



eVue Network Configuration and Monitoring Tool

User's Guide

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Products Supported by this Manual:

eVue Version 4.01.11

Preface

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

Changes in this Revision

Third Revision - Updated with instructions on remote updating of firmware.

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1 Introduction

The eVue network configuration and monitoring tool 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 and SMS 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, SNMP trap, and SMS
- Device configurations via SNMPv1/v2, Web, Telnet, and SSH

2 Installation

Recommended System Specifications

CPU: Intel i5 2.5GHz above

RAM: 4GB above

Hard disk: 1 TB, 7200 RPM, SATA-3Gb/s or higher

Operating System: Windows 7 (64-bit), Windows 10 (64-bit)

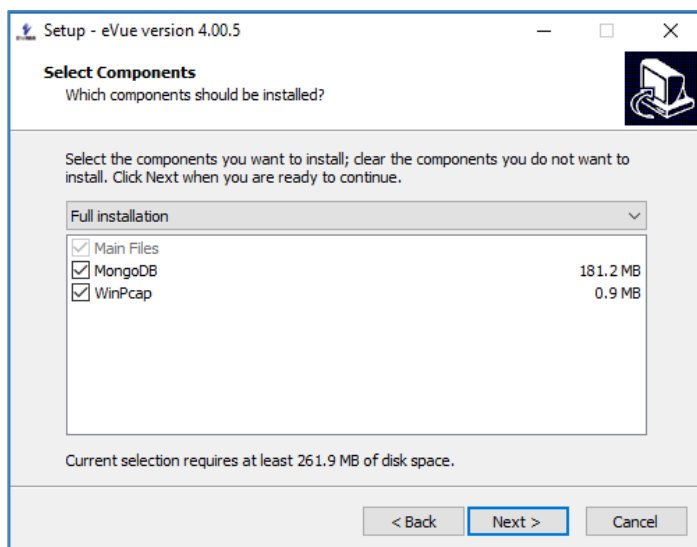
Supported Browsers: Internet Explorer 11, Microsoft Edge, Chrome version 64 or later, Firefox version 58 or later, Safari 11.11.1 or later

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:

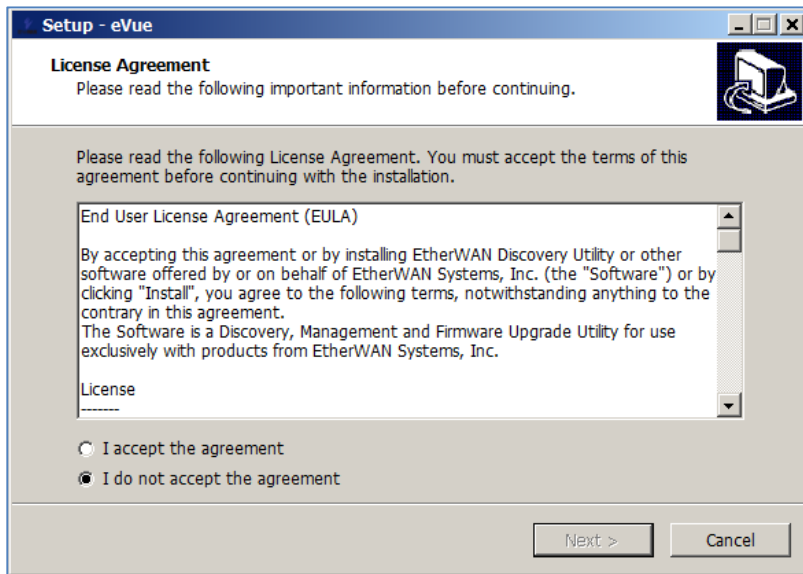


MongoDB is the database used by eVue and mainly stores devices and event information.

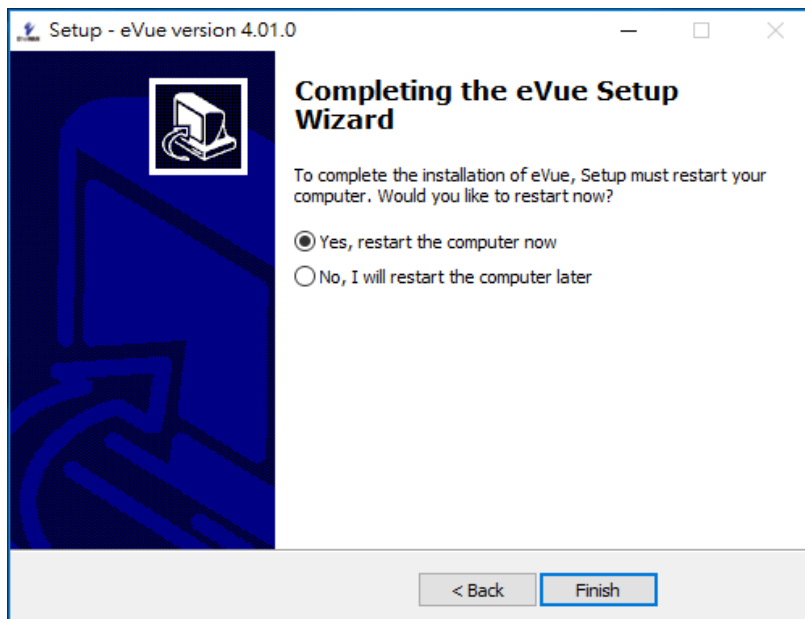
WinPcap is the industry-standard tool for link-layer network access, which allows applications to capture and transmit network packets.

Select the location for the program shortcuts, and click **Next** for the installations. MongoDB and WinPcap are installed sequentially.

Lastly, read and accept the License Agreement for eVue.



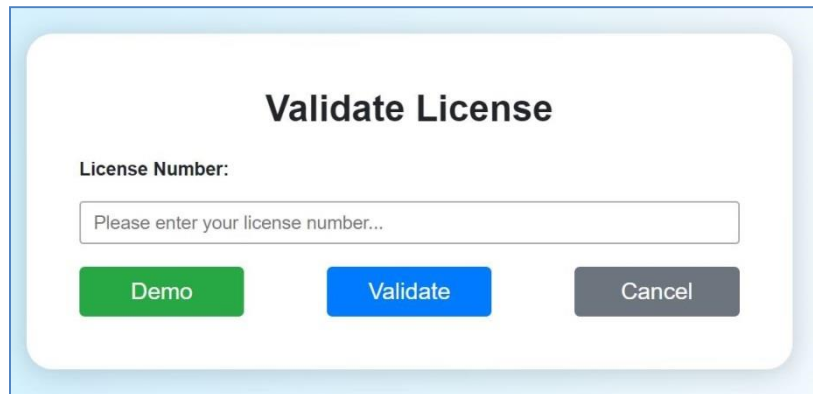
You will be prompted to restart the computer.



The first time that you run eVue from **localhost:4300**, you will be required to register the software.

Enter the license key provided and click Validate.

Note: You must be connected to the Internet for validation and product activation to be successful.



The image shows a 'Validate License' dialog box. It has a title bar 'Validate License'. Below the title, there is a label 'License Number:' followed by a text input field containing the placeholder text 'Please enter your license number...'. At the bottom of the dialog, there are three buttons: a green 'Demo' button, a blue 'Validate' button, and a gray 'Cancel' button.

If Trial button is selected, then eVue will run in Trial Mode. All functions will be available, and there is no time limit. However, a maximum of 16 devices can be monitored.

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

Port 20, 21: FTP server

Port 22: SSH

Port 23: Telnet

Port 69: TFTP

Port 161: SNMP get/set

Port 162: SNMP Trap

Port 587: Google SMTP Server

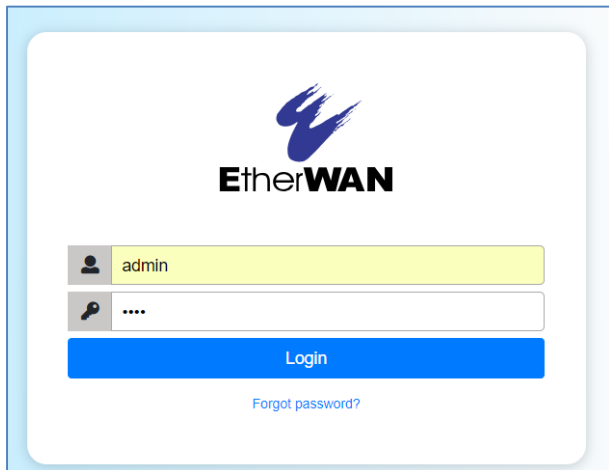
Port 4300, 4301: HTTP/HTTPS

Port 4310, 4311: License activation

Port 7002, 9600: SMS

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

Login



The login interface for EtherWAN. It features the EtherWAN logo at the top. Below the logo, there are two input fields: a username field with a person icon and the text 'admin', and a password field with a key icon and four dots. A blue 'Login' button is positioned below the password field. A link labeled 'Forgot password?' is located below the 'Login' button.

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:

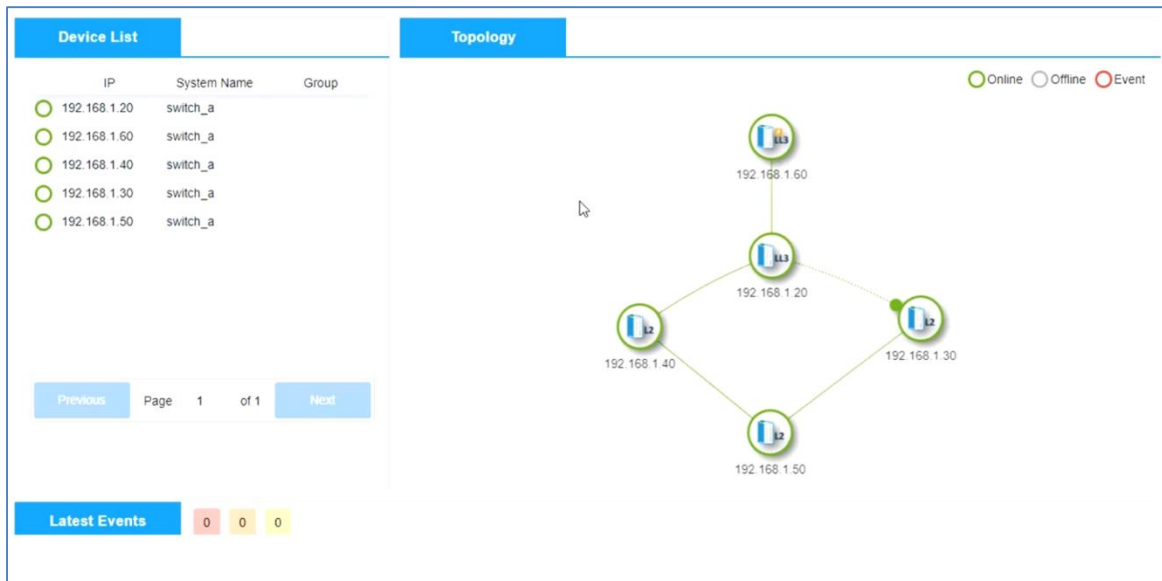
1. Open a web browser
2. In the Internet address bar, enter "localhost:4300" and hit Enter

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

1. Open a web browser
2. In the Internet address bar, enter "<Server_ipaddress>:4300" and hit enter.

(Example: 192.168.10.100:4300)

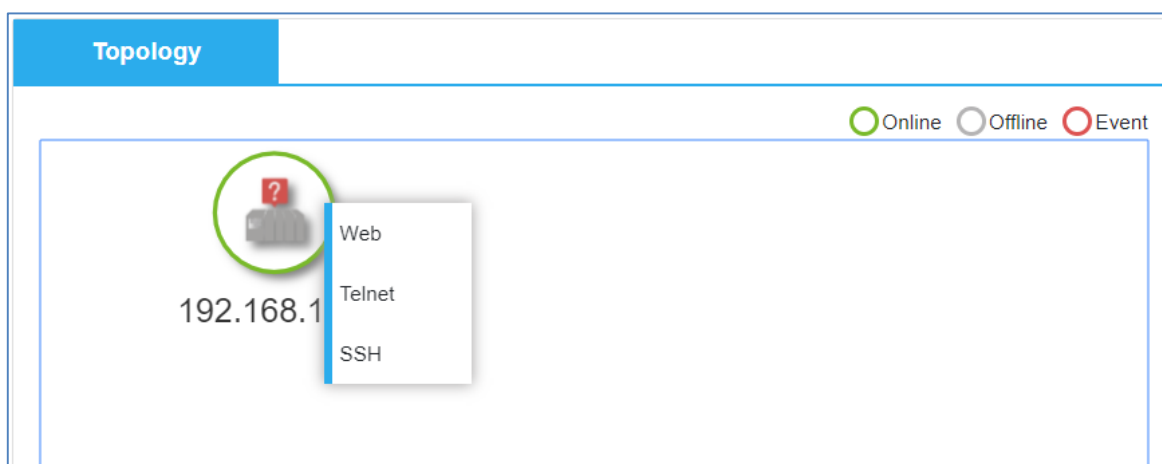
Configuration and Use



Home screen

When eVue is launched, the Home screen will display. Information is divided into three sections: On the left under **Device List** is a list of connected EtherWAN devices that shows IP address, device name, and group. The group names are assigned by eVue, so the first time the software is used that field will be blank for all devices. On the right, there is a **Topology** view of 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.). Clicking on a device's icon in topology view will show you the model and name of the device. Dotted lines connecting devices represent blocked ports. At the bottom of the screen, the **Latest Events** section displays the most recent events by order of occurrence.

