How to Configure 1:1 Redundancy  13
  Enabling 1:1 Redundancy Stack Mode  13
  Disabling 1:1 Redundancy Stack Mode  14
Configuration Examples  15
  Enabling 1:1 Redundancy stack mode  15
  Disabling 1:1 Redundancy  15
Verifying the Stack Mode  15
Additional References for 1:1 Redundancy  16
Feature History and Information for 1:1 Redundancy  16
CHAPTER 1

Managing Switch Stacks

- Finding Feature Information, on page 1
- Prerequisites for Switch Stacks, on page 1
- Restrictions for Switch Stacks, on page 1
- Information About Switch Stacks, on page 2
- How to Configure a Switch Stack, on page 3
- Configuration Examples for Switch Stacks, on page 4

Finding Feature Information

Your software release may not support all the features documented in this module. For the latest caveats and feature information, see Bug Search Tool and the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the feature information table at the end of this module.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to http://www.cisco.com/go/cfn. An account on Cisco.com is not required.

Prerequisites for Switch Stacks

All the switches in the switch stack need to be running the same license level as the active switch. For information about license levels, see the System Management section of this guide.

All switches in the switch stack need to be running compatible software versions.

Restrictions for Switch Stacks

The following are the restrictions for switch stack configuration:

- A switch stack can have up to eight stacking-capable switches connected through their StackWise ports.
- Only homogenous stacking is supported, that is, a stack of Cisco Catalyst 9200 Series Switches with only Cisco Catalyst 9200 Series Switches as stack members.
- You cannot have a switch stack containing a mix of different license levels.
• Do not stack Cisco Catalyst 9200L Series Switches with Cisco Catalyst 9200 Series Switches.

Information About Switch Stacks

Switch Stack Overview

A switch stack can have up to eight stacking-capable switches connected through their StackWise ports. The stack members work together as a unified system. Layer 2 and Layer 3 protocols present the entire switch stack as a single entity to the network.

The active switch controls the operation of the switch stack, and is the single point of stack-wide management. From the active switch, you configure:

• System-level (global) features that apply to all stack members
• Interface-level features for each stack member

The active switch contains the saved and running configuration files for the switch stack. The configuration files include the system-level settings for the switch stack and the interface-level settings for each stack member. Each stack member has a current copy of these files for back-up purposes.

Switch Stack Bridge ID and MAC Address

A switch stack is identified in the network by its bridge ID and, if it is operating as a Layer 3 device, its router MAC address. The bridge ID and router MAC address are determined by the MAC address of the active switch.

If the active switch changes, the MAC address of the new active switch determines the new bridge ID and router MAC address.

If the entire switch stack reloads, the switch stack uses the MAC address of the active switch.

Persistent MAC Address on the Switch Stack

You can use the persistent MAC address feature to set a time delay before the stack MAC address changes. During this time period, if the previous active switch rejoins the stack, the stack continues to use its MAC address as the stack MAC address, even if the switch is now a stack member and not an active switch. If the previous active switch does not rejoin the stack during this period, the switch stack takes the MAC address of the new active switch as the stack MAC address. By default, the stack MAC address will be the MAC address of the first active switch, even if a new active switch takes over.

You can also configure stack MAC persistency so that the stack MAC address never changes to the new active switch MAC address.

Upgrading a Switch Running Incompatible Software

The auto-upgrade and auto-advise features enable a switch with software packages that are incompatible with the switch stack to be upgraded to a compatible software version so that it can join the switch stack.
Switch Stack Management Connectivity

You manage the switch stack and the stack member interfaces through the active switch. You can use the CLI, SNMP, and supported network management applications such as CiscoWorks. You cannot manage stack members on an individual Device basis.

