

Quick Start Configuration for Avaya Ethernet Routing Switch 3500

Release 5.3.2 NN47203-301 Issue 06.02 September 2016

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 in varying mediums which may include product information, operating instructions and performance specifications that are generally made available to users of products. 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 or on the express behalf of 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: https://support.avaya.com/helpcenter/ getGenericDetails?detailId=C20091120112456651010 under the link

getGenericDetails?detailId=C20091120112456651010 under the link "Warranty & Product Lifecycle" 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.

"Hosted Service" means an Avaya hosted service subscription that You acquire from either Avaya or an authorized Avaya Channel Partner (as applicable) and which is described further in Hosted SAS or other service description documentation regarding the applicable hosted service. If You purchase a Hosted Service subscription, the foregoing limited warranty may not apply but You may be entitled to support services in connection with the Hosted Service as described further in your service description documents for the applicable Hosted Service. Contact Avaya or Avaya Channel Partner (as applicable) for more information.

Hosted Service

THE FOLLOWING APPLIES ONLY IF YOU PURCHASE AN AVAYA HOSTED SERVICE SUBSCRIPTION FROM AVAYA OR AN AVAYA CHANNEL PARTNER (AS APPLICABLE), THE TERMS OF USE FOR HOSTED SERVICES ARE AVAILABLE ON THE AVAYA WEBSITE, HTTPS://SUPPORT.AVAYA.COM/LICENSEINFO UNDER THE LINK "Avaya Terms of Use for Hosted Services" OR SUCH SUCCESSOR SITE AS DESIGNATED BY AVAYA, AND ARE APPLICABLE TO ANYONE WHO ACCESSES OR USES THE HOSTED SERVICE. BY ACCESSING OR USING THE HOSTED SERVICE, OR AUTHORIZING OTHERS TO DO SO, YOU, ON BEHALF OF YOURSELF AND THE ENTITY FOR WHOM YOU ARE DOING SO (HEREINAFTER REFERRED TO INTERCHANGEABLY AS "YOU" AND "END USER"), AGREE TO THE TERMS OF USE. IF YOU ARE ACCEPTING THE TERMS OF USE ON BEHALF A COMPANY OR OTHER LEGAL ENTITY, YOU REPRESENT THAT YOU HAVE THE AUTHORITY TO BIND SUCH ENTITY TO THESE TERMS OF USE. IF YOU DO NOT HAVE SUCH AUTHORITY, OR

IF YOU DO NOT WISH TO ACCEPT THESE TERMS OF USE, YOU MUST NOT ACCESS OR USE THE HOSTED SERVICE OR AUTHORIZE ANYONE TO ACCESS OR USE THE HOSTED SERVICE.

Licenses

THE SOFTWARE LICENSE TERMS AVAILABLE ON THE AVAYA WEBSITE, HTTPS://SUPPORT.AVAYA.COM/LICENSEINFO. UNDER THE LINK "AVAYA SOFTWARE LICENSE TERMS (Avaya Products)" 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.

License 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 is the software contained within the list of Heritage Nortel Products located at <u>https://support.avaya.com/LicenseInfo</u> under the link "Heritage Nortel Products" or such successor site as designated by Avaya. For Heritage Nortel Software, Avaya grants Customer 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.

Virtualization

The following applies if the product is deployed on a virtual machine. Each product has its own ordering code and license types. Note that each Instance of a product must be separately licensed and ordered. For example, if the end user customer or Avaya Channel Partner would like to install two Instances of the same type of products, then two products of that type must be ordered.

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: https:// support.avaya.com/Copyright or such successor site as designated by Avaya. The open source software license terms provided as Third Party Terms are consistent with the license rights granted in these Software License Terms, and may contain additional rights benefiting You, such as modification and distribution of the open source software. The Third Party Terms shall take precedence over these Software License Terms, solely with respect to the applicable Third Party Components to the extent that these Software License Terms impose greater restrictions on You than the applicable Third Party Terms.

The following applies only if the H.264 (AVC) codec is distributed with the product. THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL USE OF A CONSUMER OR OTHER USES IN WHICH IT DOES NOT RECEIVE REMUNERATION TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE <u>HTTP://WWW.MPEGLA.COM</u>.

Service Provider

THE FOLLOWING APPLIES TO AVAYA CHANNEL PARTNER'S HOSTING OF AVAYA PRODUCTS OR SERVICES. THE PRODUCT OR HOSTED SERVICE MAY USE THIRD PARTY COMPONENTS SUBJECT TO THIRD PARTY TERMS AND REQUIRE A SERVICE PROVIDER TO BE INDEPENDENTLY LICENSED DIRECTLY FROM THE THIRD PARTY SUPPLIER. AN AVAYA CHANNEL PARTNER'S HOSTING OF AVAYA PRODUCTS MUST BE AUTHORIZED IN WRITING BY AVAYA AND IF THOSE HOSTED PRODUCTS USE OR EMBED CERTAIN THIRD PARTY SOFTWARE, INCLUDING BUT NOT LIMITED TO MICROSOFT SOFTWARE, INCLUDING BUT NOT LIMITED TO MICROSOFT SOFTWARE, OR CODECS, THE AVAYA CHANNEL PARTNER IS REQUIRED TO INDEPENDENTLY OBTAIN ANY APPLICABLE LICENSE AGREEMENTS, AT THE AVAYA CHANNEL PARTNER'S EXPENSE, DIRECTLY FROM THE APPLICABLE THIRD PARTY SUPPLIER.

WITH RESPECT TO CODECS, IF THE AVAYA CHANNEL PARTNER IS HOSTING ANY PRODUCTS THAT USE OR EMBED THE G.729 CODEC, H.264 CODEC, OR H.265 CODEC, THE AVAYA CHANNEL PARTNER ACKNOWLEDGES AND AGREES THE AVAYA CHANNEL PARTNER IS RESPONSIBLE FOR ANY AND ALL RELATED FEES AND/OR ROYALTIES. THE G.729 CODEC IS LICENSED BY SIPRO LAB TELECOM INC. SEE WWW.SIPRO.COM/CONTACT.HTML. THE H.264 (AVC) CODEC IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL USE OF A CONSUMER OR OTHER USES IN WHICH IT DOES NOT RECEIVE REMUNERATION TO: (I) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (II) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION FOR H.264 (AVC) AND H.265 (HEVC) CODECS MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE <u>HTTP://</u> WWW.MPEGLA.COM.

Compliance with Laws

You acknowledge and agree that it is Your responsibility for complying with any applicable laws and regulations, including, but not limited to laws and regulations related to call recording, data privacy, intellectual property, trade secret, fraud, and music performance rights, in the country or territory where the Avaya product is used.

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: <u>https://support.avaya.com</u> or such successor site as designated by Avaya.

Security Vulnerabilities

Information about Avaya's security support policies can be found in the Security Policies and Support section of <u>https://</u>support.avaya.com/security.

Suspected Avaya product security vulnerabilities are handled per the Avaya Product Security Support Flow (<u>https://support.avaya.com/css/P8/documents/100161515</u>).

