MXview One 1.5.0 User Manual

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www.moxa.com/products



MXview One 1.5.0 User Manual

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Table of Contents

| 1. | Introduction | 8 |
|----|--|----------|
| | Key Features | 8 |
| | Web-based Operation | 8 |
| | Auto Discovery and Topology Visualization | 8 |
| | Event Management | 8 |
| | Configuration and Firmware Management | |
| | Traffic Monitoring | 8 |
| | System Requirements | ع و |
| | System Requirements | و م |
| 2. | Installation and Uninstallation | |
| | Installation Procedure | 10 |
| | For Windows | 10 |
| | For Ilbuntu | 10 |
| | | 10 |
| | Confinite and the second secon | 11 |
| | | 11 |
| 2 | For Ubunlu | 11 12 |
| э. | | |
| | | 12 |
| | | 12 |
| | | 13 |
| | DB Backup & Restore | 16 |
| | Plug-in Manager | 18 |
| | Certificates | 25 |
| | Starting the MXview One Server and Logging Into MXview One | 36 |
| | Logging Into MXview One Remotely | |
| | License Management | 39 |
| | Checking the License | 39 |
| | Adding a New License | |
| | Using Device Discovery | |
| | Account Management | |
| | Adding User Accounts | |
| | Modifying User Accounts | |
| | Deleting User Accounts | 45 |
| | Exporting User Accounts | 45 |
| | Configuring the Password Policy | |
| | Configuring Login Notifications | |
| | Changing the Display Language | 48 |
| 4. | License Management | |
| | License Management Overview. | |
| | | 50 |
| | Adding a New License | 51 |
| | Adding an Add-on License | 53 |
| | | |
| | Deactivating a Deactivated License | |
| | Transferring a License to a Different Instance of MYview One | |
| | Overtity of Maniferral Daviese Evendentia Number of Made based Lisenses | |
| - | Quantity of Monitored Devices Exceeds the Number of Node-Dased Licenses | |
| э. | Dashboard Widgets | |
| | Dashboard Overview | |
| | Device Summary | |
| _ | Event Highlights | |
| 6. | Device Discovery and Polling | 65 |
| | Device Discovery Overview | |
| | Configuring IP Address Scan Ranges | |
| | Configuring Device Polling Settings | 68 |
| | Changing the Default SNMP Configuration | 69 |
| | Changing Modbus TCP Settings | 70 |
| | Changing EtherNet/IP Settings | 70 |
| | Changing Siemens S7comm Settings | 71 |

| 7. | Topology Management | 72 |
|-----|--|-----|
| | Topology Overview | 72 |
| | Viewing the Topology Map | 73 |
| | Viewing Recent Events | 75 |
| | Organizing the Topology Structure By Group Function | 77 |
| | Redundant Topologies | 80 |
| | PoE Power Consumption Visualization | 80 |
| | VPN Tunnel Visualization | 81 |
| | Port Trunking | 81 |
| | Adding Devices and Links | 82 |
| | Deleting Devices and Links | 84 |
| | Updating the Topology Map | 84 |
| | Refreshing the Topology Lavout | 85 |
| | Creating a New Topology Map | 86 |
| | Setting/Editing the Background Image | 87 |
| | Editing the Topology Appearance | |
| | Editing the Device Appearance | 200 |
| | Experting the Topology Man | 92 |
| 8 | Network and Traffic Monitoring | 95 |
| 0. | Viewing Link Properties | 95 |
| | Viewing Port Traffic | 96 |
| | Viewing Polt Trainc | 90 |
| | Menitering Traffic Loads | 97 |
| | Monitoring Natural Coourity | 90 |
| | Monitoring Network Security Interchelde for Traffic and Eiber Status Manitaring Events | 102 |
| | Configuring Sevency Thresholds for Trainc and Fiber Status Monitoring Events | 105 |
| 0 | | 100 |
| 9. | Viewing the CED Eiber Statue in Table View | 107 |
| | Viewing the SFP Fiber Status in Table View | 107 |
| 10 | Synchronize the SFP Threshold From the Device | 100 |
| 10. | Viewing the Device List | 100 |
| | Viewing the Device List | 112 |
| | Importing Device Configurations | 112 |
| | Exporting Device Configurations | 113 |
| | Upgrading Firmware | 114 |
| | | 115 |
| | | 116 |
| | Configuring SNMP Communication Protocol | 11/ |
| | Configuring MXview One Polling Interval | 118 |
| | Configuring Device Accounts | 119 |
| | Modifying the Device Alias | 120 |
| | Changing the Device Icon | 121 |
| | Signing on to Device Web Consoles | 122 |
| | Managing and Running Scripts | 123 |
| | Running a CLI Script | 123 |
| | Running a Saved CLI Script | 126 |
| | Changing Device Groups | 128 |
| | Refreshing the Device Status | 129 |
| | Deleting Devices | 129 |
| 11. | Device Management | 130 |
| | Configuration and Control | 130 |
| | Configuration and Control Overview | 130 |
| | Account and Password | 149 |
| | Account Management Overview | 149 |
| | Password Automation Overview | 151 |
| | Account Audit Overview | 156 |
| | Default Password Audit Overview | 158 |
| | Temporary Accounts Overview | 159 |
| 12. | Saved CLI Scripts | 163 |
| | Saved CLI Scripts Overview | 163 |
| | CLI Scripts | 164 |

| | Adding a CLI Script | . 164 |
|-----|--|----------|
| | Searching for a CLI Script | . 165 |
| | Editing a CLI Script | . 165 |
| | Deleting a CLI Script | . 166 |
| | Deleting Multiple CLI Scripts | . 166 |
| | Creating a CLI Script Scheduled Task | . 167 |
| | Execution Results | 169 |
| | Download All Execution Results | 169 |
| | Dolate All CLI Script Execution Desults | 170 |
| | Delete Evecution Deguite Drier to a Specified Time | 171 |
| | | . 1/1 |
| | | . 1/1 |
| | Adding a Script Automation | . 1/1 |
| | Editing a Script Automation | . 173 |
| | Deleting a Script Automation | . 173 |
| | Deleting Multiple Script Automations | . 174 |
| | Automation Buttons | . 174 |
| | Editing an Automation Button Group | . 174 |
| | Editing an Automation Button | . 176 |
| | Creating an Automation Button Group | . 178 |
| | Changing the Automation Button Widget Size | . 179 |
| 13. | Firmware Management | .182 |
| | Firmware Management Overview | . 182 |
| | Check Firmware Status | 182 |
| | Model Series Table Overview | 183 |
| | Solocting a Firmware Version | 195 |
| | | 100 |
| 14 | Events and Natifications | . 100 |
| 14. | Events and Notifications | 100 |
| | Event Monitoring | 100 |
| | Viewing System Events | . 188 |
| | Viewing Network and Device Events | . 189 |
| | Configuring Event Thresholds and Severity Levels | . 191 |
| | Notification Methods | . 196 |
| | Configuring Email Server Settings | . 196 |
| | Notification Management | . 196 |
| | Configuring New Event Notifications | . 197 |
| | Adding a Microsoft Teams Action | . 198 |
| | Editing or Exporting Registered Actions | . 201 |
| | Editing or Exporting Notification Configurations | . 202 |
| | Custom Event Management | . 203 |
| | Configuring Custom Events | 203 |
| | Viewing or Exporting Custom Event Settings | 205 |
| | Enabling/Disabling or Editing Custom Events | 205 |
| | Enabling/Disabiling of Editing Custom Events | . 200 |
| | | . 207 |
| | Enabling/Disabling the Built-in Syslog Server | . 207 |
| | Viewing Syslog Events | . 207 |
| | Enabling/Disabling Syslog Forwarding | . 209 |
| 15. | Inventory Management | .211 |
| | Assets and Warranty | . 211 |
| | Asset List Overview | . 211 |
| | Warranty Management Overview | . 213 |
| | Warranty Notifications Overview | . 216 |
| | Rogue Device Detection | . 217 |
| | Rogue Device Settings Overview | . 217 |
| | Device Baseline Overview | . 219 |
| | Current Roque Devices Overview | . 220 |
| | Roque Device History Overview | . 222 |
| 16 | Backups, Restores, and Compares | .274 |
| -0. | Backing I In the MXview One Database | |
| | Backing Up the Fixtherr one Batabasen | · 225 |
| | Dacking op Device Configurations | - 223 |
| | Restoring Device Connyulations | . 227 |

| | Comparing Archived Configuration Files | . 229 |
|-----|---|-------|
| | Creating Maintenance Scheduler for Database/Configuration Backups | 231 |
| 17. | Custom Integrations | 233 |
| | OPC UA Server Overview | 233 |
| | Viewing the OPC Tags Table | 233 |
| | Adding an OPC Tag | 234 |
| | Editing an OPC Tag | 235 |
| | Deleting an OPC Tag | 235 |
| | Deleting Multiple OPC Tags | 236 |
| | Configuring OPC UA Server Settings | 236 |
| | Managing RESTful API Keys | 237 |
| | Embedding Web Widgets | 239 |
| 18. | Wireless Add-on Module | 241 |
| -01 | Introduction | 241 |
| | System Requirements | 241 |
| | Supported Devices | 241 |
| | Cotting Started With the Wireless Add-on Medule | 241 |
| | Wireless Medule Features | 242 |
| | Main Dashboard | 243 |
| | | 243 |
| | Dynamic Wireless Client Roaming | . 243 |
| | AP/Client Device Dashboard | . 245 |
| | AP Device Dashboard | 245 |
| | Client Device Dashboard | . 246 |
| | Wireless Device Summary | . 247 |
| | Wireless Roaming Playback | . 248 |
| 19. | Power Add-on Module | 250 |
| | Introduction | 250 |
| | System Requirements | 250 |
| | Supported Devices With PRP/HSR Features | 250 |
| | Getting Started With the Power Add-on Module | 251 |
| | Power Module Features | 252 |
| | Topology | 252 |
| | Ungrouping an IED Group | 254 |
| | Creating an IED Group | 258 |
| | Import SCD | 259 |
| | GOOSE Message | 260 |
| 20. | Security Add-on Module | 263 |
| | Introduction | 263 |
| | System Requirements | 263 |
| | Supported Devices | 263 |
| | Getting Started With the Security Add-on Module | 264 |
| | Checking Registered Devices | 264 |
| | Security Module Features | 265 |
| | Main Dashboard | 265 |
| | Policy Profile Management | 205 |
| | | 200 |
| | I UILY FIULIES | 200 |
| | | 274 |
| | | . 275 |
| | Policy Profile Deployment | 2// |
| | Security Package Management | . 278 |
| | Security Package Files | 2/8 |
| | Event Logs | 280 |
| | Scheduled Update Check | 281 |
| | Security Package Deployment | . 282 |
| | Upgrading the Security Package of Managed Devices | . 282 |
| | Scheduling a Security Package Deployment for Managed Devices | 282 |
| | Deleting a Scheduled Security Package Deployment | 283 |
| | Cybersecurity Event Log | 283 |
| | Viewing Cybersecurity Events | . 284 |
| | Cybersecurity Event Settings | . 285 |

| Adding a Cybersecurity Event | 285 |
|---|-----|
| Adding a Cybersecurity Event Notification | 287 |

