MXview One 1.4.1 User Manual

Version 5.1, September 2024

www.moxa.com/products



MXview One 1.4.1 User Manual

The software described in this manual is furnished under a license agreement and may be used only in accordance with the terms of that agreement.

Copyright Notice

© 2024 Moxa Inc. All rights reserved.

Trademarks

The MOXA logo is a registered trademark of Moxa Inc. All other trademarks or registered marks in this manual belong to their respective manufacturers.

Disclaimer

- Information in this document is subject to change without notice and does not represent a commitment on the part of Moxa.
- Moxa provides this document as is, without warranty of any kind, either expressed or implied, including, but not limited to, its particular purpose. Moxa reserves the right to make improvements and/or changes to this manual, or to the products and/or the programs described in this manual, at any time.
- Information provided in this manual is intended to be accurate and reliable. However, Moxa assumes no
 responsibility for its use, or for any infringements on the rights of third parties that may result from its
 use.
- This product might include unintentional technical or typographical errors. Changes are periodically
 made to the information herein to correct such errors, and these changes are incorporated into new
 editions of the publication.

Technical Support Contact Information

www.moxa.com/support

Table of Contents

1.	Introduction	7
	Key Features	7
	Web-based Operation	7
	Auto Discovery and Topology Visualization	
	Event Management	
	Configuration and Firmware Management	
	Traffic Monitoring	
	System Requirements	
	Supported Devices	
2.	Installation and Uninstallation	
	Installation Procedure	
	For Windows	
	For Ubuntu	
	Uninstallation	
	For Windows	
	For Ubuntu	
3.	Getting Started	
5.	MXview One Control Panel	
	Server Control	
	Configuration	
	DB Backup & Restore	
	·	
	Plug-in Manager	
	Certificates	
	Starting the MXview One Server and Logging Into MXview One	
	Logging Into MXview One Remotely	
	License Management	
	Checking the License	
	Adding a New License	
	Using Device Discovery	
	Account Management	
	Adding User Accounts	
	Modifying User Accounts	
	Deleting User Accounts	
	Exporting User Accounts	
	Configuring the Password Policy	
	Configuring Login Notifications	
	Changing the Display Language	
4.	License Management	
	License Management Overview	
	License Type	
	Adding a New License	
	Adding an Add-on License	
	Deactivating a License	
	Reactivating a Deactivated License	
	Transferring a License to a Different Instance of MXview One	
	Quantity of Monitored Devices Exceeds the Number of Node-based Licenses	
5.	Dashboard Widgets	
	Dashboard Overview	
	Device Summary	
	Event Highlights	
6.	Device Discovery and Polling	64
	Device Discovery Overview	
	Configuring IP Address Scan Ranges	
	Configuring Device Polling Settings	
	Changing Default SNMP Configuration	
	Changing Modbus TCP Settings	
7.	Topology Management	
	Topology Overview	70

	Viewing the Topology Map	71
	Viewing Recent Events	73
	Organizing the Topology Structure By Group Function	75
	Redundant Topologies	78
	PoE Power Consumption Visualization	78
	VPN Tunnel Visualization	79
	Port Trunking	
	Adding Devices and Links	
	Deleting Devices and Links	
	Updating the Topology Map	
	Refreshing the Topology Layout	
	Creating a New Topology Map	
	Setting/Editing the Background Image	
	Editing the Topology Appearance	
	Editing the Device Appearance	
~	Exporting the Topology Map	
8.	Network and Traffic Monitoring	
	Viewing Link Properties	
	Viewing Port Traffic	
	Viewing Packet Error Rates	
	Monitoring Traffic Loads	
	Monitoring Network Security	
	Configuring Severity Thresholds for Traffic and Fiber Status Monitoring Events	
	Configuring Custom Port Labels	
9.	SFP Fiber Status	
	Viewing the SFP Fiber Status in Table View	
	Synchronize the SFP Threshold From the Device	
10.		
	Viewing the Device List	
	Importing Device Configurations	
	Exporting Device Configurations	
	Upgrading Firmware	. 112
	Configuring SNMP Trap Server	. 113
	Configuring Port Settings	. 114
	Configuring SNMP Communication Protocol	. 115
	Configuring MXview One Polling Interval	. 116
	Configuring Device Accounts	. 117
	Modifying the Device Alias	
	Changing the Device Icon	
	Signing on to Device Web Consoles	
	Managing and Running Scripts	
	Running a CLI Script	
	Running a Saved CLI Script	
	Changing Device Groups	
	Refreshing the Device Status	
	Deleting Devices	
11.	-	
	Configuration and Control	
	Configuration and Control Overview	
	-	
	Account and Password	
	Account Management Overview	
	Password Automation Overview	
	Account Audit Overview	
	Default Password Audit Overview	
	Temporary Accounts Overview	
12.	Saved CLI Scripts	
	Saved CLI Scripts Overview	
	CLI Scripts	
	Adding a CLI Script	
	Searching for a CLI Script	161

	Editing a CLI Script	. 161
	Deleting a CLI Script	. 162
	Deleting Multiple CLI Scripts	. 162
	Creating a CLI Script Scheduled Task	. 163
	Execution Results	. 165
	Download All Execution Results	. 165
	Delete All CLI Script Execution Results	. 166
	Delete Execution Results Prior to a Specified Time	. 167
	Script Automation	. 167
	Adding a Script Automation	. 167
	Editing a Script Automation	. 169
	Deleting a Script Automation	. 169
	Deleting Multiple Script Automations	
	Automation Buttons	
	Editing an Automation Button Group	
	Editing an Automation Button	
	Creating an Automation Button Group	
	Changing the Automation Button Widget Size	
13.	Firmware Management	
	Firmware Management Overview	
	Check Firmware Status	
	Model Series Table Overview	
	Selecting a Firmware Version	
	Upgrading Firmware	
14.	Events and Notifications	
	Event Monitoring	
	Viewing Event History	
	Configuring Event Thresholds and Severity Levels	
	Notification Methods	
	Configuring Email Server Settings	
	Notification Management	
	Configuring New Event Notifications	
	Editing or Exporting Registered Actions	
	Editing or Exporting Notification Configurations	
	Custom Event Management	. 194
	Configuring Custom Events	. 194
	Viewing or Exporting Custom Event Settings	. 196
	Enabling/Disabling or Editing Custom Events	. 197
	Syslog Settings	. 198
	Enabling/Disabling the Built-in Syslog Server	
	Viewing Syslog Events	
	Enabling/Disabling Syslog Forwarding	
15.	Inventory Management	
	Assets and Warranty	. 202
	Asset List Overview	. 202
	Warranty Management Overview	. 204
	Warranty Notifications Overview	. 207
	Rogue Device Detection	. 208
	Rogue Device Settings Overview	. 208
	Device Baseline Overview	. 210
	Current Rogue Devices Overview	. 211
	Rogue Device History Overview	. 213
16.	Backups, Restores, and Compares	.215
	Backing Up the MXview One Database	. 215
	Backing Up Device Configurations	. 216
	Restoring Device Configurations	. 218
	Comparing Archived Configuration Files	. 220
	Creating Maintenance Scheduler for Database/Configuration Backups	
17.	Custom Integrations	.224
	OPC UA Server Overview	. 224

	Viewing the OPC Tags Table	224
	Adding an OPC Tag	225
	Editing an OPC Tag	226
	Deleting an OPC Tag	226
	Deleting Multiple OPC Tags	227
	Configuring OPC UA Server Settings	227
	Managing RESTful API Keys	228
	Embedding Web Widgets	230
18.	Wireless Add-on Module	232
	Introduction	232
	System Requirements	232
	Supported Devices	232
	Getting Started With the Wireless Add-on Module	233
	Wireless Module Features	234
	Main Dashboard	234
	Dynamic Wireless Client Roaming	235
	AP/Client Device Dashboard	237
	AP Device Dashboard	237
	Client Device Dashboard	238
	Wireless Device Summary	239
	Wireless Roaming Playback	
19.	Power Add-on Module	242
	Introduction	242
	System Requirements	
	Supported Devices With PRP/HSR Features	242
	Getting Started With the Power Add-on Module	
	Power Module Features	244
	Topology	244
	Ungrouping an IED Group	246
	Creating an IED Group	250
	Import SCD	251
	GOOSE Message	252

The Moxa MXview One network management software consists of three parts: The Main Module, Power Addon Module, and the Wireless Add-on Module. The Moxa MXview One network management software gives you a convenient graphical representation of your Ethernet network, and allows you to configure, monitor, and diagnose Moxa networking devices. MXview One provides an integrated management platform that can manage Moxa networking devices, such as Ethernet switches, wireless APs, SNMP-enabled, and ICMPenabled devices installed on subnets. The MXview Power Add-on Module provides additional advanced functions for power substation applications and the MXview One Wireless Add-on Module provides additional advanced functions for wireless applications to monitor and troubleshoot your network, and help you minimize downtime.

Key Features

Web-based Operation

You will need to install the MXview One on a Windows computer connected to the network(s) that are to be managed. After installing MXview One, the network can be managed using Chrome, Firefox, or Microsoft Edge (version 79+), without installing additional software.

Auto Discovery and Topology Visualization

Within the Device Discovery, MXview One locates networking devices with SNMP or ICMP services enabled. MXview One can collect topology information from devices with LLDP capability and draw the topology of the network, which shows wired and wireless connections. For ICMP devices without LLDP, MXview One can verify the connection relationship through ARP algorithms, and help you create an accurate drawing of the network topology. If any managed PoE switches are in your network, the PoE power output information will also be visualized automatically.

Event Management

For troubleshooting purposes, MXview One logs events that match predefined conditions, such as link up/down, device unreachable, or traffic overloading. The most recent events will be displayed to inform users of the networking status. Devices and links that generate events will be highlighted with different colors. When an event occurs, users can be notified by email.

Configuration and Firmware Management

MXview One provides an interface for managing Moxa networking devices from a central location. Users can remotely backup or update configuration files, and upgrade firmware via MXview One.

Traffic Monitoring

MXview One can log the network traffic of network devices that have been discovered.

System Requirements

The computer that MXview One is installed on must satisfy the following system requirements:

	System Requirements
CPU	Quad-core CPU or better
RAM	16 GB or higher
Hard Disk Space	SSD 1 TB or higher
OS	 Windows 10, Windows 11 (64-bit) Windows Server 2016, Window Server 2019, Windows Server 2022 (64- bit) Linux - Ubuntu 18.04, Ubuntu 20.04, Ubuntu 22.04 For the latest supported OS versions, please visit the MXview One website: <u>https://www.moxa.com/en/products/industrial-network-infrastructure/network-management-software/mxview-one-series#resources</u>
Client Browser Requirements	Browser: Chrome: Version 76 or later Firefox: Version 69 or later Microsoft Edge: Version 79 or later

Supported Devices

MXview One supports a full range of functions, such as network status, traffic log, and configuration/firmware file management.

- For other SNMP-enabled devices, MXview One supports standard management functions, such as link up, link down, and SNMP MIBII information.
- MXview One can only monitor the connectivity of devices that support ICMP.

Please check the MXview One datasheet on moxa.com for a list of Moxa devices that are supported.

2. Installation and Uninstallation

Installation Procedure

For Windows

- 1. Execute the installation program.
- During the installation, you can check the EULA (End-User License Agreement) and choose the directory in which MXview One will be installed and the default language, or leave the settings as the default values.
- 3. After the installation is complete, shortcuts for launching the MXview One server will be created on the desktop and in the start menu.

NOTE

If your computer already has MXview installed, please uninstall it and then start the MXview One program installation process.

For Ubuntu

For Ubuntu installation instructions, please refer to the **MXview One Linux Installation Guide**, which can be downloaded from the Moxa website.

There are two ways to install MXview One on Linux Ubuntu: offline and online installation. We recommend installing MXview One using the **offline method first** to avoid any compatibility issues.

If you are unable to activate MXview One using the online installation method, install the software using the offline method.

Uninstallation

For Windows

- 1. Locate the **Control Panel** in Windows.
- Under Programs, click Uninstall a program.
 The Uninstall or change a program screen appears.
- 3. Select MXview One
- 4. Click Uninstall or Uninstall/Change at the top of the program list.

For Ubuntu

Execute the command line:

#sudo apt remove mxview

MXview One Control Panel

Server Control

For Ubuntu users:

Execute the following command to activate MXview One Control Panel: #sudo /usr/mxview/mxview-control-panel/MXControlPanel

Open a web browser and navigate to https://[host IP address]:7100. The host IP address is the IP of the computer running MXview One. The default IP address is: 127.0.0.1

To stop MXview One in Linux, press CTRL + C.

For Windows users:

Start the MXview One server on the computer before launching the MXview One web console. On the server computer, double-click the MXview One desktop shortcut in the Windows operating system.

The MXview One Control Panel log in screen appears first and after logging in will direct to the Control Panel.

MXview One	e Control Panel
Username	
Password	\$
Log	n

Provide the following login credentials

- Username: The default username is admin.
- **Password:** The default password is **moxa**.

MXview One O	Control Panel	English	💄 admin 🔻
Server Control	â		
Configuration	\oslash		
DB Backup & Restore	Service stopped		
Plug-in Manager	Click Start to begin monitoring your network	t.	
Certificate	Start Open MXview One		
	HTTP port is disabled		
	HTTPS Port: 500		
	Database Port: 443		
	Internal Service Port 1: 8883		
	Internal Service Port 2: 8882		

After logging in with the default credentials, the system will display a message asking you to change the default password to enhance security.

Login Notification	
We strongly recommend that you change the default password to enhance	e security.
	Change

After clicking the **Change** button, the **Change Password** window will appear.

Change Password		
Old Password *	DId Password	ø
		0/128
New Password *	New Password	ø
		0/128
Confirm New Password *	Confirm New Password	ø
		0/128
		Change

Configuration

Configure the following port numbers in the **Configuration** Page:

🙉 MXview One	Control Panel		
Server Control	MXview One Central Manager Server Set	tinas	
Configuration			
DB Backup & Restore	Enable *	Yes	
Plug-in Manager			
Certificates	Manage Licenses Through MXview One Central Manager *	Yes 👻	
	Server Address *	IP/Domain Name	Port
	Server Address *	IP/Domain Name	8883
			1-65535
		Password	
	Authentication *	Password 🗞	
		At least 8 characters 0 / 63	
	Site ID *	Site ID	

MXview One Central Manager Server Settings

Enable

- ➤ Yes: This MXview One site will be managed through MXview One Central Manager. This requires the below MXview One Central Manager settings to be configured.
- No: The MXview One site operates independently and cannot be managed through MXview One Central Manager.

Manage Licenses through MXview One Central Manager

- > Yes: All the licenses of this MXview One site will be managed through MXview One Central Manager.
- > No: The licenses for this site are managed locally at the MXview One site.

• Server Address

- > **IP/Domain Name:** The IP address of MXview One Central Manager.
- Port: The service port used to connect to MXview One Central Manager. The default port number is 8883.
- Authentication
 - > **Password:** The password used to connect to MXview One Central Manager.
- Site ID
 - Site ID: This value represents the site ID as shown on the Site Management page in MXview One Central Manager.

Interface Settings

Web Interface				
	Port			
HTTPS *	500			
	1-65535			
	Enable		Port	
HTTP *	Disabled	*	80	
			1-65535	
Database Interface				
Port *	5432			
	1-65535			
Password *		ø		
	At least 8 characters	8 / 63		
Microservices Interface 🥫				
	Port		Password	
Internal Service Port 1 *	8883		•••••	ø
	1-65535		At least 8 characters	8 / 63
	Port		Password	
Internal Service Port 2 *	Port 8882		Password	\$

Web Interface

80.

- > HTTPS: Specify the HTTPS port of the MXview One Central Manager server. The default port is 443.
- > HTTP: Enable or disable HTTP. If enabled, specify the listening port of the server. The default port is

Database Interface

- Port: Specify the service port of the MXview One Central Manager database server. The default port is 5432.
- Password: The password used to connect to MXview One Central Manager. While the default password is randomized, we strongly recommend you to change the password to enhance security.

Microservices Interface

- > Internal Service Port 1/2:
 - i. **Port:** Specify the communication ports between MXview One and its internal system. The default ports are 8883 and 8882.
 - ii. **Password:** The password used for the microservices interface. While the default password is randomized, we strongly recommend you to change the password to enhance security.

When finished, click Save.

DB Backup & Restore

 Navigate to DB Backup & Restore on the MXview One Control Panel. The Database Backup & Restore screen will appear and includes Backup and Restore functions.

MXview On	e Control Panel		
Server Control			
Configuration	Backup	Restore	
DB Backup & Restore			
Plug-in Manager	Name *		
Certificate			0 / 255
	Save		

- 2. Choose the **Backup** tab to start the process of backing up the database.
- 3. In the **Name** field, specify the backup file name.
- 4. Click Save.
- 5. The message that the file of the backup database has been stored in the specified directory will be displayed.

The database ha	s been backed up to
C:\Users\	\AppData\Roaming\moxa\mxview
one\db_backup\	20230709_120518

6. When the database has been backed up successfully it will appear in the Historical backups list.

(MXview One	Control Pan	el		
Server Control				
Configuration	Backup	Restore		
DB Backup & Restore				
Plug-in Manager	Name *	Backup test		
Certificate			11 / 255	
	Save			
	Historical back	ups		
	Version	Name	Date	Time
	1.1	Backup test	20221215	13:23:37
	1.1	Backup test2	20221215	13:42:02
	1.1	XXX-20221223	20221223	14:09:09

The system backup file includes the following items:

- Topology
- Traffic
- Availability
- Event
- Threshold settings
- Maintenance scheduler settings
- OID items
- Trap items
- System settings
- System Restore

The MXview One system will restore the system configurations from a backup file.

1. Click the **Restore** Tab.

erver Control	Backup	Restore			
B Backup & Restore Yug-in Manager Sertificate		ase backups are stored on t copy a database to a specifi		t C:\Users\AppData\Reaming\moxa\mxview one\db_ba e refresh button to get the latest information.	ickup 🗍
	c				
	Version	Name	Date	Time	
	O 1.1	Backup test	20221215	13-23-37	
	O 1.1	Backup test2	20221215	13:42:02	
	O 1.1	XXX-20221223	20221223	14.09:09	
	0 1.2.0	Backup test	20230709	12.05.18	

2. Choose the backups you want to restore in the table. You can also copy a database to a specific path and then press the refresh button to get the latest result.

3. Click Restore.

A confirmation screen will appear.

Restore Backup	
Are you sure you want to restore t	his backup?
Cancel	Restore

4. Displaying the restoration process.

Restore Backup	
MXview service has stopped — 🕜 Restore Successfully —	MXview service has started
	Close

5. Click Close.

Plug-in Manager

Navigate to **Plug-in Manager** on the **Control Panel**. The Plug-in Manager is a tool that can be used to manage the plug-in files. The **Plug-in Manager** screen features two tabs: **Moxa Devices** and **SNMP Devices**.

Moxa Devices

When you discover a new Moxa product that has not been integrated in to the latest MXview One version, you may not be able to retrieve the product information from MXview One. To solve this, you can download the plug-in file from Moxa's website, and then upload the file in the Plug-in Manager. After uploading the plug-in files, these new models can be supported by MXview One.

The **Plug-in Manager** screen includes the following information:

- Plug-in file version
- Upload a Plug-in file
- Supported device model

MXview One	Control Panel			(
Server Control Configuration DB Backup & Restore	Plug-in Manager				
Plug-in Manager					
Certificates	Plug-in Version v1.3.231226				
	• You can get the latest plug-in file from the Moxa website. 12 If you already have the plug-in file, please verify that the checksum of the plug-in file is the same as the checksum on the Moxa website.				
	Upload a plug-in file				
	Select a plug-in file				
	Upload				
	Supported Device Model(300)				
	Search	Q			
	Model				
	AWK-1131A	AWK-3131A	AWK-4131A		
	AWK-1137C	AWK-3252A	AWK-4252A		
	AWK-1151C	AWK-1161A	AWK-1161C		
	AWK-1165A	AWK-1165C	WAC-1001		
	WAC-2004	TAP-213	TAP-323		
	TAP-6226	EDS-G512E-8PoE	EDS-528E		

Steps to Upload a Plug-in File:

1. Stop MXview One.

🙉 MXview One Control	Panel	H English	💄 admin 🔻
Server Control	0		
Configuration	\bigotimes		
DB Backup & Restore	Service stopped.		
Plug-in Manager	Click Start to begin monitoring your network.		
Certificates	Start Open MOview One		
	HTTP port is disabled		
	HTTPS Port: 550		
	Database Port: 5432		
	Internal Service Port 1: 8883		
	Internal Service Port 2: 8882		

2. Download the latest plug-in file from the Moxa website. <u>https://www.moxa.com/en/products/industrial-network-infrastructure/network-management-software/mxview-one-series#resources</u>

3. Navigate to the **Plug-in Manager** on the **Control Panel**.

🙉 MXview One	Control Panel					
Server Control Configuration	Plug-in Manager					
DB Backup & Restore	Moxa Devices SNMP Devices					
Plug-in Manager	Plug-in Version v1.3.231226					
Certificates	Flug-III version v1.3.231220					
		● You can get the latest plug-in file from the Moxa website. ^[2] If you already have the plug-in file, please verify that the checksum of the plug-in file is the same as the checksum on the Moxa website.				
	Upload a plug-in file					
	Select a plug-in file					
	Upload					
	Supported Device Model(300)					
	Search	Q				
	Model					
	AWK-1131A	AWK-3131A	AWK-4131A			
	AWK-1137C	AWK-3252A	AWK-4252A			
	AWK-1151C	AWK-1161A	AWK-1161C			
	AWK-1165A	AWK-1165C	WAC-1001			
	WAC-2004	TAP-213	TAP-323			
	TAP-6226	EDS-G512E-8PoE	EDS-528E			

- 4. Click the folder (^D) icon in **Select a Plug-in File** to upload the file (.zip) from your local machine.
- Click **Upload** and if successful, the message below will be displayed.
 MXview One will upload the plug-in file and display the supported devices.

Successfully updated

SNMP Devices

By default, MXview One will show basic information for third-party SNMP devices by polling the RFC-1213 public MIB and does not require users to upload device plug-in files. MXview One can also monitor the status of these SNMP devices.

To show more detailed information for third-party SNMP devices in MXview One, users can create an SNMP device plug-in by uploading the device's private MIB files and defining the OID and OID syntax mapping.

🙉 MXview One	Control Panel			
Server Control Configuration Plug-in Manager				
DB Backup & Restore	Moxa Devices SNI	IMP Devices		
Plug-in Manager	Upload a plug-in file			
Certificates	Select a plug-in file			
	Upload			
	Supported Device Model(11	0		
	= .	Q Search		
	Мо	odel		
	🗌 🖍 🖸 📋 Hin	schmann MACH		
	ABI	8		
	🗌 🖍 🖬 Alc	catel		
	🗌 🖍 🖸 Cis	sco Device		
	🗆 🖍 🖸 Em	nerson		
	🗌 🖍 🖬 Hin	rschmann		
	— 🖍 🖬 нр	P Networking Device		
	C 🖍 🖸 Roo	ckweli		
	🗆 🧨 🖸 Sch	hneider		

The tab SNMP Devices includes the following information:

- Upload a plug-in file: This function allows users to upload plug-in files for third-party SNMP devices.
- Supported Device Model: This is the third-party SNMP device plug-in list, including built-in and userdefined SNMP plug-in. You can edit, download but cannot delete the built-in plug-in. If your third-party device is not in the list, you can create a new SNMP plug-in, and please refer to the Create a Plug-in

Creating a Plug-in

Steps to Create an SNMP Plug-in:

- 1. Navigate to Control Panel > Plug-in Manager > SNMP Devices.
- Click the Add () icon.
 The Add an SNMP Model Plug-in screen will appear.

Ø MXview On	e Control Panel			🌐 English 🛛 💄 admin 🔻
Server Control	< Add an SNMP	Model Plug-In		
Configuration		model i lug in		
DB Backup & Restore	0	0	3	4
Plug-in Manager	Specify sysObjectID	Load Device Files	Select and Test OIDs	OID Alias and Value Defination
Certificates				
	sysObjectID *		Get sysObjectID	
		0 / 255		
	Model *			
		0 / 40		
	Next			

There are four steps to creating a third-party SNMP device plug-in file:

- 3. Specify sysObjectID.
 - a. sysObjectID: You can manually type in the sysObjectID or click the Get sysObjectID button to let MXview One retrieve the sysObjectID. When clicking the Get sysObjectID button, the Get sysObjectID From a Device window will appear.

Get sysObjectID	From a Device			
IP Address *				
IP Address	192.168.127.32			
SNMP Settings *				
SNMP Version	V1 -	Port	161	
Username		Password		Q
	0 / 32			0 / 64
Read Community	public			
	6/32			
Data Encryption	NoAuth -	Authentication	MD5	×
Encryption Protocol	DES -	Encryption Password		0
				0/64
			Cancel	Get sysObjectID

After specifying all the necessary information, click **Get sysObjectOID**. If successful, a confirmation message will appear.

 ${\bf Mode}{\rm l}:$ Specify the model name. The model name only supports A-Z a-z 0-9 $_$ - , (comma) () and space.

- b. When finished, click **Next**.
- 4. Load Device Files.
 - a. **MIB Files**: Upload all the necessary MIB files. You can upload multiple MIB files at once.
 - b. **Icon File**: Upload the device icon in PNG format. The maximum resolution is $150 \times 150 px$. The maximum file size is 500 KB limit.
 - □ **Icon Preview**: The icon preview will show the uploaded image as it will appear in the topology.

< Add an SNMP Model Plug-In					
Specify sysObjectID	2 Load Device	Files	3 Select and Test OIDs	4 OID Alias and Value Defination	
MIB Files	HIRSCHMANN-DISCOVERY-MGN				
Icon File *	Hirschmann mach104,png				
Icon Preview	Com m m - 1				
Back					

- c. When finished, click Next.
- 5. Select and Test OIDs.

After uploading the MIB files, the OIDs from the MIB files will be shown. You can test the OIDs to check the value before selecting them and moving on to the next step.

Server Control				
	< Add an SNMP Model Plug-In			
Configuration DB Backup & Restore	\oslash		3	0
lug-in Manager	Specify sysObjectID	Load Device Files	Select and Test OIDs	OID Alias and Value Defination
Dertificates			Q Search	
	CID 010	OID Name	OID Syntax	
	Δ .1.3.6.1.4.1.248.16.100.1.1	hmMgmtDiscMode	Integer32(read-write(1),read-only(2))	
	.1.3.6.1.4.1.248.16.100.1.2	hmMgmtDiscMacAddr	OctetString	
	Δ .1.3.6.1.4.1.248.16.100.1.3	hmMgmtDisclpIntfType	Integer32(loopback-intf(1),router-intf(2),mgmt-intf(3)}	
	.1.3.6.1.4.1.248.16.100.1.4	hmMgmtDiscSwVersion	OctetString	
	.1.3.6.1.4.1.248.16.100.1.5	hmMgmtDiscProductDescr	OctetString	
	.1.3.6.1.4.1.248.16.100.2.1	hmMgmtDiscCfgUUID	OctetString	
	Δ .1.3.6.1.4.1.248.16.100.2.2	hmMgmtDiscCfgProto	Integer32(none(1),bootp(2),dhcp(3))	
	.1.3.6.1.4.1.248.16.100.2.3	hmMgmtDiscCfgIPAddrType	Integer32(unknown(0),ipv4(1),ipv6(2),dns(16)}	
	.1.3.6.1.4.1.248.16.100.2.4	hmMgmtDiscCfgIPAddr	OctetString	

- a. Test OIDs.
 - i. Click on the **Test OID** (²) icon of the OID you want to test. The **Test OID** window will appear.
 - ii. Specify the IP address and SNMP settings.

iii. Click the **Get OID Value** button. The retrieved value will show in the **Value retrieved from OID** field.

Test OID					
IP Address and OID	•				
IP Address	192.168.127.32				
OID	.1.3.6.1.4.1.248.16.100.1.3				
Value retrieved from	n OID		27 / 255		
Value	3		1		
	L		1		
SNMP Settings *					
SNMP Version	V1	*	Port	161	
Username			Password		S.
		0/32			0/64
Read Community	public				
		6/32			
Data Encryption	NoAuth	*	Authentication	MD5	*
					ancel Get

- b. Select OIDs.
 - i. Select the OIDs you want to monitor in MXview One.
 - ii. When finished, click **Next**.

MXview One	Control Panel			🌐 English 🔒
Server Control	□ Σ .1.3.6.1.4.1.248.16.100.1.1	hmMgmtDiscMode	integer32(read-write(1),read-only(2))	
DB Backup & Restore	Σδ .1.3.6.1.4.1.248.16.100.1.2	hmMgmtDiscMacAddr	OctetString	
Plug-in Manager	D 1.3.6.1.4.1.248.16.100.1.3	hmMgmtDiscipintfType	integer32(loopback-intf(1),router-intf(2),mgmt-intf(3))	
Dertificates	□ ₽ 1.3.6.1.4.1.248.16.100.1.4	hmMgmtDiscSwVersion	OctetString	
	Σ .1.3.6.1.4.1.248.16.100.1.5	hmMgmtDiscProductDescr	OctetString	
	D 1.3.6.1.4.1.248.16.100.2.1	hmMgmtDiscCfgUUID	OctetString	
	Δ 1.3.6.1.4.1.248.16.100.2.2	hmMgmtDiscCfgProto	Integer32(none(1),bootp(2),dhcp(3))	
	2.1.3.6.1.4.1.248.16.100.2.3	hmMgmtDiscCfgiPAddrType	Integer32(unknown(0)Jpv4(1)Jpv6(2).dns(16))	
	□ ₽ 1.3.6.1.4.1.248.16.100.2.4	hmMgmtDiscCfgiPAcldr	OctetString	
	Δ .1.3.6.1.4.1.248.16.100.2.5	hmMgmtDiscCfgPrefLen		
	Z D 1.3.6.1.4.1.248.16.100.2.6	hmMgmtDiscCfgGwiPAddrType	Integer32{unknown(0).Jpv4(1).Jpv6(2).dns(16)}	
	Δ .1.3.6.1.4.1.248.16.100.2.7	hmMgmtDiscCfgGwtPAddr	OctetString	
	Σ 1.3.6.1.4.1.248.16.100.2.8	hmMgmtDiscCfgAction	Integer32{other(1),activate(2)}	
	□ Σ 1.3.6.1.4.1.248.16.100.2.9	hmMgmtDiscCfgBlinking	Integer32{enable(1),disable(2)}	

6. OID Alias and Value Definition

An overview of all selected OIDs will be shown. The OID Alias, OID Syntax, and OID Syntax Mapping is listed for each entry.

pecify sysObjectID		Load Device Files	Select and Test OIDs		OID Alias and Value Defination
				Q Search	
OID Name	OID Alias		OID Syntax	OID Syntax Mapping	
/ hmMgmtDiscMode			Integer32{read-write(1),read-only(2)}	read-write(1), read-only(2)	
hmMgmtDiscipIntfType			Integer32{loopback-intf(1),router-intf(2),mgmt-intf(3)}	loopback-intf(1), router-intf(2), mgmt-intf(3)	
/ hmMgmtDiscProductDe	escr		OctetString		
/ hmMgmtDiscCfgIPAddr	Туре		Integer32{unknown(0),ipv4(1),ipv6(2),dns(16)}	unknown(0), ipv4(1), ipv6(2), dns(16)	
hmMgmtDiscCfgPrefLe	n				
hmMgmtDiscCfgGwIPA	ddrType		Integer32{unknown(0),ipv4(1),ipv6(2),dns(16)}	unknown(0), ipv4(1), ipv6(2), dns(16)	
hmMgmtDiscCfgGwIPA	ddr		OctetString		
hmMgmtDiscCfgAction			Integer32{other(1),activate(2)}	other(1), activate(2)	

If necessary, you can manually edit the OID information.

a. Click the **Pencil** () icon of the OID you want to edit. The **Custom Name and Syntax** window will appear.

s for OID Na	ame *		
Name	hmMgmtDisclpIntfType		
Alias	Туре		
		4/64	
Syntax Map	oping		
Syntax	Integer32(loopback-intf(1),router-intf(2),mgmt-intf(3)}	
1			
Syntax Map	oping		
Value		Display Name	
		Display Name loopback-intf	
Value	1/64		
Value	1/64	loopback-intf	
Value	1/64	loopback-intf 13/64	
Value 1 Value	1/64	loopback-intf 13/64 Display Name	
Value 1 Value		Ioopback-intf 13/64 Display Name router-intf	
Value 1 Value 2		loopback-intf 13/64 Display Name router-intf 11/64	

- b. Edit the OID Alias and OID Syntax Mapping information as required.
- c. When finished, click **Apply**.
- When finished with all four steps, click Complete. The Update Plug-in window will appear.



8. If successful, a confirmation will appear indicating the plug-in was created.

SNMP Model	Plug-in addeo	đ			
The plug-in v	will now sh	ow in the Supporte	∥ d Device Model li	st.	
Plug-in Manag	jer				
Moxa Devices	SNMP Devices				
Upload a plug-in file					
Select a plug-in file					
Upload					
Supported Device Mod	el(11)			Q Search	
	Model				
- / 0 1	Hirschmann MACH				
□ / □	ABB				
□ / ⊡	Alcatel				
	Cisco Device				
	Emerson				
□ 🖌 🖸	Hirschmann				

Certificates

From the **Certificate** page, you can view the certificates used by MXview One. By default, you can view information for **Web** certificates. If this MXview One instance is managed through MXview One Central Manager, an additional **MQTT** certificate tab will be available.

Web Certificates

On the **Web** tab, you can view the information for the current web certificates, including:

- Issue To Common Name (CN)
- Issue By Common Name (CN)
- Issue By Organization (O)
- Issued On
- Expires On

rver Control				
nfiguration	Web	MQTT		
Backup & Restore				
ıg-in Manager	Certificate Information			
ertificates	Issue To - Common Name (CN) MXview One			
	Issue By - Common Name (CN) MXview One			
	Issue By - Organization (0) Moxa Inc.			
	Issued On Tuesday, Jul 19, 2033 at 12:00:	:00 AM		
	Expires On			
	Wedneeday, Jul 10, 2022 at 12	00.00 444		
	Wednesday, Jul 19, 2023 at 12:	:00:00 AM		
	Wednesday, Jul 19, 2023 at 12: Regenerate	:00:00 AM		
	Wednesday, Jul 19, 2023 at 12:	:00:00 AM		
	Wednesday, Jul 19, 2023 at 12:	::00::00 AM		
	Wednesday, Jul 19, 2023 at 12:	::00::00 AM		
	Wednesday, Jul 19, 2023 at 12 Regenerate	::00:00 AM		
	Wednesday, Jul 19, 2023 at 12 Regenerate			
	Wednesday, Jul 19, 2023 at 12: Regenerate Import Certificate Private Key (.key) *			

Regenerating the Web Certificate

- 1. Navigate to **Control Panel > Certificates.**
- 2. Go to the Web tab.
- 3. Click the **Regenerate** button.

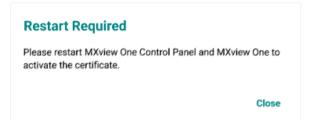
The Regenerate Certificate window will appear.

Web	OPC UA Server	Syslog Server	Syslog Forwarding
Certificate Informa	tion		
Issue To - Common Name (C MXview One	N)		
Issue By - Common Name (C MXview One	N)		
Issue By - Organization (0) Moxa Inc.			
Issued On Wednesday, Jun 19, 2024	4 at 12:00:00 AM		
Expires On Wednesday, Jul 19, 2034	at 12:00:00 AM		
Regenerate			

4. Click **Regenerate** to regenerate the certificate.

Regenerate Certificate
Are you sure you want to regenerate the certificate? The existing certificate will be deleted and a new certificate will be generated.
Cancel Regenerate

5. After successfully regenerating the certificate, MXview One Central Manager Control Panel will need to be restarted for the certificate to take effect. Click Close and restart the instance.



Importing a Web Certificate

You can manually important a certificate file and key file.

- 1. Navigate to **Control Panel > Certificates.**
- 2. Go to the **Web** tab.
- 3. In the **Import Certificate** section, click the folder icon for the Private Key and CA Certificate fields and navigate to the certificate (.crt, .cer) and key (.key) file on the local host.

Import Certificate		
Private Key (.key) *	C:\mxview.key	
CA Certificate (.crt, .cer) *	C:\mxview.crt	
Import		

4. Click Import.

5. After successfully importing the certificate, MXview One Control Panel will need to be restarted for the certificate to take effect. Click **Close** and restart the instance.

Restart Required	
Please restart MXview One Control Panel and MXview One to activate the certificate.)
Close	e

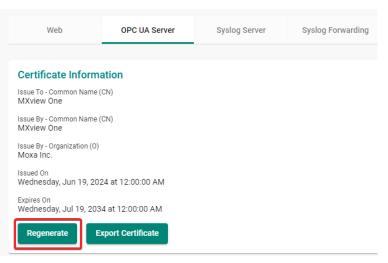
OPC UA Server Certificates

On the OPC UA Server tab, you can view the information for the current OPC UA certificates, including:

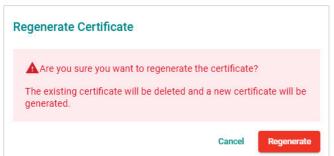
- Issue To Common Name (CN)
- Issue By Common Name (CN)
- Issue By Organization (O)
- Issued On
- Expires On

Regenerating the OPC UA Server Certificate

- 1. Navigate to **Control Panel > Certificates**.
- 2. Go to the OPC UA Server tab.
- Click the Regenerate button.
 The Regenerate Certificate window will appear.



4. Click **Regenerate** to regenerate the certificate.



5. After successfully regenerating the certificate, MXview One Control Panel will need to be restarted for the certificate to take effect. Click **Close** and restart the instance.

Restart Required	
Please restart MXview One Control Panel and MX activate the certificate.	Kview One to
	Close

Exporting the OPC UA Server Certificate

- 1. Navigate to **Control Panel > Certificates**.
- 2. Go to the **OPC UA Server** tab.
- Click the Export Certificate button.
 MXview One will export the OPC UA certificate as a ZIP file.

Web	OPC UA Server	Syslog Server	Syslog Forwarding	
Certificate Inform	ation			
Issue To - Common Name (MXview One	(CN)			
Issue By - Common Name (MXview One	(CN)		Ν	
Issue By - Organization (0) Moxa Inc.			à	
Issued On Wednesday, Jun 19, 20:	24 at 12:00:00 AM			
Expires On Wednesday, Jul 19, 203	34 at 12:00:00 AM			
Regenerate	xport Certificate			

Importing an OPC UA Server Certificate

- 1. Navigate to **Control Panel > Certificates.**
- 2. Go to the **OPC UA Server** tab.
- 3. In the **Import Certificate** section, click the folder icon for the Private Key, Certificate, and CA Certificate fields and navigate to the CA certificate (.crt, .cer), certificate (.pem), and key (.key) file on

the local host.

Import Certificate	
Private Key (.key) *	
Certificate (.pem) *	
CA Certificate (.crt, .cer) *	D
Import	

4. Click Import.

5. After successfully importing the certificate, MXview One Control Panel will need to be restarted for the certificate to take effect. Click **Close** and restart the instance.

Restart Required	
Please restart MXview One Control Panel and MXview One to activate the certificate.	
Close	

Syslog Server Certificates

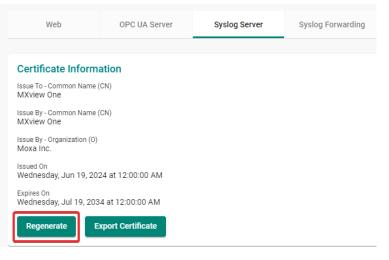
On the **Syslog Server** tab, you can view the information for the current syslog server certificates, including:

- Issue To Common Name (CN)
- Issue By Common Name (CN)
- Issue By Organization (O)
- Issued On
- Expires On

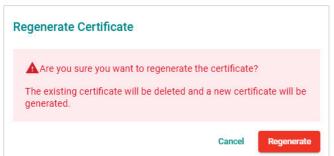
Server Control Configuration DB Backup & Restore Plug-in Manager Certificate Server Control Issue ToCommon Name (CN) MXview One Issue ByOrganization (0) Moxal nc. Issue ByOrganization (0) Moxal nc. Issue Organization (1) Monday, Jun 19, 2034 at 12:00:00 AM Expires On Monday, Jun 19, 2034 at 12:00:00 AM Expires On Monday, Jun 19, 2034 at 12:00:00 AM Expires On Private Key (key) *	MXview One O	Control Panel				•) English	💄 admin 🔻
Computation DB Backup & Restore Plug-in Manager Certificate Information Issue To - Common Name (CN) MXview One Issue By - Organization (0) MXview One Issue By - Organization (0) Moxa Inc. Issue On Sunday, May 19, 2024 at 12:00:00 AM Epines On Monday, Jun 19, 2034 at 12:00:00 AM Import Certificate Import Certificate	Server Control							
Plug-in Manager Certificate Information Issue To - Common Name (CN) MXview One Issue By - Organization (0) MXview One Issue On Sunday, May 19, 2024 at 12:00:00 AM Expires On Monday, Jun 19, 2034 at 12:00:00 AM Expires On Monday, Jun 19, 2034 at 12:00:00 AM Import Certificate Import Certificate	Configuration	Web	OPC UA Server	Syslog Server	Syslog Forwarding			
Plug-in Manager Issue To - Common Name (CN) MXview One Issue By - Common Name (CN) MXview One Issue By - Organization (0) Moxa Inc. Issue By - Organization (0) Moxa Inc. Issue On Sunday, May 19, 2024 at 12:00:00 AM Expines On Export Certificate Import Certificate	DB Backup & Restore	Cartificata Inform	ation					
Issue By- Common Name (CN) MXview One Issue By- Organization (0) Moxa Inc. Issued On Issued On Sunday, May 19, 2024 at 12:00:00 AM Expires On Monday, Jun 19, 2034 at 12:00:00 AM Regenerate Export Certificate	Plug-in Manager	Issue To - Common Name						
Certificate (.pem) *		MXview One Issue By - Common Name MXview One Issue By - Organization (O Moxa Inc. Issued On Sunday, May 19, 2024 Expires On Monday, Jun 19, 2034 Regenerate Import Certificate Private Key (.key) * Certificate (.pem) *	(CN)) at 12:00:00 AM at 12:00:00 AM Export Certificate					
Import		Import						

Regenerating the Syslog Server Certificate

- 1. Navigate to **Control Panel > Certificates**.
- 2. Go to the **Syslog Server** tab.
- Click the Regenerate button.
 The Regenerate Certificate window will appear.



4. Click **Regenerate** to regenerate the certificate.



5. After successfully regenerating the certificate, MXview One Control Panel will need to be restarted for the certificate to take effect. Click **Close** and restart the instance.

Restart Required	
Please restart MXview One Control Panel and I activate the certificate.	MXview One to
	Close

Exporting the Syslog Server Certificate

- 1. Navigate to **Control Panel > Certificates**.
- 2. Go to the Syslog Server tab.
- Click the Export Certificate button. MXview One will export the syslog server certificate as a ZIP file.

Web	OPC UA Server	Syslog Server	Syslog Forwarding	
Certificate Inform	ation			
Issue To - Common Name MXview One	(CN)			
Issue By - Common Name (MXview One	(CN)			
Issue By - Organization (O) Moxa Inc.				
Issued On Wednesday, Jun 19, 2024 at 12:00:00 AM				
Expires On Wednesday, Jul 19, 203	4 at 12:00:00 AM			
Regenerate	xport Certificate			

Importing a Syslog Server Certificate

- 1. Navigate to **Control Panel > Certificates.**
- 2. Go to the **Syslog Server** tab.
- 3. In the **Import Certificate** section, click the folder icon for the Private Key, Certificate, and CA Certificate fields and navigate to the CA certificate (.crt, .cer), certificate (.pem), and key (.key) file on

the local host.

Import Certificate	
Private Key (.key) *	
Certificate (.pem) *	
CA Certificate (.crt, .cer) *	D
Import	

4. Click Import.

5. After successfully importing the certificate, MXview One Control Panel will need to be restarted for the certificate to take effect. Click **Close** and restart the instance.

Restart Required	
Please restart MXview One Control Panel and MXview One to activate the certificate.	
Close	

Syslog Forwarding Certificates

On the **Syslog Forwarding** tab, you can view the information for the current syslog forwarding certificates, including:

- Issue To Common Name (CN)
- Issue By Common Name (CN)
- Issue By Organization (O)
- Issued On
- Expires On

Importing a Syslog Forwarding Certificate

- 1. Navigate to **Control Panel > Certificates.**
- 2. Go to the **Syslog Forwarding** tab.
- 3. In the **Import Certificate** section, click the folder icon for the Private Key, Certificate, and CA Certificate fields and navigate to the CA certificate (.crt, .cer), certificate (.pem), and key (.key) file on

the local host. Repeat these instructions for both the 1st and 2nd syslog forwarding server.

Import Certificate	
Remote IP/Domain 1	
Private Key (.key) *	
Certificate (.pem) *	
CA Certificate (.crt, .cer) *	
Import	
Remote IP/Domain 2	
Private Key (.key) *	
Certificate (.pem) *	
CA Certificate (.crt, .cer) *	
Import	

- 4. Click Import.
- 5. After successfully importing the certificate, MXview One Control Panel will need to be restarted for the certificate to take effect. Click **Close** and restart the instance.

Restart Required

Please restart MXview One Control Panel and MXview One to activate the certificate.

Close

MQTT Certificates



NOTE

By default, no MQTT certificate will be available. To view MQTT certificate information, import the CA Certificate generated through MXview One Central Manager. Refer to <u>Importing the MXview One Central</u> <u>Manager CA Certificate</u>.

