optional) Layer 2 MAC Address
<i>vlan-number</i>	(Optional) VLAN NUMBER
<i>ip-tos-value</i>	(Optional) IPv4 TOS Value
<i>interface-name</i>	(Optional) Physical Interface Name and Number
<i>action-strip-vlan</i>	(Optional) Perform the action STRIP-VLAN-ID
<i>action-drop-pkt</i>	(Optional) Perform the action Drop the Packet
<i>divert-action</i>	(Optional) Divert the packets to Controller
<i>copy-action</i>	(Optional) Copy the packets to Controller
<i>forward-normal</i>	(Optional) Forward the packets normally
<i>goto-pmap-handle</i>	(Optional) Pmap handle
<i>action-decrement-ttl</i>	(Optional) Decrement TTL on the Packet

### Command Mode

- /exec

# show port-channel capacity

show port-channel capacity [ \_\_readonly\_\_ <total> <used> <free> <percentage\_used> ]

## Syntax Description

show	Show running system information
port-channel	Show port-channel information
capacity	Capacity information
__readonly__	(Optional)
<i>total</i>	(Optional) Total resource
<i>used</i>	(Optional) Used resource
<i>free</i>	(Optional) Free resource
<i>percentage_used</i>	(Optional) Used resource in percentage

## Command Mode

- /exec

# show port-channel compatibility-parameters

show port-channel compatibility-parameters [ \_\_readonly\_\_ { <parameter> <description> } + ]

## Syntax Description

show	Show running system information
port-channel	Show port-channel information
compatibility-parameters	Show compatibility parameters
__readonly__	(Optional)
<i>parameter</i>	(Optional) Compatibility parameter
<i>description</i>	(Optional) Parameter description

## Command Mode

- /exec

# show port-channel database

```
show port-channel database [ interface <if0> ] [ __readonly__ TABLE_interface <interface>
<last-membership-update> <total-ports> <total-up-ports> [ <first_operational-port> ] <age-of-channel> [
<time-since-last-bundle> ] [ <last-bundled-member> ] [ <time-since-last-unbundle> ] [
<last-unbundled-member> ] [ { TABLE_member <port> <mode> <port-status> } ] [ <protocol> ] ]
```

## Syntax Description

show	Show running system information
port-channel	Show port-channel information
database	Show port-channel database
interface	(Optional) Specify a port-channel
<i>if0</i>	(Optional)
<i>__readonly__</i>	(Optional)
TABLE_interface	(Optional) Port-channel table
<i>interface</i>	(Optional) Port channel
<i>mode</i>	(Optional) channel-group mode
<i>last-membership-update</i>	(Optional) Last membership update
<i>total-ports</i>	(Optional) Total number of member ports
<i>total-up-ports</i>	(Optional) Total number of UP member ports
<i>first_operational-port</i>	(Optional) First operational port
TABLE_member	(Optional) Member ports info
<i>port</i>	(Optional) Member port
<i>port-status</i>	(Optional) Member port status
<i>age-of-channel</i>	(Optional) Age of port channel
<i>time-since-last-bundle</i>	(Optional) Time since last port bundled
<i>last-bundled-member</i>	(Optional) Last bundled member port
<i>time-since-last-unbundle</i>	(Optional) Time since last port un-bundled
<i>last-unbundled-member</i>	(Optional) Last unbundled member port
<i>protocol</i>	(Optional) Port channel protocol

## Command Mode

- /exec

# show port-channel load-balance

```
show port-channel load-balance { [ module <module> ] | { fex { all } } } [ __readonly__ <sys-cfg> {
<module-cfg> } + <non-ip-val> <non-ip-sel> <ipv4-val> <ipv4-sel> <ipv6-val> ]
```

## Syntax Description

show	Show running system information
port-channel	Show port-channel information
load-balance	Show port-channel load balance
module	(Optional) slot
<i>module</i>	(Optional) Specify a module number
fex	FEX devices
all	Display all configured FEX port-channel LB
__readonly__	(Optional)
<i>sys-cfg</i>	(Optional) system wide load balance configuraton
<i>module-cfg</i>	(Optional) per module load balance configuraton
<i>non-ip-val</i>	(Optional) load balance setting for non-ip traffic
<i>non-ip-sel</i>	(Optional) non ip select
<i>ipv4-val</i>	(Optional) load balance setting for ipv4 traffic
<i>ipv4-sel</i>	(Optional) ip select
<i>ipv6-val</i>	(Optional) load balance setting for ipv6 traffic

## Command Mode

- /exec

## show port-channel load-balance forwarding-path1 interface src-interface

```
show port-channel load-balance forwarding-path1 interface <ch-id> src-interface <src-if> { vlan <vlan-id> |
src-mac <src-mac> | dst-mac <dst-mac> | src-ip <src-ip> | dst-ip <dst-ip> | src-ipv6 <src-ipv6> | dst-ipv6
<dst-ipv6> | l4-src-port <l4-src-port> | l4-dst-port <l4-dst-port> | ether-type <ethertype> | ip-proto <prot> }
+ [ __readonly__ { loadbalance-algorithm <algorithm> } { outgoing-port-id <port> } ]
```

### Syntax Description

show	Show running system information
port-channel	Configure port channel parameters
load-balance	Show port-channel load balance
forwarding-path1	Packet forwarding information
interface	Specify a port-channel number
<i>ch-id</i>	Port-Channel name
vlan	VLAN - for dot1Q tagged packets at ingress
<i>vlan-id</i>	VLAN ID
src-mac	Source MAC Address
<i>src-mac</i>	Source MAC address
dst-mac	Destination MAC Address
<i>dst-mac</i>	Destination MAC address
src-ip	Source IP address
<i>src-ip</i>	Source IP address in format i.i.i.i
dst-ip	Destination IPv4 address
<i>dst-ip</i>	Destination IP address in format i.i.i.i
src-ipv6	Source IPv6 address
dst-ipv6	Destination IPv6 address
l4-src-port	Source Port
<i>l4-src-port</i>	Source L4 port
l4-dst-port	Destination Port
<i>l4-dst-port</i>	Destination L4 port

ether-type	Ethernet Type
<i>ethertype</i>	Ethernet Type
src-interface	Optional source interface (physical switch port only)
<i>src-if</i>	Interface name
ip-proto	IP v4/v6 Protocol
<i>prot</i>	IP Protocol
__readonly__	(Optional)
loadbalance-algorithm	(Optional) load balance algorithm
<i>algorithm</i>	(Optional) algorithm
outgoing-port-id	(Optional) outgoing port-id
<i>port</i>	(Optional) port

**Command Mode**

- /exec

# show port-channel load-balance forwarding-path interface

```
show port-channel load-balance forwarding-path { interface <ch-id> | hgig } { src-interface <src-if> | vlan
<vlan-id> | src-mac <src-mac> | dst-mac <dst-mac> | src-ip <src-ip> | dst-ip <dst-ip> | src-ipv6 <src-ipv6> |
dst-ipv6 <dst-ipv6> | l4-src-port <l4-src-port> | l4-dst-port <l4-dst-port> | ethertype <ethertype> | protocol
<prot> } + [ module <module> | fex <fex-range> | hgig-tgid <tgid> ] + [ source-interface <if-id> ] [
__readonly__ { loadbalance-algorithm <algorithm> } { outgoing-port-id <port> } ]
```

