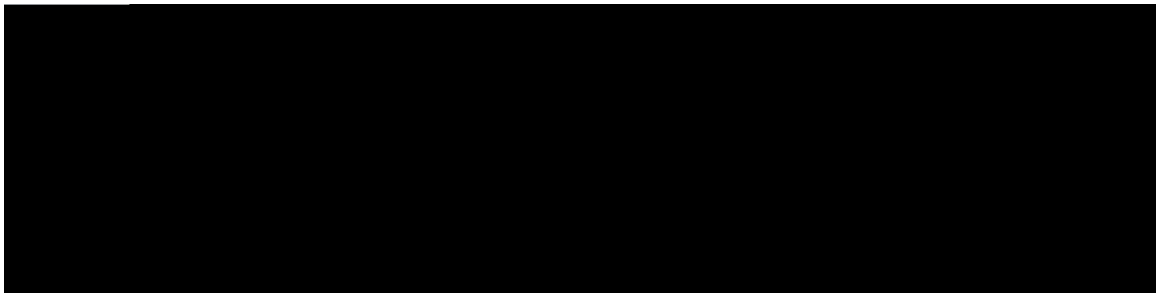
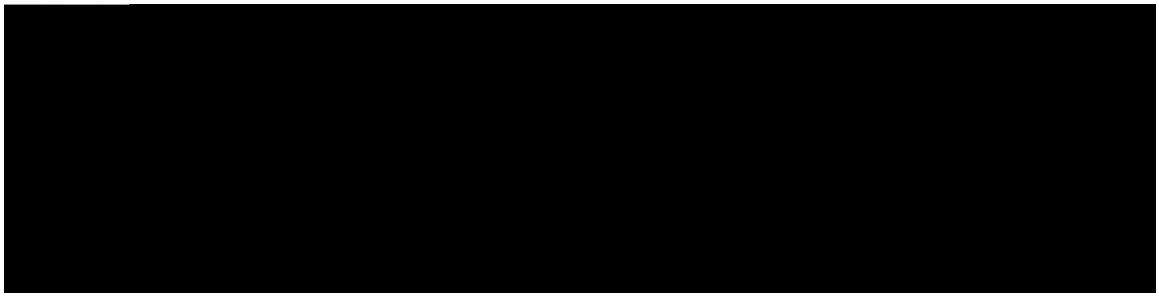


Connectivity



# Preface



## Document Conventions

This document uses the following conventions:

| Convention | Description |
|---|---|
| | Both the |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

# Related Documentation

CHAPTER 1

# Using the Command-Line Interface

*Table 1: Command Mode Summary*

DETAILED STEPS

# No and Default Forms of Commands

SUMMARY STEPS

1. **Ctrl-P** or use the

SUMMARY STEPS

1. **terminal editing**
2. **terminal no editing**

DETAILED STEPS

The

SUMMARY STEPS

1. {**show** | **more**} *command* | {**begin** | **include** |

- Connect the switch console port to a management station or dial-up modem, or connect the Ethernet management port to a PC. For information about connecting to the console or Ethernet management port, see the switch hardware installation guide.
- Use any Telnet TCP/IP or encrypted Secure Shell (SSH) package from a remote management station. The switch must have network connectivity with the Telnet or SSH client, and the switch must have an enable secret password configured.
  - The switch supports up to 16 simultaneous Telnet sessions. Changes made by one Telnet user are reflected in all other Telnet sessions.
  - The switch supports up to five simultaneous secure SSH sessions.

  After you connect through the console port, through the Ethernet management port, through a Telnet session or through an SSH session, the user EXEC prompt appears on the management station.

CHAPTER 2

# Using the Web Graphical User Interface

wireless configuration. Start the wizard through Configuration -> Wizard and

Step 3 To enable

The

If Mobility Agent is chosen, enter the mobility controller IP address in the Mobility Controller IP Address text box and mobility controller IP address in the Mobility Controller Public IP Address text box.

