Release Notes for Avaya Ethernet Routing Switch 3500 Series

Release 5.3
NN47203-400
Issue 05.02
August 2015

© 2015 Avaya Inc.
All Rights Reserved.

Notice

While reasonable efforts have been made to ensure that the information in this document is complete and accurate at the time of printing, Avaya assumes no liability for any errors. Avaya reserves the right to make changes and corrections to the information in this document without the obligation to notify any person or organization of such changes.

Documentation disclaimer

“Documentation” means information published by Avaya in varying mediums which may include product information, operating instructions and performance specifications that Avaya may generally make available to users of its products and Hosted Services. Documentation does not include marketing materials. Avaya shall not be responsible for any modifications, additions, or deletions to the original published version of documentation unless such modifications, additions, or deletions were performed by Avaya. End User agrees to indemnify and hold harmless Avaya, Avaya's agents, servants and employees against all claims, lawsuits, demands and judgments arising out of, or in connection with, subsequent modifications, additions or deletions to this documentation, to the extent made by End User.

Link disclaimer

Avaya is not responsible for the contents or reliability of any linked websites referenced within this site or documentation provided by Avaya. Avaya is not responsible for the accuracy of any information, statement or content provided on these sites and does not necessarily endorse the products, services, or information described or offered within them. Avaya does not guarantee that these links will work all the time and has no control over the availability of the linked pages.

Warranty

Avaya provides a limited warranty on Avaya hardware and software. Refer to your sales agreement to establish the terms of the limited warranty. In addition, Avaya’s standard warranty language, as well as information regarding support for this product while under warranty is available to Avaya customers and other parties through the Avaya Support website: http://support.avaya.com or such successor site as designated by Avaya. Please note that if You acquired the product(s) from an authorized Avaya Channel Partner outside of the United States and Canada, the warranty is provided to You by said Avaya Channel Partner and not by Avaya.

Licenses

THE SOFTWARE LICENSE TERMS AVAILABLE ON THE AVAYA WEBSITE, HTTP://SUPPORT.AVAYA.COM/LICENSEINFO OR SUCH SUCCESSOR SITE AS DESIGNATED BY AVAYA, ARE APPLICABLE TO ANYONE WHO DOWNLOADS, USES AND/OR INSTALLS AVAYA SOFTWARE, PURCHASED FROM AVAYA INC., ANY AVAYA AFFILIATE, OR AN AVAYA CHANNEL PARTNER (AS APPLICABLE) UNDER A COMMERCIAL AGREEMENT WITH AVAYA OR AN AVAYA CHANNEL PARTNER. UNLESS OTHERWISE AGREED TO BY AVAYA IN WRITING, AVAYA DOES NOT EXTEND THIS LICENSE IF THE SOFTWARE WAS OBTAINED FROM ANYONE OTHER THAN AVAYA, AN AVAYA AFFILIATE OR AN AVAYA CHANNEL PARTNER; AVAYA RESERVES THE RIGHT TO TAKE LEGAL ACTION AGAINST YOU AND ANYONE ELSE USING OR SELLING THE SOFTWARE WITHOUT A LICENSE. BY INSTALLING, DOWNLOADING OR USING THE SOFTWARE, OR AUTHORIZING OTHERS TO DO SO, YOU, ON BEHALF OF YOURSELF AND THE ENTITY FOR WHOM YOU ARE INSTALLING, DOWNLOADING OR USING THE SOFTWARE (HEREINAFTER REFERRED TO INTERCHANGEABLY AS “YOU” AND “END USER”), AGREE TO THESE TERMS AND CONDITIONS AND CREATE A BINDING CONTRACT BETWEEN YOU AND AVAYA INC. OR THE APPLICABLE AVAYA AFFILIATE (“AVAYA”).

Avaya grants You a license within the scope of the license types described below, with the exception of Heritage Nortel Software, for which the scope of the license is detailed below. Where the order documentation does not expressly identify a license type, the applicable license will be a Designated System License. The applicable number of licenses and units of capacity for which the license is granted will be one (1), unless a different number of licenses or units of capacity is specified in the documentation or other materials available to You. “Software” means computer programs in object code, provided by Avaya or an Avaya Channel Partner, whether as stand-alone products, pre-installed on hardware products, and any upgrades, updates, patches, bug fixes, or modified versions thereto. “Designated Processor” means a single stand-alone computing device. “Server” means a Designated Processor that hosts a software application to be accessed by multiple users. “Instance” means a single copy of the Software executing at a particular time: (i) on one physical machine; or (ii) on one deployed software virtual machine (“VM”) or similar deployment.

Licence types

Designated System(s) License (DS). End User may install and use each copy or an Instance of the Software only on a number of Designated Processors up to the number indicated in the order. Avaya may require the Designated Processor(s) to be identified in the order by type, serial number, feature key, Instance, location or other specific designation, or to be provided by End User to Avaya through electronic means established by Avaya specifically for this purpose.

Heritage Nortel Software

“Heritage Nortel Software” means the software that was acquired by Avaya as part of its purchase of the Nortel Enterprise Solutions Business in December 2009. The Heritage Nortel Software currently available for license from Avaya is the software contained within the list of Heritage Nortel Products located at http://support.avaya.com/LicenseInfo under the link “Heritage Nortel Products” or such successor site as designated by Avaya. For Heritage Nortel Software, Avaya grants You a license to use Heritage Nortel Software provided hereunder solely to the extent of the authorized activation or authorized usage level, solely for the purpose specified in the Documentation, and solely as embedded in, for execution on, or for communication with Avaya equipment. Charges for Heritage Nortel Software may be based on extent of activation or use authorized as specified in an order or invoice.

