

Stack Manager Commands

- debug platform remote-commands, page 2
- debug platform stack-manager, page 3
- reload, page 5
- remote command, page 7
- session, page 9
- show platform stack compatibility configuration, page 10
- show platform stack compatibility feature, page 11
- show platform stack compatibility table, page 13
- show platform stack manager, page 15
- show switch, page 17
- stack-mac persistent timer, page 20
- switch stack port, page 23
- switch priority, page 25
- switch provision, page 26
- switch renumber, page 28
- switch stack port-speed 10, page 30

debug platform remote-commands

To enable debugging of remote commands, use the **debug platform remote-commands** command in privileged EXEC mode. To disable debugging, use the **no** form of this command.

debug platform remote-commands no debug platform remote-commands

Syntax Description This command has no arguments or keywords.

Command Default Debugging is disabled.

Command Modes Privileged EXEC

Command History

Release	Modification
Cisco IOS 15.0(2)EX	This command was introduced.

Usage Guidelines

The undebug platform remote-commands command is the same as the no debug platform remote-commands command.

When you enable debugging on a switch stack, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the **session** *switch-number* privileged EXEC command. Enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* privileged EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Related Commands

Command	Description
remote command	Monitors all or specified stack members.
session	Accesses a specific stack member from the stack master.

OL-32565-01

debug platform stack-manager

To enable debugging of the stack manager software, use the **debug platform stack-manager** command in privileged EXEC mode. To disable debugging, use the **no** form of this command.

debug platform stack-manager {all| rpc| sdp| sim| ssm| tdm| trace} no debug platform stack-manager {all| rpc| sdp| sim| ssm| tdm| trace}

Syntax Description

all	Displays all stack manager debug messages.
rpc	Displays stack manager remote procedure call (RPC) usage debug messages.
sdp	Displays the Stack Discovery Protocol (SDP) debug messages.
sim	Displays the stack information module debug messages.
ssm	Displays the stack state-machine debug messages.
tdm	Displays the stack manager topology discovery use debug messages.
trace	Traces the stack manager entry and exit debug messages.

Command Default

Debugging is disabled.

Command Modes

Privileged EXEC

Command History

Release	Modification
Cisco IOS 15.0(2)EX	This command was introduced.

Usage Guidelines

This command is supported only on stacking-capable switches.

The undebug platform stack-manager command is the same as the no debug platform stack-manager command.

When you enable debugging on a switch stack, it is enabled only on the stack master. To enable debugging on a stack member, you can start a session from the stack master by using the **session** *switch-number* EXEC command. Enter the **debug** command at the command-line prompt of the stack member. You also can use the **remote command** *stack-member-number LINE* EXEC command on the stack master switch to enable debugging on a member switch without first starting a session.

Command	Description
remote command	Monitors all or specified stack members.
session	Accesses a specific stack member from the stack master.

reload

To reload the stack member and to apply a configuration change, use the **reload** command in privileged EXEC mode.

reload [/noverify| /verify] [LINE| at | cancel | in | slot stack-member-number | standby-cpu]

Syntax Description

/noverify	(Optional) Specifies to not verify the file signature before the reload.
/verify	(Optional) Verifies the file signature before the reload.
LINE	(Optional) Reason for the reload.
at	(Optional) Specifies the time in hh:mm for the reload to occur.
cancel	(Optional) Cancels the pending reload.
in	(Optional) Specifies a time interval for reloads to occur.
slot	(Optional) Saves the changes on the specified stack member and then restarts it.
stack-member-number	(Optional) Stack member number on which to save the changes. The range is 1 to 8.
standby-cpu	(Optional) Reloads the standby route processor (RP).

Command Default

Immediately reloads the stack member and puts a configuration change into effect.

Command Modes

Privileged EXEC

Command History

Release	Modification
Cisco IOS 15.0(2)EX	This command was introduced.

Usage Guidelines

If there is more than one switch in the switch stack, and you enter the **reload slot** *stack-member-number* command, you are not prompted to save the configuration.

