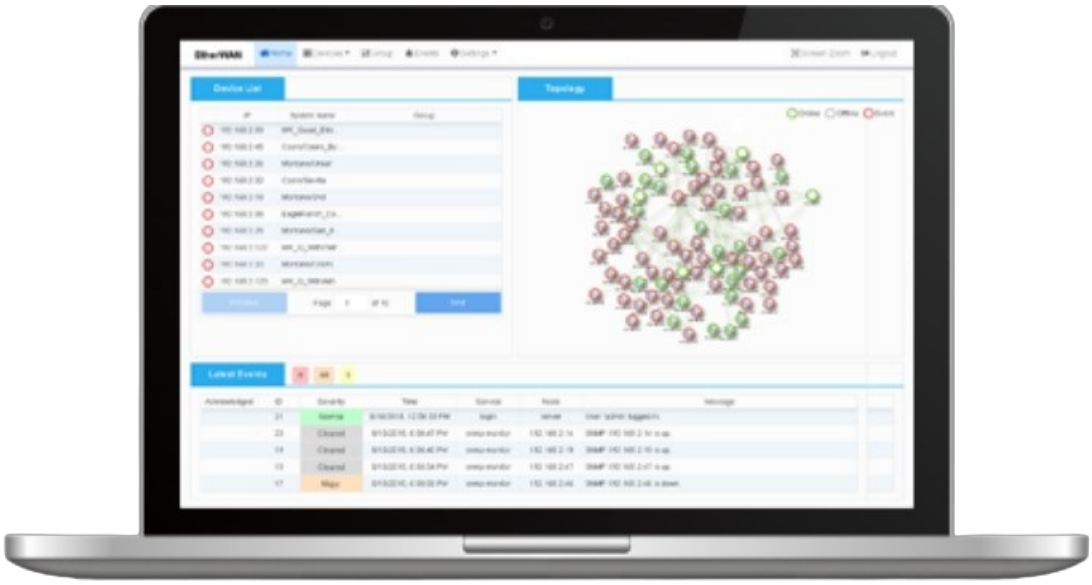
EtherWAN eVue Network Management Software User Guide

Contents

EtherWAN

EtherWAN eVue Network Management Software



Specifications

- Product Name: eVue Network Management Software
- Version: 5.01.18
- Designed for: Ethernet network installation, configuration, deployment, and maintenance
- Features: Device management, monitoring, maintenance, email notifications, network discovery

Product Usage Instructions

1. Installation

Follow these steps to install the eVue Network Management Software:

1. Download the software from the official website.
2. Run the installer and follow the on-screen instructions.
3. Complete the installation process.

Using eVue

Login

Access the software using your credentials to log in securely.

Configuration and Use

After logging in, follow these steps:

- Explore the start screen for an overview of the network status.
- Navigate through the software to access specific devices and settings.

Start Screen

The start screen provides a snapshot of the network status, highlighting any critical issues.

Navigation

Use the intuitive interface to navigate through different sections of the software for detailed information on devices and network topology.

FAQ

- **Q: What is eVue Network Management Software used for?**
  - A: eVue simplifies device management, allows monitoring of EtherWAN devices, and provides critical system information.
- **Q: How can I receive notifications from eVue?**
  - A: eVue can send email notifications based on selected levels of severity to keep you informed about the network status.

Disclaimer of Liability

The information contained in this document is subject to change without notice. EtherWAN is not liable for any errors or omissions contained herein or for resulting damage in connection with the information provided in this manual. Products Supported by this Manual: eVue Version 5.01.18

Audience

This guide is designed for the person who installs, configures, deploys, and maintains the Ethernet network.

Document Revision Level

This section provides a history of the revision changes to this document

Revision	Document Version	Date	Description
A	Version 1	07/25/2019	
B	Version 2	04/21/2020	Added eVue Mobile App instructions
C	Version 3	04/23/2020	Added remote firmware update info
D	Version 1	09/14/2021	5.00.0x update
E	Version 2	09/27/2023	5.01.13 update
F	Version 1	06/27/2024	5.01.18 update

Changes in this Revision

New features and fixes for 5.01.18

Introduction

The Vue network management software simplifies device management, allowing system administrators to monitor and maintain multiple EtherWAN devices on a local or wide area network. With the ability to send notifications by email based on selected levels of severity, eVue provides up-to-the-minute information on critical systems. The software can discover EtherWAN switches and wireless devices on a network and subnets, and display an intuitive visual representation of the network topology.

Key Features

- GUI (web based graphical user interface)
- Automated network discovery and topology visualization
- Server-Client operation to ensure system scalability, reliability and real time status
- Event handling via polling and SNMP trap
- Notification sent-out via email and SNMP trap
- Device configurations via SNMPv1/v2/v3, Web, Telnet, and SSH

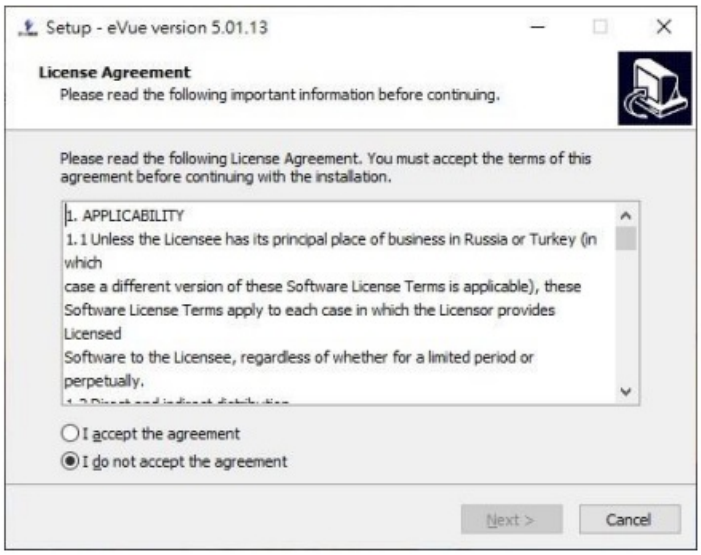
Installation

Recommended System Specifications

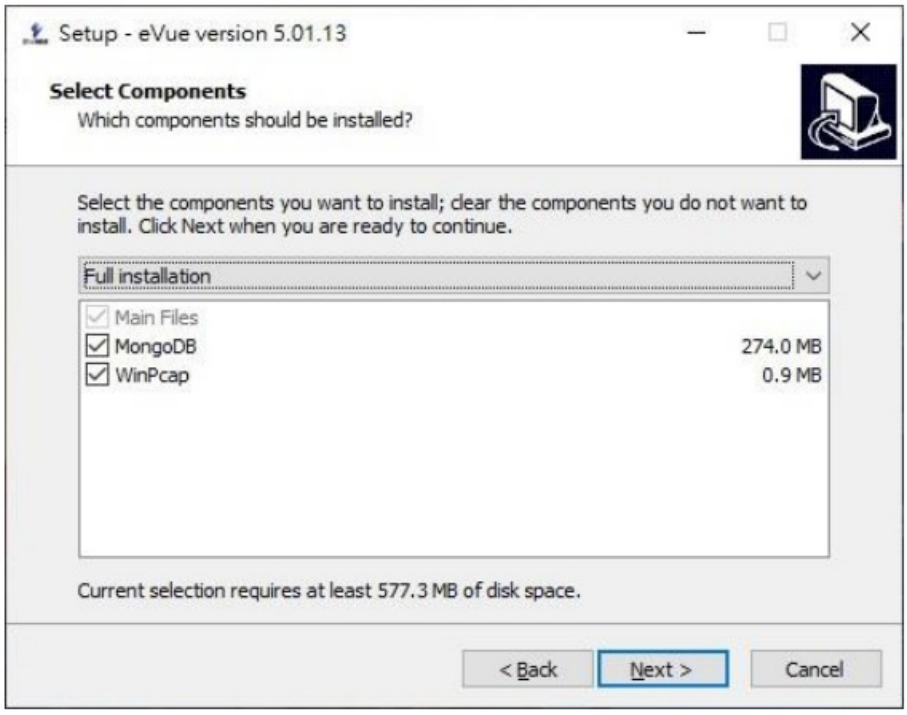
- CPU: Intel i5 2.5GHz above
- RAM: 4 GB or above
- Hard disk: 1 TB, 7200 RPM, SATA-3Gb/s or higher
- Operating System: Windows 10 (64-bit)
- Supported Browsers: Microsoft Edge, Chrome version 64 or later, Firefox version 58 or later.
- NOTE: eVue uses SNMP and LLDP to detect switches on the network. SNMP and LLDP must be enabled for all EtherWAN switches that will be used with eVue. Refer to the Appendix for information on enabling LLDP.

Install eVue

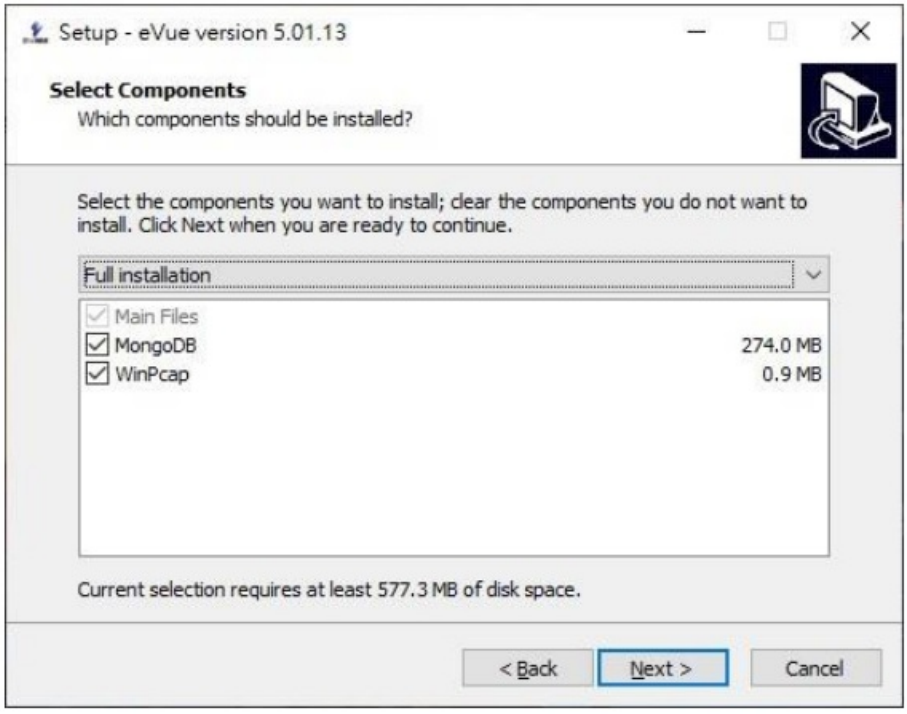
To install eVue, Double click and run the installer. Click the radio button to accept the License Agreement, and then click Next