Downloading Documentation

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

Contact Avaya Support

See the Avaya Support website: <u>https://support.avaya.com</u> 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: <u>https://support.avaya.com</u> (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, its licensors, its suppliers, 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	5
----------	---

Chapter 1: Introduction	
Chapter 2: New in this document	
Features	
Other changes	
5	
Chapter 3: Fundamentals	
System connection System logon	
Password encryption	
Quick Start	
Enterprise Device Manager	
Enterprise Device Manager access	
Default user name and password	
EDM window	
Device Physical View	
Chapter 4: Connecting to the switch	
Connecting a terminal to the switch	
Configuring with Quick Start using ACLI	
Configuring Quick Start using EDM	
Configuring the terminal	
Variable definitions	
BootP automatic IP configuration and MAC address	
Setting user access limits using ACLI	
Setting the system user name and password using ACLI	
Enabling and disabling passwords	
Setting user access limits using Enterprise Device Manager	
Configuring a console password using EDM	
Configuring a Web and Telnet password using EDM	
Configuring a console password using EDM	
Field descriptions.	
Configuring a Web and Telnet password using EDM	
Field descriptions	
Customizing the opening banner	
Customizing the opening ACLI banner	
Displaying the current banner	
Configuring Simple Network Time Protocol	
Variable definitions	
Configuring local time zone	
Configuring daylight savings time	

	Specifying summer-time recurring dates	30
	Displaying the local time zone settings	31
	Displaying the daylight savings time settings	32
	Configuring a static route using ACLI	32
	Variable definitions	
	Enabling remote access	33
	Using telnet to log on to the device	34
	Enabling the web server management interface	34
	Accessing the switch through the web interface	35
	Creating a VLAN using ACLI	36
	Variable definitions	36
	Saving the configuration	37
	Configuring system identification	37
	Variable definitions	38
Cha	pter 5: Configuring the switch using ACLI	40
	Configuring the IP address	
	Configuring the IP address	
	Variable definitions	
	Clearing the IP address	
	Configuring the IP address to the default value	
	Displaying IP address information	
	Changing subnet netmask value	
	Configuring the default gateway	44
	Displaying IP configuration	45
Cha	pter 6: Verification	46
	· Verification	46
	Pinging an IP device	
	Variable definitions	
	Displaying the agent and diagnostic software load	
	Displaying RMON Alarms using ACLI	
Cha	pter 7: Related Resources	
	Support	
	Documentation	
	Searching a documentation collection	
	Subscribing to e-notifications	

Chapter 1: Introduction

Purpose

This document provides basic instructions to perform the basic configuration of the Avaya Ethernet Routing Switch 3500 Series chassis and software.

Chapter 2: New in this document

The following sections detail what is new in Avaya Ethernet Routing Switch 3500 Series.

Features

There are no feature-related changes in this document.

Other changes

Getting Started with Avaya Ethernet Routing Switch 3500 Series is renamed Quick Start Configuration for Avaya Ethernet Routing Switch 3500 Series, NN47203-301.

Configuration information is located in the new document *Configuring Systems on Avaya Ethernet Routing Switch 3500 Series*, NN47203–506.

Chapter 3: Fundamentals

Quick Start Configuration for Avaya Ethernet Routing Switch 3500 Series, NN47203-301 includes the minimum, but essential, configuration steps to:

- Provide a default, starting point configuration
- · Establish a management interface
- · Establish basic security on the node

The shipment includes the following:

- An installation kit
- A foldout poster, *Quick Install Guide for Avaya Ethernet Routing Switch 3500 Series*, NN47203-300

For more information about hardware specifications and installation procedures, see *Installing Avaya Ethernet Routing Switch 3500 Series*, NN47203–304.

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

To download and print selected technical publications and release notes directly from the Internet, go to <u>http://support.avaya.com</u>.

System connection

Use the console cable to connect the terminal to the switch console port. The console cable and connector must match the console port on the switch (DB-9 or RJ-45, depending on your model). The following are the default communication protocol settings for the console port:

- 9600 baud
- 8 data bits
- 1 stop bit
- No parity
- No flow control
- VT100 or VT100/ANSI Terminal Protocol

To use the console port, you need the following equipment:

- A terminal or TeleTypewriter (TTY)-compatible terminal, or a portable computer with a serial port and terminal-emulation software.
- An Underwriters Laboratories (UL)-listed straight-through or null modem RS-232 cable with a female DB-9 connector for the console port on the switch. The other end of the cable must use a connector appropriate to the serial port on your computer or terminal.

You must shield the cable that connects to the console port to comply with emissions regulations and requirement

System logon

After the platform boot sequence is complete, a logon prompt displays.

The following table shows the default values for logon and password for console and Telnet sessions.

Access level	Description	Default Logon	Default Password
Read-only	Permits view-only configuration and status information. Is equivalent to Simple Network Management Protocol (SNMP) read-only community access.	RO	user
Read/write	View and change configuration and status information across the switch. You can change security and password settings. This access level is equivalent to SNMP read/write community access.	RW	secure

Password encryption

The local passwords for the switch are stored in the configuration file, encrypted with an Avaya proprietary algorithm.

Important:

For security reasons, it is recommended that you configure the passwords to values other than the factory defaults.

For more information about configuring passwords, see:

• Configuring Security on Avaya Ethernet Routing Switch 3500 Series, NN47203-504

Quick Start

You can use the **install** command in Avaya Command Line Interface (ACLI) or the Quick Start menu in Enterprise Device Manager (EDM) to configure the following:

- quick start VLAN
- in-band IP address and subnet mask
- default gateway
- · management subnet mask, management IP address and management default gateway
- · read-only and read-write community strings
- · IPv6 in-band address and IPv6 default gateway
- management IPV6 address and management IPV6 default gateway

Enterprise Device Manager

Enterprise Device Manager (EDM) is an embedded graphical user interface (GUI) that you can use to manage and monitor the platform through a standard web browser. EDM is embedded in the switch software, and the switch operates as a web server, so you do not require additional client software. For more information about EDM, *Using ACLI and EDM on Avaya Ethernet Routing Switch 3500 Series*, NN47203-102.

Enterprise Device Manager access

To access EDM, open http://<deviceip>/login.html or https://<deviceip>/ login.html from either Microsoft Internet Explorer (minimum version 8.x), or Mozilla Firefox (minimum version 3.x).

Important:

You must enable the web server from ACLI to enable HTTP access to EDM. If you want HTTP access to the device, you must also disable the web server secure-only option. The web server

secure-only option is enabled by default and allows HTTPS access to the device. Take the appropriate security precautions within the network if you use HTTP.

If you experience issues while connecting to EDM, check the proxy settings. Proxy settings can affect EDM connectivity to the switch. Clear the browser cache, and do not use a proxy when connecting to the device.

Default user name and password

The following table contains the default user name and password that you can use to log on to the switch using EDM. For more information about changing the passwords, see *Configuring Security on Avaya Ethernet Routing Switch 3500 Series*, NN47203-504.

EDM window

The EDM window contains the following parts:

- 1. navigation tree—the navigation pane on the left side of the window that displays available command folders in a tree format
- 2. menu bar—the area at the top of the window that displays primary and secondary tabs that you accessed during the session; the tabs remain available until you close them
- 3. toolbar—the area just below the menu bar that provides quick access to the most common operational commands such as **Apply**, **Refresh**, and **Help**
- 4. work area—the main area on the right side of the window that displays the dialog boxes where you view or configure switch parameters

😵 Note:

Depending on your hardware model, information displayed may appear different than the figure shown in this section.