Right click on any switch in the topology view to directly connect via Telnet, web interface, or SSH.



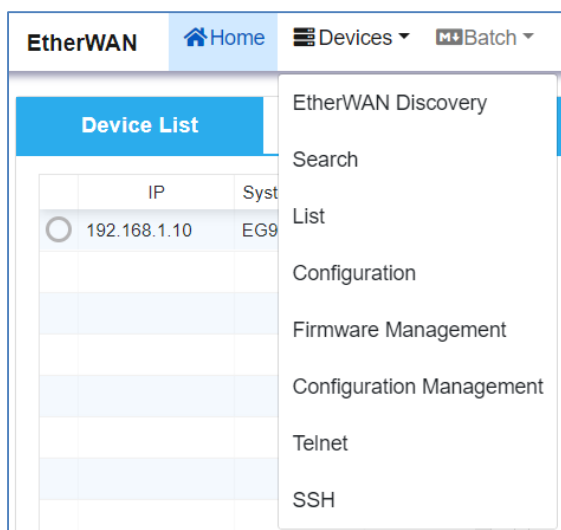
Navigation



Use the navigation bar at the top of the screen to access specific screens and associated functions.

Devices

Clicking the **Devices** button opens a drop-down menu for six functions: EtherWAN Discovery, Search, List, Configuration, Firmware Management, Configuration Management, Telnet, and SSH.



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 “Refresh NIC” to show all the current network adaptors for the host machine. If you are running eVue on **localhost:4300**, then the adaptors on your PC will be displayed.

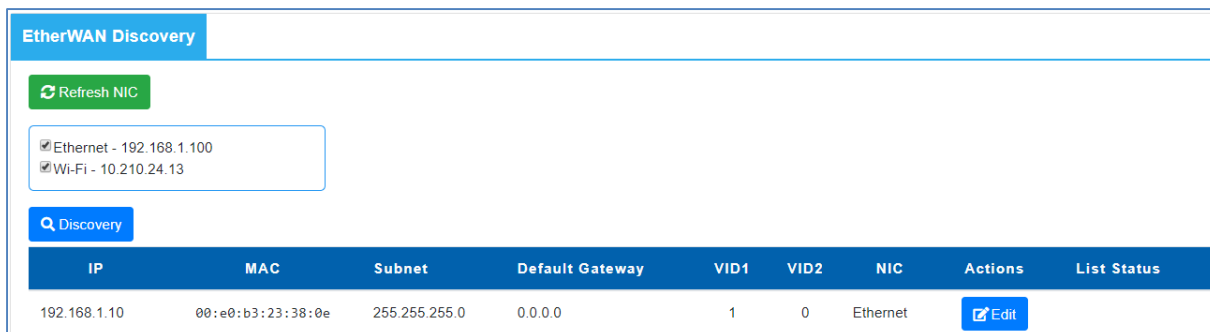


The interface shows a tab labeled "EtherWAN Discovery". Below it is a green button labeled "Refresh NIC". Underneath, there is a list of network adapters with checkboxes:

- ☒ Ethernet - 192.168.10.100
- ☒ Wireless Connection 192.168.123.100

At the bottom is a blue button labeled "Discovery".

Select the desired network interface controller (NIC) 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.




The interface shows the same "EtherWAN Discovery" tab. The "Refresh NIC" button is still present. The list of network adapters now shows:

- ☒ Ethernet - 192.168.1.100
- ☒ Wi-Fi - 10.210.24.13

The "Discovery" button is still present. Below the list is a table of discovered devices:

IP	MAC	Subnet	Default Gateway	VID1	VID2	NIC	Actions	List Status
192.168.1.10	00:e0:b3:23:38:0e	255.255.255.0	0.0.0.0	1	0	Ethernet	Edit	

For devices with default settings (IP address of 192.168.1.10), clicking the “Edit” button allows the IP address, subnet, and default gateway to be changed for that device.



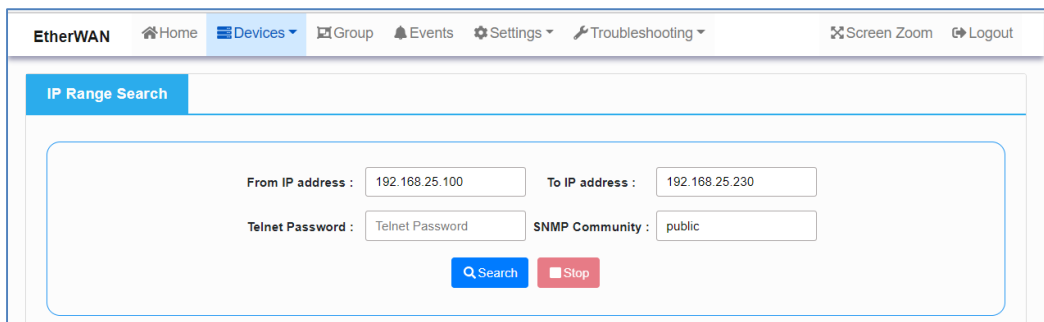
The "Edit" dialog box shows the following fields:

- IP : 192.168.1.10
- MAC : 00:e0:b3:21:e3:26
- Subnet : 255.255.255.0
- Default Gateway : 0.0.0.0
- VID1 : 1
- VID2 : 0

At the bottom are "Cancel" and "Update" buttons.

Search

The search function can find desired devices from different network segments. To start a search, enter the desired IP range, password (if any) and click the **Search** button. The allowable IP range search is 2540 nodes, or 10 Class C subnets (subnet mask 255.255.255.0).



All found devices with SNMP enabled will be displayed. To include a device in the eVue system list, click “Add.” Click the “Add All Devices” button to add all devices shown. After a device has been added, it will show in both the **Topology** and **List** views.

IP	System Name	MAC	Series	Version	List Status	SNMP	Telnet
192.168.50.44	ED3575v2-5044	00:e0:b3:50:44:00		1.94x.5	Add	✓	?
192.168.50.12	EG99-5012	00:e0:b3:50:12:00	EG99000	3.05.4	In list	✓	?
192.168.50.11	EG99-5011	00:e0:b3:50:11:00	EG99000	3.05.4	In list	✓	?
192.168.50.32	EX739-5032	00:e0:b3:50:32:00	EX73900	2.02.0	Add	✓	?
192.168.50.33	EX789-5033	00:e0:b3:50:33:00	EX78900	2.02.0	In list	✓	?
192.168.50.42	EX71v2-5042	00:e0:b3:50:42:00	EX71000	4.01.0	In list	✓	?
192.168.50.71	EX789-5071	00:e0:b3:50:71:00	EX78900	2.02.0	In list	✓	?
192.168.50.41	EX78v2-5041	00:e0:b3:50:41:00	EX78000	4.01.0	In list	✓	?

List

This screen shows all devices currently monitored by eVue. To remove a specific device from the system, click the corresponding **Remove** button. Using the button in the top right corner, you can **Remove all devices**.

EtherWAN

Home

Devices

Batch

Group

Events






Settings

Screen Zoom

Logout

Device List

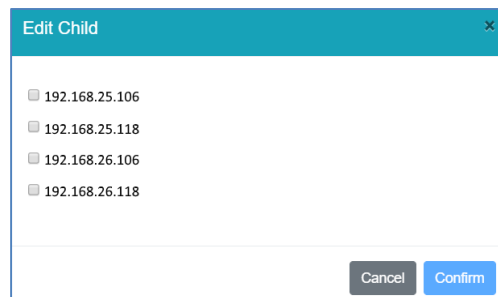
Remove All Devices

		IP	System Name	SNMP	Telnet	SSH	Web	Group	MAC	Series	Version	Actions		
▶		192.168.1.20	switch_a	✖	✖	✖	✖		00:e0:b3:78:90:cc	EX73900	2.02.1	Edit	Remove	Edit Sub IP Interface
▶		192.168.1.60	switch_a	✖	✖	✖	✖		00:e0:b3:78:94:00	EX78900	2.02.1.4	Edit	Remove	Edit Sub IP Interface
▶		192.168.1.40	switch_a	✖	✖	✖	✖		00:e0:b3:22:4a:f4	EX71000	1.94.6.3	Edit	Remove	Edit Sub IP Interface
▶		192.168.1.30	switch_a	✖	✖	✖	✖		00:e0:b3:39:f1:e0	EX83000	1.94.6.3	Edit	Remove	Edit Sub IP Interface
▶		192.168.1.50	switch_a	✖	✖	✖	✖		00:e0:b3:26:11:30	EX83000	1.94.6.3	Edit	Remove	Edit Sub IP Interface

Use the Edit button to change the Telnet password or SNMP Community for the selected switch.

On the right hand side, there is an **Edit Sub IP Interface** button. This button is used to group multiple IP addresses so that they display as one device in the topology view.

Click on the **Edit Sub IP Interface** button. A window will display showing all available IP addresses.



Edit Child

☐ 192.168.25.106
☐ 192.168.25.118
☐ 192.168.26.106
☐ 192.168.26.118

Cancel

Confirm

Select the IP addresses that you want to display as the same switch in the topology view and click **Confirm**. The new topology will now be displayed on the **Home** screen.

Configuration

Panel LED, VLAN and PoE configuration status can be viewed on this screen. To view the status for a specific device, select it from list of devices on the left, or enter the name or IP address in the search field.

Once a device has been selected, its information can be viewed using the Panel, VLAN, and PoE buttons.

