Notice

While reasonable efforts have been made to ensure that the information in this document is complete and accurate at the time of printing, Extreme Networks, Inc. assumes no liability for any errors. Extreme Networks, Inc. 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. Extreme Networks 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 Extreme Networks. End User agrees to indemnify and hold harmless Extreme Networks, Extreme Networks’ 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

Extreme Networks is not responsible for the contents or reliability of any linked websites referenced within this site or Documentation provided by Extreme Networks. Extreme Networks 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. Extreme Networks does not guarantee that these links will work all the time and has no control over the availability of the linked pages.

Warranty

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

“Hosted Service” means an Extreme Networks hosted service subscription that You acquire from either Extreme Networks or an authorized Extreme Networks 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 Extreme Networks or Extreme Networks Channel Partner (as applicable) for more information.

Hosted Service

THE FOLLOWING APPLIES ONLY IF YOU PURCHASE AN EXTREME NETWORKS HOSTED SERVICE SUBSCRIPTION FROM EXTREME NETWORKS OR AN EXTREME NETWORKS CHANNEL PARTNER (AS APPLICABLE), THE TERMS OF USE FOR HOSTED SERVICES ARE AVAILABLE ON THE EXTREME NETWORKS WEBSITE, https://extremeportal.force.com OR SUCH SUCCESSOR SITE AS DESIGNATED BY EXTREME NETWORKS, 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 OF 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 EXTREME NETWORKS WEBSITE, https://extremeportal.force.com OR SUCH SUCCESSOR SITE AS DESIGNATED BY EXTREME NETWORKS, ARE APPLICABLE TO ANYONE WHO ACCESSES OR USES ANY EXTREME NETWORKS SOFTWARE, PURCHASED FROM EXTREME NETWORKS, INC., ANY EXTREME NETWORKS AFFILIATE, OR AN EXTREME NETWORKS CHANNEL PARTNER (AS APPLICABLE) UNDER A COMMERCIAL AGREEMENT WITH EXTREME NETWORKS OR AN EXTREME NETWORKS CHANNEL PARTNER. UNLESS OTHERWISE AGREED TO BY EXTREME NETWORKS IN WRITING, EXTREME NETWORKS DOES NOT EXTEND THIS LICENSE IF THE SOFTWARE WAS OBTAINED FROM ANYONE OTHER THAN EXTREME NETWORKS, AN EXTREME NETWORKS AFFILIATE OR AN EXTREME NETWORKS CHANNEL PARTNER; EXTREME NETWORKS 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 EXTREME NETWORKS, INC. OR THE APPLICABLE EXTREME NETWORKS AFFILIATE (“EXTREME NETWORKS”).

Extreme Networks grants You a license within the scope of the license type(s) described below. Where the order documentation does not expressly identify a license type, the applicable license will be a Designated System License as set forth below in the Designated System(s) License (DS) section as applicable. 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 Extreme Networks or an Extreme Networks Channel Partner, whether as stand-alone products, pre-installed on hardware products, and any upgrades, updates, patches, bug fixes, or modified versions thereof. “Designated Processor” means a single standard-size computing device. “Server” means a set of Designated Processors that hosts (physically or virtually) 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 type(s)

Designated System(s) License (DS). End User may install and use each copy or an Instance of the Software only: 1) on a number of Designated Processors up to the number indicated in the order; or 2) up to the number of Instances of the Software as indicated in the order. Extreme Networks does not authorize by Extreme Networks in writing. Extreme Networks 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 Extreme Networks through electronic means established by Extreme Networks specifically for this purpose.

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 Extreme Networks. All content on this site, the documentation, Hosted Service, and the product provided by Extreme Networks including the selection, arrangement and design of the content is owned either by Extreme Networks 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 Extreme Networks. Unauthorized reproduction, transmission, dissemination, storage, and or use without the express written consent of Extreme Networks 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, unless otherwise stated, that each Instance of a product must be separately licensed and ordered. For example, if the end user customer or Extreme Networks 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 Extreme Networks' website at: http://www.extremenetworks.com/support/policies/software-licensing or such successor site as designated by Extreme Networks. 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 benefitting 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 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 HTTP://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 Extreme Networks 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.