## Syntax Description

show	Show running system information
port-channel	Configure port channel parameters
load-balance	Show port-channel load balance
forwarding-path	Packet forwarding information
interface	Specify a port-channel number
<i>ch-id</i>	Port-Channel name
hgig	Hgig hashing result (only with RTAG7)
vlan	VLAN of the ingress packet i.e. when available
<i>vlan-id</i>	
src-mac	Source MAC Address
<i>src-mac</i>	Source MAC address
dst-mac	Destination MAC Address
<i>dst-mac</i>	Destination MAC address
src-ip	Source IPv4 address
<i>src-ip</i>	Source IP address in format i.i.i.i
dst-ip	Destination IPv4 address
<i>dst-ip</i>	Destination IP address in format i.i.i.i
src-ipv6	Source IPv6 address
dst-ipv6	Destination IPv6 address
l4-src-port	Source L4 port
<i>l4-src-port</i>	Source L4 port
l4-dst-port	Destination l4 port
<i>l4-dst-port</i>	Destination L4 port

ethertype	Ethertype of the packet stream
<i>ethertype</i>	
src-interface	Optional source interface (physical switch port only)
<i>src-if</i>	Interface name
source-interface	(Optional) Source interface - Required paramter
<i>if-id</i>	(Optional) Interface name
protocol	Protocol
<i>prot</i>	
module	(Optional) Module #
<i>module</i>	(Optional)
fex	(Optional) FEX devices
<i>fex-range</i>	(Optional) FEX device range
hgig-tgid	(Optional) Hgig #
<i>tgid</i>	(Optional)
__readonly__	(Optional)
loadbalance-algorithm	(Optional) load balance algorithm
<i>algorithm</i>	(Optional) load balance algorithm
outgoing-port-id	(Optional) outgoing port-id
<i>port</i>	(Optional) outgoing port-id

**Command Mode**

- /exec

## show port-channel load-balance hardware forwarding-path interface source

```
show port-channel load-balance hardware forwarding-path { interface <ch-id> | hgig } { source-interface
<if-id> } { vlan <vlan-id> | src-mac <src-mac> | dst-mac <dst-mac> | src-ip <src-ip> | dst-ip <dst-ip> | src-ipv6
<src-ipv6> | dst-ipv6 <dst-ipv6> | l4-src-port <l4-src-port> | l4-dst-port <l4-dst-port> | ethertype <ethertype>
| protocol <prot> } + [ module <module> | fex <fex-range> | hgig-tgid <tgid> ] [ __readonly__ {
loadbalance-algorithm <algorithm> } { outgoing-port-id <port> } ]
```

### Syntax Description

show	Show running system information
port-channel	Configure port channel parameters
load-balance	Show port-channel load balance
hardware	ASIC hardware based information
forwarding-path	Packet forwarding information
interface	Specify a port-channel number
<i>ch-id</i>	Port-Channel name
hgig	Higig hashing result (only with RTAG7)
source-interface	Source interface - Required paramter
<i>if-id</i>	Interface name
vlan	VLAN of the ingress packet i.e. when available
<i>vlan-id</i>	
src-mac	Source MAC Address
<i>src-mac</i>	Source MAC address
dst-mac	Destination MAC Address
<i>dst-mac</i>	Destination MAC address
src-ip	Source IPv4 address
<i>src-ip</i>	Source IP address in format i.i.i.i
dst-ip	Destination IPv4 address
<i>dst-ip</i>	Destination IP address in format i.i.i.i
src-ipv6	Source IPv6 address
dst-ipv6	Destination IPv6 address

l4-src-port	Source L4 port
<i>l4-src-port</i>	Source L4 port
l4-dst-port	Destination l4 port
<i>l4-dst-port</i>	Destination L4 port
ethertype	Ethertype of the packet stream
<i>ethertype</i>	
protocol	Protocol
<i>prot</i>	
module	(Optional) Module #
<i>module</i>	(Optional)
fex	(Optional) FEX devices
<i>fex-range</i>	(Optional) FEX device range
hgig-tgid	(Optional) Hgig #
<i>tgid</i>	(Optional)
__readonly__	(Optional)
loadbalance-algorithm	(Optional) load balance algorithm
<i>algorithm</i>	(Optional) load balance algorithm
outgoing-port-id	(Optional) outgoing port-id
<i>port</i>	(Optional) outgoing port-id

### Command Mode

- /exec

# show port-channel rbh-distribution

```
show port-channel rbh-distribution [ interface <if0> ] [ __readonly__ TABLE_channel <chan-id> <port> {
<rbh> } + <num_of_buckets> ]
```

## Syntax Description

show	Show running system information
port-channel	Show port-channel information
rbh-distribution	Show RBH distribution for member ports
interface	(Optional) Specify a port-channel interface
<i>if0</i>	(Optional)
__readonly__	(Optional)
TABLE_channel	(Optional) Port-channel table
<i>chan-id</i>	(Optional) Channel ID
<i>port</i>	(Optional) Member port
<i>num_of_buckets</i>	(Optional) Channel ID
<i>rbh</i>	(Optional) Channel ID

## Command Mode

- /exec

# show port-channel summary

```
show port-channel summary [ interface <if0> | controller ] [ __readonly__ TABLE_channel <group>
<port-channel> <layer> <status> <type> <prtcl> [ { TABLE_member <port> <port-status> } ] ]
```

## Syntax Description

show	Show running system information
port-channel	Show port-channel information
summary	Show port-channel summary
interface	(Optional) Specify a port-channel
<i>if0</i>	(Optional)
controller	(Optional) Show controller configured port-channels
__readonly__	(Optional)
TABLE_channel	(Optional) Port-channel table
<i>group</i>	(Optional) Channel group number
<i>port-channel</i>	(Optional) Port channel
<i>type</i>	(Optional) Channel type
<i>prtcl</i>	(Optional) Channel protocol
<i>status</i>	(Optional) Channel status
<i>layer</i>	(Optional) Channel layer info
TABLE_member	(Optional) Member table
<i>port</i>	(Optional) Member port
<i>port-status</i>	(Optional) Member port status

## Command Mode

- /exec

# show port-channel traffic

```
show port-channel traffic [ interface <if0> ] [ __readonly__ TABLE_channel <chanId> <port> <rx-ucst>
<tx-ucst> <rx-mcst> <tx-mcst> <rx-bcst> <tx-bcst> ]
```

## Syntax Description

show	Show running system information
port-channel	Show port-channel information
traffic	Show port-channel traffic statistics
__readonly__	(Optional)
interface	(Optional) Specify a port-channel
<i>if0</i>	(Optional)
TABLE_channel	(Optional) Port-channel table
<i>chanId</i>	(Optional) Channel ID
<i>port</i>	(Optional) Member port
<i>rx-ucst</i>	(Optional) Received unicast
<i>tx-ucst</i>	(Optional) Transmitted unicast
<i>rx-mcst</i>	(Optional) Received multicast
<i>tx-mcst</i>	(Optional) Transmitted multicast
<i>rx-bcst</i>	(Optional) Received broadcast
<i>tx-bcst</i>	(Optional) Transmitted broadcast

