

# Using ACLI and EDM on Avaya Ethernet Routing Switch 3500 Series

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## **Contents**

Chapter 1: Introduction	6
Purpose	6
Chapter 2: New in this document	7
Features	7
Other changes	7
Chapter 3: ACLI concepts	8
ACLI command modes	8
ACLI access procedures	10
Opening an ACLI session	10
Chapter 3: ACLI help	11
Chapter 3: Enterprise Device Manager concepts	13
Tested browsers	
Memory requirements	14
Online help	14
Interface components	15
Switch summary view	15
Device Physical View	16
EDM window	
Single port configuration for EDM	
Multiple Port Configuration for EDM	26
Chapter 3: Enterprise Device Manager procedures	29
Enabling the Web server using ACLI	29
Disabling the Web server using ACLI	29
Displaying the Web server status using ACLI	30
Starting EDM	
Using shortcut menus	
Navigating around EDM	
Undocking tabs	
Docking tabs	
Editing a dialog box	
Inserting an entry in a dialog box	
Deleting an entry from a dialog box	
Editing an object using the shortcut menu	
Editing file system elements	
Configuring multiple interface ports using EDM - Example 1	
Configuring multiple ports using EDM - Example 2	
Graphing statistics	
Getting EDM online help files for embedded EDM	
Downloading help files	30

Configuring the path to the help files using ACLI	37
Configuring the help file path using EDM	37
Chapter 4: Configuration files fundamentals	38
ACLI configuration files	38
Viewing current configuration using ACLI	38
Saving current configuration using ACLI	38
Saving current configuration to flash memory using ACLI	39
Restoring system configuration from TFTP using ACLI	39
Downloading a configuration file automatically using ACLI	40
Enterprise Device Manager configuration files	41
ASCII configuration file management using EDM	41
Binary configuration file management using EDM	43
Saving current configuration to flash memory manually using EDM	45
Chapter 5: Supported standards and Request for Comments	46
Standards	46
RFCs and MIBs	47
Chapter 6: Related Resources	50
Support	
Documentation	
Searching a documentation collection	51
Subscribing to e-notifications	52

## **Chapter 1: Introduction**

## **Purpose**

This document provides information about the Avaya Command Line Interface (ACLI) and Enterprise Device Manager (EDM) for the switch.

## **Chapter 2: New in this document**

The following sections detail what is new in *Using ACLI and EDM on Avaya Ethernet Routing Switch* 3500 Series, NN47203-102.

## **Features**

There is no new feature-related content in this release.

#### Related links

New in this document on page 7

## Other changes

Fundamentals of Avaya Ethernet Routing Switch 3500 Series is renamed Using ACLI and EDM on Avaya Ethernet Routing Switch 3500 Series, NN47203-102.

Installation information is moved to *Installing Avaya Ethernet Routing Switch 3500 Series*, NN47203–304.

#### Related links

New in this document on page 7

## **Chapter 3: ACLI concepts**

Avaya Command Line Interface (ACLI) is a text-based interface that you can use for switch configuration and management. A common command line interface (CLI), ACLI follows the industry standard used for device management across Avaya products.

The command modes within ACLI are listed in order of increasing privileges and each mode is based on the user logon permission level. User logon permission is determined by a logon password as supplied by your system administrator.

You can access ACLI directly through a console connection, remotely through a dial-up modem connection, or in-band through a Telnet session.

You can use ACLI interactively or use the <code>configure network</code> command to load and execute ACLI scripts, to manually load the script in the console menu, or to automatically load the script at startup.

## **ACLI** command modes

Avaya Command Line Interface (ACLI) provides the following command modes:

- User EXEC
- Privileged EXEC
- · Global Configuration
- Interface Configuration
- Application Configuration

Mode access is determined by access permission levels and password protection.

If no password is set, you can enter ACLI in User EXEC mode and use the enable command to move to the next level (Privileged EXEC mode). However, if you have read-only access, you cannot progress beyond User EXEC mode, the default mode. If you have read-write access you can progress from the default mode through all of the available modes.

With sufficient permission, you can use the rules in the following table to move between the command modes.

Table 1: ACLI command modes

Command mode and sample prompt	Entrance commands	Exit commands
User Executive	No entrance command, default	exit
Switch>	mode	or
		logout
Privileged Executive	enable	exit
Switch#		or
		logout
Global Configuration Switch (config) #	From Privileged Executive mode, enter	To return to Privileged Executive mode, enter
Switch (coning) #	configure terminal	end
		or
		exit
		To exit ACLI completely, enter
		logout
Interface Configuration	From Global Configuration mode:	To return to Global Configuration
Switch (config-if)#	To configure a port, enter	mode, enter
	interface fastethernet	exit
	<port number=""></port>	To return to Privileged Executive mode, enter
	To configure a VLAN, enter	end
	<pre>interface vlan <vlan number=""></vlan></pre>	To exit ACLI completely, enter
	To configure a loopback, enter	logout
	interface loopback <pre></pre>	logodo
Application Configuration Switch (config-app)#	From Global, or Interface Configuration mode, enter	To return to Global Configuration mode, enter
Switch (Config-app)#	application	exit
		To return to Privileged Executive mode, enter
		end
		To exit ACLI completely, enter
		logout

## **ACLI access procedures**

#### Before you begin

- Connect to the switch with a console cable, connected directly to the console port, or use Telnet.
- To connect to the switch remotely, through Telnet, ensure that you enable remote access, and that the switch IP address is valid.
- Use a terminal, or computer with a terminal emulator, as the ACLI command station.
- If you use a console cable and console port, ensure that the terminal emulation program conforms to settings listed in the following table.

Property	Value
Baud Rate	9600 bps
Data Bits	8
Stop Bits	1
Parity	None
Flow Control	None
Terminal Protocol	VT100 and VT100/ANSI

## **Opening an ACLI session**

#### **Procedure**

- 1. Connect to the switch.
- 2. Enter the password, if applicable.
- 3. At the ACLI Banner Screen, enter CTRL+Y.
- 4. To access ACLI, from the main menu, press **c** or scroll to Command Line Interface.
- 5. Press Enter.

