



Cisco Catalyst 2950 Series Migration Guide

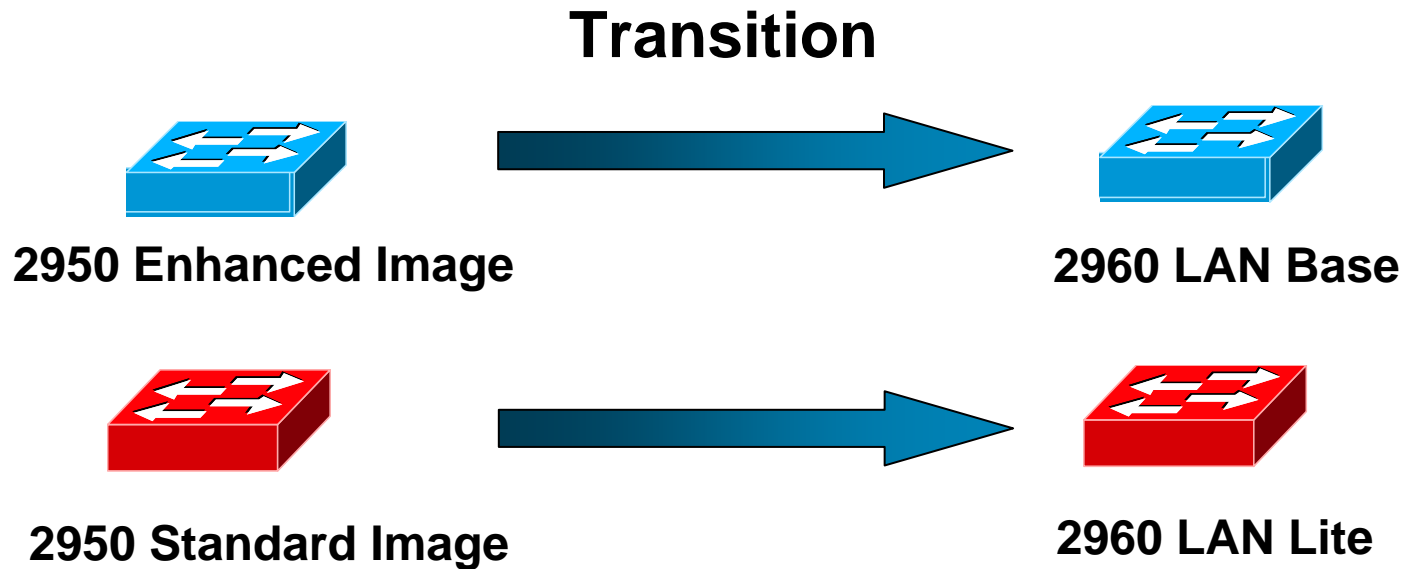
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Cisco Catalyst 2950 Series EoS/EoL Bulletins

- EoS/EoL Bulletin # 1094 covers the following Catalyst 2950 models:
 - WS-C2950G-48-EI
 - WS-C2950G-24-EI
 - WS-C2950G-12-EI
 - WS-C2950T-48-SI
 - WS-C2950T-24
- EoS/EoL Bulletin # 5850 covers the following Catalyst 2950 models:
 - WS-C2950C-24
 - WS-C2950SX-48-SI
 - WS-C2950SX-24
 - WS-C2950-24
 - WS-C2950-12
- NOTE: Catalyst 2950G-24-EI-DC is not included in either of these EoS announcements

Catalyst 2950 Transition



- Higher port density deployments may be better suited for Cisco StackWise Technology in the Cisco Catalyst 3750 Series switches

Products Affected by the End-of-Sale Announcement



Cisco Catalyst 2950 Series (PB# 1094)