	« Device Physical View 🕅 Swit	tch Summary 🙁 🛅 File System 🤅		
i 2 🔻 🖬 🖬 😪	3 nfig/Image/Diag file Asd	Config File Save Configuration	FLASH Help File Path	2
earch: × P	Apply 😤 Refresh 🎯 Help	₹ 3		
Configuration				
Administration	TftpServerInetAddressType:	Ipv4 ○ ipv6		
Device	The Council and Address	172.16.3.2		
4 🔄 Edit	TftpServerInetAddress:	1/2.10.3.2		
E Unit	BinaryConfigFilename:			
D Chassis	ImageFileName:	3500_520.img		
E Bridge	FwFileName(Diagnostics):			
E File System	i whiendine(biogroup).			
Diagnostics				
SNTP/Clock	Action:	(iii) other	O dnldConfig	oupldConfig
Snmp Server		💿 dnldImg	🔘 dnldImgIfNewer	od dnldImgNoReset
E Storm Control		O dnldFw	O dnldFwNoReset	O dnldImgFromSftp
Security		C dnldFwFromSftp	O dnldConfigFromSftp	upldConfigToSftp
Graph				O uplaconing rositp
Power Management		O dnldImgFromSftpNoReset	O dnldFwFromSftpNoReset	
VLAN	Status:	other		
Þ 🧰 P	5005.			
Pv6				
QoS				
Serviceability Help				

Figure 1: EDM window

Device Physical View

When you access EDM, the first panel in the work area displays a switch summary view. The tab behind the summary view is a real-time physical view of the front panel of a device or stack called the Device Physical View.

Objects in the Device Physical View are

- a stand-alone switch, called a unit
- · a switch stack, called a chassis
- a port

From the Device Physical View you can

- · determine the hardware operating status
- select a switch or a port to perform management tasks on specific objects or view fault, configuration, and performance information for specific objects

To select an object, click the object. The system outlines the object in yellow, indicating that the object selected.

The conventions on the device view are similar to the actual switch appearance except that LEDs in Device Physical View do not blink. The LEDs and the ports are color-coded to reflect hardware status. Green indicates the port is up and running; red indicates that the port is disabled.

From the menu bar you can click the Device Physical View tab to open the Device Physical View any time during a session.

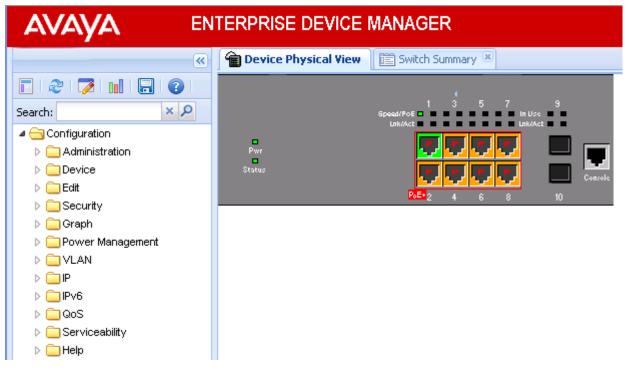


Figure 2: Device Physical View

😵 Note:

Depending on your hardware model, your switch may appear different than the figure shown in this section.

Chapter 4: Connecting to the switch

Connecting a terminal to the switch

This procedure describes the steps to connect a terminal to the console port on the switch.

Before you begin

To use the console port, you need the following equipment:

- Terminal with AC power cord and keyboard. Any terminal or PC with an appropriate terminal emulator can be used as the management station. For more information, see *Quick Install Guide for Avaya Ethernet Routing Switch 3500 Series*, NN47203-300 for a list of the terminal emulation settings that must be used with any terminal emulation software used to connect to the switch.
- Use the RJ-45 console cable to connect the switch console port to your management terminal. The maximum length for the console port cable is 25 feet (8.3 meters).

For more information, see *Installing Avaya Ethernet Routing Switch 3500 Series*, NN47203–304 for console port pin-out information. You can use the pin-out information to verify or create a console cable for use with your maintenance terminal.

Procedure

- 1. Connect one end of the serial cable to the connector on the terminal or PC.
- 2. Connect the other end of the serial cable to the console port on the switch.
- 3. Turn the terminal or PC on.
- 4. Set the terminal protocol on the terminal or terminal emulation program to VT100 or VT100/ ANSI.
- 5. Connect to the switch using the terminal or terminal emulation application. The Avaya switch banner appears when you connect to the switch through the console port.
- 6. Press Ctrl+Y and type the following CLI commands:

```
enable
```

install

The setup utility prompts you to enter the information requested as shown below.

Configuring with Quick Start using ACLI

The **Install** script consists of a series of prompts that are used to set up the minimum configuration information.

You must enter the following information when prompted:

- IP address
- Subnet mask
- Default gateway
- · Read-only community string
- · Read-write community string
- Quick start VLAN
- IPV6 address/prefix
- · IPV6 default gateway
- DHCP server information (optional)

Before you begin

• Connect to the switch using the terminal or terminal emulation application.

Procedure

1. Press

CTRL + Y to obtain a CLI prompt.

2. Enter enable

3. Enter install

The switch setup utility banner appears.

4. Enter VLAN ID for the Quick Start at the following prompt:

Please provide the Quick Start VLAN <1-4094> [1]:

5. Enter the IP address at the following prompt:

Please provide the in-band IP Address [192.168.10.6]:

6. Enter the sub-net mask address at the following prompt:

Please provide the in-band sub-net mask [255.255.255.0]:

7. Enter the default gateway IP address at the following prompt:

Please provide the Default Gateway [0.0.0.0]:

8. Enter the read only community string at the following prompt:

Please provide the Read-Only Community String [********]:

9. Enter the read write community string at the following prompt:

Please provide the Read-Write Community String [********]:

10. Enter the in-band IPv6 address at the following prompt:

Please provide the in-band IPV6 Address/Prefix length [: :/0]:

11. Enter the in-band IPv6 default gateway at the following prompt:

Please provide the in-band IPV6 Default Gateway [: :]:

12. At the Do you want to enable the DHCP server? prompt, enter Y to enable the DHCP server, OR leave the prompt at N if you do not want to enable the DHCP server.

Successful completion displays the following message: Basic stack parameters have now been configured and saved.

Example

Welcome to the ERS3500 setup utility. You will be requested to provide the switch basic connectivity settings. After entering the requested info, the configuration will be applied and stored into the switch NVRAM.

Once the basic connectivity settings are applied, additional configuration can be done using the available management interfaces. Use Ctrl+C to abort the configuration at any time.

Please provide the Quick Start VLAN <1-4094> [1]: Please provide the in-band IP Address[192.168.10.6]: Please provide the in-band sub-net mask [255.255.255.0]: Please provide the Default Gateway[0.0.0.0]: Please provide the Read-Only Community String[********]: Please provide the Read-Write Community String[********]: Please provide the in-band IPV6 Address/Prefix_length[::/0]:

```
Please provide the in-band IPV6 Default Gateway[::]:
Do you want to enable the DHCP server? y/n [n]:
```

Configuring Quick Start using EDM

Perform this procedure to configure Quick Start to enter the setup mode through a single screen.

- 1. From the navigation tree, click Administration.
- 2. In the Administration Tree, click Quick Start.
- 3. In the In-Band Switch IP address, type a switch address.
- 4. In the In-Band Subnet Mask dialog box, type a subnet mask.
- 5. In the **Default Gateway** dialog box, type an IP address.
- 6. In the **Read-Only Community String** box, type a character string.
- 7. In the **Re-enter to verify** dialog box immediately following the Read-Only Community String box, retype the character string from Step 6.
- 8. In the Read-Write Community String dialog box, type a character string.
- 9. In the **Re-enter to verify** dialog box immediately following the Read-Write Community String box, retype the character string from Step 8.
- 10. In the Quick Start VLAN dialog box, type a VLAN ID.
- 11. To enable the DHCP Server, select the **ServerEnable**check box and enter the DHCP server information.
- 12. Click Apply.