## **Chapter 3: ACLI help**

ACLI help is available at all levels.

#### **ACLI list**

From the User EXEC mode, the ACLI list command show cli list displays a detailed view of the ACLI commands. Additionally, the verbose command, show cli list verbose lists the CLI syntax for each command.

#### **Command list**

To obtain a list of all commands available from a prompt, enter a question mark (?).

#### **Command options**

To obtain a list of all options for a command, at the prompt enter a portion of a command followed by a space and a question mark (?).

#### **Command names**

To obtain a correct command name, at the prompt enter a portion of the command name, and then press the **Tab** key. The system displays the first unambiguous match for your selection. For example, when you enter down + Tab, the system displays download.

#### **Command modes**

To obtain a list of ACLI command modes available, enter help modes.

#### Commands organized by mode

To obtain a list of ACLI commands, organized by command mode, enter help commands. A short explanation of each command is included.

#### **Keystroke shortcuts**

To make using ACLI easier, use the keystroke shortcuts in the following table.

Key combination	Function
Ctrl+A	Start of line
Ctrl+B	Back 1 character
Ctrl+C	Abort command
Ctrl+D	Delete the character indicated by the cursor
Ctrl+E	End of line
Ctrl+F	Forward 1 character

Table continues...

Key combination	Function
Ctrl+H	Delete character left of cursor (Backspace key)
Tab	Command or parameter completion
Ctrl+K and Ctrl+R	Redisplay line
Ctrl+N or Down arrow	Next history command
Ctrl+P or Up arrow	Previous history command
Ctrl+T	Transpose characters
Ctrl+U	Delete entire line
Ctrl+W	Delete word to left of cursor
Ctrl+X	Delete all characters to left of cursor
Ctrl+z	Exit Global Configuration mode to Privileged EXEC mode
?	Context sensitive help
Esc+C and Exc+U	Capitalize character at cursor
Esc+l	Change character at cursor to lower case
Esc+B	Move back 1 word
Esc+D	Delete 1 word to the right
Esc+F	Move 1 word forward

# Chapter 3: Enterprise Device Manager concepts

To manage the switch from a centralized location, using Configuration and Orchestration Manager (COM) 2.0 and higher, Avaya offers optional, product-specific EDM plug-ins for COM that include other features such as centralized syslog, trap viewer, troubleshooting and diagnostic tools. For more information, or to purchase plug-ins, go to <a href="http://www.avaya.com/support">http://www.avaya.com/support</a>.

The following table compares EDM functions in the embedded version to COM plug-in version.

Table 2: EDM functions: embedded version compared to COM plug-in version

EDM functions	Embedded version	Plug-in version
100% device configuration: device view, device-specific configuration	Yes	Yes
Stackable Device Web User Interface features	Yes	No
Centralized off-box multi-user element management:	No	Yes
user and device credential manager		
user preference		
SSO-based user access control		
user-based Device Access Control (read only and read- write)		
authentication through third party (RADIUS, Microsoft AD, Sun AM)		
Centralized EM plug-in management (downloadable install and uninstall, upgrade, patch, and inventory view)	No	Yes
User activity log and audit trail	No	Yes
Device performance monitoring and polling	Limited	High performance and low latency

Table continues...

EDM functions	Embedded version	Plug-in version
Device-specific single device wizards and template	No	Yes
Centralized syslog and trap viewer	No	Yes
Troubleshooting and diagnostic tools (ping, CLI Manager, pathtrace)		

EDM is an embedded application that you can use for single device element management and configuration through a standard Web browser. Because EDM is embedded into Ethernet Routing Switch software, and the switch operates as a Web server, you do not require additional client software.

## **Tested browsers**

EDM has been tested with the following web browsers:

- Microsoft Internet Explorer 11.0
- Mozilla Firefox 45.0.2

## **Memory requirements**

If you install Configuration and Orchestration Manager on a PC to manage your switch, the PC must have at least 500 MB of free disk space.

There are no memory requirements to use EDM through a Web browser.

## Online help

Online help is context-sensitive and appears in a separate window in the Web browser.

To obtain help for the current topic, click the **help** button on the toolbar in the work area.

If you are not using EDM through COM, you need to download the help file to a TFTP server and configure the EDM Help file path.

## Interface components

This section describes Enterprise Device Manager interface components.

The Enterprise Device Manager window includes the following parts:

- · Navigation tree toolbar
- Switch Summary View
- Device Physical View
- EDM window
- · Navigation tree
- · Menu bar
- · Tool bar
- · Work area

## Switch summary view

The EDM initial view displays a switch summary view in the work area.

The Switch Summary tab displays basic switch information. This information-only display derives from the configuration tab Edit, Chassis, Chassis.

Following is a list of the fields on the Switch Summary tab:

- · hardware model
- · hardware version
- · firmware version
- · software version
- system uptime
- system object identifier
- · system contact
- · system name
- · system location

A Stack Information panel appears at the bottom of the switch summary view work area that provides a description of your switch or the units in your switch stack.

This information includes the following:

- Unit number (for stacks) also lists which unit is the base unit in a stack
- Switch type
- Description

Running software version

## **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.

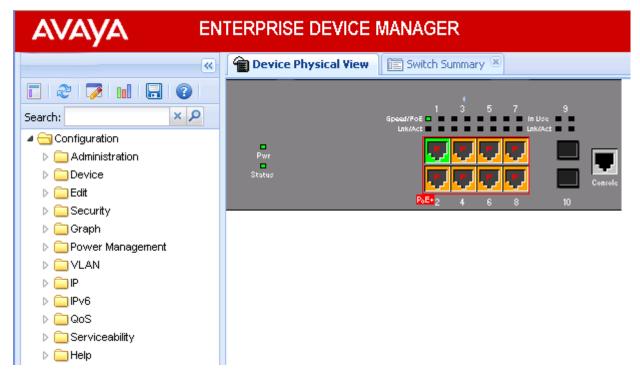


Figure 1: Device Physical View

### Note:

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

#### **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.

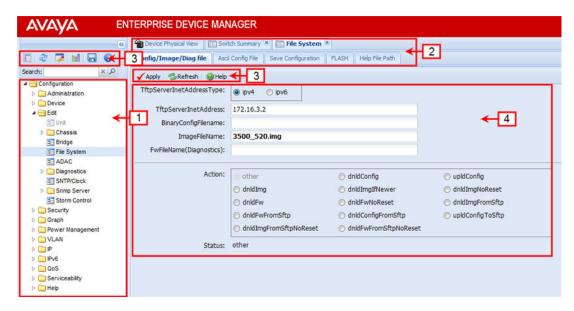


Figure 2: EDM window

### **Navigation tree**

The navigation tree displays available command topics as folders in a tree, as described in the table below.