Panel button

Device Configuration

IP, device name, device series or group name

Unregistered Switches

IP	System Name
192.168.10.30	switch_30
192.168.10.10	switch_10
192.168.10.20	switch_20
192.168.10.73	EX73-223

Panel VLAN PoE

192.168.10.30/switch_30 - Panel

Port	Link	Remote Device IP	Remote Device Port
fa1	●	192.168.10.10	fa1
fa2	●	192.168.10.20	fa2
fa3	●	-	-
fa4	●	-	-
fa5	●	-	-
fa6	●	-	-
fa7	●	-	-
fa8	●	-	-
ge1	●	-	-
ge2	●	-	-

VLAN button

Device Configuration

Ungruped Switches

IP	System Name
192.168.10.30	switch_30
192.168.10.10	switch_10
192.168.10.20	switch_20
192.168.10.73	EX73-223

Panel

VLAN

PoE

192.168.10.30/switch_30 - VLAN

Port	VID 1 / default		VID 20 / 20	
	VLAN Member	Tagged/Untagged	VLAN Member	Tagged/Untagged
fe1	✓	○	—	—
fe2	✓	○	—	—
fe3	✓	○	—	—
fe4	✓	○	—	—
fe5	✓	○	—	—
fe6	✓	○	—	—
fe7	✓	○	—	—
fe8	✓	○	—	—
ge1	✓	○	—	—
ge2	✓	○	—	—

PoE button

Device Configuration

Ungruped Switches

IP	System Name
192.168.50.62	EX71-506
192.168.50.52	EX709-506
192.168.50.51	ED3175-50
192.168.50.41	EX78v2-50
192.168.50.13	EX779-50
192.168.50.14	EX779-50

Panel

VLAN

PoE


192.168.50.41/EX78v2-5041 - PoE

Budget Power : 241.00 (W)

Available Power : 241.00 (W)


Port	Enable Mode	Fixed Power Limit (W)	Power Priority	Power Down Alarm	Status	PD Class	Current (mA)	Consumption (W)
fe1	Enable	30.00	High	Disable	Disable	N/A	0	0
fe2	Enable	30.00	High	Disable	Disable	N/A	0	0
fe3	Enable	30.00	High	Disable	Disable	N/A	0	0
fe4	Enable	30.00	High	Disable	Disable	N/A	0	0


Firmware Management


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

Firmware Management

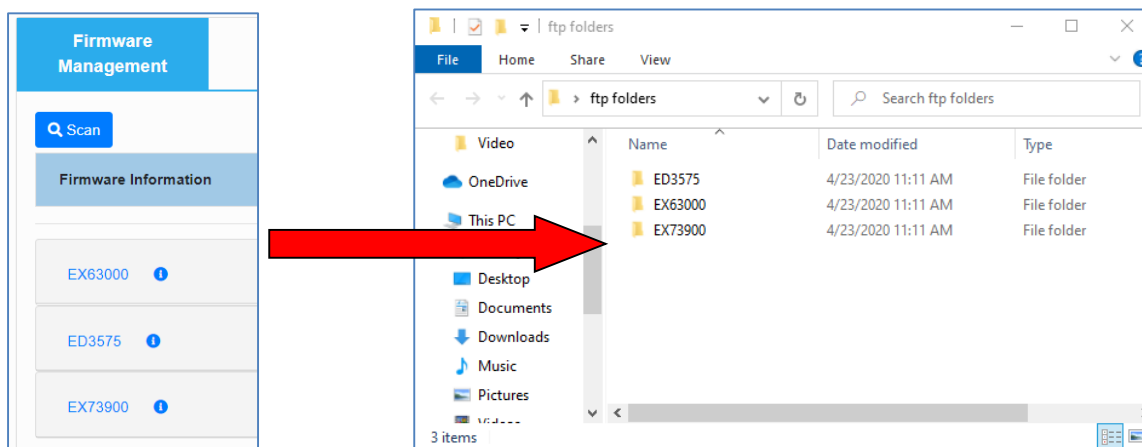
Firmware Information

EX63000 

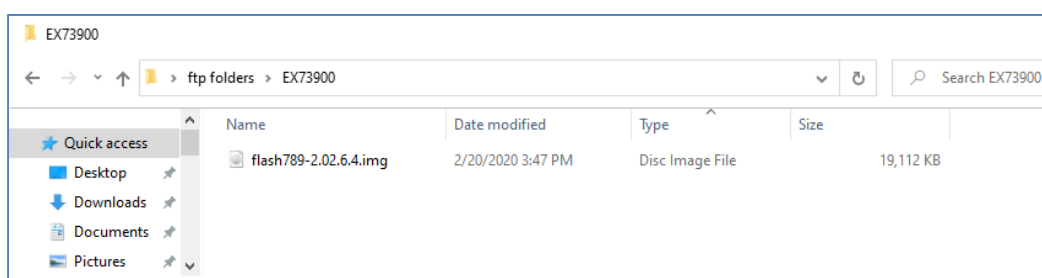
EX3575 

EX73900 

Before you can use eVue to upgrade the firmware on a device, you must configure an FTP server with the new firmware files. On the FTP server, create one or more folders with the same name as the series name shown in eVue.



Put the corresponding firmware files into the created folder(s). The FTP server filenames for the firmware must be that same as those downloaded from the EtherWAN website. The file extension for the firmware files should be either .tgz or .img.



Navigate to **Settings → General**

Input the FTP Host and Port Number, as well as the Username and Password. Then click **Update**.

FTP Account

FTP Host

127.0.0.1

Port

21

Username

gray

Password

.....

Update

Navigate back to **Devices** → **Firmware Management**, then press the **Scan** button. The firmware files available on the FTP server should be displayed.

Firmware Information		
Name	File	Version
EX73000	EX73000-1.94.6.tgz	1.94.6
	EX73v2_4.02.0.1.tgz	4.02.0.1
EX73900	flash739-2.02.7.1.tgz	2.02.7.1

If the switch has a password, then go to **Devices** → **List** and click **Edit**, then set the Telnet Password.

Edit

IP

192.168.1.73

MAC

00:e0:b3:26:9d:f8

System Name

A73

Telnet Password

.....

SNMP Community

public

Cancel

Confirm

Navigate again to **Devices** → **Firmware Management**. Click on a group of devices to expand into a list. All devices of that model will be displayed. Select the devices you want to upgrade by clicking the check boxes on the left. Next, choose the schedule (date and time), host IP and the upgrade firmware. Click the blue **Schedule** button when finished.

EX73000

Please select the devices you want to upgrade, then choose the schedule, host IP and the upgraded firmware, click Schedule.

	IP	System Name	Group	Version	Latest Firmware	Host IP	Schedule
<input type="checkbox"/>	192.168.1.73	A73		4.01.0	4.02.0.1	192.168.1.95	N/A

Previous

Page 1 of 1

Schedule

April 13, 2020, 04:55 PM

Host IP

Test-192.168.1.27




Upgraded Firmware

4.02.0.1



Schedule

Configuration Management

On this page, you can save a switch configuration to a file, or load a configuration onto a switch from a previously saved file. The initial layout of the Configuration Management screen is similar to the Firmware Management screen. These functions use the TFTP protocol, which is installed automatically when you install eVue.

Configuration Management	
EX63000	
ED3575	
EX73900	

Click on a group of devices to expand into a list.

Configuration Management								
EX63000								
	IP	System Name	Group	MAC	Version	Host IP	Export	Import
	192.168.10.10	switch_a		00:e0:b3:23:2f:cc	1.94.5.1	區域連線-192.168.10.100	<button>Export</button>	<button>Choose File</button> No file chosen
	192.168.30.10	switch_a		00:e0:b3:23:2f:da	1.94.6.3	Select Host IP	<button>Export</button>	<button>Choose File</button> No file chosen

To export a configuration, select the Host IP on the server running eVue and click the **Export** button. To import a configuration file, simply use the **Choose File** button to select the desired configuration file. It will be uploaded automatically.

Telnet

You can Telnet to any switch from within the eVue software.

Telnet

IP, device name, device series or group

X

Ungrouped Switches

6

subnet-1

0

subnet-2

0

Please select a device from the left panel

Select the group of switches on the left, and then click the desired switch in that group. Click the Connect button. *Note: The entry field is at the bottom of the black Telnet interface.

Telnet

IP, device name, device series or group

X

Ungrouped Switches

1

IP

System Name

192.168.1.10

switch_a

192.168.1.10

Disconnect

Connected

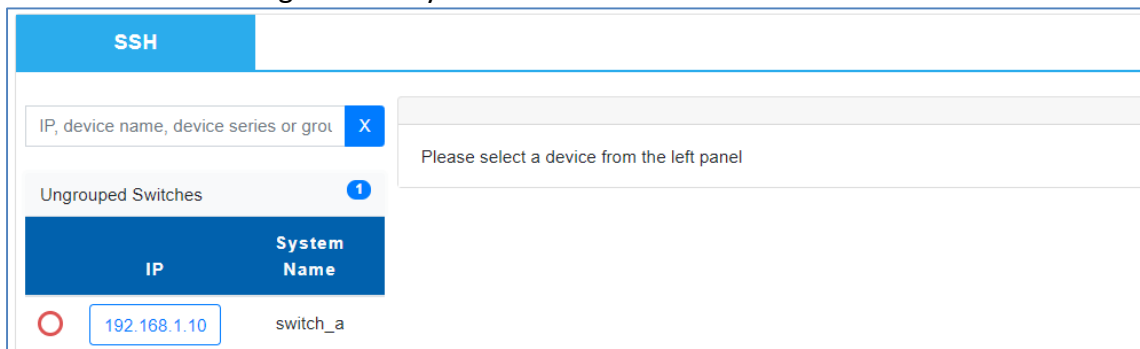
switch_a login: root

Switch version 2.02.1 10/25/18 17:14:41

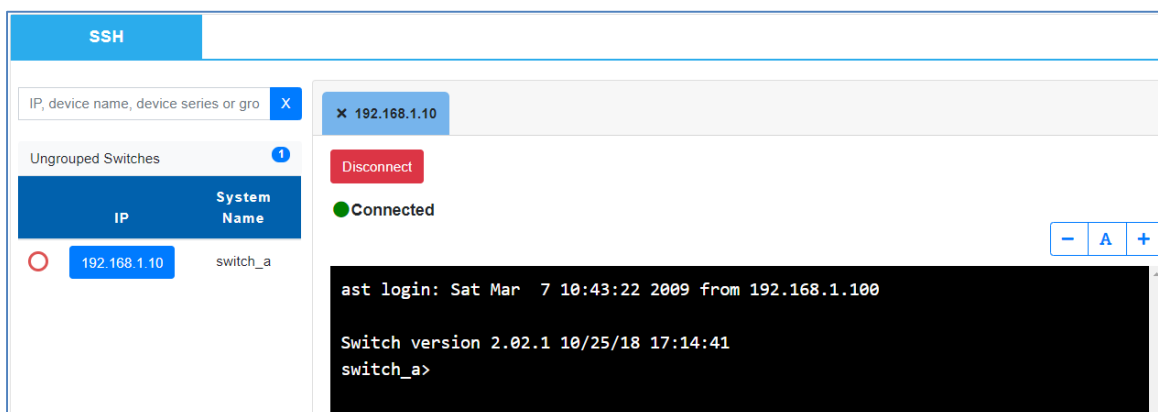
switch_a>

SSH

You can connect using SSH to any switch from within the eVue software.



Select the group of switches on the left, and then click the desired switch in that group. Click the Connect button.



Batch

Batch commands are for mass configurations. They are Username/Password Update, and SSH enable.

Username/Password Update

When navigating to this screen, you may get a message “This page is occupied by another user,” even if there are no other users logged in. Click the **Occupy** button to gain edit rights. Only one user can use this feature at a time. This feature allows for the changing of usernames and passwords on multiple devices simultaneously. Each row of the table shown corresponds to one device.

Select the connection type, **Telnet** or **SSH** from the dropdown menu.

This feature allows you to add new users, and change the passwords of existing users. To use, click the **+Add** button to add a new row to the table. Enter the IP address of the device, along with an Administrator username and password in the following fields. To create a new

user, enter the new username and passwords in the corresponding fields. To change the password for an existing user, enter the existing username in the **New/Modified Account Name** field, and then the new password in the **New/Modified Account Password** field.

You can execute changes as you enter them by clicking the **Run** button at the right side of each row, or you can enter many rows of data and then execute them all at once with the **Run All** button at the top of the table.

In the example shown below, the first row changes the password for username **root** from blank to **1234**. The second row (using the new admin password) creates a new user **dilvish** with technician privileges and password of **shoredan**.

Username/Password Update

Occupy

Release

Connection Type:

SSH

+ Add

▶ Run All

⬆ Clear Result

IP	Administrator Account	Administrator Password	New/Modified Account Name	New/Modified Account Password	Privilege	Last Run Time	Last Run Result	Run	Remove
192.168.1.10	root		root	1234	admin	3/12/2019, 11:42:51	Ok	<div>▶ Run</div>	<div>⛔ Remove</div>
192.168.1.10	root	1234	dilvish	shoredan	technician	3/12/2019, 11:42:55	Ok	<div>▶ Run</div>	<div>⛔ Remove</div>

SSH Enable

When navigating to this screen, you may get a message “This page is occupied by another user,” even if there are no other users logged in. Click the **Occupy** button to gain edit rights. Only one user can use this feature at a time. This feature allows for the enabling of SSH on multiple devices simultaneously.