EoL / EoS Products	Replacement Products	EoS Announced	End of Sale	End of Software Maintenance Releases	End of Hardware Support
WS-C2950G-48-EI	WS-C3560-48PS-S ¹	4/17/06	12/31/06	12/31/07	12/31/11
	WS-C3560-48TS-S ¹				
	WS-C2960-48TC-L ²				
WS-C2950G-24-EI WS-C2950G-12-EI	WS-C3560-24PS-S ¹				
	WS-C3560-24TS-S ¹				
	WS-C2960-24TC-L ²				
WS-C2950T-24	WS-C2960-24TT-L ²				
WS-C2950T-48-SI	WS-C2960-48TT-L ²				
<p style="text-align: center;"> ¹IP Base ²LAN Base (IOS Versions) </p>					

Cisco Catalyst 2950 Series (PB# 5850)

EoL / EoS Products	Replacement Products	EoS Announced	End of Sale	End of Software Maintenance Releases	End of Hardware Support
WS-C2950-12 WS-C2950-24	WS-C2960-24TT-L² WS-C2960-24-S³	10/08/07	10/07/08	10/07/09	10/06/13
WS-C2950C-24 WS-C2950SX-24	WS-C2960-24TC-L² WS-C2960-24TC-S³				
WS-C2950SX-48-SI	WS-C2960-48TC-L² WS-C2960-48TC-S³				
²LAN Base ³LAN Lite (IOS Versions)					

Cisco Catalyst 2950 Series NOT Included in EoS

Product Part Number <u>NOT</u> Affected by EoS Announcement	Product Description
WS-C2950G-24-EI-DC	24 10/100 + 2 GBIC + Enhanced Image + DC Power

Product Comparisons (1/3)

Feature	2950 Standard Image	2950 Enhanced Image	2960 LAN Lite	2960 LAN Base
Flash / DRAM	8 / 16 MB	8 / 16 MB	32 / 64 MB	32 / 64 MB
Switching Fabric	8.8 Gbps	13.6 Gbps	16 Gbps	16 / 32 Gbps
Jumbo Frame Support	No	No	Yes	Yes
Auto-MDIX	No	No	Yes	Yes
TDR	No	No	Yes	Yes
ACL's	None	300 ACE's	None	512 ACE's

Product Comparisons (2/3)

Feature	2950 Standard Image	2950 Enhanced Image	2960 LAN Lite	2960 LAN Base
Flex Links	No	No	No	Yes
QoS	WRR	WRR	SRR + WTD	SRR + WTD
Auto QoS	No	Yes	No	Yes
IPv6 Host	No	No	No	Yes
802.1x MAC-Auth Bypass	No	No	Yes	Yes
802.1x Web-Auth	No	No	No	Yes

Product Comparisons (3/3)

Feature	2950 Standard Image	2950 Enhanced Image	2960 LAN Lite	2960 LAN Base
DHCP Snooping	No	Yes	No	Yes
MLD Snooping	No	No	No	Yes
Link State Tracking	No	No	No	Yes
Ingress Policing	No	Yes	No	Yes
LLDP	No	No	Yes	Yes (+ MED)
SSH/SSL/SCP	SSH Only	SSH Only	Yes	Yes