Table 3: Folders and subfolders in the navigation tree

Folder	Description
Administration	Use the selections in the Administration folder to perform the following functions:
	Quick Start — sets up IP/Community/VLAN
	Remote Access — enables or disables Telnet, SNMP, Web Page, and SSH
	Run Script — configures parameters for the switch, according to Avaya best practices. Run Scripts are available for IP Office.
	MIB Web Page — performs a MIB Walk
Device	Rediscover Device — Use the Rediscover Device selection to refresh the session.
	⚠ Caution:
	All existing tabs are lost.
Edit	Opens edit dialog boxes for the objects selected in the navigation tree. Use the selections in the Edit folder to view or change parameters for the currently-selected object.
	• Unit
	Chassis: Chassis, Switch/Stack, Ports, and Environment

Table continues...

Folder	Description
	Bridge
	File System
	• ADAC
	Diagnostics: Port Mirrors, Topology, System Log. 802.1AB: LLDP, Port MED, Avaya
	SNTP/Clock
	Snmp Server: MIB View, User, Community, Host, Notification Control
	Storm Control
Security	Use the selections in the Security folder to view or change security settings.
	General
	MAC Security
	DHCP Snooping
	Dynamic ARP Inspection (DAI)
	IP Source Guard (IPSG)
	• 802.1X/EAP
	Web/Telnet/Console
	• SSH/SSL
	• RADIUS
	• TACACS+
Graph	Use the selections in the Graph folder to view statistics and produce graphs of the statistics on the following tabs:
	Chassis
	Port — to view or graph statistics for a port, first select a port on the Device Physical View.
Power Management	The Power Management tab is available only for switches equipped with Power over Ethernet (PoE). Use the tabs associated with the subfolders in the Power Management folder to view and configure Power over Ethernet (PoE) settings and to view and configure Energy Saver settings.
	Subfolders in the Power Management folder are:
	• PoE
	Energy Saver
VLAN	Use the selections in the VLAN folder to configure or view information about the following:
	• VLANs

Table continues...

Folder	Description
	Spanning Tree: Globals, STG, RSTP, MSTP
	MLT/LACP
	• SLPP
IP	Use the selections in the IP folder to set up IP functions on tabs in the following sub-folders:
	• IP
	TCP/UDP
	• IGMP
	DHCP Relay
	DHCP Server
	UDP Forwarding
IPv6	Use the selections in the IPv6 folder to set up IPv6 routing functions on tabs in the following sub-folders:
	• IPv6
	TCP/UDP
QoS	Use the selections in the QoS folder to configure quality of service and set up QoS policies and filters using tabs in the following sub-folders:
	QoS Devices
	QoS Rules
	• QoS
	QoS Agent
Serviceability	Use the selections in the Serviceability folder to navigate to the following sub-folders:
	RMon for remote monitoring and configuration of
	- Alarms
	- Control
	SLA Mon for Service Level Agreement monitoring
Help	Use the tabs associated with the subfolders in the Help folder to access help and support for the following:
	Device Manager Basic
	Support Portal (Avaya)
	Legend: Up, Down, No Link, Standby, Testing, Unmanageable, and Loopback.

To open a folder or sub-folder, you can click the arrowhead to the left of the folder or double-click the folder to display the available commands tabs.

To close a folder, click the arrowhead once.

To access a command tab, double-click the selection in the navigation tree.

## **Navigation tree toolbar**

You can use the toolbar above the navigation tree to perform common functions more easily.

Toolbar:



Figure 3: Toolbar

Following is a description of the toolbar button functions:

Button	Description
	Switch Summary – you can use the Switch Summary toolbar button to open or reopen the switch summary tab
2	Refresh Status – in addition to the existing refresh methods you can use the Refresh Status toolbar button to refresh the device status
	Edit Selected – in addition to the existing edit methods, and depending on which object you select on the Device Physical View, you can use this toolbar button to open Edit > Chassis, Edit > Unit, or Edit > Ports tabs. If you do not select an object from the Device Physical View and you click the Edit Select toolbar button, the Edit > Chassis tab opens.
Coll	Graph Selected – depending on which object you select on the Device Physical View, you can use this toolbar button to open Graph > Chassis or Graph > Port tabs. If you do not make a selection on the Device Physical View, or if you select Unit, the Graph > Chassis tab opens.
	Save Config — this button allows you to save the current configuration. A window appears asking if you want to save the configuration: click OK to save the configuration or click Cancel to cancel the Save operation.
0	Help Setup Guide – this button connects you to the help setup guide for embedded EDM and it replaces the link that appeared on the top right of work panes.

Under the toolbar is the Search function window. You can use the Search function window to find a specific sub-folder or selection in the navigation tree.

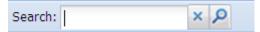


Figure 4: Search function window

Enter the sub-folder or selection you are looking in the Search window and click the magnifying glass to perform the search. The navigation tree displays the sub-folder that best matches your search criteria.

#### Menu bar

The menu bar appears above the work area and consists of two rows of tabs.

The top row displays tabs that were accessed from the navigation tree during the active session. The tabs in this row, called primary tabs, are docked and available to reopen on demand. The docked tabs appear in the sequence that you accessed them.

When you click a primary tab from the menu bar, the associated secondary tabs appear in the second row and the default dialog box appears in the work area. Click any secondary tab to display its associated dialog box.