## Command Mode

- /exec

# show port-channel usage

```
show port-channel usage [ __readonly__ <total-channel-number-used> { <used-range-low> [ <used-range-hi> ] } + { <unused-range-low> [ <unused-range-hi> ] } + ]
```

## Syntax Description

show	Show running system information
port-channel	Show port-channel information
usage	Show port-channel number usage
<i>__readonly__</i>	(Optional)
<i>total-channel-number-used</i>	(Optional) Total used number of port-channels
<i>used-range-low</i>	(Optional) Used range low end value
<i>used-range-hi</i>	(Optional) Used range high end value
<i>unused-range-low</i>	(Optional) Un-used range low end value
<i>unused-range-hi</i>	(Optional) Un-used range high end value

## Command Mode

- /exec

# show port-profile

```
show port-profile [ name <all_profile_name> ] [ __readonly__ <profile_name> <profile_id> <type> <desc>
<status> <max_ports> <min_ports> <inherit> <profile_cfg> <cmd_depth> <cmd_key> <parent_seqno>
<cmd_seqno> <cmd_attr> <form_type> <cmd_mask> <shadow_cmd> <cmd_flags> <eval_cfg> <intf>
<cap_l3> <cap_iscsi> <ctrl_sgid> <pkt_sgid> <sys_vlans> <portgrp> <pprole> <port_binding> ]
```

## Syntax Description

show	Show running system information
port-profile	Show port-profile
name	(Optional) port-profile name
<i>all_profile_name</i>	(Optional) Enter the name of the profile
<i>__readonly__</i>	(Optional)
<i>profile_name</i>	(Optional)
<i>profile_id</i>	(Optional)
<i>type</i>	(Optional)
<i>desc</i>	(Optional)
<i>status</i>	(Optional)
<i>max_ports</i>	(Optional)
<i>min_ports</i>	(Optional)
<i>inherit</i>	(Optional)
<i>profile_cfg</i>	(Optional)
<i>cmd_depth</i>	(Optional)
<i>cmd_key</i>	(Optional)
<i>parent_seqno</i>	(Optional)
<i>cmd_seqno</i>	(Optional)
<i>cmd_attr</i>	(Optional)
<i>form_type</i>	(Optional)
<i>cmd_mask</i>	(Optional)
<i>shadow_cmd</i>	(Optional)
<i>cmd_flags</i>	(Optional)

<i>eval_cfg</i>	(Optional)
<i>intf</i>	(Optional)
<i>cap_l3</i>	(Optional) L3 Profile
<i>cap_iscsi</i>	(Optional) iSCSI cap
<i>ctrl_sgid</i>	(Optional) Control Vlan Pinned Sgid
<i>pkt_sgid</i>	(Optional) Packet Vlan Pinned Sgid
<i>sys_vlans</i>	(Optional) System Vlans
<i>portgrp</i>	(Optional) VMware Portgroup
<i>pprole</i>	(Optional) Port-profile Role
<i>port_binding</i>	(Optional) Port-binding

**Command Mode**

- /exec

# show port-profile brief

```
show port-profile brief [ __readonly__ { TABLE_port_profile <profile_name> <type> <status>
<profile_cfg_cnt> <eval_cfg_cnt> <intf_cnt> <inherit_cnt> <header_flag> } { TABLE_intf_count <intf_type>
<intf_count> <tot_header_flag> } ]
```

## Syntax Description

show	Show running system information
port-profile	Show port-profile
brief	Brief info about profiles
<i>__readonly__</i>	(Optional)
<i>profile_name</i>	(Optional)
TABLE_port_profile	(Optional)
<i>type</i>	(Optional)
<i>status</i>	(Optional)
<i>profile_cfg_cnt</i>	(Optional)
<i>eval_cfg_cnt</i>	(Optional)
<i>intf_cnt</i>	(Optional)
<i>inherit_cnt</i>	(Optional)
<i>header_flag</i>	(Optional)
TABLE_intf_count	(Optional)
<i>intf_type</i>	(Optional)
<i>intf_count</i>	(Optional)
<i>tot_header_flag</i>	(Optional)

## Command Mode

- /exec

# show port-profile expand-interface

```
show port-profile expand-interface [ name <all_profile_name> ] [ __readonly__ <profile_name> <intf>
<intf_cfg> ]
```

## Syntax Description

show	Show running system information
port-profile	Show port-profile
expand-interface	Active profile config applied in a interface
name	(Optional) port-profile name
<i>all_profile_name</i>	(Optional) Enter the name of the profile
<i>__readonly__</i>	(Optional)
<i>profile_name</i>	(Optional)
<i>intf</i>	(Optional)
<i>intf_cfg</i>	(Optional)

## Command Mode

- /exec

# show port-profile sync-status

```
show port-profile sync-status [ interface <intfname> ] [ __readonly__ <intf> <status> <inherit> <sync_status> <cached_cmds> <errors> <recovery> ]
```

## Syntax Description

show	Show running system information
port-profile	Show port-profile
sync-status	Interfaces out-of-sync with port-profiles
interface	(Optional) Interface name
<i>intfname</i>	(Optional) Name of interface
<i>__readonly__</i>	(Optional)
<i>intf</i>	(Optional)
<i>status</i>	(Optional)
<i>inherit</i>	(Optional)
<i>sync_status</i>	(Optional)
<i>cached_cmds</i>	(Optional)
<i>errors</i>	(Optional)
<i>recovery</i>	(Optional)

## Command Mode

- /exec

# show port-profile usage

```
show port-profile usage [ name <all_profile_name> ] [ __readonly__ TABLE_port_profile <profile_name>
{ TABLE_interface <interface> } ]
```

## Syntax Description

show	Show running system information
port-profile	Show port-profile
usage	List of interfaces inherited a profile
name	(Optional) port-profile name
<i>all_profile_name</i>	(Optional) Enter the name of the profile
<i>__readonly__</i>	(Optional)
TABLE_port_profile	(Optional)
TABLE_interface	(Optional)
<i>profile_name</i>	(Optional)
<i>interface</i>	(Optional)

## Command Mode

- /exec

# show port-security

```
show port-security [ __readonly__ { TABLE_eth_port_sec_interfaces <secure_port> <max_secure_addr>
<current_addr> <security_violation> <security_action> <num_val> <num_elems> <cmdid_show_index>
<port_state> } <total_addr> <max_sys_limit> ]
```

## Syntax Description

port-security	Show secure port information
__readonly__	(Optional)
TABLE_eth_port_sec_interfaces	(Optional) Displays the secured interfaces
<i>secure_port</i>	(Optional) Interface Index
<i>max_secure_addr</i>	(Optional) Maximum number of secured MAC addresses
<i>current_addr</i>	(Optional) Number of secured MAC addresses
<i>security_violation</i>	(Optional) Number of security violations
<i>security_action</i>	(Optional) Security Action Shutdown/Restrict/Protect
<i>num_val</i>	(Optional) Number of Values
<i>num_elems</i>	(Optional) Number of Elements
<i>cmdid_show_index</i>	(Optional) Index for the Interfaces
<i>port_state</i>	(Optional) Port security enabled or disabled
<i>total_addr</i>	(Optional) Total number of secured MAC addresses
<i>max_sys_limit</i>	(Optional) Maximum allowed MACs excluding one per port