Migrating to:
Cisco Catalyst 3750/E Series
Cisco Catalyst 3560/E Series



Catalyst 3750/E and Catalyst 3560/E Series Enterprise-class switches

StackWise (Cat 3750)	<ul style="list-style-type: none">▪ Stack operates as a single unified system with integrated stack management▪ Automatic SW version checking▪ Auto configuration▪ 1:N Master failover (sub second L2, sub 3-second L3)▪ Cross stack Etherchannel▪ Hot add/delete: plug-n-play▪ 32 Gbps stacking throughput (64 Gbps for Cat 3750E)
StackWisePlus (Cat 3750E)	
L3 Routing	<ul style="list-style-type: none">▪ Advanced routing protocols like OSPF, EIGRP, and EIGRP-stub▪ Multicast routing: DVMRP tunneling and PIM▪ Equal cost routing for load balancing▪ Multi VRF-CE▪ IPv6 forwarding and management
PoE	<ul style="list-style-type: none">▪ 24 port Class 3 or 48 port class 2 PoE available on Cat 3750 and Cat 3560▪ 48 port Class 3 PoE on Cat 3750E and Cat 3560E
Higher GE density	<ul style="list-style-type: none">▪ 24 10/100/1000 + 4 SFP (+ 2 X2 on Cat 3750E and Cat 3560E)▪ 48 10/100/1000 + 4 SFP (+ 2 X2 on Cat 3750E and Cat 3560E)
Enhanced security	<ul style="list-style-type: none">▪ NAC LAN port IP▪ Dynamic ARP Inspection▪ IP Source Guard▪ PVLAN▪ ACLs
Scalability	<ul style="list-style-type: none">▪ 2000 ACEs for security, QoS, and multicast filtering▪ 1000 VLANs▪ 2K multicast groups

Catalyst 3750-E and Catalyst 3560-E Series Product Highlights

- Complements the Catalyst 3750 and 3560 Series
- 24 or 48 10/100/1000 ports
- All models have 2x10 GE uplinks
- PoE and data-only models
- Wire-speed performance
- StackWise Plus
 - Supports original StackWise features
 - Double the throughput of original StackWise
 - Backwards compatible with the Catalyst 3750
- Power
 - Modular power supply and fan
 - Multiple power supply options sizes
 - 48 ports of full IEEE POE in a single rack unit
 - Supported by new and improved redundant power system



Dual 10 GE Uplinks

- Dual 10GE X2 uplinks in all 3750-E and 3560-E models
- Supports the following X2 modules:
 - ER (SMF 40km)
 - LX4* (MMF - 300m SMF - 10km)
 - LR (SMF 10km)
 - SR (MMF – 26 to 300m**)
 - CX4 (Copper - 15m)



* Requires version -03



Cisco TwinGig Converter Module

- Converts X2 10GE interface into dual SFP interfaces



Benefit

- Future Proofing – utilize current 1GE links in wiring closets until ready to upgrade to 10GE.

Cisco StackWise Technology

For Catalyst 3750 Switches

- 32-Gbps Stack Interconnect
- Stack up to 9 Units
- Separate Stacking Port
- 1:N Master Redundancy
- Autoconfiguration and Cisco IOS® Version Check/update
- Cross-Stack EtherChannel and QoS
- Line-Speed Performance with QoS and ACLs for Gigabit Ethernet
- Hot Add and Delete of Gigabit Ethernet and Fast Ethernet Chassis in Same Stack
- Patented Cable Connector

Unified Stacking, Behaving As a Single Unit



Cisco StackWise Plus Technology

For Catalyst 3750-E Switches

- StackWise Plus increases stacking throughput to 64Gbps using spatial reuse
- Same great features as original Cisco StackWise Technology
- Compatible with StackWise Operates using protocol at 32Gbps



Benefit

- Protects investments in Catalyst 3750 switches
- Easy way to add 10GE support to the wiring closet

Power over Ethernet

Why PoE

- Enables the network for IP Telephony and Wireless access
- Eliminate the need for separate electrical wiring
- Protect your investment and avoid costly upgrades

Cisco Catalyst Advantages

- Standards-based IEEE 802.3af guarantees device interoperability
- Intelligent power management with granular control
- Cisco's Redundant Power Supply (RPS675) maximizes reliability
- Both Cisco pre-standard POE and 802.3af are fully supported
- Wide selection of powered devices

IP Phones

Wireless Access Points

Surveillance cameras

Access Card Readers



Gigabit Ethernet

- **Proven Technology**

 - Desktops and notebooks are now shipped with GE adapters

 - Increased PC bus speeds and server TCP offload engines (TOE) allow for full bandwidth utilization