How to Configure a Switch Stack

Monitoring the Device Stack

Table 1: Commands for Displaying Stack Information

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>show module</td>
<td>Displays summary information about the stack.</td>
</tr>
<tr>
<td>show switch detail</td>
<td>Displays detailed information about the stack.</td>
</tr>
<tr>
<td>show switch neighbors</td>
<td>Displays the stack neighbors.</td>
</tr>
<tr>
<td>show switch stack-ports [summary]</td>
<td>Displays port information for the stack. Use the <strong>summary</strong> keyword to display the stack cable length, the stack link status, and the loopback status.</td>
</tr>
<tr>
<td>show redundancy</td>
<td>Displays the redundant system and the current processor information. The redundant system information includes the system uptime, standby failures, switchover reason, hardware, configured and operating redundancy mode. The current processor information displayed includes the active location, the software state, the uptime in the current state and so on.</td>
</tr>
<tr>
<td>show redundancy state</td>
<td>Displays all the redundancy states of the active and standby devices.</td>
</tr>
</tbody>
</table>
Configuration Examples for Switch Stacks

Switch Stack Configuration Scenarios

Most of these switch stack configuration scenarios assume that at least two devices are connected through their StackWise ports.

Table 2: Configuration Scenarios

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active switch election specifically determined by existing active switches</td>
<td>Connect two powered-on switch stacks through the StackWise ports. Only one of the two active switches becomes the new active switch.</td>
</tr>
</tbody>
</table>
| Active switch election specifically determined by the stack member priority value | 1. Connect two switches through their StackWise ports.  
2. Use the `switch stack-member-number priority new-priority-number` command to set one stack member with a higher member priority value.  
3. Restart both stack members at the same time. The stack member with the higher priority value is elected active switch. |
| Active switch election specifically determined by the configuration file | Assuming that both stack members have the same priority value:  
1. Make sure that one stack member has a default configuration and that the other stack member has a saved (nondefault) configuration file.  
2. Restart both stack members at the same time. The stack member with the saved configuration file is elected active switch. |
<p>| Active switch election specifically determined by the MAC address | Assuming that both stack members have the same priority value, configuration file, and license level, restart both stack members at the same time. The stack member with the lower MAC address is elected active switch. |</p>
<table>
<thead>
<tr>
<th>Scenario</th>
<th>Result</th>
</tr>
</thead>
</table>
| Stack member number conflict         | Assuming that one stack member has a higher priority value than the other stack member:  
  1. Ensure that both stack members have the same stack member number. If necessary, use the `switch current-stack-member-number renumber new-stack-member-number` command.  
  2. Restart both stack members at the same time.  
|                                      | The stack member with the higher priority value retains its stack member number. The other stack member has a new stack member number. |
| Add a stack member                   | 1. Power off the new switch.                                           
  2. Through their StackWise ports, connect the new switch to a powered-on switch stack.  
  3. Power on the new switch.                                                      | The active switch is retained. The new switch is added to the switch stack. |
| Active switch failure                | Remove (or power off) the active switch.                               | One of the remaining stack members becomes the new stack master. All other stack members in the stack remain as stack members and do not reboot. |
| Add eight stack members              | 1. Through their StackWise ports, connect devices.                    
  2. Power on all devices.                                                         | Two devices become active switches. One active switch has stack members. The other active switch remains as a standalone device.  
  Use the Mode button and port LEDs on the device to identify which devices are active switches and which devices belong to each active switch. |

### Enabling the Persistent MAC Address Feature: Example

This example shows how to configure the persistent MAC address feature for a 7-minute time delay and to verify the configuration:

```
Device(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.
Device(config)# end
Device# show switch
```
Switch/Stack Mac Address: 0016.4727.a900
Mac persistency wait time: 7 mins

<table>
<thead>
<tr>
<th>Switch#</th>
<th>Role</th>
<th>Mac Address</th>
<th>Priority</th>
<th>Version</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>*1</td>
<td></td>
<td>0016.4727.a900</td>
<td>1</td>
<td>P2B</td>
<td>Ready</td>
</tr>
</tbody>
</table>

**show switch stack-ports summary Command Output: Example**

Only Port 1 on stack member 2 is disabled.

