Stack 1:1 Redundancy

Stack 1:1 redundancy

A stack 1:1 redundancy is a method used to assign active and standby roles to specific switches in a stack, overriding the traditional N+1 role selection algorithm. In stack 1:1 redundancy

- active and standby roles are assigned to specific switches.
- stack manager determines roles based on the flash ROMMON variable, and
- all remaining switches are designated as members.

When an active switch reboots, it becomes standby and the existing standby switch becomes the new active. The existing member switches remain in the same state.

Enable 1:1 redundancy stack mode

Before you begin

- All the switches in the stack must be running the same license level as the active switch. For information about license levels, refer to the *System Management Configuration Guide* of the required release.
- All the switches in the stack must be running compatible software versions.

Perform 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.

Procedure

Step 1 Use the **enable** command to enter into privileged EXEC mode.

Example:

```
Switch> enable
```

Enter your password if prompted.

Step 2 Use the **switch** *switch-number* **role** { **active** | **standby** } command to change stack mode to 1:1 mode and designates the switch as active or standby.

Example:

```
Switch# 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

Switch# 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
```

Step 3 (Optional) Use the **show switch stack-mode** command to verify the current stack mode on a switch

Example:

```
Switch# 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.

Disable 1:1 redundancy stack mode

Before you begin

- All the switches in the stack must be running the same license level as the active switch. For information about license levels, refer to the *System Management Configuration Guide* of the required release.
- All the switches in the stack must be running compatible software versions.

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

Procedure

Step 1 Use the **enable** command to enter into privileged EXEC mode.

Example:

```
Switch> enable
```

Enter your password if prompted.

Step 2 Use the **switch clear stack-mode** command to change stack mode to the N+1 mode and removes active and standby assignments.

Example:

```
Switch# switch clear stack-mode
WARNING: Clearing the chassis HA configuration will resultin 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]:
```

Feature history for stack 1:1 redundancy

Table 1: Feature History Table

Release	Feature	Feature Information
Cisco IOS XE Cupertino 17.7.1	Stacking support for Cisco Catalyst IE9300 Rugged Series Switches	The switch became available, with stacking supported for two-member stacks (IE-9320-26S2C-A and IE-9320-26S2C-E)