Example

AVAYA ENTERPRISE DEVICE MANAGER				
ER53500 - 🔍	👚 Device Physical View 🛛 🛅 Switch Summary 🗷 🛅 Quick Start 🗷			
🖬 🤣 🗭 🖬 🕞 🔞	IP/Community/Vlan			
search: × P	🖌 Apply 🛸 Refresh 🎯 Help			
Configuration Administration	In-Band Stack IP Address:	172.16.120.12 172.16.120.12		
E Quick Start				
E Remote Access	In-Band Subnet Mask:	255.255.255.0 255.255.0		
E Run Script	Default Gateway:	172.16.120.1 172.16.120.1		
E MIB Web Page	Community String			
▷ Device ▷ Device ▷ Device	Read-Only Community String: •••••••			
Security		Re-enter to verify		
D Graph		•		
Power Management	Read-write Community String:	/rite Community String:		
	Re-enter to verify			
▷ 🛄 P ▷ 🛄 Pv6				
	Quick Start VLAN:	14094		
Serviceability				
Þ 🧰 Help	[ServerEnable		
	Pool Name:			
	StartAddress:		(A.B.C.D)	
	EndAddress:		(A.B.C.D)	
	SubnetMask:		(A.B.C.D)	
	Router(s):		(A.B.C.D, empty=ignore, use , for more than one entry, max:2)	
	DNS Server(s):		(A.B.C.D, empty=ignore, use , for more than one entry, max:2)	

Configuring the terminal

You can configure the switch terminal settings to suit your preferences for the terminal speed and display.

About this task

Use the following procedure to configure terminal settings including the terminal connection speed, and terminal display width and length, in number of characters.

Important:

After you modify the terminal configuration, the new settings are applied to the current active session and to all future sessions (serial, telnet or SSH). Terminal configuration change does not affect open concurrent sessions.

Procedure

- 1. Log on to ACLI to enter User EXEC mode.
- 2. At the command prompt, enter the following command:

```
terminal {speed <2400 | 4800 | 9600 | 19200 | 38400> | length <1-
132> | width <1-132>}
```

3. To display the current serial port information, enter the following command:

show terminal

Example

The following example shows the output from the **show** terminal command.

```
Switch#show terminal
Terminal speed: 9600
Terminal width: 79
Terminal length: 24
```

Variable definitions

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

Variable	Value
speed {2400 4800 9600 19200 38400}	Sets the transmit and receive baud rates for the terminal. You can set the speed to one of the five options shown.
	DEFAULT: 9600
length <1–132>	Sets the length of the terminal display in characters.
	RANGE: 1 to 132
	DEFAULT: 24
width <1-132>	Sets the width of the terminal display in characters.
	RANGE: 1 to 132
	DEFAULT: 79

BootP automatic IP configuration and MAC address

The switch supports the Bootstrap protocol (BootP). You can use BootP to retrieve an ASCII configuration file name and configuration server address. With a properly configured BootP server, the switch automatically learns its assigned IP address, its subnet mask, and the IP address of the default router (default gateway).

The switch has a unique 48-bit hardware address, or MAC address, that is printed on a label on the back panel. Use this MAC address when you configure the network BootP server to recognize the switch BootP requests.

The BootP modes supported by the switch are:

- · BootP or Last Address mode
- BootP or Default IP
- · BootP Always
- · BootP Disabled

Important:

Whenever the switch is broadcasting BootP requests, the BootP process eventually times out if a reply is not received. When the process times out, the BootP request mode automatically changes to BootP or Default IP mode. To restart the BootP process, change the BootP request mode to any of the following modes:

- Always
- Disabled
- Last
- Default-ip

Setting user access limits using ACLI

The administrator can use ACLI to limit user access by creating and maintaining passwords for web, telnet, and console access. This is a two-step process that requires that you first create the password and then enable it.

Setting the system user name and password using ACLI

Use the following procedure to configure the system user name and password for access through the serial console port and Telnet. This procedure supports only one read-only and one read-write user on the switch.

Procedure

1. Enter Global Configuration mode:

enable configure terminal

2. At the command prompt, enter the following command:

```
username <username> <password> [<ro | rw>]
```

3. To set the username and password to the system default settings, enter the following command:

```
default username [<ro | rw>]
```

😵 Note:

After you configure the user name and password with the username command, you can update the password without changing the username by using the cli password command, the console interface, or EDM.

Variable definitions

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

Variable	Definition
<username> <password></password></username>	Enter your user name for the first variable, and your password for the second variable. The default user name values are RO for read-only access and RW for read/write access.
rojrw	Specifies that you are modifying the read-only (ro) user name or the read-write (rw) user name. The ro/rw variable is optional. If it is omitted, the command applies to the read-only mode.

Enabling and disabling passwords

After you set the read-only and read-write passwords, you can individually enable or disable them for the various switch-access methods.

Procedure

1. Enter Global Configuration mode:

```
enable
configure terminal
```

2. Enter the following commands to configure the password for selected access or a specific authentication type:

```
cli password {telnet | serial} {none | local | radius | tacacs}
cli password {read-only | read-write} [<password>]
```

Variable definitions

The following table describes the parameters for the cli password command.

Variable	Definition	
read-only read-write	Modifies the read only password or the read/write password.	
<password></password>	Specifies the password.	
	Important:	
	This parameter is not available when Password Security is enabled, in which case the switch prompts you to enter and confirm the new password. For information about password security, see <i>Configuring Security on Avaya</i>	

Table continues...

Variable	Definition
	<i>Ethernet Routing Switch 3500 Series,</i> NN47203-504.
serial telnet	Modify the password for serial console access or for Telnet access.
none local radius tacacs	Indicates the password type being modified:
	none: disable the password
	 local: uses the locally defined password for serial console or Telnet access
	 radius: uses RADIUS authentication for serial console or Telnet access
	 tacacs: uses TACACS+ authentication, authorization, and accounting (AAA) services for serial console or Telnet access

Setting user access limits using Enterprise Device Manager

You can use Enterprise Device Manager (EDM) to limit user access by creating and maintaining passwords for web, telnet, and console access.

Configuring a console password using EDM

Use this procedure to configure a Console password for an individual switch.

- 1. From the navigation tree, double-click **Security** to open the Security tree.
- 2. From the Security tree, click Web/Telnet/Console.
- 3. In the work area, click the **Console Password** tab.
- 4. In the Console Switch Password Setting, select a value from the **Console Password Type** list.
- 5. In the Read-Only Switch Password dialog box, type a character string.
- 6. In the **Re-enter to verify** dialog box for the Read-Only Switch Password, retype the character string.
- 7. In the **Read-Write Switch Password** dialog box, type a character string.

- 8. In the **Re-enter to verify** dialog box for the Read-Write Switch Password, retype the character string.
- 9. On the toolbar, click **Apply**.

Use the descriptions in the following table to configure the console switch password.

Variable	Definition
Console Stack Password Type	Specify the type of password to use. Values include:
	 none—Disables the password
	 Local Password—Use the locally-defined password for serial console access
	 RADIUS Authentication—Use RADIUS authentication for serial console access
	 TACACS Authentication—Use TACACS+ authentication, authorization and accounting (AAA) services authentication for console access
Read-Only Stack Password	Specify the read-only password for stack or switch access.
Read-Write Stack Password	Specify the read-write password for stack or switch access.