Copyright

Except where expressly stated otherwise, no use should be made of materials on this site, the Documentation, Software, Hosted Service, or hardware provided by Avaya. All content on this site, the documentation, Hosted Service, and the product provided by Avaya including the selection, arrangement and design of the content is owned either by Avaya or its licensors and is protected by copyright and other intellectual property laws including the sui generis rights relating to the protection of databases. You may not modify, copy, reproduce, republish, upload, post, transmit or distribute in any way any content, in whole or in part, including any code and software unless expressly authorized by Avaya. Unauthorized reproduction, transmission, dissemination, storage, and or use without the express written consent of Avaya can be a criminal, as well as a civil offense under the applicable law.

Third Party Components

“Third Party Components” mean certain software programs or portions thereof included in the Software or Hosted Service may contain software (including open source software) distributed under third party agreements (“Third Party Components”), which contain terms regarding the rights to use certain portions of the Software (“Third Party Terms”). As required, information regarding distributed Linux OS source code (for those products that have distributed Linux OS source code) and identifying the copyright holders of the Third Party Components and the Third Party Terms that apply is available in the products, Documentation or on Avaya’s website at: http://support.avaya.com/Copyright or such successor site as designated by Avaya. You agree to the Third Party Terms for any such Third Party Components.

Preventing Toll Fraud

“Toll Fraud” is the unauthorized use of your telecommunications system by an unauthorized party (for example, a person who is not a corporate employee, agent, subcontractor, or is not working on your company's behalf). Be aware that there can be a risk of Toll Fraud associated with your system and that, if Toll Fraud occurs, it can

result in substantial additional charges for your telecommunications services.

Avaya Toll Fraud intervention

If You suspect that You are being victimized by Toll Fraud and You need technical assistance or support, call Technical Service Center Toll Fraud Intervention Hotline at +1-800-643-2353 for the United States and Canada. For additional support telephone numbers, see the Avaya Support website: http://support.avaya.com or such successor site as designated by Avaya. Suspected security vulnerabilities with Avaya products should be reported to Avaya by sending mail to: securityalerts@avaya.com.

Downloading Documentation

For the most current versions of Documentation, see the Avaya Support website: http://support.avaya.com, or such successor site as designated by Avaya.

Contact Avaya Support

See the Avaya Support website: http://support.avaya.com for product or Hosted Service notices and articles, or to report a problem with your Avaya product or Hosted Service. For a list of support telephone numbers and contact addresses, go to the Avaya Support website: http://support.avaya.com (or such successor site as designated by Avaya), scroll to the bottom of the page, and select Contact Avaya Support.

Trademarks

The trademarks, logos and service marks (“Marks”) displayed in this site, the Documentation, Hosted Service(s), and product(s) provided by Avaya are the registered or unregistered Marks of Avaya, its affiliates, or other third parties. Users are not permitted to use such Marks without prior written consent from Avaya or such third party which may own the Mark. Nothing contained in this site, the Documentation, Hosted Service(s) and product(s) should be construed as granting, by implication, estoppel, or otherwise, any license or right in and to the Marks without the express written permission of Avaya or the applicable third party.

Avaya is a registered trademark of Avaya Inc.

All non-Avaya trademarks are the property of their respective owners. Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries.

Contents

Chapter 1: Introduction 5
Purpose 5
Related Resources 5
Documentation 5
Training 5
Viewing Avaya Mentor videos 6
Searching a documentation collection 6
Subscribing to e-notifications 7
Support 9
Chapter 2: New in this release 10
New in this release 10
Hardware 10
Features 11
Other changes 12
Chapter 3: Important notices 14
File names 14
Upgrading the Diag image using ACLI 15
Updating the Bootloader image from the Boot menu 15
Updating the Diag image from the Boot menu 16
Supported software and hardware capabilities 17
Supported standards RFCs and MIBs 18
Standards 19
RFCs and MIBs 19
Chapter 4: Resolved issues 22
Resolved issues 22
Chapter 5: Known issues and limitations 24
Known issues 24

Chapter 1: Introduction

Purpose

This document describes new features, hardware, upgrade alerts, known and resolved issues, and limitations for Avaya Ethernet Routing Switch 3500 Series, Software Release 5.3.

Related Resources

Documentation

See *Documentation Reference for Avaya Ethernet Routing Switch 3500 Series*, NN47203-101 for a list of the documentation for this product.

For more information about new features of the switch and important information about the latest release, see *Release Notes for Avaya Ethernet Routing Switch 3500 Series*, NN47203-400.

For more information about how to configure security, see *Configuring Security on Avaya Ethernet Routing Switch 3500 Series*, NN47203-504.

For the current documentation, see the Avaya Support website: www.avaya.com/support.

Training

Ongoing product training is available. For more information or to register, see http://avaya-learning.com/.

Enter the course code in the **Search** field and click **Go** to search for the course.

Course code	Course title
8D00020E	Stackable ERS and VSP Products Virtual Campus Offering

Viewing Avaya Mentor videos

Avaya Mentor videos provide technical content on how to install, configure, and troubleshoot Avaya products.