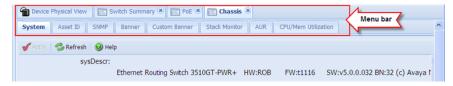


Figure 5: Menu bar

If you want to open a dialog without displacing the current open dialog, you can go to the tab on the menu bar and undock the tab by using your mouse to drag and drop it into the work area. You can drag the dialog box to any location on the screen and you can toggle between the open dialog boxes to compare information and make changes. When you no longer need the undocked tab, you can use the three buttons on the upper right side of the tab to temporarily shrink it, re-dock it, or close it.

In both rows of the menu bar, arrows can appear on the left and right sides when the number of open tabs exceeds the available space. You can use the arrows to scroll to a tab, or you can select the tab from the navigation tree.

To reduce the number of open tabs, you can click the X button on the top right of a tab to close it.

#### Tool bar

The tool bar, located below the menu bar, contains buttons that provide quick access to commonly used operational commands. Depending on the tab selected, different buttons can appear.

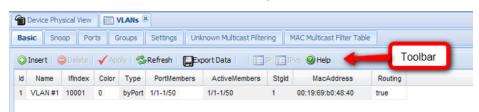


Figure 6: Tool Bar

The following table describes common tool bar buttons.

Table 4: Common tool bar buttons

Button	Name	Description
✓.	Apply	Executes parameter changes

Table continues...

Button	Name	Description
3	Refresh	Refreshes screen data
<b>②</b>	Help	Displays context-sensitive online help for the current dialog box
<b>()</b>	Insert	Opens an insert dialog box
		Submits the entry from the insert dialog box
		The insert buttons appear only on panes where you can insert entries.
	Delete	Removes a selected entry
×	Cancel	Cancels an operation

#### Work area

The work area, on the right side of the EDM page, displays the switch Device Physical View and dialog boxes related to the menu selections in the navigation tree. You can use the work area to view and configure switch parameters from the dialog boxes that appear in the work area.

See the following figure for an example of the work area for the File System, Config/Image/Diag file dialog.

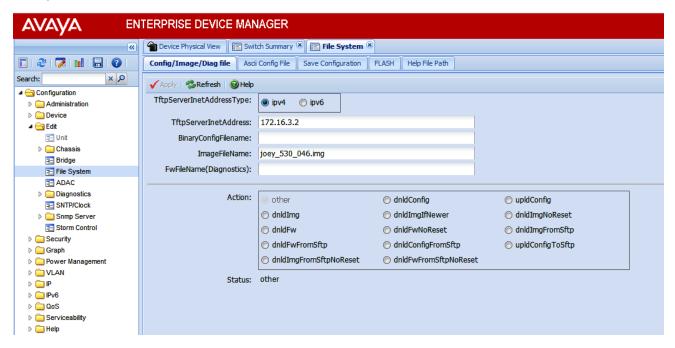


Figure 7: EDM work area

## Note:

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

## Single port configuration for EDM

#### Note:

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

You can apply configuration changes to single ports by using one of the following methods:

• From the Device Physical View, you can right-click a port and select Edit from the drop-down menu, then click the appropriate tab.

The following figure displays the drop-down menu for the selected port in the Device Physical View.

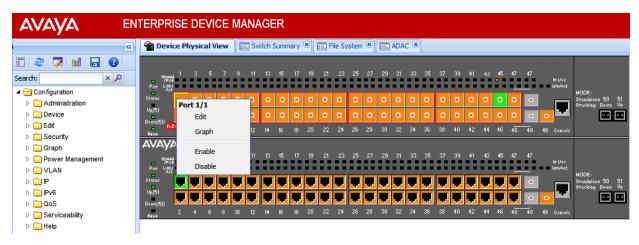


Figure 8: Device Physical View - port edit

The following figure displays the port edit work area with the VLAN tab selected.



Figure 9: Port edit -VLAN tab

 From the Navigation tree you can select any tab from the Edit, Chassis, Ports work flow and double-click a cell under an editable parameter column heading in the appropriate port row of the table.

The following figure displays the Edit, Chassis, Ports work area with the Interface tab selected.



Figure 10: Edit, Chassis, Ports - Interface tab

• From the Navigation tree you can select a port-related tab from a specific, applicable feature work area (for example, VLAN, VLANs, Ports), and double-click a cell under an editable parameter column heading in the appropriate port row of the table.

The following figure displays the VLAN, VLANs, Ports tab work area.

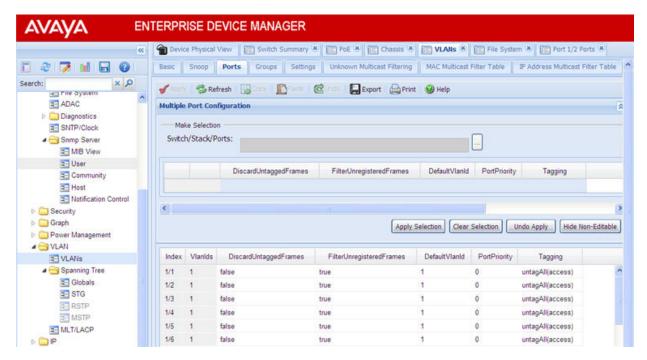


Figure 11: VLAN, VLANs - Ports tab

## **Multiple Port Configuration for EDM**



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

When you need to apply the same configuration changes to more than one port, you can use the Multiple Port Configuration function available on all tabs in the Edit, Chassis, Ports work flow, or on port-related tabs for specific, applicable feature work areas (for example, VLAN, VLANs, Ports).

The following sections use the Edit, Chassis, Ports, Interface tab work area to describe the available Multiple Port Configuration functions.

In the work area for any of the Edit, Chassis, Ports tabs, the following two panes appear in the default view:

- Multiple Port Configuration pane—provides port selection for one port, several ports, or all ports, and configurable port parameters
- Tab work pane—displays existing configuration information for the feature and configurable cells for individual ports

With Multiple Port Configuration you can perform the following:

- Hide non-editable fields from the multiple configuration pane so that you choose to view only those fields that can be configured.
- Select an individual port or a group of ports from the Port Editor.