Configuring a Web and Telnet password using EDM

Use this procedure to configure a Web and Telnet password for an individual switch.

- 1. From the navigation tree, double-click **Security** to open the Security tree.
- 2. In the Security tree, double-click **Web/Telnet/Console**.
- 3. In the work area, click the **Web/Telnet Password** tab.
- 4. In the Web/Telnet Switch Password Setting, select a value from the **Web/Telnet Switch Password Type** list.
- 5. In the Read-Only Switch Password dialog box, type a character string.
- 6. In the **Re-enter to verify** dialog box for the Read-Only Switch Password, retype the character string.
- 7. In the Read-Write Switch Password dialog box, type a character string.
- 8. In the **Re-enter to verify** dialog box for the Read-Write Switch Password, retype the character string
- 9. On the toolbar, click **Apply**.

Use the descriptions in the following table to configure the console switch password.

Variable	Definition
Web/Telnet Stack Password Type	Specify the type of password to use. Values include:
	 none—Disables the password
	 Local Password—Use the locally-defined password for serial console access
	 RADIUS Authentication—Use RADIUS authentication for serial console access
	 TACACS Authentication—Use TACACS+ authentication, authorization and accounting (AAA) services authentication for console access
Read-Only Stack Password	Specify the read-only password for stack or switch access. The maximum length of the password is 15 characters.
Read-Write Stack Password	Specify the read-write password for stack or switch access. The maximum length of the password is 15 characters.

Configuring a console password using EDM

Use this procedure to configure a Console password for an individual switch.

- 1. From the navigation tree, double-click **Security** to open the Security tree.
- 2. From the Security tree, click Web/Telnet/Console.
- 3. In the work area, click the Console Password tab.
- 4. In the Console Switch Password Setting, select a value from the **Console Password Type** list.
- 5. In the Read-Only Switch Password dialog box, type a character string.
- 6. In the **Re-enter to verify** dialog box for the Read-Only Switch Password, retype the character string.
- 7. In the **Read-Write Switch Password** dialog box, type a character string.
- 8. In the **Re-enter to verify** dialog box for the Read-Write Switch Password, retype the character string.
- 9. On the toolbar, click **Apply**.

Use the descriptions in the following table to configure the console switch password.

Variable	Definition
Console Stack Password Type	Specify the type of password to use. Values include:
	 none—Disables the password
	 Local Password—Use the locally-defined password for serial console access
	 RADIUS Authentication—Use RADIUS authentication for serial console access
	 TACACS Authentication—Use TACACS+ authentication, authorization and accounting (AAA) services authentication for console access
Read-Only Stack Password	Specify the read-only password for stack or switch access.
Read-Write Stack Password	Specify the read-write password for stack or switch access.

Configuring a Web and Telnet password using EDM

Use this procedure to configure a Web and Telnet password for an individual switch.

- 1. From the navigation tree, double-click **Security** to open the Security tree.
- 2. In the Security tree, double-click Web/Telnet/Console.
- 3. In the work area, click the Web/Telnet Password tab.
- 4. In the Web/Telnet Switch Password Setting, select a value from the **Web/Telnet Switch Password Type** list.
- 5. In the **Read-Only Switch Password** dialog box, type a character string.
- 6. In the **Re-enter to verify** dialog box for the Read-Only Switch Password, retype the character string.
- 7. In the Read-Write Switch Password dialog box, type a character string.
- 8. In the **Re-enter to verify** dialog box for the Read-Write Switch Password, retype the character string
- 9. On the toolbar, click **Apply**.

Use the descriptions in the following table to configure the console switch password.

Variable	Definition
Web/Telnet Stack Password Type	Specify the type of password to use. Values include:
	 none—Disables the password
	 Local Password—Use the locally-defined password for serial console access
	 RADIUS Authentication—Use RADIUS authentication for serial console access
	 TACACS Authentication—Use TACACS+ authentication, authorization and accounting (AAA) services authentication for console access
Read-Only Stack Password	Specify the read-only password for stack or switch access. The maximum length of the password is 15 characters.
Read-Write Stack Password	Specify the read-write password for stack or switch access. The maximum length of the password is 15 characters.

Customizing the opening banner

You can customize the banner that appears when you connect to the switch. You can customize the text that reads **AVAYA**. However you cannot customize the second line that reads **Enter** [Ctrl] +y to begin.

The Banner Control feature provides an option to specify the banner text. If you choose not to display the banner, the system enters the ACLI command mode through the default command interface. You do not have to press the Ctrl+y keys.

The Banner display that you select is used for subsequent console sessions. For executing the new mode in the console, you must logout. For Telnet access, all subsequent sessions use the selected mode.

Customizing the opening ACLI banner

Specifies the banner displayed at startup; either static or custom.

Procedure

1. Enter Global Configuration mode:

```
enable
configure terminal
```

2. At the command prompt, enter the following command:

```
[no] banner [custom | static | disabled | <1-19> LINE ]
```

Variable definitions

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

Variable	Value
static	Displays the default agent-banner
custom	Displays the custom agent-banner
disabled	Skips the agent-banner display
<1–19> LINE	Fills the Nth line of the custom banner (1 <n<19) in="" line<="" specified="" td="" text="" the="" with=""></n<19)>
no	Clears all lines of a previously stored custom banner

Displaying the current banner

Display the current banner.

Procedure

1. Enter Global Configuration mode:

enable

configure terminal

2. At the command prompt, enter the following command:

show banner [custom | static]

Variable definitions

The following table describes the parameters for the **show banner** command.

Variable	Value
static	Displays default banner
custom	Displays custom banner
(if empty)	Displays static, custom or disabled status if parameter is not entered

Configuring Simple Network Time Protocol

The Simple Network Time Protocol (SNTP) feature synchronizes the Universal Coordinated Time (UTC) to an accuracy within 1 second. This feature adheres to the IEEE RFC 2030 (MIB is the s5agent). With this feature, the system can obtain the time from any RFC 2030-compliant NTP/ SNTP server.

For more information on SNTP, see *Configuring Systems on Avaya Ethernet Routing Switch 3500 Series*, NN47203–506.

Procedure

1. Enter Global Configuration mode:

```
enable
configure terminal
```

2. Enter the following command:

```
[no] sntp server <primary | secondary> address <A.B.C.D>
```

Variable definitions

Use the data in the following table to use the sntp server command.

Variable	Definition
<a.b.c.d></a.b.c.d>	Specifies the IP address of the primary or secondary NTP server in the format XXX.XXX.XXX.XXX.

Configuring local time zone

Configure the time zone to use an internal system clock to maintain accurate time. The time zone data does not include daylight saving time changes. You must configure daylight saving time.

😵 Note:

SNTP uses Universal Coordinated Time UTC for all time synchronizations so it is not affected by different time zones.

Procedure

1. Enter Global Configuration mode:

enable

configure terminal

2. At the command prompt, enter the following command:

[no] clock time-zone <zone> <hours> <minutes>

Variable definitions

The following table describes the parameters for the clock time-zone command.

Variable	Value
zone	Specifies time zone acronym that can be displayed when showing system time; for example, EST for Eastern Standard Time.
	RANGE: Up to 4 characters
hours	Specify the hours difference from UTC.
	RANGE: —12 to + 12
minutes	Optional minutes difference from UTC.
	RANGE: 0–59
no	Disables the clock time zone feature

Configuring daylight savings time

Configure the daylight savings time with start and end dates, or disable the daylight savings time feature.