## Command Mode

- /exec

# show port-security address

```
show port-security address [ __readonly__ { TABLE_eth_port_sec_mac_addrs <vlan_id> <mac_addr> <type>
<if_index> <remain_age> <remote_learnt> <remote_aged> <num_elems> <cmd_addr_index> } <total_addr>
<max_sys_limit> ]
```

## Syntax Description

port-security	Show secure port information
address	Show secure address
__readonly__	(Optional)
TABLE_eth_port_sec_mac_addrs	(Optional) Displays the secured MAC addresses
if_index	(Optional) Interface index
vlan_id	(Optional) vlan id
mac_addr	(Optional) mac address
type	(Optional) static/sticky/dyanmic MAC address
remain_age	(Optional) Remaining age
remote_learnt	(Optional) Remotely learnt
remote_aged	(Optional) Remotely Aged Out
num_elems	(Optional) Number of Elements
cmd_addr_index	(Optional) Index for the interface address
total_addr	(Optional) Total number of secured MAC addresses
max_sys_limit	(Optional) Maximum allowed MACs excluding one per port

## Command Mode

- /exec

# show port-security address blocked

show port-security address blocked [ \_\_readonly\_\_ { TABLE\_eth\_port\_sec\_mac\_addrs <vlan\_id> <mac\_addr> <type> <if\_index> <remain\_age> <num\_elems> <cmd\_addr\_index> } <total\_addr> <max\_sys\_limit> ]

## Syntax Description

port-security	Show secure port information
address	Show secure address
blocked	Port Security Blocked macs
__readonly__	(Optional)
TABLE_eth_port_sec_mac_addrs	(Optional) Displays the secured MAC addresses
<i>if_index</i>	(Optional) Interface index
<i>vlan_id</i>	(Optional) vlan id
<i>mac_addr</i>	(Optional) mac address
<i>type</i>	(Optional) static/sticky/dyanmic MAC address
<i>remain_age</i>	(Optional) Remaining age
<i>num_elems</i>	(Optional) Number of Elements
<i>cmd_addr_index</i>	(Optional) Index for the interface address
<i>total_addr</i>	(Optional) Total number of secured MAC addresses
<i>max_sys_limit</i>	(Optional) Maximum allowed MACs excluding one per port

## Command Mode

- /exec

## show port-security address interface

```
show port-security address interface <interface-id> [ __readonly__ { TABLE_eth_port_sec_mac_addrs
<vlan_id> <mac_addr> <type> <if_index> <remain_age> <remote_learnt> <remote_aged> <num_elems>
} <total_addr> <max_sys_limit> <first> ]
```

### Syntax Description

port-security	Show secure port information
address	Show secure address
interface	Show secure interface
<i>interface-id</i>	ethernet
<i>__readonly__</i>	(Optional)
TABLE_eth_port_sec_mac_addrs	(Optional) Displays the secured MAC addresses
<i>if_index</i>	(Optional) Interface index
<i>vlan_id</i>	(Optional) vlan id
<i>mac_addr</i>	(Optional) mac address
<i>type</i>	(Optional) static/sticky/dyanmic MAC address
<i>remain_age</i>	(Optional) Remaining age
<i>remote_learnt</i>	(Optional) Remotely learnt
<i>remote_aged</i>	(Optional) Remotely Aged Out
<i>num_elems</i>	(Optional) Number of Elements
<i>total_addr</i>	(Optional) Total number of secured MAC addresses
<i>max_sys_limit</i>	(Optional) Maximum allowed MACs excluding one per port
<i>first</i>	(Optional) To identify the first entry

### Command Mode

- /exec

## show port-security address nvram

```
show port-security address nvram [ __readonly__ { TABLE_eth_port_sec_mac_addrs <vlan_id> <mac_addr>
<type> <if_index> <remain_age> <remote_learnt> <remote_aged> <num_elems> <cmd_addr_index> }
<total_addr> <max_sys_limit> ]
```

### Syntax Description

port-security	Show secure port information
address	Show secure address
nvram	Port Security NVRAM
__readonly__	(Optional)
TABLE_eth_port_sec_mac_addrs	(Optional) Displays the secured MAC addresses
<i>if_index</i>	(Optional) Interface index
<i>vlan_id</i>	(Optional) vlan id
<i>mac_addr</i>	(Optional) mac address
<i>type</i>	(Optional) static/sticky/dynamic MAC address
<i>remain_age</i>	(Optional) Remaining age
<i>remote_learnt</i>	(Optional) Remotely learnt
<i>remote_aged</i>	(Optional) Remotely Aged Out
<i>num_elems</i>	(Optional) Number of Elements
<i>cmd_addr_index</i>	(Optional) Index for the interface address
<i>total_addr</i>	(Optional) Total number of secured MAC addresses
<i>max_sys_limit</i>	(Optional) Maximum allowed MACs excluding one per port

### Command Mode

- /exec

# show port-security detail interface

```
show port-security detail interface [ __readonly__ { TABLE_eth_port_sec_intf_detail <if_index>
<port_security> <port_status> <violation_mode> <aging_time> <aging_type> <max_mac_addr>
<total_sec_addrs> <trap_count> <addr_aging_enable> <secure_last_mac_addr> <sticky_enable>
<secure_last_mac_addr_vlan_id> } ]
```

## Syntax Description

port-security	Show secure port information
detail	Show detailed information about secure interface
interface	Show secure interface
TABLE_eth_port_sec_intf_detail	(Optional) Displays the secured interface details
__readonly__	(Optional)
if_index	(Optional) Interface index
port_security	(Optional) Port Security is Enabled/Disabled
port_status	(Optional) Secure Up/Down
violation_mode	(Optional) Shutdown/Restrict/Protect
aging_time	(Optional) Aging time in minutes
aging_type	(Optional) Absolute/Inactivity
max_mac_addr	(Optional) Maximum number of MAC addresses that can be secured
total_sec_addrs	(Optional) Total number of secured MAC addresses
trap_count	(Optional) Trap Count
addr_aging_enable	(Optional) Specifies whether address aging is enabled
secure_last_mac_addr	(Optional) Secured last mac address
sticky_enable	(Optional) Specifies sticky feature is enabled on the port
secure_last_mac_addr_vlan_id	(Optional) Indicates the VLAN where the last MAC address seen on this interface

## Command Mode

- /exec

# show port-security interface

```
show port-security interface <interface-id> [ __readonly__ <config_port_security> <oper_port_security>
<port_status> <violation_mode> <aging_time> <aging_type> <max_mac_addr> <total_sec_addrs>
<conf_num_addrs> <num_sticky_addrs> <trap_count> ]
```

## Syntax Description

<i>port-security</i>	Show secure port information
<i>interface</i>	Show secure interface
<i>interface-id</i>	ethernet
<i>__readonly__</i>	(Optional)
<i>config_port_security</i>	(Optional) Port Security configuration is Enabled/Disabled
<i>oper_port_security</i>	(Optional) Port Security is Operationally Enabled/Disabled
<i>port_status</i>	(Optional) Secure Up/Down
<i>violation_mode</i>	(Optional) Shutdown/Restrict/Protect
<i>aging_time</i>	(Optional) Aging time in minutes
<i>aging_type</i>	(Optional) Absolute/Inactivity
<i>max_mac_addr</i>	(Optional) Configured Maximum
<i>total_sec_addrs</i>	(Optional) Total number of secured MAC addresses
<i>conf_num_addrs</i>	(Optional) Number of configured MAC addresses
<i>num_sticky_addrs</i>	(Optional) Number of sticky MAC addresses
<i>trap_count</i>	(Optional) Trap Count