- · Select all ports from the Port Editor.
- Double-click any or all of the editable fields to change the configuration parameter.
- · Clear your selections.
- Apply your selections.
- Undo the application of your selections.

You can expand or collapse the Multiple Port Configuration pane by clicking the Multiple Port Configuration task bar. The Multiple Port Configuration pane is expanded by default.

The following figure displays the tabs available in the Edit, Chassis, Ports work flow, with the Interface tab selected and the Multiple Port Configuration pane expanded.

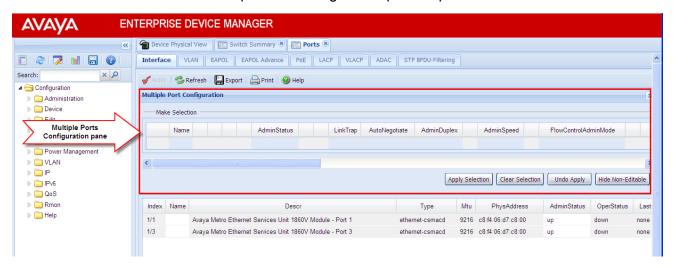


Figure 12: Interface tab — Multiple Port Configuration pane expanded

The following figure displays the Edit, Chassis, Ports, Interface tab with the Multiple Port Configuration pane collapsed.



Figure 13: Interface tab — Multiple Port Configuration pane collapsed

Changes you make to a port configuration using Multiple Port Configuration are applied to the switch configuration only after you click **Apply** on the work area toolbar.

The following figure displays the location of the **Apply** button on the work area toolbar.



Figure 14: Toolbar Apply button

# Chapter 3: Enterprise Device Manager procedures

This section contains procedures for starting and using Enterprise Device Manager (EDM) on your switch. You can use EDM software on the switch; you do not need to install a client-based application on your computer.

## **Enabling the Web server using ACLI**

The Web server is enabled by default. If you have assigned an IP address to the switch you can access EDM.

If you have disabled the Web server, use this procedure to enable and manage the Web server using ACLI. After you enable the Web server you can start EDM. For more information about the Web server, see *Configuring Security on Avaya Ethernet Routing Switch 3500 Series*, NN47203-504.

#### **Procedure**

1. Enter Global Configuration mode:

```
enable
configure terminal
```

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

```
web-server enable
```

## Disabling the Web server using ACLI

Use this procedure to disable the Web server using ACLI. After you disable the Web server, you cannot start EDM.

#### **Procedure**

1. Enter Global Configuration mode:

```
enable
configure terminal
```

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

```
no web-server enable
```

## Displaying the Web server status using ACLI

Use the following procedure to display the status of the Web server using ACLI.

#### **Procedure**

1. Enter Global Configuration mode:

```
enable
configure terminal
```

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

```
show web-server
```

## **Starting EDM**

To configure and maintain your switch through a Web-based graphical user interface, start EDM.

#### 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.
- Note the password.
- Open one of the supported Web browsers.

#### **Procedure**

- 1. In a supported Web browser, enter the IP address of the switch using one of the following formats:
  - http://<IP Address>
  - https://<IP Address>
- 2. Enter the user name.
- 3. Enter the password.

#### 4. Click Log On.

## **Using shortcut menus**

In the EDM Device Physical View you can use shortcut menus to edit objects and apply changes.

#### **Procedure**

- 1. In the **Device Physical View**, select an object.
- 2. Right-click the object.
- 3. Select a function from the list.

## **Shortcut menus field descriptions**

Name	Description
Unit	
Edit	Display the Edit unit dialog box and tabs
Refresh	Refreshes switch status
Refresh Port Tooltips	Refreshes the port tooltip data. Port tooltip data contains: Slot/Port, PortName, and PortOperSpeed
Port	
Edit	Displays the Edit port dialog box and tabs
Graph	Displays the graph port dialog box and tabs
Enable	Enables the port administratively
Disable	Shuts down the port administratively

## **Navigating around EDM**

Use the following procedure to navigate around EDM.

#### **Procedure**

- 1. In the navigation pane, click the arrowhead to the left of a folder to display the sub-level folders in the tree.
- 2. If there is a sub-folder, double-click the folder or click the arrowhead beside it, to open the sub-folder.
- 3. The primary tabs appear under the folders and sub-folders. Click a tab to open it in the work area.

## **Undocking tabs**

To improve certain types of configuration, you can view more than one tab at a time. To view more than one tab, you use the undock function to activate a previously-opened tab from the menu bar.

## Important:

When you undock a tab to make changes, then return to another open tab, in order to see the effects of the changes, you must click the **Refresh** button on the tool bar.

#### **Procedure**

- 1. From the menu bar, drag and drop the tab you want to open.
- 2. To reposition the tab in the work area, click and drag the title bar of the tab.

## **Docking tabs**

You can re-dock an undocked tab using one of the following methods.

#### **Procedure**

To re-dock a tab, do one of the following:

- On the undocked tab, click the dock-back button (the middle button on the top right of the panel)
- On the undocked tab, click the collapse button (left button on the top right of the panel) to temporarily minimize the panel.

## **Editing a dialog box**

Use this procedure to edit a dialog box.

#### **Procedure**

- 1. In the work area, double-click the field you want to edit.
- 2. Select a value from the list of predetermined values or enter the value for a field without preset values.

## Important:

Enter an IP address in decimal format: <xxx> <xxx> <xxx> <xxx>.

Enter a MAC address in hexadecimal format: xx:xx:xx:xx:xx:xx.

Time is a value based on the delta from the switch boot-up time.

3. Click Apply.

## Inserting an entry in a dialog box

Use this procedure to insert an entry in a dialog box.

#### **Procedure**

- 1. On the tool bar, click Insert.
- 2. Enter changes in the Insert dialog box.
- 3. Click **Insert** to submit the entry and return to the active tab in the work area.
- 4. On the toolbar, click **Apply** to commit the change to the configuration. The system refreshes the view and errors display in a browser popup.

## Deleting an entry from a dialog box

Use this procedure to delete an entry from a dialog box.