Click the **+Add** button to add a new row to the table. Enter the IP address of the device, along with an Administrator username and password in the following fields. Click **Run** to enable SSH on the device. You can also enter multiple rows of data and then click the **Run All** button to execute them simultaneously.

SSH Enable

Occupy

Release

+ Add

↻ Refresh All SSH Status

▶ Run All

⬆ Clear Result

	IP	Username	Password	SSH	Last Run Time	Last Run Result	Run	Remove
<div>🔄</div>	192.168.1.10	root	1234	<div>✓</div>	3/12/2019, 12:05:34 PM	Ok	<div>▶ Run</div>	<div>⛔ Remove</div>

Group

Devices can be assigned to user-defined groups for easier viewing and management. On this screen, you can add new groups, or edit and delete existing groups. Simply drag and drop to assign a device to a group, or to remove one.

Groups

+ Add New Group

All items can be dragged

Ungrouped Switches 6

IP	System Name	Series
192.168.10.10	switch_a	EX63000
192.168.50.10	switch_a	ED3575
192.168.50.254	switch_a	EX73900
192.168.10.254	switch_a	EX73900
192.168.30.254	switch_a	EX73900
192.168.30.10	switch_a	EX63000

Assigned Switches

subnet-1 0

Edit Remove

IP	System Name	Series
----	-------------	--------

subnet-2 0

Edit Remove

IP	System Name	Series
----	-------------	--------

Events

By default, the Events screen displays the most recent events. The number of events (5, 10, 20, 25, 50, or 100) shown on each screen can be set using the drop-down menu at the bottom. All events can be acknowledged or removed by clicking the **Acknowledge all events** button in the upper right corner of the screen.

Click the **Export all events** button to export a .csv file to the local machine's default save location.

Events

Export all events

Acknowledge all events

Remove all events

Acknowledged	ID	Severity	Time	Service	Node	
All		All				
<input type="checkbox"/>	202	Normal	3/12/2019, 1:26:26 PM	login	server	User 'admin' logged in.
<input type="checkbox"/>	201	Normal	3/12/2019, 1:10:30 PM	login	server	User 'admin' logged in.
<input type="checkbox"/>	200	Cleared	3/12/2019, 11:20:46 AM	snmp-monitor	192.168.1.10	SNMP 192.168.1.10 is up.
<input type="checkbox"/>	199	Cleared	3/12/2019, 11:20:46 AM	ping-monitor	192.168.1.10	Telnet 192.168.1.10 is up.
<input type="checkbox"/>	199	Cleared	3/12/2019, 11:20:46 AM	ping-monitor	192.168.1.10	SSH 192.168.1.10 is up.
<input type="checkbox"/>	199	Cleared	3/12/2019, 11:20:46 AM	ping-monitor	192.168.1.10	Web 192.168.1.10 is up.

Events can be filtered by:

1. Acknowledgement status (All, Acknowledged, Unacknowledged)
2. ID number
3. Severity (All, Unknown, Cleared, Normal, Warning, Major, Critical)
4. Date
5. Service
6. Node
7. Message

Events						
Acknowledged	ID	Severity	Time	Service	Node	
All ▾		Major ▾	Start Date → End Date			
<input type="checkbox"/>	382	Major	7/30/2018, 9:59:11 AM	trap-listener	10.1.1.253	topologyChange
<input type="checkbox"/>	383	Major	7/30/2018, 9:59:11 AM	trap-listener	192.168.30.10	topologyChange
<input type="checkbox"/>	386	Major	7/30/2018, 10:19:10 AM	trap-listener	192.168.10.254	IldpRemTablesChange
<input type="checkbox"/>	389	Major	7/30/2018, 10:24:28 AM	ping-monitor	192.168.30.10	Ping 192.168.30.10 is down.
<input type="checkbox"/>	389	Major	7/30/2018, 10:24:28 AM	ping-monitor	192.168.30.254	Ping 192.168.30.254 is down.
<input type="checkbox"/>	394	Major	7/30/2018, 10:24:51 AM	trap-listener	192.168.10.254	IldpRemTablesChange
<input type="checkbox"/>	395	Major	7/30/2018, 10:24:51 AM	trap-listener	10.1.1.253	IldpRemTablesChange
<input type="checkbox"/>	403	Major	7/30/2018, 9:07:01 PM	ping-monitor	192.168.50.10	Ping 192.168.50.10 is down.

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	✓				
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					✓

Traps from Device	Critical	Major	Warning	Normal	Cleared
Storm detect		✓			
Storm detect recovery					✓
Loopback detect		✓			
MAC Notification			✓		
Alpha-ring topology change		✓			
Digital input (DI 01) is triggered		✓			
Digital input (DI 02) is triggered		✓			
Power up				✓	
Power down	✓				
eVue Login				✓	
eVue Login fail			✓		
eVue Login fail too many times (account locked)		✓			
eVue monitoring: Ping up					✓
eVue monitoring: Ping down	✓				
eVue monitoring: Telnet up					✓
eVue monitoring: Telnet down		✓			
eVue monitoring: SSH up					✓
eVue monitoring: SSH down		✓			
eVue monitorin: SNMP up					✓
eVue monitoring: SNMP down		✓			

General

Web Service

On the top left of this screen, enable or disable http and https for the eVue service. HTTP uses port 4300, and HTTPS uses port 4301.



The Web Service configuration form includes the following fields:

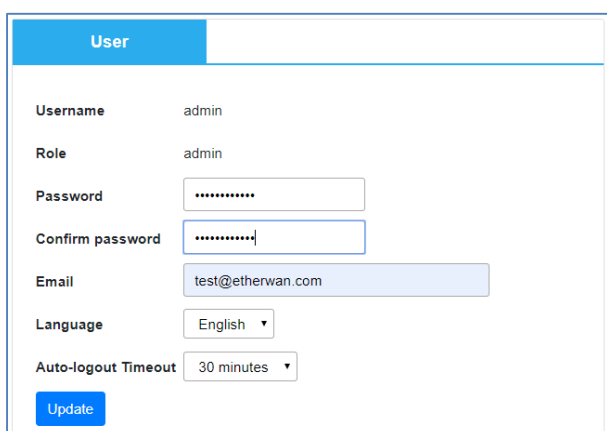
- Force HTTPS:** A dropdown menu currently set to "Yes".
- HTTP Port:** A text input field containing "4300".
- HTTPS Port:** A text input field containing "4301".
- Update:** A blue button at the bottom left.

User

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



The User configuration form includes the following fields:

- Username:** admin
- Role:** admin
- Password:** A text input field with masked characters (dots).
- Confirm password:** A text input field with masked characters (dots).
- Email:** test@etherwan.com
- Language:** English (dropdown menu)
- Auto-logout Timeout:** 30 minutes (dropdown menu)
- Update:** A blue button at the bottom left.

Note: The **Sending E-mail Account** (see below) must be set up in order for eVue to send a password reset the e-mail entered above.

Notification setting - Sending Email Account

Use this section to set up the email account (Gmail) that will be used to send notifications. Select the type of mail server, and then enter a name that will be shown in the sent email. Enter the email address the notification email will be sent from, and the password for the account. **Then click Update.**

Sending Email Account

Type:

Gmail

Name :

Name

Email :

Email

Password :

.....

Update

FTP

Required for firmware upgrades using eVue. Enter the FTP host, port, username, and password. Then click **Update**.

FTP Account

FTP Host

192.172.10.100

Port

21

Username

etherwan

Password

.....

Update

SMS

SMS Provider

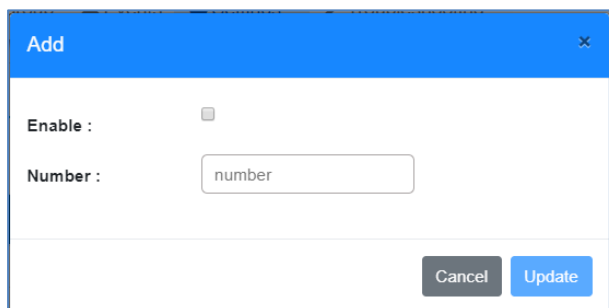
To enable notification by SMS, click the Edit button, and enter the username and password from your SMS provider, tick the box next to **Enable**, and then click **Update**. SMS provider points are shown on the right. Click the **Refresh** button to update this figure.

SMS Provider

Enable	Company	Username	Actions	Points
<input checked="" type="checkbox"/>	Mitake		Edit	unknown Refresh

SMS User

Click **+Add SMS User** to add and remove SMS users by phone number. Users enabled in this section will receive notification by SMS.

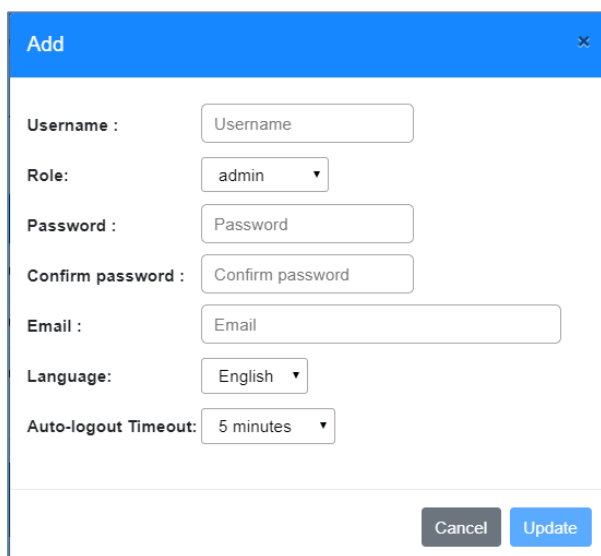


The 'Add' dialog box for SMS users features a blue header with the title 'Add' and a close button. It contains two fields: 'Enable' with a checkbox and 'Number' with a text input containing the placeholder 'number'. At the bottom right, there are 'Cancel' and 'Update' buttons.

Users

+Add User

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.

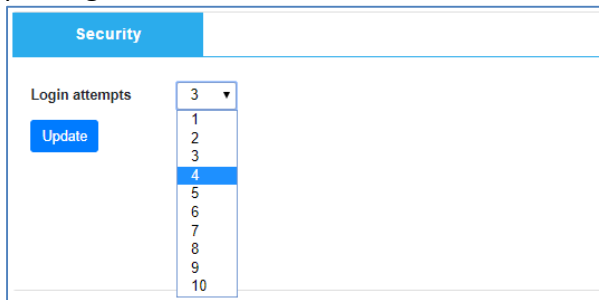


The 'Add' dialog box for general users features a blue header with the title 'Add' and a close button. It contains several fields: 'Username' (text input), 'Role' (dropdown menu with 'admin' selected), 'Password' (text input), 'Confirm password' (text input), 'Email' (text input), 'Language' (dropdown menu with 'English' selected), and 'Auto-logout Timeout' (dropdown menu with '5 minutes' selected). At the bottom right, there are 'Cancel' and 'Update' buttons.

Security

Also on the **Users** page is a drop-down menu for setting the number of unsuccessful login attempts. Select a number from 1 to 10, and click **Update**. If the number of unsuccessful attempts exceeds the set number, the account will be locked, and can only be unlocked by a system administrator.

Note: This is a global setting that affects all accounts, including accounts with **admin** privilege.

