



I Commands

This chapter describes the system management commands that begin with I.

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	<i>ACL-name</i>	Name of the IPv4 ACL. The name can be up to 64 alphanumeric characters and cannot contain a space or quotation mark.
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Command Default	No IPv4 ACLs are defined by default.
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Command Modes	Global session configuration mode
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Command History	Release	Modification
	5.2(1)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 <i>slot</i> [/ <i>QSFP-module</i>]/ <i>port</i>	Specifies the Ethernet interface to use as the source interface. The slot number is from 1 to 255. The <i>QSFP-module</i> number is from 1 to 4. The port number is from 1 to 128.
	Note The <i>QSFP-module</i> number applies only to the QSFP+ Generic Expansion Module (GEM).
loopback <i>intf-num</i>	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.
<i>vrf-name</i>	(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(2)	Support for the QSFP+ GEM was added.
5.2(1)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 <i>name</i>	(Optional) Specifies the virtual routing and forwarding (VRF) to use to resolve the domain 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
	5.2(1)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.
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Command Default	None
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Command Modes	Global configuration mode
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Command History	Release	Modification
	5.2(1)N1(1)	This command was introduced.

Usage Guidelines	Use the ip domain-lookup command to enable DNS.
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Examples	This example shows how to configure the DNS server lookup feature:
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```
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	<i>domain-name</i>	Domain name. The name can be any case-sensitive, alphanumeric string up to 63 characters.
	use-vrf <i>name</i>	(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
	5.2(1)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.
ip domain-lookup	Enables the Domain Name Server (DNS) lookup feature.
show hosts	Displays information about the IP domain name configuration.

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

<i>name</i>	Hostname. The <i>name</i> can be any case-sensitive, alphanumeric string up to 80 characters.
<i>address1</i>	IPv4 address in the x.x.x.x format.
<i>address2</i> ... <i>address6</i>	(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
5.2(1)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
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	<i>ip-address</i>	IP address for the name server.
	use-vrf <i>name</i>	(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
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Command Modes	Global configuration mode VRF context configuration mode
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Command History	Release	Modification
	5.2(1)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.
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Examples	This example shows how to configure the IP name server for the default VRF:
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```
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	<i>access-list-name</i>	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
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Command Modes	Session interface configuration mode
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Command History	Release	Modification
	5.2(1)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.