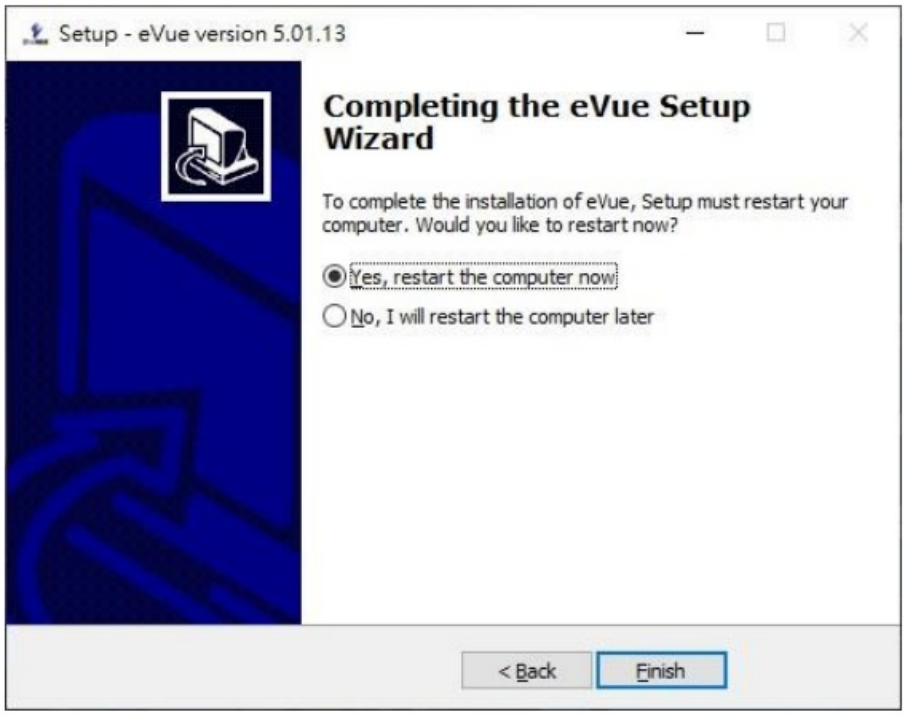
Click Next to install MongoDB and WinPcap:



MongoDB is the database used by eVue and mainly stores devices and event information. WinPcap is the industry-standard tool for link-layer network access, which allows applications to capture and transmit network packets. Select the location for the program shortcuts, and click Next for the installations. MongoDB and WinPcap are installed sequentially.
Lastly, read and accept the information for eVue.

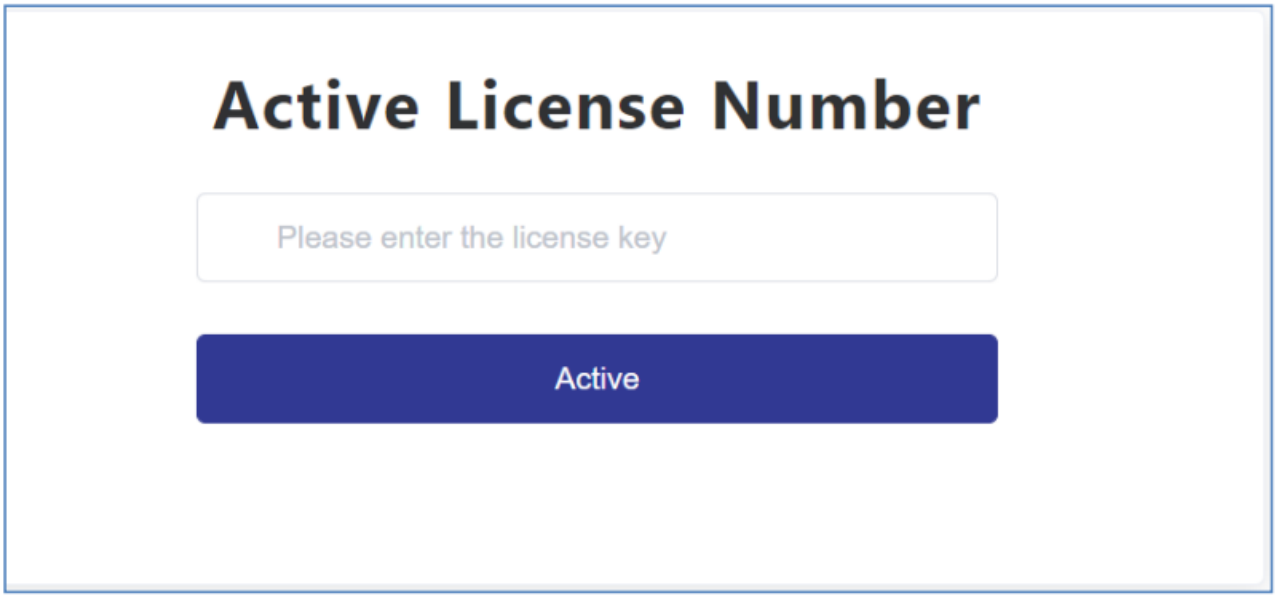


You will be prompted to restart the computer



Registration

The first time that you run eVue from https:localhost:3001, you will be required to register the software. Enter the license key provided and click to validate.



NOTE: Ensure that these ports are open when using eVue,

- Port 22: SSH
- Port 69: TFTP
- Port 161: SNMP get/set
- Port 162: SNMP Trap
- Port 3000, 3001: HTTP/HTTPS

ARP (Address Resolution Protocol) is used for EtherWAN product initial discovery.

Using eVue

Login

In addition to admin, there are two other default login options: technician and operator. Users logged in as operator have read rights only (cannot modify any fields).

The default login name is: admin (Login names are case sensitive)

The login password is: admin

To access the software from the local (server) PC:

1. Open a web browser
2. In the Internet address bar, enter “localhost:3001” and hit Enter

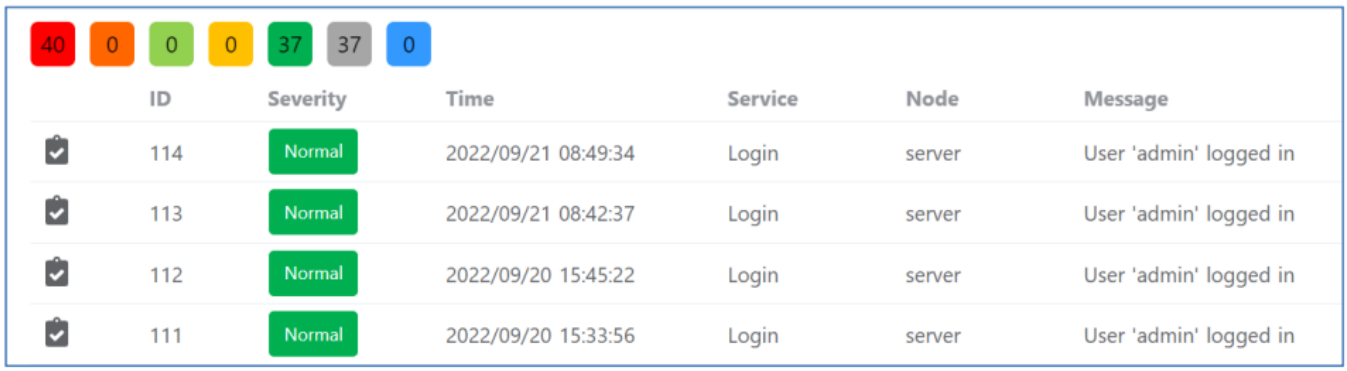
To access the software from a remote (client) PC:

1. Open a web browser
2. In the Internet address bar, enter “<Server_ipaddress>:3001” and hit enter.
   (Example: 192.168.10.100:3001)

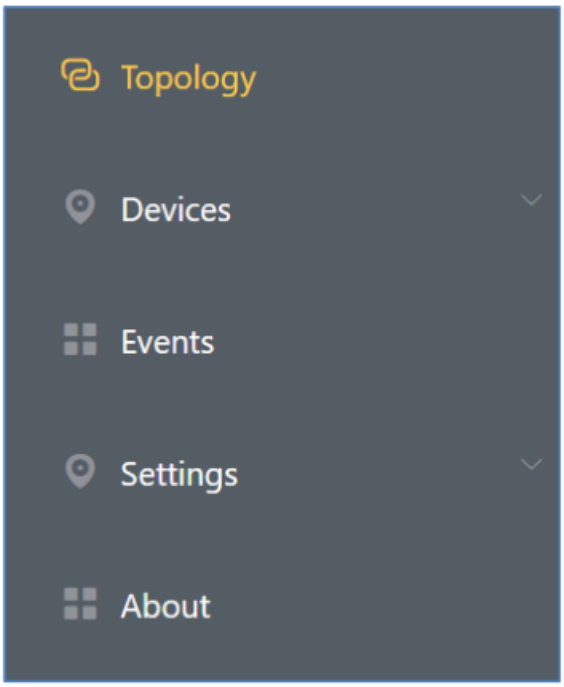
Configuration and Use

Start screen

When eVue is launched, the Topology screen will display. The Topology view will be empty the first time eVue is run. The Topology view displays all EtherWAN devices that eVue has detected on the network, and have been added using the IP Range Search function. In the Topology view, you can see each device's IP address and device type (L2, LL3, L3, etc.). Dotted lines connecting devices represent blocked ports. Moving the mouse cursor over a specific link will display the real-time port utilization (Port utilization is 99.7% for the upper left link in the example above). At the upper right of the screen, the drop-down menu beside the "Logout" button allows user to switch the interface from English to Traditional Chinese, and vice versa. At the bottom of the screen, the Events section displays the most recent events by order of occurrence.



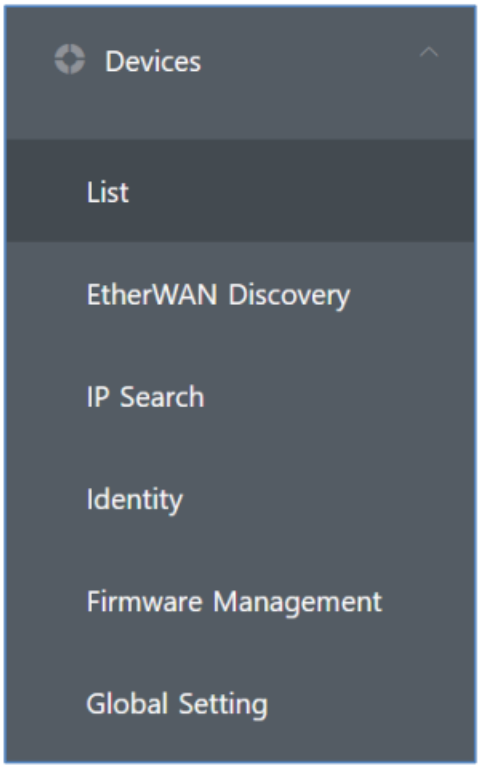
Navigation



Use the navigation labels at the left of the screen to access specific screens and associated functions.