The Moxa MXview One network management software consists of four parts: The Main Module, Power Addon Module, the Wireless Add-on Module, and the Security 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 ICMP-enabled devices installed on subnets. The MXview Power Add-on Module provides additional advanced functions for power substation applications. The MXview Wireless Add-on Module provides additional advanced functions for wireless applications to monitor and troubleshoot your network, and help you minimize downtime. The Security Add-on Module provides additional advanced functions to enhance field security, including centralized management and deployment of firewall policies, and updating cybersecurity packages.

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, Microsoft Teams, or message box.

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 | Control Panel | English | 💄 admin 🔻 |
|---------------------|--|---------|-----------|
| Server Control | â | | |
| Configuration | \oslash | | |
| DB Backup & Restore | Service stopped | | |
| Plug-in Manager | Click Start to begin monitoring your network | | |
| 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 | tings | |
| Configuration | | | |
| DB Backup & Restore | Enable * | Yes | |
| Plug-in Manager | | | |
| Certificates | Manage Licenses Through MXview One Central Manager * | Yes • | |
| | | 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

| Enable * | No | * | | |
|--------------------------------|-----------------------|---------|-----------------------|-------|
| | | | | |
| Web Interface | | | | |
| | Port | | | |
| HTTPS * | 403 | | | |
| | 1-65535 | | | |
| | Enable | | Port | |
| HTTP * | Disabled | * | 80 | |
| | | | 1-65535 | |
| Database Interface | | | | |
| Port * | 5402 | | | |
| | 1-65535 | | | |
| Password * | | ø | | |
| | At least 8 characters | 16/63 | | |
| Microservices Interface 🕕 | | | | |
| | Port | | Password | |
| ntemal Service Port 1 * | 8883 | | •••••• | 8 |
| | 1-65535 | | At least 8 characters | 16/63 |
| | Port | | Password | |
| Internal Service Port 2 * | 8882 | | | 8 |
| | 1-65535 | | At least 8 characters | 16/63 |
| | Auto Binding | Port | | |
| Security Add-on Service Port * | Enabled * | 18883 | | |
| | | 1.65515 | | |

Web Interface

- > **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 80.

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 changing the password to enhance security.

> Security Add-on Service Port:

- i. **Auto Binding**: Enable or disable the auto-binding feature. When enabled, MXview One will automatically select a random port number for the Security add-on module if the default port number is already in use.
- ii. **Port**: Specify the service port of the Security add-on module.

When finished, click **Save**.

DB Backup & Restore

1. 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 One | e Control Panel | | |
|---------------------|-----------------|---------|-------|
| Server Control | Backup | Restore | |
| DB Backup & Restore | - | | |
| Plug-in Manager | Name * | | |
| Certificate | Save | | 0/255 |

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

| 🖲 MXview On | e Control Pa | inel | | |
|---------------------|---------------|--------------|----------|----------|
| Server Control | | | | |
| Configuration | Backup | Restore | | |
| DB Backup & Restore | | | | |
| Plug-in Manager | Name * | Backup test | | |
| Certificate | | | 11 / 255 | |
| | Save | | | |
| | Historical ba | ckups | | |
| | Versio | n Name | Date | Time |
| | i 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.

| MXview One | Control Pan | el | | | |
|--------------------|---------------------------|-----------------------------|---|--------------------------------------|---|
| Configuration | Backup | Restore | | | |
| B Backup & Restore | All databas You can co | se backups are stored on ti | - he MXview One server a c path and then press th | C:\Users\ refresh button to get t | AppData\Roaming\moxa\mxview one\db_backup |
| Certificate | 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 | |
| | O 1.2.0 | Backup test | 20230709 | 12:05:18 | |
| | Restore | | | | |

- 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 | this backup? |
| Cancel | Restore |

4. Displaying the restoration process.

| Restore Backup | |
|------------------------------|----------------------------|
| ✓ MXview service has stopped | 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. ID 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 | | 🌐 English 🛛 💄 admin |
|----------------------------|---|---------------------|
| Server Control | 0 | |
| Configuration | \oslash | |
| DB Backup & Restore | Service stopped. | |
| Plug-in Manager | Click Start to begin monitoring your network. | |
| Certificates | Start Open MXview One | |
| | HTTP port is disabled | |
| | HTTPS Port: 550 | |
| | Database Port: 5432 | |
| | Internal Service Port 1: 8883 | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

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 | | 4 | | | |
|---------------------------------|---|---|-----------|--|--|--|
| Server Control Configuration | Plug-in Manager | | | | | |
| DB Backup & Restore | Moxa Devices SNMP Devices | | | | | |
| Plug-in Manager | | | | | | |
| Certificates | Plug-in Version v1.3.231226 | | | | | |
| | You can get the latest plug-in file from th If you already have the plug-in file, please | 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 | | | |

- 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 | MP Devices | | | |
| Plug-in Manager | Upload a plug-in file | | | | |
| Certificates | Select a plug-in file | | | | |
| | Upload | | | | |
| | Supported Device Model(11 | 0 | | | |
| | = . | Q Search | | | |
| | Мо | del | | | |
| | 🗌 🖍 🖸 📋 Hin | schmann MACH | | | |
| | ABI | 8 | | | |
| | 🗌 🖍 🖬 Alc | satel | | | |
| | 🗌 🖍 🖸 Cis | sco Device | | | |
| | 🗆 🖍 🖸 Em | rerson | | | |
| | 🗌 🖍 🖬 Hin | schmann | | | |
| | — 🖍 🖬 нр | ? Networking Device | | | |
| | C 🖍 🖸 Roo | ckwell | | | |
| | 🗆 🧨 🖸 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 | | Model Plug-In | | |
| Configuration | | model i lug ili | | |
| 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 | | 2 |
| | 0 / 32 | | | 0 / 64 |
| Read Community | public | | | |
| | 6 / 32 | | | |
| Data Encryption | NoAuth - | Authentication | MD5 | * |
| | | | | |
| Encryption Protocol | DES | Encryption Password | | 26 |
| | | | | 0/64 |

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 $\ensuremath{\textbf{Next}}.$
- 4. Load Device Files.
 - a. **MIB Files**: Upload all the necessaryYou can upload multiple MIB files at once.
 - b. **Icon File**: Upload the device icon in PNG format. The maximum resolution is 150 x 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.

| (Contemportation of the second | e Control Panel | | | 🌐 English 💄 adr | | | |
|--|-------------------------------|-------------------------|---|--------------------------------|--|--|--|
| Server Control Configuration | < Add an SNMP Model Plug-In | | | | | | |
| DB Backup & Restore | 0 | 0 | 0 | 0 | | | |
| Plug-in Manager | Specify sysObjectID | Load Device Files | Select and Test OIDs | OID Alias and Value Defination | | | |
| Certificates | | | Q Search | | | | |
| | dio 🗌 | OID Name | OID Syntax | | | | |
| | Δ .1.3.6.1.4.1.248.16.100.1.1 | hmMgmtDiscMode | integer32(read-write(1),read-only(2)) | | | | |
| | Σ1.3.6.1.4.1.248.16.100.1.2 | hmMgmtDiscMacAddr | OctetString | | | | |
| | Δ .1.3.6.1.4.1.248.16.100.1.3 | hmMgmtDiscipIntfType | integer32(loopback-intf(1),router-intf(2),mgmt-intf(3)) | | | | |
| | Σ .1.3.6.1.4.1.248.16.100.1.4 | hmMgmtDiscSwVersion | OctetString | | | | |
| | Δ .1.3.6.1.4.1.248.16.100.1.5 | hmMgmtDiscProductDescr | OctetString | | | | |
| | Σ .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)) | | | | |
| | Δ .1.3.6.1.4.1.248.16.100.2.3 | hmMgmtDiscCfgIPAddrType | Integer32(unknown(0),ipv4(1),ipv6(2),dns(16)} | | | | |
| | Σ .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 | | Q |
| | | 0/32 | | | 0/64 |
| Read Community | public | | | | |
| | | 6/32 | | | |
| Data Encryption | NoAuth | Ŧ | Authentication | MD5 | * |
| | | | | | |
| | | | | Cancel | Get |