If this MXview One instance is managed through MXview One Central Manager, the MQTT tab will be available. On the **MQTT** tab, you can view the information for the current MQTT certificates, including:

- Issue To Common Name (CN)
- Issue By Common Name (CN)
- Issue By Organization (O)
- Issued On
- Expires On

🙉 MXview One Co	ontrol Panel
Server Control	
Configuration	Web MQTT
DB Backup & Restore	
Plug-in Manager	Certificate Information
Certificates	Issue To - Common Name (CN) MXview One
	Issue By - Common Name (CN) MXview One
	Issue By - Organization (O) Moxa Inc.
	Issued On Friday, Jul 15, 2033 at 12:00:00 AM
	Expires On Saturday, Jul 15, 2023 at 12:00:00 AM
	Delete CA Certificate
	Import Certificate
	CA Certificate (.crt, .cer) *
	Import

Importing the MXview One Central Manager CA Certificate

If this MXview One instance is managed through MXview One Central Manager, upload the CA certificate generated through MXview One Central Manager Control Panel here.

1. Click the folder icon for the CA Certificate field and navigate to the certificate file generated through MXview One Central Manager Control Panel on the local host.

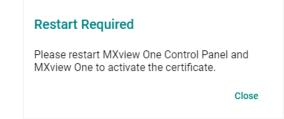
One MXview One	e Control Panel
Server Control	
Configuration	Web MQTT
DB Backup & Restore	
Plug-in Manager	Import Certificate
Certificates	CA Certificate (.crt, .cer) *
	Import

If the uploaded certificate is not from Central Manager, an error message will appear.

Failed to import the certificate. Please make sure	
the certificate is the same as MXview One Central	Close
Manager.	

2. Click Import.

3. After successfully importing the certificate, MXview One Control Panel will need to be restarted for the certificate to take effect. Click **Close** and restart the instance.



Deleting the CA Certificate

1. Click **Delete CA Certificate** to delete the current CA certificate file. The **Delete CA Certificate** window will appear.

Web	MQTT
Certificate Inform Issue To - Common Name (MXview One	
Issue By - Common Name MXview One	CN)
Issue By - Organization (0) Moxa Inc.	
Issued On Wednesday, June 7, 20	23 at 12:00:00 AM
Expires On Tuesday, June 7, 2033 a	at 12:00:00 AM
Delete CA Certificate	

2. When prompted, click **Delete**.

Delete CA Certificate	
Are you sure you want to delete CA certificate? The existing certificate will be deleted.	
Cancel	Delete

3. After successfully deleting the certificate, MXview One Control Panel will need to be restarted for the certificate to take effect. Click **Close** and restart the instance.

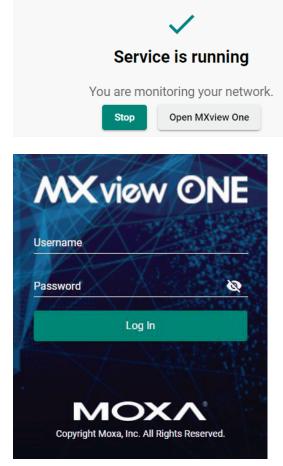
Restart Required	
Please restart MXview One Control Panel and MXview One to activate the certificate.	
Close	

Starting the MXview One Server and Logging Into MXview One

1. On the Server Control page, click Start. The MXview One server will start running.

MXview One C	ontrol Panel	🌐 English	💄 admin 🔻
Server Control	0		
Configuration	\bigotimes		
DB Backup & Restore	Service stopped		
Plug-in Manager	Click Start to begin monitoring your network	c.	
Certificate	Start Open MXview One		
	HTTP port is disabled		
	HTTPS Port: 500		
	Database Port: 443		
	Internal Service Port 1: 8883		
	Internal Service Port 2: 8882		

 Wait for the status to display Service is running, then click Open MXview One and log in to MXview One:



Provide the following login credentials

- **Username:** The default username is **admin**.
- > **Password:** The default password is **moxa**.



NOTE

Alternatively, you can log in to MXview One from a computer located remotely after starting the MXview One service. For more information, see **Logging Into MXview One Remotely**.

Logging Into MXview One Remotely

You can log in remotely to MXview One that is installed on your local site computer from another computer.

1. Launch the MXview One server at the local site computer. Go to the tool bar and click the MXview One icon. Select **Remote Access**.



NOTE

If you want to close the remote function, just click Remote Access again, then the function will be closed.

- 2. Open a web browser on the computer located at the remote site.
- In the address bar, input the IP address or domain name of the computer that you want to log in to MXview One from.
 - > Format: https://[IP address]:[Port]
 - Example: https://192.168.1.250:7100

The MXview One Control Panel appears.

MXview C	
Username	
Password	ě

- 4. Provide the following login credentials
 - > **Username:** The default username is **admin**.
 - > Password: The default password is moxa.

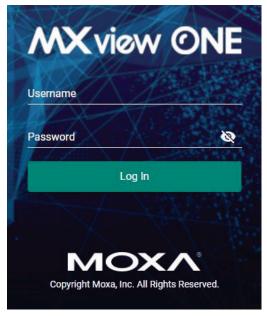
- 5. You can choose one of the actions listed below:
 - Click the Start button
 - Click the Stop button
 - > Change the configurations on the Configuration page

MXview One Co	ontrol Panel	🌐 English 🔹 admin 🔻
Server Control	0	
Configuration	\oslash	
DB Backup & Restore	Service stopped	
Plug-in Manager	Click Start to begin monitoring your netw	vork.
Certificate	Start Open MXview One	
	HTTP port is disabled	
	HTTPS Port: 500	
	Database Port: 443	
	Internal Service Port 1: 8883	
	Internal Service Port 2: 8882	

- 6. To open the MXview One web console, you can type the IP address of the computer at the local site into another web browser once the MXview One Control Panel displays 'Service is running now'.
 - > Format: https://[IP address]
 - > Example: https://192.168.1.250

The MXview One web console appears.

- 7. Provide the following login credentials
 - > Username: The default username is admin.
 - > **Password:** The default password is **moxa**.



NOTE

A maximum of 10 users can log in to MXview One web console at the same time.

License Management

You can monitor your devices inside the networking status via MXview One. Please note, in order to monitor the devices, you need to activate the Node-based license. For example, if you activate 123 nodes in MXview One, then during the device discovery MXview One will only recognize up to 123 nodes. MXview One will stop the device discovery process once it reaches the 123-node limit.

To increase the node limit, you can purchase additional licenses and import the license into MXview One.

Click "Start Trial" to start using MXview One.

Checking the License

The **License Management** screen displays information about your MXview One license, including the number of licensed nodes, nodes currently in use, and application license. You can also use the **License Management** screen to add a new license or deactivate an existing license.

To access the License Management screen, navigate to Menu (≡) > Administration > License Management.

Wireless Add-on License Mode: None	Power Add-on License Mode: None	0
Re-activate License Use both the Deactivation code and a User Code to re-activate your license.	a	
	Mode: None Re-activate License Use both the Deactivation code and User Code to re-activate your license.	Mode: None Mode: None

Adding a New License

To increase the node limit of your MXview One server, you need to add the node-based license.

- Navigate to Menu (=) > Administration > License Management. The License Management screen appears. In the Add New License section, click Add New License.
- 2. Login to the Moxa License Site to activate the MXview One license. Click **Next** to get the User Code.

		(2)		3
Log in to the Moxa Li Site	cense	Copy User Code		Activate
 Log in to the Mc Choose "Activat Registration Coordination Coordinatio	e a Product Li	te 🛛 icense" and "MXview	One" on the site.	
(N	lodel name:	on code (Type: M) LIC-MXviewOne-N	IEW-XN-SR) is)

3. Copy the User Code.

Add New License			
0	2		3
Log in to the Moxa License Site	Copy User Code	A	ctivate
Copy the User Code to the Mo	xa License Site 🛛		
User Code:		Ū	
		Clo	se Next

4. Input a valid activation code.

		3
Log in to the Moxa License Site	Copy User Code	Activate
Download the license from the here.	e <u>Moxa License Site</u> , and past	e the Activation Code

5. Click Apply.

MXview One activates the new license.



NOTE

Please reference Chapter 4: License Management to get more details on how to get the activation code.

Using Device Discovery

MXview One provides Device Discovery to help users quickly determine the network topology and handle basic configuration tasks.

1. To launch Device Discovery manually please do the following:

Navigate to **Menu** (\blacksquare) > **Device Discovery**.

Device Discovery appears to the right of the navigation panel.

D	evice Di	iscovery						
	1 Network	Range(s)			2 Discovery Resu	ılt —		3 Complete
	🛕 Scan	ned range(s) will be sav	ed after devi	ce discovery.				
	Ð							
<		Enabled/Disabled	Name	First IP Address	Last IP Address	Group	Site Name	
	_							0 of 0
	Next							

2. Add the IP address ranges to scan for devices.



NOTE

MXview One supports scanning multiple IP address ranges. The selected IP address scan ranges must be enabled in order for MXview One to scan for devices.



NOTE

Moxa devices must have the SNMP function enabled for MXview One to scan the devices.

Add Scan Range				
Enable Scan Range *				
Enabled	*			
Name *				
		CIDR Prefix *		
First IP Address *	_	/24 (255.255.255.0)	•	
Last IP Address *		CIDR Address Range		
Group *				
Root	•			
			Cano	 Add

a. Click the **Add** (1) icon.

The Add Scan Range screen appears.

- b. Select one of the following options:
 - **Enabled:** Select to enable scanning of the specified IP address range.
 - **Disabled:** Select to disable scanning of the specified IP address range.
- c. Configure the following:
 - □ Provide a custom display Name for the scan range.
 - □ Specify the **First IP Address** of the scan range.
 - □ Specify the **Last IP Address** of the scan range.
 - □ Select the **CIDR Prefix** for the scan range (if applicable).
 - □ Select the MXview One **Group** to assign the scan range to.
- d. Click Add.
- e. (Optional) Add additional network scan ranges, repeat the previous steps.
- f. (Optional) Modify scan range settings, click the **Edit** (\checkmark) icon next to an added scan range.
- g. (Optional) Remove a scan range, click the **Delete** (\mathbf{I}) icon next to the added scan range.
- h. Select one or more scan ranges to scan.
- i. Click Next.

MXview One scans the specified IP address ranges for devices.

De	evice Dis	covery						
(1 Network Ra	nge(s)			2 Discovery Resu	lt		3 Complete
		d range(s) will be sav	ed after devi	ce discovery.				
<		Enabled/Disabled	Name	First IP Address	Last IP Address	Group	Site Name	
	□ / Í	Enabled	Test	192.168.127.1	192.168.127.254	Root	ClaireYHChang-NB	1 – 1 of 1
	Next							

- 3. View devices discovered on the network.
 - a. MXview One displays discovered devices on the **Discovery Result** list. Scroll down to view more devices on the list.

Device Discovery				
Network Range(s)			2 Discovery Result	3 Complete
Device Alias	Device IP	Group	Site Name	
Device discovery successful				0 of 0
< Next				

- b. Click Next.
- 4. Click Browse Topology to view the detailed network topology.

The **Topology** screen appears.

Device Discovery		
Network Range(s)	Discovery Result	3 Complete
0 device(s) added to MXview One		
Browse Topology		

NOTE

MXview One cannot guarantee that it can draw the link of the topology for non LLDP devices. However, you can draw the link of the topology manually by clicking **Add Link**.

Account Management

To launch Account Management, please do the following: Navigate to Menu (\equiv) > Account Management.

The Account Management screen allows you to view, add, modify, and delete user accounts from MXview One. You can also export a list of user accounts and related information as a CSV file.

lser Account	Password Policy Lo	gin Notification	
Users (3)	• •		Q Search
dministrator (1)			C Search
upervisor (0)	Usernam Usernam	e Authority	
lser (2)	🗆 🖍 📋 admin	Administrator	
Set (2)	🗆 🖍 📋 user	User	
	🗆 🖍 📋 guest	User	
			Items per page: 50 1 -

MXview One provides three default accounts:

- admin
- user
- guest

Default Username	Default Password	Authority
admin	moxa	Administrator
user	moxa	User
guest	moxa	User

Each account can be assigned one of the following **Authority** permissions:

- **Administrator:** Has full access rights to modify any settings/configurations and can assign authorities to other accounts.
- Supervisor: Has full access rights to modify any settings/configurations on all pages apart from the Account Management page.
- **User:** Has the permissions listed below.

Function	Description
Dashboard	Read-only
Topology	Read-only
Event History	Can do some actions: Export, Filter
Syslog Viewer	Can do some actions: Export, Filter
Inventory Report	Can do some actions: Export
About MXview One	Can check the version
User Manual	Can link to the document
API Documentation	Can link to the document

Adding User Accounts

- Navigate to Menu (=) > Administration > Account Management. The Account Management screen appears.
- Click the Add (1) icon in the top right corner of the screen.
 The Add User Account screen appears.

Jsername *			
	0/32		
Password *	3		
	0/16		
Authority *	-		

- 3. Configure the following account details:
 - > **Username:** Specify the username for the account.
 - > **Password:** Specify the login password (minimum length: 4 characters) for the account.
 - > Authority: Assign the authority permission (Administrator, Supervisor, or User) for the account.
- 4. Click Add.

Modifying User Accounts

- Navigate to Menu (=) > Administration > Account Management. The Account Management screen appears.
- Click the Edit (
) icon in front of the account you want to modify.

 The Modify user account screen appears.

Modify User	Account
Username USEF	
	4/32
Password *	3
Authority *	0/16
User	-

Cancel Apply

- 3. Modify the following account details:
 - > Password: Specify the login password (minimum length: 4 characters) for the account.
 - > Authority: Assign the authority permission (Administrator, Supervisor, or User) for the account.
- 4. Click Apply.

Deleting User Accounts

- 1. Navigate to Menu (=) > Administration > Account Management. The Account Management screen appears.
- 2. (Optional) Select the check box(es) in front of one or more account(s).
- 3. Click the **Delete** ($\hat{\mathbf{I}}$) icon in front of the account you want to delete, or in the top left corner of the screen (if multiple accounts are selected). MXview One deletes the account(s).

Exporting User Accounts

The Account Management screen allows you to export a CSV file containing all user accounts with corresponding authority permissions and accessible sites.

- 1. Navigate to Menu (=) > Administration > Account Management. The Account Management screen appears.
- 2. Click the **Export** () icon.



3. Select Export CSV.

Configuring the Password Policy

Use the **Password Policy** screen to modify the password requirements for user accounts.

1. Navigate to Menu (=) > Administration > Account Management > Password Policy. The **Password Policy** screen appears.

User Account Password Policy Login Notification Minimum length (4 - 16) * 4 Password complexity strength check At least one digit (0-9) Mixed upper and lower case letters (A-Z, a-z) At least one special character (~!@#\$%^&*j;;,.<>[[{})())	Account Mar	nagement		
 4 Password complexity strength check At least one digit (0-9) Mixed upper and lower case letters (A-Z, a-z) 	User Account	Password Policy	Login Notification	
	4 Password complexit At least one digit Mixed upper and At least one spec	(0-9) lower case letters (A-Z		

- 2. Specify the minimum password length (between 4 to 16 characters).
- 3. Select one or more of the following password complexity requirements:
 - > At least one digit (0~9)
 - > Mixed upper and lower case letters (A~Z, a~z)
 - > At least one special character (~!@#\$%^&*-_|;:,.<>[]{}())
- 4. Click **Save**.

MXview One requires all new account passwords to satisfy the modified password policy.

Configuring Login Notifications

Use the **Password Policy** screen to customize the notifications displayed when users log in to MXview One.

 Navigate to Menu (=) > Administration > Account Management > Login Notification. The Login Notification screen appears.

User Account	Password Policy	Login Notification
Show Login Failu		
 Instantional property and provide the second se	ssword Notification	
ogin Message		
	0 / 250	
ogin Authenticatior	n Failure Message	

- 2. To enable the following notification(s), select the corresponding checkbox(es):
 - > Show Login Failure Records
 - > Show Default Password Notification
- 3. To disable the following notification(s), clear the corresponding checkbox(es):
 - > Show Login Failure Records
 - > Show Default Password Notification
- 4. To display a custom login message, type a string (up to 250 characters in length) in the **Login Message** field.
- 5. To display a custom login authentication failure message, type a string (up to 250 characters in length) in the **Login Authentication Failure Message** field.
- 6. Click Save.

MXview One displays the configured login notifications the next time a user logs in.

Changing the Display Language

Use the **Language** icon screen to customize the notifications displayed when users log in to MXview One.

1. Navigate to Language ($\textcircled{\oplus}$).

The **Language** screen appears.

2. Select language.

Language			
Language			
English	•		
		Cancel	Apply

- 3. MXview One supports the following languages:
 - > German (Deutsch)
 - ➤ Japanese (日本語)
 - > English
 - > Spanish (Español)
 - > French (Français)
 - > Simplified Chinese (简体中文)
 - ➤ Traditional Chinese (繁體中文)

4. Click Save.

MXview One updates the display language.

License Management Overview

The **License Management** screen displays information about your MXview One license, including the license types, the number of licensed nodes, nodes currently in use, and the Add-on license. You can also use the **License Management** screen to add a new license or deactivate an existing license.

To access the **License Management** screen, navigate to **Menu** (\equiv) > **Administration** > **License Management**.

License Management

	MXview One	Node License Mode: Trial Currently Used: 3 Total Number of Licenses:	Wireless Add-on License Mode: None 2000		ver Add-on License e: None		•
<	Moxa License Site	e License Type	Wireless Free Trial		Power Free Trial	Re-activate License	
	4	-7 ays	Start to experience the MXview On Wireless Add-on	e	Start to experience the MXview One Power Add-on	Use both the Deactivation Code and a User Code to re-activate your license.	
			Start Trial		Start Trial	Re-activate	

License Type

MXview One provides numerous types of licenses. Each license has a specific function.

Trial License	You can experience the power of MXview One for 90 days.
Node License	Specifies the number of devices that MXview One can monitor in the network.
Wireless Add-on License	Allows users to access additional wireless related functions.
Power Add-on License	Allows users to access additional power related functions.

Trial License	You can experience the power of MXview One for 90 days.
Node License	Specifies the number of the devices that MXview One can monitor in the network.
Wireless Add-on License	Allows users to access additional wireless related functions.
Power Add-on License	Allows users to access additional power related functions.

Adding a New License

- 1. Navigate to Menu (≡) > Administration > License Management.
 - The License Management screen appears.
- 2. In the Add New License section, click Add New License.

	License M	anagement			
	MXview One				0
		License	Wireless Add-on License	Power Add-on License	
		Mode: None	Mode: None	Mode: None	
		State: No valid licenses			
	L L L L	Current Nodes: 0			
>		Licensed Nodes: 0			
	Moxa License Site				
	Add New Licens	se License Type			

The Add New License screen appears.

Add New Licer	ise			
1		2		3
Log in to the M Site		Copy User Code		Activate
		e_2 cense" and "MXview O	ne" on the site.	
	(Model name: L	on code (Type: MXvi _IC-MXviewOne-NE [\] xxxxxxxxxxxxxxxxxxx		
			C	ose Next

- 3. Click Next.
- 4. Copy the User Code and click **Next**.

Add New License		
Ø —	2	3
Log in to the Moxa License Site	Copy User Code	Activate
Copy the User Code to the Mc	oxa License Site 🗗	
User Code:		6
		Close Next

5. Open a web browser and go to https://license.moxa.com/. Select **MXview One** and Log in to your Moxa account.

6. Click **Products and Licenses > Activate a Product License**. Then, select **MXview One** from the product type list.

Product Type	Please select a product	~
	Please select a product	
	SDC	
	IEF	
	IEC	
	MRC QuickLink	
	MXview One	
	MXview	
	MX-AOPC UA Server	
	MX-AOPC UA Logger	
	MXsecurity	
	Security Package	

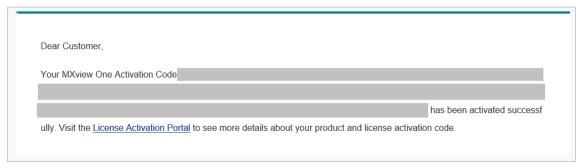
- 7. Input a valid **Registration Code** and see if the Product Type behind the Registration Code has displayed correctly of your license.
- 8. Paste a valid **User code** from MXview One. Click "I have read and agree to the EULA (End-user License Agreements)" checkbox. Then click **Activate** to get the activation code.

	roducts and Licenses / Activate a Product License	
Product Type	MXview One	~
Registration Code	- 380D392 500 500 - 5003 732 3500 MCD	Product Type : MXview One Node_and_Site
User code	9534305-8229412-112-123A9CoDeux57 INEFZ OKY	
0	EULA (End-user License Agreements) he software, you need to read the EULA, and click I know, so that	at the activation process can be
MX	view ON	JE

9. Once the process has been successfully completed, a pop-up window will appear to inform you that your license code has been activated. Click **I know** to close the window. If the license failed to activate, enter the correct Registration Code and User code again. If you are still experiencing problems, please contact Moxa Support.

Thank you for I	purchasing an MXview One product license!
Your license ha	as been activated, we will send you an activation notification
to your mailbox	ς.

10. Check your email account you used to apply for your moxa account. The activation code will be sent to this email address.



- 11. Copy the activation code from the email.
- 12. In MXview One, paste the activation code into the **Activation Code** field.

0	0	3
Log in to the Moxa License Site	Copy User Code	Activate
Download the license from th here.	e <u>Moxa License Site</u> , and paste	e the Activation Code
Activation Code		

13. Click **Apply** and then MXview One will activate the new license.

Adding an Add-on License

 Navigate to Menu (≡) > Administration > License Management. The License Management screen will appear.

MXview One				?
	License	Wireless Add-on License	Power Add-on License	
	Mode: Authorized	Mode: None	Mode: None	
	Current Nodes: 0			
LQJ	Licensed Nodes: 3			

2. Click Add New License. The Add New License screen will appear.

	1	0	
	Moxa License ite	Copy User Code	Activate
•		Site 7 License" and "MXview On	e" on the site.
	(Model nam	ation code (Type: MXvie e: LIC-MXviewOne-NEW xxxxxxxxxxxxxxxxx	

3. Click Next.

4. Copy the User Code and click **Next**.

Ø

NOTE

Please activate the Node-based License before activating the Add-on License.

Add New License		
Add Hew Election		
0	2	3
Log in to the Moxa License Site	Copy User Code	Activate
Copy the User Code to the Mo	oxa License Site 🛛	
User Code:		
		Close Next

- Open a web browser and go to <u>https://license.moxa.com/</u>. Select MXview One and log in to your Moxa account.
- Click Products and Licenses > Activate an add-on or renewal License. Input a valid Add-on Registration Code and see if the Product Type behind the Registration Code has shown your license correctly.



7. Paste a valid User code from MXview One. Then, click **Activate** to get the activation code.

Add-on or Renewal Registration		Product type ' MXVIew One Power
Code		Product type : MXview One Power
User code	Enter your user code	
License Type	ADD	

8. Once the process has been successfully completed, a pop-up window will appear to inform you that your license code has been activated. Click **I know** to close the window. If the license failed to activate, enter the correct Registration Code and User code again. If you are still experiencing problems, please contact Moxa Support.

Thank you for pure	chasing an MXview One product license!
Your license has b	een activated, we will send you an activation notification
o your mailbox.	

9. Check the email account you used to apply for your moxa account. The activation code will be sent to this email address.

Dear Customer,				
Your MXview One Activation Cod	9			
			has been activate	d successf
ully. Visit the License Activation F	ortal to see more details at	out your product and licen	se activation code.	

10. Copy the activation code from the email.

11. In MXview One, paste the activation code into the Activation Code field.

Ø —		- 3
Log in to the Moxa License Site	Copy User Code	Activate
Download the license from th here.	e <u>Moxa License Site ,</u> and past	e the Activation Code

12. Click **Apply** and MXview One will activate the license.

Deactivating a License

If you want to transfer a license to a different instance of MXview One, the license has to be deactivated first.

- Navigate to Menu (=) > Administration > License Management. The License Management screen appears.
- Expand the Licenses section.
 A list of activated licenses and activation codes appears.
- 3. Click **Deactivate** and MXview One will deactivate the license.

icense I	Management		
MXview One	e License Mode: Authorized Current Nodes: 0 Licensed Nodes: 6	Power Add-on License Mode: Authorized	Ø
Moxa License S			
Licenses			^
Activation 0	pe: Power Add-on License Code: art: 2022-06-16 15:15:13		Deactivate

•

NOTE

If you only have one Node-based License with one Add-on License, you will have to deactivate the Add-on License first, then deactivate the Node-based License next.

If you have more than one Node-based License, it is ok for you to deactivate the Node-based License or Add-on License without any order.

Reactivating a Deactivated License

A deactivated license can be reactivated on the current instance of MXview One.

- Navigate to Menu (≡) > Administration > License Management. The License Management screen appears.
- 2. Expand the **Deactivated Licenses** section.

A list of deactivated licenses and deactivation codes will appear.

License M	lanagement		
MXview One	License Mode: Authorized Current Nodes: 0 Licensed Nodes: 6	Power Add-on License Mode: Authorized	Ø
Add New Licen	nse License Type		~
Deactivated lice Wireless Add Deactivation	I-on License		^
License Start	t: 2022-06-16 15:07:15	8	Re-activate

- 3. Click Re-activate and then click Next.
- 4. Copy the deactivation code and click **Next**.

Re-activate License				
0	2	3	·	4
Log In to the Moxa License Site	Copy Deactivation Code	Copy User Code	Ac	ctivate
Copy Deactivation C	ode and paste it on Mo	oxa License Site		
Deactivation Code:			J	•
1				
			Close	Next

- Open a web browser and go to <u>https://license.moxa.com</u>. Select **MXview One** and log in using your Moxa account.
- 6. Select **Products and Licenses** and click **Transfer a Product License**. Then, select **MXview One** from the product type list.

7. Paste the **Deactivation Code** followed by the **New User Code** from MXview One. Then, click **Product Transfer**.

Products and Licenses / Transfer a Product License	
Product Type	MXview One
Deactivation Code	Enter your deactivation code
New User Code	Enter your New User Code
	Product Transfer

NOTE

'Reactivating a Deactivated License' and 'Transfer a Deactivated License to another MXview One instance' are using the same menu here.

If you are implementing 'Reactivating a Deactivated License' on the current instance of MXview One, please paste the current MXview One User code in the 'New User Code' section.

 Once the process has been successfully completed, a pop-up window will appear to inform you that your license code has been deactivated. Click **I know** to close the window. If the license failed to deactivate, enter the license key again. If you are still experiencing problems, please contact Moxa Support.

	Message notification
Deactivation Success	
	l know

9. Check the email account you used to apply for your moxa account. The activation code will be sent to this email address.

ΜΟΧΛ
Dear Customer,
Your New MXview One Activation Code
ed successfully. You can now start using MXview on this system. Visit the License Activation Portal to see more details about yo ur product and license activation code.

10. Copy the activation code from the email.

11. In MXview One, paste the activation code into the Activation Code field.

		0	4
Log In to the Moxa License Site	Copy Deactivation Code	Copy User Code	Activate
Download the licen	se from the Moxa Licens	se Site , and paste the Ac	ctivation Code
here.			

12. Click Apply and MXview One will reactivate the license.

Transferring a License to a Different Instance of MXview One

A deactivated license can be transferred to a new instance of MXview One.

- Navigate to Menu (=) > Administration > License Management. The License Management page will appear.
- 2. Expand the **Deactivated Licenses** section. A list of deactivated licenses and deactivation codes will appear. Copy the deactivation codes.

	Management		
MXview Or	License Mode: Authorized Current Nodes: 0 Licensed Nodes: 6	Power Add-on License Mode: Authorized	0
Add New Li			~
Deactivated	licenses		,
Deactivati	Add-on License ion Code: tart: 2022-06-16 15:07:15	8	Re-activate

- Open a web browser and go to <u>https://license.moxa.com</u>. Select **MXview One** and log in using your Moxa account.
- 4. Select **Products and Licenses** and click **Transfer a Product License**. Then, select **MXview One** from the product type list.

5. Paste the **Deactivation Code** and the **New User Code** from a new installation of MXview One. Then, click **Product Transfer**.

Products and Licenses / Transfer a Product License		
Product Type	MXview One ~	
Deactivation Code	Enter your deactivation code	
New User Code	Enter your New User Code	
	Product Transfer	

NOTE

To obtain a new User Code, please visit "**Adding a New License**", and follow steps 1 to 4 to obtain and copy the new User Code.

6. Once the process has been successfully completed, a pop-up window will appear to inform you that your license code has been deactivated. Click **I know** to close the window. If the license failed to deactivate, enter the license key again. If you are still experiencing problems, please contact Moxa Support.

	Message notification
Deactivation Success	
	l know

7. Check the email account you used to apply for your moxa account. The activation code will be sent to this email address.

ΜΟΧΛ
Dear Customer,
Your New MXview One Activation Code
ed successfully. You can now start using MXview on this system. Visit the License Activation Portal to see more details about yo
ur product and license activation code.

8. Copy the activation code from the email.

9. In MXview One, paste the activation code into the Activation Code field.

		- Ø	- 4
Log In to the Moxa License Site	Copy Deactivation Code	Copy User Code	Activate
Download the licen here.	se from the <u>Moxa Licens</u>	se Site , and paste the Ac	tivation Code
nore.			

10. Click **Apply** and MXview One will reactivate the license.

Quantity of Monitored Devices Exceeds the Number of Node-based Licenses

When the quantity of monitored devices exceeds the activated number of license nodes, you can purchase additional Node-based Licenses and activate them as required. Or you can delete the extra devices that you don't have to monitor.

License Management

MXview One	Current Nodes: 2001 A	fo MXview One will be locked after 30 minutes if you do not add enough licenses or remove nodes over the usage limit.	Wireless Add-on License Mode: Trial please purchase additional nodes
Licenses			
Wireless Trial	Remaining	Re-activate License Use both the Deactivation Code and a User Code to re-activate your license.	
5	58 _{Jays}		

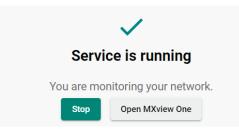
1. Buy Extra Node-based Licenses

Order the required quantity of Node-based Licenses from your channel or Moxa Sales Representative. Then, follow the instructions on **Adding a New License** to activate a new license.

2. Delete Extra Devices

a. You can delete the devices on the **Topology** page to meet the number of Node-based Licenses you available.

- b. Please follow the instructions below:
 - □ Press the **Stop** button in the Control Panel.



- □ After 1 minute, Click **Start** and wait for the status to display 'Service is running now'. Then, click **Open MXview One** and Log in to MXview One.
- □ Navigate to Menu (≡) > Topology.

The **Topology** screen will appear and displays the Topology Map by default.

□ Click the devices you want to delete and then click **Delete**. From now on, MXview One will not count the delete devices.

The MXview One **Dashboard** contains several widgets that provide summary information about your network devices and event highlights.

Dashboard Overview

To access the Dashboard, navigate to **Menu** (\equiv) > **Dashboard**.

Use the **Dashboard** to gain a quick overview of your network devices, important system events.

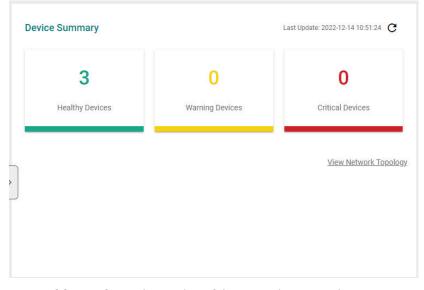
The **Dashboard** displays the following widgets:

- Device Summary
- Event Highlights: Cold/Warm Start Trap
- Event Highlights: ICMP Unreachable
- Event Highlights: Link Down

To refresh the data displayed in all the widgets, click the **Settings** (:) icon in the top right corner of the screen and select **Refresh All**.

Device Summary

The **Device Summary** widget displays the following information about the devices on your network:



- Healthy Devices: The number of devices with no critical events or warnings.
 Click to view additional details about the devices on the Topology screen.
- Warning Devices: The number of devices with warnings.
 Click to view additional details about the devices on the **Topology** screen.
- Critical Devices: The number of devices with critical events.
 Click to view additional details about the devices on the **Topology** screen.

Event Highlights

The Event Highlights will display the following events during the past seven days: Cold/Warm Start Trap, ICMP Unreachable, and Link Down.



Event Highlights: The **Cold/Warm Start Trap** widget displays the number of cold start traps and warm start traps issued by devices at a site, and the day on which the events occurred.

Event Highlights: The **ICMP Unreachable** widget displays the number of times an ICMP-enabled device on your network was unreachable, and the day on which the events occurred.

Event Highlights: The **Link Down** widget displays the number of times a port link was down on a device on a specific date.

You can perform the following actions on this widget:

- To view the number of event highlights issued at a site on a specific date, hover over a bar in the widget chart.
- To view additional details about the event on the **Event History** screen, click a bar on the widget chart.
- To refresh the widget data, click the **Refresh** ($^{\mathbb{C}}$) button following the **Last Update** timestamp.
- To download the Event Highlights data, click (\equiv) below the Refresh button.

6. Device Discovery and Polling

Device Discovery Overview

MXview One uses SNMP, ICMP, and MMS to discover devices within the scan ranges. When a Moxa device has been located, MXview One will generate an actual image of the device, demonstrated below, to indicate the device's location on the network.



MXview One will also list detailed properties and configuration parameters, including the following:

- MAC Address
- Model Name
- IP Address
- Netmask
- Gateway
- Trap Server Address
- Auto IP Configuration
- Type of Redundancy Protocol
- Role in Redundancy Protocol
- Status and Properties of the Port
- Power Status
- Status and Version of the SNMP Protocol

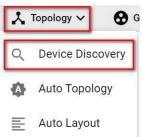
MXview One will display one of the following graphics to indicate devices:

Device	Image
Moxa devices with SNMP enabled.	MOXA SNMP
Non-Moxa devices with SNMP enabled.	SNMP
Non-Moxa devices with ICMP enabled.	ICMP
Non-Moxa devices with MMS enabled.	ммб

Configuring IP Address Scan Ranges

MXview One allows you to scan multiple ranges of IP addresses within your network. Each network range is defined by a starting IP address and an ending IP address. Use **Device Discovery** to configure network scan ranges.

- 1. Access the **Device Discovery** screen by the following method:
 - a. Navigate to **Menu** (\equiv) > **Device Discovery**.
 - b. Navigate to **Menu** (=) > **Topology**, and then navigate to **Topology** > **Device Discovery** from the Topology toolbar menu.



The **Device Discovery** screen will appear.

-	1 Network Ran	nge(s)		Discovery F	Result		3 Complete
	A The sca	nned range(s) will be	saved after th	ne device has been disco	overed.		
<	0						
		Enabled/Disabled	Name	First IP Address	Last IP Address	Group	Site Name
	- / í	Enabled	Test	192.168.127.1	192.168.127.254	Root	Site BRANDON
	•						↓ 1 – 1 of 1
	Next						

- 2. To add a new scan range:
 - a. Click the Add (¹) button in the top left corner.
 The Add Scan Range screen will appear.

Add Scan Range			
Enable Scan Range * Enabled	•		
Name *			
		CIDR Prefix *	
First IP Address *	_	/24 (255.255.255.0)	
Last IP Address *		CIDR Address Range	
Group *			
Root	•		
		Cance	Add

- b. Select the scan range status:
 - Enabled
 - □ Disabled
- c. Provide a Name for the scan range.
- d. Provide the starting IP address for the scan range.
- e. Provide the ending IP address for the scan range.
- f. Select the CIDR Prefix (if applicable).
- g. Assign the scan range to a **Group**.
- h. Click Add.
 - The new scan range appears in the Network Range table.
- 3. To edit a scan range:
 - a. Select the check box next to the scan range in the **Network Range** table.
 - b. Click the **Edit** () icon.
 - The Edit Scan Range screen appears.
 - c. Modify the scan range settings.
 - d. Click Apply.

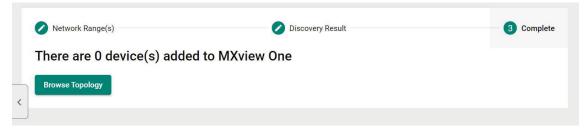
The **Device Discovery** screen displays the **Network Range** table with the updated scan range information.

4. Click **Next** to discover the devices within the specific IP address ranges.

	Network Range(s)		2	Discovery Result	3 Complete
	Device Alias	Device IP	Group	Site Name	
<	Device discovery is finished				0 of 0
	Next				

5. To complete scan range configuration, click **Next**.

The **Complete** tab and the number of devices added to MXview One.



To view the updated topology, click Browse Topology.
 The Topology screen will appear and display the updated Topology Map.

Configuring Device Polling Settings

Devices in the assigned scan range can be discovered via SNMP and ICMP protocols. (The default polling interval of ICMP is 10 seconds, while SNMP is 60 seconds. Users can go to the **Default Device Template** page to change the polling intervals.) After a device is discovered, MXview One will use SNMP and ICMP to poll the device periodically. To configure this function properly, you will need to know the following information:



NOTE

MXview One **Dashboard** widgets also use the device polling settings. For more information about the MXview One **Dashboard** widgets, see Chapter 5: **Dashboard Overview**.

- Navigate to Menu (=) > Administration > Default Device Template. The Default Device Template screen appears.
- 2. Scroll down to the **Polling Settings** section.

Polling Settings ICMP Polling Interval * 10	
10 - 600	sec
SNMP Polling Interval *	
60	
60 - 600	sec

 Configure the following ICMP polling settings: ICMP polling interval: Specify the time in set

ICMP polling interval: Specify the time in seconds between polls. MXview One will use ICMP protocol to check if the device is alive.

- Configure the following SNMP polling settings:
 SNMP polling interval: Specify the time in seconds between polls.
- 5. Scroll down to the **Log In** section to configure the device web console login credentials:
 - > **Username:** The login username for the device web console
 - > **Password:** The login password for the device web console

Log In	
Username *	
admin	
Password *	
	 A

6. Click Save.

MXview One will update the modified settings.

Changing Default SNMP Configuration

The default SNMP read community string that is used to discover devices is public. Use the **Default Device Template** screen to change the default read community string or modify other default SNMP configuration.

- Navigate to Menu (=) > Administration > Default Device Template. The Default Device Template screen will appear.
- 2. Scroll down to the **SNMP Configuration** section.

SNMP Version *		Port *
V1	*	161
Username		
admin		Password
Read Community		Write Community
public		private
Data Encryption		Authentication
Data Encryption NoAuth	~	Authentication MD5
	Ŧ	
NoAuth	•	
	•	

- 3. Configure the following:
 - a. SNMP Version: Select the SNMP protocol version
 - b. SNMP Port: Specify the SNMP port
 - c. Username: Specify the SNMP server username
 - d. Password: Specify the SNMP server password
 - e. Read Community: Specify the new community string
 - f. Write Community: Specify the new community string
 - g. **Data Encryption:** Select the data encryption method
 - □ NoAuth
 - AuthNoPriv
 - AuthPriv
 - h. Authentication: Select the authentication method
 - □ MD5
 - □ SHA
 - □ SHA256
 - □ SHA512
 - i. Encryption Protocol: Select the encryption protocol and input the Encryption Password.
 - DES
 - AES
- 4. Click Save.

MXview One updates the modified settings.

Changing Modbus TCP Settings

By configuring Modbus TCP Settings in the Default Device Template section, MXview One will be able to detect whether a device has Modbus attributes or not. If a device supports Modbus, a Modbus string will appear above the device icon in the topology to easily identify the device.

- Navigate to Menu (=) > Administration > Default Device Template. The Default Device Template screen will appear.
- 2. Scroll down to the Modbus TCP Settings section.

Modbus TCP S	ettings
Enabled *	
Disabled	-
port *	
502	

- 3. Configure the following:
 - a. **Enabled:** Enable or disabled Modbus TCP settings
 - Enabled
 - Disabled
 - b. Port: Specify the Modbus TCP port
- 4. Click Save.

MXview One updates the modified settings.

MXview One allows you to view a graphical representation of your network topology, add/delete devices and links to the Topology Map, organize the topology structure, and export the Topology Map as a PNG image. You can also scan specific IP address ranges to discover devices on your network.

Topology Overview

The Topology screen allows you to view the Topology Map, which is a graphical representation of the devices in your network, and perform most actions in MXview One. For example, you can use the Network Topology screen to do the following:

- Display a graphical representation of a real network.
- Show connecting relationships between devices.
- Indicate the status of devices and links.

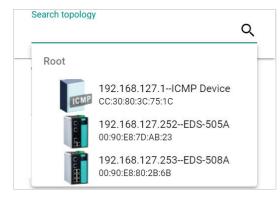


Viewing the Topology Map

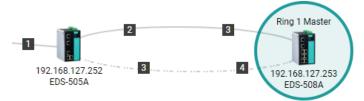
Use the Topology screen to view the Topology Map of your network.

- 1. Navigate to **Menu** (≡) > **Topology**.
 - The **Topology** screen will appear and displays the Topology Map by default.
- If the List view is displayed, click the Topology view (¹) icon in the top right corner.
 The Topology screen will display a graphical representation of the devices and links on your network.
- 3. To search for a specific device on the Topology Map:
 - a. Click the **Search topology** $(^{\mathbb{Q}})$ icon in the top left corner.

The topology search box appears with a drop-down directory tree of the Topology Map structure.



- b. Search the device in the drop-down directory tree or type a string in the search box. Click the specific device and MXview One will bring you to the device on the Topology Map.
- 4. To view the details of a specific device, select the device in the Topology Map.



The **Device Properties** pane appears to the right of the Topology Map.

Device Properties	Current Status
Basic Device Prop	erties
Alias	
EDS-510E	
Model Name	
EDS-510E	
MAC Address	
00:90:E8:86:2F:16	
Availability	
100.00%	
System Description	
EDS-510E-3GTXSF	P
System Object ID	
.1.3.6.1.4.1.8691.7	.84

To view events associated with the device, click the Current Status.
 The Current Status pane displays events associated with the device.



6. To view details about a link between devices, select a link in your Topology Map.



The **Link Properties** pane appears to the right of the Topology Map.

Link Properties
Link Information
From 10.81.10.12
Port 9
To 10.81.10.13
Port 8
Link Speed 1 Gb
SFP Information
From

Viewing Recent Events

Use the **Topology** screen to view recent events from devices in your topology. You can filter the events in the list or export the data as a CSV file.

For more information on viewing all events, see Event Monitoring.

1. Navigate to **Menu** (\equiv) > **Topology**.

The **Topology** screen will appear and displays the **Recent Events** panel on the bottom.

🙏 Topology 🗸	🔂 Group 🗸 🧪 Edit 🗸 💿 Visu	alization 🗸 🛛 📲 SFP	✓			
α #≟	Ring Master 192-168.127.13 192-168.127.63 192-168.127.65 192-168.127.65	Ring 1 Master Ring Ma 192.168.127.93 192.168.12	ster Ring Master	Ring 2 Master Ring 1 Master 127.114 192.168.1	166 127 107	
Always show	"Recent Events" at startup				Q Search	
	Site Name	ID	Source Source IP	Device Alias	Description	Time Issued
0 <u>9</u> 🖬	Site BRANDONYANG-PC	1754	MXview One 192.168.127.168	192.168.127.168-AWK-1131A	Device SNMP reachable	2022-04-28 13:48:34
0 9 🖬	Site BRANDONYANG-PC	1753	MXview One 192.168.127.168	192.168.127.168-AWK-1131A	Device SNMP unreachable	2022-04-28 13:48:28
0 9 🖬	Site BRANDONYANG-PC	1752	MXview One 192.168.127.168	192.168.127.168-AWK-1131A	Device SNMP reachable	2022-04-28 13:38:18
0 9 🖬	Site BRANDONYANG-PC	1751	MXview One 192.168.127.168	192.168.127.168-AWK-1131A	Device SNMP unreachable	2022-04-28 13:38:08
0 9 M	Site BRANDONYANG-PC	1750	MXview One 192.168.127.168	192.168.127.168AWK-1131A	Device SNMP reachable	2022-04-28 13:22:12
0 9	Site BRANDONYANG-PC	1749	MXview One 192.168.127.168	192.168.127.168-AWK-1131A	Device SNMP unreachable	2022-04-28 13:22:04
0 9 🖬	Site BRANDONYANG-PC	1748	MXview One		User login: admin	2022-04-28 13:16:52
0 9 🖬	Site BRANDONYANG-PC	1747	MXview One 192.168.127.168	192.168.127.168AWK-1131A	Device SNMP reachable	2022-04-28 13:01:53
D 9 🖬	Site BRANDONYANG-PC	1746	MXview One 192.168.127.168	192.168.127.168AWK-1131A	Device SNMP unreachable	2022-04-28 13:01:45
□ 9 🖬	Site BRANDONYANG-PC	1745	MXview One 192.168.127.168	192.168.127.168AWK-1131A	Device SNMP reachable	2022-04-28 12:53:20
🗆 🙎 🖬	Site BRANDONYANG-PC	1744	MXview One 192.168.127.168	192.168.127.168AWK-1131A	Device SNMP unreachable	2022-04-28 12:53:15
🗆 🙎 🖬	Site BRANDONYANG-PC	1743	MXview One 192.168.127.168	192.168.127.168AWK-1131A	Device SNMP reachable	2022-04-28 12:32:32
□ 9 🖬	Site BRANDONYANG-PC	1742	MXview One 192.168.127.168	192.168.127.168AWK-1131A	Device SNMP unreachable	2022-04-28 12:32:23
🗆 🙎 🖬	Site BRANDONYANG-PC	1741	MXview One 192.168.127.168	192.168.127.168AWK-1131A	Device SNMP reachable	2022-04-28 12:21:28
□ 9 🖬	Site BRANDONYANG-PC	1740	MXview One 192.168.127.168	192.168.127.168-AWK-1131A	Device SNMP unreachable	2022-04-28 12:21:23
D 9 🖬	Site BRANDONYANG-PC	1739	MXview One 192.168.127.169	192.168.127.169-AWK-4131A	Device SNMP reachable	2022-04-28 12:19:52
	Site BRANDONYANG-PC	1738				

2. To filter the information in the table, type a full or partial string that matches the value in any of the table columns on the right of the search space.