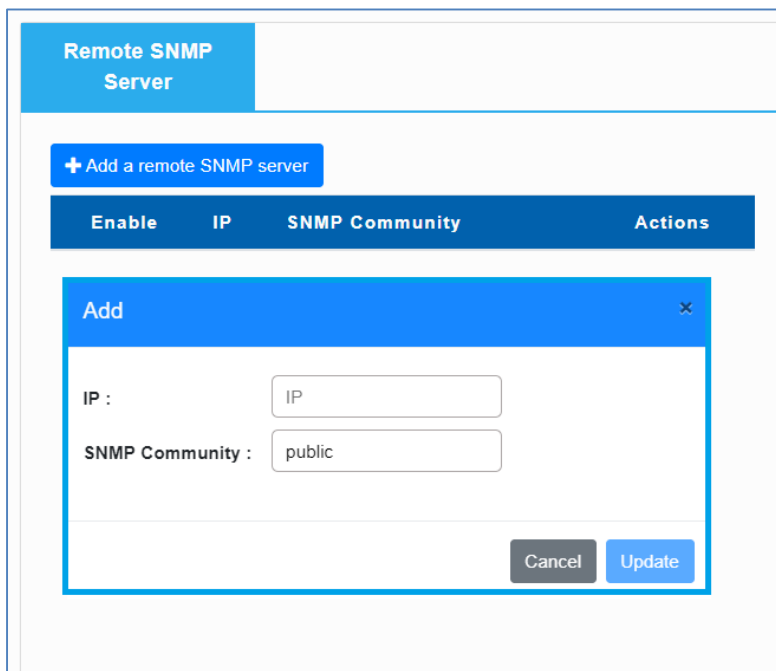


The screenshot shows the 'Security' tab in a web interface. Under the 'Login attempts' section, there is a dropdown menu currently set to '3'. An 'Update' button is located to the left of the dropdown. The dropdown menu is open, showing a list of numbers from 1 to 10, with '4' currently selected.

Notification

Remote SNMP Server

In this section, remote SNMP servers can be added and removed. Click **Add a remote SNMP server** to create a new remote SNMP server. Enter the IP address and the SNMP community.



The screenshot shows the 'Remote SNMP Server' tab in a web interface. At the top, there is a button labeled '+ Add a remote SNMP server'. Below this is a table with columns: 'Enable', 'IP', 'SNMP Community', and 'Actions'. An 'Add' dialog box is open, showing fields for 'IP :' and 'SNMP Community :'. The 'IP' field contains 'IP' and the 'SNMP Community' field contains 'public'. At the bottom of the dialog box are 'Cancel' and 'Update' buttons.

Notification Condition

Click **+Add Notification Condition** to create a new notification condition. Enter a name in the **Condition Name** field, and click **Update**.

Add

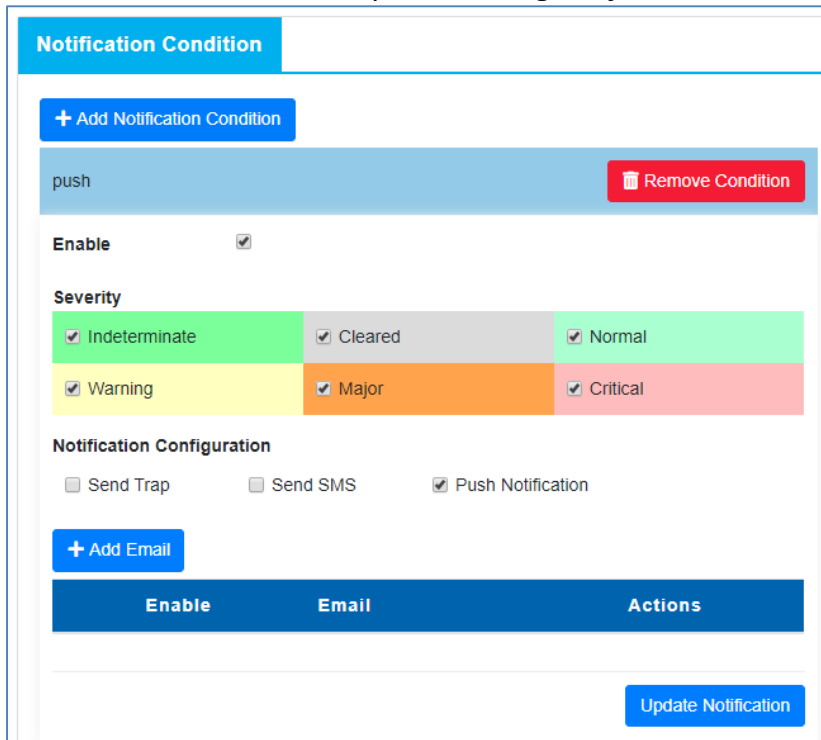
Condition Name :

Condition Name

Cancel

Update

Tick the **Enable** box to enable this notification. Tick one or more **Severity** boxes to select the Severity levels of the events to send. In the example below (named “Test Condition”), notifications will be sent only for **Warning, Major and Critical** events.



Notifications can be sent by the following methods:

Send Trap

Tick the **Send Trap** box and click the **Update Notification** button. Make sure the SNMP server has been configured.

Send SMS

Tick the **Send SMS** box and click the **Update Notification** button. Make sure the SMS settings have been configured. (Refer to [Settings](#) page)

Send Email

Click **+Add Email** and enter an email recipient, then click the **Add** button.

Make sure the **Sending Email Account** has been configured. Click **Remove** to delete an email address. Click Update Notification after adding, deleting, or editing and email recipient.

Push Notification

Tick this box to receive a push notification in the eVue Mobile App.

Click **Update Notification** when you have set up the desired notification.

+ Add Email		
Enable	Email	Actions
✓	test_email@etherwan.com	Edit Remove
Update Notification		

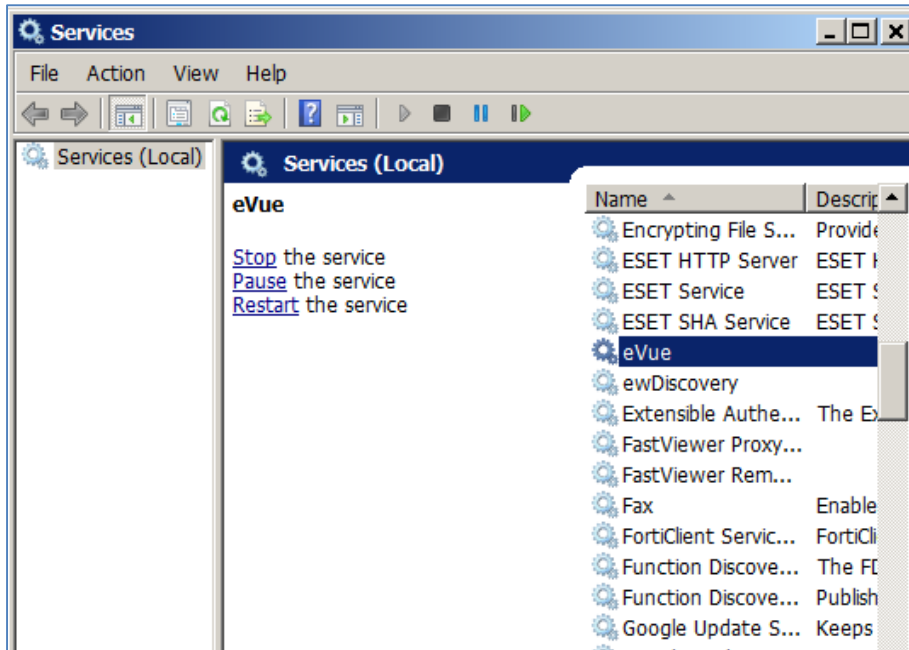
License

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

EtherWAN		Home	Devices	Batch	Group	Events	Settings
License							
License Number:							
End Date:	12/31/2019, 12:00:00 AM						
LicenseServer IP:	54.203.133.180						
LicenseServer Port:	4311						
Result:	Success						

Troubleshooting

If eVue becomes unresponsive, try restarting the service. Run **services.msc**, and then locate eVue, ewDiscovery, and MongoDB.



Right click on each service and select **restart**. If this fails to solve the problem, contact EtherWAN technical support at <https://www.etherwan.com/about-etherwan/customer-support-service>

Lost / Forgotten Password

If you forget your login password, click the “Forgot Password?” text link on the login screen. Then enter your username, and the email associated with the username. An email will be sent to you.

Note: For the Reset Password feature to work, you must have already configured an email address and email sending account under Settings > General.

Reset Password

Enter your account and email to reset password

Username:

Email:

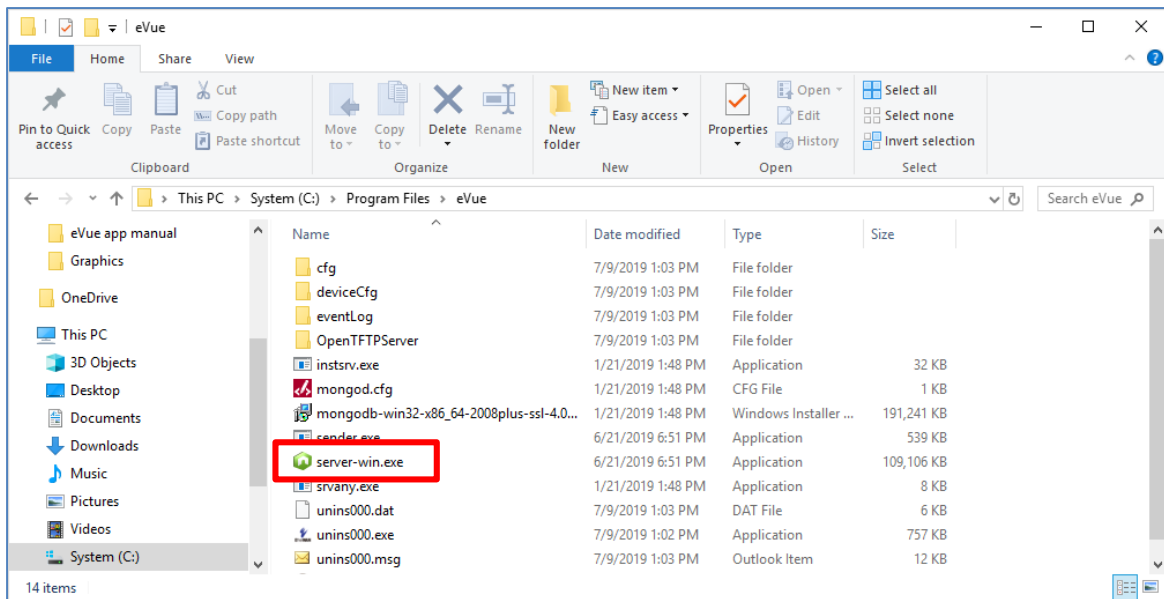
Reset Password
Cancel

4 Using the eVue Mobile App

Configure eVue server for use with app

Before using eVue Mobile App, check the following items.

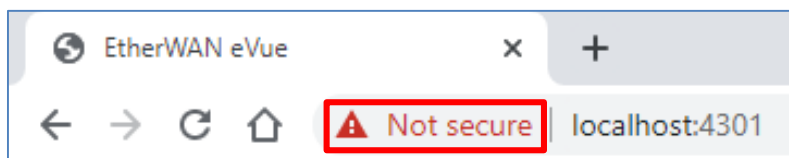
1. Make sure that ports 4300 and 4301 are not blocked by the local firewall.
2. Make sure the firewall doesn't block the program "server-win.exe" (location: C:\Program Files\eVue).



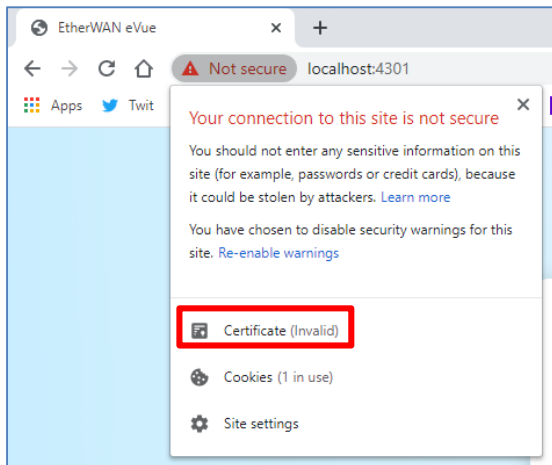
3. eVue server will check if the login IP address and the login port in the mobile app matches what's listed in the eVue server. If the information does not match, the mobile app will not be able to connect to the eVue server. The certificate needs to be installed only once in the beginning.

3-1 Open eVue server in a browser.