Security Vulnerabilities

Information about Extreme Networks' security support policies can be found in the Global Technical Assistance Center Knowledgebase at https://gtechknowledge.extremenetworks.com/.

Downloading Documentation

For the most current versions of Documentation, see the Extreme Networks Support website: http://documentation.extremenetworks.com, or such successor site as designated by Extreme Networks.

Contact Extreme Networks Support

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

Contact Avaya Support

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

Trademarks

The trademarks, logos and service marks ("Marks") displayed in this site, the Documentation, Hosted Service(s), and product(s) provided by Extreme Networks are the registered or unregistered Marks of Extreme Networks, Inc., its affiliates, its licensors, its suppliers, or other third parties. Users are not permitted to use such Marks without prior written consent from Extreme Networks 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 Extreme Networks or the applicable third party.

Extreme Networks is a registered trademark of Extreme Networks, Inc.

All non-Extreme Networks trademarks are the property of their respective owners. Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries.
For additional information on Extreme Networks trademarks, please see: http://www.extremenetworks.com/company/legal/
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Displaying the local time zone settings</td>
<td>32</td>
</tr>
<tr>
<td>Displaying the daylight savings time settings</td>
<td>33</td>
</tr>
<tr>
<td>Configuring a static route using CLI</td>
<td>33</td>
</tr>
<tr>
<td>Variable definitions</td>
<td>33</td>
</tr>
<tr>
<td>Enabling remote access</td>
<td>34</td>
</tr>
<tr>
<td>Using telnet to log on to the device</td>
<td>35</td>
</tr>
<tr>
<td>Enabling the web server management interface</td>
<td>35</td>
</tr>
<tr>
<td>Accessing the switch through the web interface</td>
<td>36</td>
</tr>
<tr>
<td>Creating a VLAN using CLI</td>
<td>36</td>
</tr>
<tr>
<td>Variable definitions</td>
<td>37</td>
</tr>
<tr>
<td>Saving the configuration</td>
<td>37</td>
</tr>
<tr>
<td>Configuring system identification</td>
<td>38</td>
</tr>
<tr>
<td>Variable definitions</td>
<td>38</td>
</tr>
<tr>
<td>Chapter 5: Configuring the switch using CLI</td>
<td>41</td>
</tr>
<tr>
<td>Configuring the IP address</td>
<td>41</td>
</tr>
<tr>
<td>Configuring the IP address</td>
<td>42</td>
</tr>
<tr>
<td>Variable definitions</td>
<td>42</td>
</tr>
<tr>
<td>Clearing the IP address</td>
<td>43</td>
</tr>
<tr>
<td>Configuring the IP address to the default value</td>
<td>43</td>
</tr>
<tr>
<td>Displaying IP address information</td>
<td>43</td>
</tr>
<tr>
<td>Changing subnet netmask value</td>
<td>44</td>
</tr>
<tr>
<td>Configuring the default gateway</td>
<td>45</td>
</tr>
<tr>
<td>Displaying IP configuration</td>
<td>46</td>
</tr>
<tr>
<td>Chapter 6: Verification</td>
<td>47</td>
</tr>
<tr>
<td>Verification</td>
<td>47</td>
</tr>
<tr>
<td>Pinging an IP device</td>
<td>47</td>
</tr>
<tr>
<td>Displaying the agent and diagnostic software load</td>
<td>48</td>
</tr>
<tr>
<td>Displaying RMON Alarms using CLI</td>
<td>49</td>
</tr>
</tbody>
</table>
Chapter 1: Preface

Purpose
This document provides basic instructions to perform the basic configuration of the Extreme Networks ERS 3500 Series chassis and software.

Training
Ongoing product training is available. For more information or to register, you can access the Web site at www.extremenetworks.com/education/.

Providing Feedback to Us
We are always striving to improve our documentation and help you work better, so we want to hear from you! We welcome all feedback but especially want to know about:

• Content errors or confusing or conflicting information.
• Ideas for improvements to our documentation so you can find the information you need faster.
• Broken links or usability issues.