<table>
<thead>
<tr>
<th>Device#</th>
<th>show switch stack-ports summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device#/</td>
<td>Stack Port Status</td>
</tr>
<tr>
<td>Port#</td>
<td>Neighbor</td>
</tr>
<tr>
<td>--------</td>
<td>---------</td>
</tr>
<tr>
<td>1/1</td>
<td>OK</td>
</tr>
<tr>
<td>1/2</td>
<td>Down</td>
</tr>
<tr>
<td>2/1</td>
<td>Down</td>
</tr>
<tr>
<td>2/2</td>
<td>OK</td>
</tr>
<tr>
<td>3/1</td>
<td>OK</td>
</tr>
<tr>
<td>3/2</td>
<td>OK</td>
</tr>
</tbody>
</table>

**Table 3: show switch stack-ports summary Command Output**

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switch#/Port#</td>
<td>Member number and its stack port number.</td>
</tr>
<tr>
<td>Stack Port Status</td>
<td>Status of the stack port.</td>
</tr>
<tr>
<td></td>
<td>• Absent—No cable is detected on the stack port.</td>
</tr>
<tr>
<td></td>
<td>• Down—A cable is detected, but either no connected neighbor is up, or the stack</td>
</tr>
<tr>
<td></td>
<td>• OK—A cable is detected, and the connected neighbor is up.</td>
</tr>
<tr>
<td>Neighbor</td>
<td>Switch number of the active member at the other end of the stack cable.</td>
</tr>
<tr>
<td>Cable Length</td>
<td>Valid lengths are 50 cm, 1 m, or 3 m. If the switch cannot detect the cable</td>
</tr>
<tr>
<td>Link OK</td>
<td>Whether the stack cable is connected and functional. There may or may not be</td>
</tr>
<tr>
<td></td>
<td>• No—There is no stack cable connected to this port or the stack cable is</td>
</tr>
<tr>
<td></td>
<td>• Yes—There is a functional stack cable connected to this port.</td>
</tr>
</tbody>
</table>
### Field Description

**Link Active** Whether a neighbor is connected on the other end of the stack cable.
- **No**—No neighbor is detected on the other end. The port cannot send traffic over this link.
- **Yes**—A neighbor is detected on the other end. The port can send traffic over this link.

**Sync OK** Whether the link partner sends valid protocol messages to the stack port.
- **No**—The link partner does not send valid protocol messages to the stack port.
- **Yes**—The link partner sends valid protocol messages to the port.

**# Changes to LinkOK** The relative stability of the link.
If a large number of changes occur in a short period of time, link flapping can occur.

**In Loopback** Whether a stack cable is attached to a stack port on the member.
- **No**—At least one stack port on the member has an attached stack cable.
- **Yes**—None of the stack ports on the member has an attached stack cable.

### Software Loopback: Examples

In a stack with three members, stack cables connect all the members:

```
Device# show switch stack-ports summary

Sw#/Port# | Port Status | Neighbor | Cable Length | Link OK | Link Active OK | Sync OK | #Changes To LinkOK | In Loopback
---------- | ----------- | -------- | ------------ | ------- | --------------- | ------ | --------------- | --------
1/1        | OK         | 3       | 50 cm        | Yes     | Yes             | Yes    | 1               | No       
1/2        | OK         | 2       | 3 m          | Yes     | Yes             | Yes    | 1               | No       
2/1        | OK         | 1       | 3 m          | Yes     | Yes             | Yes    | 1               | No       
2/2        | OK         | 3       | 50 cm        | Yes     | Yes             | Yes    | 1               | No       
3/1        | OK         | 2       | 50 cm        | Yes     | Yes             | Yes    | 1               | No       
3/2        | OK         | 1       | 50 cm        | Yes     | Yes             | Yes    | 1               | No       
```

If you disconnect the stack cable from Port 1 on Switch 1, these messages appear:

```
01:09:55: %STACKMGR-4-STACK_LINK_CHANGE: Stack Port 2 Switch 3 has changed to state DOWN
01:09:56: %STACKMGR-4-STACK_LINK_CHANGE: Stack Port 1 Switch 1 has changed to state DOWN

Device# show switch stack-ports summary

Sw#/Port# | Port Status | Neighbor | Cable Length | Link OK | Link Active OK | Sync OK | #Changes To LinkOK | In Loopback
---------- | ----------- | -------- | ------------ | ------- | --------------- | ------ | --------------- | --------
1/1        | Absent     | None    | No cable     | No      | No              | No     | 1               | No       
1/2        | OK         | 2       | 3 m          | Yes     | Yes             | Yes    | 1               | No       
2/1        | OK         | 1       | 3 m          | Yes     | Yes             | Yes    | 1               | No       
2/2        | OK         | 3       | 50 cm        | Yes     | Yes             | Yes    | 1               | No       
```

---

Stack Manager and High Availability Configuration Guide, Cisco IOS XE Gibraltar 16.10.x (Catalyst 9200 Switches)
If you disconnect the stack cable from Port 2 on Switch 1, the stack splits.