CHAPTER 3

# Managing Switch Stacks

A StackWise adapter must be installed in the stacking

If the active switch

If a newly created

Y

## 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 iM

You back up and restore the stack configuration in the same way as you would for a standalone switch configuration.

Related Topics

Assigning a Stack Member Number, on page 36
Switch Stack Configuration Scenarios, on page 45

## Offline Configuration to Provision a Stack Member

You can use the offline configuration feature to *provision* (to supply a configuration to) a

*Table 4: Results of Comparing the Provisioned Configuration with the Provisioned Switch*

If

Examples of Auto-Advise Messages

# How to Configure a Switch Stack

# Assigning a Stack Member Number

This optional task is

SUMMARY STEPS

1. **show switch**
2. **configure terminal**
3. **switch** *stack-member-number* **provision** *type*
4. **end**
5. **copy running-config startup-config**

DETAILED STEPS

| | | |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

SUMMARY STEPS

1. **configure terminal**
2. **no switch** *sta*

# Troubleshooting the Switch Stack

## Accessing the Diagnostic Console of a Stack Member

### Before You Begin

This optional task is available only from the active switch.

### SUMMARY STEPS

1. **session**

# Configuration Examples for Switch Stacks

## Switch Stack Configuration Scenarios

Most of these switch stack

# 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

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1/2 | Down | None | 3 m | Yes | No | Yes | 1 | No |
| 2/1 | Down | None | 3 m | Yes | No | Yes | | |

| Field | Description |
| --- | --- |
| | Whether |
| | |
| | |

If you

## Software Loopback with no Connected Stack Cable: Example

```
Switch
```

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:

```
Switch# show switch stack-ports summary
  Switch#
 Sw#/Port#  Port    Neighbor  Cable
```

Standards and RFCs

| | Title |
|---|---|
| | |

CHAPTER

# Configuring Cisco NSF with SSO

- Finding FeatA g

that have graceful restart capability continue to have NSF-capable sessions with this NSF-capable networking device.

- OSPF support in NSF requires that all neighbor networking devices be NSF-aware.

# SSO Operation

When a standby

- BPDU guard and filtering

decisions for a set period of time. This functionality prevents packets from being lost

# EIGRP Operation

When an EIGRP NSF-capable

SUMMARY STEPS

1. **r**

SUMMARY STEPS

1. **configure terminal**
2. **router bgp as-number**
3. **bgp graceful-restart**

DETAILED STEPS

| | Command or Action | Purpose |
|---|---|---|
| | **configure** | Enters global configuration mode. |
| | | |
| | | |

.
.

Step 2 Repeat Step 1 on each of the BGP neighbors.

Step 3 On the SSO

| | Command or Action | Purpose |
|---|---|---|
| | | Enables an OSPF routing process, which places the switch i s, |
| | | |

Number of indication LSA 0
Number of DoNotAge LSA 0
Flood

D0R 0 1 100215.09 537.59 8 00215.09 5371.118000 D0R 5371.118000250130 1 10021625013.4 6371.118000 D0Rm6371.249200215.09 5335.28200215.09 5335.41 100