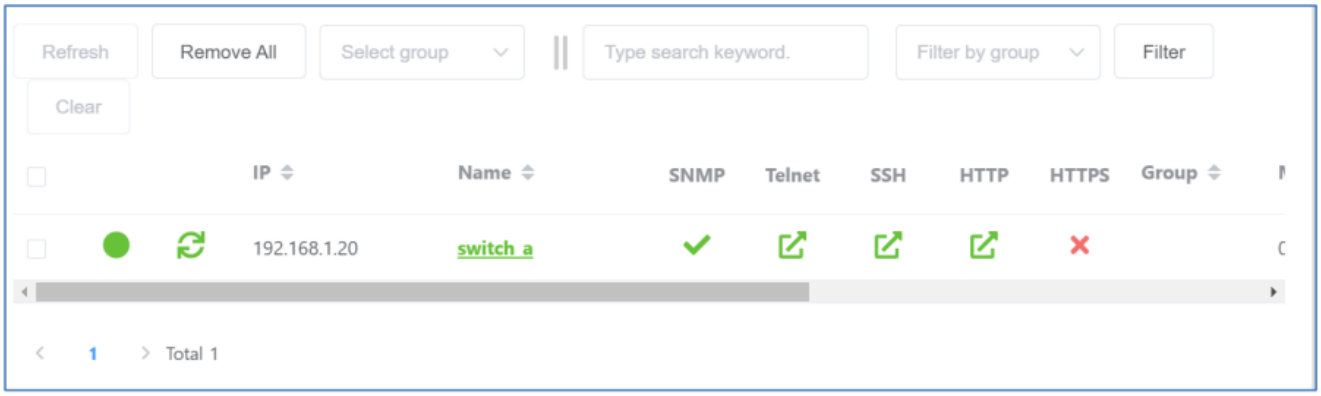
Devices

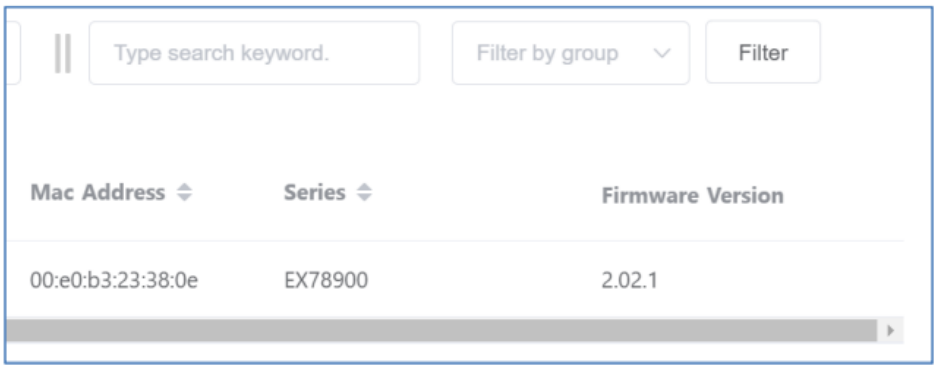
Clicking the Devices label opens a drop-down menu for five functions: List, EtherWAN Discovery, IP Search, Identity, and Firmware Management



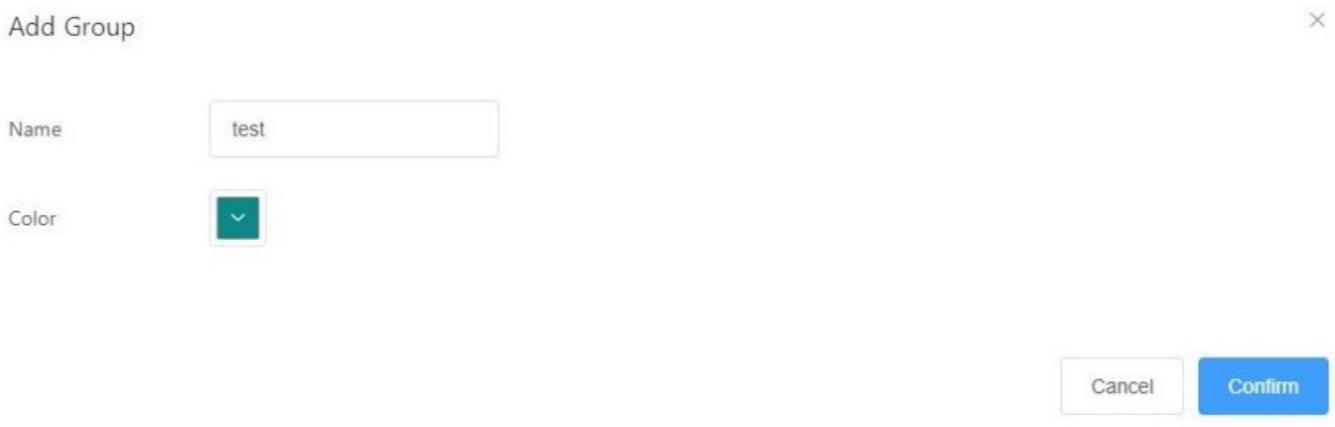
List

This screen shows all devices currently monitored by eVue. To remove a specific device from the system, select the device by clicking the checkbox on the left, and then click the Remove button. Using the Remove All button will remove all devices.



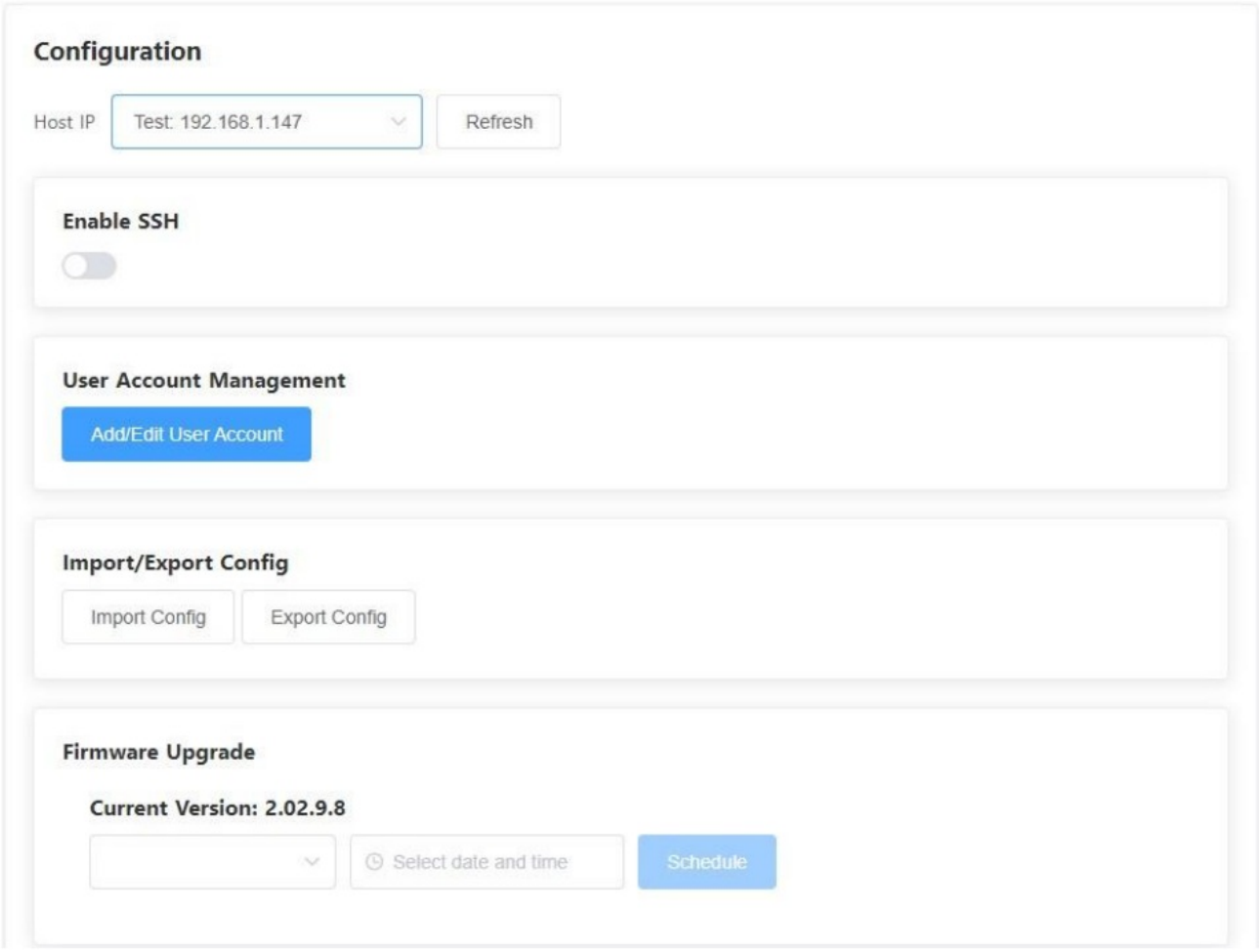


Groups – Devices can be assigned to user-defined groups for easier viewing and management. To add a new group, click on Select group and then Add New Group. Assign the new group a name and color, then click Confirm. The new group will be displayed in the Topology view. To add a switch to a defined group, click on the switch name. A new window will open with a General Settings panel on the left. Select the group from the dropdown list in the Group field. The click the Update button. The List view can be filtered by group, using the Filter by group and Filter buttons at the top right

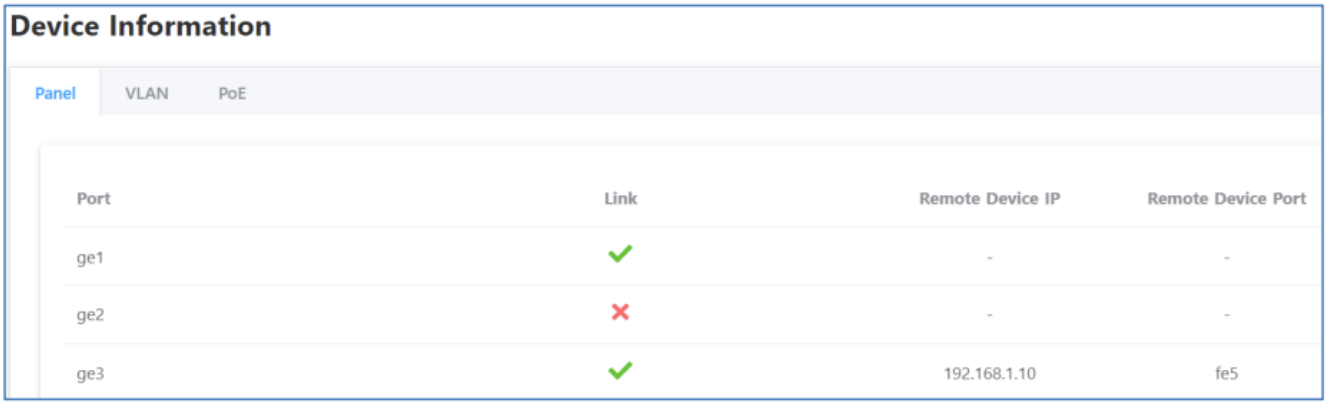


Filter – To quickly locate a specific switch, enter an IP address or a host name in the Type search keyword field, and click Filter. All device that match the search criteria will display

- Telnet, SSH, HTTP, and HTTPS – You can directly connect to any switch on the list by clicking the icon under the corresponding protocol. An icon indicates that the protocol is not enabled on the device.
- Device Configuration – Clicking on the device name in the List view opens a configuration screen that allows for SSH enabling, User Account Management, Import/Export config and Firmware Upgrade Scheduling functions.