MXview One filters the table to only display events with values that fully or partially match the specified string.

- 3. To filter the information in the table by specific criteria:
 - a. Click the **Filter** (=) icon below the **Recent Events** tab. The criteria selection screen appears.

≔ ⊽ 🖸			
Filter			×
Severity	*	Source	•
Group	•	IP Address	
		Reset	Apply

- b. Specify any of the following criteria:
 - **Severity:** Select the event severity level
 - > Any
 - Information
 - Warning
 - > Critical
 - System Information

- **Source:** Select the source that detected the event
 - > Any
 - MXview One
 - > Trap
- **Group:** Select the device group
- □ IP Address: Select the device IP address
- c. Click Apply.

MXview One filters the table to only display events that match the specified criteria.

- 4. To acknowledge the events in the table:
 - a. Click the Acknowledge (\cong) icon before the specific event, then the event will be confirmed.
 - b. If you want to acknowledge more events, click the checkbox before the events or click the checkbox on the tool bar to select all the events. Then, click the Acknowledge icon.
- 5. To sort the data in the table by a specific column, click the column heading.

MXview One sorts the table by the column.

ID	Source	Source IP 🛧	Device Alias
43	MXview One	192.168.127.252	192.168.127.252EDS-505A

- 6. To export data displayed in the **Recent Events** tab:
 - a. Click the **Export** () icon.

≡ ₹	₽	
	Export CSV	•
		t

- b. Select Export CSV.
- c. Specify the location to save the exported file.
- d. Click Save.

MXview One exports the displayed event data as a CSV file.

7. To quickly filter event, click the **Quick filter event** (\blacksquare) icon to find the events.

The events include the following:

- Unacknowledged Events
- Last 20 Unacknowledged Events
- Last 20 Events
- > Last 50 Events.

≔ ⊽ 🖸
Unacknowledged Events
Last 20 Unacknowledged Events
Last 20 Events
Last 50 Events

8. MXview One allows users to display the Recent Events panel all the time by clicking the **Always show** "Recent Events" at the startup checkbox.

🗆 Alwa] Always show "Recent Events" at start			
:=	₹ 🖸			
		Site Name		

Organizing the Topology Structure By Group Function

The Topology Map can be organized into a multi-layer tree structure of up to 5 layers. Organizing the topology structure into groups helps manage a large number of nodes on the computer screen. For example, users can move nodes of the same subnet or location into the same group. Root, which is the only group at the first layer, exists by default and cannot be deleted. Groups created by users are in the layer under Root. Devices can be moved between groups.

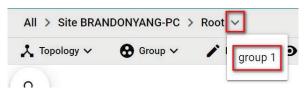
1. Navigate to **Menu** (\equiv) > **Topology**.

The **Topology** screen appears and displays the Topology Map by default.

> MXview One represents the Topology Map structure by a path at the top of the **Topology** screen:



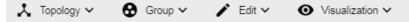
If the Topology Map contains groups under the Root layer, you can click the right arrow (>) and select the group:



> You can also click the following icon used to indicate user-defined groups within the Topology Map:



 If List view is displayed, click the Topology view ([▲]) icon in the top right corner. The Topology screen displays the following toolbar above the Topology Map:



- 3. To create a group:
 - a. Navigate to Group > Create Group. The Create Group screen appears.

-	
6 / 63	
4/128	

- b. Configure the following:
 - Parent Group
 - □ Group Name
 - □ Group Description
 - Group Icon
- c. Click Create.

MXview One will add the group below to the specified parent group.

- 4. To reorganize the groups within the Topology Map structure:
 - a. Navigate to Group > Group Maintenance.

The Group Maintenance screen appears.

Group Maintenance		
▼ Root		
group 1		
	Cancel	Apply

b. Select a layer to modify.

The group details appear to the right of the topology directory tree.

Group Maintenance		
0 1		
▼ Root	Group Name *	
group 1	group 1	
	7 / 63	
	Group Description	
	0/128	
	The maximum image size is 1MB	
	Cancel Apply	

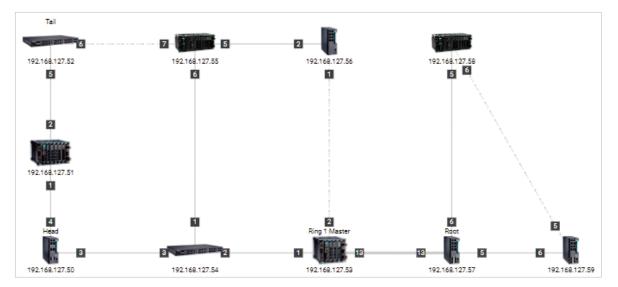
- c. (Optional) Edit the group details or perform one of the following points:
 - i. (Optional) Click **Add** to add a new group below the selected layer.
 - ii. (Optional) Click **Delete** to remove a group from the topology structure.
- d. Click Apply.
- 5. To reassign the device(s) in a group:
 - a. There are two ways to reassign the device(s) in a group:
 - i. Navigate to Group > **Change Group**. The Change Group screen appears.
 - ii. Select the device(s) you want to reassign on the topology and click the Change Group icon on the toolbar.

Root		*	
	IP Address		
	192.168.127.154		
	192.168.127.155		
	192.168.127.156		
	192.168.127.157		
	192.168.127.158		
	192.168.127.159		
	192.168.127.160		
	192.168.127.161		
	192 168 127 162		-
0 Selecte	ed / 50 total		
Assign to	o Group *		
group	1	•	

- b. If the **IP Address** list does not display the IP address(es) of the device(s) you want to reassign, select the **Current Group** drop-down list.
- c. Select the IP address(es) of the device(s) that you want to reassign to a different group.
- d. From the Assign to Group drop-down list, select the new group for the selected device(s).
- e. Click Apply.

Redundant Topologies

Redundant topologies have at least one backup link, which will be indicated with a dashed line:



For devices that play a particular role in the topology, MXview One will label the devices by displaying the roles above the images of the devices. Backup links will be indicated with dashed lines.

- RSTP has a Root
- Turbo Ring has a Master
- Turbo Chain has a Head and a Tail
- Dual Homing

NOTE

Only the **Auto Topology** function can draw dashed lines for redundancy links. Redundant links that are added manually will appear as solid lines.

PoE Power Consumption Visualization

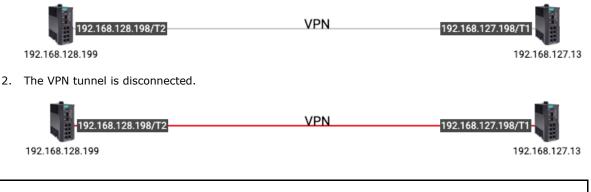
By periodic polling, a PoE link will display the port number, power (watts), voltage (V), and current (mA) directly on the topology map.



VPN Tunnel Visualization

The VPN tunnel link will display 'VPN' on the link.

1. The VPN tunnel is connected.



r

NOTE

VPN Tunnel Visualization is only available on Moxa's EDR-810 and EDR-G9010 series of secure routers.

Port Trunking

Port trunking, also called link aggregation, involves grouping links into a link aggregation group. Trunking links will be indicated with thick, solid lines.





ΝΟΤΕ

Only **Auto Topology** can draw thick lines for trunking links. Trunking links that are added manually will appear as solid lines.



NOTE

For trunked link, check **Device Properties** to get the port number corresponding to the trunking information.



Adding Devices and Links

MXview One allows you to manually add devices and links to an automatically generated Topology Map. The **Topology** screen allows you to add devices from Topology View or List View.

1. Navigate to **Menu** (≡) > **Topology**.

The **Topology** screen appears and displays the Topology Map by default.

- 2. To add a device to the Topology Map:
 - a. Click Edit > Add Device.

The Add Device screen will appear.

IP Address *				
in Address				
Assign Model *		Assign to Group *	.	
SNMP Version *		Port *		
V1	*	161		
Username				
admin		Password		
Read Community		Write Community		
public		private		
Data Encryption		Authentication		
NoAuth	*	MD5	*	
Encryption Protocol				
DES	•	Encryption Passwo	ord	

- b. Configure the following:
 - **IP Address:** Specify the IP address of the device
 - □ Assign Model: Select the model of the device
 - □ Assign to Group: Select the group to assign the device to
 - **SNMP Version:** Select the SNMP version
 - **Port:** Specify the port number
 - **Username:** Specify the device login Username
 - □ **Password:** Specify the password
 - □ Read Community: Specify the SNMP read community string
 - □ Write Community: Specify the SNMP write community string
 - **Data Encryption:** Select the data encryption method
 - **Authentication:** Select the authentication method
 - **Encryption Protocol:** Select the encryption protocol and input the **Encryption Password**
- c. Click Add.

MXview One adds the device to the topology.

- 3. To add a link to the Topology Map:
 - a. Navigate to **Edit > Add Link**.

The Add Link screen will appear.

om		
Device *	 	
Port *		
0		
Device *		
Port *		

- b. Configure the following information for the two devices joined by the link:
 - **Device:** Specify the IP address of the device
 - **Port:** Specify the device port number
- c. Click Add.MXview One adds the link between the specified devices.

Links drawn between two devices in the Topology Map are bidirectional. You may specify either device as the **From** device or the **To** device.

NOTE

NOTE

NOTE

Trunking and redundancy links added manually will appear as solid lines.

Port numbers must be numeric and entered correctly to obtain the correct traffic information.



NOTE

For modular switches, a port number depends on the chassis to which the port belongs, but not on how many modules are inserted. For switches such as the PT-7828, the first module's port numbers are from 1 to 8, the second module's port numbers are from 9 to 16, and so on. The port number depends only on which slot the module is in; in other words, the port number is the same regardless of whether other slots are empty or occupied.

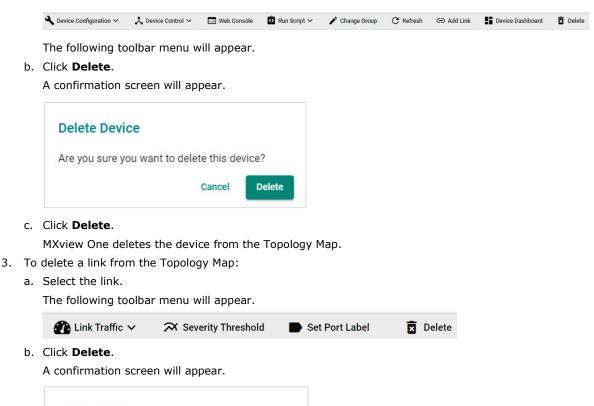
Deleting Devices and Links

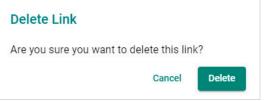
You can delete devices and links from the Topology Map. After a device is deleted, it will be removed from the topology map, and the device will not be polled or located when performing Device Discovery. Deleting a link will delete a link from the topology map, but it will not affect the actual network configuration.

1. Navigate to Menu (≡) > Topology.

The **Topology** screen will appear and display the Topology Map by default.

- 2. To delete a device from the Topology Map:
 - a. Select the device.





c. Click Delete.

MXview One deletes the link from the Topology Map.

Updating the Topology Map

Updating the existing topology adds new links and updates existing links, but does not change the status of links that are indicated as having been disconnected or links that were drawn manually.

For devices with LLDP functionality, MXview One can draw the physical topology map, down to the port level of the devices. For devices without an LLDP MIB, MXview One is able to draw links by using ARP. To activate this function, select the **Advanced Topology Analysis** checkbox from the **Auto Topology** screen.

1. Navigate to **Menu** (≡) > **Topology**.

The **Topology** screen appears and displays the Topology Map by default.

2. If **List view** is selected, click the **Topology view** (\checkmark) icon in the top right corner.

The **Topology** screen displays a graphical representation of the devices and links on your network.

3. Navigate to **Topology > Auto Topology**.

The Auto Topology screen appears.

Auto Topology		
O New Topology		
Existing links are going to be deleted		
Update Topology		
Existing links will be kept while new links are added		
 Advanced Topology Analysis Strict Link Verification Mode 		
*Additional time is required.		
	Cancel	Apply

- 4. Select Update Topology.
- 5. (Optional) Select Advanced Topology Analysis to draw links for devices without an LLDP MIB.
- 6. (Optional) Select **Strict Link Verification Mode**. If enabled, links between devices will only be shown on the topology if the devices on both ends have the other device's information in their LLDP table.
- Click **Apply**.
 MXview One will update the Topology Map.

7	

NOTE

MXview One cannot guarantee that it can draw the link of the topology for non LLDP devices. However, you can draw the link of the topology manually by clicking **Add Link**.

Refreshing the Topology Layout

After changes have been made, use the **Auto Layout** feature to refresh the layout of the Topology Map. Auto Layout does not update any devices or links. It only redraws the topology to better fit the screen.

1. Navigate to **Menu** (≡) > **Topology**.

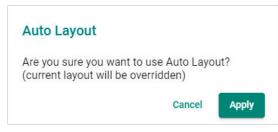
The **Topology** screen will appear and displays the Topology Map by default.

2. If **List view** is selected, click the **Topology view** $(\overset{\star}{})$ icon in the top right corner.

The **Topology** screen will display a graphical representation of the devices and links on your network.

3. Navigate to **Topology > Auto Layout**.

The Auto Layout screen appears.



4. Click Apply.

MXview One refreshes the Topology Map layout.

Creating a New Topology Map

Creating a new topology deletes all links, requests LLDP information from devices, and draws topology maps based on the gathered information.

For devices with LLDP functionality, MXview One can draw the physical topology map, down to the port level of the devices. For devices without an LLDP MIB, MXview One is able to draw links by using ARP. To activate this function, select the **Advanced Topology Analysis** checkbox from the **Auto Topology** screen.

NOTE

Links drawn manually will also be deleted by this action.



NOTE

Your devices must have firmware version 3.1 or higher to use Advanced Topology Analysis.

*	NOTE

If the Auto Topology function does not create an accurate representation of the actual network, deselect the **Advanced Topology Analysis** check box and try again.

- 1. Navigate to **Menu** (\equiv) > **Topology**.
 - The **Topology** screen appears and displays the Topology Map by default.
- 2. If **List view** is selected, click the **Topology view** ($\stackrel{*}{\frown}$) icon in the top right corner.

The **Topology** screen displays a graphical representation of the devices and links on your network.

 Navigate to Topology > Auto Topology. The Auto Topology screen appears.

Auto Topology		
New Topology		
Existing links are going to be deleted		
O Update Topology		
Existing links will be kept while new links are added		
 Advanced Topology Analysis Strict Link Verification Mode 		
*Additional time is required.		
	Cancel	Apply

- 4. Select New Topology.
- 5. (Optional) Select Advanced Topology Analysis to draw links for devices without an LLDP MIB.
- 6. Click Apply.

MXview One will create a new Topology Map.



NOTE

MXview One cannot guarantee that it can draw the link of the topology for non LLDP devices. However, you can draw the link of the topology manually by clicking **Add Link**.

Setting/Editing the Background Image

MXview One allows you to customize the Topology Map by uploading a background image in JPG, GIF, or PNG format.

1. Navigate to Menu (≡) > Topology.

The **Topology** screen appears and will display the Topology Map by default.

- If List view is selected, click the Topology view (^A) icon in the top right corner.
 The Topology screen will display a graphical representation of the devices and links on your network.
- Navigate to Edit > Background.
 The Background screen appears.



- 4. Upload the background image by using one of the following methods:
 - $\succ~$ The image size must be less than 20 MB.

> Click **Set Background** (**b**) icon to upload the image file.

MXview One will set the uploaded image as the Topology Map background.

5. Use the sliders to modify the **Alpha** and **Saturation** value of a background image.

6. Under the **Position** section, modify the value of X and Y to move the origin of the image to a suitable location. Modify the 'Width' and 'Height' to change the size of the image.



7. To delete a background image, click (\blacksquare) to remove the background image from the Topology Map.

Editing the Topology Appearance

Use the **Preferences** screen to modify how the Topology Map displays the topology line style, PoE status, background color, link status, and traffic load.

1. Navigate to Menu (≡) > Administration > Preferences.

The **Preferences** screen appears.

2. In the Appearance section, expand Topology.

The **Topology** settings appear.

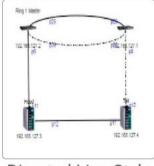
Preferences				
Q _{Search}				
Appearance				
Topology				^
Topology Line Style		Ring I Vaster	Ny tao	
Directed Line Style	•			
			ă, ă	
		142 100 1273	1440) HEND	
		Directed Line Style	Elbow Line Style	
Text Size				
Text Size				
Small	w			

3. To modify the Topology Line Style, select one of the following from the drop-down list:



> Directed Line Style

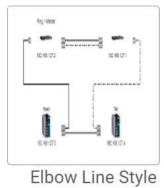
MXview One applies the following style to the lines indicating the links between devices in the Topology Map:



Directed Line Style

> Elbow Line Style

MXview One applies the following style to the lines indicating the links between devices in the Topology Map:



- 4. To modify the text size in MXview One:
 - Select one of the following from the drop-down list:
 - Large
 - Medium
 - Small

Text Size	
Text Size	
Small	-
77	

- 5. To modify how MXview One displays Power-over-Ethernet (PoE) links:
 - a. Select the **Show PoE Status on Topology** check box to indicate the PoE link status on the Topology Map.

PoE	
Show PoE Stat	tus on Topology
PoE Link Color	#CECECE

b. Click the **PoE Link Color** field and specify a new color.

PoE		
Show PoE Status on Topology	s	
PoE Link Color #CECECE	1	
Background		
Background Color #FFFFF		
Status Color		
Link Up	Link Down	
#CECECE	#FFOC	0
Turbo Ring V1	Turbo Ring	
#CECECE	#CECI	#cecece
Turbo Chain	RSTP	Hex

c. (Optional) Clear the **Show PoE Status on Topology** check box to hide the PoE link status on the Topology Map.

PoE
Show PoE Status on Topology
PoE Link Color #CECECE

6. To modify the Topology Map background, click the Background Color field and specify a new color.

	Background	-
	Background Colo #FFFFFF	
	Status Color	
	Link Up	Link Down
	#CECECE	#FF0000
1	Turbo Ring V1	Turbo Ring V2
	#CECECE	
J	Turbo Chain	RSTP
	#CECECE	#CECECE #ffffff \$
	PRP LAN A	PRP LAN B Hex

- 7. To modify the color used to indicate the status of specific links in the Topology Map, click to modify the **Status Color** hex code for any of the following links:
 - Link Up
 - Link Down
 - ➢ Turbo Ring V1
 - Turbo Ring V2
 - Turbo Chain
 - RSTP
 - > PRP/Coupling LAN A
 - PRP/Coupling LAN B
 - HSR Ring

Status Color	
Link Up	Link Down
#CECECE	#FF0000
Turbo Ring V1	Turbo Ring V2
#CECECE	#CECECE
Turbo Chain	RSTP
#CECECE	#CECECE
PRP LAN A	PRP LAN B
#008000	#0000FF
HSR Ring	
#800080	



NOTE

The three status colors (**PRP LAN A, PRP LAN B, HSR Ring**) will appear when you activate the MXview Power license.

8. Click Save.

MXview One will update the modified settings.

Editing the Device Appearance

Use the **Preferences** screen to modify how devices appear in the Topology Map.

- Navigate to Menu (=) > Administration > Preferences. The Preferences screen will appear.
- 2. In the **Appearance** section, expand **Device**.
 - The **Device** settings will appear.

Topology				
Device				
Preview				
	Ì			
IP Address Bottom Label				
None	•			
. If you cha	nge the Alias	setting please delete th	e device on the topology	and
		vice to complete the 'Alia		
Alias Bottom Label		+ Bottom Label		

- 3. To modify the label that indicates the device in the Topology Map:
 - a. Locate the **Bottom Label** drop-down list located below the Preview image:

Device		^
Preview		
IP Address		
Bottom Label		
None	*	
▲ If you change	the Alias setting, please delete the device on the topology and	
	r add a device to complete the 'Alias' setting.	

- b. Select one of the following properties from the **Bottom Label** drop-down:
 - Location
 - Alias
 - Model Name
 - □ MAC

MXview One displays the selected property below the IP address of the device.

Device Appearance	
Preview	
IP Address	
Location	
Bottom Label	
Location	•

- 4. To modify the device alias:
 - a. Locate the **Alias** section.

			ig, please delete the d o complete the 'Alias'	evice on the topology and setting.
Alias				
Bottom Label		+	Bottom Label	
IP Address	-		Model Name	*

- b. From the first drop-down list in the Alias section, select one of the following:
 - □ IP Address
 - □ MAC
 - Model Name
 - Location
 - □ SysName
- c. From the second drop-down list in the Alias section, select one of the following:
 - □ IP Address
 - □ MAC
 - Model Name
 - Location
 - □ SysName

NOTE

If you change the Alias setting, please delete the device on the topology and then rescan or add a device to complete the 'Alias' setting.

5. Click Save.

MXview One updates the modified settings.

Exporting the Topology Map

MXview One allows you to export the Topology Map as a PNG image.

- 1. Navigate to **Menu** (■) > **Topology**.
- The **Topolog**y screen appears and displays the Topology Map by default.
- If List view is selected, click the Topology view (¹/₂) icon in the top right corner.
 The Topology screen will display a graphical representation of the devices and links on your network.
- Navigate to Edit > Export Topology.
 MXview One exports the PNG image of the Topology Map.

8. Network and Traffic Monitoring

MXview One allows you to monitor the traffic between devices on your network and trigger events for specific traffic conditions. You can apply topology views to monitor traffic load, network security, as well as wireless access points and clients.

Viewing Link Properties

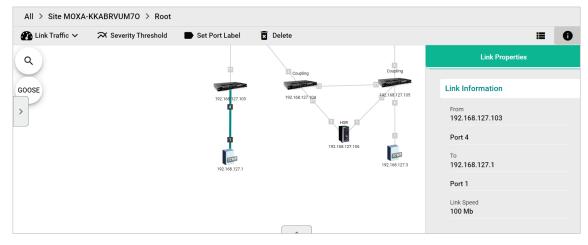
Click a link on the Topology Map to view link properties and perform the following:

1. Navigate to **Menu** (\equiv) > **Topology**.

The **Topology** screen will appear and display the Topology Map by default.

2. Click on a link between devices in the Topology Map.

The Link Properties pane appears to the right of the Topology Map.



Viewing Port Traffic

The **Port Traffic** screen displays a graph that shows the utilization percentage (Y-axis) over a specific time period (X-axis). You can also adjust the time period for the data that is displayed by changing the starting date and ending date. The minimum interval you can select is one day and the maximum interval you can select is 90 days.

1. Navigate to Menu (≡) > Topology.

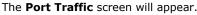
The **Topology** screen appears and displays the Topology Map by default.

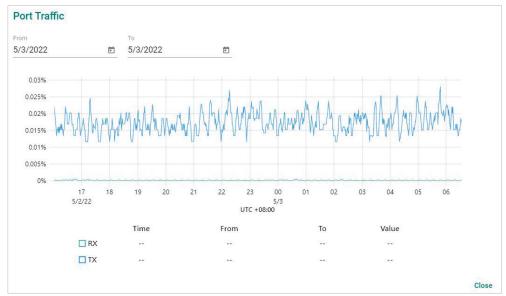
2. Click on a link between devices in the Topology Map.

The Link Properties pane and the following toolbar appear when a link is selected.



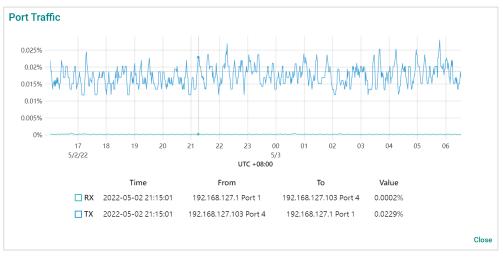
3. Navigate to Link Traffic > Port Traffic.





- 4. To adjust the time period for the graph data:
 - a. Click the **From** date and select a new starting date.
 - b. Click the **To** date and select a new ending date.
- 5. Hover over a line to view the direction of traffic.

For example, the green line at the top of the following graph represents traffic from **192.168.127.1** (device IP address) Port 1 to **192.168.127.103** (device IP address) Port 4.



Viewing Packet Error Rates

The **Packet Error Rate** screen displays a graph that shows the packet error rate (Y-axis) over a specific time period (X-axis). You can also adjust the time period for the data that is displayed by changing the start and end dates. The minimum interval is one day and the maximum interval you can select is 90 days.

1. Navigate to **Menu** (≡) > **Topology**.

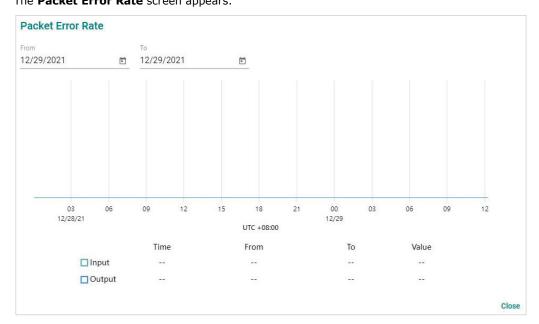
The **Topology** screen appears and displays the Topology Map by default.

2. Click on a link between devices in the Topology Map.

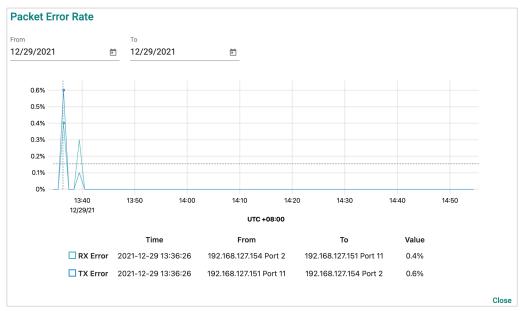
The **Link Properties** pane and toolbar appear when a link is selected.



Navigate to Link Traffic > Packet Error Rate.
 The Packet Error Rate screen appears.



- 4. To adjust the time period for the graph data:
 - a. Click the **From** date and select a new starting date.
 - b. Click the **To** date and select a new ending date.
- 5. Hover over a line to view the packet error rate.



Monitoring Traffic Loads

MXview One collects the traffic load information of every link and displays the information to provide users with a network-wide view.

1. Navigate to **Menu** (\equiv) > **Topology**.

The **Topology** screen will appear and displays the Topology Map by default.

- 2. If **List view** is selected, click the **Topology view** $(\overset{1}{\checkmark})$ icon in the top right corner.
- The **Topology** screen will display a graphical representation of the devices and links on your network. 3. From the toolbar menu, navigate to **Visualization** > **Traffic View**.



The **Traffic Load** legend will appear and the Topology Map color-codes each link to indicate the traffic load.



Monitoring Network Security

ISA/IEC 62443 is a continuously evolving cybersecurity standard whose guidelines have already been adopted in many industrial automation applications. This standard, including its subsections, aims to cover points such as general requirements, policies and procedure, system-level requirements, and componentlevel requirements.

Moxa's MXview One follows Moxa's security guidelines, which are based on the IEC 62443-4-2 componentlevel recommendations. Security View checks the security level of Moxa's network devices. There are five levels for checking the results in Security View:

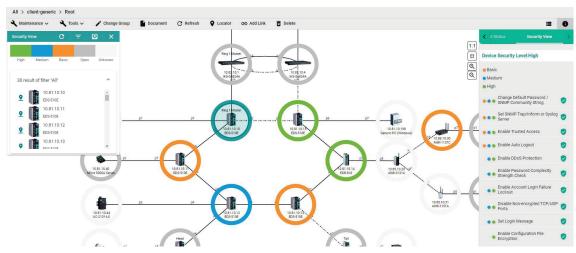
- High
- Medium
- Basic
- Open: Security Level below basic
- Unknown: Devices without security-related information for MXview One

NOTE

The definition of general baseline is based on several industrial cybersecurity policies and requirements.

- 1. Navigate to **Menu** (\blacksquare) > **Topology**.
- The **Topology** screen will appear and display the Topology Map by default.
- If List view is selected, click the Topology view (^{*}) icon in the top right corner.
 The Topology screen will display a graphical representation of the devices and links on your network.
- 3. From the toolbar menu, navigate to **Visualization > Security View**.

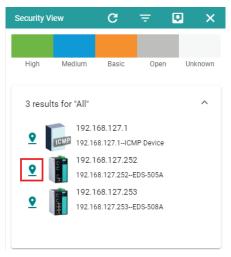
The **Security View** window will appear and the Topology Map indicates the security level of each device with a color-coded circle.



- 4. To filter the devices in the Security View window by security level:
 - a. Click the **Filter** (=) icon.
 - b. Select the security level.

The **Security View** window filters the list of devices to only show devices that match the selected security level.

5. To locate a device in the Topology Map, click the device in the Security View window.



The **Security View** details pane will appear on the right and the Topology Map highlights the circle around the device.

< 11.5	Status Security View >
Device	e Security Level:High
e Basi Med High	ium
•••	Change Default Password /
•••	Set SNMP Trap/Inform or Syslog
	Enable Trusted Access
•••	Enable Auto Logout 🥥
••	Enable DDoS Protection
	Enable Password Complexity Strength Check
••	Enable Account Login Failure
	Disable Non-encrypted TCP/UDP 🥏
	Set Login Message 🛛 🥥
	Enable Configuration File

- 6. View security details for a specific device by using one of the following methods:
 - > Select a device from the Topology Map.
 - > Select a device from the **Security View** window.

The **Security View** details pane will appear and displays the device security level and security-related configuration statuses.

7. View the Security View Report:

Click **Export** to export the Security View Report in either CSV or PDF format.



8. Review the following items in the Security View details pane:

Item	Description
Enable Auto Logout	Check if the Auto Logout function is enabled.
Set Login Message	Check if both the Web Login Message and Web Login Fail Message are configured.
Disable Non-encrypted TCP/UDP Ports	Check if non-encrypted TCP/UDP Ports are disabled. HTTP, Telnet, and Moxa Proprietary Protocol should be disabled. SNMP must be set to V3 only.
Enable Account Login Failure Lockout	Check if the Account Login Failure Lockout function is enabled.
Enable Trusted Access	Check if the Trusted Access function is enabled or not. At least one rule must be set.
Enable Password Complexity Strength Check	Check if the Password Complexity Strength Check function is enabled.
Enable Configuration File Encryption	Check if the Configuration File Encryption function is enabled. At least one rule must be enabled.
Enable DDoS Protection	Check if Broadcast Storm Protection is enabled. For eCos switches, MXview One checks whether Broadcast Storm Protection is enabled. For EDR routers, MXview One checks whether at least one form of DoS protection is enabled. For MXnos switches, MXview One checks whether at least one of the following is enabled: Broadcast, Multicast, or DLF protection.
Set SNMP Trap/Inform or Syslog Server	Check if the SNMP Trap/Inform or Syslog Server is set.
Change Default Password/SNMP Community String	Check if the Default Password or SNMP Community String is set.
Enable SSL/TLS High Secure Mode	Check if the HTTPS is enabled and HTTP is disabled.



NOTE

Users can use Security Wizard function in MXconfig to easily set the Security View status of devices.

- 9. To modify the colors used to indicate the security levels:
 - a. Navigate to Menu (=) > Administration > Preferences.
 The Preferences screen will appear.
 - b. Under the **Appearance** section, expand **Security View**.
 - c. In the **Colors for check result** section, modify the color used to indicate a security level.

Security View		^
Profile		
Built-in Profile	Profile details	
Colors for check result		
High	Medium	
#77B800	#009DDB	_
Basic	Open	
#FA943E	#C0C0C0	
Basic	Open	-
		Save

d. Click Save.

- 10. To define a custom security profile:
 - a. Navigate to Menu (=) > Administration > Preferences.
 The Preferences screen will appear.
 - b. Under the $\ensuremath{\textbf{Appearance}}$ section, expand $\ensuremath{\textbf{Security View}}.$
 - c. From the **Profile** drop-down list, select **User defined**. The user-defined profile settings will appear.

Security	y View			^
Profile User def	fined			
Colors for	r check result			
Pas #7	ss 77B800	_		
	t Pass A943E	_		
<	Switch	NPORT5000A	Device Server	>
辈				
	Check Item			
	Enable Auto Logout			
	Set Login Message			

- d. (Optional) Modify the colors for the check result.
- e. Click one of the following device tabs to configure the profile settings:
 - Switch
 - □ NPORT5000A
 - Device Server
 - Terminal Server
 - Gateway
 - □ Wireless
 - IO
- f. (Optional) Click the **Settings** (\bar{z}) icon to select a baseline.
- g. Select the check box for each item you want to add to security profile.
- h. Click Save.

Configuring Severity Thresholds for Traffic and Fiber Status Monitoring Events

MXview One allows you to configure the following traffic conditions on a link to trigger events:

- Bandwidth utilization is over the threshold.
- Bandwidth utilization is under the threshold.
- Packet error rate is over the threshold.
- Fiber Rx is under the threshold.
- Fiber Tx is under the threshold.
- Fiber temperature is over the threshold.
- Fiber voltage is under the threshold.
- Fiber voltage is over the threshold.

Since a link is bidirectional, the event will be triggered when the traffic condition in either direction satisfies the configured severity threshold.

1. Navigate to **Menu** (≡) > **Topology**.

The **Topology** screen will appear and display the Topology Map by default.

2. Click on a link between devices in the Topology Map.

The Link Properties pane and toolbar appear when a link is selected.

🕐 Link Traffic 🗸	🛪 Severity Threshold	Set Port Label	🗴 Delete
------------------	----------------------	----------------	----------

3. Click Severity Threshold.

The Severity Threshold screen will appear.

Bandwidth Utilization	Packet Error Rate	SFP Threshold
Over *		
0	Warning	-
	%	
Under *		
0	Warning	*
	%	
		Cancel Apply

Severity Threshold		
Bandwidth Utilization	Packet Error Rate	SFP Threshold
Over * 0 %	Warning	v
		Cancel Apply

Bandwidth Utilizatio	on	Packet Error Rate	SFP Threshold
SFP TX Under *			
0		Warning	*
0 ~ -100 SFP RX Under *	dBm	2	
0		Warning	*
0 ~ -100 SFP Voltage Under *	dBm		
0		Warning	-
0 ~ 10 SFP Voltage Over *	V		
0		Warning	*
0 ~ 10 SFP Temperature Over *	V		
0		Warning	-
0~200	°C		
			Cancel A

- 4. To trigger an event when the bandwidth utilization on a link exceeds a specified percentage:
 - a. Click the Bandwidth Utilization tab.
 - b. In the $\ensuremath{\textbf{Over}}$ field, specify the maximum bandwidth utilization percentage.
 - c. From the adjacent drop-down list, select one of the following severity levels:
 - Information
 - Warning
 - Critical
- 5. To trigger an event when the bandwidth utilization on a link falls below a specified percentage:
 - a. Click the Bandwidth Utilization tab.
 - b. In the **Under** field, specify the minimum bandwidth utilization percentage.
 - c. From the adjacent drop-down list, select one of the following severity levels:
 - Information
 - Warning
 - Critical
- 6. To trigger an event when the packet error rate exceeds a specified percentage:
 - a. Click the Packet Error Rate tab.
 - b. In the **Over** field, specify the maximum bandwidth utilization percentage.
 - c. From the adjacent drop-down list, select one of the following severity levels:
 - □ Information
 - Warning
 - Critical
- 7. To trigger an event when the SFP Tx falls below a specific range:
 - a. Click the **SFP Threshold** tab.
 - b. In the SFP Tx Under field, specify the maximum Tx threshold in dB (0~-100)
 - c. From the adjacent drop-down list, select one of the following severity levels:
 - Information
 - Warning
 - Critical

- 8. To trigger an event when the SFP Rx falls below a specific range:
 - a. Click the **SFP Threshold** tab.
 - b. In the SFP Rx Under field, specify the maximum Rx threshold in dB (0~-100)
 - c. From the adjacent drop-down list, select one of the following severity levels:
 - Information
 - Warning
 - Critical
- 9. To trigger an event when the SFP voltage falls below a specific range:
 - a. Click the SFP Threshold tab.
 - b. In the SFP Voltage Under field, specify the maximum voltage in V (0~10)
 - c. From the adjacent drop-down list, select one of the following severity levels:
 - Information
 - □ Warning
 - Critical
- 10. To trigger an event when the SFP voltage exceeds a specific range:
 - a. Click the SFP Threshold tab.
 - b. In the SFP Voltage Over field, specify the minimum voltage in V (0~10)
 - c. From the adjacent drop-down list, select one of the following severity levels:
 - Information
 - □ Warning
 - Critical
- 11. To trigger an event when the SFP temperature exceeds a specific range:
 - a. Click the SFP Threshold tab.
 - b. In the SFP Temperature Over field, specify the minimum temperature in Celsius (0~100)
 - c. From the adjacent drop-down list, select one of the following severity levels:
 - Information
 - Warning
 - Critical
- 12. Click Apply.
 - MXview One will update the modified settings.
- 13. (Optional) Configure the Severity Threshold and Fiber status:
 - a. Navigate to Menu (=) > Administration > Global Device Settings.

The **Global Device Settings** screen appears.

- b. To set the threshold, you can go to the sections below to complete the settings.
 - Bandwidth Utilization
 - Packet Error Rate
 - SFP Threshold
- c. Click Save.

MXview updates the web console protocol settings.

NOTE

If you complete the Bandwidth Utilization, Packet Error Rate, and SFP Threshold settings in the Global Device Settings section, the settings will be implemented to all the devices in your topology.

Configuring Custom Port Labels

MXview One uses the following port labelling convention to identify directions of traffic on a link.

<Device IP Address> / <Port Number>

You can use the Set Port Label screen to customize the port labels.

- 1. Navigate to **Menu** (≡) > **Topology**.
 - The **Topology** screen will appear and display the Topology Map by default.
- 2. Click on a link between devices in the Topology Map.

The Link Properties pane and toolbar appear when a link is selected.

🕐 Link Traffic 🗸	lpha Severity Threshold	Set Port L	abel 🔀	Delet
Click Set Port Label . The Set Port Label so	creen appears.			
Set Port Label				
Use Custom Label				
From: 10.81.10.12 / Po	Drt 8			
To: 10.81.10.11 / Port	8			
		Cancel	Apply	

- 4. Select the Use Custom Label check box.
- 5. In the **From** field, provide a new label for the source port.
- 6. In the **To** field, provide a new label for the destination port.
- 7. Click Apply.

3.

Viewing the SFP Fiber Status in Table View

MXview One collects and display fiber status in SFP > SFP List

👗 Topology 🗸	🔂 Group 🗸	🖍 Edit 🗸	O Visualization ∨	SFP ∨ F Power ∨
٩				:≡ SFP List
			/	Sync Threshold From the D

The list shows Fiber TX, RX, temperature, and voltage of the cables that are connected.

C						QS	earch		
	TX (dBm)	RX (dBm)	Temp. (°C)	Volt. (V)		TX (dBm)	RX (dBm)	Temp. (°C)	Volt. (V)
10.81.10.12 Port 8 / SFP-1GSXLC	-6.1	-6.3	42.1	3.3	10.81.10.11 Port 8 / SFP-1GSXLC	-6	-5.9	43	3.3
10.81.10.10 Port 8 / SFP-1GSXLC	-6.3	-5.8	4 <mark>1</mark> .6	3.3	10.81.10.11 Port 9 / SFP-1GSXLC	-6.2	-6.1	44.2	<mark>3.3</mark>
10.81.10.12 Port 9 / SFP-1GSXLC	-6	-5.9	43.7	3.3	10.81.10.13 Port 8 / SFP-1GSXLC	-6.1	-6.2	40.7	3.4
					Items per page: 50	Ŧ	1 – 3 of 3	< <	> >

Synchronize the SFP Threshold From the Device

MXview One can synchronize the threshold from devices, which can detect Moxa's SFP connector to get the specific threshold.

Navigate to SFP > Sync Threshold From the Device

📩 Topology 🗸	🔂 Group 🗸	🖍 Edit 🗸	$igodoldsymbol{\Theta}$ Visualization $m{arphi}$	SFP ∨ F Power ∨
٩				 ∷≡ SFP List ☆ Sync Threshold From the D

Click **Sync** and the threshold from the devices will sync to the SFP Threshold of every link.

Sync the SFP Threshold	From the [Device
You can sync the SFP Thresho Temperature, Tx Power, and Rx the SFP Threshold of every link	Power of Fil	
*To check the SFP Threshold, you can clie Threshold.	ck on a link, then	choose Severity Threshold \rightarrow SFP
Severity Threshold		
Bandwidth Utilization	Packet Error Rate	SFP Threshold
SFP TX Under *	Warning	
0 ~ -100 dB SFP RX Under *	wanning	
0	Warning	•
0 ~ -100 dB SFP Voltage Under *		
0	Warning	•
0 ~ 10 dB SFP Voltage Over *		
0	Warning	-
0 ~ 10 V SFP Temperature Over *		
0	Warning	
0 ~ 100 °C		
Are you sure you want to sync	the SFP three	shold from the device?
		Cancel Sync

The MXview One **Topology** screen provides several features and tools for managing and maintaining devices in your network topology.

Viewing the Device List

The **List view** on the **Topology** screen will display a list of discovered devices in your network topology. You can also use this view to manually add devices to your network topology or export filtered data as a CSV file.

≡ /	WX view ONE							() English	👤 admin 🖲
Root	>								
/ E	dit 🗸								. 6
Ŧ	0						Q Search		
	Device Alias	Model	Device IP	MAC Address	Firmware Version	Location			
	192.168.123.72-AWK-1151C	AWK-1151C	192.168.123.72	00:90:E8:05:17:45	v2.0 Build 2022_1007_1814				
	192.168.127.11-EDS-G516E	EDS-G516E	192.168.127.11	00:90:E8:54:E1:E6	V6.3 build 23032200	Test			
	192.168.127.12EDS-G4008	EDS-G4008	192.168.127.12	00:90:E8:8F:F0:18	v3.1 Build 2023_0217_1005	aa			
	192.168.127.13-EDS-408A	EDS-408A	192.168.127.13	00:90:E8:89:F8:C2	V3.12 build 22101114	Switch Loca	tion		
	192.168.127.14-EDS-G512E-8PoE	EDS-G512E-8PoE	192.168.127.14	00:90:E8:4D:A7:32	V6.2 build 20080519	Switch Loca	tion		
þ	192.168.127.16EDS-4012-8P-4GS	EDS-4012-8P-4GS	192.168.127.16	00:90:E8:90:A5:6E	v3.2 Build 2023_0719_1007				
6	192.168.127.25PT-G7728	PT-G7728	192.168.127.25	00:90:E8:71:1E:A5	V6.3 build 22120913	Switch Loca	tion		
	192.168.127.26PT-G7728	PT-G7728	192.168.127.26	00:90:E8:86:19:CD	V6.3 build 22120913	Switch Loca	tion		
	192.168.127.27-PT-G7728	PT-G7728	192.168.127.27	00:90:E8:8E:F7:C6	V6.3 build 22120913	Switch Loca	tion		
	192.168.127.28PT-G7828	PT-G7828	192.168.127.28	00:90:E8:79:23:82	V6.3 build 22120913	Switch Loca	tion		
	192.168.127.29PT-G7728	PT-G7728	192.168.127.29	00:90:E8:99:E9:08	V6.2 build 21110316	Switch Loca	tion		
	192.168.127.32-Hirschmann	Hirschmann	192.168.127.32	00:80:63:B3:B2:80		Hirschmann	MACH		
	192.168.127.222-ICMP Device	ICMP Device	192.168.127.222	00:E0:99:01:2A:68					

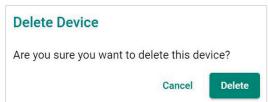
- 1. Navigate to **Menu** (\blacksquare) > **Topology**.
- The **Topology** screen will appear and display the Topology Map in Topology view.
- Click the List view (■) icon in the top right corner.
 The Topology screen displays a list of devices on your network.

- 3. To add a device to your network topology:
 - a. Click **Edit > Add Device**.

The Add Device screen will appear.

Add Device					
IP Address *					
Assign Model *		Assign to Group	* 👻		
SNMP Version *		Port *			
V1	*	161			
Username					
admin		Password			
Read Community		Write Community			
public		private			
Data Encryption		Authentication			
NoAuth	•	MD5	-		
Encryption Protocol					
DES	-	Encryption Passy	vord		
				Cancel	Add

- b. Configure the following:
 - □ IP Address: Specify the IP address of the device
 - □ Assign Model: Select the model of the device
 - □ Assign To Group: Select the group to assign the device to
 - □ SNMP Version: Select the SNMP version
 - □ Username: Specify the device login Username
 - **Password:** Create a password
 - **Read Community:** Specify the SNMP read community string
 - □ Write Community: Specify the SNMP write community string
 - **Data Encryption:** Select the data encryption method
 - **Authentication:** Select the authentication method
 - **Encryption Key:** Specify the encryption key
- c. Click Add.
 - MXview One adds the device to the topology.
- 4. To delete devices in your network topology:
 - a. Check the box on the first column of devices.
 - b. Click the **Delete** $(\overline{\mathbf{Z}})$ icon on the menu bar. The **Delete Device** screen appears.
 - c. For non AWK devices, read the message and then click **Delete** if you are sure you want to delete the device.



d. For AWK devices, read the message and wait for the countdown. Click **Delete** if you are sure you want to delete the device.