If you would like to provide feedback to the Extreme Networks Information Development team about this document, please contact us using our short online feedback form. You can also email us directly at internalinfodev@extremenetworks.com

Getting Help
Product purchased from Extreme Networks
If you purchased your product from Extreme Networks, use the following support contact information to get help.
If you require assistance, contact Extreme Networks using one of the following methods:

- **GTAC (Global Technical Assistance Center) for Immediate Support**
  - Phone: 1-800-998-2408 (toll-free in U.S. and Canada) or +1 408-579-2826. For the support phone number in your country, visit: [www.extremenetworks.com/support/contact](http://www.extremenetworks.com/support/contact)
  - Email: support@extremenetworks.com. To expedite your message, enter the product name or model number in the subject line.

- **GTAC Knowledge** – Get on-demand and tested resolutions from the GTAC Knowledgebase, or create a help case if you need more guidance.

- **The Hub** – A forum for Extreme customers to connect with one another, get questions answered, share ideas and feedback, and get problems solved. This community is monitored by Extreme Networks employees, but is not intended to replace specific guidance from GTAC.

- **Support Portal** – Manage cases, downloads, service contracts, product licensing, and training and certifications.

Before contacting Extreme Networks for technical support, have the following information ready:

- Your Extreme Networks service contract number and/or serial numbers for all involved Extreme Networks products
- A description of the failure
- A description of any action(s) already taken to resolve the problem
- A description of your network environment (such as layout, cable type, other relevant environmental information)
- Network load at the time of trouble (if known)
- The device history (for example, if you have returned the device before, or if this is a recurring problem)
- Any related RMA (Return Material Authorization) numbers

**Product purchased from Avaya**

If you purchased your product from Avaya, use the following support contact information to get help.

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

---

**Extreme Networks Documentation**

To find Extreme Networks product guides, visit our documentation pages at:


*Table continues…*
Subscribing to service notifications

Subscribe to receive an email notification for product and software release announcements, Vulnerability Notices, and Service Notifications.

About this task
You can modify your product selections at any time.

Procedure

1. In an Internet browser, go to http://www.extremenetworks.com/support/service-notification-form/.
2. Type your first and last name.
3. Type the name of your company.
4. Type your email address.
5. Type your job title.
6. Select the industry in which your company operates.
7. Confirm your geographic information is correct.
8. Select the products for which you would like to receive notifications.
9. Click Submit.
Chapter 2: New in this document

There are no new feature changes in this document.
Chapter 3: Fundamentals

This document 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 Ethernet Routing Switch 3500 Series)

For more information about hardware specifications and installation procedures, see Installing Ethernet Routing Switch 3500 Series.

For more information about how to configure security, see Configuring Security on Ethernet Routing Switch 3500 Series.

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.

<table>
<thead>
<tr>
<th>Access level</th>
<th>Description</th>
<th>Default Logon</th>
<th>Default Password</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read-only</td>
<td>Permits view-only configuration and status information. Is equivalent to Simple Network Management Protocol (SNMP) read-only community access.</td>
<td>RO</td>
<td>user</td>
</tr>
<tr>
<td>Read/write</td>
<td>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.</td>
<td>RW</td>
<td>secure</td>
</tr>
</tbody>
</table>

---

**Password encryption**

The local passwords for the switch are stored in the configuration file, encrypted with an Extreme Networks 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 Ethernet Routing Switch 3500 Series*. 
Quick Start

You can use the `install` command in Command Line Interface (CLI) 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
- DHCP server configuration
- 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 CLI and EDM on Ethernet Routing Switch 3500 Series*.

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 CLI 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**

To log on the switch for the first time when password security is enabled, use the default password. For the standard software image, the default password for RO is `user` and `secure` for RW. For the secure software image, the default password for RO is `userpasswd` and `securepasswd` for RW.

For more information about changing the passwords, see *Configuring Security on Ethernet Routing Switch 3600 Series*.

---

**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.

![EDM window diagram](image)

**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 Ethernet Routing Switch 3500 Series* 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 Ethernet Routing Switch 3500 Series* 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 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.

   #
   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[192.168.1.1]:
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]:

Basic stack parameters have now been configured and saved.