## Command Mode

- /exec

## show port-security multivlan address

show port-security multivlan address [ \_\_readonly\_\_ { TABLE\_eth\_port\_sec\_multi\_vlan <if\_index> <vlan\_id> <max\_sec\_mac\_addr\_count> <cur\_sec\_mac\_addr\_count> } ]

### Syntax Description

port-security	Show secure port information
address	Show secure address
multivlan	Show port security information for a particular vlan in a multivlan port
__readonly__	(Optional)
TABLE_eth_port_sec_multi_vlan	(Optional) Displays the secured MAC addresses
if_index	(Optional) Interface index
vlan_id	(Optional) vlan id
max_sec_mac_addr_count	(Optional) The maximum number of MAC addresses to be secured in the vlan
cur_sec_mac_addr_count	(Optional) Current number of MAC addresses secured in the VLAN

### Command Mode

- /exec

# show port-security secure address

show port-security secure address [ \_\_readonly\_\_ { TABLE\_eth\_port\_sec\_if\_vlan\_secure\_mac\_addr <if\_index> <mac\_addr> <vlan\_id> <mac\_addr\_type> <remain\_age> } ]

## Syntax Description

port-security	Show secure port information
secure	Show detail information about secure address
address	Show secure address
__readonly__	(Optional)
TABLE_eth_port_sec_if_vlan_secure_mac_addr	(Optional) Displays the secured MAC addresses
if_index	(Optional) Interface index
mac_addr	(Optional) mac address
vlan_id	(Optional) vlan id
mac_addr_type	(Optional) static/sticky/ MAC address
remain_age	(Optional) Remaining age

## Command Mode

- /exec

# show port-security state

show port-security state [ \_\_readonly\_\_ <status> ]

## Syntax Description

port-security	Port security related command
state	port security state
__readonly__	(Optional)
<i>status</i>	(Optional) show port-security

## Command Mode

- /exec

# show port-security traps enable

show port-security traps enable [ \_\_readonly\_\_ { <snmp\_traps\_enable> } ]

## Syntax Description

port-security	Show secure port information
traps	Enable SNMP traps
enable	enable
__readonly__	(Optional)
<i>snmp_traps_enable</i>	(Optional) SNMP traps enable/disable

## Command Mode

- /exec

# show privilege

show privilege

## Syntax Description

show	Show running system information
privilege	Display privilege information

## Command Mode

- /exec

# show processes

```
show processes [ __readonly__ { [ TABLE_processes <pid> <state> <pc> <start_cnt> <tty> <p_type>
<process> ] } ]
```

## Syntax Description

show	Show running system information
processes	Show processes
__readonly__	(Optional)
TABLE_processes	(Optional) all process information
<i>pid</i>	(Optional) process id
<i>state</i>	(Optional) process state
<i>pc</i>	(Optional) pc register
<i>start_cnt</i>	(Optional) TBD
<i>tty</i>	(Optional) TBD
<i>p_type</i>	(Optional) process type
<i>process</i>	(Optional) process name

## Command Mode

- /exec

# show processes cpu

```
show processes cpu [ sort ] [ __readonly__ { [ TABLE_process_cpu <pid> <runtime> <invoked> <usecs>
<onesecond> <process> ] [ <user_percent> ] [ <kernel_percent> ] [ <idle_percent> ] } ]
```

## Syntax Description

show	Show running system information
processes	Show processes
cpu	Show processes CPU Info
sort	(Optional) Show processes CPU Info (Sorted by Cpu Util with time base)
__readonly__	(Optional)
TABLE_process_cpu	(Optional) all process memory
<i>pid</i>	(Optional) process id
<i>runtime</i>	(Optional) Runtime
<i>invoked</i>	(Optional) Invoked
<i>usecs</i>	(Optional) usecs
<i>onesecond</i>	(Optional) fivesec
<i>process</i>	(Optional) name of the process
<i>user_percent</i>	(Optional) user
<i>kernel_percent</i>	(Optional) kernel
<i>idle_percent</i>	(Optional) idle

## Command Mode

- /exec

# show processes cpu history

show processes cpu history

## Syntax Description

show	Show running system information
processes	Show processes
cpu	Show processes CPU Info
history	Show processes CPU Util History

## Command Mode

- /exec

# show processes cpu module

```
show processes cpu module <i0> [ __readonly__ { [ TABLE_process_cpu <pid> <runtime> <invoked>
<usecs> <onesecond> <process> ] [ <user_percent> ] [ <kernel_percent> ] [ <idle_percent> ] } ]
```

## Syntax Description

show	Show running system information
processes	Show processes
cpu	Show processes CPU Info
module	processes CPU Info
<i>i0</i>	module number
<i>__readonly__</i>	(Optional)
<i>TABLE_process_cpu</i>	(Optional) all process memory
<i>pid</i>	(Optional) process id
<i>runtime</i>	(Optional) Runtime
<i>invoked</i>	(Optional) Invoked
<i>usecs</i>	(Optional) usecs
<i>onesecond</i>	(Optional) onesecond
<i>process</i>	(Optional) name of the process
<i>user_percent</i>	(Optional) user
<i>kernel_percent</i>	(Optional) kernel
<i>idle_percent</i>	(Optional) idle

## Command Mode

- /exec

# show processes log

```
show processes log [ __readonly__ { [ TABLE_processes_log <vdc> <process> <pid> <normal_exit> <stack>  
<core> <create_time> ] } ]
```

## Syntax Description

<i>show</i>	Show running system information
<i>processes</i>	Show processes
<i>log</i>	Show information about process logs
<i>__readonly__</i>	(Optional)
<i>TABLE_processes_log</i>	(Optional) all processes log
<i>vdc</i>	(Optional) vdc
<i>process</i>	(Optional) vdc process name
<i>pid</i>	(Optional) pid
<i>normal_exit</i>	(Optional) process exit
<i>stack</i>	(Optional) stack
<i>core</i>	(Optional) core
<i>create_time</i>	(Optional) log create time

## Command Mode

- /exec

# show processes log details

show processes log details [ \_\_readonly\_\_ { line\_in\_log\_detail <line\_in\_file> } ]

## Syntax Description

show	Show running system information
processes	Show processes
log	Show information about process logs
details	Show detail of all logs with stack
__readonly__	(Optional)
line_in_log_detail	(Optional)
<i>line_in_file</i>	(Optional) each line

## Command Mode

- /exec

# show processes log pid

show processes log pid <i0> [ \_\_readonly\_\_ { TABLE\_line\_in\_log\_pid <line\_in\_file> } ]

## Syntax Description

show	Show running system information
processes	Show processes
log	Show information about process logs
pid	Show detail log info about a specific process
<i>i0</i>	pid of the process
__readonly__	(Optional)
TABLE_line_in_log_pid	(Optional)
<i>line_in_file</i>	(Optional) each line

## Command Mode

- /exec

# show processes log vdc-all

```
show processes log vdc-all [ __readonly__ { [ TABLE_processes_log_vdc_all <vdc> <process> <pid>
<normal_exit> <stack> <core> <create_time> ] } ]
```

