



Overview

This document describes how to configure the software features in IOS release 15.0(2)ED for the Cisco 2520 Connected Grid Switch and Ethernet Switch Module (ESM). Use this document in conjunction with additional software configuration documentation listed in the supported hardware table for each feature.

This chapter provides an overview of the following features in IOS release 15.0(2)ED:

- [Switch Boot Optimization, page 1-1](#)
- [Dying Gasp, page 1-1](#)
- [Asymmetric VLAN Mapping, page 1-2](#)
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Switch Boot Optimization

Switch Boot Optimization disables memory test, file system check (FSCK), and power-on self-test (POST) to minimize switch boot time. This feature is disabled by default. When this feature is enabled and there is a system crash for some reason, the switch automatically disables the boot optimization feature and saves all the crash information in the first reload. Then the boot loader performs all necessary checks. The boot optimization is reenabled after the system comes up successfully.

Related Topics

[Chapter 2, “Configuring Switch Boot Optimization”](#)

Dying Gasp

The Dying Gasp feature enables the Cisco CGS 2520 to send dying gasp messages through SNMP, syslog, or Ethernet-OAM (Operations Administration and Maintenance) to report the abrupt loss of power to the host platform.

Related Topics

[Chapter 3, “Configuring Dying Gasp”](#)

Asymmetric VLAN Mapping

The asymmetric VLAN mapping feature for the Cisco CGS 2520 provides a method for restricting traffic on VLAN trunk ports. The feature lets you specify lists of VLANs that are allowed to forward traffic on the trunk port in the ingress direction, egress direction, or in both directions.

Related Topics

[Chapter 4, “Configuring Asymmetric VLAN Mapping”](#)

VLAN Trunking Protocol

VLAN Trunking Protocol (VTP) is a Layer 2 messaging protocol that maintains VLAN configuration consistency by managing the addition, deletion, and renaming of VLANs on a network-wide basis. VTP on the Cisco CGS 2520 Switch and Cisco Connected Grid 10-port Ethernet Switch Module Interface Card (ESM) minimizes misconfigurations and configuration inconsistencies that can cause several problems, such as duplicate VLAN names, incorrect VLAN-type specifications, and security violations.

Related Topics

[Chapter 5, “Configuring VLAN Trunking Protocol”](#)

Voice VLAN

The Voice VLAN feature enables access ports on the switch to carry IP voice traffic from a Cisco IP phone. Voice VLAN supports users connecting to both a Cisco IP phone and another data device, such as a PC, through the IP phone to a switch port. The voice traffic and data traffic can be treated differently with voice traffic having higher priority.

Related Topics

[Chapter 6, “Configuring Voice VLAN”](#)

Smart Call Home

Smart Call Home provides a notification and alert system for critical system events. A range of message formats are available for compatibility with pager services, standard e-mail, or XML-based automated parsing applications.

Common uses can include direct paging of a network support engineer, e-mail notification to a network operations center, and XML delivery to a support website.

Related Topics

[Chapter 7, “Configuring Smart Call Home”](#)