Switch 2 and Switch 3 are now in a two-member stack connected through stack cables:

```
3/1 OK 2 50 cm Yes Yes Yes 1 No
3/2 Down None 50 cm No No No 1 No
```

Switch 1 is a standalone switch:

```
1/1 Absent None No cable No No No 1 Yes
1/2 Absent None No cable No No No 1 Yes
```

**Software Loopback with Connected Stack Cables: Examples**

- On Port 1 on Switch 1, the port status is Down, and a cable is connected.

```
Device# show switch stack-ports summary
Device# Sw#/Port# Port Neighbor Cable Link Link Sync #Changes In
Status Length OK Active OK To LinkOK Loopback
-------- ------ -------- -------- ---- ------ ---- --------- --------
1/1 Down None 50 Cm No No No 1 No
1/2 Absent None No cable No No No 1 Yes
```

- In a physical loopback, a cable connects both stack ports on a switch. You can use this configuration to test
  - Cables on a switch that is running properly
  - Stack ports with a cable that works properly

```
Device# show switch stack-ports summary
Device# Sw#/Port# Port Neighbor Cable Link Link Sync #Changes In
Status Length OK Active OK To LinkOK Loopback
-------- ------ -------- -------- ---- ------ ---- --------- --------
2/1 OK 2 50 cm Yes Yes Yes 1 No
2/2 OK 2 50 cm Yes Yes Yes 1 No
```

The port status shows that
Switch 2 is a standalone switch.

The ports can send and receive traffic.

Software Loopback with no Connected Stack Cable: Example

```
Device# show switch stack-ports summary
Device#
Sw#/Port# Port Status Neighbor Cable Length Link Link Sync #Changes In
-------- ------ -------- -------- ---- ------ ---- --------- --------
1/1 Absent None No cable No No No 1 Yes
1/2 Absent None No cable No No No 1 Yes
```

Finding a Disconnected Stack Cable: Example

Stack cables connect all stack members. Port 2 on Switch 1 connects to Port 1 on Switch 2.

This is the port status for the members:

```
Device# show switch stack-ports summary
Device#
Sw#/Port# Port Status Neighbor Cable Length Link Link Sync #Changes In
-------- ------ -------- -------- ---- ------ ---- --------- --------
1/1 OK 2 50 cm Yes Yes Yes 0 No
1/2 OK 2 50 cm Yes Yes Yes 0 No
2/1 OK 1 50 cm Yes Yes Yes 0 No
2/2 OK 1 50 cm Yes Yes Yes 0 No
```

If you disconnect the cable from Port 2 on Switch 1, these messages appear:

```
%STACKMGR-4-STACK_LINK_CHANGE: Stack Port 1 Switch 2 has changed to state DOWN
%STACKMGR-4-STACK_LINK_CHANGE: Stack Port 2 Switch 1 has changed to state DOWN
```

This is now the port status:

```
Device# show switch stack-ports summary
Device#
Sw#/Port# Port Status Neighbor Cable Length Link Link Sync #Changes In
-------- ------ -------- -------- ---- ------ ---- --------- --------
1/1 OK 2 50 cm Yes Yes Yes 1 No
1/2 Absent None No cable No No No 2 No
2/1 Down None 50 cm No No No 2 No
2/2 OK 1 50 cm Yes Yes Yes 1 No
```

Only one end of the cable connects to a stack port, Port 1 on Switch 2.

- The **Stack Port Status** value for Port 2 on Switch 1 is **Absent**, and the value for Port 1 on Switch 2 is **Down**.
- The **Cable Length** value is **No cable**.
Diagnosing the problem:

- Verify the cable connection for Port 2 on Switch 1.
- Port 2 on Switch 1 has a port or cable problem if
  - The In Loopback value is Yes.
  or
  - The Link OK, Link Active, or Sync OK value is No.

Fixing a Bad Connection Between Stack Ports: Example

Stack cables connect all members. Port 2 on Switch 1 connects to Port 1 on Switch 2.