Procedure

1. Enter Global Configuration mode:

enable configure terminal

2. At the command prompt, enter the following command:

```
[no] clock summer-time <zone> [date {<day> <month> <year> <hh:mm>}
{<day> <month> <year> <hh:mm>}] [<offset>]
```

Variable definitions

The following table describes the parameters for the clock summer-time command.

Variable	Value
zone	Specifies the acronym to be displayed when summer time is in effect. If unspecified, defaults to the time zone acronym.
	RANGE: up to 4 characters
date { <day> <month> <year> <hh:mm>} {<day> <month> <year> <hh:mm>}</hh:mm></year></month></day></hh:mm></year></month></day>	The first date specifies when summer time starts, and the second date specifies when summer time ends.
	 day — day of the month (RANGE: 1 to 31)
	 month — month (RANGE: first three letters by name)
	 hh:mm — time in military format (24–hour clock), in hours and minutes
	Important:
	<day> <month> parameters can also be entered in order: <month> <day>.</day></month></month></day>
offset	Number of minutes to add during summer time
	RANGE:840 to 840
no	Disables the daylight savings time feature

Specifying summer-time recurring dates

Specify the dates that recur during the summer-time clock every year. This procedure provides flexibility for countries where the Daylight Savings Time is different than North America.

Procedure

1. Enter Global Configuration mode:

enable

configure terminal

2. At the command prompt, enter the following command:

```
clock summer-time recurring <1-5> <DAY> <MONTH> hh:mm> <1-5> <DAY>
<MONTH> <hh:mm> <1-1440>
```

Example

The following figure provides a sample of the output of the clock summer-time recurring command.

```
Switch(config)#clock summer-time recurring 1 tues Jun 12:01 3 sat Sep 23:57 1
Summer time recurring is set to:
start: 1st week of June on Tuesday at 12:01
```

```
end: 3rd week of September on Saturday at 23:57
Offset: 60 minutes.
```

Variable definitions

The following table describes the parameters for the summer-time recurring command.

Variable	Value
<1–5>	Specifies the week of the month. The first occurrence specifies when the recurring starts, and the second specifies when the recurring stops.
<day></day>	Specifies the day of the week as the first 3 letters of the name. The first occurrence specifies when the recurring starts, and the second specifies when the recurring stops.
<month></month>	Specifies the Month using the first 3 letters of the name. The first occurrence specifies when the recurring starts, and the second specifies when the recurring stops.
<hh:mm></hh:mm>	Specifies the time in hours and minutes in military format (24–hr). The first occurrence specifies when the recurring starts, and the second specifies when the recurring stops.
<1–1440>	Specifies the number of minutes to add or subtract during summer-time recurring.

Displaying the local time zone settings

Display the settings for the local time zone.

Procedure

1. Enter Global Configuration mode:

enable

configure terminal

2. At the command prompt, enter the following command:

show clock time-zone

Example

The following figure provides a sample of the output of the **show clock time-zone** command.

```
switch(config)#show clock time-zone
    Time zone offset from UTC is 00:00
```

Displaying the daylight savings time settings

Display the daylight savings time settings.

Procedure

1. Enter Global Configuration mode:

enable

```
configure terminal
```

2. At the command prompt, enter the following command:

show clock summer-time

Example

The following figure provides a sample of the output of the **show clock summer-time** command.

```
switch(config)#show clock summer-time
Summer time recurring is set to:
start: on Tuesday in the 1st week of June at 12:01
end: on Saturday in the 3rd week of September at 23:59
Offset: 60 minutes.
Daylight saving time is disabled
```

Configuring a static route using ACLI

Create static routes to manually configure a path to destination IP address prefixes.

Before you begin

- Enable IP routing globally.
- Enable IP routing and configure an IP address on the VLANs to be routed.

Procedure

- 1. Log on to ACLI in Global Configuration command mode.
- 2. At the command prompt, enter the following command:

```
[no] ip route <dest-ip> <mask> <next-hop> [<cost>] [disable]
[enable] [weight <cost>]
```

Variable definitions

The following table describes the parameters for the ip route command.

Variable	Value
[no]	Removes the specified static route.
<dest-ip></dest-ip>	Specifies the destination IP address for the route being added.
	DEFAULT:
	0.0.0.0 is considered the default route.
<mask></mask>	Specifies the destination subnet mask for the route being added.
<next-hop></next-hop>	Specifies the next hop IP address for the route being added.
[<cost>]</cost>	Specifies the weight, or cost, of the route being added.
	RANGE:
	1–65535
[enable]	Enables the specified static route.
[disable]	Disables the specified static route.
[weight <cost>]</cost>	Changes the weight, or cost, of an existing static route.
	RANGE:
	1–65535

Enabling remote access

You can enable remote access for telnet, SSH (on SSH software images), SNMP, and webpage access.

For more information, see Using ACLI and EDM on Avaya Ethernet Routing Switch 3500 Series, NN47203-102 and Configuring Systems on Avaya Ethernet Routing Switch 3500 Series, NN47203–506.

About this task

Use the following procedure to enable and configure remote access to the management features of the switch.

Procedure

1. Enter Global Configuration mode:

enable

configure terminal

2. To enable telnet remote access, enter the following command:

telnet-access enable

3. To enable SSH remote access, enter the following command:

ssh

4. To enable SNMP remote access, enter the following command:

snmp-server enable

5. To enable webpage remote access, enter the following command:

web-server enable

Example

The following is an example of enabling telnet remote access:

```
Switch>enable
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#telnet-access enable
Switch(config)#
```

Using telnet to log on to the device Procedure

1. From a computer or terminal, start a telnet session:

telnet <IPv4 address>

where <IPv4_address> is the IP address of the switch. The stand-alone units use the default IP address of 192.168.1.1 and the stacking units use the default IP address of 192.168.1.2 if the switch does not obtain its IP address from another source.

2. Enter the user ID and password when prompted.

Enabling the web server management interface

The web server must be enabled to access Enterprise Device manager (EDM). If you do not want EDM to be accessible on the device, disable the web server. By default, the web server is enabled.

Procedure

1. Enter Global Configuration mode:

```
enable
configure terminal
```

2. At the command prompt, enter the following command:

web-server enable

Accessing the switch through the web interface

You can use EDM to configure and maintain your switch through a web-based graphical user interface. You can monitor the switch through a web browser from anywhere on the network.

By default, you can access the web interface using Hypertext Transfer Protocol Secure (HTTPS) only.

For more information about configuring the web server to respond to HTTPS only or to both HTTPS and Hypertext Transfer Protocol (HTTP) client browser requests, see *Configuring Security on Avaya Ethernet Routing Switch 3500 Series*, NN47203-504.

By default, the web interface uses a 15 minute time-out period. If no activity occurs for 15 minutes, the system logs off the switch web interface, and you must reenter the password information.

To configure inactivity time-out, see *Configuring Security on Avaya Ethernet Routing Switch 3500 Series*, NN47203-504.

Before you begin

- Ensure that the switch is running.
- Note the switch IP address.
- Ensure that the web server is enabled.
- Note the user name and password.
- Open one of the supported web browsers.

For more information about the supported browsers, see Using ACLI and EDM on Avaya Ethernet Routing Switch 3500 Series, NN47203-102.

About this task

Use this procedure to access the switch through a web browser.