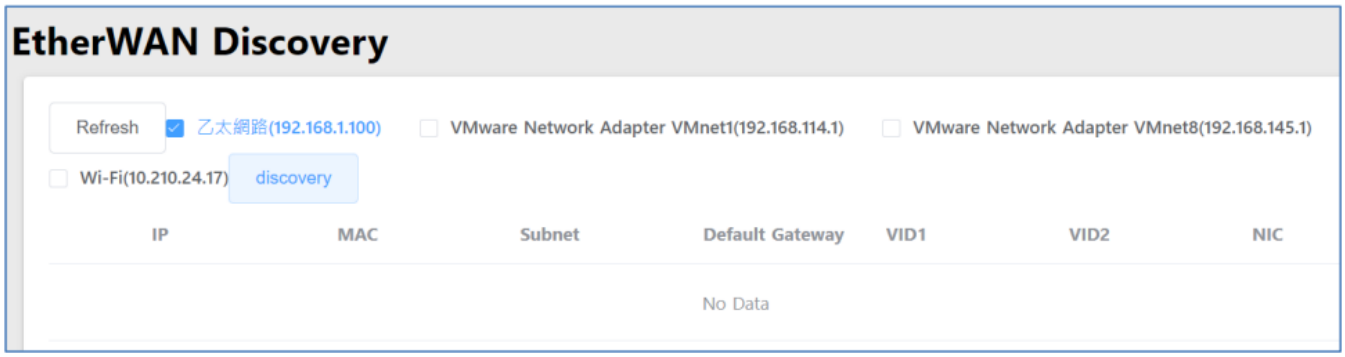


Device information for all known devices is displayed at the bottom of the configuration screen.

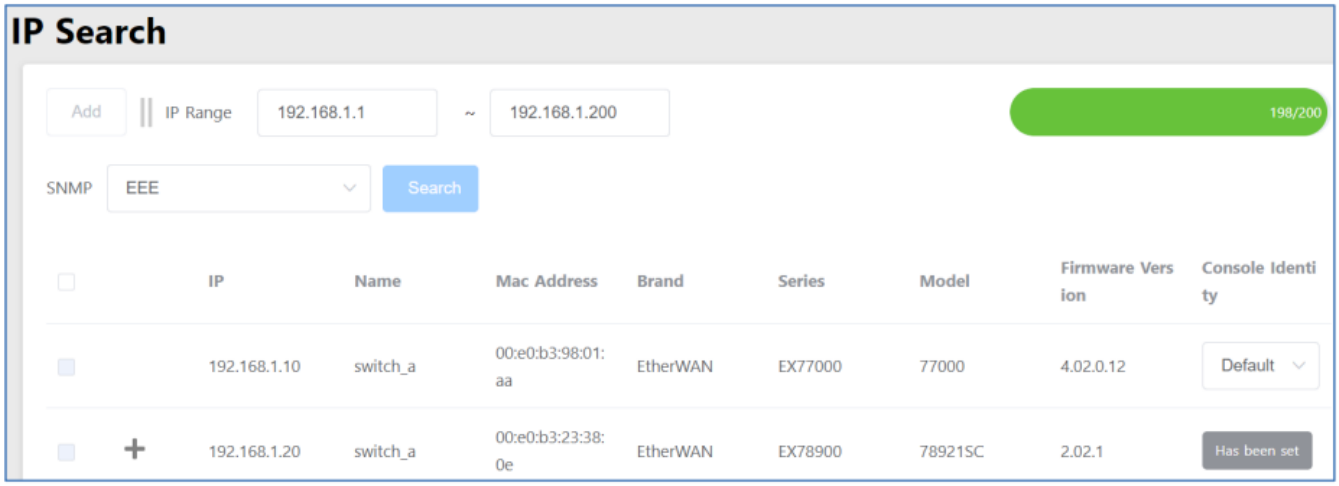


EtherWAN Discovery

EtherWAN Discovery can discover all the devices in the same LAN that are not already listed by eVue. To start EtherWAN Discovery, click the Refresh button to show all the current network adaptors for the host machine. If you are running eVue on localhost:3001, then the adaptors on your PC will be displayed



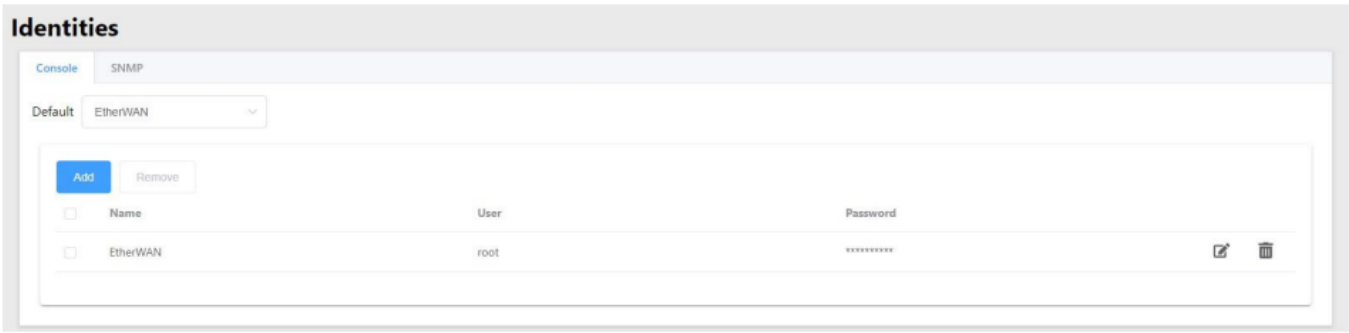
Select the desired network interface by clicking the corresponding check box, and then click the Discovery button. A list of found devices will display, showing the IP address, MAC address, subnet, default gateway, and corresponding NIC. IP Search The IP search function can find desired devices from different network segments. To start a search, enter the desired IP range, SNMP identity, and click the Search button. The allowable IP range search is 512 nodes.



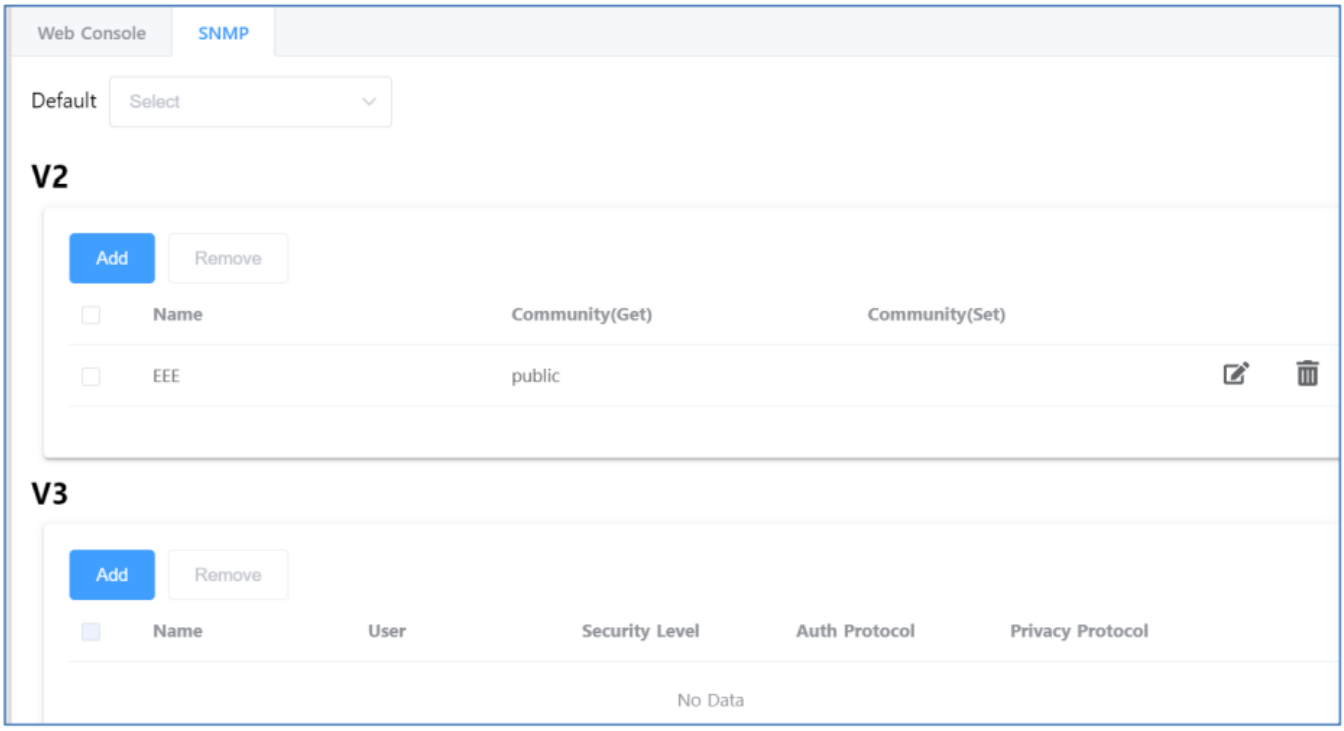
All found devices with SNMP enabled will be displayed. Click the “+” icon next to a device to set a console identity for that device. After an identity has been set, the device will show in both the Topology and List views.