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

| I MXview One | Control Panel | | | 🌐 English | 1 ed |
|---------------------|--|---------------------------|--|-----------|-------------|
| Server Control | □ ₽ .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 | Σ .1.3.6.1.4.1.248.16.100.1.3 | hmMgmtDiscipint*Type | integer 32 (loopback-intf(1) router-intf(2) .mgmt-intf(3)) | | |
| Certificates | Δ .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)] | | |
| | Σ .1.3.6.1.4.1.248.16.100.2.3 | hmMgmtDiscCfgIPAddrType | integer32(unknown(0)./pv4(1)./pv6(2).dns(16)) | | |
| | D 1.3.6.1.4.1.248.16.100.2.4 | hmMgmtDiscCfg/PAddr | OctetString | | |
| | Δ .1.3.6.1.4.1.248.16.100.2.5 | hmMgmtDiscCfgPrefLen | | | |
| | ✓ ∑ .1.3.6.1.4.1.248.16.100.2.6 | hmMgmtDiscCfgGwIPAddrType | integer32(unknown(0),ipv4(1),ipv6(2),dns(16)) | | |
| | Δ .1.3.6.1.4.1.248.16.100.2.7 | hmMgmtDiscCfgGwtPAddr | OctetString | | |
| | Σ1.3.6.1.4.1.248.16.100.2.8 | hmMgmtDiscCfgAction | integer32(other(1),activate(2)) | | |
| | Σ 1.3.6.1.4.1.248.16.100.2.9 | hmMgmtDiscCfgBlinking | integer32(enable(1),disable(2)) | | |
| | Back | | | | |

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.

| < Add an SNMP Model Plug-In | | | | | | | |
|-----------------------------|---------------------------|-----------|------------------|--|--|---------------------------------------|--|
| Specify sys | sobjectID | U | oad Device Files | Select and Test OIDs | Q Search | (4) OID Alias and Value Defination | |
| 3 | OID Name | OID Alias | | OID Syntax | OID Syntax Mapping | | |
| 1 | hmMgmtDiscMode | | | Integer32{read-write(1),read-only(2)} | read-write(1), read-only(2) | | |
| 1 | hmMgmtDiscipintfType | | | $Integer 32 \{loop back-intf(1), router-intf(2), mgmt-intf(3)\}$ | loopback-intf(1), router-intf(2), mgmt-intf(3) | | |
| 1 | hmMgmtDiscProductDescr | | | OctetString | | | |
| 1 | hmMgmtDiscCfgIPAddrType | | | Integer32{unknown(0),ipv4(1),ipv6(2),dns(16)} | unknown(0), ipv4(1), ipv6(2), dns(16) | | |
| 1 | hmMgmtDiscCfgPrefLen | | | | | | |
| 1 | hmMgmtDiscCfgGwIPAddrType | | | Integer32{unknown(0),ipv4(1),ipv6(2),dns(16)} | unknown(0), ipv4(1), ipv6(2), dns(16) | | |
| 1 | hmMgmtDiscCfgGwIPAddr | | | OctetString | | | |
| 1 | hmMgmtDiscCfgAction | | | Integer32{other(1),activate(2)} | other(1), activate(2) | | |
| Back | Complete | | | | | | |

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 UID Na | ame * | | |
|---|---------------------------|--|--|
| Nama | hmMamtDiscipletfTupe | | |
| Name | nimingintoiscipinti rype | | |
| Alias | Туре | | |
| | | 4/64 | |
| Syntax Map | oping | | |
| Syntax | Integer32{loopback-intf(1 |),router-intf(2),mgmt-intf(3)} | |
| Syntax Mar | noina | | |
| officer map | Rund | | |
| | | | |
| Value | | Display Name | |
| Value | | Display Name loopback-intf | |
| Value | 1/64 | Display Name Ioopback-intf 13 / 64 | |
| Value 1 Value | 1/64 | Display Name loopback-intf 13 / 64 Display Name | |
| Value 1 Value 2 | 1/64 | Display Name Ioopback-Intf Display Name router-Intf | |
| Value 1 Value 2 | 1/64 | Display Name Ioopback-Intf Display Name router-Intf 11/64 | |
| Value 1 Value 2 Value | 1/64 | Display Name Ioopback-Intf 13/64 Display Name Touter-Intf 11/64 Display Name | |
| Value Value 1 Value 2 Value 3 | 1/64 | Display Name Ioopback-Intf I3/64 Display Name Touter-Intf I1/64 Display Name Intf II/64 III/64 III/6 | |

- 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 added | | |
|-----------------------|-----------------------------------|------------------|----------|
| The plug-in v | vill now show in the Supported De | vice Model list. | |
| Plug-in Manag | er | | |
| Moxa Devices | SNMP Devices | | |
| Upload a plug-in file | | | |
| Select a plug-in file | D | | |
| Upload | | | |
| Supported Device Mode | ((11) | | Q Search |
| | | | Contra |
| | 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

| 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: Regenerate | ::00::00 AM | | |
| | Wednesday, Jul 19, 2023 at 12: Regenerate Import Certificate Private Key (key) * | ::00::00 AM | | |
| | Wednesday, Jul 19, 2023 at 12: Regenerate Import Certificate Private Key (.key) * | ::00:00 AM | | |
| | Wednesday, Jul 19, 2023 at 12: Regenerate Import Certificate Private Key (.key) * CA Certificate (.crt, .cer) * | ::00:00 AM | | |
| | Wednesday, Jul 19, 2023 at 12: Regenerate Import Certificate Private Key (.key) * CA Certificate (.crt, .cer) * | :00:00 AM | | |

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 | ۵ |
| 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 activate the certificate. | MXview One to |
| | Close |

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 MXvie activate the certificate. | ew 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. | | 64 | |
| 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

| (MXview One O | Control Panel | | | | Englis | h 💄 admin 🔻 |
|---------------------|---|--|---------------|-------------------|--------|-------------|
| Server Control | | | | | | |
| Configuration | Web | OPC UA Server | Syslog Server | Syslog Forwarding | | |
| DB Backup & Restore | Cartificata Inform | action | | | | |
| Plug-in Manager | Issue To - Common Name | (CN) | | | | |
| Certificates | Issue To-Common Name MXView One Issue By-Common Name MXView One Issue By-Organization (C Moxa Inc. Issued On Sunday, May 19, 2024 Expires On Monday, Jun 19, 2034 Regenerate Import Certificate Private Key (.key) * Certificate (.perm) * | (CN) (CN) at 12:00:00 AM at 12:00:00 AM Export Certificate e .cer) * | | | | |
| | 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 f 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 (0) Moxa Inc. | | | |
| lssued On Wednesday, Jun 19, 203 | 24 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 C | 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 (0) 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 | ation (CN) |
| 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 | 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 the **Remote Access** function is enabled, you can access the MXview One Control Panel from another computer. To disable this function, click **Remote Access** again.

- 2. Open a web browser on the computer located at the remote site.
- 3. 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 One Contr | rol Pan |
|------------------|---------|
| Username | |
| Password | Ø |
| | |

- 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

| with the offere | ontrol Panel | English | 💄 admin 🔻 |
|---------------------|---|---------|-----------|
| Server Control | 0 | | |
| Configuration | \bigotimes | | |
| DB Backup & Restore | Service stopped | | |
| Plug-in Manager | Click Start to begin monitoring your network. | | |
| 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.

NOTE

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 (\equiv) > Administration > License Management.

| \equiv MX view ONE | | | | ⊕English 💄 admin 🔻 |
|--|--|---|--|---|
| License Management | | | | |
| MXview One Node License Mode: Trial Currently Used: 0 Total Number of Licenses: 20 | Wireless Add-on License Power Mode: Trial Mode: Tr 2000 | Add-on License Security ial Mode: Trial | Add-on License | |
| Moxa License Site Z Add New License License Type | | | | |
| Deactivated licenses | | | | × |
| Trial Remaining | Wireless Add-on License Start to experience the MXview One Wireless Add-on | Power Add-on License Start to experience the MXview One Po Add-on | Security Add-on License Start to experience the MXview One Security Add-on | Re-activate License Use both the Deactivation Code and a User Code to re-activate your license. |
| 81 _{days} | | | | |
| | Disabled | C Enabled | Contraction Contraction Contraction | Re-activate |

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.

| r Code MXview One | a" on the sit | Activate | 2 |
|----------------------|---------------|--------------------------------|---|
| MXview One | a" on the sit | 0 | |
| ne: MVvie | w One NEV | A/) | |
| vOne-NEW | -XN-SR) is | (V) | |
| X | | WUNE-NEW-XN-SK) IS XXXXXXXX | WONE-NEW-XN-SK) IS XXXXXXXX Close |

3. Copy the User Code.

| Add New License | | | |
|------------------------------------|-------------------|----|----------|
| 0 | 2 | | 3 |
| Log in to the Moxa License Site | Copy User Code | 5 | Activate |
| Copy the User Code to the Mo | xa License Site 🛛 | | |
| User Code: | | D | |
| | | Cl | ose 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 Dis | covery | | | | | | |
|---|---------------|------------------------|---------------|------------------|------------------|-------|-----------|------------|
| | 1 Network Rar | nge(s) | | | 2 Discovery Resu | ılt — | | 3 Complete |
| | A Scanned | d range(s) will be sav | ed after devi | ce discovery. | | | | |
| | ٥ | | | | | | | |
| < | | 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.

| Enable Scan Range * | | | | |
|---------------------|---|---------------------|------------|--|
| Enabled | • | | | |
| Name * | | | | |
| | | CIDR Prefix * | | |
| First IP Address * | _ | /24 (255.255.255.0) | • | |
| Last IP Address * | | CIDR Address Range | | |
| Group * | | | | |
| Root | • | | | |
| | | | a 1 | |

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** ($\hat{\bullet}$) 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.

| D | ev | ice D | iscovery | | | | | | |
|---|----|---------|------------------------|----------------|------------------|------------------|-------|------------------|------------|
| | 1 | Network | Range(s) | | | 2 Discovery Resu | lt | | Complete |
| | | 🛕 Scan | ned range(s) will be s | aved after dev | ce discovery. | | | | |
| | _ | 0 | | | | | | | |
| < | | | Enabled/Disabled | d Name | First IP Address | Last IP Address | Group | Site Name | |
| | | • 🖊 | Enabled | Test | 192.168.127.1 | 192.168.127.254 | Root | ClaireYHChang-NB | |
| | | | | | | | | | 1 – 1 of 1 |
| | N | 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.