Examples

This example shows how to reload the switch stack:

Switch# reload

System configuration has been modified. Save? [yes/no]: y

```
Proceed to reload the whole Stack? [confirm] {\bf y}
```

This example shows how to reload a specific stack member:

```
Switch# reload slot 6
Proceed with reload? [confirm] y
```

This example shows how to reload a single-switch switch stack (there is only one member switch):

```
Switch# reload slot 3 System configuration has been modified. Save? [yes/no]: {\bf y} Proceed to reload the whole Stack? [confirm] {\bf y}
```

Command	Description
show switch	Displays information related to the stack member or the switch stack.
switch stack port	Disables or enables the specified stack port on the member.
switch renumber	Changes the stack member number.

remote command

To monitor all or specified stack members, use the remote command privileged EXEC command.

remote command {all| stack-member-number} LINE

Syntax Description

all	Applies to all stack members.
stack-member-number	The stack member. The range is 1 to 8.
LINE	The command to execute.

Command Modes

Privileged EXEC

Command History

Release	Modification
Cisco IOS 15.0(2)EX	This command was introduced.

Usage Guidelines

The commands that you use in the LINE command-to-execute string (such as **debug**, **show**, or **clear**) apply to a specific stack member or to the switch stack.

Examples

This example shows how to execute the **undebug** command on the switch stack:

This example shows how to execute the **debug udld event** command on stack member 5:

```
Switch(config)# remote command 5 undebug all
Switch :5 :
------
UDLD events debugging is on
```

Command	Description
reload	Reloads the stack member and applies a configuration change.
show switch	Displays information related to the stack member or the switch stack.

Command	Description
switch stack port	Disables or enables the specified stack port on the member.
switch renumber	Changes the stack member number.

session

To access a specific stack member use the **session** command in privileged EXEC mode on the stack master.

session stack-member-number

Syntax Description

stack-member-number	Stack member number to access from the stack master. The range is 1 to 8.
---------------------	---

Command Default

None

Command Modes

Privileged EXEC

Command History

Release	Modification
Cisco IOS 15.0(2)EX	This command was introduced.

Usage Guidelines

When you access the member, its member number is appended to the system prompt.

Use the session command from the master to access a member Switch

Use the **session** command with **processor 1** from the master or a standalone switch to access the internal controller. A standalone Switch is always member 1.

Examples

This example shows how to access stack member 3:

Switch# session 3 Switch-3#

Command	Description	
reload	Reloads the stack member and applies a configuration change.	
show switch	Displays information related to the stack member or the switch stack.	
switch stack port	Disables or enables the specified stack port on the member.	
switch renumber	Changes the stack member number.	

show platform stack compatibility configuration

To display switch stack compatibility information, use the **show platform stack compatibility configuration** command in privileged EXEC mode.

show platform stack compatibility configuration {current| failure-log| mismatch [switch switch-number]}

Syntax Description

current	Displays currently configured system level features.	
failure-log	Displays non-baseline feature configuration failure log.	
mismatch	Displays configured non-baseline features that are causing a mismatch.	
switch switch-number	(Optional) Displays configured non-baseline features that are causing a mismatch for the specified switch. The range is 1 to 8.	

Command Default

None

Command Modes

Privileged EXEC

Command History

Release	Modification
Cisco IOS 15.0(2)EX	This command was introduced.

Usage Guidelines

Use this command only when you are working directly with your technical support representative while troubleshooting a problem. Do not use this command unless your technical support representative asks you to do so.

Examples

This example shows how to display switch stack compatibility information:

Switch# show platform stack compatibility configuration current

show platform stack compatibility feature

To display switch stack state machine and message trace feature compatibility information, use the **show** platform stack compatibility feature command in privileged EXEC mode.

show platform stack compatibility feature {all| independent [feature-id feature-id]| interdependent [feature-id feature-id]| port [feature-id]}

Syntax Description

all	Displays all non-baseline features.	
independent	Displays switch-level independent features.	
feature-id feature-id	(Optional) Displays switch-level independent, system-level interdependent or port-level independent features with the specified feature ID.	
interdependent	Displays system-level interdependent features.	
port	Displays port-level independent features.	

Command Default

None

Command Modes

Privileged EXEC

Command History

Release	Modification
Cisco IOS 15.0(2)EX	This command was introduced.

Usage Guidelines

The **show platform stack compatibility** commands display feature incompatibility information between stack members in a mixed stack. Compatibility checks ensure that features that are supported across members of a stack using a forwarding ASIC with different capabilities will function effortlessly and error free.

Use this command only when you are working directly with your technical support representative while troubleshooting a problem. Do not use this command unless your technical support representative asks you to do so.