About this task

Videos are available on the Avaya Support website, listed under the video document type, and on the Avaya-run channel on YouTube.

Procedure

- To find videos on the Avaya Support website, go to http://support.avaya.com and perform one of the following actions:
  - In **Search**, type `Avaya Mentor Videos` to see a list of the available videos.
  - In **Search**, type the product name. On the Search Results page, select **Video** in the **Content Type** column on the left.
- To find the Avaya Mentor videos on YouTube, go to www.youtube.com/AvayaMentor and perform one of the following actions:
  - Enter a key word or key words in the **Search Channel** to search for a specific product or topic.
  - Scroll down Playlists, and click the name of a topic to see the available list of videos posted on the website.

Note:

Videos are not available for all products.

Searching a documentation collection

On the Avaya Support website, you can download the documentation library for a specific product and software release to perform searches across an entire document collection. For example, you can perform a single, simultaneous search across the collection to quickly find all occurrences of a particular feature. Use this procedure to perform an index search of your documentation collection.

Before you begin

- Download the documentation collection zip file to your local computer.
- You must have Adobe Acrobat or Adobe Reader installed on your computer.

Procedure

1. Extract the document collection zip file into a folder.
2. Navigate to the folder that contains the extracted files and open the file named <*product_name_release*>.pdx.

3. In the Search dialog box, select the option **In the index named <*product_name_release*>.pdx**.
4. Enter a search word or phrase.
5. Select any of the following to narrow your search:
   - Whole Words Only
   - Case-Sensitive
   - Include Bookmarks
   - Include Comments
6. Click **Search**.

   The search results show the number of documents and instances found. You can sort the search results by Relevance Ranking, Date Modified, Filename, or Location. The default is Relevance Ranking.

Subscribing to e-notifications

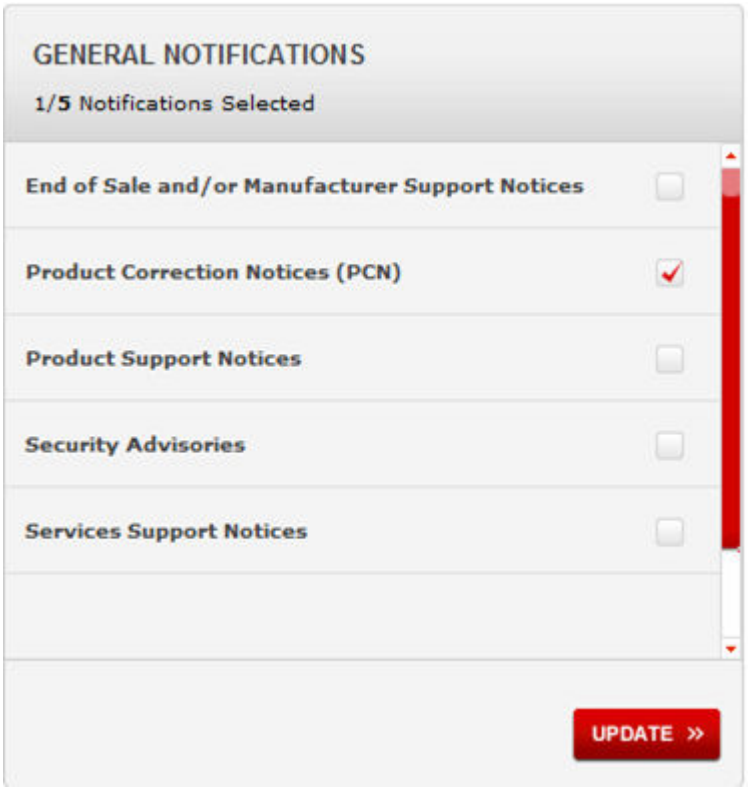
Subscribe to e-notifications to receive an email notification when documents are added to or changed on the Avaya Support website.

About this task

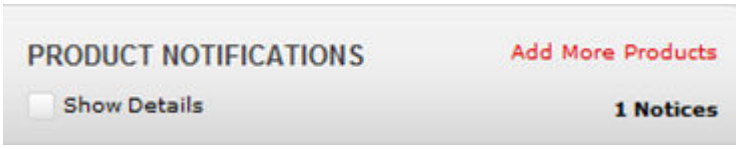
You can subscribe to different types of general notifications, for example, Product Correction Notices (PCN), which apply to any product or a specific product. You can also subscribe to specific types of documentation for a specific product, for example, Application & Technical Notes for Ethernet Routing Switch 8800.