## Syntax Description

TABLE_processes_log_vdc_all	(Optional) all processes log vdc all
show	Show running system information
processes	Show processes
log	Show information about process logs
vdc-all	Show information about process logs in all vdc's
__readonly__	(Optional)
<i>vdc</i>	(Optional) vdc process name
<i>process</i>	(Optional) vdc process name
<i>pid</i>	(Optional) process id
<i>normal_exit</i>	(Optional) process exit
<i>stack</i>	(Optional) stack
<i>core</i>	(Optional) core
<i>create_time</i>	(Optional) log create time

## Command Mode

- /exec

# show processes memory

```
show processes memory [ __readonly__ { TABLE_process_memory <mem_pid> <mem_alloc> <mem_limit>  
<mem_used> <stack_base_ptr> <process> } ]
```

## Syntax Description

show	Show running system information
processes	Show processes
memory	Show processes Memory Info
__readonly__	(Optional)
TABLE_process_memory	(Optional) all process memory
<i>mem_pid</i>	(Optional) process id
<i>mem_alloc</i>	(Optional) allocated memory
<i>mem_limit</i>	(Optional) memory limit
<i>mem_used</i>	(Optional) memory used
<i>stack_base_ptr</i>	(Optional) stack and base pointer
<i>process</i>	(Optional) name of the process

## Command Mode

- /exec

# show processes memory clis

show processes memory clis [ shared | private ]

## Syntax Description

show	Show running system information
processes	Display process information
memory	Display memory information
clis	
shared	(Optional) Display CLIS shared memory information
private	(Optional) Display CLIS private memory information

## Command Mode

- /exec

## show processes memory shared

```
show processes memory shared [ detail | dynamic ] [ __readonly__ TABLE_process_tag [ <process-tag-out>
] [ <process-memory-share-dynamic-component-str> ] [ <process-memory-share-dynamic-shared-memory-str>
] [ <process-memory-share-dynamic-current-size-str> ] [ <process-memory-share-dynamic-max-size-str> ]
[ <process-memory-share-dynamic-used-str> ] [ <process-memory-share-component-str> ] [
<process-memory-share-shared-memory-str> ] [ <process-memory-share-size-str> ] [
<process-memory-share-used-str> ] [ <process-memory-share-available-str> ] [ <process-memory-share-ref-str>
] [ <process-memory-share-byte-set-address-str> ] [ <process-memory-share-byte-set-count-str> ] [
<process-memory-share-address-str> ] [ <process-memory-share-kbytes-1-str> ] [
<process-memory-share-kbytes-2-str> ] [ <process-memory-share-kbytes-3-str> ] [
<process-memory-share-count-str> ] [ { TABLE_SMMITEM <process-memory-share-smr-name> } ] [ {
TABLE_SHOWPROC <process-memory-share-table-showproc-key> [ { TABLE_SHOWONEDYNAMIC
[ <process-memory-share-component> ] [ <process-memory-share-shared-memory> ] [
<process-memory-share-current-size> ] [ <process-memory-share-max-size> ] [ <process-memory-share-used>
] } ] [ { TABLE_ONEITEM [ <process-memory-share-proc-smr-name> ] [ <process-memory-share-smr-addr>
] [ <process-memory-share-smr-size> ] [ <process-memory-share-smr-star-char> ] [
<process-memory-share-smr-empty-char> ] [ <process-memory-share-smr-used> ] [
<process-memory-share-smr-avail> ] [ <process-memory-share-smr-ref-count> ] [
<process-memory-share-dynamic-smr-name> ] } ] [ { TABLE_ONEITEMDYNAMIC [
<process-memory-share-dynamic-smr-addr> ] [ <process-memory-share-dynamic-smr-size> ] [
<process-memory-share-dynamic-plus-char> ] [ <process-memory-share-max-mem-size-str> ] [
<process-memory-share-dynamic-smr-used> ] [ <process-memory-share-dynamic-smr-avail> ] [
<process-memory-share-dynamic-smr-ref-count> ] [ <process-memory-share-region-smr-name> ] } } ] [
<process-memory-share-total-shm-size> ] [ <process-memory-share-total-shm-used> ] [
<process-memory-share-total-shm-avail> ] ]
```

### Syntax Description

show	Show running system information
processes	Display process information
memory	Display memory information
shared	Display shared memory info
detail	(Optional) Display shared memory in bytes instead of default kbytes
dynamic	(Optional) Display details of dynamic shared memory segments
__readonly__	(Optional)
TABLE_process_tag	(Optional)
<i>process-tag-out</i>	(Optional)
<i>process-memory-share-dynamic-component-str</i>	(Optional)
<i>process-memory-share-dynamic-shared-memory-str</i>	(Optional)
<i>process-memory-share-dynamic-current-size-str</i>	(Optional)

<i>process-memory-share-dynamic-max-size-str</i>	(Optional)
<i>process-memory-share-dynamic-used-str</i>	(Optional)
<i>process-memory-share-component-str</i>	(Optional)
<i>process-memory-share-shared-memory-str</i>	(Optional)
<i>process-memory-share-size-str</i>	(Optional)
<i>process-memory-share-used-str</i>	(Optional)
<i>process-memory-share-available-str</i>	(Optional)
<i>process-memory-share-ref-str</i>	(Optional)
<i>process-memory-share-byte-set-address-str</i>	(Optional)
<i>process-memory-share-byte-set-count-str</i>	(Optional)
<i>process-memory-share-address-str</i>	(Optional)
<i>process-memory-share-kbytes-1-str</i>	(Optional)
<i>process-memory-share-kbytes-2-str</i>	(Optional)
<i>process-memory-share-kbytes-3-str</i>	(Optional)
<i>process-memory-share-count-str</i>	(Optional)
TABLE_SMMITEM	(Optional)
<i>process-memory-share-smr-name</i>	(Optional)
TABLE_SHOWPROC	(Optional)
<i>process-memory-share-table-showproc-key</i>	(Optional)
TABLE_SHOWONEDYNAMIC	(Optional)
<i>process-memory-share-component</i>	(Optional)
<i>process-memory-share-shared-memory</i>	(Optional)
<i>process-memory-share-current-size</i>	(Optional)
<i>process-memory-share-max-size</i>	(Optional)
<i>process-memory-share-used</i>	(Optional)
TABLE_ONEITEM	(Optional)
<i>process-memory-share-proc-smr-name</i>	(Optional)
<i>process-memory-share-smr-addr</i>	(Optional)
<i>process-memory-share-smr-size</i>	(Optional)

<i>process-memory-share-smr-star-char</i>	(Optional)
<i>process-memory-share-smr-empty-char</i>	(Optional)
<i>process-memory-share-smr-used</i>	(Optional)
<i>process-memory-share-smr-avail</i>	(Optional)
<i>process-memory-share-smr-ref-count</i>	(Optional)
TABLE_ONEITEMDYNAMIC	(Optional)
<i>process-memory-share-dynamic-smr-name</i>	(Optional)
<i>process-memory-share-dynamic-smr-addr</i>	(Optional)
<i>process-memory-share-dynamic-smr-size</i>	(Optional)
<i>process-memory-share-dynamic-plus-char</i>	(Optional)
<i>process-memory-share-max-mem-size-str</i>	(Optional)
<i>process-memory-share-dynamic-smr-used</i>	(Optional)
<i>process-memory-share-dynamic-smr-avail</i>	(Optional)
<i>process-memory-share-dynamic-smr-ref-count</i>	(Optional)
<i>process-memory-share-region-smr-name</i>	(Optional)
<i>process-memory-share-total-shm-size</i>	(Optional)
<i>process-memory-share-total-shm-used</i>	(Optional)
<i>process-memory-share-total-shm-avail</i>	(Optional)