Examples

This example shows how to display all non-baseline features:

Switch# show platform stack compatibility feature all

System Level Interdependent Features

- 1: FHRR hardware vlan entry sharing feature
- 2: Jumbo MTU Routing Support
- 3: VRF on PVLAN interface
- 4: Global VRF config with greater than MAX policies

- 5: Routing keyword in IPv6 ACL
- 6: Ahp keyword in IPv6 ACL
- 7: Unsupported prefixes in IPv6 ACL
- 8: Unicast Reverse Path Forwarding
- 9: Multiple FHRP support
- 10: Gateway Load Balancing ProtocolVLAN-based FSPAN
- 11: CTS tagging and role-based enforcement
- 12: SPAN support 4 source session
- 13: Unknown

Switch Level Independent Features

Port Level Independent Features

- 1: Routing keyword in IPv6 ACL
- 2: Ahp keyword in IPv6 ACL
- 3: Unsupported prefixes in IPv6 ACL
- 4: Port-based FSPAN
- 5: IPv6 QoS match protocol support
- 6: IPv6 QoS ipv6 named ACL support

show platform stack compatibility table

To display feature compatibility tables for the switch stack, use the **show platform stack compatibility table** command in privileged EXEC mode.

show platform stack compatibility table {all| independent| interdependent| port}

Syntax Description

all	Displays all feature compatibility tables.	
independent	Displays a switch-level independent feature compatibility table.	
interdependent	Displays a system-level interdependent feature compatibility table.	
port	Displays a port-level independent feature compatibility table.	

Command Default

None

Command Modes

Privileged EXEC

Command History

Release	Modification
Cisco IOS 15.0(2)EX	This command was introduced.

Usage Guidelines

The **show platform stack compatibility** commands display feature incompatibility information between stack members in a mixed stack. Compatibility checks ensure that features that are supported across members of a stack using a forwarding ASIC with different capabilities will function effortlessly and error free.

Use this command only when you are working directly with your technical support representative while troubleshooting a problem. Do not use this command unless your technical support representative asks you to do so.

Examples

This example shows how to display all feature compatibility tables:

5: Routing keyword in IPv6 ACL

```
Supported by switch versions: 1 3 4
6: Ahp keyword in IPv6 ACL
   Supported by switch versions: 1 3 4
7: Unsupported prefixes in IPv6 ACL
   Supported by switch versions: 1 3 4
8: Unicast Reverse Path Forwarding
   Supported by switch versions: 1 3 4
9: Multiple FHRP support
   Supported by switch versions: 1 3 4
10: Gateway Load Balancing ProtocolVLAN-based FSPAN
   Supported by switch versions: 1 2 3 4
11: CTS tagging and role-based enforcement
   Supported by switch versions: 1 3 4
12: SPAN support 4 source session
   Supported by switch versions: 3
13: Unknown
   Supported by switch versions: 4
         Switch Level Independent Feature Matrix
_____
         Port Level Independent Feature Matrix
______
1: Routing keyword in IPv6 ACL
   Supported by ASIC versions: 1 2 3
2: Ahp keyword in IPv6 ACL
   Supported by ASIC versions: 1 2 3
3: Unsupported prefixes in IPv6 ACL
   Supported by ASIC versions: 1 2 3
4: Port-based FSPAN
   Supported by ASIC versions: 1 2 3
5: IPv6 QoS match protocol support
   Supported by ASIC versions: 1 2 3
6: IPv6 QoS ipv6 named ACL support
```

Supported by ASIC versions: 1 2 3

show platform stack manager

To display platform-dependent switch-stack information, use the **show platform stack manager** command in privileged EXEC mode.

show platform stack manager {all| counters| trace [cs [cs]| sdp [reverse]| state [reverse]| tdm]}

Syntax Description

all	Displays all information for the entire switch stack.
counters	Displays the stack manager counters.
trace	Displays trace information.
cs	(Optional) Displays information about changes in stack-related trace messages.
sdp	(Optional) Displays Stack Discovery Protocol (SDP) information.
reverse	(Optional) Displays trace information in reverse chronological order (from recent to older chronological sequence).
state	(Optional) Displays stack state machine information.
tdm	(Optional) Displays information about topology discovery including a summary of the stacking over Ethernet state machine events and messages.

Command Default

None

Command Modes

Privileged EXEC

Command History

Release	Modification
Cisco IOS 15.0(2)EX	This command was introduced.

Usage Guidelines

Use this command only when you are working directly with your technical support representative while troubleshooting a problem. Do not use this command unless your technical support representative asks you to do so.



Note

This command is supported only on stacking-capable switches.