#### **Procedure**

- 1. Highlight the entry.
- 2. Click Delete.

## Editing an object using the shortcut menu

You can edit objects in the Device Physical View from the navigation tree or the shortcut menu. Use this procedure to edit an object using the shortcut menu.

#### About this task

Changes are not applied to the running configuration until you click **Apply**.

#### **Procedure**

- 1. On the Device Physical View, you can
  - right click an object
  - press Ctrl+click to select several objects, then right click
  - click and drag to select a group of objects, then right click
  - · click an entire device, then right click
- 2. From the list, click Edit.
- 3. Edit the applicable tab in the work area.
- 4. Click Apply.

## **Editing file system elements**

Use this procedure to edit file system elements.

#### **Procedure**

- 1. Click the **Edit** arrowhead to open the Edit menu.
- 2. Double-click **File System** to open the File System tab in the work area.

## File System work area field descriptions

The following table describes the tabs in the File System work area.

Tab	Description
Config/Image/Diag file	Use this tab to view information about and acquire image, configuration, and firmware files.
Ascii Config File	Use this tab to acquire ASCII configuration files.
Save Configuration	Use this tab to save the current configuration manually or automatically.

# Configuring multiple interface ports using EDM - Example 1

Use this procedure as an example for configuring multiple interface ports using the Multiple Port Configuration function and the **Edit, Chassis, Ports, Interface** work flow.

#### Before you begin

Select ports on the Device Physical View.

#### **Procedure**

- 1. In the navigation tree, double-click **Edit**.
- 2. In the Edit tree, double-click Chassis.
- 3. In the Chassis tree, click Ports.
- 4. Click the Interface tab.
- 5. To change the configuration of the selected ports, in the Multiple Port Configuration pane, double-click the cell beneath the column heading that represents the parameter you want to change and do one of the following:
  - · Select a value from a drop-down list.
  - Type a value in the cell.

- 6. In the Make Selection pane, click **Apply Selection**. The changes appear in the table.
- 7. On the Interface tab toolbar, click **Apply** to apply the changes to the switch configuration.

## Configuring multiple ports using EDM - Example 2

Use this procedure to configure multiple ports using the Multiple Port Configuration functions and the **Security, MAC Security, AutoLearn** workflow. When you use this workflow you can select ports directly from the Multiple Port Configuration pane on the **Configuration** tab.

#### **Procedure**

- 1. In the navigation tree, double-click **Security**.
- 2. In the Security tree, double-click **MAC Security**.
- Click the AutoLearn tab.
- 4. In the work area, in the Make Selection section of the Multiple Port Configuration pane, click the Switch/Stack/Ports ellipsis (...) to open the Port Editor dialog.
- 5. In the Port Editor window, click the ports you want to configure.
  - Note:

If you want to configure all ports, click All.

6. Click **OK** to return to the Make Selection pane.

The ports you selected appear in the Switch/Stack/Ports box.

- 7. To change the configuration of the selected ports, in the Multiple Port Configuration pane, double-click the cell beneath the column heading that represents the parameter you want to change and do one of the following:
  - Select a value from a drop-down list.
  - Type a value in the cell.
- 8. In the Make Selection pane, click **Apply Selection**.

The changes appear in the table.

9. On the **AutoLearn** tab toolbar, click **Apply** to apply the changes to the configuration.

## **Graphing statistics**

You can graph statistics for an entire device, a group of ports, or a single port.

#### Before you begin

On a Device Physical View select one of the following:

- a port
- · a group of ports
- · a device

#### **Procedure**

- 1. In the navigation tree, double-click **Graph**.
- 2. In the Graph tree, select one of the following:
  - Chassis
  - Port
- 3. In the work area, select a tab.
- 4. On the tab, select information to graph. To export the information to another application, on the task bar click **Export Data**.
- 5. To create the graph, on the task bar, click a graph type.

## Getting EDM online help files for embedded EDM

Because help files are not included with the embedded EDM software files on the switch, you need to download the help files to a TFTP destination and use ACLI to configure a path from your switch to the help files.

If you are using COM to manage your switch, help resides with COM and you do not need to use these procedures.

## Downloading help files

Use this procedure to download help files.

#### Before you begin

• An available TFTP server — ensure that the TFTP path differs from the path you use to download switch software



#### **Caution:**

Do not install EDM help files on Flash.

#### **Procedure**

- 1. To obtain EDM help files for the embedded element manager, do one of the following;
  - Go to the Avaya Web site http://support.avaya.com/css/appmanager/public/support and locate the help file for the appropriate product.

- Select the help file from the software CD ROM contained in the Base Software License Kit.
- 2. Download the help file to a TFTP server.

# Configuring the path to the help files using ACLI

Use this procedure to configure the path to the help files.

#### **Procedure**

1. Enter Global Configuration mode:

```
enable
configure terminal
```

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

```
edm help-file-path <path name> <tftp address> <filename>
```

#### **Example**

Following is an example of an ACLI EDM help file path:edm help-file-path ERS3500 51 Help tftp address 10.100.100.15

In the preceding example, ERS3500\_51\_Help is a folder that contains help files and the folder is located on a TFTP server at the 10.100.100.15 address.

# Configuring the help file path using EDM

Use this procedure to configure the path to the help files.

#### **Procedure**

- 1. In the navigation tree, double-click **Edit** or click the Edit arrowhead to open the Edit menu.
- 2. Click **File System** to open the File System work area.
- 3. In the work area, click the **Help File Path** tab.
- 4. In the Path dialog box, enter the path to the help file storage location.

#### Example

tftp://A.B.C.D/file name

# **Chapter 4: Configuration files fundamentals**

This chapter provides fundamental information about working with configuration files.

Configuration files are ASCII text files that allow the administrator to change switch configuration quickly.

Procedures to manage binary configuration files are included in the Enterprise Device Manager section.

# **ACLI** configuration files

You can use ACLI to display, store, and retrieve configuration files, and to save the current configuration.

# Viewing current configuration using ACLI

Use this procedure to view the current configuration.