Identity

Console identity: Create console identities in order to use remote configuration and firmware upgrade functions. Click the Add button, then enter a name for the device identity, and the username and password required to access the device

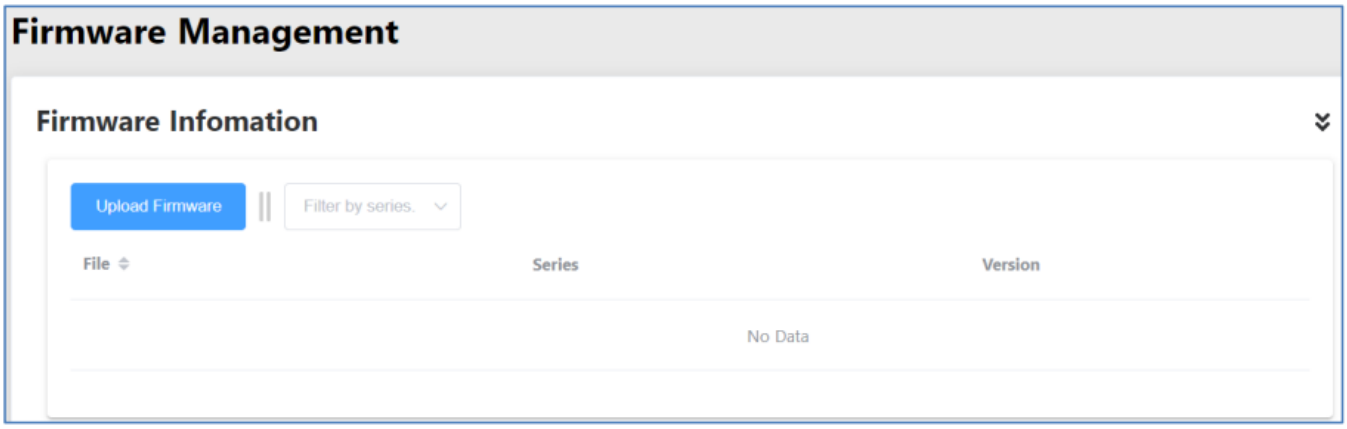


SNMP identity: When eVue used for the first time, it is necessary to establish SNMP identities. SNMP version can be v2 or v3 (Community get: public). After SNMP identity is set up, the IP Search function will be available. Click the Add button, then fill in the Community (Get) and Community (Set) fields.

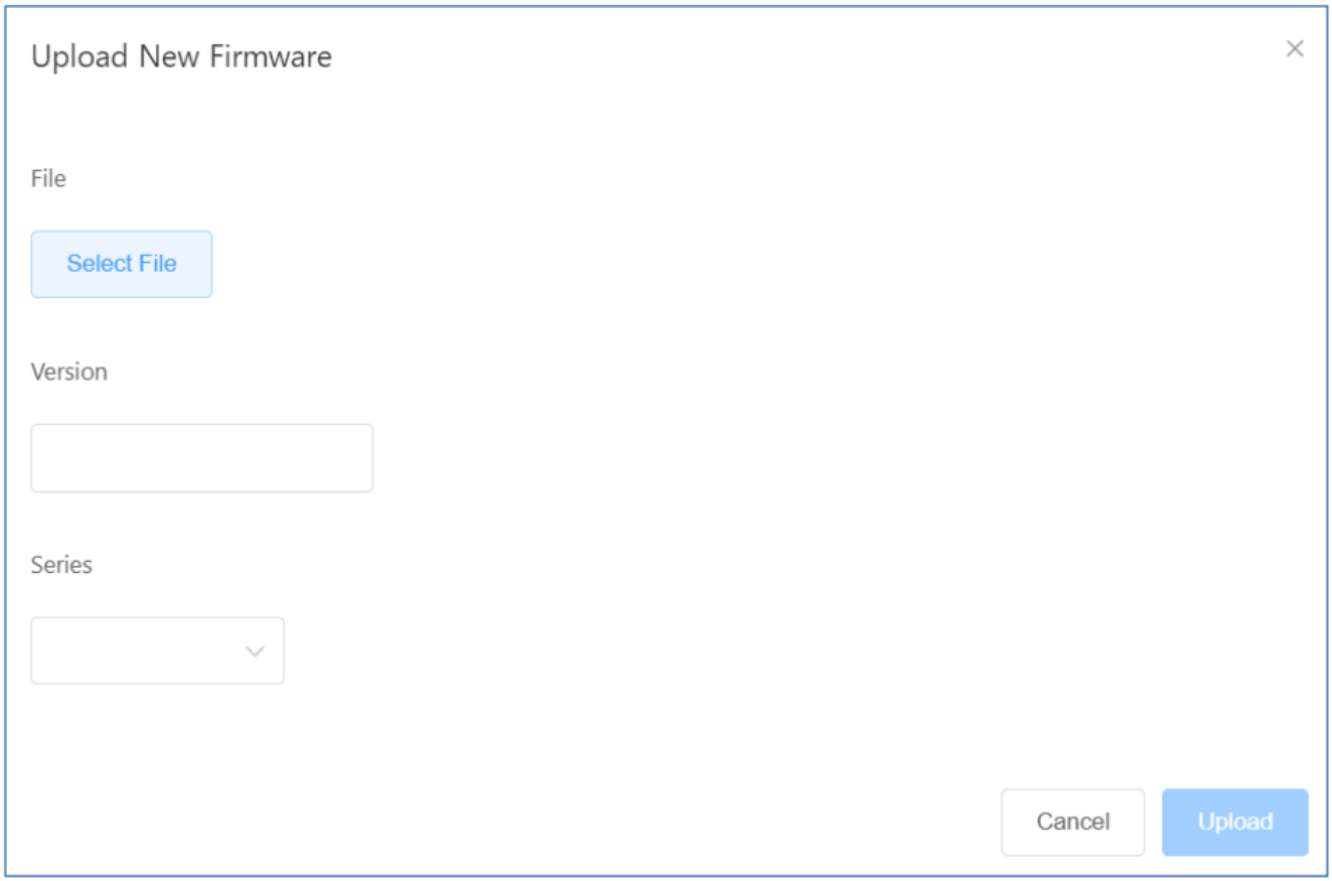


Firmware Management

On the Firmware Management screen, devices are grouped by model number. Click on the corresponding icon to see information about that device model.

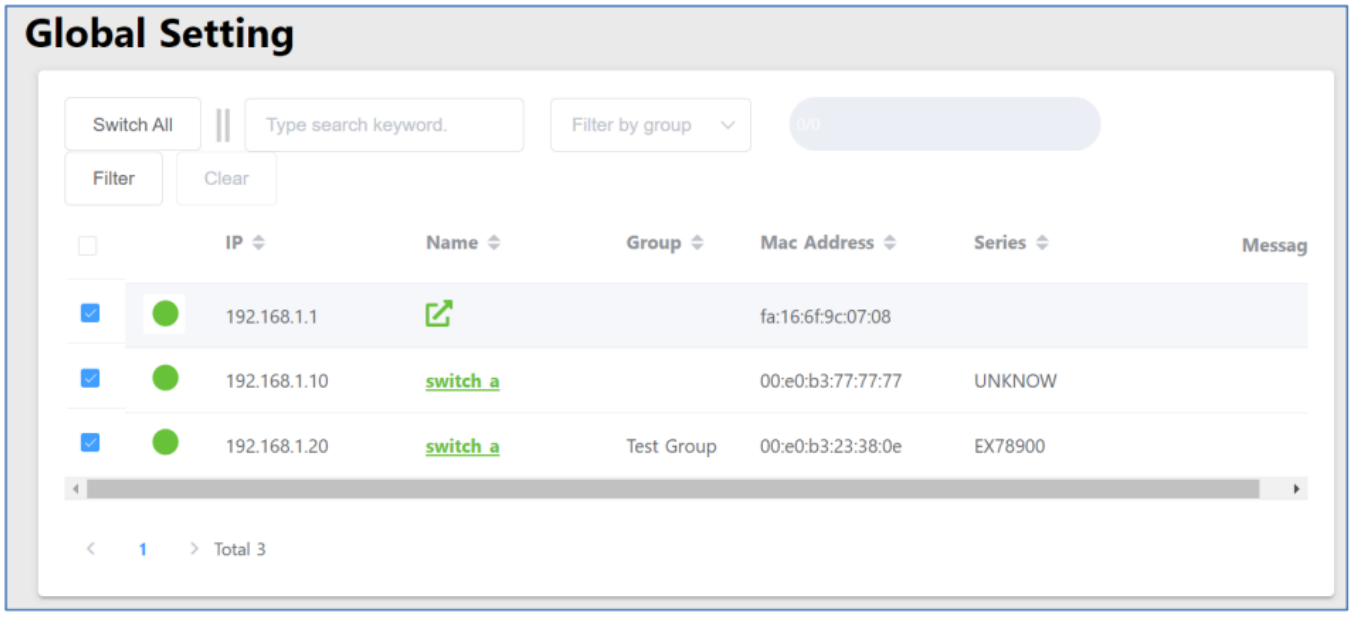


Click the Upload Firmware button to upload new firmware to a device. Select the desired firmware file, and fill out the Version and Series fields. Then click Upload.

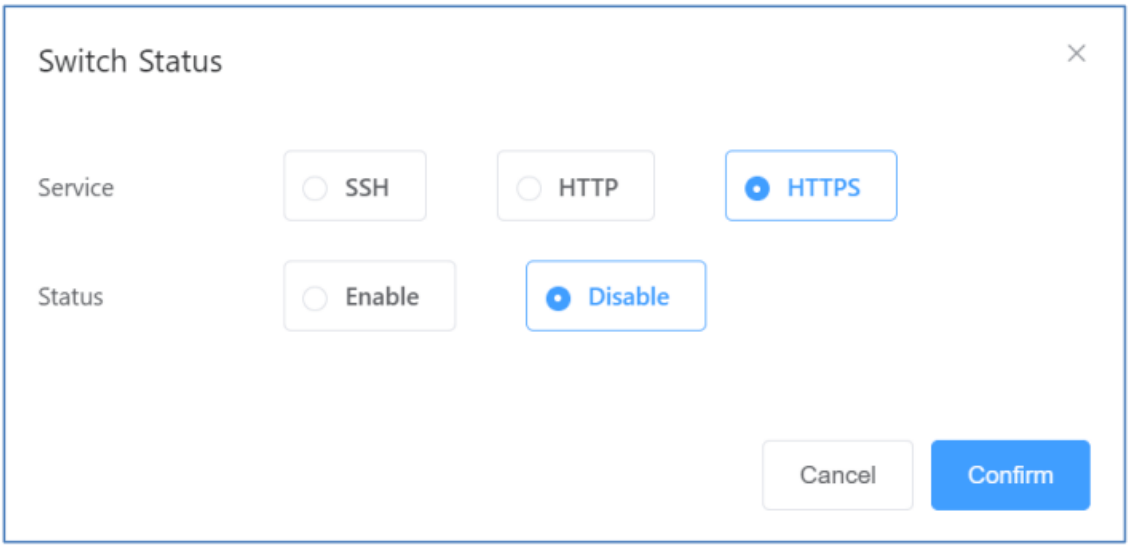


Global Setting

On this screen, multiple switches can be configured to enable or disable SSH, HTTP, and HTTPS at once. Select the switches to be configured by clicking the check box to the right of the switch name. Then click the Switch button