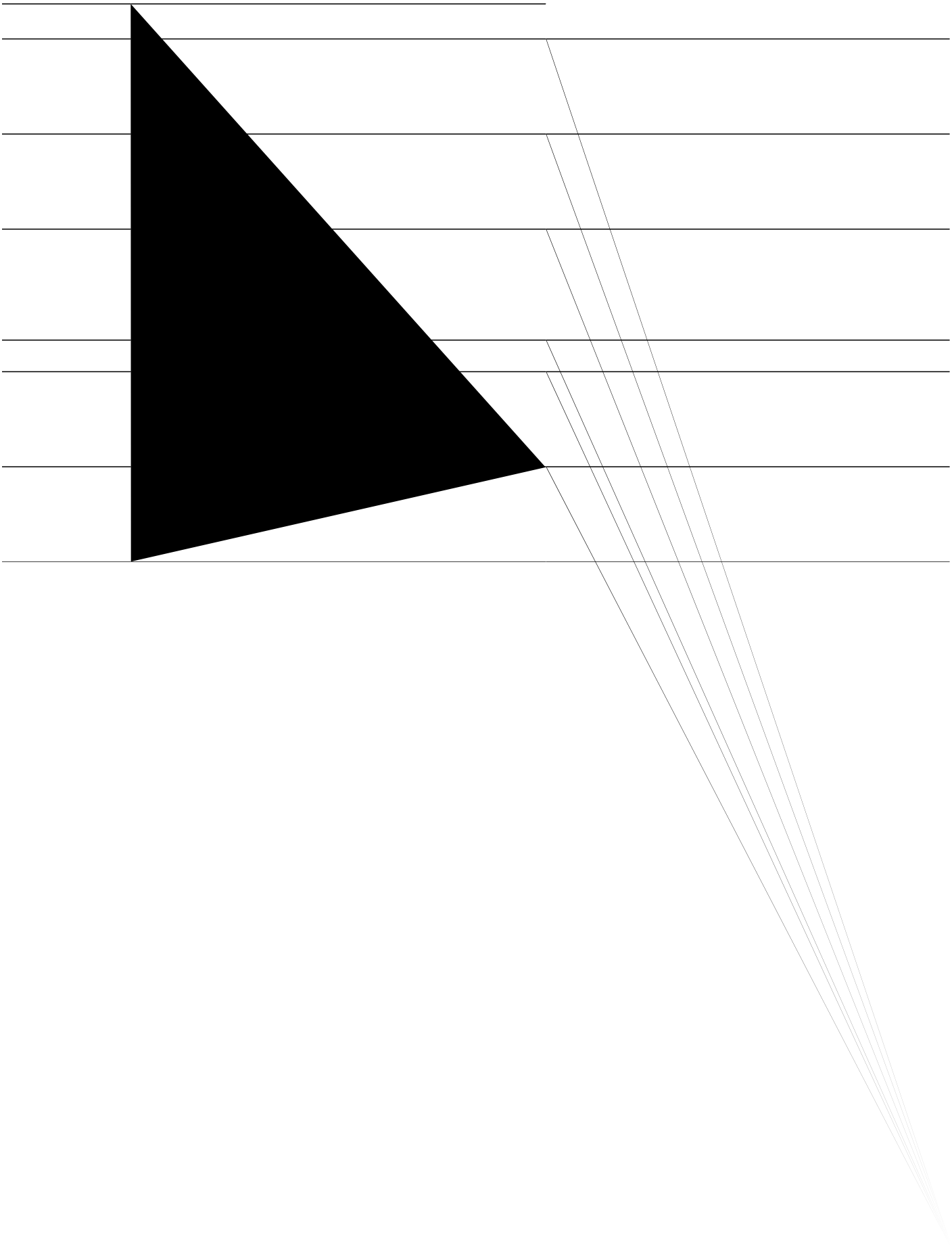
. .
.

Step 2 Enter

# Information About Redundancy

In case of n+1 redundancy, access points are configured with primary, secondary, and tertiary controllers. When the primary controller fails, depending upon the number