Configuring with Quick Start using CLI

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 [192.0.2.1]:

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 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[192.0.2.1]:
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]:

December 2017
Configuring Quick Start using EDM

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

Procedure

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.
**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 CLI 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.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>speed</td>
<td>Sets the transmit and receive baud rates for the terminal. You can set the speed to one of the five options shown. DEFAULT: 9600</td>
</tr>
<tr>
<td>length</td>
<td>Sets the length of the terminal display in characters. RANGE: 1 to 132 DEFAULT: 24</td>
</tr>
<tr>
<td>width</td>
<td>Sets the width of the terminal display in characters. RANGE: 1 to 132 DEFAULT: 79</td>
</tr>
</tbody>
</table>

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 CLI

The administrator can use CLI 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 CLI

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.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;username&gt; &lt;password&gt;</td>
<td>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.</td>
</tr>
<tr>
<td>ro</td>
<td>rw</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>read-only</td>
<td>Modifies the read only password or the read/write password.</td>
</tr>
<tr>
<td>&lt;password&gt;</td>
<td>Specifies the password.</td>
</tr>
</tbody>
</table>

⚠️ 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
### Variable | Definition
---|---
| security, see Configuring Security on Ethernet Routing Switch 3500 Series. |  
| 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.

**Procedure**

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**.

**Field descriptions**

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

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

**Configuring a Web and Telnet password using EDM**

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

**Procedure**

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**.
Field descriptions

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

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

Customizing the opening banner

You can customize the banner that appears when you connect to the switch. You can customize the text that reads Extreme Networks. 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 CLI 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 CLI 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.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>static</td>
<td>Displays the default agent-banner</td>
</tr>
<tr>
<td>custom</td>
<td>Displays the custom agent-banner</td>
</tr>
<tr>
<td>disabled</td>
<td>Skips the agent-banner display</td>
</tr>
<tr>
<td>&lt;1–19&gt; LINE</td>
<td>Fills the Nth line of the custom banner (1&lt;N&lt;19) with the text specified in LINE</td>
</tr>
<tr>
<td>no</td>
<td>Clears all lines of a previously stored custom banner</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>static</td>
<td>Displays default banner</td>
</tr>
<tr>
<td>custom</td>
<td>Displays custom banner</td>
</tr>
<tr>
<td>(if empty)</td>
<td>Displays static, custom or disabled status if parameter is not entered</td>
</tr>
</tbody>
</table>
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 Ethernet Routing Switch 3500 Series.

Procedure

1. Enter Global Configuration mode:
   
   enable
   
   configure terminal
   
2. Enter the following command:

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

Variable definitions

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

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;A.B.C.D&gt;</td>
<td>Specifies the IP address of the primary or secondary NTP server in the format XXX.XXX.XXX.XXX.</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>zone</td>
<td>Specifies time zone acronym that can be displayed when showing system time; for example, EST for Eastern Standard Time. &lt;br&gt; RANGE: Up to 4 characters</td>
</tr>
<tr>
<td>hours</td>
<td>Specify the hours difference from UTC. &lt;br&gt; RANGE: —12 to + 12</td>
</tr>
<tr>
<td>minutes</td>
<td>Optional minutes difference from UTC. &lt;br&gt; RANGE: 0–59</td>
</tr>
<tr>
<td>no</td>
<td>Disables the clock time zone feature</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>zone</td>
<td>Specifies the acronym to be displayed when summer time is in effect. If unspecified, defaults to the time zone acronym.</td>
</tr>
</tbody>
</table>

Table continues…
<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>date {&lt;day&gt; &lt;month&gt; &lt;year&gt; <a href="">hh:mm</a>} {&lt;day&gt; &lt;month&gt; &lt;year&gt; <a href="">hh:mm</a>}</td>
<td>The first date specifies when summer time starts, and the second date specifies when summer time ends.</td>
</tr>
<tr>
<td></td>
<td>• day — day of the month (RANGE: 1 to 31)</td>
</tr>
<tr>
<td></td>
<td>• month — month (RANGE: first three letters by name)</td>
</tr>
<tr>
<td></td>
<td>• hh:mm — time in military format (24–hour clock), in hours and minutes</td>
</tr>
<tr>
<td></td>
<td><strong>Important:</strong></td>
</tr>
<tr>
<td></td>
<td>&lt;day&gt; &lt;month&gt; parameters can also be entered in order: &lt;month&gt; &lt;day&gt;.</td>
</tr>
<tr>
<td>offset</td>
<td>Number of minutes to add during summer time</td>
</tr>
<tr>
<td></td>
<td>RANGE: —840 to 840</td>
</tr>
<tr>
<td>no</td>
<td>Disables the daylight savings time feature</td>
</tr>
</tbody>
</table>