The summary information about the switch stack shows these states:

- Waiting—A switch is booting up and waiting for communication from other switches in the stack. The
 switch has not determined whether or not it is stack master.
 Stack members not participating in election remain in the waiting state until the stack master is elected
 and ready.
- Initializing—A switch has determined whether it is stack master. If not, the switch receives its systemand interface-level configuration from the stack master and loads it.
- Ready—The member has completed loading the system- and interface-level configurations and can
 forward traffic.
- Master Re-Init—The state immediately after a reelection and a different member is elected the stack
 master. The new stack master is reinitializing its configuration. This state applies only to the new stack
 master.
- Ver Mismatch—A switch in version mismatch mode. Version-mismatch mode is when a switch that joins the stack has a different stack protocol minor version number than the stack master.

A typical state transition for a stack member (including stack master) booting up is Waiting > Initializing > Ready.

A typical state transition for a stack member to stack master after an election is Ready > Master Re-Init > Ready.

A typical state transition for a stack member in version mismatch (VM) mode is Waiting > Ver Mismatch.

show switch

To display information that is related to the stack member or the switch stack, use the **show switch** command in EXEC mode.

show switch [stack-member-number| detail| neighbors| stack-ports| stack-ring speed]



Note

This command is supported only on Catalyst 2960-X switches running the LAN Base image.

Syntax Description

stack-member-number	(Optional) Number of the stack member. The range is 1 to 8.	
detail	(Optional) Displays detailed information about the stack ring.	
neighbors	(Optional) Displays the neighbors of the entire switch stack.	
stack-ports	(Optional) Displays port information for the entire switch stack.	
stack-ring	(Optional) Displays information about the stack ring.	
speed	Displays the stack ring speed.	

Command Default

None

Command Modes

User EXEC

Privileged EXEC

Command History

Release	Modification
Cisco IOS 15.0(2)EX	This command was introduced.

Usage Guidelines

This command displays these states:

- Waiting—A switch is booting up and waiting for communication from other switches in the stack. The switch has not determined whether or not it is a stack master.
- Stack members not participating in a stack master election remain in the waiting state until the stack master is elected and ready.
- Initializing—A switch has determined whether it has stack master status. If it is not the stack master, it is receiving its system- and interface-level configuration from the stack master and loading it.

- Ready—The member has completed loading the system- and interface-level configurations and can
 forward traffic.
- Master Re-Init—The state immediately after a master reelection and a different member is elected master. The new master is reinitializing its configuration. This state applies only to the new master.
- Ver Mismatch—A switch in version mismatch mode. Version-mismatch mode is when a switch joining the stack has a different stack protocol minor version number than the master.
- SDM Mismatch—A switch in Switch Database Management (SDM) mismatch mode. SDM mismatch is when a member does not support the SDM template running on the master.
- Provisioned—The state of a preconfigured switch before it becomes an active member of a switch stack, or the state of a stack member after it has left the switch stack. The MAC address and the priority number in the display are always 0 for the provisioned switch.

A typical state transition for a stack member (including a master) booting up is Waiting > Initializing > Ready.

A typical state transition for a stack member becoming a stack master after a stack master election is Ready > Master Re-Init > Ready.

A typical state transition for a stack member in version mismatch (VM) mode is Waiting > Ver Mismatch.

You can use the **show switch** command to identify whether the provisioned switch exists in the switch stack. The **show running-config** and the **show startup-config** privileged EXEC commands do not provide this information.

The display also includes stack MAC-persistency wait-time if persistent MAC address is enabled.

Examples

This example shows how to display summary stack information:

Switch# show switch Switch/Stack Mac Address : d4a0.2a37.4800 H/W Current Switch# Role Mac Address Priority Version State Member 0cd9.9624.f980 4 Ready *2 Master d4a0.2a37.4800 1 4 Readv Member 0003.e31a.1e00 4 Readv

This example shows how to display detailed stack information:

Switch# show switch detail

Switch/Stack Mac Address : d4a0.2a37.4800					
Switch#	Role	Mac Address	Priority	H/W Version	Current State
1	Member	0cd9.9624.f980	7	4	Ready
*2	Master	d4a0.2a37.4800	8	4	Ready
6	Member	0003.e31a.1e00	2	0	Ready

Switch#	Stack Port Port 1	Status Port 2	Neighb Port 1	
1	Ok	Down	2	None
2	Down	Ok	None	1
6	Down	Ok	None	1