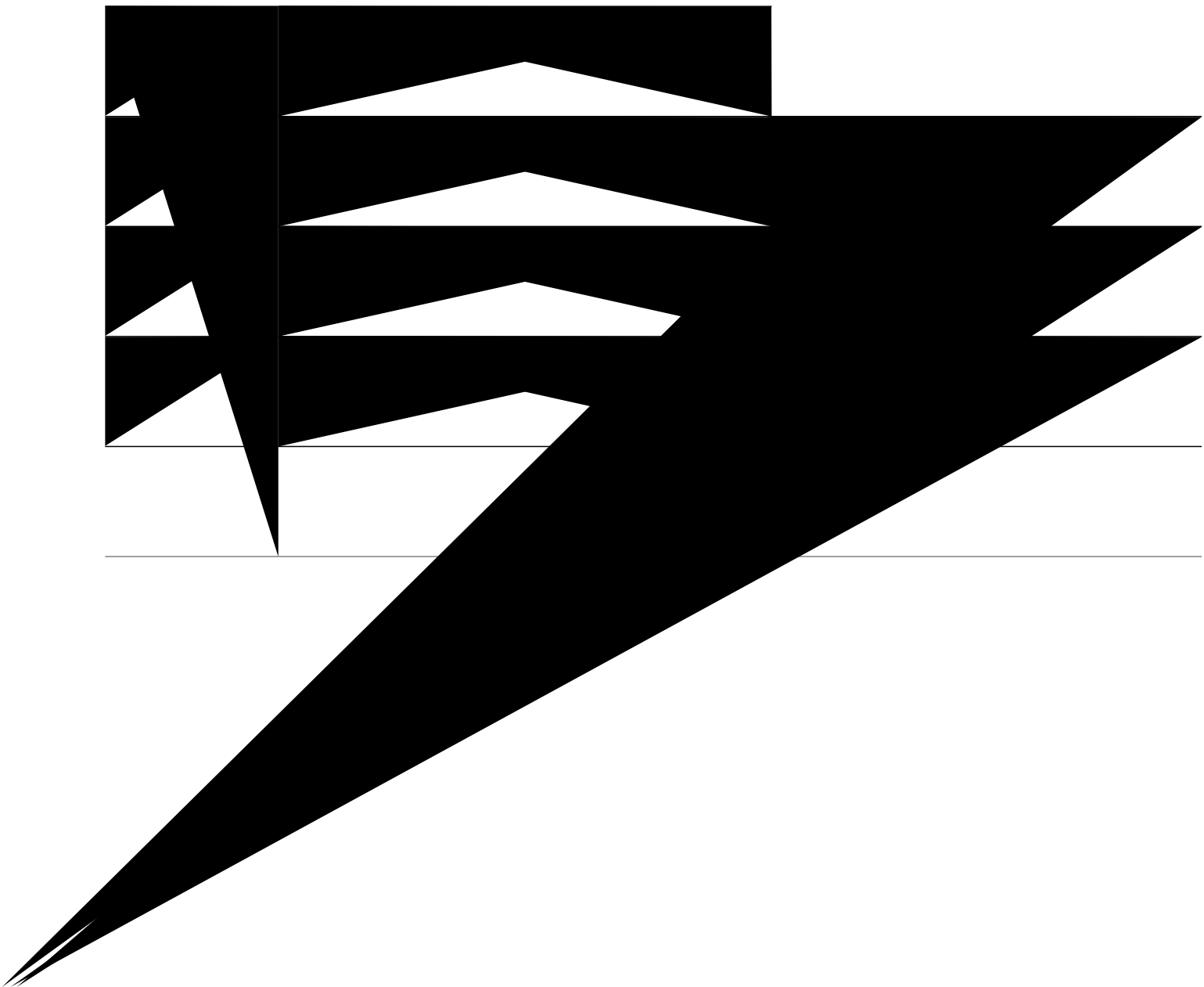
For more details on configuring EtherChannel, and Etherchannel modes, see the Layer 2 (Link Aggregation) Configuration Guide, Cisco IOS XE Release 3SE



SUMMARY STEPS

1. **configure terminal** HLW360945 64 314000DO
2. **service internal**
3. **redundancy**
4. **main-cpu**
5. **standby console enable**
6. **exit**

DETAILED STEPS



SUMMARY STEPS

```
!
interface TenGigabitEthernet1/0/5
 switchport mode trunk
 channel-group 1 mode on
 ip dhcp snooping trust
!
interface TenGigabitEthernet1/0/6
 switchport mode trunk
 channel-group 1 mode on
 ip dhcp snooping trust
!
interface TenGigabitEthernet2/0/1
 switchport mode trunk
 channel-group 2 mode on
 ip dhcp snooping trust
!
interface TenGigabitEthernet2/0/2
```

# Viewing Redundancy Switchover History (GUI)

Step 1 Click **Monitor > Controller > Redundancy** > **States.**
The Redundancy States page is displayed. The values for the following parameters are displayed in the page:

| | |
|---|---|
| | |
| | |
| | |
| | |
| | |

stack member