| Account Mar | nagement | | | |
|-------------------|-----------------|--------------------|---------------|-------------------------------|
| User Account | Password Policy | Login Notification | | |
| All Users (3) | | | | O Search |
| Administrator (1) | | | | C Search |
| Supervisor (0) | | Jsername | Authority | |
| User (2) | | admin | Administrator | |
| | | user | User | |
| | | guest | User | |
| | | | | Items per page: 50 1 – 3 of 3 |

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 4 | Account Management | | | | |
|--|---|---|-----------------------------|--|--|
| 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 (~!@#\$%^&* ;:,.<>[]{()) Save | User Account | Password Policy | Login Notification | | |
| | Minimum length (4 - 16) * 4 Password complexity At least one digit Mixed upper and At least one spec Save | y strength check (0-9) lower case letters (A-Z ial character (~!@#\$%/ | , 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.

| USEI ACCOUNT | Password Policy | Login Notification |
|------------------------------|---------------------|--------------------|
| Show Login Failu | re Records | |
| Show Default Pas | ssword Notification | |
| ogin Message | | |
| | 0 / 250 | |
| 114 Aug 487520 129227 521517 | n Failure Message | |
| ogin Authenticatior | | |

- 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**.

| ≡ MX view ©NE | | | | ⊕English 💄 admin 🔻 |
|---|--|--|--|---|
| License Management | | | | |
| MXview One Node License Mode: Trial Currently Used: 0 Total Number of Licenses: 2 | Wireless Add-on License Power Mode: Trial Mode: T | Add-on License Security Add- rial Mode: Trial | on License | |
| Moxa License Site. | | | | |
| Deactivated licenses | | <u></u> | | × |
| Trial Remaining | Wireless Add-on License Start to experience the MXview One Wireless Add-on | Power Add-on License Start to experience the MXview One Power Add-on | Security Add-on License Start to experience the MXview One Security Add-on | Re-activate License Use both the Deactivation Code and a User Code to re-activate your license. |
| 81 _{days} | | | | |
| | Disabled | C Enabled | Contraction Contraction Contraction | 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. |
| Security Add-on License | Allows users to access additional security related functions. |

| cense Type | |
|-------------------------|---|
| 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. |
| Security Add-on License | Allows users to access additional security related functions. |
| | Clos |

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.

| L | ICENSE M | anagement | | | • |
|---|-------------------|--------------------------|-------------------------|----------------------|---|
| | | License | Wireless Add-on License | Power Add-on License | Ø |
| | | Mode: None | Mode: None | Mode: None | |
| | | State: No valid licenses | | | |
| | பு | Current Nodes: 0 | | | |
| > | M | Licensed Nodes: 0 | | | |
| | Moxa License Site | License Type | | | |

The Add New License screen appears.

| Add New Lice | ense | | |
|---|--|---|----------------------|
| | | 2 | 3 |
| Log in to the I Si | Moxa License ite | Copy User Code | Activate |
| 1. Log in to 2. Choose "/ 3. Registrati | the <u>Moxa License Sit</u> Activate a Product Lic on Code | e 🗹 cense" and "MXview One" or | n the site. |
| | Your registratio (Model name: L | on code (Type: MXview C LIC-MXviewOne-NEW-XN | one NEW) I-SR) is |

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

| Add New License | | |
|------------------------------------|--------------------|------------|
| 0 | 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.

| Products and Licens | ses / Activate a Product License | |
|---------------------|----------------------------------|---|
| Product Type | Please select a product | ~ |
| | Please select a product | |
| | IEF | |
| | 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 | 9534305-82294121112-123A9CoDeux57 INEFZ OKY | |
| This is the first activation of the handled. | Lours (Livensei Liverise Agreenienis) le software, you need to read the EULA, and click I know, so tha | 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 p | ourchasing an MXview One product license! |
|-----------------|--|
| Your license ha | is been activated, we will send you an activation notification |
| to your mailbox | l. |

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.

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

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 | | | |
| | Licensed Neders 2 | | | |

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

| 1 | 2 | 3 |
|---|---|----------|
| Log in to the Moxa License Site | Copy User Code | Activate |
| Log in to the <u>Moxa Licer</u> Choose "Activate a Prod Registration Code | n <u>se Site [2]</u> luct License" and "MXview One" on the si | ite. |
| Your regis (Model na xxxxxxxx | stration code (Type: MXview One NE ame: LIC-MXviewOne-NEW-XN-SR) i: xxxxxxxxxxxxxxxxxxxxx | EW) s |
| xxxxxxxx | **** | |

3. Click Next.

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

| 4 | ļ | > |
|---|---|---|
| ٢ | , | |
| | | |

NOTE

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

| Add New License | | |
|------------------------------------|--------------------|------------|
| 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 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 |
| to 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.



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 M | lanagement | | |
|--|--|--|------------|
| MXview One | License Mode: Authorized Current Nodes: 0 Licensed Nodes: 6 | Power Add-on License Mode: Authorized | 0 |
| Moxa License Site | e 🖸 Ise License Type | | |
| Licenses | | | ^ |
| License Type: Activation Co License Start: | : Power Add-on License de: : 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 | 0 |
| Add New Licen | License Type | | ~ |
| Deactivated lice Wireless Add Deactivation (| enses -on License Code: | | ^ |
| License Start: | :: 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**.

| e-activate License | | | |
|---|--------------------------------|------------------|---------------------------------------|
| 0 | _ 2 _ | 3 | - 4 |
| Log In to the Moxa License Site | Copy Deactivation Code | Copy User Code | Activate |
| Copy Deactivation C Deactivation Code: | Code and paste it on <u>Mo</u> | ixa License Site | |
| | | | , , , , , , , , , , , , , , , , , , , |
| , | | , | 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 Licen | ses / 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.

| License | Management | | |
|----------------------------|---|--|-------------|
| MXview On | e License Mode: Authorized Current Nodes: 0 Licensed Nodes: 6 | Power Add-on License Mode: Authorized | 0 |
| Licenses | License Type | | ~ |
| Deactivated | licenses | | ^ |
| Wireless A Deactivation | Add-on License on 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 Licen | ses / 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.

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

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 | License Mode: Authorized State: Not enough nodes Current Nodes: 2000 Licensed Nodes: 2000 License Type | for MXview One will be locked after 30 minutes if you do not add enough licenses or remove nodes over the usage limit. | Wireless A Mode: Trial please purchase additional nodes | dd-on License |
|----------------|---|--|---|---------------|
| Licenses | | | | |
| Wireless Trial | Remaining | Re-activate License Use both the Deactivation Code and a User Code to re-activate your license. | | |
| 5 | 58 | | | |

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. | SNMP |
| Non-Moxa devices with SNMP enabled. | SNMP |
| Non-Moxa devices with ICMP enabled. | ICMP |
| Non-Moxa devices with MMS enabled. | ммз |

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.

| 9 | 1 Network Rar | nge(s) | | Discovery I | Result | | 3 Complete |
|---|---------------|-----------------------|----------------|-------------------------|-----------------|-------|--------------|
| | A The sca | nned range(s) will be | saved after th | e device has been disco | overed. | | |
| < | 0 | | | | | | |
| | | Enabled/Disabled | Name | First IP Address | Last IP Address | Group | Site Name |
| | - / i | Enabled | Test | 192.168.127.1 | 192.168.127.254 | Root | Site BRANDON |
| | 4 | | | | | | 1 − 1 of 1 |
| 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 | • | | |
| | | | |
| | | Cancel 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:

ΝΟΤΕ

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 MXview One Polling Interval section.

| MXview One Po | olling Interval |
|-------------------------------|-----------------|
| ICMP Polling Interval * 10 | |
| 10 - 600 | sec |
| SNMP Polling Interval | * |
| 60 | |
| 60 - 600 | sec |

3. Configure the following ICMP polling settings:

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

4. 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 * | |
| | ø |

6. Click Save.

MXview One will update the modified settings.

Changing the 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 |
| Data Encryption NoAuth Encryption Protocol | • | Authentication MD5 |

- 3. Configure the following settings:
 - 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
 - I 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 **Device Identification Settings** section.

| Modbus Enable * Disabled | * | Modbus Port * 502 | |
|-----------------------------|---|------------------------|------------------------|
| | | 1 - 65535 | |
| EtherNet/IP Enable * | | EtherNet/IP TCP Port * | EtherNet/IP UDP Port * |
| Disabled | * | 44818 | 44818 |
| | | 1 - 65535 | 1 - 65535 |
| Siemens S7comm Enable * | | Siemens S7comm Port * | |
| Disabled | - | 102 | |
| | | 1 - 65535 | |

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

MXview One updates the modified settings.

Changing EtherNet/IP Settings

By configuring EtherNet/IP Settings in the Default Device Template section, MXview One will be able to detect whether an ICMP device has EtherNet/IP attributes or not. If an ICMP device supports EtherNet/IP, an EtherNet/IP device icon will be displayed in the topology to easily identify the device.

1. Navigate to Menu (=) > Administration > Default Device Template.

The Default Device Template screen will appear.

2. Scroll down to the Device Identification Settings section.

| | | 5 | |
|-----------------------------|---|------------------------|------------------------|
| Modbus Enable * Disabled | Ŧ | Modbus Port * 502 | |
| | | 1 - 65535 | |
| EtherNet/IP Enable * | | EtherNet/IP TCP Port * | EtherNet/IP UDP Port * |
| Disabled | • | 44818 | 44818 |
| | | 1 - 65535 | 1 - 65535 |
| Siemens S7comm Enable * | | Siemens S7comm Port * | |
| Disabled | * | 102 | |
| | | 1 - 65535 | |

- 3. Configure the following settings:
 - > EtherNet/IP Enable: Enable or disable EtherNet/IP settings.
 - > **EtherNet/IP TCP Port**: Specify the EtherNet/IP TCP port.
 - > EtherNet/IP UDP Port: Specify the EtherNet/IP UDP port.
 - > Click Save.