#### **Procedure**

1. Enter Privileged EXEC mode:

enable

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

show running-config [verbose] [module]

# Saving current configuration using ACLI

Use this procedure to save the current configuration to a specific TFTP server.

#### **Procedure**

1. Enter Privileged EXEC mode:

enable

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

copy running-config tftp [address (<A.B.C.D> | <WORD>)][filename <WORD>1

#### Variable definitions

The following table describes the parameters for the copy running-config command.

Variable	Value
address <a.b.c.d></a.b.c.d>	Specifies the address of the TFTP server.
	A.B.C.D — specifies the IP address
filename <name></name>	Specifies the configuration file name.

# Saving current configuration to flash memory using ACLI

Use this procedure to save the current configuration to flash memory. Note that the system automatically issues the copy config nvram command periodically.

#### **Procedure**

1. Enter Privileged EXEC mode:

enable

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

copy config nvram



#### Note:

The current configuration can also be saved to Non-Volatile RAM (NVRAM) using the write memory command or the save config command. Both of these commands are also issued from Privileged EXEC command mode.

# Restoring system configuration from TFTP using ACLI

Use this procedure to restore the system configuration from TFTP.

#### **Procedure**

1. Enter Privileged EXEC mode:

enable

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

copy tftp config address <A.B.C.D> filename <name>

#### Variable definitions

The following table describes the parameters for the copy tftp config command.

Variable	Value
address <a.b.c.d></a.b.c.d>	Specifies the address of the TFTP server.
	A.B.C.D — specifies the IP address
filename <name></name>	Specifies the configuration file name.

# Downloading a configuration file automatically using ACLI

Use this procedure to configure a switch to automatically load a configuration file.

#### **Procedure**

1. Enter Privileged EXEC mode:

enable

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

configure network load-on-boot {disable | use-bootp | use-config}
address <A.B.C.D> filename <name>

#### Variable definitions

The following table describes the parameters for the configure network load-on-boot command.

Variable	Value
load-on-boot {disable   use-bootp   use-config}	Specifies the setting to automatically load a configuration file when the system starts
	disable — disables the automatic loading of the configuration file
	use-bootp — specifies loading the ASCII configuration file at startup and using BootP to obtain values for the TFTP address and file name
	use-config — specifies loading the ASCII configuration file at startup and using the locally configured values for the TFTP address and file name
	If you omit the variables, the system immediately downloads and runs the ASCII configuration file.
address <a.b.c.d></a.b.c.d>	Specifies the address of the TFTP server.
	A.B.C.D — specifies the IP address
filename <name></name>	Specifies the configuration file name.

# **Enterprise Device Manager configuration files**

You can use Enterprise Device Manager procedures in the following sections to:

- store the current switch ASCII configuration on a TFTP server
- retrieve an ASCII configuration file from a TFTP server to apply to a switch
- store a binary configuration file from a TFTP server
- retrieve a binary configuration file from a TFTP server
- manually save the current configuration to flash memory
- designate a configuration to download automatically at switch startup

# **ASCII configuration file management using EDM**

Use the following procedure to manage ASCII configuration files.

## Storing current ASCII configuration on a TFTP server using EDM

Use this procedure to store the current ASCII configuration on a TFTP server.

#### **Procedure**

- 1. In the navigation tree, double-click **Edit** to open the Edit tree.
- 2. Double-click File System.
- 3. Click the Ascii Config File tab.
- 4. In **TftpServerInetAddressType** choose the TFTP server internet address type.
- 5. In TFTPServerInetAddress, enter the TFTP server IP address.
- 6. In AsciiConfigFilename, enter the configuration file name.
- 7. In AsciiConfigManualUpload, choose uploadNow.
- 8. On the toolbar, click **Apply**.

#### **ASCII Config File field descriptions**

The following table describes the fields on the Ascii Config File tab.

Name	Description
TftpServerInetAddressType	Specifies the IP version of the TFTP server address.
TftpServerInetAddress	Specifies the TFTP server IP address.
AsciiConfigFilename	Specifies the name of the ASCII configuration file.
AsciiConfigManualUpload	uploadNow — Initiates manual configuration upload

# Downloading an ASCII configuration from a TFTP server using EDM

Use this procedure to download an ASCII configuration from a TFTP server.

#### **Procedure**

- 1. In the navigation tree, double-click **Edit** to open the Edit tree.
- 2. Double-click File System.
- 3. Click the **Ascii Config File** tab.
- 4. In **TftpServerInetAddressType**, choose the TFTP server internet address type .
- 5. In TftpServerInetAddress, enter the TFTP server IP address.
- 6. In AsciiConfigFilename, enter the configuration file name.
- 7. In AsciiConfigManualDownload, choose downloadNow.
- 8. On the toolbar, click **Apply**.

#### **ASCII Config File field descriptions**

The following table describes the fields on the Ascii Config File tab.

Name	Description
TftpServerInetAddressType	Specifies the IP version of the TFTP server address.
TftpServerInetAddress	Specifies the TFTP server IP address.
AsciiConfigFilename	Specifies the name of the ASCII configuration file.
AsciiConfigManualDownload	downloadNow — Initiates manual configuration download

# Downloading a configuration file automatically using EDM

Use this procedure to download a configuration file automatically.

#### **Procedure**

- 1. In the navigation tree, double-click **Edit** to open the Edit tree.
- 2. Double-click File System.
- 3. Click the **Ascii Config File** tab.
- 4. In **TftpServerInetAddressType**, choose the TFTP server internet address type.
- 5. In AsciiConfigFilename, enter the configuration file name.
- 6. In AsciiConfigAutoDownload,, choose the automatic download source either useBootp, to specify loading the ASCII configuration file at system start and using Bootp to obtain values for the TFTP address and file name, or use useConfig, to specify loading the ASCII configuration file at system start and using the locally configured values for the TFTP address and file name.
- 7. On the toolbar, click **Apply**.

#### **ASCII Config File field descriptions**

The following table describes the fields on the Ascii Config File tab.