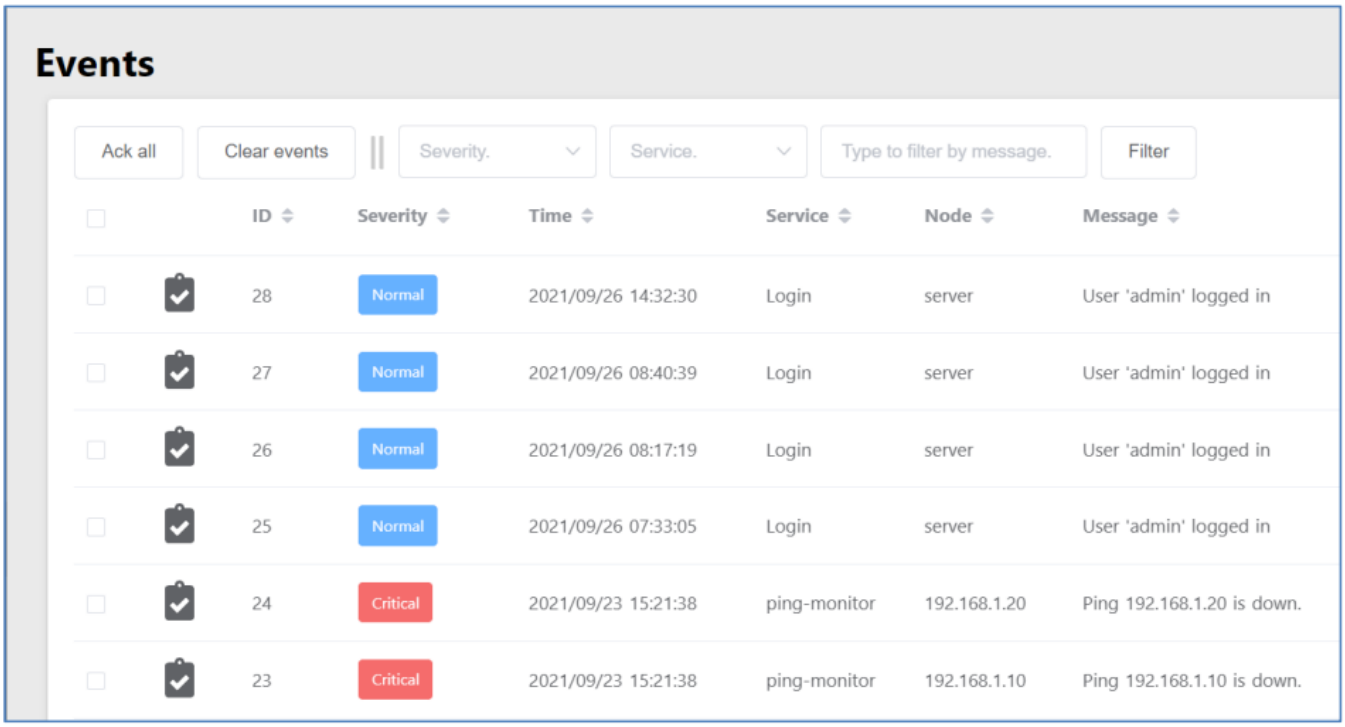


Select the service, then select enable or disable. Click Confirm to apply this configuration to all selected devices



Events

The Events screen displays the most recent events. All events can be acknowledged or removed by clicking the Ack All button in the upper left corner of the screen. Events can be filtered by severity, service (Ping-monitor, SNMP Monitor, or Login), or text in the Event message. The Clear All button allows for the clearing of either all events or events from a week ago.



Events can be sorted by:

1. ID number
2. Severity (All, Unknown, Cleared, Normal, Warning, Major, Critical)
3. Time
4. Service
5. Node
6. Message

Definitions for event severity levels:

Critical (7)

This state indicates that numerous devices on the network are affected by the event. Resolving this problem should be a priority for all personnel.

Major (6)

A device is completely down or in danger of going down. Attention should be paid to this problem immediately.

Warning (4)

An event has occurred that may require action. This severity can also be used to indicate a condition that should be noted (logged) but does not require direct action. An example would be a login failure, or when a link goes up unexpectedly.

Normal (3)

Informational message only. No action is required.

Cleared (2)

This severity is reserved for use in alarms to indicate that an alarm describes a self-clearing error condition that has been corrected, and service restored.

Indeterminate (1)

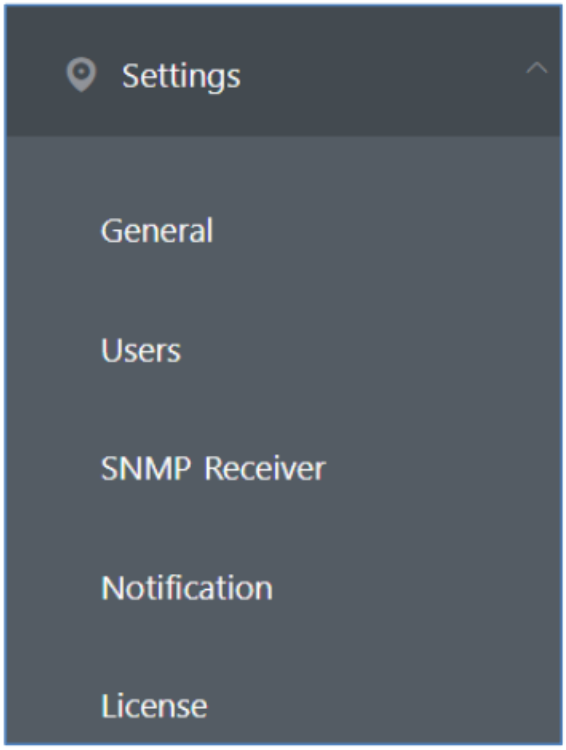
Severity for this event could not be determined. The table below shows some example events and their corresponding severity level.

Traps from Device	Critical	Major	Warning	Normal	Cleared
Loopback detect		✓			
MAC Notification			✓		
Alpha-ring topology change		✓			
Digital input (DI 01) is triggered		✓			
Digital input (DI 02) is triggered		✓			
Power up				✓	
Power down	✓				

Traps from Device	Critical	Major	Warning	Normal	Cleared
PoE up				✓	
PoE down		✓			
PoE overload	✓				
PoE system error	✓				
Alpha-ring coupling topology change		✓			
Storm detect		✓			
Loopback detect recovery					✓
Dying gasp	✓				
User login			✓		
User logout			✓		
User login failure		✓			
Temperature over specified range	✓				
Temperature under specified range				✓	
Humidity over specified range	✓				
Humidity under specified range				✓	
Digital input is triggered		✓			
Temperature within specified range					✓
Humidity within specified range					✓
Digital input within specified range					✓
Storm detect		✓			
Storm detect recovery					✓
eVue Login				✓	
eVue Login fail			✓		
eVue monitoring: Ping up					✓
eVue monitoring: Ping down	✓				

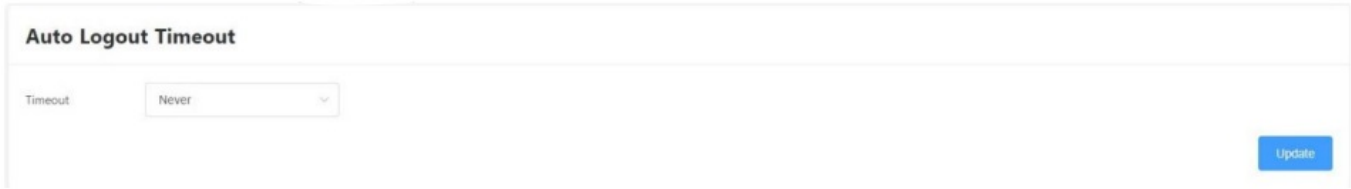
Settings

Clicking the Settings label opens a drop-down menu for five functions: General, Users, SNMP Receiver, Notification, and License

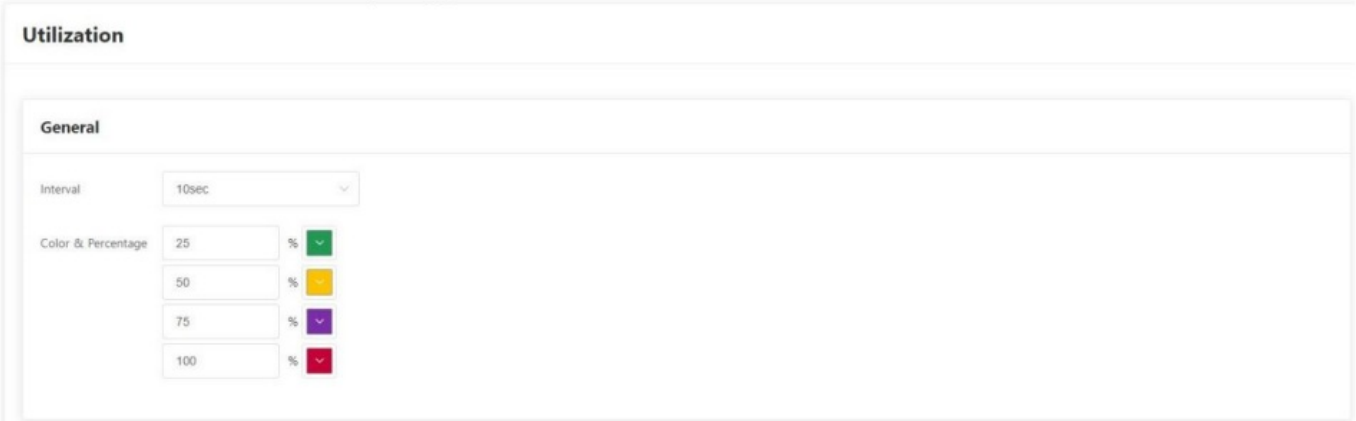


General

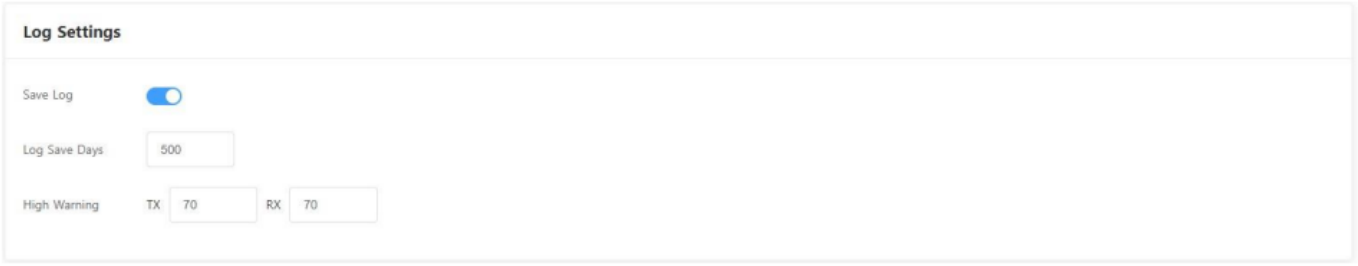
Auto logout is a functionality implemented to log out the user automatically when there is no activity from the user's for a specified period.