MXview One updates the modified settings.

Changing Siemens S7comm Settings

By configuring Siemens S7comm Settings in the Default Device Template section, MXview One will be able to detect whether an ICMP device has Siemens S7comm attributes or not. If an ICMP device supports Siemens S7comm, a Siemens S7comm device icon will be displayed in the topology to easily identify the device.

1. Navigate to Menu (=) > Administration > Default Device Template.

The Default Device Template screen will appear.

2. Scroll down to the Device Identification Settings section.

| Modbus Enable * Disabled | - | Modbus Port * 502 | |
|-----------------------------|---|------------------------|------------------------|
| | | 1 - 65535 | |
| EtherNet/IP Enable * | | EtherNet/IP TCP Port * | EtherNet/IP UDP Port * |
| Disabled | * | 44818 | 44818 |
| | | 1 - 65535 | 1 - 65535 |
| Siemens S7comm Enable * | | Siemens S7comm Port * | |
| Disabled | - | 102 | |
| | | 1 - 65535 | |

- 3. Configure the following settings:
 - > Siemens S7comm Enable: Enable or disable Siemens S7comm settings.
 - > **Siemens S7comm Port**: Specify the Siemens S7comm 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.

| All > Site BR | ANDONYANG-PC > Root | | | | | |
|---------------|---|---------------------------|--------------------------|--|-------------------------|---------------------|
| 🙏 Topology 🗸 | 🚱 Group 🗸 🧪 Edit 🗸 💿 Visua | lization 🗸 🛛 📲 SFP 🗸 | | | | ≡ 0 |
| Q ∰ | Ring Master Ring Master 192.168.127.13 192.168.127.67 192.168.127.95 | Ring 1 Master Ring Master | Ring Master | Ring 2 Master Ring 1 Master 27.114 192.168.1 | 92 166 127 107 | : |
| Always show | "Recent Events" at startup | | | | Q Search | ĺ |
| | Site Name | ID Sou | rce Source IP | Device Alias | Description | Time Issued |
| 0 <u>9</u> 🖬 | Site BRANDONYANG-PC | 1754 MX | view One 192.168.127.168 | 192.168.127.168-AWK-1131A | Device SNMP reachable | 2022-04-28 13:48:34 |
| | Site BRANDONYANG-PC | 1753 MX | view One 192.168.127.168 | 192.168.127.168-AWK-1131A | Device SNMP unreachable | 2022-04-28 13:48:28 |
|) o o 🖻 | Site BRANDONYANG-PC | 1752 MX | view 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 MX | view One 192.168.127.168 | 192.168.127.168-AWK-1131A | Device SNMP unreachable | 2022-04-28 13:38:08 |
| 0 <u>9</u> 🖬 | Site BRANDONYANG-PC | 1750 MX | view One 192.168.127.168 | 192.168.127.168-AWK-1131A | Device SNMP reachable | 2022-04-28 13:22:12 |
| 0 <u>9</u> 🖬 | Site BRANDONYANG-PC | 1749 MX | view One 192.168.127.168 | 192.168.127.168AWK-1131A | Device SNMP unreachable | 2022-04-28 13:22:04 |
| 0 <u>9</u> 🖬 | Site BRANDONYANG-PC | 1748 MX | view One | | User login: admin | 2022-04-28 13:16:52 |
| 0 <u>9</u> 🖬 | Site BRANDONYANG-PC | 1747 MX | view One 192.168.127.168 | 192.168.127.168AWK-1131A | Device SNMP reachable | 2022-04-28 13:01:53 |
| 0 9 🖬 | Site BRANDONYANG-PC | 1746 MX | view One 192.168.127.168 | 192.168.127.168AWK-1131A | Device SNMP unreachable | 2022-04-28 13:01:45 |
| 0 9 🖬 | Site BRANDONYANG-PC | 1745 MX | view One 192.168.127.168 | 192.168.127.168AWK-1131A | Device SNMP reachable | 2022-04-28 12:53:20 |
| 0 9 🖬 | Site BRANDONYANG-PC | 1744 MX | view One 192.168.127.168 | 192.168.127.168AWK-1131A | Device SNMP unreachable | 2022-04-28 12:53:15 |
| 0 <u>9</u> 🖬 | Site BRANDONYANG-PC | 1743 MX | view One 192.168.127.168 | 192.168.127.168AWK-1131A | Device SNMP reachable | 2022-04-28 12:32:32 |
| 0 <u>9</u> 🖬 | Site BRANDONYANG-PC | 1742 MX | view One 192.168.127.168 | 192.168.127.168AWK-1131A | Device SNMP unreachable | 2022-04-28 12:32:23 |
| 0 <u>9</u> 🖬 | Site BRANDONYANG-PC | 1741 MX | view One 192.168.127.168 | 192.168.127.168-AWK-1131A | Device SNMP reachable | 2022-04-28 12:21:28 |
| 0 <u>9</u> 🖬 | Site BRANDONYANG-PC | 1740 MX | view One 192.168.127.168 | 192.168.127.168-AWK-1131A | Device SNMP unreachable | 2022-04-28 12:21:23 |
| 0 <u>9</u> 🖬 | Site BRANDONYANG-PC | 1739 MX | view One 192.168.127.169 | 192.168.127.169AWK-4131A | Device SNMP reachable | 2022-04-28 12:19:52 |
| 0 <u>9</u> 🖬 | Site BRANDONYANG-PC | 1738 MX | view One 192.168.127.169 | 192.168.127.169-AWK-4131A | Device SNMP unreachable | 2022-04-28 12:19:44 |

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 | N |
| | | 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.

| Alway | s show "Recent Events | " at startup |
|-------|-----------------------|--------------|
| := | ₹ ₽ | |
| | Site Nar | ne |

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** (\blacksquare) > **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 | | |
| | | |
| | 6/63 | 6 / 63 |

- 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 | | |
|-------------------|--------|-------|
| D î | | |
| ▼ 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 |
| | Image 💦 🖸 | |
| | 888 | |
| | 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 | | * | |
|-----------|-----------------|---|---|
| П | IP Address | | |
| | 192.168.127.154 | | |
| | 192.168.127.155 | | |
| | 192.168.127.156 | | |
| | 192.168.127.157 | | 1 |
| | 192.168.127.158 | | 1 |
| | 192.168.127.159 | | |
| | 192.168.127.160 | | |
| | 192.168.127.161 | | |
| | 192 168 127 162 | | - |
| 0 Selecte | ed / 50 total | | |
| Assign to | 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.



ſ

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** (\equiv) > **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.

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 (≡) > Topology.
 - The **Topology** screen appears and displays the Topology Map by default.
- 2. If **List view** is selected, click the **Topology view** (^A) 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 | | Reg I Loper | | |
| Directed Line Style | • | No. of the second secon | 1 mm | |
| | | | ă ă | |
| | | 912 911 1921 (05.127.5 1922 (05.127.6 | R = 271 H (R = 271 | |
| | | Directed Line Style | Elbow Line Style | |
| Text Size | | | | |
| Text Size | | | | |
| Small | • | | | |

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 | | |
| 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 |
| | 10 million (1997) | |

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 |
| - | 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.

| гороюду | | | | |
|---------------------------|--------------------------------|--|--|--------------------|
| Device | | | | |
| Preview | | | | |
| | 1 | | | |
| IP Address | | | | |
| None | | | | |
| | | | | |
| | | | | |
| If you char then resca | nge the Alias n or add a de | setting, please del vice to complete tl | ete the device or 1e 'Alias' setting. | n the topology and |

- 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:

- 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.

| then resca | nge the Alias n or add a d | settin evice t | ig, please delete the d o complete the 'Alias' | evice on the topology and setting. |
|--------------|-------------------------------|-------------------|---|------------------------------------|
| | | | nan ta da ana sun n | far foundation 💌 en |
| Alias | | | | |
| Bottom Label | | + | Bottom Label | |
| | _ | | Madal Nama | _ |

- 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.



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** (\equiv) > **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.



3. Navigate to Link Traffic > Packet Error Rate.



- 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** $(\stackrel{!}{\rightarrow})$ 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 | c ium |
| ••• | Change Default Password / |
| ••• | Set SNMP Trap/Inform or Syslog |
| ••• | Enable Trusted Access |
| ••• | Enable Auto Logout 🥏 |
| •• | Enable DDoS Protection 🥏 |
| | Enable Password Complexity 🛛 🥑 |
| •• | 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 | Drofile dotaile 2 | |
| | | |
| Colors for check result | | |
| High | Medium | |
| #77B800 | #009DDB | |
| Basic | Open | |
| #FA943E | #C0C0C0 | |
| 2 | | |
| | | |
| | | 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 | _ | | |
| #F | 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** $(\stackrel{\exists \pm}{=})$ 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 | * |
| 3 | % | |
| | | 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 |
|----------------------------------|-----|-------------------|---------------|
| SEP TX Under * | | | |
| D | | Warning | * |
|) ~ -100 SFP RX Under * | dBm | | |
|) | | Warning | * |
|) ~ -100 SFP Voltage Under * | dBm | | |
| C | | Warning | - |
| 0 ~ 10 SFP Voltage Over * | V | | |
| C | | 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 ($0\sim10$)
 - 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 La | bel 🗴 | Delet |
|--------------------------|-------------------------|-------------|-------|-------|
| Click Set Port Label. | | | | |
| The Set Port Label so | reen appears. | | | |
| Set Port Label | | | | |
| Use Custom Label | | | | |
| From: 10.81.10.12 / Po | rt 8 | | | |
| - | | | | |
| To: 10.81.10.11 / Port 8 | 3 | | | |
| | | | | |
| | | Cancel Ap | oply | |