Delet	e Devic	е			
A	Confirm	nation o	f devic	e(s) del	etion
devi trac to p	torical dat ice(s) will eability o roceed? Wireless F Device Da	also be f listed f Roaming	e purgeo features g Playba	d and af s. Do yo	fect
			Dele	ete (2)	Cancel

ΝΟΤΕ

If you click the check box for all the devices, when you click the Delete icon, you will delete all the devices in the topology.

 To view device properties, select the check box next to the **Device Alias**. The **Device Properties** details pane will appear.

Device Properties	Current Status
Pagio Device Propo	artico
Basic Device Prope	intes
Alias	
EDS-510E	
Model Name	
EDS-510E	
MAC Address	
00:90:E8:86:2F:16	
Availability	
100.00%	
System Description	
EDS-510E-3GTXSFP	
System Object ID	
.1.3.6.1.4.1.8691.7.8	84

- 6. To filter the device list by severity level:
 - a. Click the Filter ([〒]) icon in the top left corner. The Severity drop-down list appears.

		>
Severit	У	•
	Reset	Apply

- b. Select one of the following severity levels:
 - □ Critical
 - □ Warning
 - □ Information
- c. Click Apply.

MXview One filters the device list to only display devices with the selected severity level.

- 7. To export the device list:
 - a. Click the **Export** () icon.

Ŧ	J
	Export CSV
	client-generic

b. Select Export CSV.

MXview One will export the displayed data as a CSV file.

Importing Device Configurations

Use the **Topology** screen to import an INI-formatted configuration file to a device in your network topology by selecting the device from the **Topology Map** or **Device List**.

- 1. Navigate to Menu (\equiv) > Topology.
 - The **Topology** screen will appear and display the Topology Map by default.
- 2. Select one of the following views:
 - > **Topology view:** Displays a graphical representation of devices in your network topology.
 - > List view: Displays a list of the devices in your network topology.
- 3. Select the device that you want to import configurations to:
 - **Topology view:** Click the icon of the device in the Topology Map.
 - > List view: Select the check box next to the site name in the Device List.

The toolbar options change.

🔧 Device Configuration 🗸 🕹 Device Control 🗸 😌 Cybersecurity Controls 🗸 🖃 Web Console 🔯 Run Script 🗸 🖍 Change Group 🕐 Refresh 🖙 Add Link 🖿 PRP/HSR Tags 🕫 Delete

4. Navigate to **Device Control > Import Config**.

The Import Config screen appears and indicates the IP address of the selected device.

Import Config - 192.168.127.25	52
Import Config *	
The maximum file size is 1 MB.	
* Please make sure the username and p for this device are correctly set in "Adva Settings"	
Cancel	Import

- 5. Click the folder ([■]) icon to upload the configuration file from your local machine.
- 6. Click **Import**.

MXview One imports the configuration file to the specified device.

Exporting Device Configurations

Use the **Topology** screen to export an INI-formatted configuration file from a device in your network topology by selecting the device from the **Topology Map** or **Device List**.

1. Navigate to **Menu** (\equiv) > **Topology**.

The **Topology** screen will appear and display the Topology Map by default.

- 2. Select one of the following views:
 - > **Topology view:** Displays a graphical representation of the devices in your network topology.
 - > **List view:** Displays a list of the devices in your network topology.
- 3. Select the device that you want to export configurations from.
 - > **Topology view:** Click the icon of the device in the Topology Map.
 - > List view: Select the check box next to the device in the Device List.

The toolbar options change.

🔦 Device Configuration 🗸 Device Control 🗸 Device Control V 🗘 Cybersecurity Controls V 🖃 Web Console 🧰 Run Script V 🖍 Change Group 🕐 Refresh 🖙 Add Link 🖿 PRP/HSR Tags 🛱 Delete

4. Navigate to **Device Control > Export Config**.

The **Export Config** screen will appear and indicate the IP address of the selected device.

Export Config - 192.168.127.252
* Please make sure the username and password for this device are correctly set in "Advanced Settings"
Cancel Export

5. Click Export.

MXview One exports the device configurations as an INI file in the specified location.

Upgrading Firmware

Use the **Topology** screen to upgrade the firmware (ROM-formatted file) on a device in your network topology by selecting the device from the **Topology Map** or **Device List**.

1. Navigate to **Menu** (\equiv) > **Topology**.

The **Topology** screen appears and displays the Topology Map by default.

- 2. Select one of the following views:
 - > **Topology view:** Displays a graphical representation of the devices in your network topology.
 - b. List view: Displays a list of the devices in your network topology.
- 3. Select the device that you want to upgrade the firmware for:
 - > **Topology view:** Click the icon of the device in the Topology Map.
 - > List view: Select the check box next to the device in the Device List.

The toolbar options change.

🔧 Device Configuration 🗸 Device Control 🗸 Device Control 🗸 😯 Cybersecurity Controls 🗸 📰 Web Console 🔯 Run Script 🗸 🖍 Change Group 🕐 Refresh 🖙 Add Link 🍽 PRP/HSR Tags 🛱 Delete

4. Navigate to **Device Control > Upgrade Firmware**.

The **Upgrade Firmware** screen appears and indicates the IP address of the selected device.

Upgrade Firmware - 192.168.127.252			
Upgrade Firmware *	E]	
* Please make sure the use for this device are correctly Settings"			
	Cancel	Upgrade	

5. Click the folder (■) icon to upload the ROM-formatted firmware file from your local machine.

6. Click Upgrade.

MXview One will upgrade the firmware on the specified device.

Configuring SNMP Trap Server

MXview One can collaborate with other network management software and send SNMP Traps to non-Moxa NMS. MXview One supports up to two trap servers depending on the device.

1. Navigate to **Menu** (≡) > **Topology**.

The **Topology** screen will appear and display the Topology Map by default.

- 2. Select one of the following views:
 - > **Topology view:** Displays a graphical representation of the devices in your network topology.
 - > List view: Displays a list of the devices in your network topology.
- 3. Select the device.
 - > **Topology view:** Click the icon of the device in the Topology Map.
 - > List view: Select the check box next to the device in the Device List.

The toolbar options change.

🔧 Device Configuration 🗸 Device Control 🗸 Device Control 🗸 🖓 Cybersecurity Controls 🗸 🖃 Web Console 🧰 Run Script 🗸 🧨 Change Group 🕐 Refresh 🖙 Add Link 🍽 PRP/HSR Tags 🛱 Delete

4. Navigate to **Device Configuration > Trap Server**.

The Trap	Server	screen	appears.
-----------------	--------	--------	----------

Trap Server	
Destination IP1 *	
10.82.10.6	
Community Name1 * public	
Destination IP2 *	_
Destination IP2 *	 -
Community Name2 *	-

- 5. Configure the following SNMP trap server settings for the device:
 - > Destination IP1
 - > Community Name1
 - > (Optional) **Destination IP2**
 - > (Optional) Community Name2
- 6. Click Apply.

MXview One sends SNMP traps to the configured trap server(s) when events are detected on the device.



NOTE

When a device fails to reply within seven seconds, MXview One will display the message "Failed to update device Trap server settings." Please confirm the execution results via the same settings page or go to the web page of the devices.

Configuring Port Settings

Use the **Topology** screen to configure port settings for a device in your network topology by selecting the device from the **Topology Map** or **Device List**.

1. Navigate to **Menu** (≡) > **Topology**.

The **Topology** screen appears and displays the Topology Map by default.

- 2. Select one of the following views:
 - > **Topology view:** Displays a graphical representation of the devices in your network topology.
 - > List view: Displays a list of the devices in your network topology.
- 3. Select the device.
 - > **Topology view:** Click the icon of the device in the Topology Map.
 - > **List view:** Select the check box next to the device in the Device List.

The toolbar options will change.

🔧 Device Configuration 🗸 Device Control 🗸 Device Control 🗸 😯 Cybersecurity Controls 🗸 🧮 Web Console 🤷 Run Script 🗸 🧨 Change Group 😷 Refresh 🖙 Add Link 🕒 PRP/HSR Tags 😨 Delete

 Navigate to Device Configuration > Ethernet/Fiber Port Settings. The Ethernet/Fiber Port Setting screen appears.

1	*		
Enable *			
Enabled	*		
Media Type			
1000TX,RJ45,POE.			
Port Description			
Apply settings to another port	Ŧ		

- 5. Configure the following port settings for the device:
 - > **Port:** Select the port number.
 - > Enable: Enable or disable the port.
 - > **Port Description:** Provide a description of the port.
 - Apply settings to another port: Select to apply the configured settings to other ports on the device.
- 6. Click Apply.

MXview One will update the port settings to the device.

Configuring SNMP Communication Protocol

Use the **Topology** screen to configure SNMP settings for a device in your network topology by selecting the device from the **Topology Map** or **Device List**.

1. Navigate to **Menu** (≡) > **Topology**.

The **Topology** screen appears and displays the Topology Map by default.

- 2. Select one of the following views:
 - > **Topology view:** Displays a graphical representation of the devices in your network topology.
 - > List view: Displays a list of the devices in your network topology.
- 3. Select the device.
 - > **Topology view:** Click the icon of the device in the Topology Map.
 - > List view: Select the check box next to the device in the Device List.

The toolbar options will change.

🔧 Device Configuration 🗸 Device Control 🗸 Device Control 🗸 😯 Cybersecurity Controls 🗸 🧮 Web Console 🔯 Run Script 🗸 🖍 Change Group 🕐 Refresh 🖙 Add Link 🗩 PRP/HSR. Tags 🛱 Delete

 Navigate to Device Configuration > SNMP Communication Protocol. The SNMP Communication Protocol screen will appear.

SNMP Version * V3	Port* ▼ 161			
Username	Passw	ord		
admin		•	Ø	
Read Community	Write 0	Community		
public	priva	te		
Data Encryption	Auther	tication		
AuthPriv	▼ SHA		Ŧ	
Encryption Protocol	Encryp	tion Password		
DES	· ·····		3	

- 5. Configure the following SNMP settings for the device:
 - > SNMP Version
 - > SNMP Port
 - > Username
 - > Password
 - > Read Community
 - > Write Community
 - > Data Encryption
 - > Authentication
 - > Encryption Protocol
 - > Encryption Password
- 6. Click Apply.

MXview One updates the SNMP communication protocol settings to the device.

ľ

NOTE

For the first time, users can use the Default Device Template function to set the function template. For more information, see **Changing Default SNMP Configuration**.

Configuring MXview One Polling Interval

Use the **Topology** screen to configure ICMP or SNMP polling settings for a device in your network topology by selecting the device from the **Topology Map** or **Device List**.

1. Navigate to **Menu** (\blacksquare) > **Topology**.

The **Topology** screen will appear and display the Topology Map by default.

- 2. Select one of the following views:
 - > **Topology view:** Displays a graphical representation of the devices in your network topology.
 - > List view: Displays a list of the devices in your network topology.
- 3. Select the device.
 - > **Topology view:** Click the icon of the device in the Topology Map.
 - > List view: Select the check box next to the device in the Device List.

The toolbar options change.

🔦 Device Configuration 🗸 🙏 Device Control 🗸 😯 Cybersecurity Controls 🗸 🖃 Web Console 🤷 Run Script 🗸 🖍 Change Group 🕐 Refresh 🖙 Add Link 🕒 PRP/HSR Tags 😨 Delete

- 4. Navigate to **Device Configuration > MXview One Polling Interval**.
 - The MXview One Polling Interval screen appears.

MXview One Polling Interval			
ICMP Polling Interval *			
10			
10 - 600 SNMP Polling Interval *	sec		
60			
60 - 600	sec		
		Cancel	Apply

- 5. Configure the following polling settings for the device:
 - > ICMP polling interval
 - > SNMP polling interval
- 6. Click Apply.

MXview One will update the polling settings for the device.

NOTE

For the first time, users can use the Default Device Template function to set the function template. For more information, see **Default Device Template**.

Configuring Device Accounts

Use the **Topology** screen to configure advanced settings for a device in your network topology by selecting the device from the **Topology Map** or **Device List**.

1. Navigate to **Menu** (\equiv) > **Topology**.

The **Topology** screen will appear and display the Topology Map by default.

- 2. Select one of the following views:
 - > **Topology view:** Displays a graphical representation of the devices in your network topology.
 - > List view: Displays a list of the devices in your network topology.
- 3. Select the device.
 - > **Topology view:** Click the icon of the device in the Topology Map.
 - > List view: Select the check box next to the device in the Device List.

The toolbar options change.

🔧 Device Configuration 🗸 Device Control 🗸 Device Control 🗸 😯 Cybersecurity Controls 🗸 🖃 Web Console 🧰 Run Script 🗸 🧨 Change Group 😷 Refresh 🖙 Add Link 🖝 PRP/HSR Tags 🛱 Delete

4. Navigate to **Device Configuration > Device Accounts**.

The **Device Accounts** screen appears.

Device Acco	ounts		
Username			
admin			
Password			
	6		

5. Enter the **Username** and **Password** for the device web console.

6. Click Apply.

MXview One updates the advanced settings.

Modifying the Device Alias

Use the **Topology** screen to configure advanced settings for a device in your network topology by selecting the device from the **Topology Map** or **Device List**.

1. Navigate to **Menu** (\equiv) > **Topology**.

The **Topology** screen will appear and display the Topology Map by default.

- 2. Select one of the following views:
 - > **Topology view:** Displays a graphical representation of the devices in your network topology.
 - > List view: Displays a list of the devices in your network topology.
- 3. Select the device.
 - > **Topology view:** Click the icon of the device in the Topology Map.
 - > List view: Select the check box next to the device in the Device List.

The toolbar options change.

🔧 Device Configuration 🗸 Device Control 🗸 Device Control > 😯 Cybersecurity Controls > 🖃 Web Console 🔯 Run Script > 🖍 Change Group C Refresh GD Add Link 🗩 PRP/HSR Tags 🛱 Delete

4. Navigate to **Device Configuration > Device Alias**.

The Device Alias	screen appears.
-------------------------	-----------------

Device Alias			
Alias 192.168.127.14EDS-G512E-8PoE			
	30 / 63		
		Cancel	Apply

- 5. Edit the **Alias** field.
- 6. Click **Apply**.

MXview One updates the advanced settings.

Changing the Device Icon

Use the **Topology** screen to change the device icon by selecting the device from the **Topology Map** or **Device List**, and then upload a JPG, GIF, or PNG image file.

1. Navigate to **Menu** (≡) > **Topology**.

The **Topology** screen will appear and display the Topology Map by default.

- 2. Select one of the following views:
 - > **Topology view:** Displays a graphical representation of the devices in your network topology.
 - > List view: Displays a list of the devices in your network topology.
- 3. Select the device.
 - > **Topology view:** Click the icon of the device in the Topology Map.
 - > List view: Select the check box next to the device in the Device List.

The toolbar options will change.

🔧 Device Configuration 🗸 Device Control 🗸 🕑 Cybersecurity Controls V 🔄 Web Console 🔯 Run Script V 🖍 Change Group 🕐 Refresh 🖙 Add Link 🖝 PRP/HSR Tags 🛱 Delete

 Navigate to Device Configuration > Change Device Icon. The Change Device Icon screen appears.

Change Device Icon		
IP Address: 10.81.10.11	-	
Model Icon *		
	Cancel	Apply

5. Click the folder (►) icon to upload the device icon from your local machine. (The maximum image size is 100 KB.)

6. Click Apply.

MXview One will change the device icon to the uploaded JPG, GIF, or PNG image file.

Signing on to Device Web Consoles

MXview One allows you to use the **Topology** screen to the web console for a device from the **Topology Map** or **Device List**.



NOTE

You can use the **Global Device Settings** screen to configure the web console protocol. The web console protocol can be set to HTTP or HTTPS, and then the port numbers of the HTTP and HTTPS can be set by users.

- 1. (Optional) Configure the web console protocol:
 - a. Navigate to Menu (=) > Administration > Global Device Settings.
 The Global Device Settings screen appears.
 - b. Find the **Management Interface** to complete the settings.

HTTP	
HTTP Port *	
80	
HTTPS Port *	
443	

- c. Configure the following:
 - Web Console Protocol
 - HTTP Port
 - □ HTTPS Port
- d. Click Save.

MXview One updates the web console protocol settings.

$\boldsymbol{\rho}$	

NOTE

If you complete the Management Interface settings in the Global Device Settings section, the settings will be applied to all the devices in your topology.

2. Navigate to **Menu** (\equiv) > **Topology**.

The **Topology** screen will appear and display the Topology Map by default.

- 3. Select one of the following views:
 - > **Topology view:** Displays a graphical representation of the devices in your network topology.
 - > List view: Displays a list of the devices in your network topology.
- 4. Select the device.
 - > Topology view: Click the icon of the device in the Topology Map.

> List view: Select the check box next to the device in the Device List.

The toolbar options change.

🔧 Device Configuration 🗸 Device Control 🗸 🤣 Cybersecurity Controls 🗸 🖃 Web Console 🔯 Run Script 🗸 🖍 Change Group 🕐 Refresh 🖙 Add Link 🖿 PRP/HSR Tags 🕫 Delete

5. Navigate to **Web Console**.

The login screen for device web console appears in a new browser tab.



NOTE

You may need to allow pop-ups on your web browser in order to view the device web console.

- 6. Enter the **Username** and **Password** for the device web console.
- 7. Click Login.

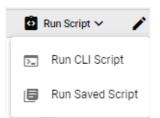
The device web console will successfully log in.

Managing and Running Scripts

The **Run Script** function allows you to quickly perform a set of actions on one or multiple devices at once. You can run scripts on selected devices from the **Topology** or **Device Management** screen.

Click the **Run Script** (¹²⁾) icon in the menu bar to expand the script functions. There are two main functions:

- Run CLI Script: Write and run a CLI script and test if the script works correctly.
- Run Saved Script: Select and run a CLI Script from the Saved CLI Scripts database. Refer to the Saved CLI Scripts section.



Running a CLI Script

- 1. In the **Topology** or **Device Management** screen, select the device(s) to run the script on.
- Click the Run Script (¹²⁾) icon in the menu bar and click Run CLI Script. The Run CLI Script window will appear.

Script			
			1.
acted Daviace			0 / 9999
ected Devices			
ected Devices	Alias	Model	0 / 9999
	Alias 192.168.127.12-EDS-G4008	Model EDS-G4008	
IP			

- 3. Enter the script:
 - a. In the CLI Script field, enter the CLI command(s) to execute.
 - b. Confirm the selected devices that the script will be executed on.
 - c. Click Run.

4. The system will show the script execution status for each device.

In CLI Script				
CLI Execution Re If you leave this scree	sults n, you can download the execution results from	n Saved CLI Scripts > Executi	on Results.	
IP	Alias	Model	Status	
192.168.127.12	192.168.127.12EDS-G4008	EDS-G4008	In Progress	
192.168.127.16	192.168.127.16EDS-4012-8P-4GS	EDS-4012-8P-4GS	In Progress	
				•

I

ΝΟΤΕ

You cannot perform any actions on the device while the script is running. If you close the MXview One web page, you can download the execution results from **Saved CLI Scripts > Execution Results** page.

5. Check the script results.

When all devices have finished running the script, click the **Expand** (\checkmark) icon next to the device to check the result.

				,
				27 / 999
Alias	Model	Status		A
192.168.127.12EDS-G4008	EDS-G4008	Finished	~	
192.168.127.16EDS-4012-8P-4GS	EDS-4012-8P-4GS	Finished	~	

- 6. You can either run or save the script:
 - a. **Run script**: Modify the CLI script (if necessary) and click **Run**. The system will execute the CLI script on the selected devices.
 - b. **Save script**: Click **Save as a CLI Script** to save the CLI script for future use. The **Save CLI Script** window will appear.

Save CLI Script			
Name *			
0 / 64			
Description *			
0 / 255 CLI Script			
show interfaces description			
			- 1
			27 / 9999
	Cancel	Back	Save

- i. Enter a name and description for the script. The CLI Script field is read-only and cannot be modified here.
- ii. Click **Save**. A confirmation message will appear.

New CLI script created successfully

iii. The CLI script will be stored and shown in the **Saved CLI Scripts** section.

								() English	🔔 admin 🔻
Sa	aved	CI	LIS	Scripts					
	CLIS	Script	s	Execution Resu	lts Script Automation	Automation Buttons			
				Script scheduled tasks to	run CLI scripts at a specified	date and time from the Administration	Maintenance Scheduler page.		
	۰						Q Search		
<				Name	Description	Linked Scheduled Tasks	Linked Script Automations		
		1	1	reload-task	reload-description		start-btn, diff_cli-btn, same_cli_btn1		
		1	1	reload-task-new	reload-description-new		diff_cli-btn, same_cli_btn2		
		1	I.	Interface description	Show interface description				
-									

Running a Saved CLI Script

- 1. In the **Topology** or **Device Management** screen, select the device(s) to run the script on.
- Click the Run Script (¹⁰) icon in the menu bar and click Run Saved Script. The Run Saved Script window will appear.



If no saved scripts can be found, the following message will appear.

Run Sav	ved Script	
¢	"No CLI scripts found. Add a CLI script first from Saved CLI Scripts" Add a CLI Script	
		Close

Click the **Add a CLI Script** to create a script. Refer to <u>Adding a CLI Script</u>.

 Select the script you want to execute and confirm the selected devices that the script will be executed on.

You can modify the script if necessary.

elect a CLI Script				
			Q Search	
CLI Script Name	Description			
Interface description	Show interface description			
(Þ
I Script				,
show interfaces description				
now interfaces description				
				28/9
elected Devices				28/9
elected Devices				28/9
		Alias	Model	28/9
elected Devices		Alias	Model	28/9
IP				28/9
elected Devices IP 192.168.127.12		Alias 192.168.127.12EDS-G4008	Model EDS-G4008	28/9
IP 192.168.127.12		192.168.127.12EDS-G4008	EDS-G4008	28/9
IP				28/9
IP 192.168.127.12		192.168.127.12EDS-G4008	EDS-G4008	28/9

4. Click Run.

5. The system will show the script execution status for each device.

CLI Execution Re f you leave this scree	esults en, you can download the execution results from	n Saved CLI Scripts > Executi	on Results.	
IP	Alias	Model	Status	
		EDS-G4008	In Progress	
192.168.127.12	192.168.127.12EDS-G4008	ED3-64008		



ΝΟΤΕ

You cannot perform any actions on the device while the script is running. If you close the MXview One web page, you can download the execution results from **Saved CLI Scripts > Execution Results** page.

6. Check the script results

When all devices have finished running the script, click the **Expand** (\checkmark) icon next to the device to check the result.

	cution Results his screen, you	can download t	he execution results fro	om Saved CLI Scripts > Execu	ition Results.		
P	Ali	ias		Model	Status		
92.168.127.	12 19	92.168.127.12E	DS-G4008	EDS-G4008	Finished	^	
esult							
Interface	AdminStatus	OperStatus	Description				
Eth1/1	down	down					
Eth1/2	down	down					
Eth1/3	down	down					
Eth1/4	up	up					
Eth1/5	down	down					-
Eth1/6	down	down					_
Eth1/7	up	up					*
Eth1/8	up	up					11
92.168.127.	16 19	92.168.127.16E)S-4012-8P-4GS	EDS-4012-8P-4GS	Finished	~	

Changing Device Groups

Use the **Topology** screen to change the assigned group for a device by selecting the device from the **Topology Map** or **Device List**.

1. Navigate to **Menu** (≡) > **Topology**.

The **Topology** screen will appear and display the Topology Map by default.

- 2. Select one of the following views:
 - > **Topology view:** Displays a graphical representation of the devices in your network topology.
 - > List view: Displays a list of the devices in your network topology.
- 3. Select the device.
 - > **Topology view:** Click the icon of the device in the Topology Map.
 - > List view: Select the check box next to the device in the Device List.

The toolbar options change.

🔧 Device Configuration V 🙏 Device Control V 😲 Cybersecurity Controls V 🖃 Web Console 🔯 Run Script V 🖍 Change Group C Refresh 🖙 Add Link 🍽 PRP/HSR Tags 🖥 Delete

4. Click Change Group.

The **Change Group** screen will appear and displays the following information:

Root	3roup *	*	
E	IP Address		1
	10.81.10.10		
~	10.81.10.11		
	10.81.10.12		
	10.81.10.13		
	10.81.10.14		
	10.81.10.15		
	10.81.10.16		
	10.81.10.17		
_	40.04.40.40		
1 Selecte	ed / 30 total		
Assign	to Group *	*	

- 5. (Optional) Select additional IP addresses to assign other devices from the current group to the new group.
- 6. From the **Assign to Group** drop-down list, select the new group that you want to assign the selected device(s) to.
- 7. Click **Apply**.

MXview One will assign the selected device(s) to the new group.

Refreshing the Device Status

Since some device data is collected by polling, there may be a time delay for some data. Use the **Topology** screen to refresh the device status by selecting the device from the **Topology Map** or **Device List**.

1. Navigate to **Menu** (≡) > **Topology**.

The **Topology** screen appears and displays the Topology Map by default.

- 2. Select one of the following views:
 - > **Topology view:** Displays a graphical representation of the devices in your network topology.
 - > List view: Displays a list of the devices in your network topology.
- 3. Select the device.
 - > **Topology view:** Click the icon of the device in the Topology Map.
 - > List view: Select the check box next to the device in the Device List.

The toolbar options change.

🔦 Device Configuration 🗸 Device Control 🗸 Device Control 🗸 © Cybersecurity Controls 🗸 🖃 Web Console 🔯 Run Script 🗸 🖍 Change Group 🕐 Refresh 🖙 Add Link 🗭 PRP/HSR Tags 🛱 Delete

4. Click Refresh.

MXview One polls the device for updated data.

Deleting Devices

Use the **Topology** screen to delete devices from the Topology Map. After a device is deleted, it will be removed from the topology map and the device will not be polled.

1. Navigate to **Menu** (≡) > **Topology**.

The **Topology** screen appears and displays the Topology Map by default.

- 2. Select one of the following views:
 - > **Topology view:** Displays a graphical representation of the devices in your network topology.
 - > List view: Displays a list of the devices in your network topology.
- 3. Select the device.
 - > Topology view: Click the icon of the device in the Topology Map.

> List view: Select the check box next to the device in the Device List.

The toolbar options will change.

🔧 Device Configuration 🗸	📩 Device Control 🗸	😯 Cybersecurity Controls 🗸	🔲 Web Console	🙆 Run Script 🗸	🖍 Change Group	C Refresh	CO Add Link	PRP/HSR Tags	Delete
--------------------------	--------------------	----------------------------	---------------	----------------	----------------	-----------	-------------	--------------	--------

4. Click Delete.

MXview One removes the device from your network topology.

The **Device Management** feature lets users perform certain functions directly from within MXview One, without having to enter the device's web console. This feature covers two sections: **Configuration and Control** and **Account and Password**.

The **Device Configuration and Control** section provides quick access buttons to quickly execute commonly used device management functions. Users can perform these functions either from the menu bar on the **Topology** screen, or directly from the **Configuration and Control** page.

The **Account and Password** section allows administrators to check device accounts and perform account and default password audits.

Configuration and Control

Configuration and Control Overview

To access the Configuration and Control page, in the function tree, navigate to Menu (\equiv) > Device Management> Configuration and Control.

At the top of this screen is the menu bar which provides quick access buttons for device management functions. At the bottom part of the page is the device list which allows users to select the devices to perform the quick function on.

The quick access functions are organized into four main types:

- Device Configuration
- Device Control
- Cybersecurity Controls
- Run Script

≡ MX view ONE							()) English	🔔 admin'
Q Type keyword to search	Select Device Select Configuration Device Control	Cybersecurity Controls	Run Script					
Dashboard		Cybersecurity Controls	Run Script			Q Search		
Topology	Device Alias	Model	Device IP	MAC Address	Firmware Version	Location		
Device Discovery Device Management	192.168.123.70-AWK-3252A	AWK-3252A	192.168.123.70		v2.0 Build 2023_0217_1145			
Configuration and Control	192.168.123.151-EDS-G516E	EDS-G516E	192.168.123.151	00:90:E8:44:52:AE	V6.2 build 20080519	NSD Lab ab		
Account and Password	192.168.123.152EDS-518A	EDS-518A	192.168.123.152	00:90:E8:00:00:55	V3.9 build 21110513	NSD Lab lalala		
Saved CLI Scripts Firmware Management	192.168.123.157-IEX-402-SHDSL	IEX-402-SHDSL	192.168.123.157	00:90:E8:D1:02:10	V1.0 build 12112311.	NSD Lab		
Device Configuration Center	192.168.127.2ABB	ABB	192.168.127.2	00:21:C1:5C:3D:91				
Event Management ~						items per page: 50 - 1 -	5 of 5 < <	< > :
Inventory Management ~								
Integration ~								
Administration ~ Help ~								

Refer to the following section for an overview of all functions in each category.

Device Configuration

Change Wi-Fi Channel

If the performance of your wireless devices is affected by interruptions in the current Wi-Fi channel, you can use the Change Wi-Fi Channel function to switch to another channel to improve performance.

- 1. Navigate to Menu (≡) > Device Management> Configuration and Control.
- 2. Selected the device(s) to configure from the device list.

≡ MX view ONE							() English	💄 admin ▼
Select Operation								
🔧 Device Configuration 🗸	📩 Device Control 🗸	Cybersecurity Cont	rols 🗸 🔹 Ru	n Script 🗸 📃	Web Console			
					Q Search			
Device Alias		Model	Device IP	MAC Address	Firmware Version	Location		
192.168.3.16AWK-11610	>	AWK-1161C	192.168.3.16	00:90:E8:11:61:C2	v2.0 Build 2023_0417_0232	а		
192.168.3.65AWK-1165	A	AWK-1165A	192.168.3.65	00:90:E8:11:65:49	v2.0 Build 2023_0418_1026			
192.168.123.72AWK-115	51C	AWK-1151C	192.168.123.72	00:90:E8:05:17:45	v2.0 Build 2023_0217_1145			
✓ 192.168.123.73-AWK-425	52A	AWK-4252A	192.168.123.73	00:90:E8:9D:C4:FE				
192.168.127.25PT-G772	8	PT-G7728	192.168.127.25	00:90:E8:71:1E:A5	V6.3 build 22120913	Switch Location		

3. From the **Device Configuration** drop-down list, select **Change Wi-Fi Channel**. The **Change Wi-Fi Channel** screen will appear.

≡ MX view ONE						() English	💄 admin ▼
Select Operation Zevice Configuration Zevice Configuration	Cybersecurity Contr	nia ya 🛱 Du	n Script 🗸 🗐	Web Console			
Change Wi-Fi Channel	Cybersecurity Contr		n Script V EU	Q Search			
Add Wi-Fi SSID	Model	Device IP	MAC Address	Firmware Version	Location		
192.168.3.16~AWK-1161C	AWK-1161C	192.168.3.16	00:90:E8:11:61:C2	v2.0 Build 2023_0417_0232	а		
192.168.3.65AWK-1165A	AWK-1165A	192.168.3.65	00:90:E8:11:65:49	v2.0 Build 2023_0418_1026			
192.168.123.72-AWK-1151C	AWK-1151C	192.168.123.72	00:90:E8:05:17:45	v2.0 Build 2023_0217_1145			
✓ 192.168.123.73-AWK-4252A	AWK-4252A	192.168.123.73	00:90:E8:9D:C4:FE				
> 192.168.127.25-PT-G7728	PT-G7728	192.168.127.25	00:90:E8:71:1E:A5	V6.3 build 22120913	Switch Location		

4. Modify the Wi-Fi channel settings.

4G hannel	5G Channe	el		
	36			
-13 Channel Width	36-196 Channe	el Width		
20 MHz	- 20/40	0 MHz		
	STATES IN			
IP			 Alias	Model

Setting	Description	Limit
Channel	Enter the channel for the 2.4 GHz and 5 GHz band.	2.4 GHz: 1 to 13
Channer		5 GHz: 36 to 196
		2.4 GHz: 20 MHz, 20/40 MHz
Channel Width	Select the width of the channel.	5 GHz: 20 MHz, 20/40 MHz,
		20/40/80 MHz

5. When finished, click **Change**. The system will execute the action.

hange Wi-Fi Chann	el		
IP	Alias	Model	Status
192.168.123.73	192.168.123.73AWK-4252A	AWK-4252A	In Progress

6. If successful, a confirmation will be shown in the Status column.

P	Alias	Model	Status	
192.168.123.73	192.168.123.73AWK-4252A	AWK-4252A	Finished	

If unsuccessful, check the error description in the Status column to identify the issue. Click **Retry Failed Devices** to perform the action again.

Change Wi-Fi Channel					
IP	Alias	Model	Status		
192.168.3.16	192.168.3.16AWK-1161C	AWK-1161C	Failed(Login failure)		
192.168.3.65	192.168.3.65AWK-1165A	AWK-1165A	Failed(Login failure)		
			Cancel Retry Failed Devices		

Add Wi-Fi SSID

Use the Add Wi-Fi SSID function to create additional Wi-Fi SSIDs for your wireless environment.

- 1. Navigate to Menu (≡) > Device Management > Configuration and Control.
- 2. Selected the device(s) to configure from the device list.

≡ MX view ©NE						() English	💄 admin ▼
Select Operation							
A Device Configuration V	Cybersecurity Contr	rols 🗸 🛛 🙆 Ru	n Script 🗸 🛛 🗖	Web Console			
				Q Search			
Device Alias	Model	Device IP	MAC Address	Firmware Version	Location		
192.168.3.16AWK-1161C	AWK-1161C	192.168.3.16	00:90:E8:11:61:C2	v2.0 Build 2023_0417_0232	а		
192.168.3.65AWK-1165A	AWK-1165A	192.168.3.65	00:90:E8:11:65:49	v2.0 Build 2023_0418_1026			
192.168.123.72AWK-1151C	AWK-1151C	192.168.123.72	00:90:E8:05:17:45	v2.0 Build 2023_0217_1145			
✓ 192.168.123.73~AWK-4252A	AWK-4252A	192.168.123.73	00:90:E8:9D:C4:FE				
> 192.168.127.25-PT-G7728	PT-G7728	192.168.127.25	00:90:E8:71:1E:A5	V6.3 build 22120913	Switch Location		

3. From the **Device Configuration** drop-down list, select **Add Wi-Fi SSID**. The **Add Wi-Fi SSID** screen will appear.

= MX viøw ONE						⊕English	💄 admin▼
Select Operation							
✓ Device Configuration ✓ ▲ Device Control ✓	Cybersecurity Contro	ols 🗸 🛛 🤷 Rur	Script 🗸 📃 V	Web Console			
😪 Change Wi-Fi Channel				Q Search			
🥱 Add Wi-Fi SSID	Model	Device IP	MAC Address	Firmware Version	Location		
192.168.3.16AWK-1161C	AWK-1161C	192.168.3.16	00:90:E8:11:61:C2	v2.0 Build 2023_0417_0232	а		
192.168.3.65AWK-1165A	AWK-1165A	192.168.3.65	00:90:E8:11:65:49	v2.0 Build 2023_0418_1026			
192.168.123.72-AWK-1151C	AWK-1151C	192.168.123.72	00:90:E8:05:17:45	v2.0 Build 2023_0217_1145			
✓ 192.168.123.73-AWK-4252A	AWK-4252A	192.168.123.73	00:90:E8:9D:C4:FE				
> 192.168.127.25-PT-G7728	PT-G7728	192.168.127.25	00:90:E8:71:1E:A5	V6.3 build 22120913	Switch Location		

4. Modify the Wi-Fi SSID settings.

Clear All Existing SSIDs Disabled	•				
SSID *		RF Band 2.4 GHz	.		
	0/10				
Dpen	•				
IP				Alias	Model
192.168.123.73				192.168.123.73AWK-4252A	AWK-4252A

Clear All Existing SSIDs

Clear All Existing 55	1DS
Setting	Description
Enabled or Disabled	Choose to keep or delete all existing SSIDs on the selected device(s).
SSID	
Setting	Description
SSID Name	Enter a name for the SSID.
RF Band	

RF Band

Setting	Description
2.4 GHz, 5 GHz	Select the RF band for this SSID.

Security

Security	
Setting	Description
Open	
WPA	
WPA2	Colort the convitu mode for the CCID
WPA3	Select the security mode for the SSID.
WPA/WPA2 Mixed	
WPA2/WPA3 Mixed	

When using any security mode other than **Open**, configure the following settings:

WPA Mode

Setting	Description	
Personal	Authenticate WPA, WPA2, or WPA3 with a Pre-shared key (PSK).	
Protected Man	agement Frame	
Setting	Description	

	Disable the protected management frame. This option is not available when using WPA3.
802.11w	Use the 802.11w protocol as the protected management frame.

Encrvptio	,

Епстурноп	
Setting	Description
AES	Use Advance Encryption System (AES) encryption.
TKIP/AES Mixed	Use TKIP/AES Mixed encryption. This option provides a TKIP broadcast key and TKIP+AES unicast key to support legacy AP clients. This option is rarely used and is not available when using WPA3.

EAPOL Version

Setting	Description
1	Use EAPOL Version 1 as the security authentication method.
2	Use EAPOL Version 2 as the security authentication method.

Passphrase

Setting	Description
8 to 63 characters	Enter the passphrase. This is the master key to generate keys for encryption and
	decryption.

5. When finished, click **Add**. The system will execute the action.

d Wi-Fi SSID			
IP	Alias	Model	Status
192.168.123.73	192.168.123.73AWK-4252A	AWK-4252A	In Progress

6. If successful, a confirmation will be shown in the Status column.

dd Wi-Fi SSID				
IP	Alias	Model	Status	
192.168.123.73	192.168.123.73AWK-4252A	AWK-4252A	Finished	
				Clos

If unsuccessful, check the error description in the Status column to identify the issue. Click **Retry Failed Devices** to perform the action again.

dd Wi-Fi SSID			
IP	Alias	Model	Status
192.168.123.73	192.168.123.73-AWK-4252A	AWK-4252A	Failed(Maximum number of SSIDs: 9)
			Cancel Retry Failed Devices

Dynamic Sticky MAC

Use the **Dynamic Sticky MAC** function to configure Dynamic Sticky MAC settings for one or multiple selected devices at once.

1. Navigate to Menu (≡) > Device Management > Configuration and Control.

2. Selected the device(s) to configure from the device list.

≡ MX view ONE							English	👤 admin▼
B Select Operation								
🔧 Device Configuration 🗸	📩 Device Control 🗸	Cybersecurity Con	trols 🗸 🛛 🙆 Ru	n Script 🗸 📃	Web Console			
					Q Search			
Device Alias		Model	Device IP	MAC Address	Firmware Version	Location		
192.168.3.16AWK-116	IC	AWK-1161C	192.168.3.16	00:90:E8:11:61:C2	v2.0 Build 2023_0417_0232	а		
192.168.3.65AWK-116	5A	AWK-1165A	192.168.3.65	00:90:E8:11:65:49	v2.0 Build 2023_0418_1026			
192.168.123.72AWK-1	151C	AWK-1151C	192.168.123.72	00:90:E8:05:17:45	v2.0 Build 2023_0217_1145			
✓ 192.168.123.73AWK-42	252A	AWK-4252A	192.168.123.73	00:90:E8:9D:C4:FE				
> 192.168.127.25PT-G77	28	PT-G7728	192.168.127.25	00:90:E8:71:1E:A5	V6.3 build 22120913	Switch Location		

3. From the **Device Configuration** drop-down list, select **Dynamic Sticky MAC**. The **Dynamic Sticky MAC** screen will appear.

= /	WX view ONE					Englis	h 💄 admin▼
1 Se	lect Operation						
٩.	evice Configuration 🗸 🕺 Devic	ce Control 🗸 🛛 😯 Cybersecurity Contr	rols 🗸 🛛 🖸 Rur	n Script 🗸 🔳	Web Console		
93 93	Dynamic Sticky MAC				Q Search		
	Device Alias	Model	Device IP	MAC Address	Firmware Version	Location	
	192.168.3.16AWK-1161C	AWK-1161C	192.168.3.16	00:90:E8:11:61:C2	v2.0 Build 2023_0417_0232	a	
	192.168.3.65AWK-1165A	AWK-1165A	192.168.3.65	00:90:E8:11:65:49	v2.0 Build 2023_0418_1026		
	192.168.123.72-AWK-1151C	AWK-1151C	192.168.123.72	00:90:E8:05:17:45	v2.0 Build 2023_0217_1145		
	192.168.123.73-AWK-4252A	AWK-4252A	192.168.123.73	00:90:E8:9D:C4:FE	v2.0 Build 2023_0217_1145		
> 🗹	192.168.127.25PT-G7728	PT-G7728	192.168.127.25	00:90:E8:71:1E:A5	V6.3 build 22120913	Switch Location	



NOTE

You can only select devices with the same port format (either non-modular or modular device) and the same number of ports to execute the Dynamic Sticky MAC function. For example, you can set multiple non-modular switches at the same time, but not non-modular and modular switches. Because non-modular switch and modular switches have different port formats. An error message will appear if the selection is incompatible.

A Models must have the same port format and number of ports.

4. Click the Add (•) icon and configure the following settings:

	28															
Port	0/1	0/2	0/3	0/4	1/1	1/2	1/3	1/4	2/1	2/2	2/3	2/4	3/1	3/2	3/3	
On- Device Web UI	1	2	3	4	1-1	1-2	1-3	1-4	2-1	2-2	2-3	2-4	3-1	3-2	3-3	
	C Settin	js				-		-	Þ							
3	C Setting	js		Port				ticky MAC	•	·	Address 1	s Limit				

Alias

Setting	Description
Device Alias	Select the device(s) to configure Sticky MAC settings for.

Port

Setting	Description
Port	Select the port(s) associated with the device for which to configure the Sticky MAC settings for. You can refer to the Port Name Key section at the top of the page to understand the correlation between the ports listed in the Port drop-down menu and the on-device web UI.

Sticky MAC

Setting	Description
Enabled or Disabled	Enable or disable the Sticky MAC function for the selected port(s).

Address Limit

Setting	Description
1 to 1013	Specify the maximum numbers of the learned MAC addresses.

Security Action

Security Action	
Setting	Description
Shutdown Port	Shut down the port if a violation occurs.
Drop Packet	Drop the packet if a violation occurs.

5. When finished, click **Apply**. The system will execute the action.

IP	Alias	Model	Status
192.168.127.25	192.168.127.25PT-G7728	PT-G7728	In Progress

6. If successful, a confirmation will be shown in the Status column.

IP	Alias	Model	Status
192.168.127.25	192.168.127.25PT-G7728	PT-G7728	Finished

If unsuccessful, check the error description in the Status column to identify the issue. Click **Retry Failed Devices** to perform the action again.

mamic Sticky M	AC		
IP	Alias	Model	Status
192.168.127.25	192.168.127.25PT-G7728	PT-G7728	Failed(Login failure)
			Cancel Retry Failed Devices

Device Control

Reboot

Use the **Reboot** function to manually reboot devices or configure a reboot schedule.

- 1. Navigate to Menu (=) > Device Management > Configuration and Control.
- 2. Selected the device(s) to configure from the device list.

≡ MX view ©NE						⊕English	💄 admin 🔻
Select Operation							
🔧 Device Configuration 🗸 🛛 🕹 Device Control 🗸	Cybersecurity C	ontrols 🗸 🛛 🙆 Ru	n Script 🗸 📃	Web Console			
				Q Search			
Device Alias	Model	Device IP	MAC Address	Firmware Version	Location		
192.168.3.16AWK-1161C	AWK-1161C	192.168.3.16	00:90:E8:11:61:C2	v2.0 Build 2023_0417_0232	а		
192.168.3.65AWK-1165A	AWK-1165A	192.168.3.65	00:90:E8:11:65:49	v2.0 Build 2023_0418_1026			
192.168.123.72AWK-1151C	AWK-1151C	192.168.123.72	00:90:E8:05:17:45	v2.0 Build 2023_0217_1145			
✓ 192.168.123.73-AWK-4252A	AWK-4252A	192.168.123.73	00:90:E8:9D:C4:FE				
192.168.127.25PT-G7728	PT-G7728	192.168.127.25	00:90:E8:71:1E:A5	V6.3 build 22120913	Switch Location		

3. From the **Device Control** drop-down list, select **Reboot**. The **Reboot** screen will appear.

≡ MX viøw ONE						
Q Type keyword to searc	Select Operation Select Configuration Device Configuration	Cybersecurity Controls	s 🗸 🖸 Run Sc	ript 🗸		
Dashboard Topology	Device Alias	Model	Device IP	MAC Address	Firmware Version	Location
Device Discovery	192.168.123.72-AWK-1151C	AWK-1151C	192.168.123.72	00:90:E8:05:17:45	v2.0 Build 2023_0217_1145	
Device Management	192.168.127.12EDS-G4008	EDS-G4008	192.168.127.12	00:90:E8:8F:F0:18	v3.1 Build 2023_0217_1005	aa
Saved CLI Scripts	192.168.127.14EDS-G512E-8PoE	EDS-G512E-8PoE	192.168.127.14	00:90:E8:4D:A7:32	V6.2 build 20080519	Switch Location
Firmware Management	192.168.127.16EDS-4012-8P-4GS	EDS-4012-8P-4GS	192.168.127.16	00:90:E8:90:A5:6E	v3.2 Build 2023_0719_1007	
Device Configuration Center Event Management	192.168.127.25PT-G7728	PT-G7728	192.168.127.25	00:90:E8:71:1E:A5	V6.3 build 22120913	Switch Location
Notification Management	192.168.127.26PT-G7728	PT-G7728	192.168.127.26	00:90:E8:86:19:CD	V6.3 build 22120913	Switch Location
Reports	✓ 192.168.127.27PT-G7728	PT-G7728	192.168.127.27	00:90:E8:8E:F7:C6	V6.3 build 22120913	Switch Location
Integration	✓ 192.168.127.28PT-G7828	PT-G7828	192.168.127.28	00:90:E8:79:23:82	V6.3 build 22120913	Switch Location
Administration	¥ 192.168.127.29PT-G7728	PT-G7728	192.168.127.29	00:90:E8:99:E9:08	V6.2 build 21110316	Switch Location
Help	¥ 192.168.127.31-PT-G503	PT-G503	192.168.127.31	00:90:E8:00:02:65	V5.3 build 23090110	

4. Configure the reboot sequence and execution time.

nart Sequence	×		
Order	IP	Alias	Model
1	192.168.127.29	192.168.127.29PT-G7728	PT-G7728
2	192.168.127.31	192.168.127.31PT-G503	PT-G503

- a. Select the reboot sequence:
 - □ **Strict Sequential**: Reboot the devices based on the device sequence in the topology starting from the device furthest away from the computer running MXview One, proceeding to the nearest one.
 - □ **Smart Sequential:** Reboot the devices based on the device sequence in the topology but simultaneously reboot all devices in the same topology layer.
- b. Select an execution time:
 - **Reboot**: Click **Reboot** to restart the devices instantly.
 - **Add to Scheduler:** Click **Add to Schedular** to create a new scheduled task. MXview One will reboot the devices based on the specified time and date in the schedule.
- 5. To reboot devices instantly, click **Reboot**. The system will execute the action.