Procedure

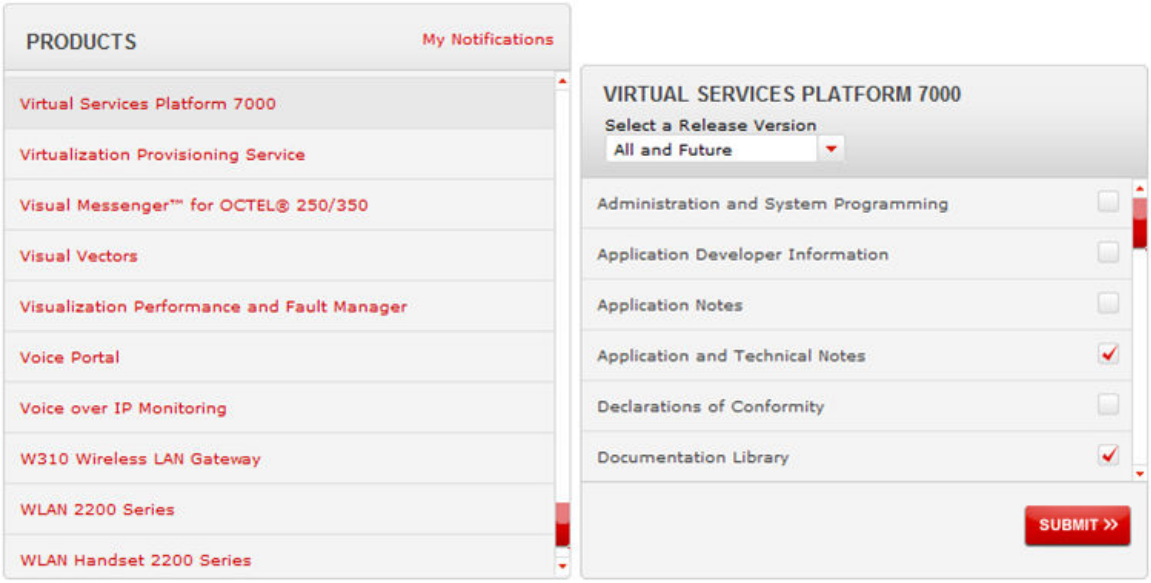
1. In an Internet browser, go to https://support.avaya.com.
2. Type your username and password, and then click **Login**.
3. Under **My Information**, select **SSO login Profile**.
4. Click **E-NOTIFICATIONS**.
5. In the GENERAL NOTIFICATIONS area, select the required documentation types, and then click **UPDATE**.



6. Click **OK**.
7. In the PRODUCT NOTIFICATIONS area, click **Add More Products**.



8. Scroll through the list, and then select the product name.
9. Select a release version.
10. Select the check box next to the required documentation types.



11. Click **Submit**.

Support

Go to the Avaya Support website at http://support.avaya.com for the most up-to-date documentation, product notices, and knowledge articles. You can also search for release notes, downloads, and resolutions to issues. Use the online service request system to create a service request. Chat with live agents to get answers to questions, or request an agent to connect you to a support team if an issue requires additional expertise.

Chapter 2: New in this release

New in this release

The following sections detail what is new in *Release Notes for Avaya Ethernet Routing Switch 3500 Series*, NN47203-400 for Release 5.3.

These Release Notes are a supplement to the technical documentation and, in some cases, may supersede information contained in them.

Hardware

The following table lists and describes the hardware that is new for the Avaya Ethernet Routing Switch 3500 Series for Release 5.3:

Table 1: Switch models

Model	Description
Avaya Ethernet Routing Switch 3550T	48 10/100 Ethernet and 2 combo 10/100/1000/SFP, plus 2 rear dual mode/stacking ports.
Avaya Ethernet Routing Switch 3550T-PWR+	48 10/100 Ethernet 802.3at PoE+ and 2 combo 10/100/1000/SFP, plus 2 rear dual mode/stacking ports.

Table 2: Avaya 10 GB SFP+ devices

Model	Description
AA1403011-E6	10GBT-LR SFP+ (LC) SINGLE MODE 10 km
AA1403013-E6	10GB-ER SFP+ (LC) SINGLE MODE 40 km
AA1403015-E6	10GB-SR 850 nm
AA1403016-E6	10GBase-ZR/ZW 70 km
AA1403017-E6	10GB-LRM SFP+ (LC) MULTI-MODE, 220 m
AA1403018-E6	SFP+ direct attach cable, 10 m
AA1403019-E6	SFP+ direct attach cable, 3 m
AA1403020-E6	SFP+ direct attach cable, 5 m
AA1403153-E6	CWDM SFP+ LC - 1470 nm Wavelength, 40 km

Table continues…

Model	Description
AA1403154-E6	CWDM SFP+ LC - 1490 nm Wavelength, 40 km
AA1403155-E6	CWDM SFP+ LC - 1510 nm Wavelength, 40 km
AA1403156-E6	CWDM SFP+ LC - 1530 nm Wavelength, 40 km
AA1403157-E6	CWDM SFP+ LC - 1550 nm Wavelength, 40 km
AA1403158-E6	CWDM SFP+ LC - 1570 nm Wavelength, 40 km
AA1403159-E6	CWDM SFP+ LC - 1590 nm Wavelength, 40 km
AA1403160-E6	CWDM SFP+ LC - 1610 nm Wavelength, 40 km
AA1403161-E6	CWDM SFP+ LC - 1470 nm Wavelength, 70 km
AA1403162-E6	CWDM SFP+ LC - 1490 nm Wavelength, 70 km
AA1403163-E6	CWDM SFP+ LC - 1510 nm Wavelength, 70 km
AA1403164-E6	CWDM SFP+ LC - 1530 nm Wavelength, 70 km
AA1403165-E6	CWDM SFP+ LC - 1550 nm Wavelength, 70 km
AA1403166-E6	CWDM SFP+ LC - 1570 nm Wavelength, 70 km
AA1403167-E6	CWDM SFP+ LC - 1590 nm Wavelength, 70 km
AA1403168-E6	CWDM SFP+ LC - 1610 nm Wavelength, 70 km

Avaya recommends that you use Avaya SFP and SFP+ devices to provide maximum compatibility and support for the ERS 3500 Series. The following third-party SFP+ devices are validated by Avaya to function with the 3550T-PWR+ SFP+ port.