## 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.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1–5&gt;</td>
<td>Specifies the week of the month. The first occurrence specifies when the recurring starts, and the second specifies when the recurring stops.</td>
</tr>
<tr>
<td>&lt;DAY&gt;</td>
<td>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.</td>
</tr>
<tr>
<td>&lt;MONTH&gt;</td>
<td>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.</td>
</tr>
<tr>
<td><a href="">hh:mm</a></td>
<td>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.</td>
</tr>
<tr>
<td>&lt;1–1440&gt;</td>
<td>Specifies the number of minutes to add or subtract during summer-time recurring.</td>
</tr>
</tbody>
</table>

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.

```plaintext
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 CLI

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 CLI 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.
Enabling remote access

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

For more information, see Using CLI and EDM on Ethernet Routing Switch 3500 Series and Configuring Systems on Ethernet Routing Switch 3500 Series.

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.

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.

For more information, see Configuring Security on Ethernet Routing Switch 3500 Series.

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 CLI and EDM on Ethernet Routing Switch 3500 Series.

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 CLI

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.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1–4094&gt;</td>
<td>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.</td>
</tr>
<tr>
<td>name &lt;WORD&gt;</td>
<td>Enter the new name you want for the VLAN.</td>
</tr>
<tr>
<td>type</td>
<td>Enter the type of VLAN. Values include:</td>
</tr>
<tr>
<td></td>
<td>• port — port-based VLAN</td>
</tr>
<tr>
<td></td>
<td>• protocol-ipv6Ether2 — IPv6 protocol-based VLAN</td>
</tr>
<tr>
<td></td>
<td>• voice-vlan — voice VLAN</td>
</tr>
<tr>
<td>msti &lt;1–7&gt;</td>
<td>This parameter is available only in MSTP mode. It associates the VLAN with either an MSTI instance or the CIST.</td>
</tr>
<tr>
<td>cist</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;text&gt;</code></td>
<td>Specify the SNMP system name value. Enter an alphanumeric string of up to 255 characters.</td>
</tr>
</tbody>
</table>

*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

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;text&gt;</code></td>
<td>Specify the SNMP system contact value. Enter an ASCII string of up to 255 characters.</td>
</tr>
</tbody>
</table>

Use the definitions in the following table to use the `snmp-server location` command.
Table 3: snmp-server location command

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;text&gt;</td>
<td>Specify the SNMP system location value. Enter an alphanumeric string of up to 255 characters.</td>
</tr>
</tbody>
</table>

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

Table 4: snmp-server host command

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;host-ip&gt;</td>
<td>Specify an IPv4 or IPv6 address for a host intended to be the trap destination.</td>
</tr>
<tr>
<td>&lt;community-string&gt;</td>
<td>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.</td>
</tr>
</tbody>
</table>
Chapter 5: Configuring the switch using CLI

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.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.B.C.D</td>
<td>Enters the IP address or subnet mask of the switch in the format XXX.XXX.XXX.XXX; netmask is optional.</td>
</tr>
</tbody>
</table>
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 source` command.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>bootp-always</td>
<td>Always use the BootP server.</td>
</tr>
<tr>
<td>bootp-last-address</td>
<td>Use the last BootP server.</td>
</tr>
<tr>
<td>bootp-when-needed</td>
<td>Use the BootP server when needed. DEFAULT: bootp-when-needed</td>
</tr>
<tr>
<td>configured-address</td>
<td>Use the manually configured IP configuration.</td>
</tr>
<tr>
<td>dhcp-always</td>
<td>Always use the DHCP server.</td>
</tr>
<tr>
<td>dhcp-last-address</td>
<td>Use the last DHCP server.</td>
</tr>
<tr>
<td>dhcp-when-needed</td>
<td>Use DHCP client when needed.</td>
</tr>
</tbody>
</table>
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 CLI 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 \texttt{show ip address} command.

Switch>show ip address

<table>
<thead>
<tr>
<th>Configured</th>
<th>In Use</th>
<th>Last BootP/DHCP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stack IP Address:</td>
<td>192.0.1.1</td>
<td>0.0.0.0</td>
</tr>
<tr>
<td>Switch IP Address:</td>
<td>192.0.1.2</td>
<td>192.0.1.2</td>
</tr>
<tr>
<td>Switch Subnet Mask:</td>
<td>255.255.255.0</td>
<td>255.255.255.0</td>
</tr>
</tbody>
</table>

\* 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 \texttt{Configuring the IP address} on page 41. Use this procedure to change the subnet mask to the default value or clear the subnet mask.

**Procedure**

1. Enter Global Configuration mode:
   
   \texttt{enable}  
   \texttt{configure terminal}

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

   \texttt{[default] [no] ip netmask}

**Variable definitions**

The following table describes the parameters for the \texttt{ip netmask} command.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>default</td>
<td>Sets the subnet mask to the default value (255.255.255.0).</td>
</tr>
<tr>
<td>no</td>
<td>Sets the subnet mask for a switch to all zeros (0.0.0.0).</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;A.B.C.D&gt;</code></td>
<td>Enter the IP address of the default IP gateway in the format XXX.XXX.XXX.XXX. DEFAULT: 0.0.0.0.</td>
</tr>
<tr>
<td></td>
<td>⚠️ Important:</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>no</td>
<td>Clears the IP address of the default IP gateway. Sets the IP default gateway address to zeros (0).</td>
</tr>
<tr>
<td>default</td>
<td>Sets the IP default gateway address to all zeros (0.0.0.0).</td>
</tr>
</tbody>
</table>
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 CLI 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

<table>
<thead>
<tr>
<th></th>
<th>Configured</th>
<th>In Use</th>
<th>Last BootP/DHCP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stack IP Address:</td>
<td>192.0.1.1</td>
<td></td>
<td>0.0.0.0</td>
</tr>
<tr>
<td>Switch IP Address:</td>
<td>192.0.1.2</td>
<td>192.0.2.2</td>
<td>0.0.0.0</td>
</tr>
<tr>
<td>Switch Subnet Mask:</td>
<td>255.255.255.0</td>
<td>255.255.255.0</td>
<td>0.0.0.0</td>
</tr>
<tr>
<td>Default Gateway:</td>
<td>192.0.1.3</td>
<td>192.0.1.3</td>
<td>0.0.0.0</td>
</tr>
</tbody>
</table>

switch>
```