Name	Description
TftpServerInetAddressType	Specifies the IP version of the TFTP server address.
TftpServerInetAddress	Specifies the TFTP server IP address.
AsciiConfigFilename	Specifies the name of the ASCII configuration file.
AsciiConfigAutoDownload	disabled — Disabled automatic loading of ASCII configuration file at startup
	useBootp — Specifies loading the ASCII configuration file at startup and using BootP to obtain values for the TFTP address and file name
	useConfig — Specifies loading the ASCII configuration file at startup and using the locally configured values for the TFTP address and file name
AsciiConfigAutoDldStatus	Displays the configuration automatic download status

# Binary configuration file management using EDM

Use the following procedures to manage binary configuration files.

# Storing a binary configuration file on a TFTP server using EDM

Use this procedure to store a binary configuration file on a TFTP server.

#### **Procedure**

- 1. In the navigation tree, double-click **Edit** to open the Edit menu.
- 2. Double-click File System.
- 3. Click the Config/Image/Diag file tab.
- 4. In TftpServerInetAddressType, choose the TFTP server internet address type.
- 5. In TftpServerInetAddress, enter the TFTP server IP address.
- 6. In **BinaryConfigFilename**, enter the configuration file name.
- 7. In Action, select upldConfig.
- 8. On the toolbar, click Apply.

#### Config Image Diag file tab field descriptions

The following table describes the fields on the Config/Image/Diag file tab.

Name	Description
TftpServerInetAddressType	Specifies the IP version of the TFTP server address.

Table continues...

Name	Description
TftpServerInetAddress	Specifies the TFTP server IP address.
BinaryConfigFilename	Specifies the name of the binary configuration file.
Action	dnldConfig—Downloads a configuration file to the switch.
	upldConfig—Uploads a configuration file to the switch from a designated location.
	dnldImg—Downloads a new software image to the switch.
	dnldImgIfNewer—Downloads a new software image to the switch only it if is newer than the current image.
	dnldImgNoReset—Downloads a new software image to the switch without a switch reset.
	dnldFW—Downloads a new diagnostic software image to the switch.
	dnldFwNoReset—Downloads a new diagnostic software image to the switch without a switch reset.
Status	Displays the status of the most recent action since the last switch restart.

# Downloading a binary configuration file on a TFTP server using EDM

Use this procedure to download a binary configuration file on a TFTP server.

#### **Procedure**

- 1. In the navigation tree, double-click **Edit** to open the Edit menu.
- 2. Double-click File System.
- 3. Click the **Config/Image/Diag file** tab.
- 4. In TftpServerInetAddress, enter the TFTP server IP address.
- 5. In **BinaryConfigFilename**, enter the configuration file name.
- 6. In Action, select dnldConfig.
- 7. On the toolbar, click **Apply**.

#### Config Image Diag file tab field descriptions

The following table describes the fields on the Config/Image/Diag file tab.

Name	Description
TftpServerInetAddressType	Specifies the IP version of the TFTP server address.

Table continues...

Name	Description
TftpServerInetAddress	Specifies the TFTP server IP address.
BinaryConfigFilename	Specifies the name of the binary configuration file.
Action	dnldConfig—Downloads a configuration file to the switch.
	upldConfig—Uploads a configuration file to the switch from a designated location.
	dnldlmg—Downloads a new software image to the switch.
	dnldImglfNewer—Downloads a new software image to the switch only it if is newer than the current image.
	dnldlmgNoReset—Downloads a new software image to the switch without a switch reset.
	dnldFW—Downloads a new diagnostic software image to the switch.
	dnldFwNoReset—Downloads a new diagnostic software image to the switch without a switch reset.

# Saving current configuration to flash memory manually using EDM

Use this procedure to save the current configuration to flash memory manually.

#### **Procedure**

- 1. In the navigation tree, double-click **Edit** to open the Edit tree.
- 2. Double-click File System.
- 3. Choose Save Configuration.
- 4. Deselect **AutosaveToNvramEnabled** this option is enabled by default.
- 5. In Action, choose copyConfigToNvram.
- 6. On the toolbar, click **Apply**.

# Chapter 5: Supported standards and Request for Comments

This chapter lists the Supported standards and Request for Comments (RFCs) supported.

# **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 lpv6 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 6: Related Resources**

# **Support**

Go to the Avaya Support website at <a href="http://support.avaya.com">http://support.avaya.com</a> 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 <a href="http://avaya-learning.com/">http://avaya-learning.com/</a>.

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 <a href="http://support.avaya.com">http://support.avaya.com</a> 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.



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

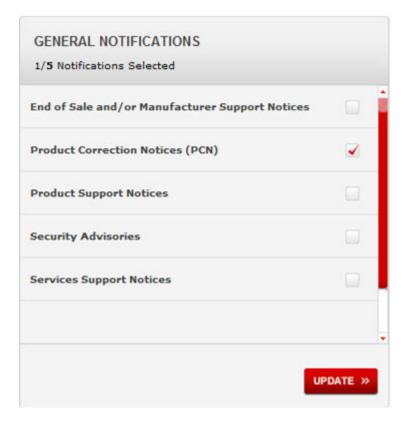
Subscribe to e-notifications to receive an email notification when documents are added to or changed on the Avaya Support website.

#### 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**

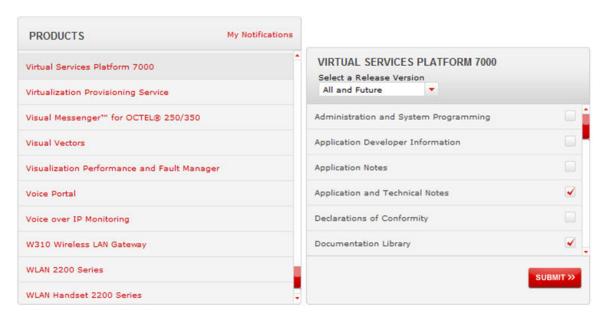
- 1. In an Internet browser, go to <a href="https://support.avaya.com">https://support.avaya.com</a>.
- 2. Type your username and password, and then click **Login**.
- 3. Under My Information, select SSO login Profile.
- 4. Click E-NOTIFICATIONS.
- 5. In the GENERAL NOTIFICATIONS area, select the required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