This example shows how to display the member 6 summary information:

Switch#	show switch	h 6			
Switch#	Role	Mac	Address	Priority	State

6 Member 0003.e31a.1e00 1 Ready

This example shows how to display the neighbor information for a stack:

Switch# show switch neighbors Switch # Port A Port B ---- ----- 6 None 8 None 8 None

This example shows how to display stack-port information:

Switch# :	show	switch	stack-p	orts
Switch	#	Port A	A	Port B
			-	
6		Down		Ok
8		Ok		Down

Command	Description
reload	Reloads the stack member and applies a configuration change.
remote command	Monitors all or specified stack members.
session	Accesses a specific stack member from the stack master.
switch stack port	Disables or enables the specified stack port on the member.
switch provision	Supplies a configuration to a new switch before it joins the switch stack.
switch renumber	Changes the stack member number.

stack-mac persistent timer

To enable the persistent MAC address feature, use the **stack-mac persistent timer** command in global configuration mode on the switch stack or on a standalone switch. To disable the persistent MAC address feature, use the **no** form of this command.

stack-mac persistent timer [0| time-value]

no stack-mac persistent timer

Syntax Description

0	(Optional) Continues using the MAC address of the current stack master after a new stack master takes over.
time-value	(Optional) Time period in minutes before the stack MAC address changes to that of the new stack master. The range is 1 to 60 minutes. When no value is entered, the default is 4 minutes. We recommend that you configure an explicit value for this command.

Command Default

Persistent MAC address is disabled. The MAC address of the stack is always that of the first stack master.

When the command is entered with no value, the default time before the MAC address changes is four minutes. We recommend that you configure an explicit value for this command.

Command Modes

Global configuration

Command History

Release	Modification
Cisco IOS 15.0(2)EX	This command was introduced.

Usage Guidelines

The MAC address of the switch stack is determined by the MAC address of the stack master. In the default state (persistent MAC address disabled), if a new switch becomes stack master, the stack MAC address changes to the MAC address of the new stack master.

When persistent MAC address is enabled, the stack MAC address does not change for a time period. During that time, if the previous stack master rejoins the stack as a stack member, the stack retains its MAC address for as long as that switch is in the stack. If the previous stack master does not rejoin the stack during the specified time period, the switch stack takes the MAC address of the new stack master as the stack MAC address.

You can set the time period to be from 0 to 60 minutes.

- If you enter the command with no value, the default delay is 4 minutes.
- If you enter **0**, the stack continues to use the current stack MAC address until you enter the **no stack-mac persistent timer** command.

• If you enter a time delay of 1 to 60 minutes, the stack MAC address of the previous stack master is used until the configured time period expires or until you enter the **no stack-mac persistent timer** command.



Note

When you enter the **stack-mac persistent timer** command with or without keywords, a message appears warning that traffic might be lost if the old master MAC address appears elsewhere in the network domain. You should use this feature cautiously.

If you enter the **no stack-mac persistent timer** command after a switchover, before the time expires, the switch stack moves to the current stack master MAC address.

If the whole stack reloads, when it comes back up, the MAC address of the stack master is the stack MAC address.

Examples

This example shows how to configure the persistent MAC address feature, with the warning messages for each configuration. It also shows how to verify the configuration:

```
Switch(config) # stack-mac persistent timer
WARNING: Use of an explicit timer value with the command is recommended.
WARNING: Default value of 4 minutes is being used.
WARNING: The stack continues to use the base MAC of the old Master
WARNING: as the stack-mac after a master switchover until the MAC
WARNING: persistency timer expires. During this time the Network
WARNING: Administrators must make sure that the old stack-mac does
WARNING: not appear elsewhere in this network domain. If it does,
WARNING: user traffic may be blackholed.
Switch(config) # stack-mac persistent timer 0
WARNING: Stack MAC persistency timer value of 0 means that, after a
WARNING: master switchover, the current stack-mac will continue
WARNING: to be used indefinitely.
WARNING: The Network Administrators must make sure that the old
WARNING: stack-mac does not appear elsewhere in this network
WARNING: domain. If it does, user traffic may be blackholed.
Switch (config) # stack-mac persistent timer 7
WARNING: The stack continues to use the base MAC of the old Master
WARNING: as the stack-mac after a master switchover until the MAC
WARNING: persistency timer expires. During this time the Network
WARNING: Administrators must make sure that the old stack-mac does
WARNING: not appear elsewhere in this network domain. If it does,
WARNING: user traffic may be blackholed.
Switch(config)# end
Switch(config) # show switch
Switch/Stack Mac Address: 0cd9.9624.dd80
Mac persistency wait time: 7 mins
                                          H/W Current
                              Priority Version State
Switch# Role Mac Address
        Master 0cd9.9624.dd80
                                  1
                                        4
                                                 Readv
```