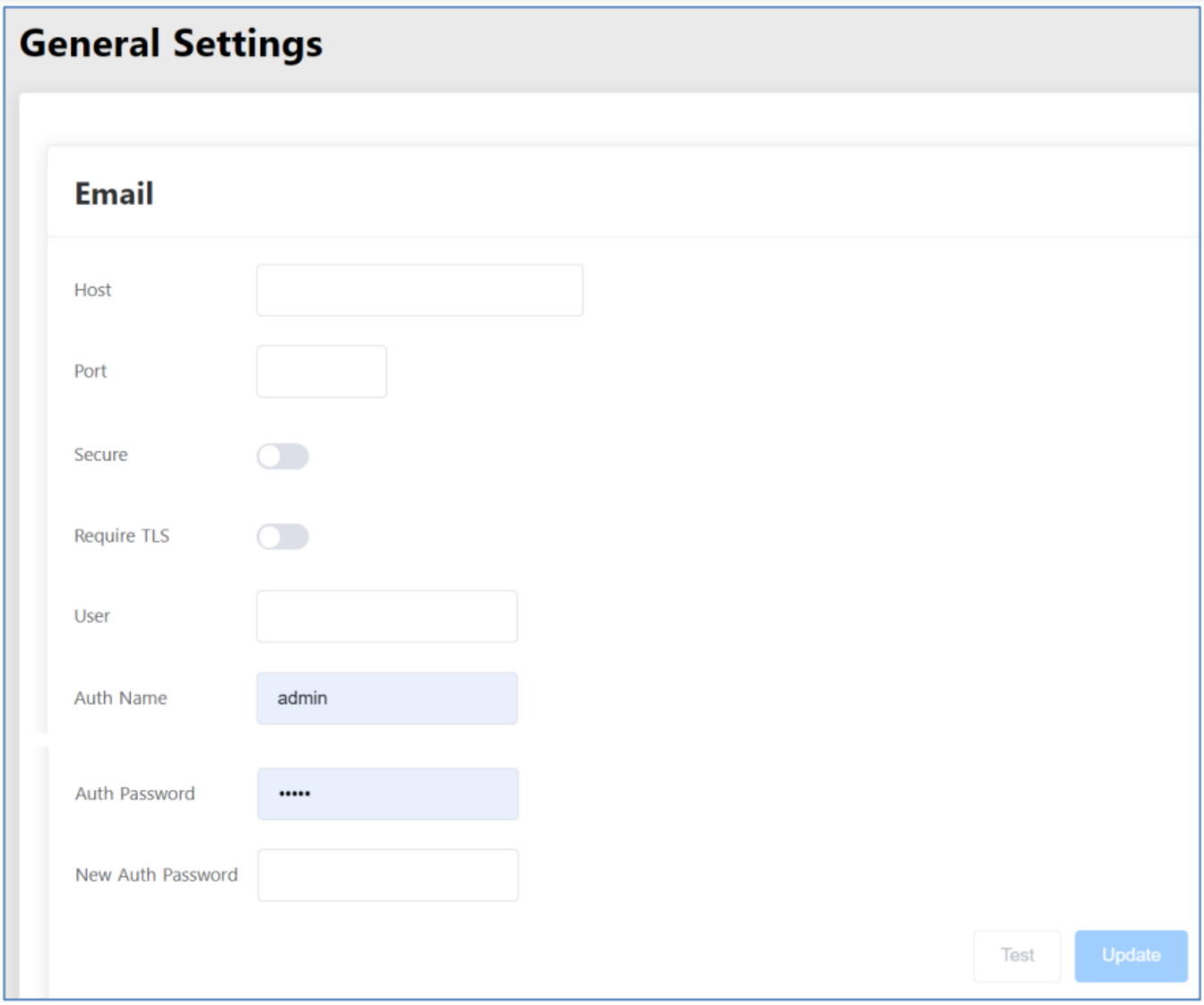
Network utilization is the ratio of current network traffic to the maximum traffic that the port can handle. It indicates the bandwidth use in the network. User can choose intercal value and customize the color to show on the topology view.



When the Log setting is enabled, the traffic utilization of each port will be saved in the local disk drive (recommended that the remaing enough space), and users can track and view past traffic utilization as needed

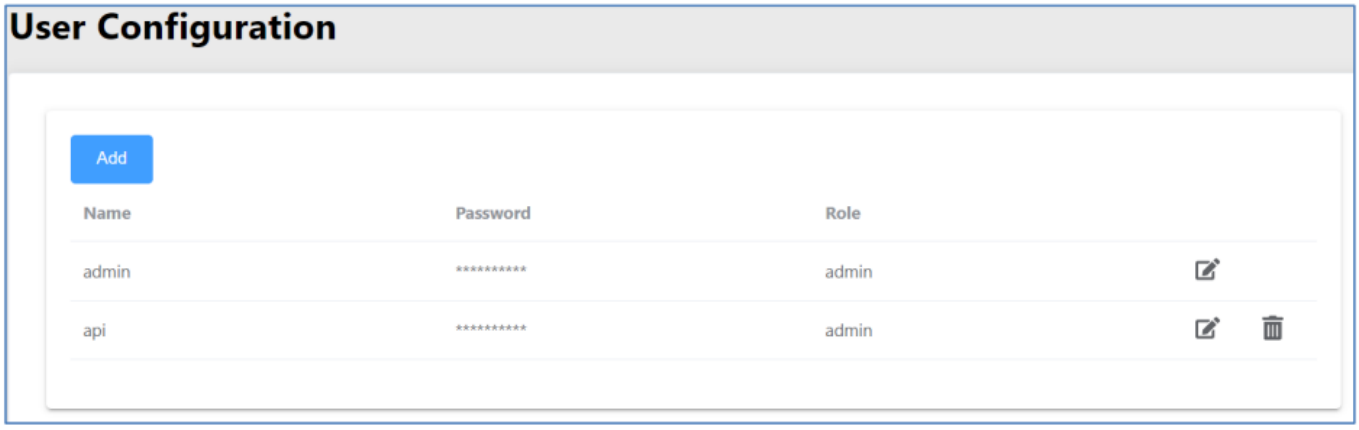


Configure e-mail notifications on this screen. Fields are Host, Port, Secure, Require TLS (used to convey a request to ignore recipient-side policy mechanisms), User, Auth Name, and Auth Password.



Users

Three types of user can be set up: Admin, Technician, and Operator. Admins have full read and configuration rights, Technicians only have rights to upgrade firmware, manage configuration files, and acknowledge events. Operators have read rights only.

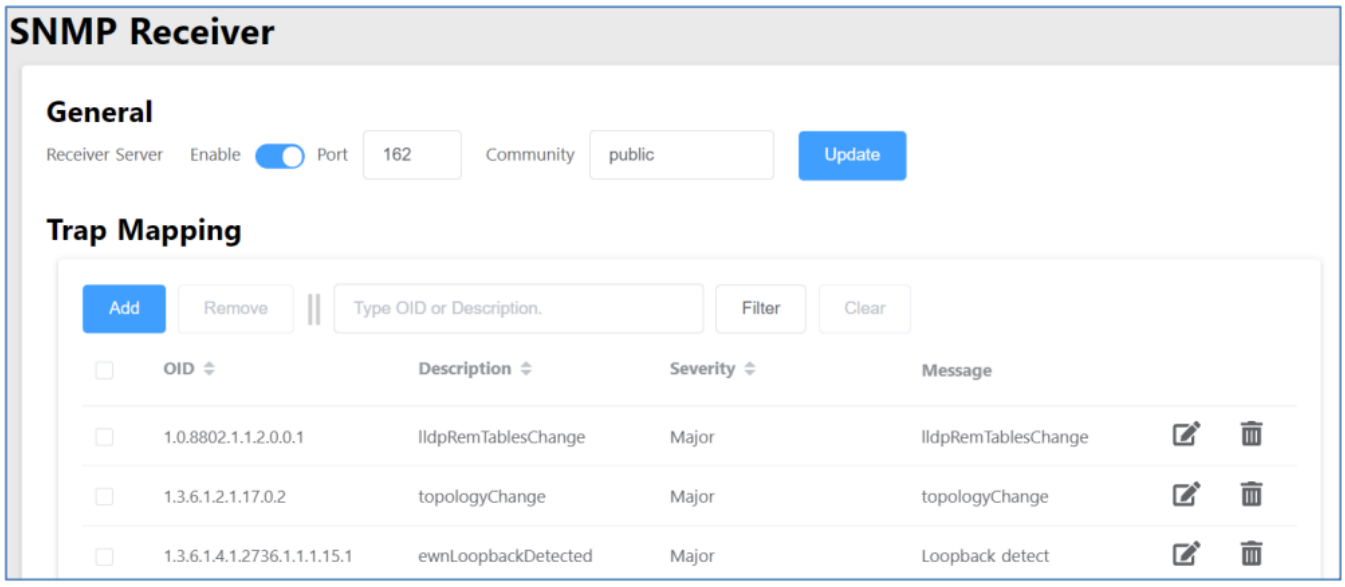


In the User section, the password, contact email, and interface language can be set for the current user type. You must be logged in as that user type to make changes (Example: User logged in as admin can only modify fields related to admin user account.) The email account entered here is only used in case of a lost password. You can also set the Auto-logout Timeout.
Password complexity requirements are:

1. Password length is minimum 12 characters and maximum 35 characters, without spaces.
2. The password must contain characters from the following categories:
    - Uppercase English letters, (A to Z)
    - Lowercase English letters, (a to z)
    - Numbers, (0 to 9)
    - Non-alphanumeric characters