This is the port status:

```
Device# show switch stack-ports summary

Device# show switch stack-ports summary

<table>
<thead>
<tr>
<th>Sw#/Port#</th>
<th>Status</th>
<th>Neighbor</th>
<th>Cable Length</th>
<th>Link OK</th>
<th>Link Active</th>
<th>Link Sync</th>
<th>#Changes</th>
<th>To Link</th>
<th>In Loopback</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1</td>
<td>OK</td>
<td>2</td>
<td>50 cm</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>1</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>1/2</td>
<td>Down</td>
<td>None</td>
<td>50 cm</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>2</td>
<td>2</td>
<td>No</td>
</tr>
<tr>
<td>2/1</td>
<td>Down</td>
<td>None</td>
<td>50 cm</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>2</td>
<td>2</td>
<td>No</td>
</tr>
<tr>
<td>2/2</td>
<td>OK</td>
<td>1</td>
<td>50 cm</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>1</td>
<td>1</td>
<td>No</td>
</tr>
</tbody>
</table>
```

Diagnosing the problem:

- The Stack Port Status value is Down.
- Link OK, Link Active, and Sync OK values are No.
- The Cable Length value is 50 cm. The switch detects and correctly identifies the cable.

The connection between Port 2 on Switch 1 and Port 1 on Switch 2 is unreliable on at least one of the connector pins.

Additional References for Switch Stacks

**Related Documents**

<table>
<thead>
<tr>
<th>Related Topic</th>
<th>Document Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabling and powering on a switch stack.</td>
<td><em>Cisco Catalyst 9200 Series Switches Hardware Installation Guide</em></td>
</tr>
<tr>
<td>SGACL High Availability</td>
<td>&quot;Cisco TrustSec SGACL High Availability&quot; module of the <em>Cisco TrustSec Switch Configuration Guide</em></td>
</tr>
</tbody>
</table>
## Error Message Decoder

<table>
<thead>
<tr>
<th>Description</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>To help you research and resolve system error messages in this release, use the Error Message Decoder tool.</td>
<td><a href="https://www.cisco.com/cgi-bin/Support/Errordecoder/index.cgi">https://www.cisco.com/cgi-bin/Support/Errordecoder/index.cgi</a></td>
</tr>
</tbody>
</table>

## Standards and RFCs

<table>
<thead>
<tr>
<th>Standard/RFC</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

## MIBs

<table>
<thead>
<tr>
<th>MIB</th>
<th>MIBs Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>All the supported MIBs for this release.</td>
<td>To locate and download MIBs for selected platforms, Cisco IOS releases, and , use Cisco MIB Locator found at the following URL: <a href="http://www.cisco.com/go/mibs">http://www.cisco.com/go/mibs</a></td>
</tr>
</tbody>
</table>

## Technical Assistance

<table>
<thead>
<tr>
<th>Description</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies.</td>
<td><a href="http://www.cisco.com/support">http://www.cisco.com/support</a></td>
</tr>
<tr>
<td>To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds.</td>
<td></td>
</tr>
<tr>
<td>Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.</td>
<td></td>
</tr>
</tbody>
</table>
Additional References for Switch Stacks
Configuring 1:1 Redundancy

Prerequisites for 1:1 Redundancy

All the switches in the stack must be running the same license level as the active switch. For information about license levels, see the System Management Configuration Guide.

All the switches in the stack must be running compatible software versions.

Information About 1:1 Redundancy

1:1 redundancy is used to assign active and standby roles to specific switches in the stack. This overrides the traditional N+1 role selection algorithm, where any switch in the stack can be active or standby. In 1:1 redundancy, the stack manager determines the active and standby role for a specific switch, based on the flash ROMMON variable. The algorithm assigns one switch as active, another switch as standby, designating all remaining switches in the stack as members. When an active switch reboots it becomes standby and the existing standby switch will become active. The existing member switches remain in the same state.