- **Easy to Deploy**

 - Works over existing Cat-5 cabling

- **Prepares the network for future application demands**

 - Scales beyond 100Mbps as bandwidth requirements increase

 - Protects your investment and avoids a costly upgrade

- **Storage**

 - Takes advantage of simple and affordable Network Attached Storage (NAS)

- **Clustering**

 - Enables high performance GRID and distributed computing

- **Software Applications**

 - Data Backup, Database Access, Microsoft Exchange, File Sharing, Collaborative Development, Remote Operating System Updates, Scientific Modeling, Medical Imaging, Video Production

 - Prepares your network to leverage capabilities in next generation operating systems, such as Microsoft Vista

Routed Access (Layer 3) Advantage

- Utilizes OSPF and EIGRP in the access layer
- Increased resiliency for VoIP, IP Video, and Collaboration applications
- Improves network availability
- Fast convergence and load balancing
- Reduces network complexity
- Simplifies network management
- Reduce network recovery and downtime
- Easier troubleshooting due to use of common protocols
- EIGRP-stub and PIM-stub included in IP Base

Network Admission Control Framework Deployment Options

	LAN Port IP (LPIP)	LAN Port 802.1X Basic (LP1X)
Switch Models	Catalyst 3750 and Catalyst 3560	Catalyst 3750, Catalyst 3560 and Catalyst 2960
Credentials	Carries credentials inside EAPoUDP, completely independent of any user authentication	Carries credentials inside EAPoL along with user authentication
Trigger	Triggered by ARP or DHCP traffic from the host	Triggered by normal 802.1X exchange
Enforcement Policy	RADIUS IP Downloadable ACLs	RADIUS VLAN Assignment
Client Requirements	Can be used with or without CTA (clientless host)	Requires an enhanced supplicant with CTA built-in

IPv6 Services

- IPv6 expands the network address space, improves ease of use, mobility, security
- IPv6 services are supported in hardware for maximum performance and investment protection
- The Catalyst 3750 and 3560 support IPv6 routing, management, multicast, and ACLs; host management available in IP Base license

IP Service	IPv4 Solution	IPv6 Solution
Addressing Range	32-bit, NAT	128-bit, Multiple Scopes
Autoconfiguration	DHCP	Serverless, Auto-Config
Mobility	Mobile IP	Mobile IP, but no foreign agent required
Multicast	Many protocols use broadcast traffic	More protocols use efficient multicast traffic
Security	IPSec Support Optional	IPSec Support Mandatory



Summary and FAQ

- Why is Cisco announcing the end-of-sale for Catalyst 2950 Series switches?

Cisco has introduced the Catalyst 2960 LAN Lite and Catalyst 2960 LAN Base switches with additional capabilities as a cost-effective migration path for the older Catalyst 2950 switches.

- Are all the Catalyst 2950 Series switch models going end-of-sale?

No. There are no EoS plans for the Catalyst 2950G-24-EI-DC switch.

- What is the migration path for the Catalyst 2950 switches?

Cisco recommends the enterprise-class Catalyst 3750-E/3750 and Catalyst 3560-E/3560 Series which offer advanced intelligence to drive business productivity with significant investment protection.

- Can I buy a Catalyst 2960 LAN Lite and later upgrade to the LAN Base software?

No. The Catalyst 2960 switches are not upgradeable from LAN Lite to LAN Base, however software version updates will be available at no additional charge.

Questions?

- Catalyst 2950 Series EoL/EoS Announcements:

http://www.cisco.com/en/US/products/hw/switches/ps628/prod_eol_notices_list.html

- Additional Resources:

For more information about Cisco Catalyst Family of switches, visit

<http://www.cisco.com/en/US/products/hw/switches/index.html> or contact your local account representative.

For more information about the Cisco End-of-Life Policy, go to:

http://www.cisco.com/en/US/products/prod_end_of_life.html

To subscribe to receive end-of-life/end-of-sale information, go to:

<http://www.cisco.com/cgi-bin/Support/FieldNoticeTool/field-notice>