**Command Mode**

- /exec

# show processes vdc

show processes vdc <e-vdc2>

## Syntax Description

show	Show running system information
processes	Show processes
vdc	Show processes in vdc
<i>e-vdc2</i>	Enter Virtual Device Context <vdc-id>

## Command Mode

- /exec

# show processes vdc cpu

show processes vdc <e-vdc2> cpu

## Syntax Description

show	Show running system information
processes	Show processes
vdc	Show processes in vdc
<i>e-vdc2</i>	Enter Virtual Device Context <vdc-id>
cpu	Show processes CPU Info

## Command Mode

- /exec

# show processes vdc log

show processes vdc <e-vdc2> log

## Syntax Description

show	Show running system information
processes	Show processes
vdc	Show processes in vdc
<i>e-vdc2</i>	Enter Virtual Device Context <vdc-id>
log	Show information about process logs

## Command Mode

- /exec

# show processes vdc log details

show processes vdc <e-vdc2> log details

## Syntax Description

show	Show running system information
processes	Show processes
vdc	Show processes in vdc
<i>e-vdc2</i>	Enter Virtual Device Context <vdc-id>
log	Show information about process logs
details	Show detail of all logs with stack

## Command Mode

- /exec

# show processes vdc log pid

show processes vdc <e-vdc2> log pid <i1>

## Syntax Description

show	Show running system information
processes	Show processes
vdc	Show processes in vdc
<i>e-vdc2</i>	Enter Virtual Device Context <vdc-id>
log	Show information about process logs
pid	Show detail log info about a specific process
<i>i1</i>	pid of the process

## Command Mode

- /exec

# show processes vdc memory

```
show processes vdc <e-vdc2> memory [ __readonly__ { [ TABLE_process_memory <mem_pid> <mem_alloc>
<mem_limit> <mem_used> <stack_base_ptr> <process> ] [ <sum_mem_malloced> ] } ]
```

## Syntax Description

show	Show running system information
processes	Show processes
vdc	Show processes in vdc
<i>e-vdc2</i>	Enter Virtual Device Context <vdc-id>
memory	Show processes Memory Info
<i>__readonly__</i>	(Optional)
TABLE_process_memory	(Optional) all process memory
<i>mem_pid</i>	(Optional) process id
<i>mem_alloc</i>	(Optional) allocated memory
<i>mem_limit</i>	(Optional) memory limit
<i>mem_used</i>	(Optional) memory used
<i>stack_base_ptr</i>	(Optional) stack and base pointer
<i>process</i>	(Optional) name of the process

## Command Mode

- /exec

# show processes version

show processes { version | threads } [ <comp-string> ] [ \_\_readonly\_\_ TABLE\_component <component-name> <version> <buildinfo> <sourceversion> ]

## Syntax Description

show	Show running system information
processes	Display process information
version	Display system release information
threads	Threads Info
<i>comp-string</i>	(Optional) Component name for detailed information
<i>__readonly__</i>	(Optional)
TABLE_component	(Optional)
<i>component-name</i>	(Optional)
<i>version</i>	(Optional)
<i>buildinfo</i>	(Optional)
<i>sourceversion</i>	(Optional)

## Command Mode

- /exec

# show pss debug

show pss debug

## Syntax Description

show	Show running system information
pss	display pss information
debug	display pss debug configuration

## Command Mode

- /exec

# show ptp brief

show ptp brief [ \_\_readonly\_\_ { TABLE\_ptp <ptp-ifindex> <state> } <ptp-end> ]

## Syntax Description

ptp	Precision Time Protocol (IEEE 1588) Subsystem
brief	port states in brief
__readonly__	(Optional) Read Only
TABLE_ptp	(Optional) ptp table
<i>ptp-ifindex</i>	(Optional) ptp ifindex
<i>ptp-end</i>	(Optional) End of table
<i>state</i>	(Optional) BMC state

## Command Mode

- /exec

# show ptp clock

```
show ptp clock [ __readonly__ <clock-id> <domain-id> <num-ports> <priority1> <priority2> <class>
<accuracy> <scaled-log-variance> <offset-from-master> <mean-path-delay-to-master> <steps-removed>
<device-type> <encap> <two-step-clock> <src-ip> <slave-only> ]
```

## Syntax Description

<b>ptp</b>	Precision Time Protocol (IEEE 1588) Subsystem
<b>clock</b>	Set local clock attributes
<b>__readonly__</b>	(Optional) Read only
<i>domain-id</i>	(Optional) Domain Id
<i>clock-id</i>	(Optional) Clock Id
<i>priority1</i>	(Optional) Priority 1
<i>priority2</i>	(Optional) Priority 2
<i>num-ports</i>	(Optional) Number of PTP ports
<i>class</i>	(Optional) Class
<i>accuracy</i>	(Optional) Clock accuracy
<i>scaled-log-variance</i>	(Optional) scaled log variance
<i>offset-from-master</i>	(Optional) Offset from master
<i>mean-path-delay-to-master</i>	(Optional) mean path delay to master
<i>steps-removed</i>	(Optional) Steps removed
<i>device-type</i>	(Optional) Device Type
<i>encap</i>	(Optional) Encapsulation
<i>src-ip</i>	(Optional) IPv4 address (A.B.C.D) of source (in layer-3 encapsulation)
<i>two-step-clock</i>	(Optional) Two-step clock operation
<i>slave-only</i>	(Optional) Slave-only mode

## Command Mode

- /exec

# show ptp clock foreign-masters record

```
show ptp clock foreign-masters record [ interface <if0> ] [ __readonly__ { TABLE_ptp <interface-name>
<clock-id> <priority1> <priority2> <class> <accuracy> <scaled-log-variance> <steps-removed> <is-gm> }
<ptp-end> ]
```

## Syntax Description

<i>ptp</i>	Precision Time Protocol (IEEE 1588) Subsystem
<i>clock</i>	Set local clock attributes
<i>foreign-masters</i>	foreign-masters
<i>record</i>	record
<i>if0</i>	(Optional)
<i>__readonly__</i>	(Optional) Read only
<i>TABLE_ptp</i>	(Optional) ptp table
<i>interface-name</i>	(Optional) interface name
<i>clock-id</i>	(Optional) Clock Id
<i>priority1</i>	(Optional) Priority 1
<i>priority2</i>	(Optional) Priority 2
<i>class</i>	(Optional) Class
<i>accuracy</i>	(Optional) Clock accuracy
<i>scaled-log-variance</i>	(Optional) scaled log variance
<i>steps-removed</i>	(Optional) Steps removed
<i>is-gm</i>	(Optional) Is Grandmaster
<i>ptp-end</i>	(Optional) End of table