P	Alias	Model	Status
92.168.127.29	192.168.127.29PT-G7728	PT-G7728	In Progress
92.168.127.31	192.168.127.31PT-G503	PT-G503	In Progress

If successful, a confirmation will be shown in the Status column.
 If unsuccessful, check the error description in the Status column to identify the issue. Click **Retry** Failed Devices to perform the action again.

IP	Alias	Model	Status
192.168.127.29	192.168.127.29PT-G7728	PT-G7728	Finished
192.168.127.31	192.168.127.31PT-G503	PT-G503	Failed(Connection failure)

Create Snapshot

Use the **Snapshot** function to create a snapshot of the current configuration. The snapshot can be used to restore the configuration later.

- 1. Navigate to Menu (≡) > Device Management > Configuration and Control.
- 2. Selected the device(s) to configure from the device list.

≡ MX viøw ©NE						() English	💄 admin ▼
3 Select Operation							
A Device Configuration V 🎝 Device Control V	Cybersecurity Contr	rols 🗸 🔹 Ru	n Script 🗸 📃	Web Console			
				Q Search			
Device Alias	Model	Device IP	MAC Address	Firmware Version	Location		
192.168.3.16-AWK-1161C	AWK-1161C	192.168.3.16	00:90:E8:11:61:C2	v2.0 Build 2023_0417_0232	а		
192.168.3.65AWK-1165A	AWK-1165A	192.168.3.65	00:90:E8:11:65:49	v2.0 Build 2023_0418_1026			
192.168.123.72AWK-1151C	AWK-1151C	192.168.123.72	00:90:E8:05:17:45	v2.0 Build 2023_0217_1145			
V 192.168.123.73-AWK-4252A	AWK-4252A	192.168.123.73	00:90:E8:9D:C4:FE				
> 192.168.127.25-PT-G7728	PT-G7728	192.168.127.25	00:90:E8:71:1E:A5	V6.3 build 22120913	Switch Location	1	

3. From the **Device Control** drop-down list, select **Create Snapshot**. The **Create Snapshot** screen will appear.

\equiv MX view ONE			
0	Select Operation		
C Type keyword to search	A Device Configuration 🕺 Device Control 🗸	Cybersecurity Controls	s 🗿 Run Script 🗸
Dashboard	192.168.127.5-ABB	38	192.168.127.5 0021c1569bb7
Topology	🗌 192.168.127.11-E	04-G516E	192.168.127.11 00.90.E8:54.E1:E6 V6.3 build 23032200 Test
Device Discovery	□ 192.168.127.12-EUS	ot 25-64008	192.168.127.12 00.90.E8:8F.F0:18 v3.1 Build 2023_0217_1005 aa
Device Management	192.168.127.13-EDS-408A	EDS-408A	192.168.127.13 00:90:E8:89:F8:C2 V3.12 build 22101114 Switch Location
Saved CLI Scripts Firmware Management	192.168.127.14-EDS-G512E-8PoE	EDS-G512E-8PoE	192.168.127.14 00:90/E8:4D:A7:32 V6.2 build 20080519 Switch Location
Device Configuration Center	192.168.127.16-EDS-4012-8P-4GS	EDS-4012-8P-4GS	192.168.127.16 00:90:E8:90:A5:6E v3.2 Build 2023_0719_1007
Event Management V	192.168.127.25-PT-G7728	PT-G7728	192.168.127.25 00:90/E8:71:1E:A5 V6.3 build 22120913 Switch Location
Notification Management	192.168.127.26-PT-G7728	PT-G7728	192.168.127.26 00:90/E8:86:19:CD V6.3 build 22120913 Switch Location
Reports ~	192.168.127.27-PT-G7728	PT-G7728	192.168.127.27 00:90:E8:8EF7:C6 V6.3 build 22120913 Switch Location
Integration ~	192.168.127.28PT-G7828	PT-G7828	192.168.127.28 00:90/E8:79/23:82 V6.3 build 22120913 Switch Location
Help ~	192.168.127.29-PT-G7728	PT-G7728	192.168.127.29 00:90:E8:99:E9:08 V6.2 build 21110316 Switch Location
	192.168.127.32-Hirschmann	Hirschmann	192.168.127.32 00:80:63:83:82:80 Hirschmann MACH
	192.168.127.33-SDS-G3008	SDS-G3008	192.168.127.33 00.90.E8:00:00:00
	192.168.127.222ICMP Device	ICMP Device	192.168.127.222 00:E0:99:01:2A:68
	192.168.127.223-V2406C (Windows)	V2406C (Windows)	192.168.127.223 00:90:EB:89:9C:49
	☑ 192.168.128.12–UC-1222A	UC-1222A	192.168.128.12 00.90:E8:00:FA:FA Customizable field (configure /usr/share/snmp/snmpd.local.conf)
	192.168.128.22-UC-2222A-T	UC-2222A-T	192.168.128.22 00:90:E8:00:FB:56 Customizable field (configure /usr/share/snmp/snmpd.local.conf)

4. Configure the execution time.

Alias	Model
192.168.128.12-UC-1222A	UC-1222A
192.168.128.22-UC-2222A-T	UC-2222A-T
c	Cancel Add to Scheduler Create
	192.168.128.12UC-1222A 192.168.128.22UC-2222A-T

- > **Create**: Click **Create** to create a snapshot instantly.
- > Add to Scheduler: Click Add to Schedular to create a new scheduled task. MXview One will create a snapshot based on the specified time and date in the schedule.
- 5. To create a snapshot instantly, click **Create**. The system will execute the action.

P	Alias	Model	Status
92.168.128.12	192.168.128.12UC-1222A	UC-1222A	In Progress
92.168.128.22	192.168.128.22UC-2222A-T	UC-2222A-T	In Progress

6. If successful, a confirmation will be shown in the Status column.

If unsuccessful, check the error description in the Status column to identify the issue. Click **Retry Failed Devices** to perform the action again.

IP	Alias	Model	Status
192.168.128.12	192.168.128.12-UC-1222A	UC-1222A	Finished
192.168.128.22	192.168.128.22UC-2222A-T	UC-2222A-T	Failed(Login failure)

Restore From Snapshot

Use the **Restore from Snapshot** to restore the configuration from a previously created snapshot.

- 1. Navigate to Menu (≡) > Device Management > Configuration and Control.
- 2. Selected the device(s) to configure from the device list.

≡ ₩	Kviøw ONE						English	💄 admin ▼
B Select	Operation							
🔧 Devic	e Configuration 🗸 🕺 Device Control 🗸	Cybersecurity Contro	ols 🗸 🛛 🙆 Rur	n Script 🗸 🔲 🛛	Web Console			
					Q Search			
🗖 De	evice Alias	Model	Device IP	MAC Address	Firmware Version	Location		
192	2.168.3.16-AWK-1161C	AWK-1161C	192.168.3.16	00:90:E8:11:61:C2	v2.0 Build 2023_0417_0232	а		
192	2.168.3.65AWK-1165A	AWK-1165A	192.168.3.65	00:90:E8:11:65:49	v2.0 Build 2023_0418_1026			
192	2.168.123.72AWK-1151C	AWK-1151C	192.168.123.72	00:90:E8:05:17:45	v2.0 Build 2023_0217_1145			
192	2.168.123.73AWK-4252A	AWK-4252A	192.168.123.73	00:90:E8:9D:C4:FE				
> 1 192	2.168.127.25PT-G7728	PT-G7728	192.168.127.25	00:90:E8:71:1E:A5	V6.3 build 22120913	Switch Location		

3. From the **Device Control** drop-down list, select **Restore from Snapshot**. The **Restore from Snapshot** screen will appear.

\equiv MX view ONE						
0	Select Operation					
Q Type keyword to search	A Device Configuration 🙏 Device Control 🗸 🏾	Cybersecurity Controls	Run Script	~		
Dashboard	192.168.127.5-ABB	3B	192.168.127.5	0021c1569bb7		
Topology	🗌 192.168.127.11-E S 🌅 Create Snapshot	06516E	192.168.127.11	00:90:E8:54:E1:E6	V6.3 build 23032200	Test
Device Discovery	□ 192.168.127.12-EDS ④ Restore from Snapsh	ot ^{JS-G4008}	192.168.127.12	00:90:E8:8F:F0:18	v3.1 Build 2023_0217_1005	88
Device Management	192.168.127.13-EDS-408A	EDS-408A	192.168.127.13	00:90:E8:89:F8:C2	V3.12 build 22101114	Switch Location
Saved CLI Scripts Firmware Management	192.168.127.14-EDS-G512E-8PoE	EDS-G512E-8PoE	192.168.127.14	00:90:E8:4D:A7:32	V6.2 build 20080519	Switch Location
Device Configuration Center	192.168.127.16-EDS-4012-8P-4GS	EDS-4012-8P-4GS	192.168.127.16	00:90:E8:90:A5:6E	v3.2 Build 2023_0719_1007	
Event Management 🗸 🗸	192.168.127.25-PT-G7728	PT-G7728	192.168.127.25	00:90:E8:71:1E:A5	V6.3 build 22120913	Switch Location
Notification Management	192.168.127.26PT-G7728	PT-G7728	192.168.127.26	00:90:E8:86:19:CD	V6.3 build 22120913	Switch Location
Reports ~	192.168.127.27PT-G7728	PT-G7728	192.168.127.27	00:90:E8:8E:F7:C6	V6.3 build 22120913	Switch Location
Integration ~	192.168.127.28-PT-G7828	PT-G7828	192.168.127.28	00:90:E8:79:23:82	V6.3 build 22120913	Switch Location
Help v	192.168.127.29PT-G7728	PT-G7728	192.168.127.29	00:90:E8:99:E9:08	V6.2 build 21110316	Switch Location
	192.168.127.32-Hirschmann	Hirschmann	192.168.127.32	00:80:63:B3:B2:80		Hirschmann MACH
	192.168.127.33-SDS-G3008	SDS-G3008	192.168.127.33	00:90:E8:00:00:00		
	192.168.127.222-ICMP Device	ICMP Device	192.168.127.222	00:E0:99:01:2A:68		
	192.168.127.223V2406C (Windows)	V2406C (Windows)	192.168.127.223	00:90:E8:89:9C:49		
	192.168.128.12-UC-1222A	UC-1222A	192.168.128.12	00:90:E8:00:FA:FA		Customizable field (configure /usr/share/snmp/snmpd.local.conf)
	192.168.128.22-UC-2222A-T	UC-2222A-T	192.168.128.22	00:90:E8:00:FB:56		Customizable field (configure /usr/share/snmp/snmpd.local.conf)

4. Configure the execution time.

estore from Snapshot		
IP	Alias	Model
192.168.128.12	192.168.128.12UC-1222A	UC-1222A
192.168.128.22	192.168.128.22-UC-2222A-T	UC-2222A-T
	Car	Add to Scheduler Restore

- > **Restore**: Click **Restore** to restore the snapshot instantly.
- Add to Scheduler: Click Add to Schedular to create a new scheduled task. MXview One will restore the snapshot based on the specified time and date in the schedule.

5. To restore the snapshot instantly, click **Restore**. The system will execute the action.

>	Alias	Model	Status
92.168.128.12	192.168.128.12-UC-1222A	UC-1222A	In Progress
92.168.128.22	192.168.128.22UC-2222A-T	UC-2222A-T	In Progress

If successful, a confirmation will be shown in the Status column.
 If unsuccessful, check the error description in the Status column to identify the issue. Click **Retry** Failed Devices to perform the action again.

estore from Snap	oshot		
IP	Alias	Model	Status
192.168.128.12	192.168.128.12UC-1222A	UC-1222A	Finished
192.168.128.22	192.168.128.22UC-2222A-T	UC-2222A-T	Failed(Login failure)
			Cancel Retry Failed Devices

Cybersecurity Controls

Sticky MAC On/Off

Use the **Sticky MAC On/Off** function to enable or disable Sticky MAC for the selected device(s).

- 1. Navigate to Menu (≡) > Device Management > Configuration and Control.
- 2. Selected the device(s) to configure from the device list.

≡ /	MX view ONE						() English	💄 admin 🎙
<u> </u>	elect Operation	•	2	-	_			
۹ ۵	evice Configuration ∨	👗 Device Control 🗸	Cybersecurity Cont	rols 🗸 🖸 Ru	in Script 🗸 📃	Web Console		
	Device Alias		Model	Device IP	MAC Address	Firmware Version	Location	
	192.168.123.72-AWK-11	51C	AWK-1151C	192.168.123.72	00:90:E8:05:17:45	v2.0 Build 2023_0217_1145		
\checkmark	192.168.127.12EDS-G4	008	EDS-G4008	192.168.127.12	00:90:E8:8F:F0:18	v3.1 Build 2023_0217_1005	aa	
	192.168.127.14EDS-G5	12E-8PoE	EDS-G512E-8PoE	192.168.127.14	00:90:E8:4D:A7:32	V6.2 build 20080519	Switch Location	
	192.168.127.16EDS-40	12-8P-4GS	EDS-4012-8P-4GS	192.168.127.16	00:90:E8:90:A5:6E	v3.2 Build 2023_0719_1007		
	192.168.127.25PT-G77	28	PT-G7728	192.168.127.25	00:90:E8:71:1E:A5	V6.3 build 22120913	Switch Location	

3. From the **Cybersecurity Controls** drop-down list, select **Sticky MAC On/Off**. The **Sticky MAC On/Off** screen will appear.

\equiv MX view ONE			
~	Select Operation		
Q Type keyword to search	A Device Configuration V 🕺 Device Control V	Cybersecurity Controls 🗸 🙆 Ru	ın Script 🗸 🔲
Dashboard	☐ 192.168.127.4ABB	Sticky MAC On / Off	00:21:C1:50:52:95
Topology	192.168.127.5ABB	Relearn Dynamic Sticky MAC	00:21:C1:56:9B:B7
Device Discovery	192.168.127.11-EDS-G516E	📎 Disable Unused Ethernet an	00:90:E8:54:E1:E6
Device Management Saved CLI Scripts	✓ 192.168.127.12-EDS-G4008	Disable Insecure HTTP and	00:90:E8:8F:F0:18
Firmware Management	< 192.168.127.13-EDS-408A	EDS-408A 192.168.127.13	00:90:E8:89:F8:C2
Device Configuration Center	192.168.127.14EDS-G512E-8PoE	EDS-G512E-8PoE 192.168.127.14	00:90:E8:4D:A7:32

4. Choose to enable or disable Sticky MAC.

Sticky MAC On / Off Sticky MAC Enabled		
Ib	Alias	Model
192.168.127.12	192.168.127.12EDS-G4008	EDS-G4008
		Cancel Apply

5. Click **Apply**. The system will execute the action.

icky MAC On / Off			
IP	Alias	Model	Status
192.168.127.12	192.168.127.12EDS-G4008	EDS-G4008	In Progress

6. If successful, a confirmation will be shown in the Status column.

IP	Alias	Model	Status	
192.168.127.12	192.168.127.12EDS-G4008	EDS-G4008	Finished	

If unsuccessful, check the error description in the Status column to identify the issue. Click **Retry Failed Devices** to perform the action again.

Relearning Dynamic Sticky MAC

Use the **Relearn Dynamic Sticky MAC** function to reset all previously learned MAC addresses and relearn them again for the selected device(s).

- 1. Navigate to Menu (≡) > Device Management > Configuration and Control.
- 2. Selected the device(s) to configure from the device list.

≡ MX viøw ONE						() English	💄 admin 1
3 Select Operation							
Device Configuration ~	👗 Device Control 🗸	Cybersecurity Cont	rols 🗸 🛛 🙆 Ru	n Script 🗸 📃	Web Console		
Device Alias		Model	Device IP	MAC Address	Firmware Version	Location	
192.168.123.72-AWK-11	51C	AWK-1151C	192.168.123.72	00:90:E8:05:17:45	v2.0 Build 2023_0217_1145		
✓ 192.168.127.12EDS-G40	008	EDS-G4008	192.168.127.12	00:90:E8:8F:F0:18	v3.1 Build 2023_0217_1005	aa	
192.168.127.14EDS-G5	12E-8PoE	EDS-G512E-8PoE	192.168.127.14	00:90:E8:4D:A7:32	V6.2 build 20080519	Switch Location	
192.168.127.16EDS-401	2-8P-4GS	EDS-4012-8P-4GS	192.168.127.16	00:90:E8:90:A5:6E	v3.2 Build 2023_0719_1007		
192.168.127.25PT-G772	28	PT-G7728	192.168.127.25	00:90:E8:71:1E:A5	V6.3 build 22120913	Switch Location	

3. From the **Cybersecurity Controls** drop-down list, select **Relearn Dynamic Sticky MAC**. The **Relearn Dynamic Sticky MAC** screen will appear.

\equiv MX view ONE			
Q. Type keyword to search	Select Operation Select Configuration Device Configuration Device Control	Cybersecurity Controls 🗸 🖸 Ru	ın Script 🗸 🔳
Dashboard	192.168.127.4ABB	Sticky MAC On / Off	00:21:C1:50:52:95
Topology	□ 192.168.127.5ABB	Relearn Dynamic Sticky MAC	00:21:C1:56:9B:B7
Device Discovery Device Management	D 192.168.127.11EDS-G516E	🚫 Disable Unused Ethernet an	00:90:E8:54:E1:E6
Saved CLI Scripts	✓ 192.168.127.12-EDS-G4008	Disable Insecure HTTP and	00:90:E8:8F:F0:18
Firmware Management	192.168.127.13-EDS-408A	EDS-408A 192.168.127.13	00:90:E8:89:F8:C2
Device Configuration Center	192.168.127.14EDS-G512E-8PoE	EDS-G512E-8PoE 192.168.127.14	00:90:E8:4D:A7:32

4. Click **Relearn**. The system will execute the action.

Relearn Dynamic Sticky MAC		
IP	Alias	Model
192.168.127.12	192.168.127.12EDS-G4008	EDS-G4008
		Cancel Relearn

5. If successful, a confirmation will be shown in the Status column.

P	Alias	Model	Status	
192.168.127.12	192.168.127.12EDS-G4008	EDS-G4008	Finished	

If unsuccessful, check the error description in the Status column to identify the issue. Click **Retry Failed Devices** to perform the action again.

Disable Unused Ethernet and Fiber Ports

Use the **Disable Unused Ethernet and Fiber Ports** function to disable any unused Ethernet or fiber ports to make sure these ports cannot be exploited to gain unauthorized access to the device.

- 1. Navigate to Menu (≡) > Device Management > Configuration and Control.
- 2. Selected the device(s) to configure from the device list.

≡ MX view ©NE						
	Select Operation					
Q Type keyword to search	A Device Configuration 🙏 Device Control 🗸	Cybersecurity Controls	🗸 🧰 Run Si	cript 🗸		
Dashboard						
Topology	Device Alias	Model	Device IP	MAC Address	Firmware Version	Location
Device Discovery	E Device Anas	Model	Device Ir	MAG AUUIESS	Pillingale version	Location
Device Management	192.168.123.72-AWK-1151C	AWK-1151C	192.168.123.72	00:90:E8:05:17:45	v2.0 Build 2022_1007_1814	
Saved CLI Scripts	192.168.127.1-ICMP Device	ICMP Device	192.168.127.1	00.90/E8/91/86/64		
Firmware Management	92.168.127.11-EDS-G516E	EDS-G516E	192.168.127.11	00.90:E8:54:E1:E6	V6.3 build 23032200	Test
Device Configuration Center	92.168.127.12-EDS-G4008	EDS-G4008	192.168.127.12	00.90:E8:8F:F0:18	v3.1 Build 2023_0217_1005	33
Event Management 🗸 🗸	192.168.127.13-EDS-408A	EDS-408A	192.168.127.13	00.90 E8 89 F8 C2	V3.12 build 22101114	Switch Location
Notification Management	<					
Reports ~	192.168.127.14-EDS-G512E-8PoE	EDS-0512E-8PoE	192.168.127.14	00:90:E8:4D:A7:32	V6.2 build 20080519	Switch Location
Integration ~	192.168.127.16-EDS-4012-8P-4GS	EDS-4012-8P-43S	192.168.127.16	00.90.E8.90.A5.6E	v3.2 Build 2023_0719_1007	
Administration 🗸	192.168.127.25-PT-G7728	PT-G7728	192.168.127.25	00-90-58-71-15-45	V6.3 build 22120913	Switch Location

3. From the **Cybersecurity Controls** drop-down list, select **Disable Unused Ethernet and Fiber Ports**. The **Disable Unused Ethernet and Fiber Ports** screen will appear.

\equiv MX view ONE		
C Type keyword to search	Image: Select Operation Image: Operation </th <th>Cybersecurity Controls 🗸 🙆 Run Script 🗸</th>	Cybersecurity Controls 🗸 🙆 Run Script 🗸
Dashboard	192.168.127.4ABB	Disable Unused Ethernet an 4 00:21:C1:50:52:95
Topology	192.168.127.5ABB	Disable Insecure HTTP and5 00:21:C1:56:9B:B7
Device Discovery Device Management	✓ 192.168.127.11-EDS-G516E	EDS-G516E 192.168.127.11 00:90:E8:54:E1:E6
Saved CLI Scripts	192.168.127.12EDS-G4008	EDS-G4008 192.168.127.12 00:90:E8:8F:F0:18

4. Choose to keep ports with temporary inactivity active.

Keep in-use ports with temporary o	utage active	
IP	Alias	Model
192.168.127.11	192.168.127.11EDS-G516E	EDS-G516E
192.168.127.12	192.168.127.12EDS-G4008	EDS-G4008

5. Click **Disable Unused Ports**. The system will execute the action.

	Alias	Model	Status
192.168.127.11	192.168.127.11EDS-G516E	EDS-G516E	In Progress
192.168.127.12	192.168.127.12EDS-G4008	EDS-G4008	In Progress

If successful, a confirmation will be shown in the Status column.

Ρ	Alias	Model	Status
192.168.127.11	192.168.127.11-EDS-G516E	EDS-G516E	Finished
192.168.127.12	192.168.127.12-EDS-G4008	EDS-G4008	Finished

If unsuccessful, check the error description in the Status column to identify the issue. Click **Retry Failed Devices** to perform the action again.

Disable Insecure HTTP and Telnet Console

Use the **Disable Insecure HTTP and Telnet Console** function to disable the non-secure HTTP and Telnet connection interfaces.

- 1. Navigate to Menu (≡) > Device Management > Configuration and Control.
- 2. Selected the device(s) to configure from the device list.

C Type keyword to search	Select Operation Select Configuration A Device Configuration	Cybersecurity Control	i 🗸 🚺 Run Si	cript 🗸		
ashboard						
opology evice Discovery	Device Alias	Model	Device IP	MAC Address	Firmware Version	Location
Vevice Management	192.168.123.72-AWK-1151C	AWK-1151C	192.168.123.72	00:90:E8:05:17:45	v2.0 Build 2022_1007_1814	
wed CLI Scripts	192.168.127.1-ICMP Device	ICMP Device	192.168.127.1	00:90:E8:91:86:64		
mware Management	92 192 168.127.11-EDS-G516E	EDS-G516E	192.168.127.11	00:90:E8:54:E1:E6	V6.3 build 23032200	Test
vice Configuration Center	2 192.168.127.12-EDS-G4008	EDS-G4008	192.168.127.12	00.90 E8 8F F0:18	v3.1 Build 2023_0217_1005	88
ent Management 🛛 🗸	192.168.127.13-EDS-408A	EDS-408A	192.168.127.13	00.90.E8.89.F8.C2	V3.12 build 22101114	Switch Location
eports ~	192.168.127.14-EDS-0512E-8PoE	EDS-G512E-8PoE	192.168.127.14	00:90:E8:4D:A7:32	V6.2 build 20080519	Switch Location
egration ~	192.168.127.16-EDS-4012-8P-4GS	EDS-4012-8P-4GS	192.168.127.16	00:90:E8:90:A5:6E	v3.2 Build 2023_0719_1007	
dministration 🗸 🗸	192.168.127.25-PT-G7728	PT-07728	192,168,127,25	00:90:E8:71:1E:A5	V6.3 build 22120913	Switch Location

3. From the **Cybersecurity Controls** drop-down list, select **Disable Insecure HTTP and Telnet Console**.

The Disable Insecure HTTP and Telnet Console screen will appear.

\equiv MX view ONE		
	Select Operation	
$Q_{Type keyword to search}$	🔦 Device Configuration 🛛 🙏 Device Control 🗸	Cybersecurity Controls V 🙆 Run Script V
Dashboard	192.168.127.4~ABB	Disable Unused Ethernet an
Topology	192.168.127.5ABB	Disable Insecure HTTP and 5 00:21:C1:56:9B:B7
Device Discovery	✓ 192.168.127.11-EDS-G516E	EDS-G516E 192.168.127.11 00:90:E8:54:E1:E6
Device Management		
Saved CLI Scripts	192.168.127.12-EDS-G4008	EDS-G4008 192.168.127.12 00:90:E8:8F:F0:18

4. Click **Disable HTTP and Telnet**. The system will execute the action.

IP	Alias	Model
192.168.127.11	192.168.127.11EDS-G516E	EDS-G516E
192.168.127.12	192.168.127.12EDS-G4008	EDS-G4008

If successful, a confirmation will be shown in the Status column.

IP	Alias	Model	Status
192.168.127.11	192.168.127.11-EDS-G516E	EDS-G516E	Finished
192.168.127.12	192.168.127.12EDS-G4008	EDS-G4008	Finished

If unsuccessful, check the error description in the Status column to identify the issue. Click **Retry Failed Devices** to perform the action again.

Run Script

Refer to the Managing and Running Scripts section.

Account and Password

Account Management Overview

To access the **Account Management** page, in the function tree, navigate to **Menu** (\equiv) > **Device Management** > **Account and Password** and go to the **Account Management** tab.

The **Account Management** tab shows an overview of all user accounts on each device.

	view ON	IE					() English 💄 adn
ccou	int and	Password Manag	gement Autor	mation			
Account	: Management	Password Automation	Account Audit	Default Password Audit	Temporary Accounts		
Accoun	ıt Informati	on					
Click the 'I	Refresh' butto	n to retrieve the account informatio	on for all devices. This ma	y take some time.			
Refrest	h						
	_						
						Q Search	
	De	evice Alias		Compatible	Model	Q Search Device IP	Accounts
		vice Alias 12.168.123.70-AWK-3252A		Compatible Yes	Model AWK-3252A		Accounts even,v3user,admin
_	19					Device IP	
	2, 19 2, 19	12.168.123.70-AWK-3252A		Yes	AWK-3252A	Device IP 192.168.123.70	even,v3user,admin
	2, 19 2, 19 2, 19	12.168.123.70-AWK-3252A 12.168.123.151-EDS-G516E		Yes	AWK-3252A EDS-G516E	Device IP 192.168.123.70 192.168.123.151	even,v3user,admin adminTest,even,aaaa,admin,aaaab
	2, 19 2, 19 2, 19 2, 19 2, 19	12.168.123.70-AWK-3252A 12.168.123.151-EDS-G516E 12.168.123.152-EDS-518A		Yes Yes No	AWK-3252A EDS-G516E EDS-518A	Device IP 192.168.123.70 192.168.123.151 192.168.123.152	even,v3user,admin adminTest,even,aasa,admin,aasab N/A

This page displays the following information in a table format:

Column	Description
Device Alias	The unique name of the device.
Compatible	Shows if the device supports MXview One retrieving account information.
Model	The device model name.
Device IP	The IP address of the device.
Accounts	The list of accounts associated with the device. Under certain conditions, the
	following statuses can show:
	 Unable to retrieve accounts: The device supports this feature, but MXview One was unable to successfully retrieve account information from the device. N/A: MXview One cannot retrieve account information because the device does not support this feature.

Click **Refresh** at the top of the page to update the account information in the table.

Editing Accounts on a Device

NOTE

This function is only available for compatible devices. If the device is incompatible, this function will be greyed out.

- 1. Navigate to Menu (≡) > Device Management > Account and Password.
- 2. Go to the **Account Management** tab.

 Click the Edit () icon next to the device account you want to edit. The Account Management window will appear.

Operation * Change Default "Ac	dmin" Na	me	•	
New Username *				
Minimum 4 characters	0/64			
	20			
New Password *	Q			

- 4. To change the default admin account credentials:
 - a. Select Change Default "Admin" Name as the operation.
 - b. Specify the new username and password.
 - c. Click Change.
- 5. To add an account:
 - a. Select Edit Account as the operation.
 - b. Select the **Add Account** radio button.
 - c. Specify the username, password, and authority of the account.
 - d. Click Add.
- 6. To delete an account:
 - a. Select Edit Account as the operation.
 - b. Select the **Delete Account** radio button.
 - a. Enter the username of the account you want to delete.
 - b. Click Delete.

Password Automation Overview

To access the **Account Management** page, in the function tree, navigate to **Menu** (\equiv) > **Device Management** > **Account and Password** and go to the **Password Automation** tab.

The **Password Automation** tab shows an overview of all user accounts on each device.

	NE					Q)English	💄 admin▼
Account and	Password Manag	ement Auto	mation					
Account Manageme	nt Password Automation	Account Audit	Default Password Audit	Temporary Accounts				
Password Autom Last Executed: N/A Start Wizard								
Managed Device	s				Q Search			
> Device Alias			Model		Device IP	Applicable Accounts		
							0	of 0

This page displays the following information in a table format:

Column	Description
Device Alias	The unique name of the device.
Model	The device model name.
Device IP	The IP address of the device.
Applicable Accounts	Shows the device accounts that the password automation functions are applied
	to.

Running the Password Automation Wizard

- 1. Navigate to Menu (≡) > Device Management > Account and Password.
- 2. Go to the **Password Automation** tab.
- 3. In the **Password Automation** section, click **Start Wizard**.
- 4. When prompted, verify your MXview One account. The **Password Automation Wizard** screen will appear.

0	2	3	4	5
erify Email Recipient	Select Devices	Set Password Complexity	Apply Password to Devices	Send Password E
,,				
	ssword Email Recipient	t(s)		
	ssword Email Recipien	t(s)		
erify Account and Pas	ssword Email Recipient	t(s)		
Yerify Account and Pas at Email Recipient *	ssword Email Recipient	t(s)		
erify Account and Pas	ssword Email Recipient	t(\$)		
Yerify Account and Pas at Email Recipient *	ssword Email Recipient	t(\$)		

- 5. Enter the 1st and 2nd recipient email addresses and click **Verify Email**. MXview One will send a verification code to these addresses.
- Enter the verification code in the Wizard to continue. If you have not received an email, check your Spam folder or confirm the Email Server Configuration settings in MXview One.

Password Automation	on Wizard			
0	2	3	4	5
Verify Email Recipient	Select Devices	Set Password Complexity	Apply Password to Devices	Send Password Email
Verify Account and Pa	ssword Email Recipien	t(s)		
A If you have not recei	ved the email with the verifica	ation code, check your spam folder or ver	rify the Email Server Configuration	
1st Email Recipient	Verification Co		ifirm	
Verification code expires Resend	in: 9:34			
				Close

7. Select the device(s) to generate a randomized password for and click **Next**.

⊘2	3	·	4	5
nail Recipient Select Devices	Set Password	Complexity	Apply Password to D	evices Send Password Ema
he device(s) to generate a randomized pass Device Alias	Compatible	Model	Device IP	Applicable Accounts
10.123.35.195ICMP Device	No	ICMP Device	10.123.35.195	N/A
192.168.123.70-AWK-3252A	Yes	AWK-3252A	192.168.123.70	even,v3user,admin
192.168.123.151EDS-G516E	Yes	EDS-G516E	192.168.123.151	adminTest,even,aaaa,admin,aaaab
192.168.123.152EDS-518A	No	EDS-518A	192.168.123.152	N/A
192.168.123.157IEX-402-SHDSL	No	IEX-402-SHDSL	192.168.123.157	N/A
192.168.127.2ICMP Device	No	ICMP Device	192.168.127.2	N/A

- 8. Specify the randomized password length and click **Next**.
 - MXview One will generate a random password of the specified length containing:
 - At least one digit (0-9).
 - > Mixed upper and lowercase letters (A-Z, a-z).
 - At least one special character (~!@#\$%^&*-_|;:,.<>[]{}())

	on Wizard			
\bigcirc —	$ \bigcirc $	3	4	5
/erify Email Recipient	Select Devices	Set Password Complexity	Apply Password to Devices	Send Password Ema
1Xview One will gener	rate the random passw	ord for the selected devices.		
make the passwor	ra lengar to multin the fild.	ximum allowed password length on	are device(o).	
ndom Password Length *				
andom Password Length *				
16 t least one digit (0-9): Enabl		abled		

9. MXview One will start generating new passwords for the selected devices.

Password Automation Wizard

Verify Email Recipient	Select Devices	Set Password Complexity	Apply Password to Devi	Ces Send Password Email
Device Alias		Model	Device IP	Status
192.168.127.11EDS-G5	16E	EDS-G516E	192.168.127.11	In progress

10. When finished, MXview One will send the device account and password information to the email recipients specified at the beginning of the Wizard.

Users will receive two emails. One email containing the account information and execution results and

another email containing the string to unzip the account information file.

Password Automation Wizard

\odot —	-	\odot	\bigcirc	5
Verify Email Recipient	Select Devices	Set Password Complexity	Apply Password to Devices	Send Password Email
MXview One has sent the	device account, password	d, and execution result to the follow	ing email recipient(s):	

- 11. Click Close.
- 12. The table will show all the devices and associated accounts that password automation is applied to.

Close

Account Management	Password Automation	Account Audit	Default Password Audit	Temporary Accounts			
Password Automation Last Executed: 2024-07-23 PM 5:04:43 Next Scheduled for: 2024-10-21 AM 3:00:00 Start Over Regenerate Password Resend Password Email Managed Devices		Password Automation 1 Interval * 90 30 - 365 Days Save	Start Time *	<u>.</u>			
Managed Devices							
Managed Devices			Model		Q Sear	ch Applicable Accounts	

NOTE

Click Start Over to run the Password Automation Wizard again.

Regenerating Device Passwords

NOTE

This function is only available after completing the Password Automation Wizard at least once. Refer to <u>Running the Password Automation Wizard</u>.

- 1. Navigate to Menu (=) > Device Management > Account and Password.
- 2. Go to the Password Automation tab.
- 3. In the Password Automation section, click Regenerate Password.
- 4. When prompted, verify your MXview One account. The **Regenerate Password** screen will appear.

Regenerate Passwo	ord				
	MXview One will use the following settings to generate a new password for each device.				
Password Strength Random Password Length: 8					
Password Email Reci 1st Email:	pient				
	Cancel	Regenerate			

5. Click **Regenerate**.

MXview One will generate a new password for all applicable devices.

generate Password			
Device Alias	Model	Device IP	Status
92.168.127.11EDS-G516E	EDS-G516E	192.168.127.11	In progress

Click Send Password Email to receive an email with the new randomized passwords to the recipients specified in the Password Automation Wizard.

Device Alias	Model	Device IP	Status
92.168.127.11EDS-G516E	EDS-G516E	192.168.127.11	Finished

Resending the Password Email

NOTE

This function is only available after completing the Password Automation Wizard at least once. Refer to Running the Password Automation Wizard.

- 1. Navigate to Menu (≡) > Device Management > Account and Password.
- 2. Go to the **Password Automation** tab.
- 3. In the Password Automation section, click Resend Password Email.
- When prompted, verify your MXview One account. The Resend Password Email screen will appear.

Resend Password Ema	ail	
Are you sure you want to res password to the following re 1st Email:		
	Cancel	Resend

5. Click Resend.

MXview One will send an email with the device account credentials to the recipients specified in the Password Automation Wizard.

Resend Password Email
MXview One has sent the device account and password file to the following email address(es): 1st Email:
Close

Configuring a Password Automation Schedule

With the password automation schedule function, you can configure a specific interval at which MXview One will generate new randomized passwords for all applicable devices.

NOTE

This function is only available after completing the Password Automation Wizard at least once. Refer to <u>Running the Password Automation Wizard</u>.

- 1. Navigate to Menu (≡) > Device Management > Account and Password.
- 2. Go to the **Password Automation** tab.
- 3. In the **Password Automation Schedule** section, configure the following settings:

Interval *		Start Time *	
90		AM 3:00	-
30 - 365	Days		

- > Interval: Select the interval (in days) at which MXview One will randomize device passwords.
- > Start Time: Specify the day of time when MXview One will execute the password automation.
- 4. Click Save.

Account Audit Overview

To access the **Account Audit** page, in the function tree, navigate to **Menu** (=) > **Device Management** > **Account and Password** and go to the **Account Audit** tab.

The **Account Audit** tab lets users create a device account baseline and perform an account audit to easily identify newly added or deleted accounts.

MX view ONE							()) English	💄 adm
ccount and P	assword Manag	gement Auton	nation					
Account Management	Password Automation	Account Audit	Default Password Audit	Temporary Account	ts			
Accounts Baseline								
Last Executed: N/A								
Create								
Ū						Q Search		
Device Alias		Compatible	Model	Device IP	Baseline Accounts	Added Accounts	Deleted Accounts	
192.168.123.70AWK-:	3252A	Yes	AWK-3252A	192.168.123.70	N/A	N/A	N/A	
192.168.127.11-EDS-G	3516E	Yes	EDS-G516E	192.168.127.11	N/A	N/A	N/A	
							1-	2 of 2

This page displays the following information in a table format:

Column	Description
Device Alias	The unique name of the device.
Compatible	Shows if the device supports MXview One retrieving account information. If the device does not support this function, the Accounts column will show N/A .
Model	The device model name.
Device IP	The IP address of the device.
Baseline Accounts	Shows the user accounts associated with the device when creating the baseline.
Added Accounts	Shows the user accounts that were added compared to the baseline after performing an account audit.
Deleted Accounts	Shows the user accounts that were deleted compared to the baseline after performing an account audit.

Creating an Account Baseline

- 1. Navigate to Menu (≡) > Device Management > Account and Password.
- 2. Go to the **Account Audit** tab.
- 3. The Accounts Baseline section includes the following information:

Accounts Baseline
Last Executed: 2024-07-23 AM 9:24:44
Create

Last Executed: Shows the date and time when the most recent baseline was created. If no baseline has been created before, this will show N/A.

4. Click Create. The Device Baseline window will appear.

Accounts Baseline	
This operation will create a new basel overwrite the existing one.	ine and will
Cancel	Create

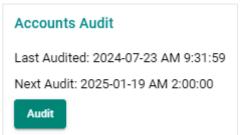
5. Click Create.

Executing a Manual Account Audit

NOTE

This function is only available after creating an account baseline. Refer to Creating an Account Baseline.

- 1. Navigate to Menu (=) > Device Management > Account and Password.
- 2. Go to the **Account Audit** tab.
- 3. The Accounts Audit section shows the following information:



- > Last Audited: Shows the date and time of the most recent account audit.
- Next Audit: If automatic account auditing is enabled, this shows the time and date of the next scheduled audit.
- 4. Click Audit.

MXview One will compare the current accounts to the baseline and will show any added or deleted accounts in the table.

Configuring an Automatic Account Audit Schedule

7	

NOTE

This function is only available after creating an account baseline. Refer to Creating an Account Baseline.

- 1. Navigate to Menu (≡) > Device Management > Account and Password.
- 2. Go to the **Account Audit** tab.
- 3. In the Audit Automation section, configure the following settings:

Accounts Audit	Audit Automatio	n		
Last Audited: 2024-07-23 PM 6:17:08	Enable * Enabled	-	Interval 180	
Next Audit: 2025-01-19 AM 2:00:00	Save		7 - 365	Day

- > **Enable**: Enable or disable the automatic account auditing function.
- > Interval: Specify the interval (in days) when MXview One will perform an account audit.
- 4. Click Save.

Default Password Audit Overview

To access the **Default Password Audit** page, in the function tree, navigate to **Menu** (\equiv) > **Device Management** > **Account and Password** and go to the **Default Password Audit** tab.

The **Default Password Audit** tab lets users quickly check for any accounts that are using the default password.

=	MX view ONE							()) English	<u>.</u> admin▼	
A	Account and Password Management Automation									
	Account Management	Password Automation	Account Audit	Default Password Audit	Temporary Accounts					
	Default Password Au	dit								
	Last Executed: N/A									
	Scan									
	٢						Q Search			
	Device Alias			Compatible	Model	Device IP	Default Username/Password			
>									0 of 0	
_										

This page displays the following information in a table format:

Column	Description
Device Alias	The unique name of the device.
Compatible	Shows if the device supports MXview One retrieving account information.
Model	The device model name.
Device IP	The IP address of the device.
Default Account/Password	Shows if the account is using the default credentials:
	 Yes: The device uses the default username and password. For security reasons, it is highly recommended to change the default credentials. No: The device is not using the default credentials. N/A: MXview One cannot retrieve account information because the device does not support this feature.

Performing a Default Password Audit

- 1. Navigate to Menu (≡) > Device Management > Account and Password.
- 2. Go to the **Default Password Audit** tab.
- 3. In the **Default Password Audit** section, click **Scan**. The **Default Password Audit** window will appear.

Default Password Audit
Scanning for default account credentials may take some time and will leave the interface temporarily unavailable. Are you sure you want to continue?
Cancel Scan

4. Click Scan.

MXview One will scan for any accounts using the default credentials and list them in the table.

Temporary Accounts Overview

To access the **Temporary Accounts** page, in the function tree, navigate to **Menu** (\equiv) > **Device Management** > **Account and Password** and go to the **Temporary Accounts** tab.

The Temporary Accounts tab allows users to create, edit, and delete temporary accounts for devices.

count and F	Password Manage	ment Autom	ation						
ccount Management	Password Automation	Account Audit	Default Password Audit	Temporary Accou	nts				
							Q Search		
	Device Alias	Compatibl	e Model	Device IP	Username	Start Time	End Time	Status	
- +1 2/ 2	- 192.168.123.70AWK-3252A	Yes	AWK-3252A	192.168.123.70					
- +1 2/ 2	= 192.168.127.11EDS-G516E	Yes	EDS-G516E	192.168.127.11					
								1	- 2 of 2

This page displays the following information in a table format:

Column	Description
Device Alias	The unique name of the device.
Compatible	Shows if the device supports the temporary accounts function.
Model	The device model name.
Device IP	The IP address of the device.
Username	The username of the account.
Start Time	The account validity start time.
End Time	The account validity end time.
Status	The status of the account.

Adding a Temporary Account

- 1. Navigate to Menu (≡) > Device Management > Account and Password.
- 2. Go to the **Temporary Accounts** tab.
- Click the Add (**) icon next to the device you want to create a temporary account for. The Add Temporary Account window will appear.

Username *			
Minimum 4 characters	0/64		
Password *	Ø		
Minimum 8 characters Action *	0/64		
Immediate	*		
Valid Until *			
2024/07/23			
End Time *			
PM 6:30	*		

- 4. Configure the following settings:
 - > **Username**: Enter a username for the account.
 - > **Password**: Enter the password for the account.
 - > **Action**: Select the type of account.
 - **Immediate**: The account will be active immediately until the specified end date.
 - **Scheduled**: The account will only be active during the specified time period.
 - > Active From: If you selected Scheduled, specify the date the account will be valid from.
 - > Start Time: If you selected Scheduled, specify the starting time the account will be valid from.
 - > Valid Until: Specify the date the account expires.
 - > **End Time**: Specify the time of day the account expires.

5. Click Add.

MXview One will show the status of the account creation.

Add Temporary Account				
Device Alias	Model	Device IP	Status	
192.168.127.11-EDS-G516E	EDS-G516E	192.168.127.11	In Progress	

Editing a Temporary Account

- 1. Navigate to Menu (≡) > Device Management > Account and Password.
- 2. Go to the **Temporary Accounts** tab.
- Click the Edit (²) icon next to the device you want to edit the temporary account for. The Edit Temporary Account window will appear.

Edit Temporary	Acco	unt	
Username			
Minimum 4 characters	4/04		
Password	1.0		
	Q		
Minimum 8 characters	8/64		
Action *			
Scheduled	*		
Active From *			
2024/07/25			
Start Time *			
PM 6:30	*		
Valid Until *			
2024/07/26	٥		
End Time *			
PM 6:30	*		
			_
		Cancel	Change

- 4. Configure the following settings:
 - > **Action**: Select the type of account.
 - **Immediate**: The account will be active immediately until the specified end date.
 - **Scheduled**: The account will only be active during the specified time period.
 - > Active From: If you selected Scheduled, specify the date the account will be valid from.
 - > Start Time: If you selected Scheduled, specify the starting time the account will be valid from.
 - > Valid Until: Specify the date the account expires.
 - > **End Time**: Specify the time of day the account expires.
- 5. Click Change.