Table 3: Third-party 10 GB SFP+ devices

Vendor	Model	Description
Cisco	450–16141	SFP+ direct attach cable, 5 m
Cisco	450–16140	SFP+ direct attach cable, 3 m
Cisco	450–16142	SFP+ direct attach cable, 1 m
Hewlett-Packard	J9281B	SFP+ direct attach cable, 1 m
Hewlett-Packard	J9283B	SFP+ direct attach cable, 3 m
Hewlett-Packard	J9285B	SFP+ direct attach cable, 7 m

Features

See the following sections for information about new features in ERS 3500 series.

IPv6 host mode enhancement

IPv6 host mode enhancement is an extension of the IPv6 management application, which supports several settings that are not available by default on the in-band/out-of-band management interface.

You can configure IPv6 host mode enhancement using ACLI. For more information, see *Configuring Security on Avaya Ethernet Routing Switch 3500 Series*, NN47203-504.

IPv6 Loopback

IPv6 Loopback provides support for loopback IPv6 interface on a switch/stack. A maximum of 4 internal loopback interfaces can be configured to test IPv6 stack applications prior to connection to other devices.

For more information, see *Configuring Security on Avaya Ethernet Routing Switch 3500 Series*, NN47203-504.

Many to One Port Mirroring

The Many to One Port Mirroring feature provides the ability of mirroring multiple ports to a single monitor port. You can use this feature to configure a single port to capture traffic from a set of selected ports. The captured traffic can be ingress or egress traffic.

For more information, see *Configuring System Monitoring on Avaya Ethernet Routing Switch 3500 Series*, NN47203-501.

MLT/DMLT/LAG Dynamic VLAN Changes

Enhancements are made to the Link Aggregation Groups (LAG) that provide consistent operation of Multi-Link Trunk (MLT), Distributed Multi-Link Trunk (DMLT), and LAGs so that you can make VLAN changes on trunks without disabling the trunk first.

For more information on MLT/DMLT/LAG Dynamic VLAN Changes, see *Configuring Layer 2 on Avaya Ethernet Routing Switch 3500 Series*, NN47203-500.

Static STP Multicast Destination Configuration

Static STP Multicast Destination Configuration feature allows to modify the STP Default Spanning Tree Group (essentially, the 802.1d STP) destination multicast MAC address to a custom MAC address.

For more information about Static STP Multicast Destination Configuration, see *Configuring Layer 2 on Avaya Ethernet Routing Switch 3500 Series*, NN47203-500.

Syslog enhancements

Remote logging allows to send system messages to a remote syslog. With the syslog enhancement feature, the messages are sent in User Datagram Protocol (UDP) packet to a remote Syslog host using port 514.

For more information, see *Configuring System Monitoring on Avaya Ethernet Routing Switch 3500 Series*, NN47203-501.

Other changes

See the following sections for information about changes that are not feature-related.

Bootloader:

Updating the Bootloader image from the Boot menu is updated to include more information on Bootloader.

RFCs:

The following list shows the RFCs updated on the switch:

- RFC 5095 Deprecation of Type 0 Routing Headers in IPv6
- RFC 4861 Neighbor Discovery for IPv6
- RFC 4862 IPv6 Stateless Address Autoconfig
- RFC 3879 Deprecating Site Local Addresses
- RFC 3484 Default Address Selection for IPv6
- RFC 3596 DNS Extensions for IPv6
- RFC 4293 MIB for IP
- RFC 4022 MIB for TCP
- RFC 4113 MIB for UDP
- RFC 2464 Ipv6 over Ethernet

Chapter 3: Important notices

This section provides important software and hardware related notices.

File names

The following table describes the Avaya Ethernet Routing Switch 3500 Series, Software Release 5.3, software files. File sizes are approximate.

Module or file type	Description	File name	File size (bytes)
Standard (non-SSH) runtime image	Standard software image for the Avaya Ethernet Routing Switch 3500 Series	3500_530004.img	9470292
Secure (SSH) runtime image	Standard software image for the Avaya Ethernet Routing Switch 3500 Series	3500_530005s.img	9715572
Diagnostic software version 5.3.0.6	Diagnostic software for the Avaya Ethernet Routing Switch 3500 Series	3500_53006_diag.bin	2,090,269
MIB definition files	Management Information Base (MIB) definition files	Ethernet_Routing_Switch_35xx_MIBs_5.3.0.zip	2080000
EDM Help file zip	A downloadable zip file containing Help information for Enterprise Device Manager (EDM)	ers3500v530_HELP_EDM.zip	2730278
COM Plug in file zip	COM Plug in for Enterprise Device Manager (EDM)	ers3500v5.3.0.0.zip	4054361

Upgrading the Diag image using ACLI

Perform the following procedure to upgrade the Diag image using ACLI.

Procedure

1. Connect a default switch to a TFTP server.
2. Set a valid IP address and subnet mask.
3. Configure the TFTP server address using the following command from Privileged EXEC mode:

   ```
   tftp-server <A.B.C.D>
   ```

4. Verify the connection to the TFTP Server.
5. At the command prompt, enter the **download** command with the following parameters.