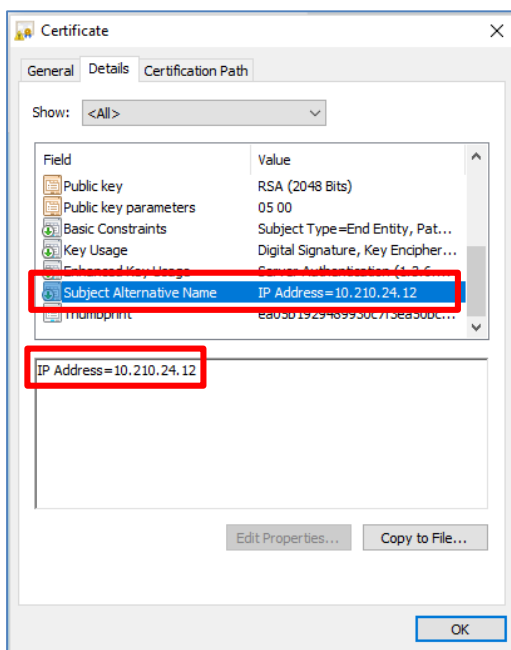
3-2 Click "Not secure" text at the top of the browser.



3-3. Click "Certificate"



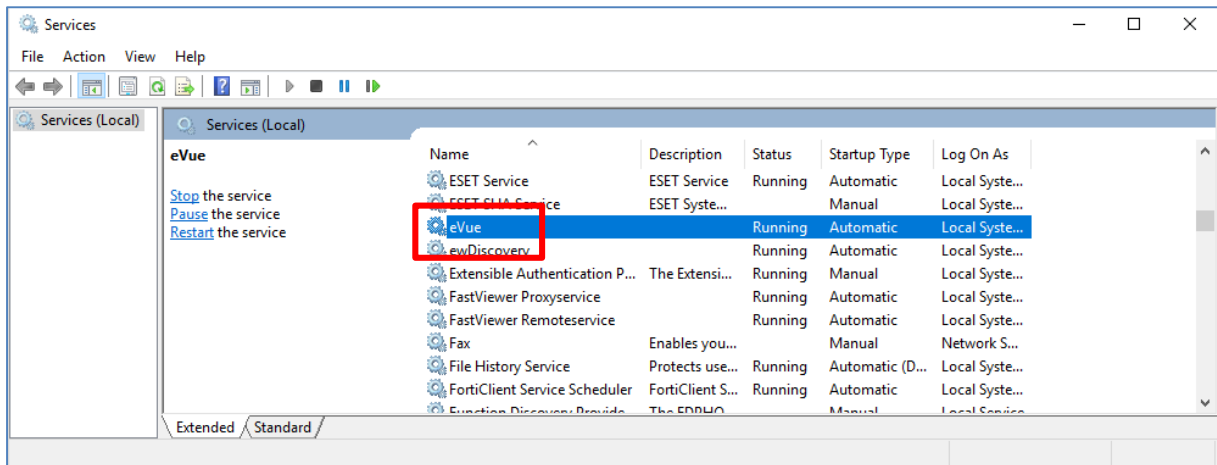
3-4 Click the second tab “Details”, scroll to the end of the list, and check the IP address of certificate.



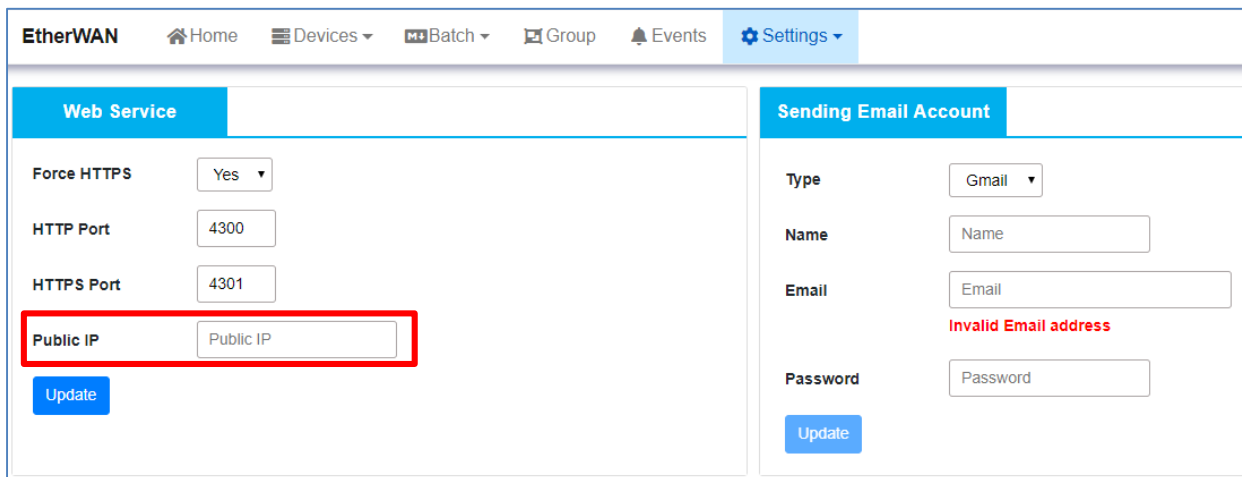
*The correct condition is:

Certificate’s IP address = eVue server (PC)’s IP address = the IP address you enter in the mobile app.

* If the IP address in the certificate does not match the eVue server’s IP address, go to “Services” in Windows to restart “eVue” and “ewDiscovery”.



*If your eVue server has a public IP address, you can add the public IP address in eVue at “Settings → General → Public IP”.



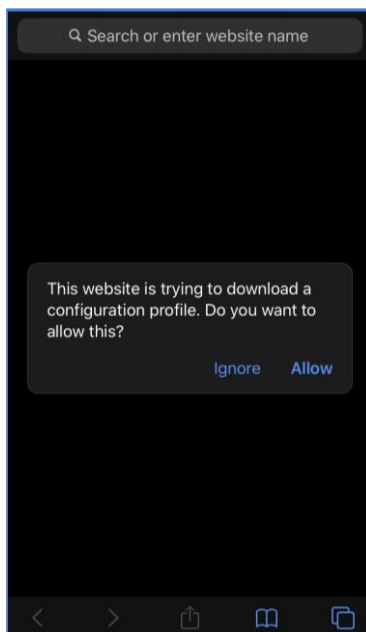
Install and start the eVue Mobile App

1. Download and install the eVue Mobile app from an app store (The Apple App Store or Google Play) on mobile device.
2. Open the eVue Mobile app on the mobile device.
3. The login page will display. Click the “Download Certificate” link at the bottom of the screen. (Make sure the mobile device is connected to the Internet when downloading the certificate.)

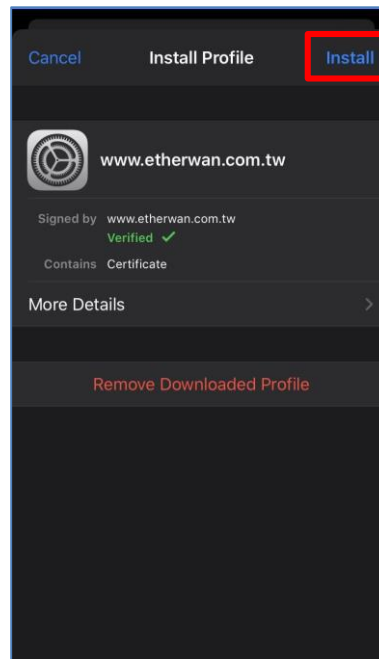
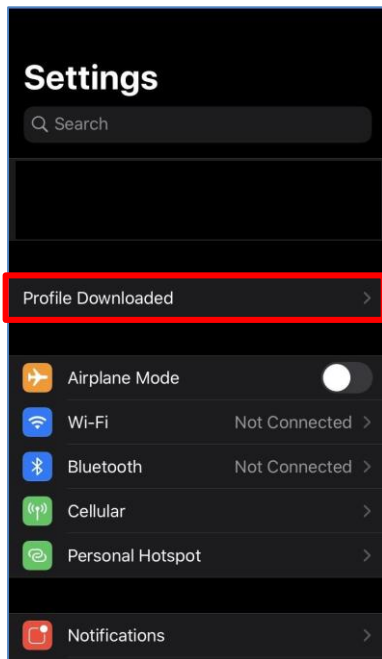


3.1 For iOS devices:

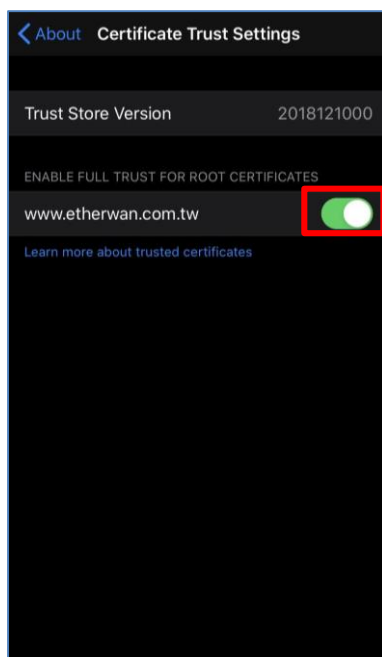
- a. The eVue Mobile App will open the website in Safari when “Download Certificate” is selected. Select “Allow” to download the profile.



- b. **Install the certificate:** On iOS, go to mobile device’s Settings → Profile Downloaded → Install profile.



c. **Enable EtherWAN certificate:** Go to mobile device's General → About → Certificate Trust Settings, and enable full trust for root certificates: www.etherwan.com.tw

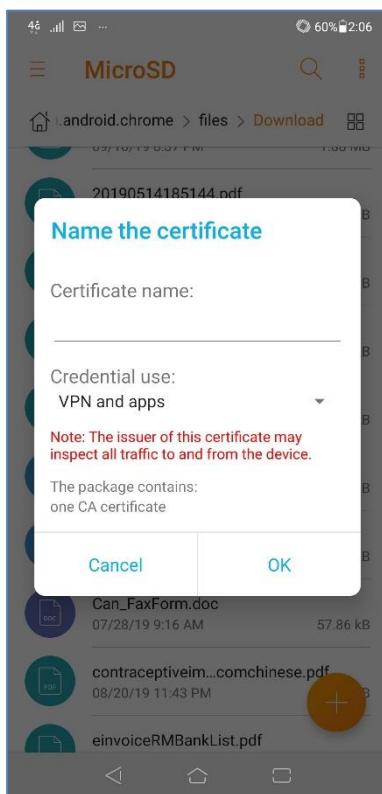


3.2 For Android devices:

a. When "Download Certificate" is selected, the eVue Mobile app will open a webpage in a browser to the download the certificate.

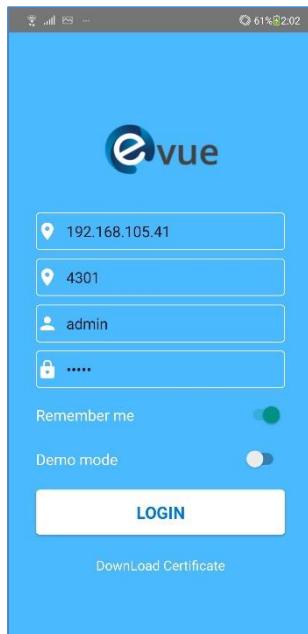


b. Open the downloaded certificate (named “ca.crt”) and give it a name (for example: EtherWAN). This will install the certificate on the mobile device.



4. Login to the eVue server via eVue Mobile App

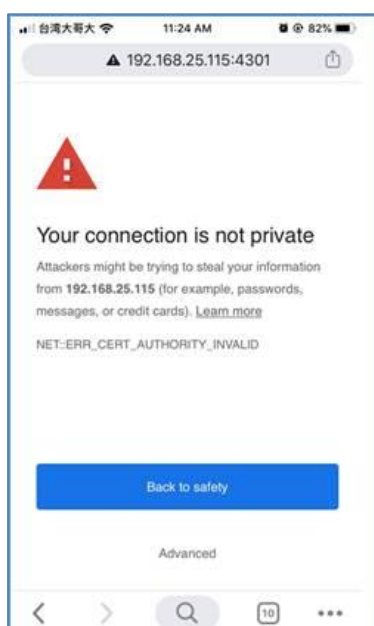
- a. Make sure the mobile device is in the same subnet as the eVue server.
- b. Log in to the eVue Mobile App with eVue server’s IP address, port 4301, username, and password.