MXview One will show the status of the account modification.

vice Alias	Model	Device IP	Status
		2-2-7-0-2 H	Claroo
2.168.127.11-EDS-G516E	EDS-G516E	192,168,127,11	Finished

Deleting a Temporary Account

- 1. Navigate to Menu (≡) > Device Management > Account and Password.
- 2. Go to the **Temporary Accounts** tab.
- 3. Click the **Delete** ([•]) icon next to the device you want to delete the temporary account of. The **Delete Temporary Account** window will appear.

Delete Temporary Account	
Are you sure you want to delete this tem account?	nporary
Cancel	Delete

4. Click **Delete**.

MXview One will show the status of the account deletion.

Delete Temporary Account					
Device Alias	Model	Device IP	Status		
192 168 127 11-EDS-G516E	EDS-G516E	192.168.127.11	In Progress		

The CLI Scripts function allows users to generate and execute CLI scripts from within MXview One. After creating and saving CLI scripts, users can create script automations and automation buttons to quickly execute batch configurations on multiple devices at once.

Saved CLI Scripts Overview

To access the **Saved CLI Scripts** page, in the function tree, navigate to **Menu** (\equiv) > **Saved CLI Scripts**.

If there are no saved CLI scripts, a script will need to be created by clicking the **Add** () icon. Refer to **Adding a CLI Script** for information on how to create a script.

If there are saved CLI scripts, the following tabs will be available:

- **CLI Scripts**: This list shows all saved CLI scripts. From this table, you can create, edit, or delete CLI scripts.
- Execution Results: From this tab, you can download or delete the execution results of previously
 executed scripts.
- Script Automation: From this tab, you can view, create, edit, or delete script automations.
- **Automation Buttons**: Each script automation you create will generate an automation button. From this tab, you can manage script automation buttons.

≡ MX view ©NE							() English	≗ admin▼
Q Type keyword to search	1	Saved CLI S	Scripts					
Dashboard		CLI Scripts	Execution Results	Script Automation	Automation Buttons			
Topology								
Device Discovery		A Scheduled		CLI scripts at a specifier	date and time from the Administrati	tion > Maintenance Scheduler nage		
Device Management	~					nan mantenaries constants page.		
Saved CLI Scripts		0				Q Search		
Firmware Management			Name D	escription	Linked Scheduled Tasks	Linked Script Automations		
Device Configuration Center			1.11.1					
Event Management	~		reload-task re	load-description		start-btn, diff_cli-btn, same_cli_btn1		
Notification Management			reload-task-new re	load-description-new		diff_cli-btn, same_cli_btn2		
Inventory Management	~							
Integration	~							
Administration	~							
Help	~							

CLI Scripts

Adding a CLI Script

- Navigate to Menu (=) > Saved CLI Scripts > CLI Scripts. The Saved CLI Scripts screen will appear. A list of configured CLI scripts will show in the CLI Scripts list (if any).
- 2. Click the Add (🖿) icon.

The Add CLI Script screen will appear.

Add CLI Script			
Name *			
	0 / 64		
Description *			
CLI Script	0 / 255		
			1.
			0 / 9999
		Cancel	Add

- 3. Configure the following settings:
 - a. Name: Enter a name for the CLI script.
 - b. Description: Enter a description for the CLI script.
 - c. **CLI Script**: Enter the CLI command(s) to execute.
- 4. Click Add.

The CLI script will be added to the table.

					() English	.
ved CLI S	Scripts					
CLI Scripts	Execution Resul	Its Script Automation	Automation Buttons			
A Scheduled	Conint					
		run CLI scripts at a specified	d date and time from the Administration	> Maintenance Scheduler page.		
		run CLI scripts at a specified	d date and time from the Administration	> Maintenance Scheduler page.		
You can create		run CLI scripts at a specified	d date and time from the Administration Linked Scheduled Tasks			
You can create	scheduled tasks to r			Q Search		
You can create	scheduled tasks to r	Description		Q Search Linked Script Automations		

Searching for a CLI Script

- Navigate to Menu (=) > Saved CLI Scripts > CLI Scripts. The Saved CLI Scripts screen will appear. A list of configured CLI scripts will show in the CLI Scripts list (if any).
- 2. In the **Search** (\mathbf{Q}) field, type the full or partial information of the CLI script. All CLI scripts matching the entered string will be shown in the table.

Editing a CLI Script

- Navigate to Menu (=) > Saved CLI Scripts > CLI Scripts. The Saved CLI Scripts screen will appear. A list of configured CLI scripts will show in the CLI Scripts list (if any).
- Click the Edit (
 icon next to the script you want to edit. The Edit CLI Script screen will appear.

Edit CLI Script Name * Interface description Description * Show interface description CLI Script				
Interface description Description * Show interface description 26 / 255	Edit CLI Script			
Description * 21 / 64 Show interface description 26 / 255	Name *			
Description * Show interface description 26 / 255	Interface description			
Show interface description	Description *	21 / 64		
our outpet	CLI Script	26 / 255		
show interfaces description				
				27/99
27 / 9			Cancel	Apply

- 3. Configure the following settings:
 - a. Name: Enter a name for the CLI script.
 - b. **Description**: Enter a description for the CLI script.
 - c. **CLI Script**: Enter the CLI command(s) to execute.
- 4. Click Apply.

A confirmation will appear to verify the CLI script was updated.

CLI script updated successfully

Deleting a CLI Script

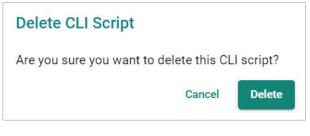
NOTE

A CLI script cannot be deleted if it is linked to a scheduled task. To delete the script, modify or delete the scheduled task first on the **Administration> Maintenance Scheduler** page.

1. Navigate to Menu (≡) > Saved CLI Scripts > CLI Scripts.

The **Saved CLI Scripts** screen will appear. A list of configured CLI scripts will show in the **CLI Scripts** list (if any).

 Click the **Delete** (■) icon next to the CLI script you want to delete. A confirmation window will appear.



3. Click **Delete**.

A confirmation will appear to verify the CLI script was deleted.

CLI script deleted successfully

Deleting Multiple CLI Scripts



NOTE

A CLI script cannot be deleted if it is linked to a scheduled task. To delete the script, modify or delete the scheduled task first on the **Administration> Maintenance Scheduler** page.

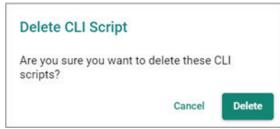
1. Navigate to Menu (≡) > Saved CLI Scripts > CLI Scripts.

The **Saved CLI Scripts** screen will appear. A list of configured CLI scripts will show in the **CLI Scripts** list (if any).

- 2. Select the checkbox of the scripts you want to delete in the list.
- 3. Click the **Delete** (\blacksquare) icon at the top-left corner of the page.

					()) English	L ad
aved CLI	Scripts					
CLI Scripts	Execution Resul	Its Script Automation	Automation Buttons			
	d Script					
You can create	e scheduled tasks to i	run CLI scripts at a specified	d date and time from the Administration :	> Maintenance Scheduler page.		
1				Q Search		
Delete	Name	Description	Linked Scheduled Tasks	Q Search Linked Script Automations		
Delete		Description reload-description	Linked Scheduled Tasks			
	reload-task	Constants.	Linked Scheduled Tasks	Linked Script Automations		
- / -	reload-task reload-task-new	reload-description	Linked Scheduled Tasks	Linked Script Automations start-btn, diff_cli-btn, same_cli_btn1		

4. A confirmation window will appear.



5. Click **Delete**.

A confirmation will appear to verify the CLI script was deleted.

Creating a CLI Script Scheduled Task

1. Navigate to Menu (≡) > Administration > Maintenance Scheduler. The

....

\equiv MX view ONE							English	👱 admin V
Q Type keyword to search	Maintenance	Scheduler						
Device Management	Ð					Q Search		
Saved CLI Scripts Firmware Management		Job Name	Action	Description	Scheduled Time	Registered Devices		
Device Configuration Center	□ / ■	test	Export Configuration	test	2023-12-04 PM1:00	1		
Event Management 🗸 🗸							1 -	1 of 1
Notification Management								
Reports 🗸 🧹	<							
Integration V								
Administration ^								
Account Management								
Default Device Template								
Global Device Settings								
System Settings								
Maintenance Scheduler								

2. Click the **Add** (**b**) icon.

The Add Job screen will appear.

Add Job			
Job Name *			
Action *			
Run Saved Script		•	
CLI Script Name *	•		
Description *			
0	/ 200		
Registered Devices *			
Repeat Execution *			
Once	-		
Start Date *			
mm/dd/yyyy			
Execution Time *			
:			

- 3. Configure the following settings:
 - a. Job Name: Enter a name for the job.
 - b. Action: Select Run Saved Script from the Action drop-down list.
 - c. CLI Script Name: Select the CLI script that you want to execute.
 - d. **Description**: Enter a description for the job.
 - e. Registered Devices: Select the devices that you want to run the selected CLI script on.
 - f. Repeat Execution: Select the job execution frequency: Once, Daily, Weekly, Monthly.
 - g. **Start Date**: If you select **Once** in the Repeat Execution field, specify the start date to begin executing the scheduled job.
 - h. **On**: If you select **Weekly** or **Monthly** in the Repeat Execution field, specify when to begin executing the scheduled job.
 - i. **Execution Time**: Specify the time of day to run the scheduled job.

4. Click Add.

MXview One will display the scheduled job in the Maintenance Scheduler table and will run the CLI script for the selected devices according to the defined schedule.

Maintenar	nce Scheduler				
٥					Q Search
	Job Name	Action	Description	Scheduled Time	Registered Devices
	Test	Run Saved Script	test	2023-12-29 PM2:38	1

Execution Results

Download All Execution Results

- Navigate to Menu (=) > Saved CLI Scripts. The Saved CLI Scripts screen will appear.
- 2. Go to the **Execution Results** tab.

Saved CLI Sc	Saved CLI Scripts					
CLI Scripts	Execution Results					
Download All Exec	ution Results					
Delete All CLI Scri	pt Execution Results					
Delete Script Exec	ution Results Prior to					
< 2024/07/22	•					
Time *						

3. Click **Download**.

MXview One will download all the CLI script execution results as a ZIP file.

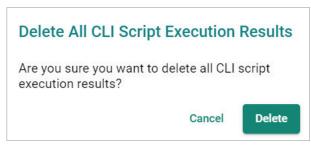
Delete All CLI Script Execution Results

- Navigate to Menu (=) > Saved CLI Scripts. The Saved CLI Scripts screen will appear.
- 2. Go to the **Execution Results** tab.

ç	Saved CLI Sc	ripts
	CLI Scripts	Execution Results
	Download All Exec	ution Results
	Delete All CLI Scri Delete	pt Execution Results
		ution Results Prior to
<	Date * 2024/07/22	•
	Time *	

3. Click **Delete**.

A confirmation window will appear.



4. Click Delete.

A confirmation will appear to verify all execution results have been deleted.

Script execution results deleted successfully

Delete Execution Results Prior to a Specified Time

- Navigate to Menu (≡) > Saved CLI Scripts. The Saved CLI Scripts screen will appear.
- 2. Go to the Execution Results tab.

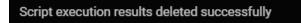
Saved	Saved CLI Scripts						
CLI S	cripts	Execu	tion Results	Script			
Downloa	ad All Exe	cution R	esults				
Downloa	ad						
Delete A	II CLI Scr	ipt Exect	ution Result	s			
Delete							
	cript Exe	cution Re	esults Prior	to			
< Date * 2024/07	/22						
Time *							
:-							
Delete							

- 3. Specify the **Date** and **Time**. All execution results prior to this time will be deleted.
- 4. Click **Delete**.

A confirmation window will appear.

	Delete CLI Script Execution Rest	ults
	Are you sure you want to delete all script execution results prior to 2024/07/22 12	
	Cancel	Delete
5.	Click Delete .	

A confirmation will appear to verify all execution results have been deleted.



Script Automation

From the **Script Automation** screen, you can create and manage script automations. A script automation allows you to combine multiple saved CLI scripts into a single script. A corresponding automation button then lets you quickly execute the included commands to the specified devices with just a single click.

Adding a Script Automation

- Navigate to Menu (≡) > Saved CLI Scripts. The Saved CLI Scripts screen will appear.
- 2. Go to the Script Automation tab.

3. Click the **Add** (**1**) icon.

The Add Script Automation s	screen w	ill appear.		
Add Script Automation				
Name *				
	0 / 64			
Description *				
	0 / 255			
CLI Scripts and Target Devices				
0				
			Cancel	Add

- 4. Configure the following settings:
 - > **Name**: Enter a name for the script automation.
 - > **Description**: Enter a description for the script automation.
 - CLI Scripts and Target Devices: Select the saved CLI script and devices to include in this automation. You can add a maximum of 50 scripts in a single script automation. This requires a previously created saved CLI script. Refer to the Adding a CLI Script section.

Click the **Add** (**b**) icon to add additional entries to the automation.

μ	

NOTE

Only one saved CLI script can be assigned to an individual target device.

5. Click Add.

The script automation will be added to the table. Each script automation entry will also create an individual button in the Automation Button section. Refer to the <u>Automation Buttons</u> section.

						()) English	💄 adı
ave	ed CLI S	Scripts					
0	CLI Scripts	Execution Results	Script Automation	Automation Buttons			
6	•				Q Search		
	•				Q Search		
		Name	Desc	cription			
	1	start-btn	A-btn	-192.168.123.152			
	1	diff_cli-btn	A-btn	-192.168.123.153			
	/ 1	same_cli_btn1	153&	154			
Ē	/ 1	same_cli_btn2	153&	154			

NOTE

MXview One supports a maximum of 200 script automations.

Editing a Script Automation

- Navigate to Menu (≡) > Saved CLI Scripts. The Saved CLI Scripts screen will appear.
- 2. Go to the Script Automation tab.
- Click the Edit (
) icon next to the script automation you want to edit.

 The Edit Script Automation screen will appear.

art-btn	9 / 64	
	9 / 64	
	- 1	
escription *		
btn-192.168.123.152		
	21 / 255	
LI Scripts and Target Devices		
-		
Select Saved CLI Script *	Target Devices *	
reload-task	 192.168.123.152EDS-518A 	-

- 4. Configure the following settings:
 - > **Name**: Enter a name for the script automation.
 - > **Description**: Enter a description for the script automation.
 - CLI Script and Target Devices: Select the saved CLI script and devices to include in this automation. You can add a maximum of 50 scripts in a single script automation. This requires a previously created saved CLI script. Refer to the <u>Adding a CLI Script</u> section.

Click the **Add** (**I**) icon to add additional entries to the automation.

Click the **Delete** $(\mathbf{\overline{I}})$ icon to remove an entry.

5. Click Apply.

A confirmation will appear to verify the script automation was updated

Updated successfully

Deleting a Script Automation

- 1. Navigate to **Menu** (≡) > **Saved CLI Scripts**.
- Go to the Script Automation tab. The Script Automation screen will appear. A list of configured script automation will show.
- 3. Click the **Delete** () icon next to the script automation you want to delete. A confirmation window will appear.

Delete Script Automation	
Are you sure you want to delete this sc automation?	ript
Cancel	Delete

4. Click **Delete**.

A confirmation will appear to verify the CLI script was deleted.

Deleting Multiple Script Automations

- 1. Navigate to **Menu** (≡) > **Saved CLI Scripts**.
- Go to the Script Automation tab. The Script Automation screen will appear. A list of configured script automation will show in the CLI Scripts list (if any).
- 3. Select the checkbox of the script automations you want to delete in the list.
- 4. Click the **Delete** (\blacksquare) icon at the top of the page.

						()) English	💄 admin▼
\$	Saved CLI	Scripts					
	CLI Scripts	Execution Results	Script Automation	Automation Buttons			
					Q Search		
	Delete	Name	Desc	cription			
		start-btn	A-btn	r-192.168.123.152			
	Z / 1	diff_cli-btn	A-btr	-192.168.123.153			
<	□/▮	same_cli_btn1	1538	154			
	□ / ∎	same_cli_btn2	1538	154			
-							

5. A confirmation window will appear.

elete Script Automation	
re you sure you want to delete these utomations?	script
Cancel	De

6. Click Delete.

A confirmation will appear to verify the script automations were deleted.

Automation Buttons

From the **Automation Buttons** screen, you can manage automation buttons for configured script automations.

Each newly added automation script will automatically generate an automation button that is placed in the default Unnamed group.

Editing an Automation Button Group

- 1. Navigate to Menu (≡) > Saved CLI Scripts.
- 2. Go to the **Automation Buttons** tab.

3. Click the **Edit** (\checkmark) icon in the top-left corner of the screen to enter edit mode.

≡ MX view O	NE				() English	👱 admin 🔻
Saved CLI S	cripts					
CLI Scripts	Execution Results	Script Automation	Automation Buttons			
1						
_				153+154	Unname	d
				same_cli_btn1 same_cli_btn2	start-btn di	ff_cli-btn
				same_cil_btn1 same_cil_btn2	start-oth di	n_ci+bui

4. Click the **Edit** (\checkmark) icon next to the group name of the group you want to edit.

=	MX view O	NE				() English	👤 admin 🔻
Sa	aved CLI S	cripts					
	CLI Scripts	Execution Results	Script Automation	Automation Buttons			
	8 0 2						
					153+154	Unnamed	
					same_cli_btn1 same_cli_btn2	start-btn dif	f_cli-btn
-							
>							

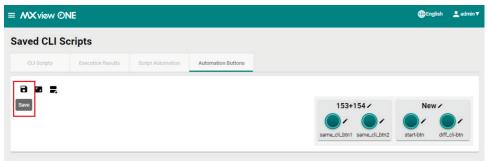
The Edit Group will appear.

Group Name *	
Jnnamed	
	7 / 64
Reorder Buttons	
Unna	amed
start-btn	diff_cli-btn

- 5. Configure the following settings:
 - > **Group Name**: Enter a name for the group.
 - > **Reorder Buttons**: Click and drag the buttons to adjust their position.
- 6. Click Apply.

The changes will appear on the **Automation Buttons** page.

7. Click the **Save** (**B**) icon to save your changes and leave edit mode.



8. A confirmation will appear to verify the button group was updated.



If you leave the **Automation Buttons** page without saving, a confirmation window will appear.



Editing an Automation Button

- 1. Navigate to Menu (≡) > Saved CLI Scripts.
- 2. Go to the **Automation Buttons** tab.
- 3. Click the **Edit** (𝗨) icon in the top-left corner of the screen to enter edit mode.

≡ MX view ©	NE					lish 🙎 admin 🎙
Saved CLI S	cripts					
CLI Scripts	Execution Results	Script Automation	Automation Buttons			
1						
				153+154	Unna	med
				same_cli_btn1 same_cli_btn2	start-btn	diff_cli-btn

4. Click the **Edit** (\checkmark) icon next to the button you want to edit.

≡ MX view OI	NE										() Englist	🔔 admin 🔻
Saved CLI S	cripts											
CLI Scripts	Execution Results	Script Automation	Automation Button									
802												
							1	53+	154 🖍	1	New 🖍	
									_ ~		-) r
							same_cli_	otn1	same_cli_btn2	start-btn	diff_	cli-btn

The Edit Button window will appear.

Edit Button		
Background Color * #008787		
Text Color * #000000		
Group Use the current group		
Group Name	w group 0 / 6-	 4
O Move to another group Group Name 153+154)	
	Cancel	Apply

- 5. Configure the following settings:
 - a. **Background Color**: Click the value to open the color picker. Select the preferred background color on the color picker or enter the color's hex value.
 - b. **Text Color**: Click the value to open the color picker. Select the preferred text color on the color picker or enter the color's hex value.
 - c. **Group**: Select the group to assign this button to.
 - **Use the current group**: Leave the button in its currently assigned group.
 - **Create and add to a new group**: Create and assign the button to a new group.
 - **Move to another group**: Select an existing group to assign the button to.
- 6. Click Apply.

The changes will appear on the **Automation Buttons** page.

≡ MX view ©I	NE					() English	💄 admin 🔻
Saved CLI S	cripts						
CLI Scripts	Execution Results	Script Automation	Automation Buttons				
				New2 /	153+154 /	New /	
			st	tart-btn	same_cli_btn1 same_cli_btn2	diff_cli-btn	

7. Click the **Save** (**B**) icon to save your changes and leave edit mode.

	NE					()) English	💄 admin 🔻
Saved CLI S	cripts						
CLI Scripts	Execution Results	Script Automation	Automation Buttons				
802							
Save				New2 /	153+154 /	New /	
					• •		
			st	art-btn	same_cli_btn1 same_cli_btn2	diff_cli-btn	

8. A confirmation will appear to verify the button was updated.



Creating an Automation Button Group

- 1. Navigate to **Menu** (≡) > **Saved CLI Scripts**.
- 2. Go to the Automation Buttons tab.
- 3. Click the **Edit** () icon in the top-left corner of the screen to enter edit mode.

= .	MX view (ONE			
Sa	wed CLI S	Scripts			
	CLI Scripts	Execution Results	Script Automation	Automation Buttons	
Г					
Ľ					

4. Click the **Create and add to a new group** (**=**) icon in the top-left corner of the screen.

≡ MX view O	NE					() English	💄 admin 1
Saved CLI S	cripts						
CLI Scripts	Execution Results	Script Automation	Automation Buttons				
Create and add to a				New2 /	153+154 /	New /	
Create and add to a	new group			/			

The **Create and add to a new group** window will appear.

Group Name *		
	0 / 64	
Button Name *	•	

- 5. Configure the following settings:
 - > **Group Name**: Enter a name for the group.
 - > **Button Name**: Select the button(s) to add to this group.

6. Click **Create**.

The changes will appear on the **Automation Buttons** page.

≡ MX view ©	NE				() English	💄 admin '
Saved CLI S	cripts					
CLI Scripts	Execution Results	Script Automation	Automation Buttons			
802						
			Moxa EU 🗸	New2 /	New 🖍	
					•	
			start-btn	same_cli_btn1	diff_cli-btn	
				Moxa Asia 🖌	153+154	·
>					same_cli_btn2	
<u> </u>						

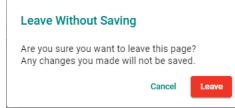
7. Click the **Save** (^B) icon to save your changes and leave edit mode.

\equiv MX view O	NE				() English	👱 admin▼
Saved CLI S	cripts					
CLI Scripts	Execution Results	Script Automation	Automation Buttons			
1						
				New2	New	
				same_cli_btn1	diff_cli-btn	
				Moxa EU	153+154	a l
>				start-btn	same_cli_btn2	

8. A confirmation will appear to verify the button was updated.



If you leave the **Automation Buttons** page without saving, a confirmation window will appear.



Changing the Automation Button Widget Size



NOTE

Changes to the widget size will reflect on both the **Automation Buttons** and **Topology** pages.

- 1. Navigate to Menu (≡) > Saved CLI Scripts.
- 2. Go to the Automation Buttons tab.

3. Click the **Edit** () icon in the top-left corner of the screen to enter edit mode.

\equiv MX view O	NE						() English	👱 admin▼
Saved CLI S	cripts							
CLI Scripts	Execution Results	Script Automation	Automation Buttons					
1								
-				153+154	Ne	w	New2	
			same_	cli_btn2	diff_cli-btn	start-btn	same_cli_btn1	

4. Click the **Widget Size** () icon in the top-left corner of the screen.

DNE						() English	👤 admin▼
Scripts							
Execution Results	Script Automation	Automation Buttons					
			153+154 2	Nev	v /	New2 /	
				•	•		
		same	_cli_btn2	diff_cli-btn	start-btn	same_cli_btn1	
	DNE Scripts Execution Results	Scripts	Scripts Execution Results Script Automation Automation Buttons	Scripts Execution Results Script Automation Automation Buttons	Scripts Execution Results Script Automation Automation Buttons 153+154 / Nev /	Scripts Execution Results Script Automation Automation Buttons 153+154 / New / / / /	Scripts Execution Results Script Automation 153+154 / New / / /

The **Widget Size** window will appear.

Widget Size			
Widget Size *			
Large		-	
Align all groups in	a single colu	mn	

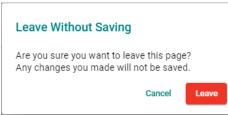
- 5. Configure the following settings:
 - Widget Size: Select the size of the automation button widgets on the Automation Buttons and Topology pages.
 - > Align all groups in a single column: Check to align automation button group widgets in a single column.
- 6. Click the **Save** (^B) icon to save your changes and leave edit mode

	NE				🌐 English 🛛 💄 admin
Saved CLI S	cripts				
CLI Scripts	Execution Results	Script Automation	Automation Buttons		
8 2 2					
Save			153+154 🖍	New 🖌	New2 /
			•	• •	•
			same_cli_btn2	diff_cli-btn start-btn	same_cli_btn1

7. A confirmation will appear to verify the button was updated.

Upda	ated succ	essfully		

If you leave the **Automation Buttons** page without saving, a confirmation window will appear.



MXview One features Moxa Firmware Server integration to check for the availability of the latest firmware for devices. From the Firmware Management section, users can review the release notes, download the firmware file, and perform firmware updates for multiple devices at once.

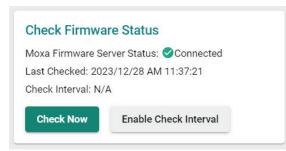
Firmware Management Overview

To access the Firmware Management page, in the function tree, navigate to **Menu** (\equiv) > **Firmware Management**.

On this page, users can find the **Check Firmware Status** function and a table of with the firmware information of all model series in the topology.

≡ MX view ©NE										() English	💄 admin ▼
Q Type keyword to sea	rch	F	irm	ware	Ma	anagement					Î
Dashboard Topology Device Discovery Device Management Saved CLI Scripts Firmware Management			Moxa F Last Cł Check Chec		Server 023/12 //A	Status Status: Connected 2/28 AM 11:37:21 nable Check Interval					
Device Configuration Cente	r v	<			_					Q Search	
Notification Management Reports						Model Series	Device Status	Latest Version on the Firmware Server	Selected Version	Selected Firmware Download Status	
Integration					۰	EDS-408A	🙁 Not updated	v3.13	:≡ None		
Administration					۰	EDS-G4008	🙁 Not updated	v3.2	i≡ None		
Help				(L)	۰	EDS-G512E-8PoE	Not updated	v6.4	i≡ None		
				[]		EDS-G516E	ONOT updated	v6.4	i≡ None		

Check Firmware Status



The **Check Firmware Status** section includes the following the information:

- **Moxa Firmware Server Status**: This indicates the status of the MXview One connection to the Moxa Firmware Server.
- Last Checked: This is the date and time MXview One last checked the firmware information on the Moxa Firmware Server.
- **Check Interval**: If Check Interval is enabled, this shows the interval at which MXview One will check for firmware information. If no interval is configured, this will show "N/A".

There are two ways for MXview One to check for the firmware information on the Moxa Firmware Server:

- Check Now: Click Check Now to immediately check for updated firmware information.
- **Enable Check Interval**: Specify a time and date interval at which MXview One will check for new firmware information.

Enable Check Interval				
Repeat *				
Daily	-			
Execution Time *				
;				
	Cancel	Add		

Model Series Table Overview

The models table is divided into two separate tabs: Models and Ignored Models.

Models

The **Models** tab shows an overview of all the model series and their respective firmware information. All identical models will be shown by a single representative entry in this table.

	Models	Ignored Models				
						Q Search
		Model Series	Device Status	Latest Version on the Firmware Server	Selected Version	Selected Firmware Download Status
	- I 🏚	EDS-408A	Not updated	v3.13	i≡ None	
		EDS-G4008	Not updated	v3.2	: None	
	□ [] ♠	EDS-G512E-8PoE	Not updated	v6.4	i≡ None	
		EDS-G516E	Not updated	v6.4	i≡ None	
>	□ [] ♠	MDS-G4028	Not updated	v4.0	i≡ None	
	□ I	PT-7728-PTP	Not updated	v3.6	i≡ None	
		PT-G510	Not updated	v6.5	: None	
		PT-G7728	Partially updated	v6.3	i≡ None	
		AWK-1151C	C All updated	v2.0	i≡ None	

This screen includes the following information:

Itom	Description		
Model Series	The model name. All identical models will be represented by a single entry. For example, if there are multiple EDS-408A devices, only one EDS-408A entry will appear in the table.		
Device Status	 The current firmware version status of the model series. The following statuses can be shown: All updated: The firmware version of all models of this type is up to date. Partially updated: The firmware version of some of the models of this type is not up to date. Not updated: The firmware version of all models of this type is not up to date. Not updated: The firmware version of all models of this type is not up to date. Not updated: The firmware version of all models of this type is not up to date. No information available: There is no firmware version information 		
Latest Version on the Firmware Server	available on the firmware server for this model. The latest firmware version of this model series on the Moxa firmware server.		
Selected Version	Shows the currently selected firmware version and its release notes. Users can select a different firmware version. Refer to <u>Selecting a Firmware Version</u> .		
Selected Firmware Download Status	After selecting a firmware version to download, this shows the firmware file download progress as a percentage.		

The following actions are available from this screen:

Icon	Name	Description
۹	Disable new version notifications	Click this icon to prevent MXview One from checking for and sending notifications for new firmware versions for that model series. This will add the model series to the Ignored Models list. Refer to <u>Ignored</u> <u>Models</u> for more information.
[+]	Upgrade firmware	Click this icon to initiate a firmware upgrade. Refer to <u>Upgrading</u> <u>Firmware</u> .
≔	Select firmware version	Click this icon to select a different firmware version. Refer to <u>Selecting a Firmware Version</u> .
0	Security patch available	This icon indicates a new security patch is available for that model series.
1	Enable new version notifications	Click this icon to enable MXview One to check for and send notifications for new firmware versions for that model series.

Ignored Models

The Ignored Models lists all models for which MXview One is not checking for new firmware and is not

sending notifications. To add a model series to the Ignored Models list, click the **bell** () icon on the Models tab next to the model series.

Models	Ignored Models	
	Model Series	
*	EDS-408A	
-	200 1000	

Selecting a Firmware Version

Users can manually select a firmware version to upgrade to. When upgrading firmware, MXview One will apply the selected firmware to all similar models.

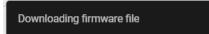
- 1. Navigate to Menu (≡) > Firmware Management.
- 2. Go to **Models** tab.
- 3. In the device list, click the **Select Firmware** (E) icon of the corresponding model series in the Selected Version column.

The **Select Firmware** window will appear.

4. Select a different firmware version from the Version drop-down menu. The release notes for the selected firmware version will appear in the section below.

/ersion		
5.4	·	
Release	Notes	
Change N/A		
	ort for SFP auto-negotiation/forced mode CLI commands. chanism to prevent firmware downgrading to a version earlier than v6.2.	
Feature N/A		
2. If the ring	ntication fails when using MS-CHAPv2 with certain RADIUS servers. vrts and coupling port are configured in a sequence (e.g. ports 1, 2, 3) an s the last port in the sequence, the coupling link will not be established.	d the
certain older	e changes to the components of the product, the device will be incompat mware versions. To ensure device stability, a mechanism has been adde re downgrading to any version earlier than v6.2.	

- 5. Click Select.
- 6. MXview One will begin download the selected firmware.



7. The download progress will be shown in the Selected Firmware Download Status.

	Model Series	Device Status	Latest Version on the Firmware Server	Selected Version	Selected Firmware Download Status
– U 🖡	EDS-G516E	🙁 Not updated	v6.4	:≡ v6.4	100%
- ± \$	MDS-G4028	🙁 Not updated	v4.0	i≡ None	
• • •	PT-7728-PTP	🙁 Not updated	v3.6	i≡ None	

Upgrading Firmware

Once you have selected a firmware version and MXview One has finished downloading the firmware file, you can upgrade the firmware of the selected model series. To select and download a firmware version, refer to <u>Selecting a Firmware Version</u>.

- 1. Navigate to **Menu** (≡) > **Firmware Management**.
- 2. Go to the **Models** tab.
- 3. In the device list, select the model series to upgrade firmware for. You can select multiple model series.
- 4. Click the **Upgrade Firmware** () icon.
- 5. Configure the reboot sequence and execution time.

pgrade	Sequence				
mart Sequ	ential 👻				
Order	IP	Alias	Model Series	Current Version	Selected Version
1	192.168.127.11	192.168.127.11EDS-G516E	EDS-G516E	V6.3 build 23032200	v6.4
2	10.123.32.40	10.123.32.40MDS-G4028	MDS-G4028		v4.0
				Cancel Schedul	ed Upgrade Upgrade Now

- a. Select the reboot sequence:
 - □ Strict Sequential: Upgrade the devices based on the device sequence in the topology starting from the device furthest away from the computer running MXview One, proceeding to the nearest one.
 - □ **Smart Sequential:** Upgrade the devices based on the device sequence in the topology but simultaneously upgrade all devices in the same topology layer.

•

NOTE

The computer running MXview One must be added to the topology in order for MXview One to determine the upgrade sequence. If the computer running MXview One is not added to the topology, you cannot select an update mode and MXview One will update the device firmware concurrently.

- b. Select an execution time:
 - **Upgrade Now**: Click **Upgrade Now** to upgrade the devices instantly.
 - □ Scheduled Upgrade: Click Scheduled Upgrade to create a new scheduled task. MXview One will upgrade the devices based on the specified time and date in the schedule.
- 6. To upgrade the devices instantly, click Upgrade Now. The system will execute the action.

rmware Upgrade Status									
A The firmware upgrade may take some time. Please wait for the upgrade process to complete.									
Order	IP	Alias	Model Series	Selected Version	Status				
1	10.123.32.40	10.123.32.40MDS-G4028	MDS-G4028	v4.0	Waiting				

 Click Download CSV Report or Download PDF Report to download a summary report of the firmware upgrade. 8. If the firmware upgrade was unsuccessful, check the error description in the Status column to identify the issue. Click **Retry Failed Devices** to perform the action again.

Order	IP	Alias	Model Series	Selected Version	Status
1	10.123.32.40	10.123.32.40MDS-G4028	MDS-G4028	v4.0	Failed
2	192.168.127.11	192.168.127.11EDS-G516E	EDS-G516E	v6.4	Finished

9. If you close this page without downloading the results report, a confirmation will appear. Clicking **Ignore** will delete the results report permanently.

Ignore Report
Are you sure you want to skip downloading the report?
If you leave this page, the report will no longer be available for download.
Back Ignore

MXview One allows you to monitor system events, create custom monitoring events, and configure event notifications.

Event Monitoring

Viewing Event History

The **Event History** screen provides information about all the network events for devices in your topology. Use the filters to customize the information displayed in the table. You can also export the data as a CSV file.

Event History

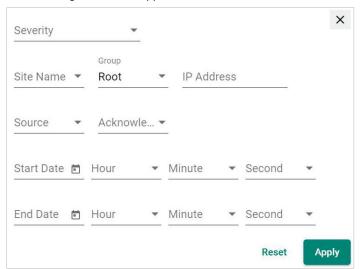
\mathbf{M}	ŧ:	J	Ŧ						
			Site Name	ID	Source	Source IP	Device Alias	Description	Time Issued
	`	ß	Site BRANDONYANG-PC	1096	MXview One	192.168.127.158	192.168.127.158ICMP Device	Device ICMP reachable	2022-05-05 15:52:32
	\sim	8	Site BRANDONYANG-PC	1095	MXview One	192.168.127.158	192.168.127.158ICMP Device	Device ICMP unreachable	2022-05-05 15:52:32
	$\mathbf{\mathbf{Y}}$	B	Site BRANDONYANG-PC	1094	MXview One	192.168.1.130	192.168.1.130ioLogik- W5312	Device SNMP unreachable	2022-05-05 15:51:55
	$\mathbf{\mathbf{Y}}$	B	Site BRANDONYANG-PC	1093	MXview One	192.168.1.130	192.168.1.130ioLogik- W5312	Device ICMP unreachable	2022-05-05 15:51:52
	$\mathbf{\sim}$	B	Site BRANDONYANG-PC	1092	MXview One	192.168.1.129	192.168.1.129AWK-1131A	A Device ICMP unreachable	2022-05-05 15:51:25
	\sim	B	Site BRANDONYANG-PC	1091	MXview One	192.168.1.129	192.168.1.129AWK-1131A	A Device SNMP unreachable	2022-05-05 15:51:14
					N 457 -		100 100 107 000 1040		

1. Navigate to Menu (≡) > Event Management > Event History.

The **Event History** screen will display the following information in a table format:

Column	Description
Ack All Events/Acknowledge	Acknowledge status of the event
Show Details	The detailed information of this event
Site Name	The site to which the device that issued the event belongs
ID	The unique identifier of the event
Source IP	The IP address of the device that issued the event
Source	The source of the event
Device Alias	The unique name of the device
Description	The description of the event
Time Issued	The time the event was issued

- 2. To filter the information in the table by specific criteria:
 - a. Click the **Filter** ($\overline{\Xi}$) icon in the top left corner. The following screen will appear.



b. Specify any of the following criteria:

Criteria	Description
Severity	Select the severity level of the event
Site Name	Select the site to which the device that issued the event belongs
Group	Select the group to which the device is assigned
IP Address	Specify the IP address of the device
Source	Select the source of the event
Acknowledge	Select the acknowledgement status of the event
Start Date	Specify the start date and time for the event data to display
End Date	Specify the end date and time for the event data to display

c. Click Apply.

MXview One filters the table to only display events that match the specified criteria.

- To sort the data in the table by a specific column, click the column heading. MXview One sorts the table by the column.
- 4. To export data displayed on the **Event History** screen:
 - a. Click the **Export** () icon.

D =
Export CSV
Export All Events to CSV 4

b. Select **Export CSV** for just the events on the first page or **Export All Events to CSV** for all event pages.

MXview One exports the displayed event data as a CSV file.

Configuring Event Thresholds and Severity Levels

Use the **Preferences** and **Global Device Settings** screen to configure default event thresholds and severity levels.

- Navigate to Menu (=) > Administration > Preferences. The Preferences screen will appear.
- 2. In the **Advanced** section, expand **Events**.

The **Events** settings will appear.

<	Events		^
	Link Up *		
	Information	•	
	Link Down *		
	Information	*	
			Save

- 3. Select one of the following severity levels for Link Up events:
 - > Information
 - > Waning
 - > Critical
- 4. Select one of the following severity levels for Link Down events:
 - > Information
 - > Warning
 - > Critical
- 5. Navigate to Menu (≡) > Administration > Global Device Settings.

The Global Device Settings screen will appear.

μ	

NOTE

Once you save the settings in the Global Device Settings section, the settings will synchronize to each device in the topology.

- 6. To trigger events when network bandwidth utilization exceeds a threshold:
 - a. Select Enabled from the first Bandwidth Utilization Over drop-down list.

Bandwidth Utilization Over Enabled	•		
Bandwidth Utilization Over		Severity	
0		Warning	
	%		

b. Specify the percentage of bandwidth utilization for the threshold.

Bandwidth Utilization Over Enabled	•	
Bandwidth Utilization Over 0	Severity Warning	· · · · · ·
	%	

- c. Select the **Severity** level for the event.
- 7. To trigger events when network bandwidth utilization falls below a threshold:
 - a. Select **Enabled** from the first **Bandwidth Utilization Under** drop-down list.

Bandwidth Utilization Under Enabled	•		
Bandwidth Utilization Under		Severity	
0		Warning	-
	%		

b. Specify the percentage of bandwidth utilization for the threshold.

Bandwidth Utilization Under Enabled	
Bandwidth Utilization Under 0	Sevenity Warning
%	

- c. Select the **Severity** level for the event.
- 8. To trigger events when the packet error rate exceeds a threshold:
 - a. Select **Enabled** from the first **Packet Error Rate Over** drop-down list.

Packet Error Rate Over Enabled	•			
Packet Error Rate Over		Severity		
0		Warning	*	
	%			

b. Specify the packet error rate for the threshold.

Packet Error Rate Over Enabled		
Packet Error Rate Over	Severity	
0	Warning	~
%		

c. Select the Severity level for the event.

- 9. To trigger events when the SFP TX value is below a certain threshold:
 - a. Select **Enabled** from the first **SFP TX Under** drop-down list.

SFP TX Under Enabled	•		
SFP TX Under *		Severity *	
0		Warning	-
-100 - 0	dBm		

b. Specify the SFP TX threshold level.

SFP TX Under *			
Enabled	•		
SFP TX Under		Severity *	
-50	\$	Warning	•
-100 - 0	dBm		

- 10. To trigger events when the SFP RX value is below a certain threshold:
 - a. Select **Enabled** from the first **SFP RX Under** drop-down list.

SFP RX Under Enabled	•		
SFP RX Under *		Severity *	
0		Warning	•
-100 - 0	dBm		

b. Specify the SFP RX threshold level.

SFP RX Under *			
Enabled	•		
SFP RX Under		Severity *	
-50	\$	Warning	-
-100 - 0	dBm		

- 11. To trigger events when the SFP voltage is below a certain threshold:
 - a. Select **Enabled** from the first **SFP Voltage Under** drop-down list.

SFP Voltage Under Enabled	•		
SFP Voltage Under *		Severity *	
0		Warning	•
0 - 10	V		

b. Specify the SFP Voltage threshold level.

SFP Voltage Under *			
Enabled	•		
SFP Voltage Under		Severity *	
5	\$	Warning	-
0 - 10	V		

- 12. To trigger events when the SFP voltage is over a certain threshold:
 - a. Select **Enabled** from the first **SFP Voltage Over** drop-down list.

SFP Voltage Over Enabled	•		
SFP Voltage Over *		Severity *	
0		Warning	•
0 - 10	V		

b. Specify the SFP Voltage threshold level.

SFP Voltage Over * Enabled	•		
SFP Voltage Over *		Severity *	
5		Warning	•
0 - 10	V		

- 13. To trigger events when the SFP temperature is over a certain threshold:
 - a. Select **Enabled** from the first **SFP Temperature Over** drop-down list.

SFP Temperature Over Enabled	•		
SFP Temperature Over *		Severity *	
0		Warning	•
0 - 100	°C		

b. Specify the SFP Temperature threshold level.

Enabled	•		
SFP Temperature Over *		Severity *	
50		Warning	•
0 - 100	°C		

NOTE

If the threshold is set as '0', the threshold function will be disabled.

14. Click Save.

MXview One will update the event threshold settings.

Notification Methods

MXview One supports email notifications for events. The notification method requires specific server configurations.

Configuring Email Server Settings

Use the **System Settings** screen to configure an email server to send email notifications for event notifications.

1. Navigate to Menu (=) > Administration > System Settings.

The System Settings screen will appear.

- 2. Find the Email Server Configuration section.
- 3. Configure the following:
 - > Server Domain Name/IP
 - > Port number
 - > Encryption
 - > Username
 - > Password
 - > Sender Address
- 4. Click Save.

MXview One can send email messages for configured event notifications.

Notification Management

The **Notification Management** screen allows you to configure event notifications by issuing a registered action (e.g., sending an email message to a specified recipient) when configured events are detected on your network.

Notification	Management		
Notification	Action		
		۵	"Please go to Action Tab and add an action first"
		Ŧ	Action

Configuring New Event Notifications

MXview One event notifications require at least one registered action (e.g., sending an email message to a specified recipient), which MXview One performs when a specified event is detected on your network.

- Navigate to Menu (=) > Notification Management. The Notification Management screen appears.
- 2. To register an action:
 - a. Click the Action tab.

The Action tab displays a list of registered actions (if any).

Notification Management		
Notification Action		
• •		Q. Search
Action Name	Туре	Action Information
🗆 🖍 🔋 Test	E-mail	email@example.com
		1 – 1 of 1

b. Click the **Add** (\pm) icon in the top right corner.

The Add notification action screen will appear.

Add notifica	tion action		
Action Name *			
Type *	•		
Action Informat	ion *		
		Cancel	Add

- c. In the Action Name field, type a name to describe the action.
- d. From the $\ensuremath{\mbox{Type}}$ drop-down list, select one of the following actions:
 - **E-mail:** Sends an email to the specified email address.
- e. Provide additional information required for the action (if any).
- f. Click Add.

The registered action appears in the table on the **Action** tab.

- 3. To add a new event notification:
 - a. Click the Notification tab.

The Notification tab displays a list of configured event notifications (if any).

otificatio	n Management				
Notification	Action				
• •			-	Q Search	
	Notification Name	Туре	Registered Devices	Registered Actions	
- / 1	Test	Device ICMP unreachable	2	Test;	
					1 - 1 of 1

b. Click the Add (¹/₁) icon in the top right corner.
 The Add notification screen appears.

Add notification	
Notification Name *	
Type *	•
Registered Devices * 👻	
Registered Actions * 👻	
	Cancel Add

- c. In the Notification Name field, type a name to describe the event notification.
- d. From the Type drop-down list, select the event type.
- e. From the Registered Devices drop-down list, select the network device(s) you want to monitor.
- f. From the **Registered Actions** drop-down list, select the action that MXview One performs when the specified event is detected on the previously selected device(s).
- g. Click Add.

The event notification appears in the table on the **Notification** tab.

Editing or Exporting Registered Actions

Use the **Action** tab on the **Notification Management** screen to edit registered actions or export a CSV file containing registered action information.

- Navigate to Menu (=) > Notification Management. The Notification Management screen will appear.
- 2. Click the **Action** tab.

The **Action** tab displays a list of registered actions.

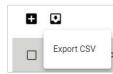
- 3. To edit a registered action:
 - a. Click the Edit (✓) icon next to the action you want to edit.
 The Edit notification action screen will appear.

Edit notifica	tion action		
Action Name *			
Test			
Type *			
E-mail	*		
Receiver Email *			
email@examp	e.com		
		Cancel	Apply

- b. Modify the following settings:
 - Action Name
 - 🗖 Туре
 - Action information
- c. Click Apply.