## Command Mode

- /exec

## show ptp corrections

```
show ptp corrections [ __readonly__ { TABLE_ptp <intf-name> <sup-time> <correction-val>  
<mean-path-delay> } <ptp-end> ]
```

### Syntax Description

<code>ptp</code>	Precision Time Protocol (IEEE 1588) Subsystem
<code>__readonly__</code>	(Optional) Read Only
<code>corrections</code>	Display last few corrections
<code>TABLE_ptp</code>	(Optional) ptp table
<code>intf-name</code>	(Optional) interface name
<code>sup-time</code>	(Optional) sup time
<code>correction-val</code>	(Optional) correction value
<code>ptp-end</code>	(Optional) End of table

### Command Mode

- /exec

# show ptp counters interface

```
show ptp counters { interface <if0> | all } [ { detail | ipv4 <ip> } ] [ __readonly__ [ TABLE_ptp
<interface_name> [ <accepted-ip> ] <tx-announce-pkts> <rx-announce-pkts> <tx-sync-pkts> <rx-sync-pkts>
<tx-follow-up-pkts> <rx-follow-up-pkts> <tx-delay-req-pkts> <rx-delay-req-pkts> <tx-delay-resp-pkts>
<rx-delay-resp-pkts> <tx-pdelay-req-pkts> <rx-pdelay-req-pkts> <tx-pdelay-resp-pkts> <rx-pdelay-resp-pkts>
<tx-pdelay-follow-up-pkts> <rx-pdelay-follow-up-pkts> <tx-mgmt-pkts> <rx-mgmt-pkts> ] <ptp-end> ]
```

## Syntax Description

ptp	Precision Time Protocol (IEEE 1588) Subsystem
__readonly__	(Optional) Read Only
counters	Display PTP packet counters
interface	Enter the port interface
all	Displays all information
<i>if0</i>	
detail	(Optional) Show detail
ipv4	(Optional) IP address for the stat info
<i>ip</i>	(Optional) IPv4 address (A.B.C.D)
TABLE_ptp	(Optional) ptp table
<i>interface_name</i>	(Optional) interface name
<i>accepted-ip</i>	(Optional) Accepted IP in unicast mode
<i>ptp-end</i>	(Optional) End of table

## Command Mode

- /exec

# show ptp packet-trace

```
show ptp packet-trace [ __readonly__ <ptp-header> { TABLE_ptp <intf-name> <sup-time> <pkt_dir>
<pkt_type> <pkt_info> } <ptp-end> ]
```

## Syntax Description

<i>ptp</i>	Precision Time Protocol (IEEE 1588) Subsystem
<i>__readonly__</i>	(Optional) Read Only
<i>packet-trace</i>	Display last few pkt traces
<i>TABLE_ptp</i>	(Optional) ptp table
<i>intf-name</i>	(Optional) interface name
<i>sup-time</i>	(Optional) sup time
<i>pkt_dir</i>	(Optional) pkt_dir
<i>pkt_type</i>	(Optional) pkt_type
<i>pkt_info</i>	(Optional) pkt_info
<i>ptp-header</i>	(Optional) Start of table
<i>ptp-end</i>	(Optional) End of table

## Command Mode

- /exec

# show ptp parent

```
show ptp parent [ __readonly__ <clock-id> <port-num> <obs-parent-offset> <obs-parent-clk-phase-chg>
<parent-ip> <gm-id> <gm-class> <gm-accuracy> <gm-scaled-log-variance> <gm-priority1> <gm-priority2>
]
```

## Syntax Description

ptp	Precision Time Protocol (IEEE 1588) Subsystem
parent	parent clock
__readonly__	(Optional) Read only
<i>clock-id</i>	(Optional) Clock Id
<i>port-num</i>	(Optional) Port ID: port number
<i>obs-parent-offset</i>	(Optional) observed parent offset
<i>obs-parent-clk-phase-chg</i>	(Optional) observed parent clock phase change
<i>parent-ip</i>	(Optional) Parent clock IP
<i>gm-id</i>	(Optional) Grandmaster Id
<i>gm-class</i>	(Optional) Class
<i>gm-accuracy</i>	(Optional) Clock accuracy
<i>gm-scaled-log-variance</i>	(Optional) scaled log variance
<i>gm-priority1</i>	(Optional) GM Priority 1
<i>gm-priority2</i>	(Optional) GM Priority 2

## Command Mode

- /exec

# show ptp port interface

```
show ptp port interface <if0> [ __readonly__ <intf-name> <clock-id> <port-num> <version> <transport-mode>
<accepted-ip> <state> <vlan> <delay-req-intv> <ann-rx-tout> <peer-mean-path-delay> <ann-intv> <sync-intv>
<delay-mechanism> <peer-delay-req-intv> ]
```

## Syntax Description

<i>ptp</i>	Precision Time Protocol (IEEE 1588) Subsystem
<i>port</i>	port
<i>interface</i>	Enter the port interface
<i>if0</i>	
<i>__readonly__</i>	(Optional) Read only
<i>intf-name</i>	(Optional) interface name
<i>clock-id</i>	(Optional) Port ID: Clock Id
<i>port-num</i>	(Optional) Port ID: port number
<i>version</i>	(Optional) version
<i>transport-mode</i>	(Optional) Transport mode
<i>accepted-ip</i>	(Optional) Accepted IPs
<i>state</i>	(Optional) BMC state
<i>vlan</i>	(Optional) Vlan
<i>delay-req-intv</i>	(Optional) log mean delay req interval
<i>ann-rx-tout</i>	(Optional) announce receipt timeout
<i>peer-mean-path-delay</i>	(Optional) peer mean path delay
<i>ann-intv</i>	(Optional) announce interval
<i>sync-intv</i>	(Optional) sync interval
<i>delay-mechanism</i>	(Optional) delay mechanism
<i>peer-delay-req-intv</i>	(Optional) peer delay req interval

## Command Mode

- /exec

## show ptp time-property

show ptp time-property [ \_\_readonly\_\_ <current-utc-offset-valid> <current-utc-offset> <leap-59> <leap-61> <time-traceable> <freq-traceable> <ptp-timescale> <time-source> ]

### Syntax Description

ptp	Precision Time Protocol (IEEE 1588) Subsystem
time-property	time property
__readonly__	(Optional) Read only
<i>current-utc-offset-valid</i>	(Optional) current_utc_offset_valid
<i>current-utc-offset</i>	(Optional) current_utc_offset
<i>leap-59</i>	(Optional) leap-59
<i>leap-61</i>	(Optional) leap-61
<i>time-traceable</i>	(Optional) time-traceable
<i>freq-traceable</i>	(Optional) freq-traceable
<i>ptp-timescale</i>	(Optional) ptp-timescale
<i>time-source</i>	(Optional) time-source

### Command Mode

- /exec

# show pulse

show pulse { ms | us | transmit | log-stats } { all | sup sap <sapno> }

## Syntax Description

show	Show running system information
pulse	Pulse Utility
ms	In Milli Second Time Format
us	In Micro Second Time Format
transmit	MTS Send Statistics
log-stats	Remote Logging Statistics
all	Scan Pulse of All Subscribers
sup	Supervisor Application
sap	Staic MTS SAP
<i>sapno</i>	MTS SAP Number of an Application

## Command Mode

- /exec

show pulse