

# Cisco IOS

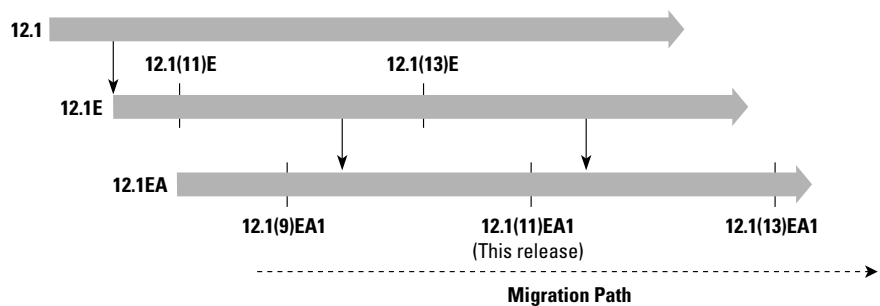
## Deployment Release 12.1(11)EA1

This Product Bulletin describes the content and delivery information concerning Cisco IOS® software release 12.1(11)EA1. This release is specific for the Catalyst® 3550 and 2950 Series platform. For more information about the Cisco IOS software release process, please see Product Bulletin #537.

### Migration Guide

Diagram 1 below displays Cisco IOS 12.1(11)EA1 release functionality relative to the 12.1 and 12.1E releases. This diagram identifies the recommended migration path.

**Figure 1** Cisco IOS Release 12.1EA Release Train



## New Features in Cisco IOS Release 12.1(11)EA1

The following features will be delivered in the initial release of 12.1(11)EA1.

**Table 1** Cisco IOS Release 12.1(11)EA1 New Features

12.1(11)EA1 Feature	3550-EMI	3550-SMI	2950-EI	2950-SI	Description
BGPv4	Yes	No	No	No	L3 routing protocol which allows service providers to offer layer 3 VPN services to their enterprise customers.
WCCP	Yes	No	No	No	Allows 3550 to interact with a cache, redirecting content requests to a cache, and performing basic load balancing across multiple caches
Multi-VRF CE	Yes	No	No	No	Provides a separate IP routing and forwarding table to each L3 VPN
RIPv1, RIPv2, and Static Routing	Already Supported	Yes	No	No	Extends 3550 EMI feature support to 3550 SMI image
Per Port, per VLAN, Ingress Policing	Yes	Yes	No	No	Allows for per-port, per-VLAN policing
CISCO-PORT-QOS-MIB	Yes	Yes	No	No	Used for QoS monitoring, billing
L2/L3 Interface MIB	Yes	Yes	No	No	Allows Network Management System to determine whether Catalyst 3550 is L2 or L3, identify the correct software image to download via SWIM, properly represent 3550 in topology, and know if a port is routed or switched
Time-based ACLs	Already Supported	Already Supported	Yes	No	Allows configuration of differentiated services based on time periods
QoS Based on DSCP Classification	Already Supported	Already Supported	Yes	No	Enhancements which allow more granular QoS
ACLs Based on DSCP Filtering	Already Supported	Already Supported	Yes	No	Adds DSCP bits to current ACL filtering parameters.
Additional Frame Format Support	Already Supported	Already Supported	Yes	No	Supports additional frame types: Ethernet II (tagged and untagged), 802.3 (SNAP Encapsulated tagged and untagged frames)
RSPAN	Yes	Yes	Yes	No	Allows network administrators to remotely monitor ports in a Layer 2 switch network from any other switch in the same network
SNMPv3 (crypto)	Yes	Yes	No	No	Authenticates and encrypts packets over the network and provides security features such as message integrity, authentication, and encryption
SNMPv3 (non-crypto)	Yes	Yes	Yes	Yes	Monitors and controls network devices, manages configurations, statistics collection, performance, and security
Trusted Boundary Configuration	Yes	Yes	Yes	Yes	Provides the ability to configure port trust state, as well as specify whether or not to trust class of service (CoS), Type of Service (ToS), or DSCP.
Aggressive UDLD	Yes	Yes	Yes	Yes	Allows precautionary disabling of port on bidirectional links
Crash Information Support	Already Supported	Already Supported	Yes	Yes	Enables switch to generate a crash file for improved troubleshooting
Cisco-RTTMON-MIB	Already Supported	Already Supported	Yes	Yes	Allows users to monitor network performance between a Catalyst switch and a remote device
Entity MIB	Yes	Yes	Yes	Yes	Allows report of physical box configuration