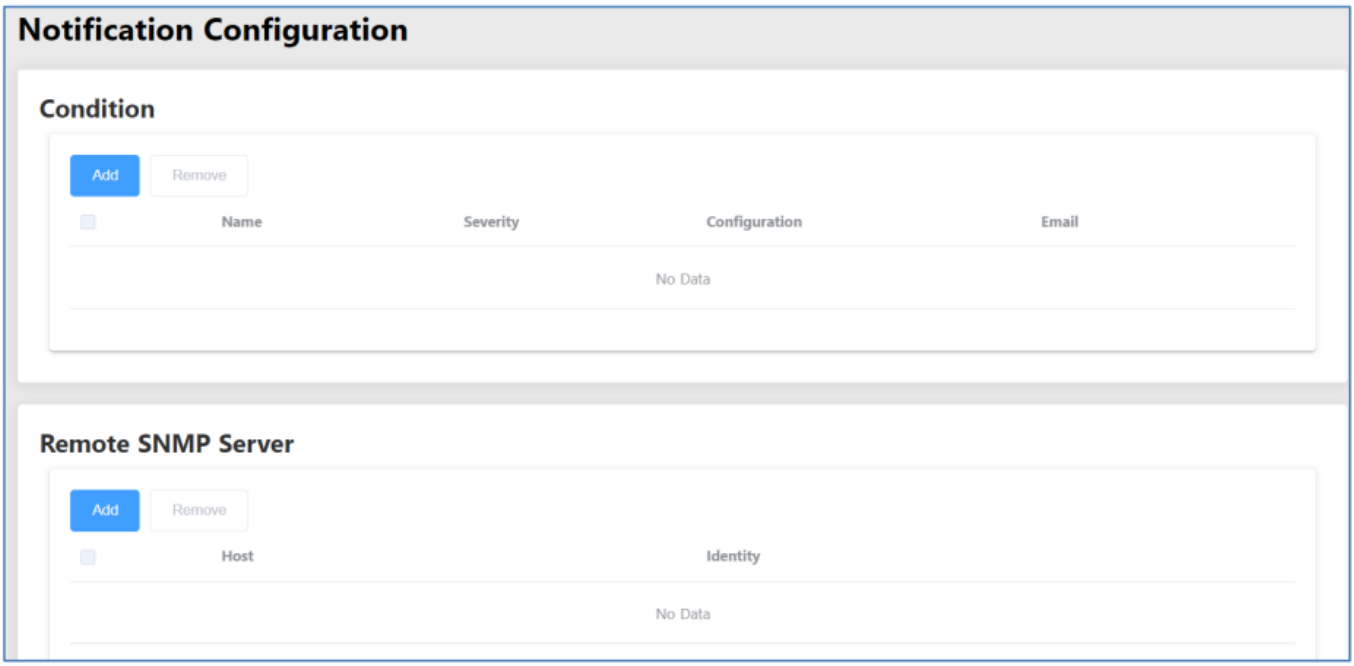
SNMP Receiver

Configure the capture, display, and logging of SNMP traps on this screen.



Notification

Notification Condition Click +Add button to create a new notification condition. Enter a name in the Condition Name field, and click Update.In this section, remote SNMP servers can be added and removed. Click Add button to create a new remote SNMP server. Enter the IP address and the SNMP community.

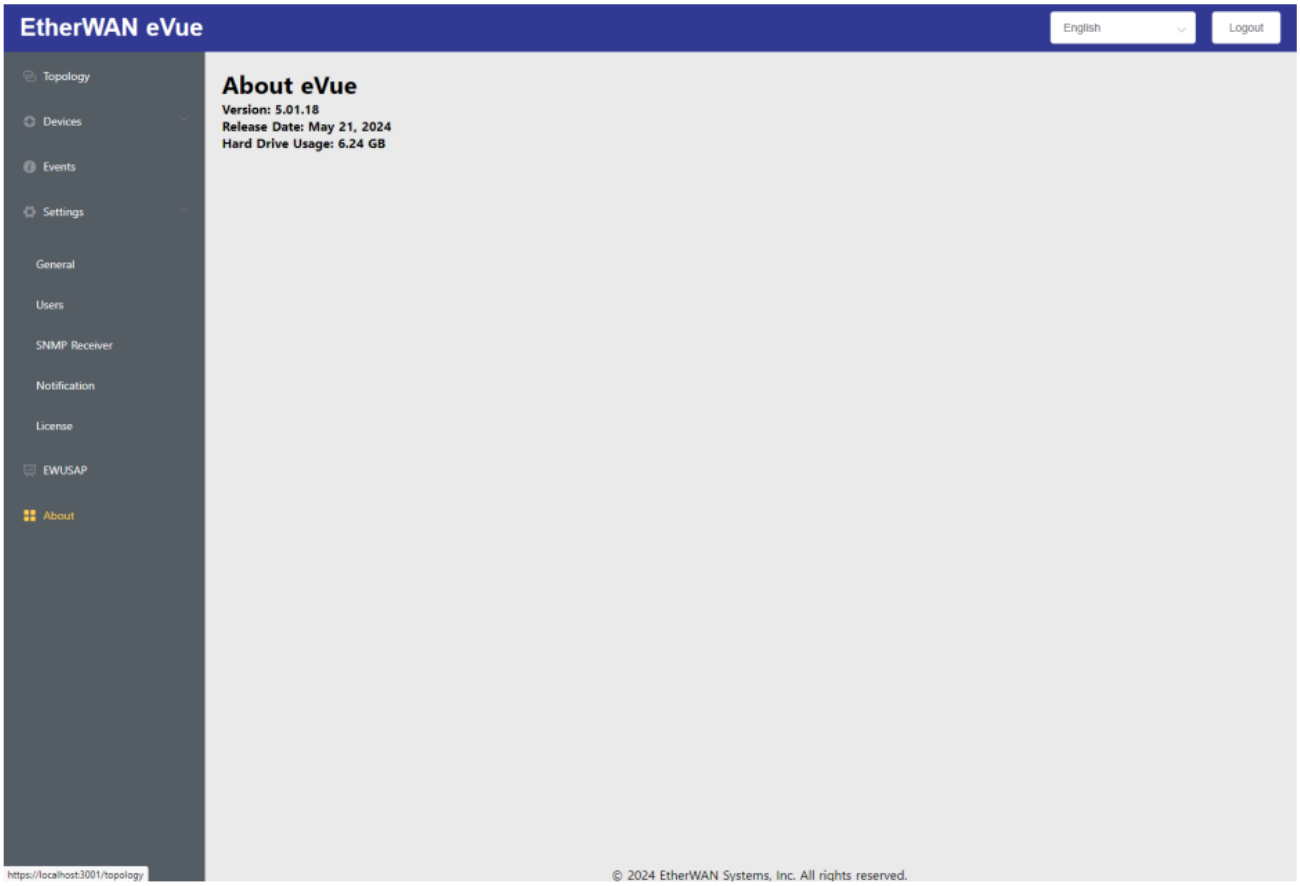


License

This is a read-only screen that displays current licensing information

About

Show the version of eVue and storage usage



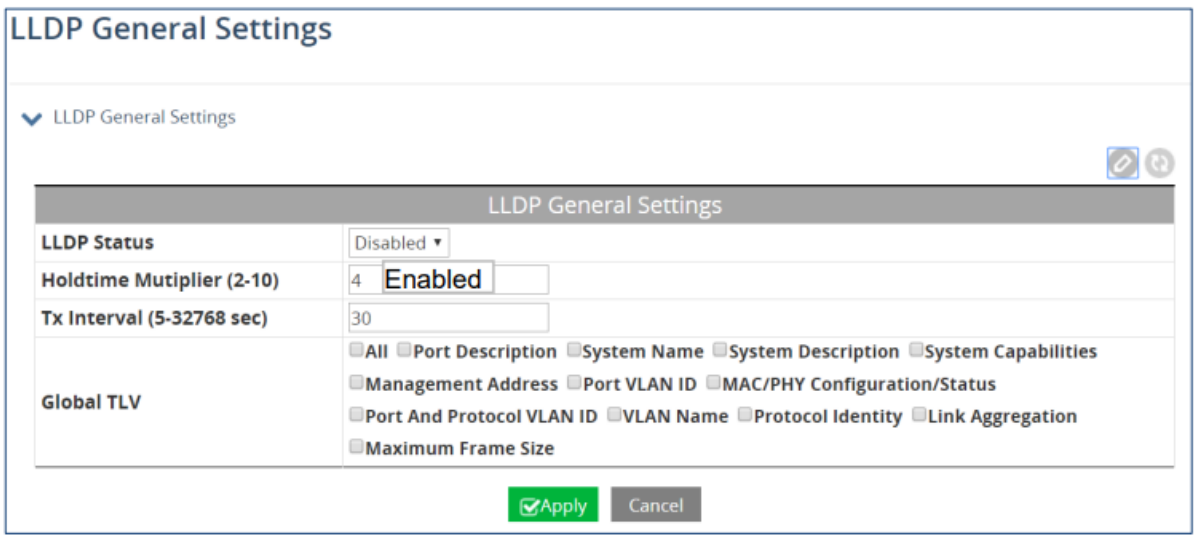
Appendix I

Command reference for enabling LLDP on EtherWAN switches. (NOTE: Some legacy EtherWAN switches, such as the EX96000 and Espresso series, do not support LLDP, and are incompatible with eVue.

EG99000 CLI:

Command Mode	Global Configuration
Syntax	lldp enable
Parameters	None
Example usage	switch_a(config)# lldp enable

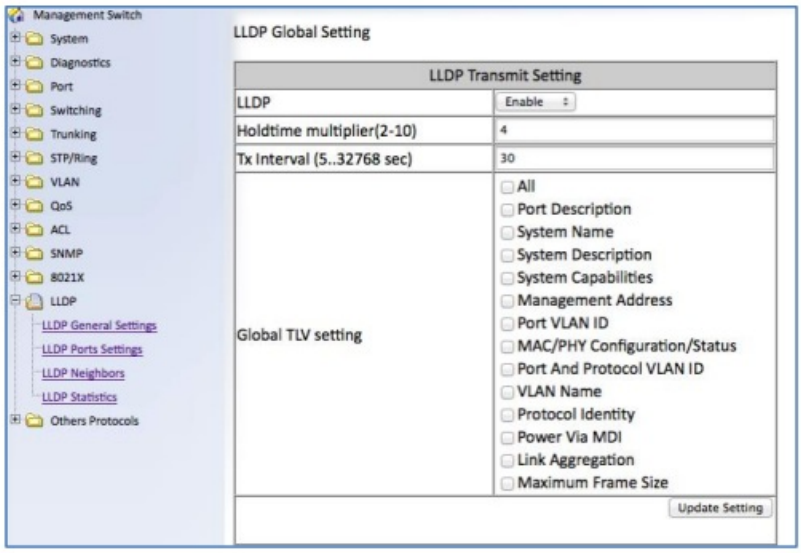
EG99000 GUI:



All EX Series Managed Switches CLI

Command Mode	Global Configuration
Syntax	lldp enable
Parameters	None
Example usage	switch_a(config)# lldp enable

All EX Series Managed Switches GUI



Contact

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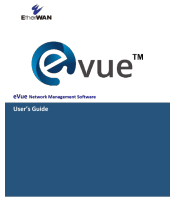
Documents / Resources

	EtherWAN eVue Network Management Software [pdf] User Guide eVue Network Management Software, eVue, Network Management Software, Management Software, Software

References

- EtherWAN PoE Solution and Industrial Ethernet Switches | EtherWAN
- User Manual