Variable definitions

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

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>bootp mode</td>
<td>Displays BootP-related IP information.</td>
</tr>
<tr>
<td>default-gateway</td>
<td>Displays the IP address of the default gateway.</td>
</tr>
<tr>
<td>address</td>
<td>Displays the current IP address.</td>
</tr>
<tr>
<td>switch</td>
<td>stack</td>
</tr>
<tr>
<td>dns</td>
<td>Displays the DNS configuration.</td>
</tr>
</tbody>
</table>
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 CLI 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 1292.0.1.1
Host is reachable

Variable definitions

The following table describes the parameters for the ping command.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;A.B.C.D&gt;</td>
<td>Specifies the IP address, DNS host name, or IPv6 address of the unit to test.</td>
</tr>
<tr>
<td>datalize&lt;64–4096&gt;</td>
<td>Specifies the size of the ICMP packet to be sent. The data size range is from 64 to 4096 bytes.</td>
</tr>
</tbody>
</table>

Table continues...
<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(count &lt;1–9999&gt;)</td>
<td>continuous</td>
</tr>
<tr>
<td>(timeout -t) &lt;1–120&gt;</td>
<td></td>
</tr>
<tr>
<td>interval&lt;1–60&gt;</td>
<td></td>
</tr>
<tr>
<td>debug</td>
<td></td>
</tr>
<tr>
<td>source&lt;A.B.C.D&gt;</td>
<td></td>
</tr>
<tr>
<td>ttl&lt;0–255&gt;</td>
<td></td>
</tr>
</tbody>
</table>

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 CLI 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.
```

Variable definitions

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

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>diag</td>
<td>Displays information for the diagnostic load only.</td>
</tr>
<tr>
<td>image</td>
<td>Displays information for the image load only.</td>
</tr>
</tbody>
</table>
Displaying RMON Alarms using CLI

Displays information about RMON alarms.

Procedure

1. Log on to CLI in Global Configuration command mode.
2. At the command prompt, enter the following command:
   
   show rmon alarm