I Commands

ip access-list (session)

To create an IPv4 access control list (ACL) within a configuration session, use the ip access-list command. To remove an ACL from a configuration session, use the no form of this command.

ip access-list ACL-name
no ip access-list ACL-name

Syntax Description

ACL-name	Name of the IPv4 ACL. The name can be up to 64 alphanumeric characters and cannot contain a space or quotation mark.

Command Default

No IPv4 ACLs are defined by default.

Command Modes

Global session configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Examples

This example shows how to create an IPv4 ACL for a configuration session:

```
switch# configure session MySession1
switch(config-s)# ip access-list myACL
switch(config-s-acl)#
```

Related Commands

Command	Description
configure session	Creates a configuration session.
deny	Configures a deny rule in an IPv4 ACL.
permit	Configures a permit rule in an IPv4 ACL.
show configuration session	Displays the contents of the session.

ip dns source-interface

To configure the source interface for the Domain Name Server (DNS) domain lookup, use the ip dns source-interface command. To revert to the default settings, use the no form of this command.

ip dns source-interface ethernet slot /[QSFP-module/] port | loopback intf-num [vrf vrf-name | default | management]
no ip dns source-interface ethernet slot /[QSFP-module/] port | loopback intf-num [vrf vrf-name | default | management]

Syntax Description

ethernet slot/[QSFP-module/]port	Specifies the Ethernet interface to use as the destination SPAN port. The slot number is from 1 to 255. The QSFP-module number is from 1 to 199. The port number is from 1 to 128.
loopback intf-num	Specifies the loopback interface to use as the source interface. The range of values is from 0 to 1023.
vrf	(Optional) Specifies the virtual routing and forwarding (VRF) instance.
vrf-name	(Optional) VRF name. The name is case sensitive and can be a maximum of 32 characters.
default	(Optional) Specifies the default VRF.
management	(Optional) Specifies the management VRF.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to configure an Ethernet interface as the source interface for a DNS lookup:

```
switch# configure terminal
switch(config)# ip dns source-interface ethernet 1/5
switch(config)#
```

Related Commands

Command	Description
ip domain-lookup	Enables the DNS lookup feature.
show ip dns source-interface	Displays information about the DNS source interfaces.

ip domain-list

To configure the IP domain list, use the ip domain-list command. To disable the IP domain list, use the no form of the command.

ip domain-list domain-name [use-vrf name]
no ip domain-list domain-name [use-vrf name]

Syntax Description

domain-list	Specifies the domain name for the IP domain list. The name can be any case-sensitive, alphanumeric string up to 63 characters.
use-vrf name	(Optional) Specifies the virtual routing and forwarding (VRF) to use to resolve the domain name for the IP domain list. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default

None

Command Modes

Global configuration mode

VRF context configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines

Use the ip domain-list command to configure additional domain names for the device. Use the vrf context command to enter the VRF context mode to configure additional domain names for a particular VRF.

Examples

This example shows how to configure the IP domain list for the default VRF:

```
switch# config terminal
switch(config)# ip domain-list Mysite.com
```

This example shows how to configure the IP domain list for the management VRF:

```
switch# config terminal
switch(config)# vrf context management
switch(config-vrf)# ip domain-list Mysite.com
```

This example shows how to configure the IP domain list for the default VRF to use the management VRF as a backup if the domain name cannot be resolved through the default VRF:

```
switch# config terminal
switch(config)# vrf context management
switch(config-vrf)# exit
switch(config)# ip domain-name Mysite.com use-vrf management
switch(config)# ip name-server 192.0.2.1
switch(config)# ip domain-list Mysite2.com
```

Related Commands

Command	Description
show hosts	Displays information about the IP domain name configuration.

ip domain-lookup

To enable the Domain Name Server (DNS) lookup feature, use the ip domain-lookup command. Use the no form of this command to disable this feature.

ip   domain-lookup
no   ip   domain-lookup

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines

Use the ip domain-lookup command to enable DNS.

Examples

This example shows how to configure the DNS server lookup feature:

```
switch# config terminal
switch(config)# vrf context management
switch(config-vrf)# exit
switch(config)# ip domain-name Mysite.com use-vrf management
switch(config)# ip name-server 192.0.2.1
switch(config)# ip domain-lookup
switch(config)#
```

Related Commands

Command	Description
show hosts	Displays information about the DNS.

ip domain-name

To configure a domain name, use the ip domain-name command. To delete a domain name, use the no form of the command.

ip domain-name domain-name [use-vrf name]
no ip domain-name domain-name [use-vrf name]

Syntax Description

domain-name	Domain name. The name can be any case-sensitive, alphanumeric string up to 63 characters.
use-vrf name	(Optional) Specifies the virtual routing and forwarding (VRF) to use to resolve the domain name. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default

None

Command Modes

Global configuration mode

VRF context configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines

Use the ip domain-name command to configure the domain name for the device. Use the vrf context command to enter the VRF context mode to configure the domain monastery for a particular VRF.