- 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 |
| | | | | \bigcirc 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 | 3.3 |
| 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 |
| | | | | | | | | | |

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 🗸 | O Visualization ∨ | SFP V Fower V |
|--------------|-----------|----------|-------------------|--|
| 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 S | FP Threshold | From the [|)evice | |
|---|--|--------------------------------------|---|-----------------|
| You can sync Temperature, the SFP Three | the SFP Thresho , Tx Power, and R , shold of every lin | ld from Moxa k Power of Fil k. | 's switch. After syncing oer Check will be synce | g, the ed to |
| *To check the SFF Threshold. | ^o Threshold, you can cli | ck on a link, then | choose Severity Threshold \rightarrow S | SFP |
| | Severity Threshold | | | |
| | Bandwidth Utilization | Packet Error Rate | SFP Threshold | |
| | SFP TX Under * | Warning | | |
| | 0 ~ -100 di SFP RX Under * | | | |
| | 0 0 ~ -100 di SEP Voltane Linder * | Warning | | |
| | 0 0 - 10 | Warning | • | |
| | SFP Voltage Over * | Warning | | |
| | 0 – 10 SFP Temperature Over * 0 | Warning | | |
| | 0 ~ 100 | p | | |
| 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.

| ≡, | MX view ONE | | | | | | | English | 🔔 admii | n۳ |
|------------|-------------------------------|-----------------|-----------------|-------------------|---------------------------|---------------|----------|---------|---------|----|
| Roo | t > | | | | | | | | | |
| / E | Edit 🗸 | | | | | | | | * | 0 |
| Ŧ | ٥ | | | | | | 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 | | | | | |
| | 192.168.127.11EDS-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 Locati | on | | | |
| | 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 Locati | on | | | |
| 7 | 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 Locati | on | | | |
| | 192.168.127.26-PT-G7728 | PT-G7728 | 192.168.127.26 | 00:90:E8:86:19:CD | V6.3 build 22120913 | Switch Locati | on | | | |
| | 192.168.127.27PT-G7728 | PT-G7728 | 192.168.127.27 | 00:90:E8:8E:F7:C6 | V6.3 build 22120913 | Switch Locati | on | | | |
| | 192.168.127.28PT-G7828 | PT-G7828 | 192.168.127.28 | 00:90:E8:79:23:82 | V6.3 build 22120913 | Switch Locati | on | | | |
| | 192.168.127.29-PT-G7728 | PT-G7728 | 192.168.127.29 | 00:90:E8:99:E9:08 | V6.2 build 21110316 | Switch Locati | on | | | |
| | 192.168.127.32-Hirschmann | Hirschmann | 192.168.127.32 | 00:80:63:B3:B2:80 | | Hirschmann I | ИАСН | | | |
| | 192.168.127.222ICMP 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 Pass | word | | |
| | | | | | |
| | | | | 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.

| Delete | e Devid | ce | | | | |
|--|--|--|--------------------------------------|------------------------------------|--------------------------------|--------------------------|
| A | Confir | mation | of de | evice(| s) <mark>de</mark> l | etion |
| Hist devi trace to pr • V • D | orical da ce(s) wi eability o roceed? Vireless Vireless Device D | ata of de Il also b of listed Roamin ashboar | elete e pu feat ig Pla d | d wire rged a ures. aybac | less c and af Do yo k | client fect u want |
| | | | | Delete | (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 |
|-----------------------|----------------|
| | |
| Basic Device Prope | erties |
| 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 | 34 |

- 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.

| | | > |
|----------|-------|-------|
| Severity | / | • |
| < | 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.

| = | |
|---|----------------|
| | 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 🗸 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" | oassword inced |
| 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 - 7 | 192.168. | 127.252 |
|--|---------------------------|----------------------|
| Upgrade Firmware * | | |
| * Please make sure the us for this device are correctl Settings" | ername an y set in "Ad | d password vanced |
| | 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 * | - |
| Destination IP2 * Community Name2 * public | - |
| Destination IP2 * Community Name2 * public | - |

- 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.

| T OIL | | |
|--------------------------------|---|--|
| 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 * | Port * | | |
|---------------------|---------------|--------|---|
| | | | |
| Username | Password | | |
| admin | | Ø | 2 |
| Read Community | Write Commu | nity | |
| public | private | | |
| Data Encryption | Authenticatio | n | |
| AuthPriv | ▼ SHA | | - |
| Encryption Protocol | Encryption Pa | ssword | |
| 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.

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 | | | |
| | 65 | | |

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. You can change the icon for multiple devices at once.

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(s).
 - Topology view: Click the icon of the device in the Topology Map. To select multiple devices, click and drag over the devices or CTRL + left-click the devices individually.
 - > List view: Select the check box next to the device(s) in the Device List.

The toolbar options will change.

🔧 Device Configuration 🗸 Device Control 🗸 🍄 Cybersecurity Controls 🗸 🚍 Web Console 🧰 Run Script 🗸 🦯 Change Group 🕐 Refresh G2 Add Link 🖿 PRP/HSR Tags 👼 Delete

4. 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 |

 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(s) 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 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 🗸 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.

| un och script | | | |
|---|---|---------------------------------------|---|
| l Script | | | |
| | | | |
| | | | |
| | | | |
| | | | 1. |
| | | | |
| lected Devices | | | 0 / 9999 |
| ected Devices IP | Alias | Model | 0 / 9999 |
| ected Devices IP 192.168.127.12 | Alias 192.168.127.12EDS-G4008 | Model EDS-G4008 | 0 / 9999 |
| IP 192.168.127.12 192.168.127.16 | Alias 192.168.127.12-EDS-G4008 192.168.127.16-EDS-4012-8P-4GS | Model EDS-G4008 EDS-4012-8P-4GS | 0 / 9999 |
| IP 192.168.127.12 192.168.127.16 192.168.127.16 | Alias 192.168.127.12EDS-G4008 192.168.127.16EDS-4012-8P-4GS | Model EDS-G4008 EDS-4012-8P-4GS | • |

- 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 | 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 | |
| | | | | • |

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.

| In CLI Script | | | | | |
|----------------------------------|--|------------------------------|----------------------|--------|----------|
| now interfaces description | | | | | |
| | | | | | |
| | | | | | |
| | | | | | 27 (000 |
| IP | Alias | Model | Status | | 277999 |
| | | | | | |
| | | | | | |
| 192.168.127.12 | 192.168.127.12EDS-G4008 | EDS-G4008 | Finished | ~ | |
| 192.168.127.12 192.168.127.16 | 192.168.127.12EDS-G4008 192.168.127.16EDS-4012-8P-4GS | EDS-G4008 EDS-4012-8P-4GS | Finished 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 | | | |
| | A s You d | icheo an ci | duled reate | 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 | Ш | 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>.

3. 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.

| | 1 | | | | |
|--|----------------|----------------------------|---|---------------------------------------|------|
| elect a CLI Scri | ipt | | | | |
| | | | | Q Search | |
| CLI Script | t Name | Description | | | |
| Interface | description | Show interface description | | | |
| t | | | | | Þ |
| I Script | | | | | |
| | | | | | |
| elected Device | 25 | | | | 28/9 |
| elected Device | 25 | | Alias | Model | 28/9 |
| elected Device IP 192.168.127.1: | *S 2 | | Allas 192.168.127.12-EDS-G4008 | Model EDS-G4008 | 28/9 |
| elected Device IP 192.168.127.1 192.168.127.1 | rs 2 6 | | Allas 192.168.127.12-EDS-G4008 192.168.127.16-EDS-4012-8P-4GS | Model EDS-G4008 EDS-4012-8P-4GS | 28/9 |
| elected Device IP 192.168.127.1 192.168.127.1 | 2 6 | | Alias 192.168.127.12EDS-G4008 192.168.127.16EDS-4012-8P-4GS | Model EDS-G4008 EDS-4012-8P-4GS | 28/9 |

4. Click Run.

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

| un CLI Script | | | | |
|--|--|-----------------------------|-------------|---|
| CLI Execution Re If you leave this scree | sults In, you can download the execution results from | 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 | |
| | | | | • |



NOTE

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.

| you leave t | 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 | 92.168.127.12EI | DS-G4008 | EDS-G4008 | Finished | ^ | |
| esult | | | | | | | |
| Interface | AdminStatus | OperStatus | Description | | | | |
| Fth1/1 | 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 GD Add Link 🍽 PRP/HSR Tags 🖥 Delete

4. Click Change Group.

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

| Current C | Broup * | | |
|-----------|---------------|---|---|
| ROOT | | • | |
| E | IP Address | | 2 |
| | 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 🗸 Device Control × 😧 Cybersecurity Controls × 🖃 Web Console 🤷 Run Script × 🖍 Change Group C 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.

| A Device Configuration V 🔥 Device Control V | Cybersecurity Controls 🗸 | 🔲 Web Console | 🏚 Run Script 🗸 | 🖍 Change Group | C Refresh | G 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

| \equiv MX view ONE | | | | | | | | | ۵ |)English | 💄 admin▼ |
|------------------------------|-----------------------------------|----------------------------------|----------------|------------------------|-----------------|-------------------|---------------------------|----------------------|------------|----------|----------|
| C Type keyword to search | SeleDe | ect Device vice Configuration | Levice Control | Cybersecurity Controls | Run Script | | | | | | |
| Dashboard | ÷ | | | | | | | Q Search | | | |
| Topology Device Discovery | | Device Alias | | Model | Device IP | MAC Address | Firmware Version | Location | | | |
| Device Management | | 192.168.123.70-AWK | 3252A | AWK-3252A | 192.168.123.70 | 00:90:E8:00:04:12 | 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 | < | 192.168.123.157IEX- | 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 | < < | > > |
| Notification Management | | | | | | | | | | | |
| 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. Select the device(s) to configure from the device list.