   ```
   download diag <WORD>
   ```

   The Diag image is downloaded and then the switch is rebooted. To avoid rebooting the switch after the download, add the option <*no-reset*> to the **download** command.

Variable definitions

The following table describes the parameters for the **download** command.

Variable	Value
<A.B.C.D>	Enter the IP address of the TFTP server in the format XXX.XXX.XXX.XXX
<*WORD*>	The filename of the diagnostic image

Updating the Bootloader image from the Boot menu

Bootloader is the program that loads the hardware after a power-up or reset. The hardware cannot boot up with an incompatible version of Bootloader. Right version of the Bootloader is required to ensure that the units do not lock up when the system comes out of a power reset.

Note:

ERS 3510GT/3524GT/3526T that initially has 5.0 code must be updated.

Use the following procedure to update the Bootloader image from the Boot menu.

Procedure

1. Connect a default switch to a TFTP server.

2. Reboot the switch (either a soft or hard reset).
3. During the boot process, press `CTRL+C` until the following menu is displayed:
   a. Press `'a'` to run Agent code.
   b. Press `'d'` to download the agent/diag/bootloader code.
   c. Press `'e'` to display Errors.
   d. Press `'i'` to initialize config flash.
   e. Press `'p'` to run POST tests.
   f. Press `'r'` to reset the switch.
4. Press `'d'`.
5. Choose `option: 3- Bootloader`.
6. Choose `option: 1 — Download via TFTP`.
7. Enter the filename, along with its extension.
8. Enter the TFTP server IP address.
9. Enter the switch IP address.
10. Enter the subnet mask.
11. Enter the port in which the cable is connected.

    The download of the DIAG image begins.
12. Press `'y'` to program flash when prompted after download.
13. Once the download and programming completes, you can either additionally download the Diags or Agent image, or press `'y'` to reboot the switch.

Updating the Diag image from the Boot menu

Use this procedure to update the Diagnostics image from the Boot menu.

Procedure

1. Connect a default switch to a TFTP server.
2. Reboot the switch (either a soft or hard reset).
3. During the boot process, press `CTRL+C` until the following menu is displayed:
   a. Press `'a'` to run Agent code.
   b. Press `'d'` to download the agent/diag/bootloader code.
   c. Press `'e'` to display Errors.
   d. Press `'i'` to initialize config flash.

e. Press `'p'` to run POST tests.

f. Press `'r'` to reset the switch.

4. Press `'d'`.
5. Choose `option: 2 – Diagnostics`.
6. Choose `option: 1 — Download via TFTP`.
7. Enter the filename, along with its extension; for example `3500_53006_diag.bin`
8. Enter the TFTP server IP address.
9. Enter the switch IP address.
10. Enter the subnet mask.
11. Enter the port in which the cable is connected.

    The download of the DIAG image begins.

Supported software and hardware capabilities

The following table summarizes the known capabilities for the Avaya Ethernet Routing Switch 3500 Series software.

Table 4: Supported capabilities for the Avaya Ethernet Routing Switch 3500 Series

Feature	Maximum number supported
QoS egress queues	4
QoS filters per precedence	256
QoS precedence	4
Total QoS filters	(4 x 256) = 1024
MAC addresses	16000
Layer 2	
VLANs	256
Spanning Tree Groups in STPG and RSTP modes	1
Multiple Spanning Tree Instances (MSTI) in MSTP mode	8
MultiLink Trunking (MLT), Link Aggregation (LAG) groups	6
Links for each MLT or LAG	4
Layer 3	
ARP entries (local, static & dynamic)	512 (of which 32 are reserved for local ARPs)
Local ARP Entries (local IP interfaces)	32

Table continues…

Comments on this document? infodev@avaya.com

Feature	Maximum number supported
Static ARP entries	256
Dynamic ARP entries	max 480 (shares 480 entries with dynamic ARPs)
IPv4 route entries (local, static & dynamic)	32 local + 32 static + 0 dynamic
Static routes and Non-local Static routes	32
Local routes	32
Management routes	4
UDP Forwarding entries	128
DHCP relay entries	256
DHCP relay forward paths	256
DHCP Server Pools	16 (one per VLAN)
DHCP Server clients per pool	256
DHCP Server clients per switch/stack	2000
Miscellaneous	
802.1X EAP scaling (clients for each port)	32
ADAC (IP Phones)	16
Jumbo frame support	9 K bytes
IGMP multicast groups	up to 59
802.1X (EAP) clients per port, running in MHMA	32
802.1X (EAP) clients per switch	384
LLDP Neighbors	160 on ERS 3510GT 416 on ERS 3524GT 448 on ERS 3526T 816 on ERS 3549GTS 816 on ERS 3550T
RMON alarms	400
RMON events	400
RMON Ethernet statistics	128 per unit
RMON Ethernet history	196 per unit

Supported standards RFCs and MIBs

Standards

The standards in the following list are supported on the switch:

- IEEE 802.1AB (Link Layer Discovery Protocol (LLDP) and LLDP-Media Endpoint Discover (LLDP-MED))
- IEEE 802.1Q (VLANs)
- IEEE 802.1p (Priority Queues)
- IEEE 802.1D (Spanning Tree)
- IEEE 802.1w (Rapid Spanning Tree)
- IEEE 802.1s (Multiple Spanning Tree Groups)
- IEEE 802.1X (Extensible Authentication Protocol (EAP))
- IEEE 802.3 (10BASE-T/100BASE-TX)
- IEEE 802.3u (100BASE-T (ANSI) Auto-Negotiation)
- IEEE 802.3x (Pause Frames / Flow Control)
- IEEE 802.3z (1000BASE-X)
- IEEE 802.3ab (1000BASE-T)
- IEEE 802.3ad (Link Aggregation Control Protocol (LACP))
- IEEE 802.3aq (10GBASE-LRM 10 Gbit/s Ethernet over fiber)
- IEEE 802.3at (Power over Ethernet plus— PoE+ (32W))

RFCs and MIBs

For more information about networking concepts, protocols, and topologies, consult the following RFCs and MIBs:

- RFC 783 Trivial File Transfer Protocol (TFTP)
- RFC 791/ 950 Internet Protocol (IP)
- RFC 792 Internet Control Message Protocol (ICMP)
- RFC 826 Address Resolution Protocol (ARP)
- RFC 854 Telnet Server and Client
- RFC 951/ 1542 (BOOTP)
- RFC 1112 Internet Group Management Protocol v1 (IGMPv1)
- RFC 1213 MIB-II
- RFC 1215 SNMP Traps Definition

- RFC 1271 / 1757 / 2819 RMON
- RFC 1361 / 1769 Simple Network Time Protocol (SNTP)
- RFC 1493 (Bridge MIB)
- RFC 1573 / 2863 Interface MIB
- RFC 1643 / 2665 Ethernet MIB
- RFC 1905 / 3416 SNMP
- RFC 1906 / 3417 SNMP Transport Mappings
- RFC 1907 / 3418 SNMP MIB
- RFC 1945 HTTP v1.0
- RFC 1981 Path MTU Discovery for IPv6
- RFC 2011 SNMP v2 MIB for IP
- RFC 2012 SNMP v2 MIB for TCP
- RFC 2013 SNMP v2 MIB for UDP
- RFC 2131 DHCP Client
- RFC 2132 DHCP Options 6, 43 & 60
- RFC 2138 RADIUS
- RFC 2236 Internet Group Management Protocol v2 (IGMPv2)
- RFC 2460 Internet Protocol v6 (IPv6) Specification
- RFC 2461 Neighbor Discovery for IPv6
- RFC 2462 Auto-configuration of link local addresses
- RFC 2464 Ipv6 over Ethernet
- RFC 2474 Differentiated Services Support
- RFC 2570 / 3410 SNMPv3
- RFC 2571 / 3411 SNMP Frameworks
- RFC 2572 / 3412 SNMP Message Processing
- RFC 2573 / 3413 SNMPv3 Applications
- RFC 2574 / 3414 SNMPv3 USM
- RFC 2575 / 3415 SNMPv3 VACM
- RFC 2576 / 3584 Co-existence of SNMP v1/v2/v3
- RFC 2616 HTTP
- RFC 2660 HTTPS (Secure Web)
- RFC 2665 Ethernet MIB
- RFC 2674 Q-Bridge MIB

- RFC 2737 Entity MIBv2
- RFC 2819 RMON MIB
- RFC 2863 Interfaces Group MIB
- RFC 2866 RADIUS Accounting
- RFC 2869 RADIUS Extensions (interim updates)
- RFC 3046 (& 5010) DHCP option 82, Relay Agent Information Option
- RFC 3058 RADIUS Authentication
- RFC 3361 DHCP option 120 SIP Servers
- RFC 3376 Internet Group Management Protocol v3 (IGMPv3)
- RFC 3484 Default Address Selection for IPv6
- RFC 3576 RADIUS Change of Authorization
- RFC 3596 DNS Extensions for IPv6
- RFC 3879 Deprecating Site Local Addresses
- RFC 4007 Scoped Address Architecture
- RFC 4022 MIB for TCP
- RFC 4113 MIB for UDP
- RFC 4193 Unique Local IPv6 Unicast Addresses
- RFC 4252 SSH
- RFC 4291 IPv6 Addressing Architecture
- RFC 4293 MIB for IP
- RFC 4301 Security Architecture for the Internet Protocol
- RFC 4432 SSHv2 RSA
- RFC 4443 Internet Control Message Protocol (ICMPv6) Update to RFC 2463
- RFC 4675 RADIUS Attributes for VLAN and Priority Support
- RFC 4861 Neighbor Discovery for IPv6
- RFC 4862 IPv6 Stateless Address Autoconfig
- RFC 5095 Deprecation of Type 0 Routing Headers in IPv6
- RFC 5859 TFTP Server DHCP option

Chapter 4: Resolved issues

Use the information in this section to learn more about issues that have been resolved in Release 5.3.

Resolved issues

The following table lists the issues resolved in the current software release.