Examples

This example shows how to configure the IP domain name for the default VRF:

```
switch# config terminal
switch(config)# ip domain-name Mysite.com
switch(config)#
```

This example shows how to configure the IP domain name for the management VRF:

```
switch# config terminal
switch(config)# vrf context management
switch(config-vrf)# ip domain-name Mysite.com
switch(config-vrf)#
```

This example shows how to configure the IP domain name for the default VRF to use the management VRF as a backup if the domain name cannot be resolved through the default VRF:

```
switch# config terminal
switch(config)# vrf context management
switch(config-vrf)# exit
switch(config)# ip domain-name Mysite.com use-vrf management
```

Related Commands

Command	Description
ip domain-list	Configures the IP domain list.

Command	Description
ip domain-lookup	Enables the Domain Name Server (DNS) lookup feature.
show hosts	Displays information about the IP domain name configuration.

ip dscp (ERSPAN)

To configure the differentiated devices code point (DSCP) value of the packets in the Encapsulated Remote Switched Port Analyzer (ERSPAN) traffic, use the ip dscp command. To revert to the default value, use the no form of this command.

ip dscp dscp_value
no ip dscp dscp_value

Syntax Description

dscp_value	DSCP value of the packets in the ERSPAN traffic. The range is from 0 to 63.

Command Default   None

Command Modes   ERSPAN source session configuration mode (config-erspan-src)

SPAN-on-Drop ERSPAN session configuration mode (config-span-on-drop-erspan)

SPAN-on-Latency ERSPAN session configuration mode (config-span-on-latency-erspan)

Command History

Release	Modification
7.0(0)N1(1)	This command was modified. This command was implemented in the following modes: SPAN-on-Drop ERSPAN session configuration mode, and SPAN-on-Latency ERSPAN session configuration mode.
6.0(2)N1(1)	This command was introduced.

Usage Guidelines   This command does not require a license.

Examples   This example shows how to configure the DSCP value of the packets in the ESRSPAN traffic for an ERSPAN source session:

```
switch# configure terminal
switch(config)# monitor session 1 type erspan-source
switch(config-erspan-src)# ip dscp 10
switch(config-erspan-src)#
```

This example shows how to configure the DSCP value of the packets in the ESRSPAN traffic for a SPAN-on-Drop ERSPAN session:

```
switch# configure terminal
switch(config)# monitor session 1 type span-on-dropn-erspan
switch(config-span-on-drop-erspan)# ip dscp 20
switch(config-span-on-drop-erspan)#
```

This example shows how to configure the DSCP value of the packets in the ESRSPAN traffic for a SPAN-on-Latency ERSPAN session:

```
switch# configure terminal
switch(config)# monitor session 1 type span-on-latency-erspan
```

```
switch(config-span-on-latency-erspan)# ip dscp 30
switch(config-span-on-latency-erspan)#
```

Related Commands	Command	Description
	ip prec	Configures the IP precedence value of the ERSPAN traffic.
	ip ttl	Configures the IP time-to-live (TTL) value of the ERSPAN traffic.
	monitor-session	Enters the monitor configuration mode for configuring an ERSPAN or SPAN session for analyzing traffic between ports.

ip host

To define static hostname-to-address mappings in the Domain Name System (DNS) hostname cache, use the ip host command. To remove a hostname-to-address mapping, use the no form of this command.

ip host name address1 [address2 ... address6]
no ip host name address1 [address2 ... address6]

Syntax Description		
name	Hostname. The name can be any case-sensitive, alphanumeric string up to 80 characters.	
address1	IPv4 address in the x.x.x.x format.	
address2 ...address6	(Optional) Up to five additional IPv4 addresses in the x.x.x.x format.	

Command Default None

Command Modes Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines Use the ip host command to add a static hostname to DNS.

Examples This example shows how to configure a static hostname:

```
switch(config)# ip host mycompany.com 192.0.2.1
```

Related Commands

Command	Description
ipv6 host	Configures a static host name in the DNS database.
show hosts	Displays information about the IP domain name configuration.

ip name-server

To configure a name server, use the ip name-server command. To disable this feature, use the no form of the command.

ip name-server ip-address [use-vrf name]
no ip name-server ip-address [use-vrf name]

Syntax Description

ip-address	IP address for the name server.
use-vrf name	(Optional) Specifies the virtual routing and forwarding (VRF) to use to reach the name-server. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default   None

Command Modes   VRF context configuration mode

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines   Use the ip name-server command to configure the name server for the device. Use the vrf context command to enter the VRF context mode to configure the domain names for a particular VRF.