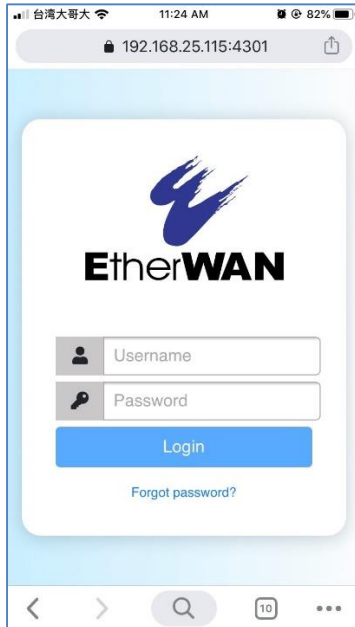
***If you cannot login to the eVue Mobile App, check to see if the certificate is working properly by using the mobile device's browser to connect to eVue server.**

1. If the browser on mobile device can't connect to eVue server, and the eVue Mobile App can't connect either, which indicates a routing issue.
2. If the browser on mobile device can connect to eVue server via <https://<IP address>:4301>, but the eVue Mobile App is unable to connect to the eVue server, then there is a certificate issue.

If the screen display resembles the below image when using a browser to connect to the eVue server, then that means there is no certificate installed in the mobile device. Please follow the install procedure for the certificate again to install the certificate on mobile device.



If the screen display resembles the below image when using a browser to connect to the eVue server, that means eVue certificate has been installed on the mobile device successfully.

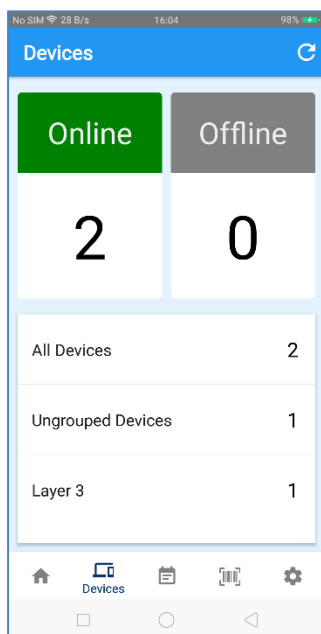


eVue Mobile App Functions

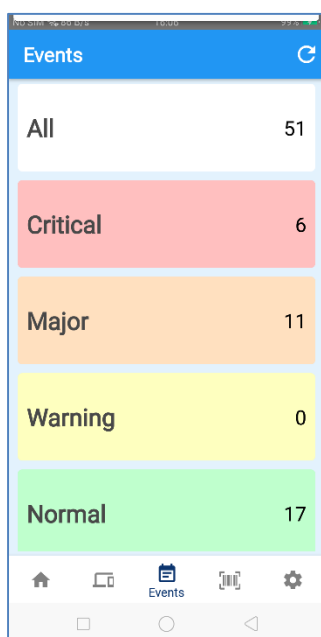
At the bottom of the screen are five icons, representing the views/functions available in the app. The first icon is home. On the **Home** screen, you can view critical, major, and warning events, as well as the number of devices online and offline.



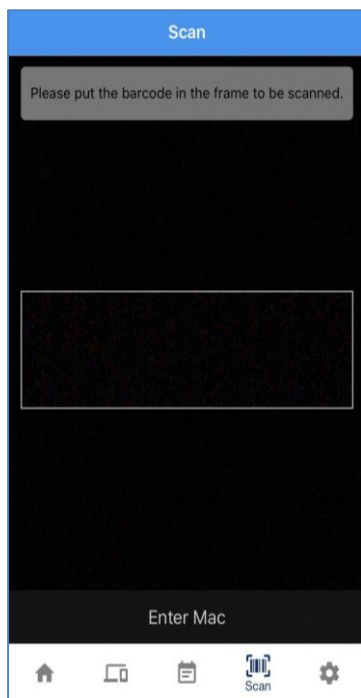
The second icon is for the **Devices** view. This view shows the number of online and offline devices, as well as the number of ungrouped and Layer 3 (a user-defined group name) devices.



The third icon is for navigating to the **Events** view. All events are grouped by severity level and displayed here. Select a group to view details.

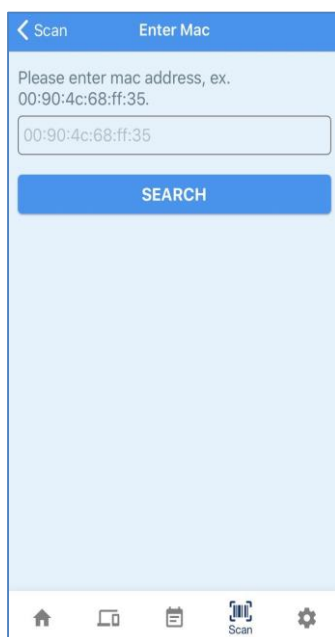


The Scan icon navigates to the scan page where you can connect to a device directly by scanning the bar code on the device. You need to allow permission for the camera on the iOS or Android device to use this feature.



Note: Bar code stickers are not available on current models.

You can also connect to a device directly by entering its MAC address and selecting **search**.



When you have found a device by either method, the device information will display. The type and amount of information depends on whether the IP address of the device is the default 192.168.1.10, and whether the device has been previously added to the eVue list on the server.

- If the device IP is 192.168.1.10 (default IP) and the device is **not** in the eVue device list, the resulting page will show the device information and the **edit** button.

←
Device Information

IP	192.168.1.10
MAC	00:e0:b3:11:11:da
Subnet	255.255.255.0
Default Gateway	0.0.0.0
NIC	乙太網路
vid1	1
vid2	0

✎

Scenario table

eVue management Device's IP address	When Device is IN eVue managing list	When Device is NOT in eVue managing list
When Device has default IP address (192.168.1.10)	eVue Mobile App will show device information.	eVue Mobile App will show device information and an "Edit" button allows you to change device's default IP address.
When Device does NOT have default IP address	eVue Mobile App will show device information.	eVue Mobile App will show device information

If the device is not in eVue device list, the resulting page will display an edit button. Select the button to edit the IP address, subnet, and gateway of the device.

←
Back Device Information

IP	192.168.1.10
MAC	00:e0:b3:55:66:77
Subnet	255.255.255.0
Default Gateway	0.0.0.0
NIC	乙太網路 2
vid1	1
vid2	0

✎

Edit IP

New IP

New Subnet

New Getway

Close
Edit

Refresh to display the updated data.

< Back
Device Information

IP	0.0.0.0
MAC	00:e0:b3:55:66:77
Subnet	0.0.0.0
Default Gateway	0.0.0.0
NIC	以太网路 2
vid1	1
vid2	0

🏠
📱
📅
🔍 Scan
⚙️

Receive Push Notifications

Push notifications are configured in eVue in the Settings -> [Notification](#) page. Enable a new notification condition, and select “Push Notification”. Select the level of event severity for which you want to send notifications to eVue Mobile App. Then select “Update Notification”.

Notification Condition

+ Add Notification Condition

Push notification
Remove Condition

Enable ☒

Severity

☐ Indeterminate

☐ Cleared

☐ Normal

☐ Warning

☐ Major

☐ Critical

Notification Configuration

☐ Send Trap

☐ Send SMS

☒ Push Notification

+ Add Email

Enable	Email	Actions

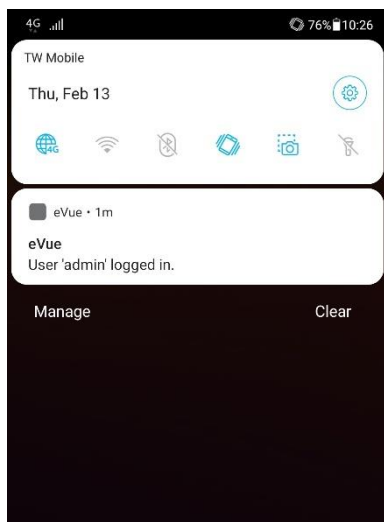
Update Notification

46
eVue



On the mobile device, allow permission for push notifications. When you use the app for the first time, the app will ask permission for push notifications. Additionally, you can allow push notifications in the device settings.

When an event occurs, the mobile device will receive push notification via the eVue Mobile App when the eVue Mobile App is running as a background program.



Note: The push notification function requires the eVue server to have an internet connection.

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:

LLDP General Settings

LLDP General Settings

LLDP Status: Enabled

Holdtime Multiplier (2-10): 4

Tx Interval (5-32768 sec): 30

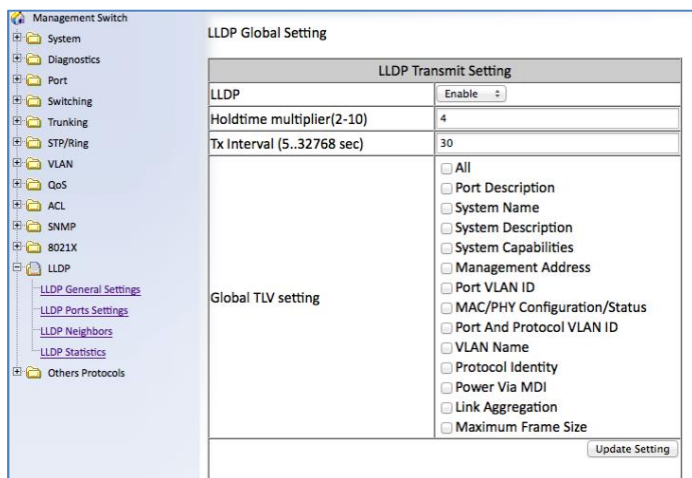
Global TLV:

- ☐ All ☐ Port Description ☐ System Name ☐ System Description ☐ System Capabilities
- ☐ Management Address ☐ Port VLAN ID ☐ MAC/PHY Configuration/Status
- ☐ Port And Protocol VLAN ID ☐ VLAN Name ☐ Protocol Identity ☐ Link Aggregation
- ☐ Maximum Frame Size

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



The screenshot shows the 'LLDP Global Setting' configuration page in a web-based GUI. On the left is a navigation tree with categories like System, Diagnostics, Port, Switching, Trunking, STP/Ring, VLAN, QoS, ACL, SNMP, 8021X, and LLDP. Under LLDP, there are links for 'LLDP General Settings', 'LLDP Ports Settings', 'LLDP Neighbors', and 'LLDP Statistics'. The main content area is titled 'LLDP Global Setting' and contains two sections: 'LLDP Transmit Setting' and 'Global TLV setting'.

LLDP Transmit Setting

LLDP	Enable
Holdtime multiplier(2-10)	4
Tx Interval (5..32768 sec)	30

Global TLV setting

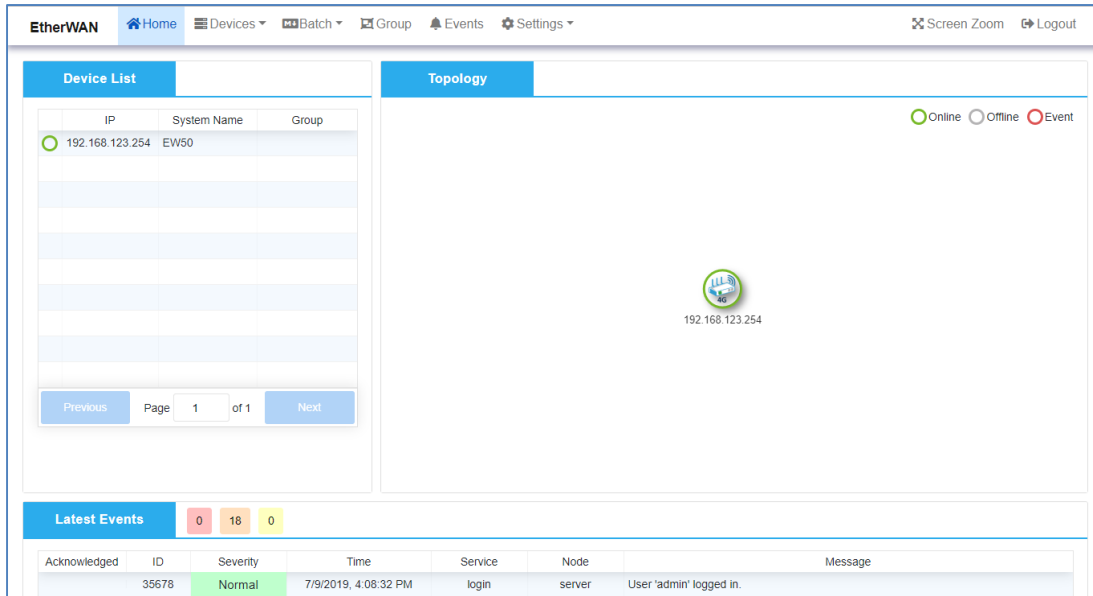
- ☐ All
- ☐ Port Description
- ☐ System Name
- ☐ System Description
- ☐ System Capabilities
- ☐ Management Address
- ☐ Port VLAN ID
- ☐ MAC/PHY Configuration/Status
- ☐ Port And Protocol VLAN ID
- ☐ VLAN Name
- ☐ Protocol Identity
- ☐ Power Via MDI
- ☐ Link Aggregation
- ☐ Maximum Frame Size

At the bottom right of the Global TLV setting section is an 'Update Setting' button.