Reference number	Description
wi01221420	**EDM**: The Remote System Log tab is not updated according to the new Syslog enhancements.
wi01224186	On attempting to launch EM from VPFM, operation fails with an error message.
wi01217508	Cannot configure **`bnLogMsgRemoteSyslogSaveTargets`** object on the stack and any attempt will return the following error message: `noSuchObject`
wi01225156	PoE port status is not set to Low on {1/1,1/2} ports after running IP Office script on a BU-TBU-BU scenario.
wi01229035	SSH dsa-auth settings is not retained after upgrade from last patch 5.2.2.003 to 5.3.0.049.
wi01146473	There is a discrepancy between the Diagnostic reset count, which increments every time the software starts Diagnostics, and the **`show sys-info`** reset count increments when the agent comes all the way up.
wi01152177	**ADAC**: Wrong port assignation when using ADAC UFA and certain settings. Avaya recommends the user do not use ADAC and LLDP at the same time with Avaya Phones.
wi01041815	**Image file download**: If an image checksum is incorrect, the system returns the following message: `% Invalid image`

wi01059140	**DHCP Snooping, ACLI**: The following error message may appear when enabling the IP DHCP Snooping per VLAN:
	`% Cannot modify settings`
	`% Error setting VLAN DHCP snooping`

Table continues…

Reference number	Description
wi00966215 wi00966455 wi00968425	**Precedence:** The ASIC has only four slices (precedences) for all the ports. All these slices are occupied by default (one used by ARP, two by QoS and one by DHCP). In order to enable Auto QoS/ADAC/IPSG/UDP Fwd, at least one precedence should be freed. The precedences used by QoS can be freed by issuing the following commands: **`(config)# qos if-group name <GROUP_NAME> class <trusted | unrestricted | untrustedbasic>`** **`(config)# qos if-assign port all name <GROUP_NAME>`** The precedence used by DHCP can be freed by issuing the following command: **`(config)# no ip dhcp-relay`** Note that the precedence used by ARP cannot be freed.
wi00988287	**ASCII config file:** There is a difference between ACLI and EDM in how an ASCII config file is executed on all platforms. When encountering an error, EDM stops the execution and the operation fails, whereas ACLI moves to the next command.
wi00988195	**sftp syslog:**Saving the binary configuration to an external TFTP or SFTP server will generate a `bsnConfigurationSavedToNvram` message in the Syslog as the configuration is saved in the NVRAM prior sending it.

Chapter 5: Known issues and limitations

Use the information in this section to learn more about known issues and limitations.

Where appropriate, use workarounds provided for the known issues.

Known issues

The following table lists and describes known issues and limitations for Avaya Ethernet Routing Switch 3500 Series. Where available and appropriate, workarounds are provided.

Reference number	Description
For Release 5.3	
wi01228226	**EDM**: Previously unsupported QoS system elements are now selectable options in EDM, but attempting to create them yields blank elements. Also, the page cannot display them properly, assuming that they are created. Use CLI to create QoS system elements.
wi01229978	RMON mismatch between EDM and CLI regarding creation of RMON parameters `RisingEvent` and `FallingEvent`.
wi01229973	RMON alarm is deleted if another alarm is configured with the same index.

wi01228904	The following MAC Security options are not applied when the options are selected in EDM:
	`noAction`
	`partitionPort`
	`daFiltering`
	`partitionPortAnddaFiltering`

wi01228633	**IPv6 Loopback**: IPv6 loopback interface address can be set from CLI, but there is no option to set it on an IPv6 loopback Interface from EDM.
wi01227354	**Adac**: Error message appears when `operating mode` is changed.
wi01220784	**DHCP Server**: The SNMP object for the MAC address of a host type pool is in a wrong format.

Table continues…

Comments on this document? infodev@avaya.com

Reference number	Description
wi01228751	**IPv6 Netmask**: There is an inconsistency between CLI and EDM configuration for ipv6 netmask. The value cannot be set in decimal in EDM while it can be set using CLI.
wi01228755	The same ip address for GLOBAL, EAP, NEAP servers lead to overload of network traffic.
From Release 5.2	
wi01058803	In EDM, the Mac Violation tab does not display anything. Use show log.
wi01070932 wi01129521 wi01130292 wi01133577	**3526T and 3526T-PWR+, NVR Sw Exception critical logs:** On the ERS3526 models, exceptions with the Unknown type may appear when the power is cut. No actual exceptions occur - the device functionality and its configuration are not affected. This also occurs on soft resets.
wi01079448	**MIB, Temperature sensor:** The Temperature sensor in the 35XX units is currently defined as a "Metro1200ESM"
wi01124460	DHCP Client info is missing from EDM.
wi01124487	**DHCP Client**: Incorrect lease time is received when configuring the DHCP client lease on the DUT and its value is above 3600 seconds.
wi01125690	**Storm Control**: Storm Control Action Drop Enable will not generate an error message unless there are no precedences available at the time it is being set. If a policy is created afterwards and there is no precedence available at the time storm control is triggered, then the function will not work and a log message is generated. Customers should check for one free precedence by using the **`show qos diag`** command.
wi01146838	**EDM Network Management**: Missing snmp link trap commands. The Link trap was replaced by a link notification trap for both link up and link down and is controlled in the SNMP Notification Control field. The values viewed under the edit port/ports will now be greyed out with Enabled. To see the actual values in EDM the user will need to go to Configuration-> Edit-> SNMP Server-> Notification Control.
wi01156743	ERS-3526T-PWR+ (5.1.0.006): Running a MIB-Walk on an ERS 35xx (SW v5.1) switch returns a warning for a non-existing Power-Supply.
From Release 5.0	
wi00984443	**Fan Failure:** If an ERS 3510GT-PWR+ fan fails, during diagnostics, the Status LED should flash Amber, but the Power LED lights Amber instead.