You can verify your settings by entering either of two privileged EXEC commands:

- **show running-config**—If enabled, stack-mac persistent timer and the time in minutes appears in the output.
- show switch—If enabled, Mac persistency wait time and the number of minutes appears in the output.

Command	Description
show switch	Displays information related to the stack member or the switch stack.

switch stack port

To disable or enable the specified stack port on the member, use the **switch** command in privileged EXEC mode on a stack member.

switch stack-member-number stack port port-number {disable| enable}



Note

This command is supported only on Catalyst 2960-X switches running the LAN Base image.

Syntax Description

stack-member-number	Current stack member number. The range is 1 to 8.
stack port port-number	Specifies the stack port on the member. The range is 1 to 2.
disable	Disables the specified port.
enable	Enables the specified port.

Command Default

The stack port is enabled.

Command Modes

Privileged EXEC

Command History

Release	Modification
Cisco IOS 15.0(2)EX	This command was introduced.

Usage Guidelines

A stack is in the full-ring state when all members are connected through the stack ports and are in the ready state.

The stack is in the partial-ring state when the following occurs:

- All members are connected through their stack ports but some are not in the ready state.
- Some members are not connected through the stack ports.



Note

Be careful when using the **switch** *stack-member-number* **stack port** *port-number* **disable** command. When you disable the stack port, the stack operates at half bandwidth.

If you enter the **switch** *stack-member-number* **stack port** *port-number* **disable** privileged EXEC command and the stack is in the full-ring state, you can disable only one stack port. This message appears:

Enabling/disabling a stack port may cause undesired stack changes. Continue?[confirm]

If you enter the **switch** *stack-member-number* **stack port** *port-number* **disable** privileged EXEC command and the stack is in the partial-ring state, you cannot disable the port. This message appears:

Disabling stack port not allowed with current stack configuration.

Examples

This example shows how to disable stack port 2 on member 4:

Switch# switch 4 stack port 2 disable

Command	Description
show switch	Displays information related to the stack member or the switch stack.

switch priority

To change the stack member priority value, use the **switch priority** command in global configuration mode on the stack master.

switch stack-member-number priority new-priority-value

Syntax Description

stack-member-number	Current stack member number. The range is 1 to 8.
new-priority-value	New stack member priority value. The range is 1 to 15.

Command Default

The default priority value is 1.

Command Modes

Global configuration

Command History

Release	Modification
Cisco IOS 15.0(2)EX	This command was introduced.

Usage Guidelines

The new priority value is a factor when a new stack master is elected. When you change the priority value the stack master is not changed immediately.

Examples

OL-32565-01

This example shows how to change the priority value of stack member 6 to 8:

Switch(config)# switch 6 priority 8
Changing the Switch Priority of Switch Number 6 to 8
Do you want to continue?[confirm]

Command	Description
reload	Reloads the stack member and applies a configuration change.
session	Accesses a specific stack member from the stack master.
show switch	Displays information related to the stack member or the switch stack.
switch renumber	Changes the stack member number.

switch provision

To supply a configuration to a new switch before it joins the switch stack, use the **switch provision** command in global configuration mode on the stack master. To delete all configuration information that is associated with the removed switch (a stack member that has left the stack), use the **no** form of this command.

switch stack-member-number provision type no switch stack-member-number provision

Syntax Description

stack-member-number	Stack member number. The range is 1 to 8.
type	Switch type of the new switch before it joins the stack.

Command Default

The switch is not provisioned.

Command Modes

Global configuration

Command History

Release	Modification
Cisco IOS 15.0(2)EX	This command was introduced.

Usage Guidelines

For type, enter the model number of a supported switch that is listed in the command-line help strings.

To avoid receiving an error message, you must remove the specified switch from the switch stack before using the **no** form of this command to delete a provisioned configuration.

To change the switch type, you must also remove the specified switch from the switch stack. You can change the stack member number of a provisioned switch that is physically present in the switch stack if you do not also change the switch type.