The **Action** tab appears and displays the updated action information.

- 4. To export data displayed on the Action tab:
 - a. Click the **Export** () icon.



b. MXview One exports the displayed action data as a CSV file.

Editing or Exporting Notification Configurations

Use the **Notification** tab on the **Notification Management** screen to edit configured notifications or export a CSV file containing notification configuration information.

- Navigate to Menu (=) > Notification Management. The Notification Management screen will appear.
- 2. Click the **Notification** tab.

The **Notification** tab displays a list of configured notifications.

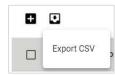
- 3. To edit a notification:
 - a. Click the Edit (𝒜) icon next to the action you want to edit.
 The Edit notification screen will appear.

Edit Notification	
Notification Name *	
Test	
Type *	
Device ICMP unreachable	•
Registered Devices *	
All devices	
Registered Actions *	
Email	
Content	
The device ICMP is unreachable.	0
	<u>1</u> 9
	31 / 2000
	Cancel Apply

- b. Modify the following settings:
 - Notification Name
 - 🗖 Туре
 - Registered devices
 - Registered Actions
- c. Click Apply.

The **Notification** tab appears and displays the updated notification information.

- 4. To export data displayed on the **Notification** tab:
 - a. Click the **Export** () icon.



b. Select Export CSV.

MXview One exports the displayed notification data as a CSV file.

Custom Event Management

The **Custom Event** screen provides information about all the custom events configured on MXview One. You can use the **Custom Event** screen to view whether a custom event is enabled or disabled, modify a custom event, or export custom event configurations as a CSV file.

(3)							0		
ritical (1)	H 🖸						Q Searc	h	
farning (1)		Event Name	Enabled/Disabled	Condition	Description	Recovery Description	Duration	Registered Devices	
formation (1)	0/1	DslLed1	Enabled	Over 10	The DsILed1 value is over 10.	Recovery	0	5	
	0/1	ifInDiscards.13	Enabled	Below 10	The ifInDiscards.13 value is below 10.	Recovery	0	5	
	0/1	cpuLoading300s	Enabled	Over 20	The cpuLoading300s is over 20.	Recovery	0	5	

Configuring Custom Events

The Custom Event screen allows you to define your own events to monitor with flexible detection thresholds, severity levels, and duration times. You can also export the custom event configurations as a CSV file.

Custom Events Management									
All (0)	+ 0						Qs	earch	
Critical (0)		Event Name	Enabled/Disabled	Condition	Description	Recovery Description	Duration	Registered Devices	
Warning (0)									0 of 0

- Navigate to Menu (≡) > Event Management > Custom Event. The Custom Event screen appears.
- Click the Add (¹) button in the top-left corner of the screen.
 The Add custom event screen will appear.

Add Custom E	vent			
Enable Custom Event *				
Enabled	*			
Severity *	*			
Device Properties	*			
Condition Operato	or* 🔻	Condition Value *		
Description				
	0 / 250			
Recovery Descrip	tion			
Duration *	0 / 250			
0				
Consecuti	ve Pollings			
Registered Device	es* 💌			
			Cancel	1

- 3. Select the default event status:
 - > Enabled: MXview One monitors the event
 - > **Disabled:** MXview One does not monitor the event
- 4. Select one of the following severity levels for the event:
 - Information
 - > Warning
 - > Critical
- 5. Click the **Device Properties** and select the device property to monitor.
- 6. Configure the following threshold criteria:
 - > Condition Operator: Select the criteria operator for matching the condition value
 - > Condition Value: Specify the value for the criteria operator to match
- 7. (Optional) In the **Description** field, type a string (up to 250 characters in length) to describe the custom monitoring.
- 8. (Optional) In the **Recovery Description** field, type a string (up to 250 characters in length) to describe how to recover from the event.
- 9. In the **Duration** field, users can specify how many times an event can happen without any action being taken. If the number of times the event happens exceeds the **Duration**, then MXview One will send an alert.
- 10. From the Register Devices drop-down list, select the devices to monitor for the custom event.
- 11. Click Add.

The custom event appears in the **Custom Event** table.



NOTE

If the threshold is set as '0', the threshold function will be disabled.

Viewing or Exporting Custom Event Settings

The **Custom Event** screen provides information about all the custom events configured on MXview One. You can use the **Custom Event** screen to view whether a custom event is enabled or disabled, modify a custom event, or export custom event configurations as a CSV file.

(3)	+ •					Q Search		
ritical (1)						- Cocuro		
/arning (1)		Event Name	Enabled/Disabled	Condition	Description	Recovery Description	Duration	Registered Devices
formation (1)		lpAddr	Enabled	Over 10	123	456	5	1
		IpMask	Enabled	Equal 23	2525	sfdg	6	1
	0/1	dhPort2	Enabled	Not Equal 50	gddfgsdg	wedgzgbaeh	134	1

1. Navigate to Menu (≡) > Event Management > Custom Event.

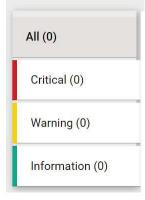
The **Custom Event** screen will appear and displays the following information in a table format:

Column	Description
Event Name	The name of the event
Enabled/Disabled	The monitoring status of the event
Condition	The threshold criteria configured for the event
Description	The description of the event
Recovery Description	The recovery description of the event
Duration	The number of times of consecutive pollings for the event
Registered Devices	The number or registered devices that the event applies to

2. To search for information in the table, type a full or partial string that matches the value in any of the table columns.

MXview One filters the table to only display events with values that fully or partially match the specified string.

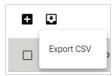
3. To filter the information in the table by event severity, click one of the color-coded severity levels in the left-side panel.



MXview One filters the table to only display events that match the selected severity level.

 To sort the data in the table by a specific column, click the column heading. MXview One sorts the table by the column.

- 5. To export data displayed on the **Custom Event** screen:
 - a. Click the **Export** () icon.



b. Select Export CSV.

MXview One exports the displayed event data as a CSV file.

Enabling/Disabling or Editing Custom Events

To enable or disable a custom event, edit the custom event settings.

- Navigate to Menu (≡) > Event Management > Custom Event. The Custom Event screen appears.
- Click the Edit (
 icon next to the event you want to enable/disable. The Update custom event screen appears.

able Custom Event *			
nabled	•		
Severity *			
ritical	*		
evice Properties *			
)slLed1			
Condition Operator *		Condition Value *	
Condition Operator * Over Description The DsILed1 is ove		10	
Dver Description			
Over Description The DSILed1 is ove	er 10.		
Over Description The DSILed1 is over Recovery Description Recovery	er 10.		
Dver Description The DSILed1 is over Recovery Description Recovery Duration *	er 10. 23 / 250 8 / 250		
Over Description The DSILed1 is over Recovery Description Recovery	er 10. 23 / 250 8 / 250		

- 3. From the Enable Custom Event drop-down list, select one of the following:
 - Enabled
 - > Disabled
- 4. Modify any additional event settings you wish to change.
- 5. Click Apply.

The **Custom Event** screen will appear and displays the updated event information.



NOTE

If the threshold is set as '0', the threshold function will be disabled.

Syslog Settings

MXview One features a built-in syslog server to receive and log syslog events from devices. Users can also define filtering rules, allowing MXview One to forward syslog events that match these rules to one or multiple external syslog servers.

Enabling/Disabling the Built-in Syslog Server

- Navigate to Menu (≡) > Event Management > Syslog Settings. The Syslog Settings screen appears.
- 2. Go to the **Syslog Server Settings** tab.

Syslog Settin	gs	
Syslog Server Settings	Syslog Viewer	Syslog Forwarding
Built-in Syslog Server * Disabled UDP Port *	×	
514 1 - 65535		
TCP Port * 5143 1 - 65535	Authentication * Disabled	T
Save		

- 3. To enable the syslog server:
 - a. In the Built-in Syslog Server field, select a syslog mode.
 - **Enable (UDP only)**: Enable the syslog server and restrict it to UDP only.
 - **Enable (TCP only)**: Enable the syslog server and restrict it to TCP only.
 - **Enable (UDP & TCP)**: Enable the syslog server and make it accessible via TCP and UDP.
 - b. Specify the syslog server's UDP port. The default port number is 514.
 - c. Specify the syslog server's TCP port. The default port number is 5143.
 - d. Select an authentication mode:
 - **Disabled**: Do not require authentication.
 - **TLS only**: Use TLS authentication.
 - **TLS + certificate**: Use a combination of TLS and certificates for authentication.
 - e. Click Save.

NOTE

If you selected **TLS + certificate** as the authentication method, the **Download and manage certificates from the MXview One Control Panel** message will show. Click the link to go to MXview One Control Panel for managing the syslog server certificate.

- 4. To disable the syslog server:
 - a. In the Built-in Syslog Server field, select Disabled.
 - b. Click Save.

Viewing Syslog Events

Use the **Syslog Viewer** tab on the **Syslog Settings** screen to view information about syslog events on your network. Use the filters to customize the information displayed in the table. You can also export the data as a CSV file.

≡ MXview ONE	🌐 English 🗕 admin'
Syslog Settings	
Syslog Server Settings Syslog Viewer Syslog Forwarding	
	Q Search
Severity Time Stamp IP Address Facility Message	
	Items per page: 100 ▼ 0 of 0 < < > >

- 1. Navigate to Menu (≡) > Event Management > Syslog Settings. The Syslog Settings screen appears.
- 2. Go to the **Syslog Viewer** tab.

The **Syslog Viewer** screen displays the following information in a table format:

Column	Description
Severity	The severity of the event
Time Stamp	The time the event was issued
IP Address	The IP address of the device that issued the event
Facility	The group the device is assigned to
Message	The description of the event

- 3. To search the information in the table, type a full or partial string that matches the value in any of the table columns.
- MXview One searches the table to only display results that fully or partially match the specified string.
- 4. To filter the information in the table by specific criteria:
 - a. Click the **Filter** $(\overline{=})$ icon in the top-left corner.

The following screen will appear.

IP Address					×
Facility	•				
Priority	•	Severity		•	
Start Date 🖬 Hour	4	▼ Minute	•		
End Date 📋 Hour		▼ Minute	•		
				Reset	Apply

b. Specify any of the following criteria:

Criteria	Description
IP Address	Specify the IP address of the device that issued the event
Facility	Select the group to which the device is assigned
	Select the criteria operator for matching the event severity level:
Priority	Higher than or equal to
Thomey	• Equals
	Lower than or equal to
Severity	Select the severity level of the event
Start Date	Specify the start date and time for the event data to display
End Date	Specify the end date and time for the event data to display

c. Click Apply.

MXview One filters the table to only display events that match the specified criteria.

- To sort the data in the table by a specific column, click the column heading. MXview One sorts the table by the column.
- 6. To export data displayed on the **Syslog Viewer** screen:
 - a. Click the **Export** () icon.

Ŧ		
Site	Export CSV	
	Export All Syslog to CSV	

- b. Select **Export CSV** for just the first syslog page or **Export All Syslog to CSV** for all syslog pages. MXview One exports the displayed syslog data as a CSV file.
- To clear all syslog data, click the Clear All Events (¹) icon.
 MXview One clears all syslog data on the Syslog Viewer screen.

Enabling/Disabling Syslog Forwarding

From the **Syslog Forwarding** tab on the **Syslog Settings** screen, you can enable or disable the syslog forwarding function and define the filtering rules. MXview One will act as a syslog forwarder and forward the syslog events that match the configured rules to one or multiple external syslog servers.

Syslog Settings					
Syslog Server Settings	Syslog Viewer	Syslog Forwarding			
Syslog Forwarding * Disabled					
Protocol *					
Remote IP/Domain Na	Port 1				
0 / 253	1 - 65535				
Remote IP/Domain Na	Port 2				
0 / 253	1 - 65535				
Syslog Filters (1/128)					
+ Source IP *		Severity *			
Any IP		All	*		-
					•
Save					

- Navigate to Menu (=) > Event Management > Syslog Settings. The Syslog Settings screen appears.
- 2. Go to the **Syslog Forwarding** tab.
- 3. To enable syslog forwarding:
 - a. Configure the following settings:
 - **Syslog Forwarding:** Select **Enabled**.
 - **Protocol**: Select the communication protocol (**UDP** or **TCP**).

□ Authentication: If you selected TCP as the Protocol, select an authentication method (Disabled, TLS only, TLS + certificate).

NOTE

If you selected **TLS + certificate** as the authentication method, the **Download and manage certificates from the MXview One Control Panel** message will show. Click the link to go to MXview One Control Panel for managing the syslog forwarding certificate.

- □ **Remote IP/Domain Name 1/2**: Specify the IP address or domain name of the 1st and 2nd syslog server.
- **Port 1/2**: Specify the port number of the 1st and 2nd syslog server.
- b. In the Syslog Filters section, configure the syslog filtering rules. The default rule is Source IP=Any IP, Severity=All, meaning MXview One will forward all syslog events from all sources and all severities.

To add a filtering rule, click the **Add** (**b**) icon and configure the following settings:

□ **Source IP**: Specify the IP addresses of the device(s) you want to forward syslog events for. You can enter multiple IP addresses, separated by a comma.

Syslog Fil	ters (1/128)		
• You	can enter multiple source IP addresses,	separated by a comma.	
8			
S	ource IP	Severity *	
1	92.168.127.1,192.168.127.2	All	*

Severity: Select the event severity level(s) that will be forwarded.

All	
Debug(7)	
✓ Info(6)	
Votice(5)	
Varning(4)	
_	•

NOTE

MXview One supports a maximum of 128 syslog forwarding filtering rules.

- c. To delete a filtering rule, click the **Delete** (\mathbf{I}) icon next to the rule you want to delete.
- d. Click **Save**. MXview One will forward any syslog events that match the configured rules.
- 4. To disable syslog forwarding:
 - a. In the Syslog Forwarding field, select Disabled.
 - b. Click Save.

The **Inventory Management** section allows users to manage device inventory, check warranty information, and manage rogue devices.

Assets and Warranty

Asset List Overview

To access the **Asset List** page, in the function tree, navigate to **Menu** (\equiv) > **Inventory Management** > **Assets and Warranty** and go to the **Asset List** tab.

The **Asset List** section provides a summary of key information about your network devices.

As	ssets and Warranty							
	Asset List Warranty Manage	ement Warranty	Notifications					
	. ≡,						Q Search	
	Alias	Model	IP	MAC Address	Firmware Version	Serial Number Warranty End Date		Channel Extended Warranty End Date
	192.168.123.70~AWK-3252A	AWK-3252A	192.168.123.70	00:90:E8:00:04:12	v2.0 Build 2023_0217_1145			N/A
	192.168.123.71Unknown Device	Unknown Device	192.168.123.71					N/A
1	192.168.123.72AWK-1151C AWK-1151C		192.168.123.72	00:90:E8:05:17:45	v2.0 Build 2022_1007_1814	ABCDE1234587		N/A
	192.168.123.151-EDS-G516E EDS-G516E		192.168.123.151	00:90:E8:44:52:AE	V6.2 build 20080519	06820		N/A
	192.168.123.152EDS-518A EDS-518A		192.168.123.152	00:90:E8:00:00:55	V3.9 build 21110513			N/A
	192.168.123.157-IEX-402-SHDSL	IEX-402-SHDSL	192.168.123.157	00:90:E8:D1:02:10	V1.0 build 12112311.			N/A
	192.168.127.2-ICMP Device	ICMP Device	192.168.127.2	00:21:C1:5C:3D:91				N/A
	192.168.127.15MDS-G4028	MDS-G4028	192.168.127.15	00:90:E8:7A:08:63	v5.0 Build 2024_0610_2008	TAICB1123037		N/A
								1 - 8 of 8

This page displays the following information in a table format:

Column	Description						
Alias	The unique name of the device.						
Model	The model number of the device.						
IP	he IP address of the device.						
MAC Address	The MAC address of the device.						
Firmware Version	The firmware version of the device.						
Serial Number	The serial number of the device.						
Warranty End Date	The date the device warranty expires.						
Channel Extended Warranty	The expiration date of the extended device warranty provided by your channel						
End Date	representative.						



NOTE

The **Channel Extended Warranty End Date** value is provided by the channel partner and must be entered by the user. Refer to <u>Editing the Channel Extended Warranty End Date</u>.

Searching the Asset List

- 1. Navigate to Menu (≡) > Inventory Management > Assets and Warranty.
- 2. Go to the **Asset List** tab.
- 3. In the **Search** (\mathbf{Q}) field, type the full or partial information. All items matching the entered string will be shown in the table.

Exporting the Asset List

- 1. Navigate to Menu (≡) > Inventory Management > Assets and Warranty.
- 2. Go to the Asset List tab.
- Click the **Export** () icon in the top-left corner of the table.
 MXview One exports the asset list as a CSV file.

Editing the Asset List Layout

- 1. Navigate to Menu (≡) > Inventory Management > Assets and Warranty.
- 2. Go to the Asset List tab.
- 3. Click the **Edit Columns** (=) icon in the top-left corner of the table.

The **Edit Columns** window will appear.

Edit	Columns		
Adjus	table Columns		Reset
H	Alias		Θ
#	Model		ο
H	IP		Θ
H	MAC Address		ο
:	Firmware Version		o
:	Serial Number		ο
:	Warranty End Date		o
#	Channel Extended Warranty End Date		0
		Close	Save

- 4. To show or hide a column:
 - a. Click the **Visible** (\odot) and **Hidden** (\bigotimes) icons to toggle column visibility.
- 5. To change the column order:
 - a. Click and drag the Drag (ii) icon of the column you want to move.



- b. Drag the column to the desired position and release the mouse.
- 6. To revert all changes to column visibility and order, click **Reset**.

7. Click Save.

Warranty Management Overview

To access the Warranty Management page, in the function tree, navigate to Menu (=) > Inventory Management > Assets and Warranty and go to the Warranty Management tab.

The **Warranty Management** section shows warranty information for your devices.

sse	ts and Warranty									
As	set List Warranty M	anagement Wa	ranty Notifications							
Aoxa W .ast Up	x Warranty Status Jarranty Server Status: Available date: 2024-07-22 PM 02:41:54 eve Data	Sea Ser	anually Check War ch by* ial Number Sheck	 Serial Number * 	0 / 12					
	• =,						Q Search			
	Alias	IP	MAC Address	Serial Number	Warranty Duration	Warranty Start Date	Warranty End Date	Channel Extended Warranty End Date	0	Warranty Status
	192.168.123.70AWK-3252A	192.168.123.7	0 00:90:E8:00:04:12	2				🖍 N/A		N/A
	192.168.123.71-Unknown Dev	ice 192.168.123.7	1							N/A

This page displays the following information in a table format:

Column	Description						
Alias	The unique name of the device.						
IP	The IP address of the device.						
MAC Address	The MAC address of the device.						
Serial Number	The serial number of the device.						
Warranty Duration	The warranty duration of the device.						
Warranty Start Date	The date the device warranty starts.						
Warranty End Date	The date the device warranty expires.						
Channel Extended Warranty	The expiration date of the extended device warranty provided by your channel						
End Date	representative.						
Warranty Status	The current warranty status of the device. Valid : The warranty is active and valid. The remaining duration (in days) between the current date and the Warranty End Date/Channel Extended Warranty End Date is greater than the threshold value configured for the Send Reminder field on the Warranty Notifications tab. Refer to Enabling Warranty Expiration Notifications. Expires soon : The warranty is active and valid. The remaining duration (in days) between the current date and the Warranty End Date/Channel Extended Warranty End Date is equal to or less than the threshold value configured for the Send Reminder field on the Warranty Notifications tab. Refer to Enabling Warranty Expiration Notifications. Expired : The device warranty has exceeded the warranty period.						

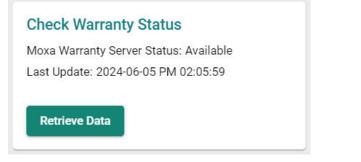
NOTE

The **Channel Extended Warranty End Date** value is provided by the channel partner and must be entered by the user. Refer to <u>Editing the Channel Extended Warranty End Date</u>.

Checking the Warranty Status of All Devices

- 1. Navigate to Menu (≡) > Inventory Management > Assets and Warranty.
- 2. Go to the Warranty Management tab.

3. The Check Warranty Status section includes the following information:



- Moxa Warranty Server Status: This indicates the status of the connection to the Moxa warranty server. If this connection is unavailable, the warranty table cannot be updated until the connection to the warranty server is restored.
- > Last Update: Shows the date and time the warranty table was last checked and updated.
- Click Retrieve Data. MXview One will check for updates and refresh the table.

Checking the Warranty Status of a Specific Device

- 1. Navigate to Menu (\equiv) > Inventory Management > Assets and Warranty.
- 2. Go to the **Warranty Management** tab.
- 3. The Manually Check Warranty section includes the following information:

Search by *		
Serial Number	Serial Number *	
		0/12

- Search by: Select the criteria to search for warranty information, either based on serial number or MAC address.
- Serial Number: If Serial Number is selected in the Search by field, specify the serial number of the device to check warranty information for.
- MAC Address: If MAC Address is selected in the Search by field, specify the MAC address of the device to check warranty information for.
- 4. Click **Check**.

 $\ensuremath{\mathsf{MXview}}$ One will check and show the warranty information for the specified criteria.

Searching the Warranty Management List

- 1. Navigate to Menu (≡) > Inventory Management > Assets and Warranty.
- 2. Go to the Warranty Management tab.
- 3. In the **Search** (\mathbf{Q}) field, type the full or partial information. All items matching the entered string will be shown in the table.

Exporting the Warranty Management List

- 1. Navigate to Menu (≡) > Inventory Management > Assets and Warranty.
- 2. Go to the Warranty Management tab.
- Click the Export () icon in the top-left corner of the table.
 MXview One exports the warranty management table as a CSV file.

Editing the Warranty Management List Layout

- 1. Navigate to Menu ([≡]) > Inventory Management > Assets and Warranty.
- 2. Go to the **Warranty Management** tab.
- Click the Edit Columns (=√) icon in the top-left corner of the table. The Edit Columns window will appear.

djus	table Columns	F	Reset
H	Alias		0
H	IP		0
H	MAC Address		0
H	Serial Number		0
H	Warranty Duration		0
H	Warranty Start Date		0
H	Warranty End Date		0
H	Channel Extended Warranty End Date		0
H	Warrantv Status		0
		Close	S

- 4. To show or hide columns:
 - a. Click the **Visible** (\odot) and **Hidden** (\bigotimes) icons to toggle column visibility.
- 5. To change the column order:
 - a. Click and drag the **Drag** (**!!**) icon of the column you want to move.

: Alias	Θ
---------	---

- b. Drag the column to the desired position and release the mouse.
- 6. To revert all changes to column visibility and order, click **Reset**.
- 7. Click Save.

Editing the Channel Extended Warranty End Date

- 1. Navigate to Menu (≡) > Inventory Management > Assets and Warranty.
- 2. Go to the Warranty Management tab.
- 3. Check the box of the device(s) you want to edit the Channel Extended Warranty End Date for.
- 4. Click the Edit () icon in the Channel Extended Warranty End Date column of the device you want to edit.

If you selected multiple devices, click the Edit (icon in the top-left corner of the page.
---	--

/	Q Search									
	Alias	IP	MAC Address	Serial Number	Warranty Duration	Warranty Start Date	Warranty End Date	Channel Extended Warranty End Date	0	Warranty Status
~	192.168.123.70-AWK-3252A	192.168.123.70						► N/A		N/A

The Channel Extended Warranty End Date window will appear.

mm/dd/yyyy		
		5

- 5. To update the channel extended warranty end date:
 - a. Click the **Calendar** () icon to select the new warranty end date.
 - b. Click Apply.

MXview One will update the channel extended warranty end date value and warranty status according to the new end date.

Alias	IP	MAC Address	Serial Number	Warranty Duration	Warranty Start Date	Warranty End Date	Channel Extende Warranty End Dat	Warranty Status
192.168.123.70-AWK-3252A	192.168.123.70	-						🔗 Valid

- 6. To reset the channel extended warranty end date:
 - a. Click Reset.

MXview One will update the channel extended warranty end date value to its default value of N/A.

Alias	IP	MAC Address	Serial Number	Warranty Duration	Warranty Start Date	Warranty End Date	Channel Extende Warranty End Dat	Warranty Status	
192.168.123.70-AWK-3252A	192.168.123.70						🖍 N/A	N/A	

Warranty Notifications Overview

To access the **Warranty Notifications** page, in the function tree, navigate to **Menu** (\equiv) > **Inventory Management** > **Assets and Warranty** and go to the **Warranty Notifications** tab.

From the **Warranty Notifications** tab, you can enable and configure warning notifications to inform you when a device's warranty is about to expire.

Enabling Warranty Expiration Notifications

- 1. Navigate to Menu (≡) > Inventory Management > Assets and Warranty.
- 2. Go to the Warranty Notifications tab.
- 3. Configure the following settings:
 - a. Enabled: Enable or disable warranty expiration notifications.
 - b. **Send Reminder**: Specify how many days before the Warranty End Date/Channel Extended Warranty End Date you want to receive a notification.
 - c. Email to: Enter the email address of the warranty notification recipient(s).

NOTE

You can add multiple recipient email addresses, separated by a comma.

4. Click Save.

MXview One will send an email notification to the specified recipients when the number of days from the current date to the device Warranty End Date/Channel Extended Warranty End Date is equal to the value set in the **Send Reminder** field.

Rogue Device Detection

From the **Rogue Device Detection** section, users can create a baseline of the currently monitored devices. When MXview One detects an unknown device connection that is not part of this baseline, the system will identify and show information about this rogue device. This feature can help users manage the connection status of devices within their network, preventing unknown devices from gaining access to the network.

Rogue Device Settings Overview

To access the **Rogue Device Settings** page, in the function tree, navigate to **Menu** (=) > **Inventory Management** > **Rogue Device Detection** and go to the **Rogue Device Settings** tab.

From the **Rogue Device Settings** tab, you can create a device baseline and enable the rogue device detection function.

Rogue Device D	etection		
Rogue Device Settings	Device Baseline	Current Rogue Devices	Rogue Device History
Device Baseline Created on: N/A		Rogue Device Detection	1
Create		Save No device baseli	ne exist. Create a baseline first.

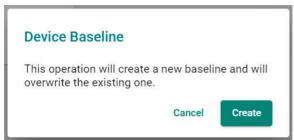
Creating a Device Baseline

- 1. Navigate to Menu (≡) > Inventory Management > Rogue Device Detection.
- 2. Go to the Rogue Device Settings tab.
- 3. The **Device Baseline** section includes the following information:

Created on: Shows the date and time when the most recent baseline was created. If no baseline has been created before, this will show N/A.

4. Click Create.

The **Device Baseline** window will appear.



5. Click Create.

MXview One will create a baseline of the currently monitored devices and enable the **Rogue Device Detection** function.

Rogue Device D	etection					
Rogue Device Settings	Device Baseline	Current Rogue Devices	Rogue Device History			
Device Baseline Created on: 2024-07-23 AM 0	3:50:53	Rogue Device Detection				
Create		Save				

Enabling/Disabling Rogue Device Detection



NOTE

To enable or disable **Rogue Device Detection**, a device baseline must be created first. Refer to <u>Creating a</u> <u>Device Baseline</u>.

- 1. Navigate to Menu (≡) > Inventory Management > Rogue Device Detection.
- 2. Go to the Rogue Device Settings tab.
- 3. In the **Rogue Device Detection** section, configure the following settings:

Rogue Device D	Detection
Enabled *	
Enabled	-
Save	

> **Enabled**: Enable or disable the Rogue Device Detection function.

4. Click Save.

NOTE

After creating a device baseline and enabling the **Rogue Device Detection** function, you can add devices to the baseline via the **Device Discovery** function or by <u>Adding a Rogue Device to the Baseline</u>.

Device Baseline Overview

To access the **Device Baseline** page, in the function tree, navigate to **Menu** (\equiv) > **Inventory Management** > **Rogue Device Detection** and go to the **Device Baseline** tab.

From the **Device Baseline** tab, you can view information about the devices included in the most recent baseline. From this screen, you can also add or remove devices from the baseline and export the device baseline.

Rogue Device Settings	Device Bas	eline Curre	ent Rogue Devices	Rogue Device History		
• •					Q Search	
MAC Ad	dress IP A	ddress	NIC Vendor			
00:90:E8	:44:52:AE 192.	168.123.151	Moxa Technologies CC	RP. Ltd		
00:90:E8	:00:00:55 192.	168.123.152	Moxa Technologies CC	RP. Ltd		

This page displays the following information in a table format:

Column	Description
MAC Address	The MAC address of the device.
IP Address	The IP address of the device.
NIC Vendor	The vendor of the device's network interface card.

Searching the Device Baseline

- 1. Navigate to Menu (≡) > Inventory Management > Rogue Device Detection.
- 2. Go to the **Device Baseline** tab.
- 3. In the **Search** (\mathbf{Q}) field, type the full or partial information. All items matching the entered string will be shown in the table.

Adding a Device to the Baseline

- 1. Navigate to Menu (≡) > Inventory Management > Rogue Device Detection.
- 2. Go to the **Device Baseline** tab.
- 3. Click the **Add** (**I**) icon in the top-left corner of the screen.

The Add Device to Baseline screen will appear.

- 4. Specify the MAC address of the device you want to add to the baseline.
- 5. Click Add.

Deleting Devices From the Baseline

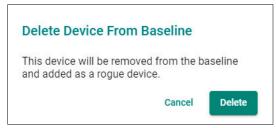


NOTE

If a device that was removed from the baseline attempts to reconnect, MXview One will identify the device as a rogue device and add it to the **Current Rogue Devices** list. Refer to <u>Current Rogue Devices</u> <u>Overview</u>.

- 1. Navigate to Menu (≡) > Inventory Management > Rogue Device Detection.
- Go to the **Device Baseline** tab.
 To delete a single device:

a. Click the **Delete** (**I**) icon next to the device you want to delete from the baseline. The **Delete Device From Baseline** screen will appear.



- 3. To delete multiple devices:
 - a. Check the box of the devices you want to delete from the baseline.
 - b. Click the **Delete** (■) icon in the top-left corner of the screen.
 The **Delete Device From Baseline** screen will appear.

Delete Device From Baseline	
These devices will be removed from the and added as rogue devices.	e baseline
Cancel	Delete

4. Click Delete.

Exporting the Device Baseline

- 1. Navigate to Menu (≡) > Inventory Management > Rogue Device Detection.
- 2. Go to the **Device Baseline** tab.
- Click the Export () icon in the top-left corner of the table.
 MXview One exports the device baseline as a CSV file.

Current Rogue Devices Overview

To access the **Current Rogue Devices** page, in the function tree, navigate to **Menu** (\equiv) > **Inventory Management** > **Rogue Device Detection** and go to the **Current Rogue Devices** tab.

From the **Current Rogue Devices** tab, you can view information about rogue devices detected on your network.

Ro	gue [Device Dete	ction				
R	ogue Devi	ce Settings De	vice Baseline	Current Rogue Devices	Rogue Device History		
							Q Search
		MAC Address	IP Address	First Seen	Last Seen	Connected Switch/Port	NIC Vendor
		00:90:E8:05:17:45	192.168.123.72	2024-07-23 AM 03:50:59	2024-07-23 AM 10:12:45	192.168.123.70	Moxa Technologies CORP. Ltd
	•	00:0C:29:29:C6:3C	192.168.123.209	2024-07-23 AM 03:51:36	2024-07-23 AM 10:12:43	192.168.123.152/Port1	Vmware Inc

Column	Description
MAC Address	The MAC address of the rogue device.
IP Address	The IP address of the rogue device.
First Seen	The date and time MXview One first detected the rogue device.

Last Seen	The date and time MXview One last detected the rogue device.
Connected Switch/Port	The switch device and port the rogue device is connected to.
NIC Vendor	The vendor of the rogue device's network interface card.



NOTE

It is possible to see the same IP listed with different MAC addresses in the rogue device list. This could indicate one of the following situations:

- A single device with multiple MAC addresses: In addition to a CPU MAC address, certain Moxa products (e.g. EDS-(G)4000 Series, MDS-G4028 Series, etc.) and some third-party devices have an individual MAC address for each port.
- Different devices using the same IP address: Different devices using an identical IP address indicate a possible IP conflict. To avoid issues, identify and resolve any IP conflicts.

Searching the Current Rogue Devices List

- 1. Navigate to Menu (≡) > Inventory Management > Rogue Device Detection.
- 2. Go to the Current Rogue Devices tab.
- 3. In the **Search** (\mathbf{Q}) field, type the full or partial information. All items matching the entered string will be shown in the table.

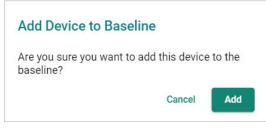
Adding a Rogue Device to the Baseline

- 1. Navigate to Menu (≡) > Inventory Management > Rogue Device Detection.
- 2. Go to the **Current Rogue Devices** tab.
- Click the Add () icon next to the rogue device you want to add to the baseline.
 To add multiple rogue devices to the baseline, check the box of the devices you want to add and click

the Add (🖼) icon in the top-lef	t corner of the screen.
-----------------------------------	-------------------------

					Q Se	arch
	MAC Address	IP Address	First Seen	Last Seen	Connected Switch/Port	NIC Vendor
	00:0C:29:36:3E:B8		2024-06-26 PM 04:28:43	2024-06-26 PM 04:28:43	192.168.127.14/Port7	Vmware Inc
E	00:0C:29:43:60:8B	192.168.127.186	2024-06-26 PM 04:28:43	2024-06-26 PM 04:28:43	192.168.127.14/Port7	Vmware Inc

The Add Device to Baseline window will appear.



4. Click Add.

Exporting the Current Rogue Devices List

- 1. Navigate to Menu (=) > Inventory Management > Rogue Device Detection.
- 2. Go to the **Current Rogue Devices** tab.
- Click the Export () icon in the top-left corner of the table.
 MXview One exports the current rogue devices list as a CSV file.

Rogue Device History Overview

To access the **Rogue Device History** page, in the function tree, navigate to **Menu** (\equiv) > **Inventory Management** > **Rogue Device Detection** and go to the **Rogue Device History** tab.

From the **Rogue Device History** tab, you can view information about rogue devices that were originally in the Current Rogue Devices list but are currently no longer detected by MXview One.

le Device I	Detection				
ue Device Settings	Device Baseline	Current Rogue Devices	Rogue Device History		
ÎF 🖸					Q Search
Sequence No.	MAC Address	IP Address	First Seen	Last Seen	NIC Vendor
18	00:90:E8:0E:BC:05	192.168.127.118	2024-07-23 AM 03:57:36	2024-07-23 AM 10:33:35	Moxa Technologies CORP. Ltd
17	4C:E7:05:0A:02:2B	192.168.127.117	2024-07-23 AM 03:57:36	2024-07-23 AM 10:33:11	Siemens Industrial Automation Products Ltd., Chengdu

This page displays the following information in a table format:

Column	Description
Sequence No.	The index of the history record.
MAC Address	The MAC address of the rogue device.
IP Address	The IP address of the rogue device.
First Seen	The date and time MXview One first detected the rogue device.
Last Seen	The date and time MXview One last detected the rogue device.
NIC Vendor	The vendor of the rogue device's network interface card.

Searching the Rogue Device History

- 1. Navigate to Menu (≡) > Inventory Management > Rogue Device Detection.
- 2. Go to the Rogue Device History tab.
- 3. In the **Search** (**Q**) field, type the full or partial information. All items matching the entered string will be shown in the table.

Exporting the Rogue Device History

- 1. Navigate to Menu (≡) > Inventory Management > Rogue Device Detection.
- 2. Go to the **Rogue Device History** tab.
- Click the Export () icon in the top-left corner of the table.
 MXview One exports the rogue device history as a CSV file.

Clearing the Rogue Device History

- 1. Navigate to Menu (≡) > Inventory Management > Rogue Device Detection.
- 2. Go to the Rogue Device History tab.
- Click the Delete (I ;) icon in the top-left corner of the screen.
 The Clear Rogue Device History window will appear.

Clear Rogue Device History	
All rogue device history will be cleared. Are sure you want to continue?	you
Cancel	Delete

4. Click **Delete**.

MXview One will clear the rogue device history.

16. Backups, Restores, and Compares

The MXview One web console provides several features to assist database backups and device configuration migrations. MXview One allows you to back up or restore configurations for multiple devices, and also compare changes between different versions of archived configuration files. You can also create scheduled jobs to automatically export/import device configurations or back up the MXview One database.

Backing Up the MXview One Database

Use the DB Backup & Restore screen on the Control Panel to back up the MXview One database.

 Navigate to DB Backup & Restore on the MXview One Control Panel. The Database Backup & Restore screen appears.

🕽 MXview On	e Control Panel		
Server Control			
Configuration	Backup	Restore	
DB Backup & Restore			
Plug-in Manager	Name *		
Certificate			0 / 255
	Save		

- 2. Choose the **Backup** tab to start the process of backing up the database.
- 3. In the **Name** field, specify the backup file name.
- 4. Click Save.
- 5. The message that the file of the backup database has been stored in the specified directory will be displayed.



6. The Database backup completed will appear on the Historical backups list.

Server Control	e Control Pa	inei		
Configuration	Backup	Restore		
DB Backup & Restore				
Plug-in Manager	Name *	Backup test		
Certificate			11/255	
	Save			
	Historical ba	ckups		
	Versio	on Name	Date	Time
	1 .1	Backup test	20221215	13:23:37
	1.1	Backup test2	20221215	13:42:02
	1.1	XXX-20221223	20221223	14:09:09

Backing Up Device Configurations

Use the **Device Configuration Center** screen to export configuration backup files from one or more devices.

- Navigate to Menu (=) > Device Configuration Center. The Device Configuration Center screen appears.
- 2. Click the **Backup** tab.

Available devices will appear in the **Device List**.

Config	Configuration Center							
Ba	ckup	Restore	Records					
Device								
=					Q Search			
	IP Address	Alias Name		Group	·			
	10.81.10.10	EDS-510E		Root				
	10.81.10.11	EDS-510E		Root				
	10.81.10.12	EDS-510E		Root				
	10.81.10.13	EDS-510E		Root				
	10.81.10.14	EDR-810		Root				
	10.81.10.15	EDS-510E		Root				

- 3. (Optional) Filter the devices in the **Device List**:
 - a. Click the **Filter** $(\overline{-})$ icon.
 - b. Specify any of the following criteria:
 - **Group:** The group in the MXview One tree structure that the device is assigned to
 - □ IP Address: The IP address of the device
 - c. Click Apply.

MXview One filters the **Device List** according to the specified criteria.

- 4. To export the device list from all available devices:
 - a. Click the **Export** () icon.

Ð		
	Export CSV	>

MXview One exports the 'All available devices' list as a CSV file.

- 5. To back up configurations from specific devices:
 - a. Select the check box next to the device(s) you want to back up.
 - b. Click the **Backup** (**b**) icon in either of the following locations:
 - **\Box** For a single device, click the **Backup** (**\Box**) next to the selected device.
 - \Box For multiple devices, click the **Backup** (\Box) icon in the upper left corner of the screen.

The Backup Configuration screen appears.

)e	vice	List					
	8						
			IP Address	Alias Name	Back Up Configuration		
		8	192.168.127.152	192.168.127.152EDS-518	MXview One will archive these configuration files		
		8	192.168.127.153	192.168.127.153EDS-405	192.168.127.152 192.168.127.153		
		8	192.168.127.154	192.168.127.154NPort-S8	192.168.127.154		
	~	8	192.168.127.155	192.168.127.155NPort-S8	192.168.127.155 192.168.127.156		
		a	192.168.127.156	192.168.127.156IEX-402-		Cancel	Save

c. Click Save.

MXview One archives configuration files from selected device(s) to the MXview One server and displays them in the **Records** tab. Also, MXview One will export configurations from the selected device(s) as a ZIP file.

For more information, please see the following topics:

Comparing Archived Configuration Files

NOTE

If MXview One compares two configuration files and they are the same, it will only leave the latest one. If the two configuration files are different, MXview One will keep both in the **Records** tab.

Restoring Device Configurations

Use the **Configuration Center** screen to restore configurations to one or more devices by restoring an archived configuration from the MXview One server or importing a local configuration backup file (in INI format).

1. Navigate to Menu (≡) > Device Configuration Center.

The Device Configuration Center screen will appear.

2. Click the **Restore** tab.

Available devices will appear in the Device List.

Confi	Configuration Center										
Ba	ackup	Restore	Records								
Device	List				(Q Search					
-					-	C Search					
	IP Address	Alias Name		Group							
Ð	10.81.10.10	EDS-510E		Root							
Ð	10.81.10.11	EDS-510E		Root							
Ð	10.81.10.12	EDS-510E		Root							
Ð	10.81.10.13	EDS-510E		Root							
Ð	10.81.10.14	EDR-810		Root							
Ð	10.81.10.15	EDS-510E		Root							

- 3. (Optional) Filter the devices in the **Device List**:
 - a. Click the **Filter** $(\overline{-})$ icon.
 - b. Specify any of the following criteria:
 - **Group:** The group that the device is assigned to
 - □ IP Address: The IP address of the device
 - c. Click Apply.

MXview One filters the **Device List** according to the specified criteria.

- 4. (Optional) Export configurations from all available devices:
 - a. Click the **Export** () icon.



b. Select Export CSV.

MXview One exports the 'All available devices' list as a CSV file.

- 5. To restore an archived configuration file to a device:
 - a. Click the **Restore** (\mathfrak{S}) icon next to the **IP Address** of a device in the **Device List**.

The **Restore Configuration** screen will appear.

Restore Configuration		
Restore Device - 10.81.10.11		
Restore Configuration	•	
	Cancel	Apply

b. From the **Restore Configuration** drop-down list, select the archived device configuration to restore.

	Restore Configuration	
	Restore Device - 10.81.10.11 Device Octometics Local File	^
	10.82.10.3_20210805_2223.ini	
	10.82.10.3_20210805_2304.ini	Apply
nc tc	10.82.10.3_20210806_1109.ini	
ot ot	10.81.10.11_20200722_1722.ini	•

c. Click Apply.

Restore Configuration	
Restore Device - 10.81.10.11 Restore Configuration	
10.81.10.11_20200722_1722.ini	•
Createing Time: 2021-09-22 10:10:00 Last Checking Time: 2020-11-26 10:4	
Cance	Apply

MXview One imports the configuration file to the selected device.

- 6. To import a local configuration file to a device:
 - a. Click the Restore (\mathfrak{G}) icon next to the IP Address of a device in the Device List.

The **Restore Configuration** screen appears.

Restore Configuration		
Restore Device - 10.81.10.11		
Restore Configuration	•	
	Cancel	Apply

b. From the Restore Configuration drop-down list, select Local File.

c. Click the **Configuration File** field to a select the configuration file.

Restore Configuration		
Restore Device - 10.81.10.11 Restore Configuration		
Local File	•	
Configuration File		
	Cancel	Apply

- d. Select the configuration file to import and click Open.
- e. Click Apply.

Restore Configuration		
Restore Device - 10.81.10.11 Restore Configuration		
Local File	•	
Configuration File		
10.81.10.11.ini		
	Cancel	Apply

MXview One imports the configuration file to the selected device.

Comparing Archived Configuration Files

Use the **Device Configuration Center** to compare changes in the history of saved configuration files.

- Navigate to Menu (=) > Device Configuration Center. The Device Configuration Center screen appears.
- 2. Click the **Records** tab.

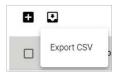
A list of archived backup configuration files appears.

Backup	Restore Reco	rds		
nfiguratio	on File			
₹ €				Q Search
	Configuration File	Createing Time	Last Checking Time	
8 1	10.82.10.3_20210805_2223.ini	2021-09-22 10:10:00	2021-08-05 22:23:00	
16	10.82.10.3_20210805_2304.ini	2021-09-22 10:10:00	2021-08-05 23:04:00	
8 1	10.82.10.3_20210806_1109.ini	2021-09-22 10:10:00	2021-08-06 11:09:00	
8	10.81.10.11_20200722_1722.ini	2021-09-22 10:10:00	2020-11-26 10:47:00	
8	10.81.10.11_20210409_1812.ini	2021-09-22 10:10:00	2021-04-09 18:12:00	
8	10.81.10.12_20201211_1508.ini	2021-09-22 10:10:00	2020-12-11 15:08:00	
8 1	10.81.10.12_20210409_1812.ini	2021-09-22 10:10:00	2021-08-05 23:04:00	
8 1	10.85.10.20_20201215_1342.ini	2021-09-22 10:10:00	2020-12-15 13:42:00	
8 1	10.85.10.30_20201215_1358.ini	2021-09-22 10:10:00	2021-04-09 18:13:00	

- 3. (Optional) Filter the list of configuration files:
 - a. Click the **Filter** ($\overline{-}$) icon.
 - b. Specify any of the following criteria:
 - **Group:** The group that the device is assigned to
 - □ Start Date: The earliest file creation date
 - □ Start Time: The earliest file creation time on the Start Date
 - **End Date:** The latest file creation or update date
 - **End Time:** The latest file creation or update time on the End Date

c. Click Apply.

- 4. (Optional) Export configurations from all available devices:
 - a. Click the **Export** () icon.



b. Select Export CSV.

MXview One exports all the devices information as a CSV file.

Click the **Compare** (^[]) icon next to the configuration file you want to compare.
 The **Compare Configurations** screen will appear.

Compare Configurations		
Compare Basement: 192.168.127.13_20220503_1818.ir Device List *	ni	
192.168.127.13		
Compare Target		
192.168.127.13_20220503_1819.ini		
	Cancel	Compare

- 6. Select the device from the **Device List** drop-down list.
- 7. Select the target configuration file to compare from the **Compare Target** drop-down list.