EW50/EW200 - eVue Installation Guide

Home screen

When eVue is launched, the Home screen will display. Information is divided into three sections: On the left under **Device List** is a list of connected EtherWAN devices that shows IP address, device name, and group. The group names are assigned by eVue, so the first time the software is used that field will be blank for all devices. On the right, there is a **Topology** view of 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.). Clicking on a device's icon in topology view will show you the model and name of the device. Dotted lines connecting devices represent blocked ports. At the bottom of the screen, the **Latest Events** section displays the most recent events by order of occurrence.



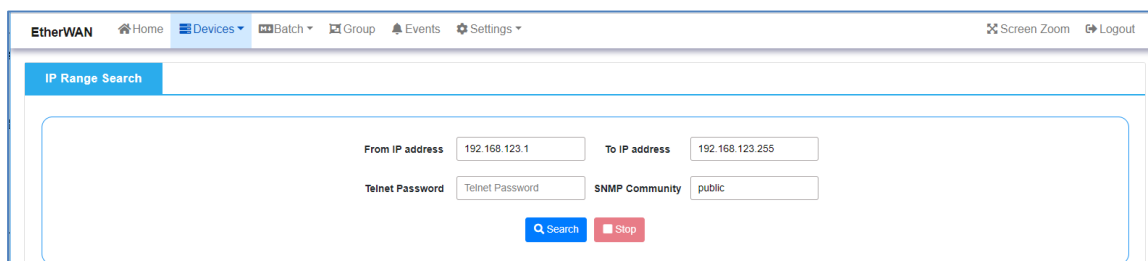
The screenshot shows the eVue Home screen with the following components:

- Header:** EtherWAN logo, Home button, and navigation tabs: Devices, Batch, Group, Events, Settings.
- Device List:** A table with columns IP, System Name, and Group. It shows one device with IP 192.168.123.254 and System Name EW50. Below the table are navigation buttons: Previous, Page 1 of 1, Next.
- Topology:** A large area showing a single device icon with IP 192.168.123.254. Above the icon are status indicators: Online (green circle), Offline (grey circle), and Event (red circle).
- Latest Events:** A section with a summary bar showing 0 Acknowledged, 18 ID, and 0 Severity. Below it is a table of events.

Acknowledged	ID	Severity	Time	Service	Node	Message
	35678	Normal	7/9/2019, 4:08:32 PM	login	server	User 'admin' logged in.

Step 1. Search

The search function can find desired devices from different network segments. To start a search, enter the desired IP range, password (if any) and click the **Search** button. The allowable IP range search is 2540 nodes, or 10 Class C subnets (subnet mask 255.255.255.0).



The IP Range Search form includes the following fields:

- From IP address:** 192.168.123.1
- To IP address:** 192.168.123.255
- Telnet Password:** Telnet Password
- SNMP Community:** public
- Buttons:** Search, Stop

All found devices with SNMP enabled will be displayed. To include a device in the eVue system list, click “Add.” Click the “Add All Devices” button to add all devices shown. After a device has been added, it will show in both the **Topology** and **List** views.



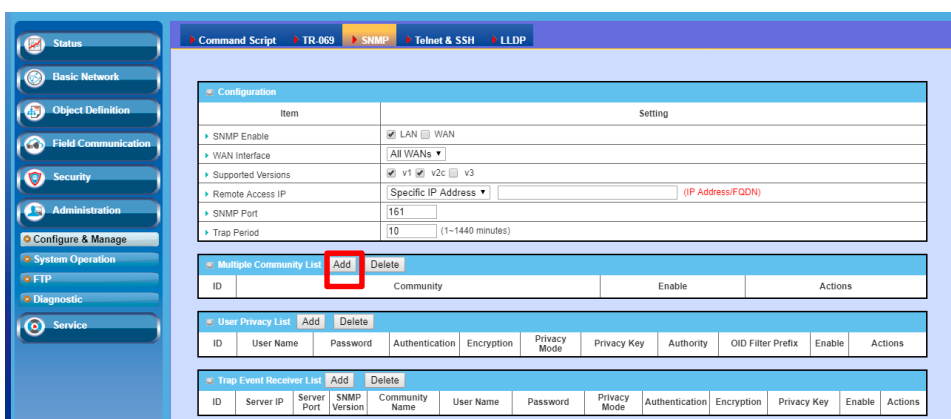
IP	System Name	MAC	Series	Version	List Status	SNMP	Telnet	SSH	Web
192.168.123.254	EW50	00:08:b3:3f:36:2c	EW50	0EWDY80.I71_e71.0EWD_08081000	In list	✓	✓	✓	✓

[Add All Devices](#)

Note: Please make sure that SNMP and LLDP settings of EW50/EW200 are enabled. Check the SNMP section in the EW50 or EW200 user’s manual for detailed settings.

Quick SNMP setting steps are listed below.

Log in to the EW50/EW200 through the web console. Then go to Administration > Configure & Manage > SNMP tab. Create a community by clicking **Add** button.



The SNMP configuration page shows the following sections:

- Configuration:**
 - SNMP Enable: ☒ LAN ☐ WAN
 - WAN Interface: All WANs
 - Supported Versions: ☒ v1 ☒ v2c ☐ v3
 - Remote Access IP: Specific IP Address (IP Address/FQDN)
 - SNMP Port: 161
 - Trap Period: 10 (1-1440 minutes)
- Multiple Community List:**
 - Add** button highlighted.
 - Table with columns: ID, Community, Enable, Actions.
- User Privacy List:**
 - Add** button.
 - Table with columns: ID, User Name, Password, Authentication, Encryption, Privacy Mode, Privacy Key, Authority, OID Filter Prefix, Enable, Actions.
- Trap Event Receiver List:**
 - Add** button.
 - Table with columns: ID, Server IP, Server Port, SNMP Version, Community Name, User Name, Password, Privacy Mode, Authentication, Encryption, Privacy Key, Enable, Actions.

When Add button is applied, Multiple Community Rule Configuration screen will appear.

Multiple Community Rule Configuration	
Item	Setting
Community	Read Only <input type="text"/>
Enable	<input checked="" type="checkbox"/> Enable

Key in 'public', this is the same community name of eVue default setting. Then Click the **Save** button to save the configuration. Or change to any community string as desired. Any valid string will work as long as the community values match on eVue and EW50/200 settings.

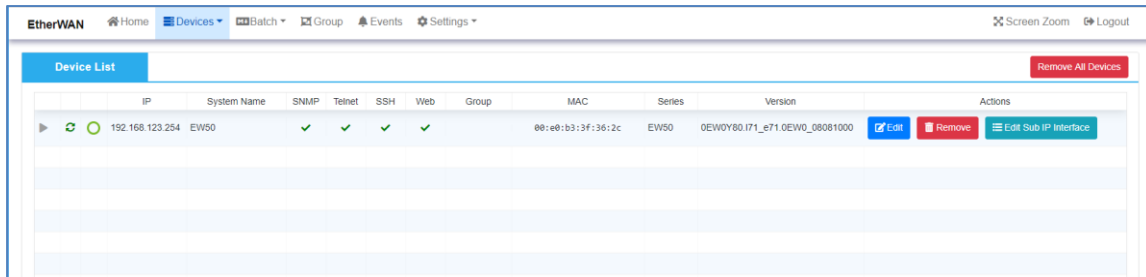
Multiple Community Rule Configuration	
Item	Setting
Community	Read Only <input type="text" value="public"/>
Enable	<input checked="" type="checkbox"/> Enable

Then it will show the setting result.

Multiple Community List <input type="button" value="Add"/> <input type="button" value="Delete"/>			
ID	Community	Enable	Actions
1	Read Only public	<input checked="" type="checkbox"/>	<input type="button" value="Edit"/> <input type="button" value="Select"/>

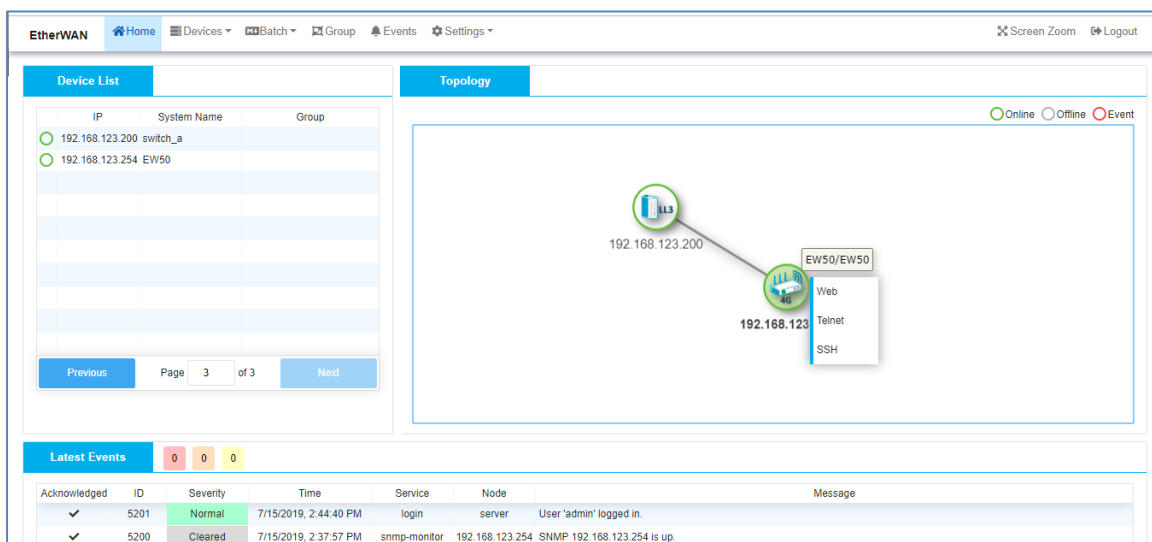
Step 2. List

This screen shows all devices currently monitored by eVue. To remove a specific device from the system, click the corresponding **Remove** button. Using the button in the top right corner, you can **Remove all devices**.



IP	System Name	SNMP	Telnet	SSH	Web	Group	MAC	Series	Version	Actions
192.168.123.254	EW50	✓	✓	✓	✓		00:e0:b3:3f:36:2c	EW50	0EW0Y80.171_e71.0EW0_08081000	Edit Remove Edit Sub IP Interface

Go back to the **Home** tab, and you will see all your selected devices are shown on the left side, and eVue's visualization of the network topology. If you want to web access a specific device, a simple and quick way is to mouse over the device icon and right click.



IP	System Name	Group
192.168.123.200	switch_a	
192.168.123.254	EW50	

Acknowledged	ID	Severity	Time	Service	Node	Message
✓	5201	Normal	7/15/2019, 2:44:40 PM	login	server	User 'admin' logged in.
✓	5200	Cleared	7/15/2019, 2:37:57 PM	snmp-monitor	192.168.123.254	SNMP 192.168.123.254 is up.

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eVue User's Guide

April 23, 2020

Document version: Version 3