If the switch type of the provisioned switch does not match the switch type in the provisioned configuration on the stack, the switch stack applies the default configuration to the provisioned switch and adds it to the stack. The switch stack displays a message when it applies the default configuration.

Provisioned information appears in the running configuration of the switch stack. When you enter the **copy running-config startup-config** privileged EXEC command, the provisioned configuration is saved in the startup configuration file of the switch stack.



Caution

When you use the **switch provision** command, memory is allocated for the provisioned configuration. When a new switch type is configured, the previously allocated memory is not fully released. Therefore, do not use this command more than approximately 200 times, or the switch will run out of memory and unexpected behavior will result.

Examples

This example shows how to provision a switch with a stack member number of 2 for the switch stack. The **show running-config** command output shows the interfaces associated with the provisioned switch.

```
Switch(config)# switch 2 provision WS-xxxx
Switch(config)# end
Switch# show running-config | include switch 2
!
interface GigabitEthernet2/0/1
!
interface GigabitEthernet2/0/2
!
interface GigabitEthernet2/0/3
<output truncated>
```

You also can enter the **show switch** user EXEC command to display the provisioning status of the switch stack.

This example shows how to delete all configuration information about stack member 5 when the switch is removed from the stack:

```
Switch(config) # no switch 5 provision
```

You can verify that the provisioned switch is added to or removed from the running configuration by entering the **show running-config** privileged EXEC command.

Command	Description
show switch	Displays information related to the stack member or the switch stack.

switch renumber

To change the stack member number, use the **switch renumber** command in global configuration mode on the stack master.

switch current-stack-member-number renumber new-stack-member-number

Syntax Description

current-stack-member-number	Current stack member number. The range is 1 to 8.
new-stack-member-number	New stack member number for the stack member. The range is 1 to 8 .

Command Default

The default stack member number is 1.

Command Modes

Global configuration

Command History

Release	Modification
Cisco IOS 15.0(2)EX	This command was introduced.

Usage Guidelines

If another stack member is already using the member number that you just specified, the stack master assigns the lowest available number when you reload the stack member.



Note

If you change the number of a stack member, and no configuration is associated with the new stack member number, that stack member loses its current configuration and resets to its default configuration.

Do not use the **switch** *current-stack-member-number* **renumber** *new-stack-member-number* command on a provisioned switch. If you do, the command is rejected.

Use the **reload slot** *current stack member number* privileged EXEC command to reload the stack member and to apply this configuration change.

Examples

This example shows how to change the member number of stack member 6 to 7:

Switch(config) # switch 6 renumber 7

WARNING: Changing the switch number may result in a configuration change for that switch. The interface configuration associated with the old switch number will remain as a provisioned configuration.

Do you want to continue?[confirm]

Command	Description
reload	Reloads the stack member and applies a configuration change.
session	Accesses a specific stack member from the stack master.
show switch	Displays information related to the stack member or the switch stack.
switch stack port	Disables or enables the specified stack port on the member.

switch stack port-speed 10

To set the switch stack port speed to 10 Gbps and enable mixed stacking with one or more Catalyst 2960-S switches, use the **switch stack port-speed 10** command in global configuration mode. To return to the default setting, use the **no** form of this command.

switch stack port-speed 10 no switch stack port-speed

Syntax Description

This command has no arguments or keywords.

Command Default

The default port speed is 20 Gbps.

Command History

Release	Modification
Cisco IOS 15.0(2)EX	This command was introduced.

Usage Guidelines

By default, Catalyst 2960-X switches operate at a port speed of 20 Gbps while 2960-S switches have a maximum port speed of 10 Gbps. In a mixed stack of Catalyst 2960-X and Catalyst 2960-S switches, the stack must operate at the port speed of the Catalyst 2960-S switch; otherwise, the switches will not stack.

To set the port speed of the stack to 10 Gbps, use the **switch stack port-speed 10** global configuration command on a Catalyst 2960-X stack member before you add a Catalyst 2960-S switch to the stack, and then reload the stack.

Examples

This example shows how to set the switch stack port speed to 10 Gbps and then reload the stack:

```
Switch(config) # switch stack port-speed 10
WARNING: Changing the stack speed may result in a stack speed mismatch.
Do you want to continue?[confirm]
New stack speed will be effective after next reload
Switch(config) # exit
Switch# reload
System configuration has been modified. Save? [yes/no]:
```

You can verify your settings by entering the **show switch stack-ring speed** privileged EXEC command.