**Table 2** New Features in Cisco Cluster Management Suite (CMS)

Feature	Description
<b>Performance Improvement</b>	Enhancements made to improve CMS performance
<b>Voice, Video, and Data Wizard Enhancements</b>	Display device name in Show CLI, improve summary
<b>Security Wizard Enhancements</b>	More easily restrict access to server, network, application traffic type
<b>Users and Passwords</b>	Enable users with privilege level 15 to configure Enable password, local usernames and password, and console and VTY lines enable password
<b>Switch Configuration Save and Restore</b>	Allows back up of switch start-up configuration to TFTP server and restore later
<b>Cloning Device Configuration</b>	Allows cloning of switch configuration
<b>Save CMS Attributes on Exit</b>	CMS->Preference entries are saved on local hard disk
<b>SNMPv3 Configuration</b>	Allows SNMPv3 configuration
<b>Per Port Per VLAN Policing</b>	Allows user to police per port per VLAN on ingress
<b>Help Index Enhancement</b>	New Help indices added
<b>DSCP Filtering and Time-based ACL</b>	Supports DSCP filtering and time-based ACLs on Catalyst 2950Gs
<b>Intelligent VLAN trunk and EtherChannel Configuration</b>	Ease configuration of trunks and EtherChannels
<b>Alarm Notification Enhancement</b>	Allows user to configure to send E-mail messages based on threshold of system message
<b>System Uptime in Inventory Report</b>	System uptime displaced in Inventory Dialog
<b>IE 6.x Support</b>	Supports IE 5.5 and 6.0
<b>Netscape 6.x</b>	Supports Netscape 4.75 and 6.2
<b>Java Plug-in 1.4</b>	Supports Java Plug-in v1.3.0, v1.3.1, v1.4

- Catalyst 3550 EMI and SMI platforms include:
  - Catalyst 3550-12G, 3550-12T, 3550-24-SMI, 3550-24-EMI, 3550-24-DC-SMI, 3550-48-SMI, 3550-48-EMI, 3550-24-FX-SMI.
- Catalyst 2950 Enhanced Image platforms include:
  - Catalyst 2950T-24, 2950C-24, 2950G-12-EI, 2950G-24-EI, 2950G-24-EI-DC, 2950G-48-EI.

- Catalyst 2950 Standard Image platforms include:
  - Catalyst 2950-12, 2950-24, 2950SX-24.

## Detailed Information

For more information about the platforms and features being delivered in 12.1(11)EA1 please reference the following Release Notes documents:

- <http://www.cisco.com/univercd/cc/td/doc/product/lan/c3550/>
- <http://www.cisco.com/univercd/cc/td/doc/product/lan/cat2950/>

## Support

Cisco IOS software release 12.1(11)EA1 follows the standard Cisco support policy as indicated in the following link

- <http://www.cisco.com/warp/public/437/27.html>

## Product Numbers

For more detailed information about feature sets, images, and memory recommendations Cisco IOS software release 12.1(11)EA1, please refer to the 12.1(11)EA1 release notes at:

- <http://www.cisco.com/univercd/cc/td/doc/product/lan/c3550/>
- <http://www.cisco.com/univercd/cc/td/doc/product/lan/cat2950/>

## Download Information

There are two software images for all Catalyst 3550-24 and 3550-48 products—the Standard Multilayer Software Image (SMI) and the Enhanced Multilayer Software Image (EMI). Catalyst 3550 switches that were purchased with the SMI preinstalled (WS-C3550-24-SMI, WS-C3550-48-SMI and WS-C3550-24-DC-SMI) are only authorized to be upgraded to the most recent SMI.

If an enhancement to the EMI is desired, a software upgrade kit must be purchased before an authorized EMI software download. The part number for the EMI software upgrade is CD-3550-EMI=. If the Catalyst 3550 was purchased with the EMI preinstalled (WS-C3550-24-EMI and WS-C3550-48-EMI), or CD-3550-EMI= has been purchased for the switch, then the downloading of the most recent EMI is authorized.

All Catalyst 3550-12T and 3550-12G switches are always shipped with the EMI and are authorized to be upgraded to the most recent version. Downloads will be monitored for adherence to this authorization.

Customers can download Cisco IOS Release 12.1(11)EA1 software from Cisco Connection Online (CCO) in the Software Image Library.

- <http://www.cisco.com/public/sw-center/sw-ios.shtml>

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