Procedure

- 1. Start your web browser.
- 2. Type the switch IP address as the URL in the Web address field.

```
http://<IP Address>
```

OR

https://<IP Address>

- 3. Enter the user name.
- 4. Enter the password.
- 5. Click Log On.

Creating a VLAN using ACLI

Use this procedure to create port-based or IPv6 protocol-based VLANs.

Important:

This procedure fails if the VLAN already exists.

Procedure

1. Enter Global Configuration mode:

```
enable
configure terminal
```

2. At the command prompt, enter the following command:

```
vlan create {<1-4094> | <vid_list>} [name <WORD>] [ type { port |
protocol-ipv6Ether2 | voice-vlan}] | [voice-vlan] [msti <1-7> |
cist]
```

Example

```
vlan create 2-10,80 type port
vlan create 15 type voice-vlan
```

Variable definitions

The following table describes the parameters for the **vlan** create command.

Variable	Value
<1-4094> <vid_list></vid_list>	Enter the ID of the VLAN you want to create or enter as a list or range of VLAN IDs to create multiple VLANs simultaneously. A VLAN ID can range from 1 to 4094
name <word></word>	Enter the new name you want for the VLAN.
type	Enter the type of VLAN. Values include:
	 port — port-based VLAN
	 protocol-ipv6Ether2 — IPv6 protocol-based VLAN
	 voice-vlan — voice VLAN
msti <1–7> <i>cist</i>	This parameter is available only in MSTP mode. It associates the VLAN with either an MSTI instance or the CIST.

Saving the configuration

After you change the configuration, you must save the changes. Save the configuration to a file to retain the configuration settings.

😵 Note:

File Transfer Protocol (FTP) and TFTP support both IPv4 and IPv6 addresses, with no difference in functionality or configuration.

Before you begin

Enable the Trivial File Transfer Protocol (TFTP) on the switch.

About this task

Use this procedure to save the configuration.

Procedure

1. Enter Privileged EXEC mode:

enable

2. At the command prompt, enter the following command:

save config

Configuring system identification

About this task

You can configure system identification to specify the system name, contact person, and location of the switch, and to add a trap receiver to the trap-receiver table.

Procedure

1. Enter Global Configuration mode:

enable configure terminal

2. Enable the Simple Network Management Protocol (SNMP) server:

snmp-server enable

3. Configure the read-only community name:

snmp-server community ro

😵 Note:

Enter the community string twice.

If you ran the install script to set up the configuration information, the read-only community name is already configured.

4. Configure the read-write community name:

snmp-server community rw

😵 Note:

Enter the community string twice.

If you ran the install script to set up the configuration information, the read-write community name is already configured.

5. Configure the system name:

snmp-server name <text>

6. Configure the system contact:

snmp-server contact <text>

7. Configure the location:

snmp-server location <text>

8. Configure the SNMP host to add a trap receiver to the trap-receiver table:

snmp-server host <host-ip> <community-string>

Variable definitions

Use the definitions in the following table to use the snmp-server name command.

Table 1: snmp-server name command

Variable	Definition
<text></text>	Specify the SNMP system name value. Enter an alphanumeric string of up to 255 characters.
	😸 Note:
	On the console, the SNMP server name is truncated. On the web interface, the full SNMP server name appears.

Use the definitions in the following table to use the **snmp-server** contact command.

Table 2: snmp-server contact command

Variable	Definition
<text></text>	Specify the SNMP system contact value. Enter an ASCII string of up to 255 characters.

Use the definitions in the following table to use the **snmp-server** location command.

Table 3: snmp-server location command

Variable	Definition
<text></text>	Specify the SNMP system location value. Enter an
	alphanumeric string of up to 255 characters.

Use the definitions in the following table to use the **snmp-server** host command.

Table 4: snmp-server host command

Variable	Definition
<host-ip></host-ip>	Specify an IPv4 or IPv6 address for a host intended to be the trap destination.
<community-string></community-string>	If you are using the proprietary method for SNMP, enter a community string that works as a password and permits access to the SNMP protocol.

Chapter 5: Configuring the switch using ACLI

Configuring the IP address

Use this procedure to configure the IP address and subnet mask for the switch or stack. You can also use this procedure to select the boot mode for the next switch reboot.

Important:

When you change the IP address or subnet mask, you can lose connection to Telnet and the Web. You also disable any new Telnet connection, and you must connect to the serial Console port to configure a new IP address.

😵 Note:

If you do not specify the stack or switch parameter, the system automatically modifies the stack IP address when in stack mode and modifies the switch IP address when in standalone mode.

Procedure

1. Enter Global Configuration mode:

enable

configure terminal

2. At the command prompt, enter the following command:

```
ip address [switch|stack|unit<1-8>][<A.B.C.D>] [netmask <A.B.C.D>]
[default-gateway <A.B.C.D>]
```

Variable definitions

The following table describes the parameters for the ip address command.

Variable	Value
A.B.C.D	Enters the IP address or subnet mask of the switch in the format XXX.XXX.XXX.XXX; netmask is optional.

Table continues...

Variable	Value
switch stack unit <1–8>	Specifies whether to set the IP address for the switch, the stack, or another unit in a stack.
netmask	Sets the IP subnet mask.
default-gateway <a.b.c.d></a.b.c.d>	Sets the IP address of the default gateway.

Configuring the IP address

Use this procedure to automatically obtain an in-band management IP address, subnet mask and default gateway on the switch or stack.

About this task

When you use DHCP, the switch or stack can also obtain up to three DNS server IP addresses.

Procedure

1. Enter Global Configuration mode:

enable configure terminal

2. At the command prompt, enter the following command:

```
ip address source {bootp-always | bootp-last-address | bootp-when-
needed | configured-address | dhcp-always | dhcp-last-address |
dhcp-when-needed}
```

Variable definitions

The following table describes the parameters for the ip address sourcecommand.

Variable	Value
bootp-always	Always use the BootP server.
bootp-last-address	Use the last BootP server.
bootp-when-needed	Use the BootP server when needed.
	DEFAULT: bootp-when-needed
configured-address	Use the manually configured IP configuration.
dhcp-always	Always use the DHCP server.
dhcp-last-address	Use the last DHCP server.
dhcp-when-needed	Use DHCP client when needed.

Clearing the IP address

Use this procedure to clear the existing IP address and subnet mask for the switch or stack or another unit of a stack.

Important:

When you change the IP address or subnet mask, you can lose connection to Telnet and the Web. You also disable any new Telnet connection, and you must connect to the serial Console port to configure a new IP address.

Procedure

1. Enter Global Configuration mode:

enable

configure terminal

2. At the command prompt, enter the following command:

```
no ip address [switch|stack|unit<1-8>]
```

Configuring the IP address to the default value

The default value for the switch is 192.168.1.1 for Standalone Mode or 192.168.1.2 for Stacking Mode.

Procedure

1. Enter Global Configuration mode:

enable

configure terminal

2. At the command prompt, enter the following command:

default ip address

Displaying IP address information

Use this procedure to display IP configurations, switch address, subnet mask, and gateway address.

Procedure

- 1. Log on to ACLI to enter User EXEC mode.
- 2. At the command prompt, enter the following command:

show ip address

Example

The following figure displays a sample output for the **show** ip **address** command.

```
      Switch>show ip address
      Configured
      In Use
      Last BootP/DHCP

      Stack IP Address:
      172.16.120.10
      0.0.0.0

      Switch IP Address:
      172.16.120.12
      172.16.120.12

      Switch Subnet Mask:
      255.255.255.0
      255.255.255.0
```

😵 Note:

The Router and DNS IP addresses are global, or common. Addresses and pools that do not have Router and DNS addresses configured within them use these global addresses.