| \equiv MX view ONE | | | | | €ngl | ish 💄 admin ▼ |
|--|----------------------------|-----------------|-------------------|---------------------------|-----------------|---------------|
| Select Operation | | | | | | |
| 🔧 Device Configuration 🗸 🛛 🕹 Device Contro | ol 🗸 🛛 😯 Cybersecurity Con | itrols 🗸 🛛 🙆 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 | | |
| ✓ 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 Configuration** drop-down list, select **Change Wi-Fi Channel**. The **Change Wi-Fi Channel** screen will appear.

| \equiv MX view ONE | | | | | | lish 💄 admin▼ |
|---|--------------------|----------------|-------------------|---------------------------|-----------------|---------------|
| 1 Select Operation | | | | | | |
| 🔧 Device Configuration 🗸 🕺 Device Control 🗸 | Cybersecurity Cont | rols 🗸 🛛 🙆 Ru | in Script 🗸 📃 | Web Console | | |
| 😪 Change Wi-Fi Channel | | | | Q Search | | |
| Reference 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 | 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 | | | |
| > 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.

| 2.4G Channel | 5G Chai | nnel | | |
|-----------------------|--------------|------------------|-------|-------|
| 1 | 36 | | | |
| 1-13 Channel Width | 36-1 Chai | 96 nnel Width | | |
| 20 MHz | - 20/ | (40 MHz | | |
| | | | | |
| | | | | |
| IP | | | Alias | Model |
| IP | | | Alias | Model |

| Setting | Description | Limit |
|---------------|--|----------------------------|
| Channel | Enter the channel for the 2.4 CHz and 5 CHz hand | 2.4 GHz: 1 to 13 |
| Channel | | 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.

| IP Alias Model Status 192.168.123.73 192.168.123.73-AWK-4252A AWK-4252A In Progress | Change Wi-Fi Channel | | | |
|---|----------------------|-------------------------|-----------|-------------|
| 192.168.123.73 192.168.123.73-AWK-4252A AWK-4252A In Progress | 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.

| hange Wi-Fi Channel | | | | |
|---------------------|-------------------------|-----------|----------|------|
| IP | Alias | Model | Status | |
| 192.168.123.73 | 192.168.123.73AWK-4252A | AWK-4252A | Finished | |
| | | | С | clos |

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 Ch | nannel | | |
|-----------------|-----------------------|-----------|-----------------------------|
| 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. Select the device(s) to configure from the device list.

| \equiv MX view ONE | | | | | ¢ | English | _ admin ▼ | |
|---|---------------------|----------------|-------------------|---------------------------|-----------------|---------|-----------|--|
| 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 | | | |
| 192.168.3.65~AWK-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 | | | | | |
| > 192.168.127.25PT-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 view ONE | | | | | €En | glish 💄 admin▼ |
|---------------------------|---------------------------------|----------------|-------------------|---------------------------|-----------------|----------------|
| Select Operation | | | | | | |
| A Device Configuration V | Control 🗸 🛛 😯 Cybersecurity Con | trols 🗸 🛛 🙆 Ru | n Script 🗸 📃 | 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 | 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 | | | |
| > 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.

| Disabled | • | | | | |
|----------------|------|--------------------|----------|--------------------------|-----------|
| SSID * | | RF Band 2.4 GHz | . | | |
| Security | 0/10 | | | | |
|)pen | • | | | | |
| IP | | | | Alias | Model |
| 192.168.123.73 | | | | 192.168.123.73AWK-4252A | AWK-4252A |
| 192.168.123.73 | | | | 192.168.123.73~AWK-4252A | AWK-4252A |

Clear All Existing SSIDs

| cical All Existing 55 | 103 |
|-----------------------|--|
| 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. |
| PE Band | |

RF Band

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

Security

| Security | |
|-----------------|---------------------------------------|
| Setting | Description |
| Open | |
| WPA | |
| WPA2 | Coloct the cocyrity mode for the SCID |
| WPA3 | |
| 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 Managemen | t Frame |
| Setting | Description |

| Disabled | 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. |

| Fn | Cr | /n | ti | 6 | n |
|-------------|----|----|----|---|---|
| г 11 | () | ~ | | " | |

| Linci yption | |
|----------------|--|
| 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.

| Add Wi-Fi SSID | | | | |
|----------------|-------------------------|-----------|----------|-------|
| IP | Alias | Model | Status | |
| 192.168.123.73 | 192.168.123.73AWK-4252A | AWK-4252A | Finished | |
| | | | | Close |

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

| Add Wi-Fi SSID |) | | |
|----------------|-------------------------|-----------|------------------------------------|
| IP | Alias | Model | Status |
| 192.168.123.73 | 192.168.123.73AWK-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. Select the device(s) to configure from the device list.

| | ≡ / | WX view ONE | | | | | | | English | 👤 admin ▼ |
|---|------|------------------------|--------------------|---------------------|----------------|-------------------|---------------------------|-----------------|---------|-----------|
| (| 🔒 Se | lect Operation | | | | | | | | |
| | ۹ ۵ | evice Configuration 🗸 | 📩 Device Control 🗸 | 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-115 | 10 | AWK-1151C | 192.168.123.72 | 00:90:E8:05:17:45 | v2.0 Build 2023_0217_1145 | | | |
| | ~ | 192.168.123.73AWK-4252 | 2A | AWK-4252A | 192.168.123.73 | 00:90:E8:9D:C4:FE | | | | |
| | , Þ | 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 Configuration** drop-down list, select **Dynamic Sticky MAC**. The **Dynamic Sticky MAC** screen will appear.

| = MX view ONE | | | | | ⊕English 💄 admin 🔻 |
|---|---------------------|----------------|-------------------|---------------------------|--------------------|
| Select Operation | | | | | |
| Cevice Configuration V 🕹 Device Control V | Cybersecurity Contr | ols 🗸 🖸 Ru | n Script 🗸 🔲 | Web Console | |
| ද්රී 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 | |
| 192.168.123.73AWK-4252A | AWK-4252A | 192.168.123.73 | 00:90:E8:9D:C4:FE | v2.0 Build 2023_0217_1145 | |
| > 192.168.127.25-PT-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:

| T-G772 | .8 | Key | | | | | | | | | | | | | | |
|--------|-------------------------------------|----------------|-----|------|-----|-----|----------|-----------------------|-----|-----|------------------------|---------|-----|-----|-----|--|
| 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 | |
| 212 | | | | 4 | 1-1 | 1-2 | 1-3 | 1-4 | 2-1 | 2-2 | 2-3 | 2-4 | 3-1 | 3-2 | 3-3 | |
| Veb UI | 1 Setting | 2 JS | 3 | | | | | | • | | | | | | | |
| ky MAC | 1 Setting | 2 Js | 3 | Dert | | | s | Sticky MAC | • | | Addres | s Limit | | | | |
| Alia | 1 Setting | 2 Js | 3 | Port | | | s • E | Sticky MAC Enabled | • | Ţ | Address 1 | s Limit | | | | |
| ky MAC | 1 : Setting as urity Actio | 2 js | 3 | Port | | | s • E | Sticky MAC | • | | Addres: 1 1-1013 | 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

| Decuncy 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.

| ynamic Sticky MA | C | | |
|------------------|------------------------|----------|-------------|
| 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.

| Dynamic Sticky MAC | | | | |
|--------------------|------------------------|----------|----------|-------|
| IP | Alias | Model | Status | |
| 192.168.127.25 | 192.168.127.25PT-G7728 | PT-G7728 | Finished | |
| | | | | Close |

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

| Dynamic 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 |

Serial Port Monitoring



NOTE

This function is only supported by the NPort 6000 Series and NPort 6000-G2 Series.

Use the Serial Port Monitoring function to configure event trigger rules for triggering serial port events.

- 1. Navigate to Menu (≡) > Device Management > Configuration and Control.
- 2. Select the NPort 6000 Series or NPort 6000-G2 Series device(s) to configure from the device list.

| \equiv MX view ONE | | | | | | ()) English | 💄 admin ▼ |
|---|--------------------|----------------|-------------------|-------------------------|-----------------|--------------------|-----------|
| Select Operation | | | | | | | |
| A Device Configuration V 🕹 Device Control V | Cybersecurity Cont | trols 🗸 🛛 🙆 Ru | un Script 🗸 🔳 | Web Console | | | |
| | | | | Q Search | | | |
| Device Alias | Model | Device IP | MAC Address | Firmware Version | Location | | |
| ✓ 192.168.4.246NPort-6150 | NPort-6150 | 192.168.4.246 | 00:90:E8:0E:79:3A | 2.2 Build 22110116 | | | |
| 192.168.4.247NPort-6150 | NPort-6150 | 192.168.4.247 | 00:90:E8:65:C3:4F | 2.2 Build 22110116 | | | |
| 192.168.127.35-EDR-G9010 | EDR-G9010 | 192.168.127.35 | 00:90:E8:91:86:82 | V3.13.99 build 24110411 | Device Location | | |
| 192.168.127.69-NPort-6450 | NPort-6450 | 192.168.127.69 | 00:90:E8:12:FA:42 | 1.21 Build 21053111 | | | |

3. From the **Device Configuration** drop-down list, select **Serial Port Monitoring**. The **Serial Port Events** screen will appear.