How to Configure 1:1 Redundancy

Enabling 1:1 Redundancy Stack Mode

Follow these steps to enable the 1:1 redundancy stack mode, and set a switch as the active switch in a stack, or as the standby:
SUMMARY STEPS

1. enable
2. switch switch-number role {active | standby}

DETAILED STEPS

<table>
<thead>
<tr>
<th>Command or Action</th>
<th>Purpose</th>
</tr>
</thead>
</table>
| **Step 1**
  enable
  Example:
  Device> enable | Enables privileged EXEC mode.  
  • Enter your password if prompted. |
| **Step 2**
  switch switch-number role {active | standby}
  Example:
  Device#switch 1 role active | Changes stack mode to 1:1 mode and designates the switch as active or standby. |

Disabling 1:1 Redundancy Stack Mode

On a switch where 1:1 redundancy is enabled, follow these steps to disable the feature. This changes the stack mode to N+1:

SUMMARY STEPS

1. enable
2. switch clear stack-mode

DETAILED STEPS

<table>
<thead>
<tr>
<th>Command or Action</th>
<th>Purpose</th>
</tr>
</thead>
</table>
| **Step 1**
  enable
  Example:
  Device> enable | Enables privileged EXEC mode.  
  • Enter your password if prompted. |
| **Step 2**
  switch clear stack-mode
  Example:
  Device# switch clear stack-mode | Changes stack mode to the N+1 mode and removes active and standby assignments. |
Configuration Examples

Enabling 1:1 Redundancy stack mode

You can use the `switch switch-number role` command to set the active and standby switch in 1:1 stack mode. Stack will run in 1:1 stack mode with designated active or standby after reboot. In the following example, switch 1 is assigned the active role, and switch 2 is assigned the standby role.

```
Device# switch 1 role active
WARNING: Changing the switch role may result in redundancy mode being configured to 1+1 mode for this stack. If the configured Active or Standby switch numbers do not boot up, then the stack will not be able to boot. Do you want to continue?[y/n]? [yes]: yes
```

```
Device# switch 2 role standby
WARNING: Changing the switch role may result in redundancy mode being configured to 1+1 mode for this stack. If the configured Active or Standby switch numbers do not boot up, then the stack will not be able to boot. Do you want to continue?[y/n]? [yes]: yes
```

Disabling 1:1 Redundancy

You can use the `switch clear stack-mode` command to remove 1:1 stack mode, and change it back to N+1 stack mode.

```
Device# switch clear stack-mode
WARNING: Clearing the chassis HA configuration will result in the chassis coming up in Stand Alone mode after reboot. The HA configuration will remain the same on other chassis. Do you wish to continue? [y/n]? [yes]:
```

Verifying the Stack Mode

To verify the current stack mode on a switch, enter the `show switch stack-mode` command in privileged EXEC mode. The output displays detailed status of the currently running stack mode.

```
Device# show switch stack-mode
Switch Role Mac Address Version Mode Configured State
---------------------------------------------------------------
1 Member 3c5e.c357.c880 1+1' Active' Ready
2 Active 547c.69de.cd00 V05 1+1' Standby' Ready
3 Member 547c.6965.cf80 V05 1+1' Member' Ready
```

The Mode field indicates the current stack mode.

The Configured field refers to the switch state expected after a reboot.

Single quotation marks (‘’) indicate that the stack mode has been changed.
## Additional References for 1:1 Redundancy

### Related Documents

<table>
<thead>
<tr>
<th>Related Topic</th>
<th>Document Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>For complete syntax and usage information for the commands used in this chapter.</td>
<td>See the <em>Stack Manager and High Availability</em> section of the Command Reference guide for the release.</td>
</tr>
</tbody>
</table>

### MIBs

<table>
<thead>
<tr>
<th>MIB</th>
<th>MIBs Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>All the supported MIBs for this release.</td>
<td>To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL: <a href="http://www.cisco.com/go/mibs">http://www.cisco.com/go/mibs</a></td>
</tr>
</tbody>
</table>

### Technical Assistance

<table>
<thead>
<tr>
<th>Description</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies. To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds. Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.</td>
<td><a href="http://www.cisco.com/support">http://www.cisco.com/support</a></td>
</tr>
</tbody>
</table>

## Feature History and Information for 1:1 Redundancy

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

<table>
<thead>
<tr>
<th>Release</th>
<th>Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cisco IOS XE Fuji 16.9.2</td>
<td>This feature was introduced.</td>
</tr>
</tbody>
</table>