Examples   This example shows how to configure the IP name server for the default VRF:

```
switch# config terminal
switch(config)# vrf context management
switch(config-vrf)# exit
switch(config)# ip domain-name Mysite.com use-vrf management
switch(config)# ip name-server 192.0.2.1
```

This example shows how to configure the IP name server for the management VRF:

```
switch# config terminal
switch(config)# vrf context management
switch(config-vrf)# ip name-server 192.0.2.1
```

This example shows how to configure the IP name server for the default VRF to use the management VRF as a backup if the IP name server cannot be reached through the default VRF:

```
switch# config terminal
switch(config)# vrf context management
switch(config-vrf)# exit
switch(config)# ip domain-name Mysite.com use-vrf management
switch(config)# ip name-server 192.0.2.1 use-vrf management
```

Related Commands

Command	Description
ip domain-list	Defines a list of domains.
ip domain lookup	Enables DNS-based host name-to-address translation.
show hosts	Displays information about the IP domain name configuration.
vrf context	Creates a virtual routing and forwarding (VRF) instance.

ip port access-group (session)

To apply an IPv4 access control list (ACL) to an interface as a port ACL, use the ip port access-group command. To remove an IPv4 ACL from an interface, use the no form of this command.

ip port access-group access-list-name in | out
no ip port access-group access-list-name in | out

Syntax Description

access-list-name	Name of the IPv4 ACL. The name can be up to 64 alphanumeric, case-sensitive characters long.
in	Specifies that the ACL applies to inbound traffic.
out	Specifies that the ACL applies to outbound traffic.

Command Default   None

Command Modes   Session interface configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Examples

This example shows how to apply an IPv4 ACL named ip-acl-01 to the Ethernet interface 1/2 as a port ACL:

```
switch# configure session MySession1

switch(config-s)# interface ethernet 1/2

switch(config-s-if)# ip port access-group ip-acl-01 in

switch(config-s-if)#
```

This example shows how to remove an IPv4 ACL named ip-acl-01 from Ethernet interface 1/2:

```
switch(config-s)# interface ethernet 1/2

switch(config-s-if)# no ip port access-group ip-acl-01 in

switch(config-s-if)#
```

Related Commands

Command	Description
show access-lists	Displays all ACLs.
show configuration session	Displays the contents of the session.

ip ttl (ERSPAN)

To configure the IP time-to-live (TTL) value of the Encapsulated Remote Switched Port Analyzer (ERSPAN) traffic, use the ip ttl command. To revert to the default configuration, use the no form of this command.

ip ttl ttl_value
no ip ttl ttl_value

Syntax Description

| ttl_value | IP TTL value of the ERSPAN traffic. The range is from 1 to 255. |

Command Default

255

Command Modes

ERSPAN source session configuration mode (config-erspan-src)

SPAN-on-Drop ERSPAN session configuration mode (config-span-on-drop-erspan)

SPAN-on-Latency ERSPAN session configuration mode (config-span-on-latency-erspan)

Command History

Release	Modification
7.0(0)N1(1)	This command was modified. This command was implemented in the following modes: SPAN-on-Drop ERSPAN session configuration mode, and SPAN-on-Latency ERSPAN session configuration mode.
6.0(2)N1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to configure the IP TTL value of the ESRSPAN source:

```
switch# configure terminal
switch(config)# monitor session 1 type erspan-source
switch(config-erspan-src)# ip ttl 30
switch(config-erspan-src)#
This example shows how to remove the IP TTL value from the ESRSPAN source:
switch# configure terminal
switch(config)# monitor session 1 type erspan-source
switch(config-erspan-src)# no ip ttl 30
switch(config-erspan-src)#
```

This example shows how to configure the IP TTL value in a SPAN-on-Drop ESRSPAN session:

```
switch# configure terminal
switch(config)# monitor session 1 type span-on-drop-erspan
switch(config-span-on-drop-erspan)# ip ttl 30
switch(config-span-on-drop-erspan)#
```

This example shows how to remove the IP TTL value in a SPAN-on-Latency ESRSPAN session:

```
switch# configure terminal
switch(config)# monitor session 1 type span-on-latency-erspan
```

```
switch(config-span-on-drop-latency)# no ip ttl 30
switch(config-span-on-drop-latency)#
```

Related Commands	Command	Description
	ip dscp	Configures the DSCP value of the packets in the ERSPAN traffic.
	monitor-session	Enters the monitor configuration mode for configuring an ERSPAN or SPAN session for analyzing traffic between ports.