8. Click Compare.

MXview One will display a comparison of the selected configuration files.

ompare evice List	Basement: 192.168.127.13_20240125_0922.ini		
92.168.	127.13		
ompare Ta	arcet		
	127.13_20240125_0932.ini 👻		
б	# System Identification #	б	# System Identification #
7	#######################################	7	*****
8	# [SwitchName]: Switch Name	8	# [SwitchName]: Switch Name
9	# -> max. length = 35 words	9	# -> max. length = 35 words
10	SwitchName Managed Redundant Switch 02810	10	SwitchName Managed Redundant Switch 02810
11		11	-
12	# [Location]: Switch Location	12	# [Location]: Switch Location
13	# -> max. length = 80 words	13	# -> max. length = 80 words
14	- Location Switch Location	14	+ Location Lab
15		15	
16	# [SysDescr]: Switch Description	16	# [SysDescr]: Switch Description
17	# -> max. length = 30 words	17	# -> max. length = 30 words
18	SysDescr EDS-408A	18	SysDescr EDS-408A
19		19	
00	# [Oantant]. Maintainas Oantant Infa	00	# [Ounteent]: Maximterines: Ounteent Info

The inserted, deleted, and modified lines in the configuration will be highlighted.

NOTE

The green lines are the configurations of Compare Target. The red lines are the configurations of Compare basement.

Creating Maintenance Scheduler for Database/Configuration Backups

Use the **Maintenance Scheduler** to automatically export/import device configurations or back up the MXview One database on a predefined schedule.

- Navigate to Menu (=) > Administration > Maintenance Scheduler. The Maintenance Scheduler screen appears.
- (Optional) Search a previously saved scheduled job, type a job name in the search box. The Maintenance Scheduler table displays a list of matching scheduled jobs.
- 3. Click the **Add** (**±**) button.

The Add job screen appears.

- 4. Specify the Job Name.
- 5. Select one of the following options from the Action drop-down box:
 - Export Configuration
 - > Import Configuration
 - > Database Backup
- 6. Type a **Description** for the job.
- 7. Select the Registered Devices that apply.
- 8. Select a job frequency from the **Repeat Execution** drop-down box:
 - Once
 - Daily
 - > Weekly
 - > Monthly

- 9. Specify the **Start Date** to begin executing the scheduled job.
- 10. Specify the **Execution Time** on the Start Date to run the scheduled job.
- 11. Click **Add**.

MXview One will display the scheduled job on the **Maintenance Scheduler** table and will execute the job according to the defined schedule.

MXview One supports several features that enable integration with third-party applications or external systems.

OPC UA Server Overview

MXview One supports integrated OPC UA Server functionality to integrate with OPC clients such as SCADA systems. From this section, users can configure OPC tags and server settings.

To access the **OPC UA Server** screen, navigate to **Menu** (\equiv) > **Integration** > **OPC UA Server**.

≡ MXview ©NE							() Englist	👤 admin 🔻
Q Type keyword to search	OP	C UA	Server					
Dashboard		OPC T	ags	Server Settings				
Topology								
Device Discovery		٠					Q Search	
Device Management		_						
Configuration and Control				Status	Device Property	Tag Name	Registered Devices	
Account and Password			∕∎	Enabled	Availability	Availability	1	
Saved CLI Scripts			∕∎	Enabled	cpuLoading	cpuLoading	2	
Firmware Management							1-	2 of 2
Device Configuration Center	Ľ_							
Event Management ~ Notification Management								
Inventory Management V								
OPC UA Server								
API Key Management								
Embedded Web Widget								
Administration								

Viewing the OPC Tags Table

- Navigate to Menu (≡) > Integration > OPC UA Server. The OPC UA Server screen appears.
- 2. Go to the **OPC Tags** tab.
- 3. The OPC tags table includes the following information:

Shows the status of the OPC tag.Shows the SNMP device property of the tag name.Shows the tag name.		
Shows the tag name.		
Shows the tag name.		
Shows the devices registered to the tag. Click the hyperlink number in this column to show an overview of all registered devices. Registered Devices Device Alias 192.168.123.152-EDS-518A 192.168.123.157-IEX-402-SHDSL		

Adding an OPC Tag

- Navigate to Menu ([□]) > Integration > OPC UA Server. The OPC UA Server screen appears.
- 2. Go to the **OPC Tags** tab.
- Click the Add (1) icon. The Add OPC Tag screen will appear.

Status * Enabled	•	
Device Property *		
Tag Name *		
	0 / 64	
Registered Devices *	•	

- 4. Configure the following settings:
 - > **Status**: Select to enable or disable the OPC tag.
 - > **Device Property**: Select the SNMP property to generate the OPC tag.
 - > **Tag Name**: Enter a name for the OPC tag.
 - > **Registered Devices**: Select the devices to register to this tag.

5. Click Add.

If the total number of registered devices exceeds 4000, an error message will show.

•	_	
	_	
	_	
16/64	4	
*	_	
Close	Add	
to verii	fy tag w	as creat
	Close	16/64 Close Add

NOTE

MXview One supports a maximum of 2000 OPC tags.

Editing an OPC Tag

- Navigate to Menu (=) > Integration > OPC UA Server. The OPC UA Server screen appears.
- 2. Go to the **OPC Tags** tab.
- Click on the Edit () icon next to the tag you want to edit The Edit OPC Tag screen will appear.

itatus *	
Enabled	*
Device Property	
Availability	
ag Name *	
Availability	
Registered Devices *	12/64
92.168.127.25PT-G77	28.192.16

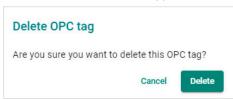
- 4. Configure the following settings:
 - > **Status**: Select to enable or disable the OPC tag.
 - > Tag Name: Enter a name for the OPC tag.
 - > **Registered Devices**: Select the devices to associate this tag with.
- 5. Click Apply.

A confirmation will appear to verify the tag was updated.

Tag updated successfully

Deleting an OPC Tag

- Navigate to Menu (≡) > Integration > OPC UA Server. The OPC UA Server screen appears.
- 2. Go to the **OPC Tags** tab.
- 3. Click the **Delete** () icon next to the tag you want to delete. A confirmation window will appear.



4. Click Delete.

A confirmation will appear to verify the tag was deleted.

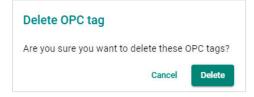
Tags deleted successfully

Deleting Multiple OPC Tags

- Navigate to Menu (≡) > Integration > OPC UA Server. The OPC UA Server screen appears.
- 2. Go to the OPC Tags tab
- 3. Select the checkbox of the OPC tags you want to delete in the list.
- 4. Click the **Delete** () icon at the top of the page.

WX via	ew ON	E			()) English 💄 a
C UA	Serv	er			
OPC	Tags	Server Settings			
1	1			Q Sear	ch
Delete		Status	Device Property	Tag Name	Registered Devices
	1	Enabled	Availability	Availability	1
		-			
	1	Enabled	cpuLoading	cpuLoading	2

5. A confirmation window will appear.



6. Click Delete.

A confirmation will appear to verify the tags were deleted.

Configuring OPC UA Server Settings

- 1. Navigate to Menu (≡) > Integration > OPC UA Server. The OPC UA Server screen appears.
- 2. Go to the Server Settings tab.
- 3. Enable the OPC UA server.

4. Configure the following settings:

OPC Tags	Server Settings
• •	.tcp://127.0.0.1:4840/MXviewOne/OPCUA
Enable OPC UA Server * Enabled	•
IP/Domain Name * 127.0.0.1	
	/ 253
Port *	, 200
4840	
1 - 65535	
Authentication Set Method *	ttings
Anonymous	
Security Mode	
Allow No Security * Disabled	
01040104	
Supported Securit	v Policies
Basic128Rsa15	,
Basic256 Basic256Sha256	
Basiczooonazoo	

- > **IP/Domain Name**: Specify the OPC UA server's IP or domain name.
- > **Port**: Enter the server port.
- > **Authentication Settings**: Select an authentication method.
 - □ **Anonymous**: OPC clients can connect to the OPC UA server anonymously without authentication.
 - □ Account and Password: Specify an account and password for OPC clients to connect to the OPC UA server (MXview One).
 - **Certificate**: Authenticate OPC clients using a certificate provided by MXview One Control Panel.
- > Allow No Security: Enable or disable allowing no security.
 - **Disabled**: The connection requires encryption.
 - **Enabled**: The connection can be established without encryption.
- 5. Click Save.

Managing RESTful API Keys

MXview One supports RESTful APIs for custom integrations with third-party products. Use the **API Key Management** screen to add new applications and generate API keys.

 Navigate to Menu (≡) > Integration > API Key Management. The API Key Management screen will appear.

	ey Manage	linent				
÷					Q Search	
	Application Name	Create Time	Access Count	API Key		
🗆 t	est	2021-10-28 10:20:10	183	eyJhbGciOiJIUz11NilsInR5cCl6ikpXVCJ9.eyJ1c2VybmFlZSl6inRyeW14dmildylsImlhdCl6MTY zNTM4NzYxMCwianRpijoiNWEyN2E4ZGY2Y2NiYJ2hOGY1ZjkwN2JIOTIiMGVkYTUyYWYyZWQ 4MiJ9.i9ZVczIAoES0o1IrD7bmwSv1LJXhp17JAr8YDz5Q0uA		
						1 – 1 of

- (Optional) Search the list of applications, type a string in the search box.
 MXview One filters the list of applications to display only the applications that contain full or partial matching strings.
- 3. To add a new API key for an application:
 - a. Click the Add (
 Add (

 The Add New Token screen will appear.

Add New Token		
Application Name *		
	Cancel	Add

- b. Specify an Application Name.
- c. Click Add.

MXview One will add the new application to the **API Key Management** screen and display the generated API key.

- 4. To regenerate an API key for an existing application:
 - a. Select the check box next to the Application Name.

The **Regenerate the API Key** ($^{m{O}}$) icon will appear in the top left corner of the screen.

N K	Key Management							
Î	C				Q Search			
	Application Name	Create Time	Access Count	API Key				
	test	2021-10-28 10:20:10	183	eyJhbGciOiJIUz11NilsInR5cCl6ikpXVCJ9.eyJ1c2VybmFtzSl6inRyeW14dmlldylsImlhdCl6MTY zNTM4NzYxMCwianRpijoiNWEyN2E4ZGY2Y2NiYjZhOGY1ZjikwN2JIOTIiMGVkYTUyYWYyZWQ 4MiJ9.i9ZVczIAcES0o1IrD7bmwSv1LJXhp17JAr8YDz5Q0uA				
						1 – 1 of 1		

b. Click the Regenerate the API Key $({}^{igcestyle})$ icon.

MXview One will regenerate the API key for the selected application.

NOTE

Regenerating the API key will prevent any APIs that use the old API key from working properly.

- 5. To delete an application:
 - a. Select the check box next to the Application Name.
 - b. Click the **Delete** (**1**) icon in the top left corner of the screen.
 MXview One will delete the application.



NOTE

Deleting the application will prevent any APIs that use the old API key from working properly.

6. To view API reference documentation, navigate to Menu (=) > Help > API Documentation. The MXview One API screen will appear and display the reference document for supported MXview One APIs. Click API user guide below the MXview One API title, where you can find the guidelines for using the RESTful API functions.

MXview One API 100 0AS3	
A document of API for accessing data from MXview One	
API user guide	
Servers http://127.0.0.1/ v	Authorize 🔒
Resource	\checkmark
GET /resources/icons/url/{url} Get device icon	
GET /resources/icons/{url} Get the icon of a site	
GET /resources/panel_images/url/{url} Get the panel image of a device	

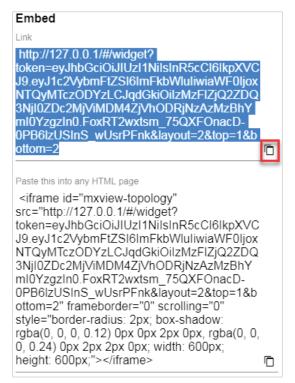
Embedding Web Widgets

MXview One allows you to embed the Topology Map and Recent Events widgets from the MXview One **Topology** screen in third-party applications.

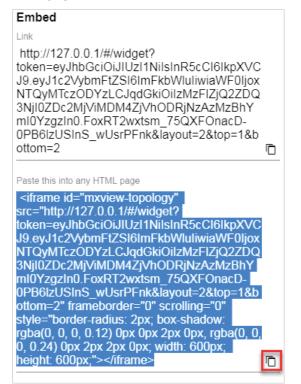
- Navigate to Menu ([□]) > Integration > Embedded Web Widget. The Embedded Web Widget screen will appear.
- From the Select API Key drop-down list, select the Application Name for the API key you want to use.

Select API key	
Demo	•

- 3. From the **Select Layout** drop-down list, select the widget(s) you want to embed:
 - Topology and Recent Events: Embeds both the Topology Map and Recent Events widgets in the target application
 - > **Topology:** Embeds only the Topology Map in the target application
 - > Recent event: Embeds only the Recent Events widget in the target application
- 4. Copy and paste the widget link for the target application:
 - > To embed the widget in a web application, click the **Copy link** (\Box) icon in the **Link** section.



➤ To embed the link in a static HTML page, click the Copy link ([□]) icon in the Paste this into any HTML page section.



MXview One supports several optional modules that extend the functionality of the main module. These modules require a separate license to use.

Introduction

The MXview One Wireless Add-on Module provides a set of tools to help you monitor and troubleshoot your wireless network through MXview One and supports up to a total of 200 wireless APs and clients. The add-on gives you clear, real-time information about the status of your wireless network including the client roaming status and key wireless performance indicators such as SNR and noise level. The wireless module also instantly notifies you of any problems with your wireless devices and helps you narrow down the root cause of the problem, allowing for quick and easy troubleshooting.

System Requirements

The computer that the MXview One Wireless Add-on Module is installed on must satisfy the following system requirements based on the maximum capacity of 200 wireless APs and clients:

	System Requirements
CPU	2 GHz or faster dual core CPU
RAM	8 GB or higher
Hard Disk Space	20 to 30 GB for 1 month of performance and event history recording
	Windows 10 (64-bit)
os	Windows 11 (64-bit)
05	Windows Server 2016 (64-bit)
	Windows Server 2019 (64-bit)
	Chrome: Version 76 or later
Browser Requirements	Firefox: Version 69 or later
	Microsoft Edge: Version 79 or later

Supported Devices

The MXview One Wireless Add-on Module supports the following wireless devices:

- AWK-1131A Series (firmware v1.22 or higher)
- AWK-1137C Series (firmware v1.6 or higher)
- AWK-1151C Series (firmware v2.0 or higher)
- AWK-1161A Series (firmware v1.0 or higher)
- AWK-1161C Series (firmware v1.0 or higher)
- AWK-1165A Series (firmware v1.0 or higher)
- AWK-1165C Series (firmware v1.0 or higher)
- AWK-3131A Series (firmware v1.16 or higher)
- AWK-3252A Series (firmware v2.0 or higher)
- AWK-4131A Series (firmware v1.16 or higher)
- AWK-4252A Series (firmware v2.0 or higher)

Getting Started With the Wireless Add-on Module

In order to use the MXview One Wireless Add-on module, you will need to activate it first. You can choose to activate a new license, or enable the wireless 90-Day free trial through the license management page.

I	icense M	anagement			
	MXview One				0
		License	Wireless Add-on License		
		Mode: Authorized	Mode: Authorized		
		Current Nodes: 47			
>	L L L	Licensed Nodes: 250			
	Moxa License Site				
	Add New Licens	se License Type			
	Licenses				~
	Re-activate Lic	cense			
		activation Code and a			
	User Code to re-ac	tivate your license.			
	Re-a	activate			

The system will automatically restart after you activate the module. A message will appear telling you to wait 10 seconds while the module activates. Once done, click **OK** to refresh your browser and enable the Wireless Add-on features.



- For detailed information on how to activate the MXview One Wireless Add-on Module, refer to License Management.
- To add wireless devices to your MXview One network, refer to Using Device Discovery.

I

NOTE

Please activate the Node-based License first and then the Wireless Add-on License.

Wireless Module Features

The MXview One Wireless Add-on Module offers a set of features specifically designed to help you monitor and troubleshoot your wireless network more easily.

Main Dashboard

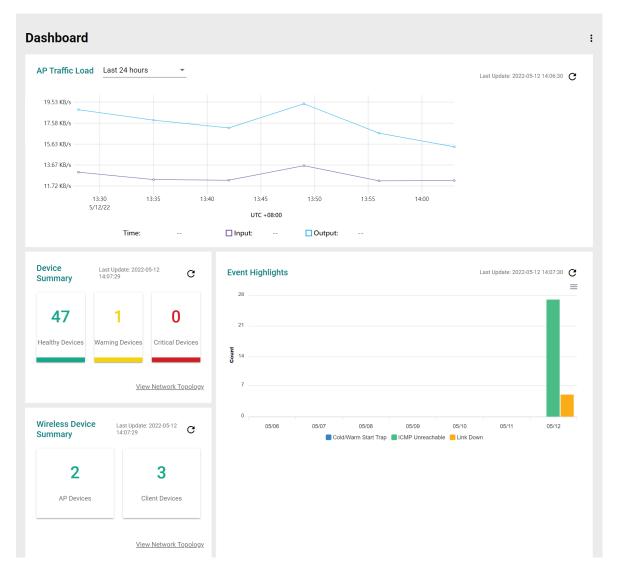
If the wireless module is activated, the MXview One Dashboard will show two additional types of information: AP Traffic load and the Wireless Device Summary.

The AP Traffic Load graph shows the aggregated traffic of all the AP devices monitored by MXview One. You can select a specific time to check the wireless network status at that time. MXview One provides three time sections: **Last 24 hours, Last week,** and **Last 2 weeks**.

The Wireless Device Summary shows the number of deployed wireless devices. Clicking one of the cards will direct you to the Wireless Device Summary screen where you can find more detailed information about the wireless devices. Refer to Chapter 5: **Dashboard Widgets** for more information about the other cards on the dashboard.

To access the Dashboard, navigate to **Menu** (\equiv) > **Dashboard**.

To refresh the data displayed in all the widgets, click the **Settings** (i) icon in the top-right corner of the screen and select **Refresh All**.



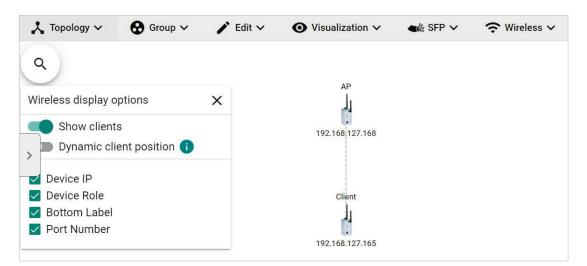
Dynamic Wireless Client Roaming

The MXview One Wireless Add-on Module features dynamic wireless roaming display, which updates roaming connections of wireless clients in real-time. Instead of using LLDP data to draw links between devices, MXview One uses both the client list data from the wireless AP and AP data from the wireless client to detect wireless roaming changes.

To enable the dynamic wireless client roaming function, toggle the **Dynamic client position** option. In this mode, wireless clients will automatically move below the AP they connect to when roaming. The link between the client and AP on the topology will also change dynamically if the client connects to another AP.

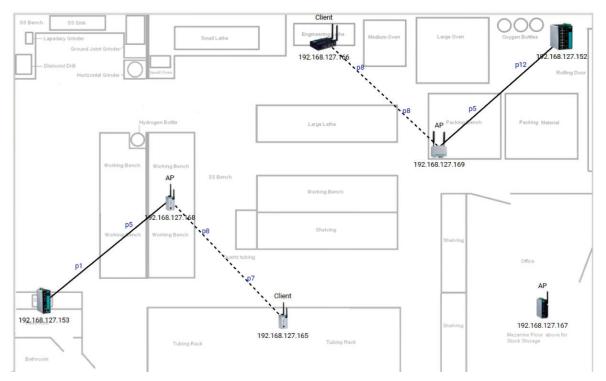
Refer to the table below for a description of each display option.

Option	Description
Show clients	Toggle this option on or off to show or hide wireless clients on the
	topology
	Enable this option to have wireless clients move to a position close to
Dynamic client position	the AP they are associated with
	Disabling this option will return the clients to their original position

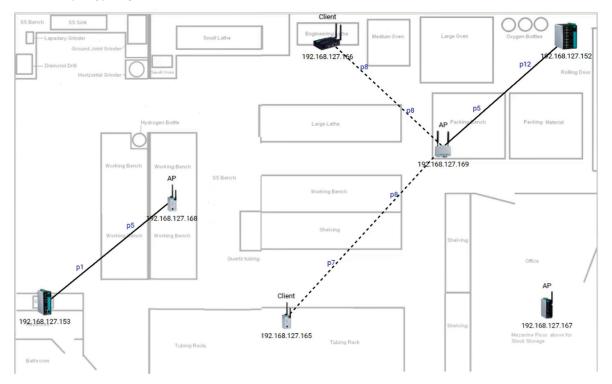


The following diagrams are an example of the dynamic roaming display showing dynamic client-AP link changes.





When the client roams to another AP, MXview One will automatically redraw the link to the new AP on the wireless topology diagram.



AP/Client Device Dashboard

Use the **AP/Client Device Dashboard** screens to see detailed information and performance statistics of the client or AP.

To access the AP/Client Device Dashboard, click on any wireless AP or client device's icon on the topology diagram and click **Device Dashboard** in the toolbar.

C Refresh	Device Dashboard	🗴 Delete
-----------	------------------	----------

AP Device Dashboard

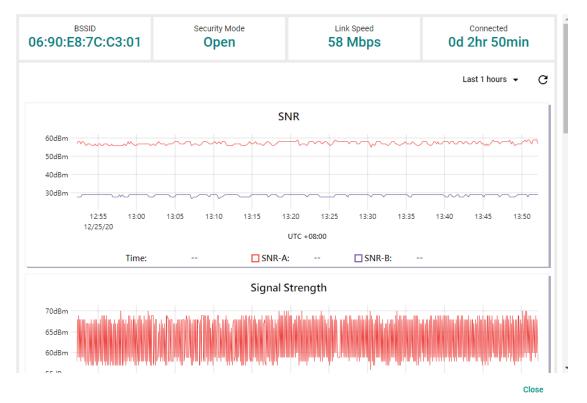
lter	Client Count 1 / 2 Managed Connected	Security Mode	TX Power 5 dBm	Uptime 11d 9hr 26min
XA ^ :E8:88:41:11				Last 30 minutes 👻 📿
00:90:E8:6F:A2:7F		Traffi	c Load	
	600 Byte/s			/
	400 Byte/s			
	200 Byte/s			
	0 KB/s			
	18:00	18:05 18:10	18:15	18:20 18:25
	12/24/23		UTC +08:00	
	Time:	🗖 R	ах: 🗆 тх	:
		CPU Ut	tilization	
	15%			
	10%			

The AP Device Dashboard shows the following information:

Parameter	Description	1
Client Count	Managed	The total number of wireless clients connected to this AP that are managed by MXview One
	Connected	The total number of wireless clients that are connected to this AP
Security Mode	The Security	Mode of the AP: Open, WEP, WPA, or WPA2
TX Power	The current	transmission power of the AP
Uptime	The total tin	ne the wireless AP has been online since the last restart
Traffic Load	The current	and historical traffic throughput of the wireless interface
CPU Utilization		and historical CPU utilization of the AP (only supported by certain firmware
	versions)	
Memory Utilization	The current	and historical memory utilization of the AP (only supported by certain
	firmware ve	rsions)

Client Device Dashboard

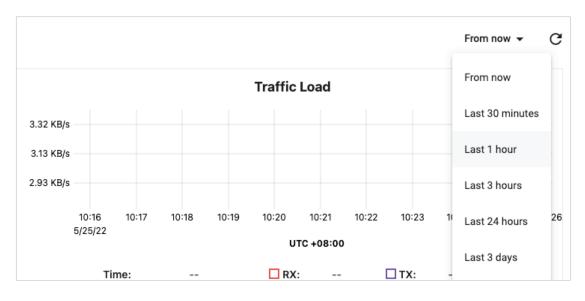
Client Dashboard-192.168.127.166--AWK-1137C



The Client Device Dashboard shows the following information:

Parameter	Description
BSSID	The BSSID of the wireless AP the client is connected to
Security Mode	The Security Mode of the client: Open, WEP, WPA, or WPA2
Link Speed	The real-time bandwidth of the connection to the AP
Connected	The total time the wireless client has been connected to the AP
	The current and historical Signal-to-Noise ratio of the client
SNR	If the wireless device has multiple antennas, the SNR of each antenna will be
	separately shown as SNR-A and SNR-B
Signal Strength	The current and historical signal strength of the client
Noise Floor	The current and historical noise floor of the client
Traffic Load	The current and historical traffic throughput of the wireless interface
CPU Utilization	The current and historical CPU utilization of the client (only supported by certain
	firmware versions)
Memory Utilization	The current and historical memory utilization of the client (only supported by certain
inemory oullization	firmware versions)

You can view the device diagnostics and usage parameters in real-time or recall the history for up to the last 3 days from the drop-down menu in the top-right. You can zoom in on the timeline to examine a narrower time period. Double-click the timeline to return to the original view.



Wireless Device Summary

The Wireless Device Summary screen provides detailed information about all the AP and client devices including the device's IP and MAC address, operation mode, and current signal strength.

To access the Wireless Device Summary screen, expand the **Wireless** ([?]) menu in the toolbar and click **Wireless Device Summary**.

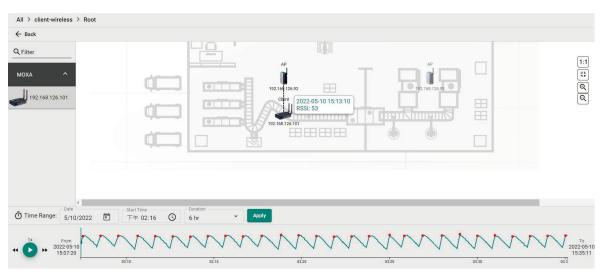
Click **Back** in the top-left corner to return to the topology view.

← Back											
Wireless Devic	e Summary										Í
All (5)	G							Q Search			
Client (3)	Operation Mode	e IP Address	MAC Address	BSSID	Channel	Noise Floor	Signal Strength (dBm)				
>	AP - 192.168.127.168	(Site Name: Site BR	ANDONYANG-PC / M	AC Address: 00:90:E	8:52:39:50 /	Channel: 1)					
	Client	192.168.127.165	00:90:E8:52:39:75	06:90:E8:52:39:50	1	-88	-23				
	^ AP - 192.168.127.169	(Site Name: Site BR)	ANDONYANG-PC / M	AC Address: 00:90:E	8:7C:C3:01 /	Channel: 1)					
	Client	192.168.127.166	00:90:E8:63:A7:6C	06:90:E8:7C:C3:01	1	-91	-22				
	 Unmanaged AP (Site I 	Name: Site BRANDON	IYANG-PC)								
	Client	192.168.127.167	00:90:E8:52:07:85	N/A	1	N/A	N/A				
								Items per page: 50 💌	1 – 5 of 5	< <	> >
4					^						•

Wireless Roaming Playback

Through the Wireless Roaming Playback screen, you can recall the roaming history of a specific client. By default, MXview One will keep the roaming playback data for 30 days.

To access the Wireless Roaming Playback screen, expand the **Wireless** (²) menu in the toolbar and click **Wireless Roaming Playback**.



Click **Back** in the top-left corner to return to the topology view.

On the left-hand side is a list of wireless clients, in the center is the topology map, and located at the bottom is the playback progress bar. Select any client from the list and click **Play** () to start playing the wireless roaming history for the selected time range. You can adjust the playback speed by clicking the **Decrease Speed** () or **Increase Speed** () button to increase or decrease the playback speed respectively.

To view the history for a specific time and date, click (i) to choose the starting date, set the time in the Start Time field, select the duration of the playback history from the Duration drop-down menu, and click **Apply**.

-				ate				Start 1	Fime	Fime	Time Duration -	Fime Duration	Fime Duration
0	Time F	Range	e: 1,	/22/2	021			08:58		S	() 1 hr	() 1 hr	() 1 hr
								× 1					
	DEC	2020	*			<	>						
						1	Ĩ.						
	S	М	Т	W	Т	F	S						
	DEC												
			1	2	3	4	5						
	6	7	8	9	10	11	12						
	13	14	15	16	17	18	19						
			10	10									
	20	21	22	23	24	25	26						
	27	28	29	30	31								
	- Date -	_	_		Star	t lime -	_						
ge:	12/2	5/202	0		01:	42 PN	1	0					

The progress bar also displays the RSSI value at the time. In addition, the red dots indicate the time when the wireless client roamed to a different AP. You can zoom in on the timeline to examine a narrower time period. Click **Apply** to return to the original view.



MXview One supports several optional modules that extend the functionality of the main module. These modules require a separate license to use.

Introduction

The MXview Power Add-on Module provides a set of features to help you monitor and troubleshoot your power substation network that follows the IEC 61850 standard and supports switches that have the PRP/HSR function with deep visualization. To monitor the IED (Intelligent Electronic Device), which is an important device that can receive data and issue commands on the network, MXview Power supports the MMS protocol to view and provide the status of the IED. Furthermore, there is a critical packet called GOOSE in power substation networks, and MXview Power can also help customers troubleshoot GOOSE events such as GOOSE Timeout and GOOSE Tampered. The power module instantly notifies you of any problems with your power devices and helps you narrow down the root cause of the problem, allowing for quick and easy troubleshooting.

System Requirements

The computer that the MXview Power Add-on Module is installed on must satisfy the same system requirements as those required for MXview One. See **System Requirements** in Chapter 1 for more information.

Supported Devices With PRP/HSR Features

 $\mathsf{PRP}/\mathsf{HSR}$ features can be visualized with the devices that support $\mathsf{PRP}/\mathsf{HSR}$ functions or have a $\mathsf{PRP}/\mathsf{HSR}$ module.

- PT-G503 Series (firmware v5.1 or higher)
- PT-G510 Series (firmware v6.4 or higher)
- PT-G7728/G7828 Series and LM-7000H-2GPHR module (firmware v6.2 or higher)
- DA-820C Series and DN-PRP-HSR-I210 or DA-PRP-HSR-I210 (OS Win 10 or higher)

Getting Started With the Power Add-on Module

In order to use the MXview Power Add-on module, you will need to activate it first. You can choose to activate a new license or enable the Power 90-day free version through the License Management page.

License M	lanagement		
MXview One		Power Add-on License Mode: Authorized	0
	cense activation Code and a ctivate your license.		
Re	-activate		

The system will automatically restart after you activate the module. A message will appear telling you to wait 10 seconds while the module activates. Once done, click **OK** to refresh your browser and enable the Power Add-on features.



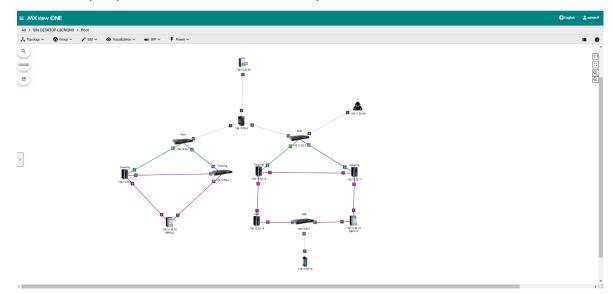
- For detailed information on how to activate the MXview Power Add-on Module, refer to **Chapter 4:** License Management.
- To add power devices to your MXview One network, refer to Using Device Discovery.

NOTE

Please activate the Node-based License and then the Power Add-on License.

Power Module Features

The MXview Power Add-on Module offers a set of features specifically designed to help you monitor and troubleshoot your power substation network more easily.



Topology

After you enable the MXview Power add-on module, you will see the panel has changed on the left handside.

GOOSE panel

1. Before you import the SCD file, the GOOSE panel will be displayed in light gray. At this point, it has limited functionality.



- Once you have imported the SCD file via Power > Import SCD, you can find the IED as a GOOSE publisher identity via the GOOSE panel.
 - a. Click GOOSE panel.



b. Scroll down or type the GOOSE-related information, such as IED name or GoCB name.

≡	MX view ONE
All	> Site DESKTOP-L8CNQNO > Root
٩	Maintenance 🗸 🔹 🔨 Change G
Q	
Ch	noose a GOOSE publisher
	REF620
Y	Control_DataSet 0x3001 / 01:0C:CD:01:00:01
	gcbgcbtest 0x0001 / 01:0C:CD:01:00:02
	REF615
	gcbGOOSE 0x0002 / 01:0C:CD:01:00:05

Display Options

- 1. Once you have activated the MXview Power add-on module, you can see the display options include extra functions such as PRP LAN A, PRP LAN B, and HSR Ring.
- 2. If the box is checked, you can see the color of the link for the PRP/HSR on the topology. If you uncheck the box, then the link will not display the color for the PRP/HSR function.

>	splay options	×
~	Device IP	
\checkmark	Device Role	
~	Bottom Label	
\checkmark	Port Number	
		1
 	PRP LAN A	1
		1

ΝΟΤΕ

PRP LAN A is represented by a green line, PRP LAN B by a blue line, and HSR Ring by a purple line.

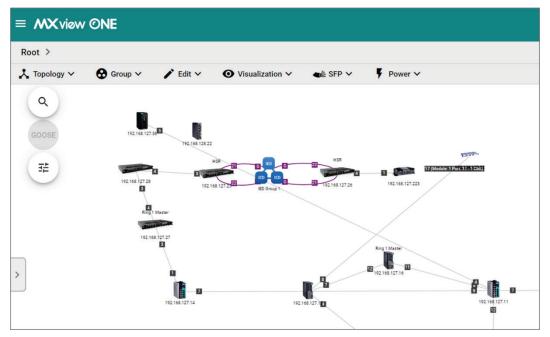


NOTE

MXview One cannot guarantee that it can draw the link of the topology for non LLDP devices, such as an IED device. However, you can draw the link of the topology manually by clicking **Add Link**.

Ungrouping an IED Group

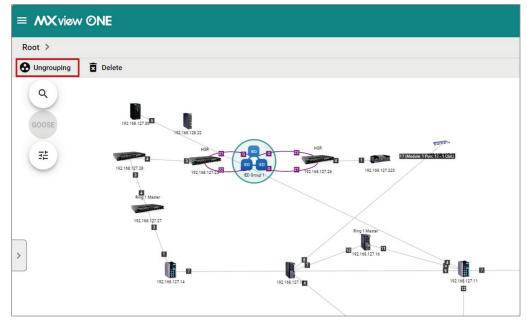
After executing the **Auto Topology** function, MXview One will automatically group the IEDs within the same HSR ring into an IED Group and represent the HSR link with a purple line. If you want to display the IEDs within the Root group or display GOOSE Message information in the topology, you can use the **Ungrouping** function.



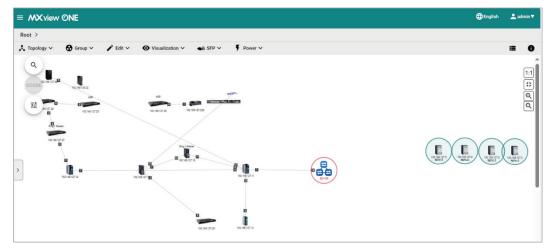
1. Navigate to **Menu** (**E**) > **Topology**

The **Topology** screen will appear and display the Topology Map by default.

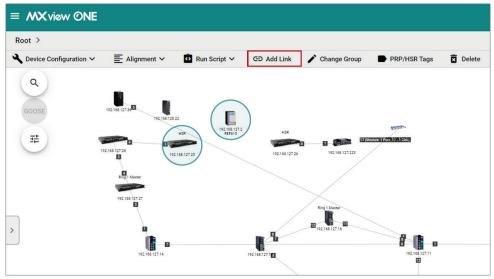
- 2. Click on the IED group in the topology that you want to ungroup.
- 3. Click **Ungrouping**.



4. After ungrouping an IED group, the individual IEDs will be shown on the right-hand side of the topology.



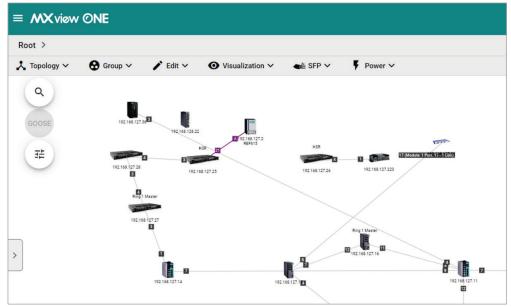
- 5. Align the network connections for each IED.
 - a. Drag and move the IEDs to their appropriate position in the topology.
 - b. Select the devices to draw a connection between and click **Add Link**. The **Add Link** screen will appear.



c. Specify the device port number. You can set the port number to non-numerical mode (e.g., A, B) on the IED side.

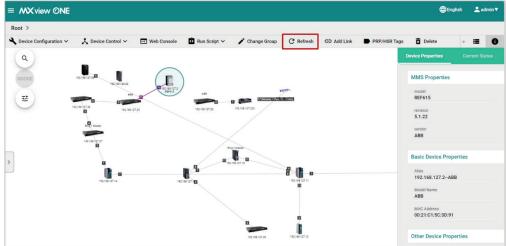
Add Link		
From		
IP Address: 192.168.127.2 Model: ABB Alias: 192.168.127.2ABB Port *		
A		
То		
IP Address: 192.168.127.25 Model: PT-G7728 Alias: 192.168.127.25PT-G7728 Port *		
21		
	Cancel	Add

d. Click **Add**. MXview One will draw the connection on the topology.

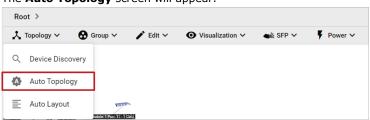


- e. Repeat this process for any other remaining IED connections.
- 6. (**Optional**) Refresh the IED information.
 - a. Select one or multiple IEDs.

b. Click **Refresh**. MXview One will retrieve the latest information from the IED.



- 7. (**Optional**) Restore the original IED group.
 - a. Go to **Topology > Auto Topology**. The **Auto Topology** screen will appear.



b. Select New Topology or Update Topology.

Auto Topology		
New Topology		
Existing links are going to be deleted		
O Update Topology		
Existing links will be kept while new links are added		
 Advanced Topology Analysis Strict Link Verification Mode 		
*Additional time is required.		
	Cancel	Apply

c. Click Apply.

MXview One will restore the topology and IED group to their original state.

NOTE

To display GOOSE Message information on the topology, you must first ungroup the IED group, manually draw the links between the IEDs, and import the SCD file.

Creating an IED Group

Using the **Grouping** function, you can assign multiple IEDs on the topology to a single IED group.

1. Navigate to Menu (😑) > Topology

The **Topology** screen will appear and display the Topology Map by default.

- 2. Select the IEDs in the topology that you want to group together.
- 3. Click Grouping.

$\equiv MX$ via	ew ONE						
Root >							
Grouping Q	C Refresh	▲ Device Configuration ∨	E Alignment ∨	🖸 Run Script 🗸	Change Group	PRP/HSR Tags	Delete
GOOSE 明 中							
6	Ring 1 Massar						
>		20 112.14.127.13					

4. MXview One will combine the selected IEDs together and show them as a single group on the topology. To ungroup an IED group, refer to <u>Ungrouping an IED Group</u>.

Import SCD

The SCD (Substation Configuration Description) file includes the information of the critical packet – GOOSE message in the network. To visualize the GOOSE message flow in MXview Power, the user has to import the SCD file.

1. Navigate to Menu (≡) > Topology

The **Topology** screen will appear and display the Topology Map by default.

- 2. To import the SCD file to the Topology Map:
 - a. Click **Power > Import SCD**.

The **Import SCD** screen will appear.

Import SCD		
	Subscriber Publisher	G00SE Publisher Control_DataSet 0x01 / 01.0ccd/01.00.01 Timeout 0x05E 0x01 / 01.0ccd/01.00.02
Vi	isualize GOOSE Messag	es
To visualize GOOSE mes file first.	ssages between IEDs, yo	ou must import an SCD
Select File *		
Maximum file size is 100 MB		
		Cancel Import

b. Upload the SCD file by clicking the **File** (\Box) icon. The file size must be less than 100 MB. Click **Import**

3. Click **Import**.

4. MXview Power will import the uploaded SCD file into the Topology Map.

If the SCD file is correct, the user will see the message below.



If the SCD file content cannot find the devices in the Topology, then MXview Power will display the missing devices and provide the steps for the user to resolve the problem.

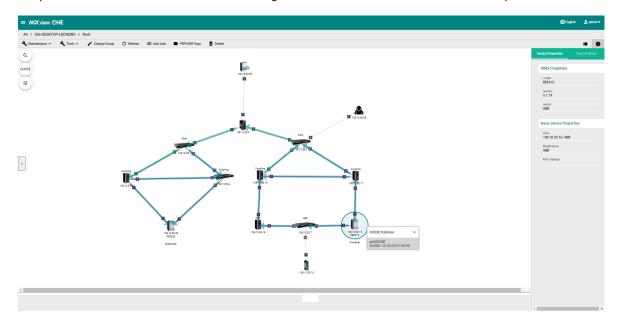
Failed to Import SCD File	
Can't find the following device(s):	
Try these steps to resolve issues.	
 Add the missing device(s) Click "Edit" → "Add Device". 	
2. Import the SCD file again Click "Power" → "Import SCD".	
	Close

GOOSE Message

MXview Power can display the GOOSE Message information on the Topology or in the IED Device Property panel by importing the SCD file. Moxa's PT switch, which was specifically designed for use in power substation systems, can detect GOOSE events. MXview Power can collect the GOOSE events and alert users when there is something wrong. Users can follow the step-by-step guidelines to solve the GOOSE events.

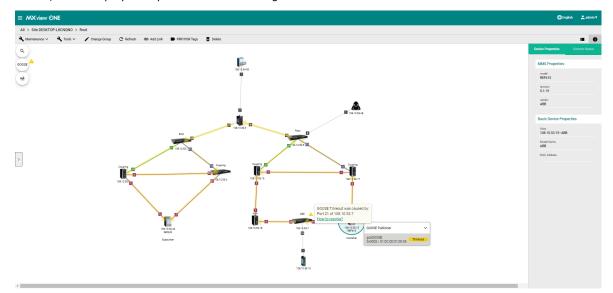
GOOSE Flow

There are two roles for IED device(s): Subscriber and Publisher. The topology displays the flow of the GOOSE packet, which starts from the Publisher and ends at the Subscriber. The route you see on the GOOSE flow is not the completed GOOSE packet publishing direction. The purpose of displaying the GOOSE flow is to troubleshoot the path of the GOOSE packet for certain cases such as a GOOSE event (e.g. GOOSE Timeout, GOOSE Tampered), a device malfunction, or a link going down. The GOOSE flow will show the path the packet took to enable faster troubleshooting and minimize substation network recovery times.



GOOSE Timeout

When a GOOSE Timeout event happens, MXview Power can display the event and indicate the possibly affected devices on the Topology by placing a yellow triangle next to them. When users click on the IED device, it will display the specific GOOSE message and will also include a Timeout status notification.



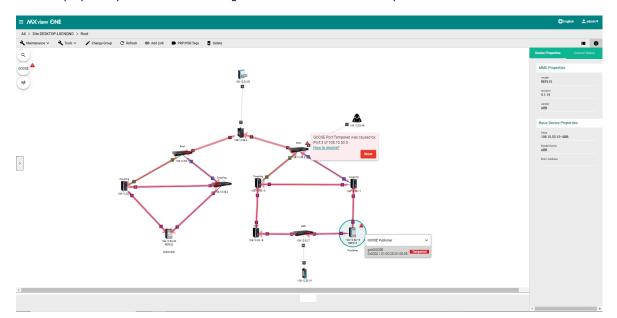
Click the **How to resolve** link and MXview Power will provide you with step-by-step instructions to solve the problem.

Resolve GOOSE Timeout Issue
GOOSE Timeout was caused by: Port 21 of 108.10.53.7
Try these steps to resolve GOOSE Timeout issues.
 Check the IED(s) settings Make sure the GOOSE publish/subscribe messages of the IED are set correctly.
 Make sure the port is not in link down status Check to make sure the port of each device in the GOOSE flow (gcbGOOSE/0x0002/01:0C:CD:01:00:05) is not in link down status.
 Make sure the port does not have any TX/RX errors Click on a link, choose "Link Traffic" to see the "Packet Error Rate" section. Make sure the port does not have any errors.
 Check if the fiber ports exceed certain thresholds Click "SFP" → "SFP List". Make sure the ports do not exceed certain thresholds.
Still not working? Remove the SFP module and install it again. If you have further questions, contact your <u>channel partner</u> of first. Contact <u>Moxa Technical Support</u> of you still need additional support.
Close

Once the problem is solved, MXview Power will provide the recovery status in the Recent Event panel and the yellow triangle will disappear.

GOOSE Tampered

When a GOOSE Tampered event happens, MXview Power can display the event and provide the possibly affected devices on the Topology by placing a red triangle next to them. When users click on the IED device, it will display the specific GOOSE message and will also include a Tampered status notification.



Click the **How to resolve** link and MXview Power will provide you with step-by-step instructions to solve the problem.

Resolve GOOSE Port Tampered Issue	
GOOSE Port Tampered was caused by: Port 3 of 108.10.53.5	
Try these steps to resolve the GOOSE Port Tampered issue	
 Check the IED(s) settings Make sure the GOOSE publish/subscribe messages of the IED are set correctly. 	
2. Check the port status Please check port 3 status of 108.10.53.5.	
Still not working? If you have further questions, contact your <u>channel partner</u> ☑ first. Contact <u>Moxa Technical Support</u> ☑ if you still need additional support.	
	Close

In order to enhance security, MXview Power allows users to click the **Reset** button to clear the events log for the devices. Once the event logs are cleared, MXview Power will provide the recovery status in the Recent Event panel and the red triangle will disappear.

