



# I Commands

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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*

<b>Syntax Description</b>	<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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<b>Command Default</b>	No IPv4 ACLs are defined by default.
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<b>Command Modes</b>	Global session configuration mode
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<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	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)#
```

<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>configure session</b>	Creates a configuration session.
	<b>deny</b>	Configures a deny rule in an IPv4 ACL.
	<b>permit</b>	Configures a permit rule in an IPv4 ACL.
	<b>show configuration session</b>	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

<b>ethernet</b> <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.  <b>Note</b> The <i>QSFP-module</i> number applies only to the QSFP+ Generic Expansion Module (GEM).
<b>loopback</b> <i>intf-num</i>	Specifies the loopback interface to use as the source interface. The range of values is from 0 to 1023.
<b>vrf</b> <i>vrf-name</i>	(Optional) Specifies the virtual routing and forwarding (VRF) instance. (Optional) VRF name. The name is case sensitive and can be a maximum of 32 characters.
<b>default</b>	(Optional) Specifies the default VRF.
<b>management</b>	(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
	<b>ip domain-lookup</b>	Enables the DNS lookup feature.
	<b>show ip dns source-interface</b>	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

<b>domain-list</b>	Specifies the domain name for the IP domain list. The name can be any case-sensitive, alphanumeric string up to 63 characters.
<b>use-vrf</b> <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.

**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 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
	<b>show hosts</b>	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.
<b>use-vrf</b> <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 name 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**

<b>Command</b>	<b>Description</b>
<b>ip domain-list</b>	Configures the IP domain list.
<b>ip domain-lookup</b>	Enables the Domain Name Server (DNS) lookup feature.
<b>show hosts</b>	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 ...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
<b>show hosts</b>	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.
	<b>use-vrf</b> <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

**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 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
	<b>ip domain-list</b>	Defines a list of domains.
	<b>ip domain lookup</b>	Enables DNS-based host name-to-address translation.
	<b>show hosts</b>	Displays information about the IP domain name configuration.
	<b>vrf context</b>	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.
	<b>in</b>	Specifies that the ACL applies to inbound traffic.
	<b>out</b>	Specifies that the ACL applies to outbound traffic.

**Command Default** None

**Command Modes** Session interface configuration mode

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
	<b>show access-lists</b>	Displays all ACLs.
	<b>show configuration session</b>	Displays the contents of the session.