Changing subnet netmask value

The subnet mask is configured using procedure <u>Configuring the IP address</u> on page 40. Use this procedure to change the subnet mask to the default value or clear the subnet mask.

Procedure

1. Enter Global Configuration mode:

enable configure terminal

2. At the command prompt, enter the following command:

```
[default] [no] ip netmask
```

Variable definitions

The following table describes the parameters for the ip netmask command.

Variable	Value
default	Sets the subnet mask to the default value (255.255.255.0).
no	Sets the subnet mask for a switch to all zeros (0.0.0.0).

Configuring the default gateway

Use this procedure to configure the IP default gateway address for a switch, to change the IP default gateway address to the default address, or to clear the IP default gateway address.

Important:

When you change the IP gateway address, you can lose connection to Telnet and the Web. You also can disable any new Telnet connection required to connect to the serial Console port to configure a new IP Gateway address.

Procedure

1. Enter Global Configuration mode:

enable

configure terminal

2. At the command prompt, enter the following command:

```
[no] [default] ip default-gateway <A.B.C.D>
```

Variable definitions

The following table describes the parameters for the ip default-gateway command.

Variable	Value
<a.b.c.d></a.b.c.d>	Enter the IP address of the default IP gateway in the format XXX.XXX.XXX.XXX.
	DEFAULT: 0.0.0.0.
	Important:
	When you change the IP gateway, you can lose connection to Telnet and the Web. You can also disable any new Telnet connection required to connect to the serial Console port to configure a new IP Gateway address.
no	Clears the IP address of the default IP gateway. Sets the IP default gateway address to zeros (0).
default	Sets the IP default gateway address to all zeros (0.0.0.0).

Displaying IP configuration

This procedure is used to display the IP configuration, specifically BootP mode, switch or stack or unit address, subnet mask, and gateway address. These parameters are displayed for what is configured, what is in use, and the last BootP.

Procedure

- 1. Log on to ACLI to enter User EXEC mode.
- 2. At the command prompt, enter the following command:

```
show ip [bootp][default-gateway [address [switch | stack | unit <1-
8>]][dns]
```

If you do not enter any parameters, the **show ip** command displays all IP-related configuration information.

Example

The following figure displays a sample output of the **show** ip command.

```
Switch>show ip
Bootp/DHCP Mode: BootP Or Default IP

Configured In Use Last BootP/DHCP

Stack IP Address: 172.16.120.10 0.0.0.0

Switch IP Address: 172.16.120.12 172.16.120.12 0.0.0.0

Switch Subnet Mask: 255.255.255.0 255.255.0 0.0.0.0

Default Gateway: 172.16.120.1 172.16.120.1 0.0.0.0

switch>
```

Variable definitions

The following table describes the parameters for the show ip command.

Variable	Value
bootp mode	Displays BootP-related IP information.
default-gateway	Displays the IP address of the default gateway.
address	Displays the current IP address.
switch stack unit <1–8>	Specifies the current IP address of the switch or stack or specified unit.
dns	Displays the DNS configuration.

Chapter 6: Verification

Verification

Pinging an IP device

You can ping a device to test the connection between a switch and another network device. After you ping a device, the switch sends an Internet Control Message Protocol (ICMP) packet to the target device. If the device receives the packet, it sends a ping reply. After the switch receives the reply, a message appears that indicates traffic can reach the specified IP address. If the switch does not receive a reply, the message indicates the address does not respond.

Before you begin

The local IP address must be configured before issuing the ping command.

Procedure

- 1. Log on to ACLI to enter User EXEC mode.
- 2. At the command prompt, enter the following command:

```
ping <IP address>
```

where <IP_address> is an IPv4 or IPv6 address.

Example

The following figure shows a sample ping response.

```
Switch>ping 120.16.125.10
Host is reachable
```

Variable definitions

The following table describes the parameters for the ping command.

Variable	Value
<a.b.c.d> <dns_host_name> <word></word></dns_host_name></a.b.c.d>	Specifies the IP address, DNS host name, or IPv6 address of the unit to test.
datasize<64–4096>	Specifies the size of the ICMP packet to be sent. The data size range is from 64 to 4096 bytes.

Table continues...

Variable	Value
{count <1–9999>} continuous	Sets the number of ICMP packets to be sent. The continuous mode sets the ping running until the user interrupts it by entering CtrI-C.
{timeout -t} <1-120>	Sets the timeout using either the timeout or -t parameter, followed by the number of seconds the switch must wait before timing out.
interval<1-60>	Specifies the number of seconds between transmitted packets.
debug	Provides additional output information such as ICMP sequence number and trip time.
source <a.b.c.d></a.b.c.d>	Specifies the source IP address of the packet. Must be a configured address on the switch.
ttl<0–255>	Specifies the maximum hop limit for the packet. Range of 0 to 255.

Variable definitions

The following table describes the parameters for the **show** boot command.

Variable	Value
diag	Displays information for the diagnostic load only.
image	Displays information for the image load only.

Displaying the agent and diagnostic software load

Display the currently loaded and operational software status for agent and diagnostic loads, either individually or combined, for a switch or stack.

Procedure

- 1. Log on to ACLI to enter User EXEC mode.
- 2. At the command prompt, enter the following command:

```
show boot [diag] [image]
```

Example

The following figure provides a sample output of the **show** boot command.

Switch>show boot Unit Agent Image Active Image Diag Image Active Diag 1 5.2.0.037 5.2.0.037 1.0.0.11 1.0.0.11 2 5.2.0.037 5.2.0.037 1.0.0.11 1.0.0.11 3 5.2.0.037 5.2.0.037 1.0.0.11 1.0.0.11 * - Stack requires reboot for new Active Image to be made operational.
 # - Stack requires reboot for new Diag to be made operational.

Displaying RMON Alarms using ACLI

Displays information about RMON alarms.

Procedure

- 1. Log on to ACLI in Global Configuration command mode.
- 2. At the command prompt, enter the following command:

show rmon alarm

Chapter 7: Related Resources

Support

Go to the Avaya Support website at <u>http://support.avaya.com</u> 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.

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 <u>http://avaya-learning.com/</u>.

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 <u>http://support.avaya.com</u> 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 <u>www.youtube.com/AvayaMentor</u> 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 cproduct_name_release>.pdx.

- 3. In the Search dialog box, select the option **In the index named** cproduct_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 Virtual Services Platform 7000.

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**.

nd of Sale and/or Manufacturer Support Notices	
Product Correction Notices (PCN)	
Product Support Notices	
Security Advisories	
Services Support Notices	

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

PRODUCT NOTIFICATIONS	Add More Products
Show Details	1 Notices

- 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.

PRODUCTS My Not	tifications
Virtual Services Platform 7000	VIRTUAL SERVICES PLATFORM 7000 Select a Release Version
Virtualization Provisioning Service	All and Future
Visual Messenger [™] for OCTEL® 250/350	Administration and System Programming
Visual Vectors	Application Developer Information
Visualization Performance and Fault Manager	Application Notes
Voice Portal	Application and Technical Notes
Voice over IP Monitoring	Declarations of Conformity
W310 Wireless LAN Gateway	Documentation Library
WLAN 2200 Series	SUBMIT >>
WLAN Handset 2200 Series	

11. Click Submit.