| ≡ MX viøw ©NE | | | | | tenglish | admin▼ |
|---|--------------------|----------------|-------------------|-------------------------|-----------------|--------|
| Select Operation | | | | | | |
| 🔧 Device Configuration 🗸 🕺 Device Control 🗸 | Cybersecurity Cont | rols 🗸 🛛 🧰 Ru | un Script 🗸 📃 | Web Console | | |
| Serial Port Monitoring | | | | Q Search | | |
| Device Alias | Model | Device IP | MAC Address | Firmware Version | Location | |
| 192.168.4.246NPort-6150 | NPort-6150 | 192.168.4.246 | 00:90:E8:0E:79:3A | 2.2 Build 22110116 | | |
| 192.168.4.247NPort-6150 | NPort-6150 | 192.168.4.247 | 00:90:E8:65:C3:4F | 2.2 Build 22110116 | | |
| 192.168.127.35EDR-G9010 | EDR-G9010 | 192.168.127.35 | 00:90:E8:91:86:82 | V3.13.99 build 24110411 | Device Location | |
| 192.168.127.69-NPort-6450 | NPort-6450 | 192.168.127.69 | 00:90:E8:12:FA:42 | 1.21 Build 21053111 | | |

- 4. In the **Event Trigger Rules** section, configure the event trigger rules.
- 5. To add an event trigger rule:

a. Click the **Add** (**b**) icon and configure the following settings:

| Seria | I Port Events | | | | | | | |
|--------|----------------------------|---|--|---------------------|----------|-----------------------|--------------|---|
| Event | Trigger Rules (1/64) | | | | | | | |
| € Î | Serial Port * All Ports | * | Event Type * Any Serial Error Count 👻 | Trigger Threshold * | Count(o) | Severity * Warning | • | |
| | | | | 1-10000 | count(s) | | Cancel Apply | ý |

- **Serial Port**: Select the device port(s) to apply the event trigger rule to.
- **Event Type**: Select the rule event property.
- No Data Period: If the Event Type is set to RX Inactivity, TX Inactivity, or TX & RX Inactivity, specify the duration the port does not transmit or receive data before triggering a no data event.
- □ **Trigger Threshold**: If the Serial Port Properties to any Error Count type, specify the number of consecutive error counts the serial can receive before triggering an error event.
- **Severity**: Select the event severity for this rule.
- b. (Optional) If there are other devices of the model type in the topology, use the **Condition Copy** option to copy the event trigger rules to these devices.
- c. Click Apply.

NOTE

MXview One supports a maximum of 64 event trigger rules. Different rules cannot have identical Serial Port and Event Type settings.

- 6. To delete an event trigger rule:
 - a. Click the Delete ($\overline{\blacksquare}$) icon next to the rule you want to delete.
- 7. When a serial port event is triggered, a yellow triangle icon will appear the above affected devices in the Topology screen. Click the device icon to show the event list.

| \equiv MX view ONE | | | | | | 🌐 English | 💄 admin 👻 |
|--------------------------|--------------------|-------------------------|--|---|----------------|-----------|-----------|
| Root | | | | | | | |
| 🔧 Device Configuration 🗸 | 🕹 Device Control 🐱 | Cybersecurity Control 🗸 | 🙆 Execute CLI 🗸 | H Web Console | 🖍 Change Group | C Refresh | ≡ 0 |
| Q 192.168.127.2 | 192.168.1273 | 192.166.127.4 | Serial Port 1 The TX of se data in last 1 How to resol The TX of Se data in last 1 How to resol The TX of Se data in last 1 How to resol Serial Port 1 Overrun. | Error Status trial port 1 did not receive 10 orminutes. Ve2 of serial port 1 did not receive of serial port 1 did not receive set 10 minutes. Ve2 received an error: Error C Ve2 | any celve | | |

8. Click the **How to resolve?** link to open a pop-up window with step-by-step instructions to resolve the issue.



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. Select the device(s) to configure from the device list.

| ≡ MX viøw ©NE | | | | | () English | 👤 admin ▼ |
|---|----------------------|----------------|-------------------|---------------------------|-----------------|-----------|
| Select Operation | | | | | | |
| 🔧 Device Configuration 🗸 🕺 Device Control 🗸 | Cybersecurity Contro | ols 🗸 🛛 🙆 Rui | 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 | | |
| 192.168.123.72-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 | | | |
| > 192.168.127.25PT-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 ©NE | | | | | | |
|------------------------------|---|------------------------|---------------------|------------------|--------------------------|-----------------|
| | Select Operation | | | | | |
| Type keyword to search | 🔦 Device Configuration 🗼 Device Control 🗸 | Cybersecurity Controls | s 🗸 📫 Run Script 🗸 | ~ | | |
| Dashboard | Device Alias | Model | Device IP MAG | C Address F | irmware Version | Location |
| Topology Device Discovery | 192.168.123.72-AWK-1151C | AWK-1151C | 192.168.123.72 00:9 | 90:E8:05:17:45 v | 2.0 Build 2023_0217_1145 | |
| Device Management | 192.168.127.12-EDS-G4008 | EDS-G4008 | 192.168.127.12 00:9 | 90:E8:8F:F0:18 v | 3.1 Build 2023_0217_1005 | aa |
| Saved CLI Scripts | 192.168.127.14EDS-G512E-8PoE | EDS-G512E-8PoE | 192.168.127.14 00:9 | 90:E8:4D:A7:32 V | /6.2 build 20080519 | Switch Location |
| Firmware Management | 192.168.127.16EDS-4012-8P-4GS | EDS-4012-8P-4GS | 192.168.127.16 00:9 | 90:E8:90:A5:6E v | 3.2 Build 2023_0719_1007 | |
| Device Configuration Center | 192.168.127.25PT-G7728 | PT-G7728 | 192.168.127.25 00:9 | 0:E8:71:1E:A5 V | /6.3 build 22120913 | Switch Location |
| Event Management ~ | 192.168.127.26PT-G7728 | PT-G7728 | 192.168.127.26 00:9 | 90:E8:86:19:CD V | /6.3 build 22120913 | Switch Location |
| Reports ~ | 192.168.127.27PT-G7728 | PT-G7728 | 192.168.127.27 00:9 | 90:E8:8E:F7:C6 V | /6.3 build 22120913 | Switch Location |
| Integration 🗸 | 192.168.127.28PT-G7828 | PT-G7828 | 192.168.127.28 00:9 | 90:E8:79:23:82 V | /6.3 build 22120913 | Switch Location |
| Administration ~ | ✓ 192.168.127.29PT-G7728 | PT-G7728 | 192.168.127.29 00:9 | 90:E8:99:E9:08 V | /6.2 build 21110316 | Switch Location |
| Help ~ | 192.168.127.31-PT-G503 | PT-G503 | 192.168.127.31 00:9 | 0:E8:00:02:65 V | /5.3 build 23090110 | |

4. Configure the reboot sequence and execution time.

| eboot poot Sequence nart Sequential | • | | |
|---|----------------|-------------------------|------------------------------|
| Order | IP | Alias | Model |
| 1 | 192.168.127.29 | 192.168.127.29-PT-G7728 | PT-G7728 |
| 2 | 192.168.127.31 | 192.168.127.31PT-G503 | PT-G503 |
| | | | Cancel Add to Scheduler Rebo |

- 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.

| Reboot | | | |
|----------------|-------------------------|----------|-------------|
| IP | Alias | Model | Status |
| 192.168.127.29 | 192.168.127.29 PT-G7728 | PT-G7728 | In Progress |
| 192.168.127.31 | 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.

| boot | | | |
|----------------|------------------------|----------|----------------------------|
| 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) |
| | | | Cancel Retry Failed Device |

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. Select the device(s) to configure from the device list.

| ≡ MX view ONE | | | | | ¢ | English | _ admin ▼ |
|---|---------------------|----------------|-------------------|---------------------------|-----------------|---------|-----------|
| Select Operation | | | | | | | |
| 🔧 Device Configuration 🗸 🛛 🕹 Levice Control 🗸 | 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 | | |
| 192.168.3.65~AWK-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 **Create Snapshot**. The **Create Snapshot** screen will appear.

| ≡ MX view ©NE | | | | | | |
|-----------------------------|---|------------------------|-----------------|-------------------|---------------------------|--|
| | Select Operation | | | | | |
| C 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–EIS 📮 Create Snapshot | 26516E | 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 Snapsho | t ^{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 | 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 |
| 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 | 192.168.127.25PT-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 |
| Help ~ | 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 |
| | 192.168.127.33SDS-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:E8:89:9C:49 | | |
| | 192.168.128.12UC-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.

| IP | Alias | Model |
|----------------|--------------------------|------------|
| 192.168.128.12 | 192.168.128.12UC-1222A | UC-1222A |
| 192.168.128.22 | 192.168.128.22UC-2222A-T | UC-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.

| | Alias | Model | Status |
|--------------|--------------------------|------------|-------------|
| 2.168.128.12 | 192.168.128.12UC-1222A | UC-1222A | In Progress |
| 2.168.128.22 | 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.

| Р | Alias | Model | Status |
|----------------|---------------------------|------------|-----------------------|
| 192.168.128.12 | 192.168.128.12UC-1222A | UC-1222A | Finished |
| 192.168.128.22 | 192.168.128.22 UC-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. Select the device(s) to configure from the device list.

| ≡ MX view | DNE | | | | | • | English | 💄 admin ▼ |
|--------------------|---------------------------|------------------|------------------|-------------------|---------------------------|-----------------|---------|-----------|
| Select Operation | | | | | | | | |
| A Device Configura | tion 👻 🔥 Device Control 🛩 | Cybersecurity Co | ontrols 🗸 🛛 🤷 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 | | |
| 192.168.3.65- | AWK-1165A | AWK-1165A | 192.168.3.65 | 00:90:E8:11:65:49 | v2.0 Build 2023_0418_1026 | | | |
| 192.168.123.7 | 2AWK-1151C | AWK-1151C | 192.168.123.72 | 00:90:E8:05:17:45 | v2.0 Build 2023_0217_1145 | | | |
| 192.168.123.7 | 3-AWK-4252A | AWK-4252A | 192.168.123.73 | 00:90:E8:9D:C4:FE | | | | |
| > 192.168.127.2 | 5PT-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.

| ≡ MX view ©NE | | | | | | | |
|-----------------------------|---------------------------|------------------------|------------------------|-----------------|-------------------|---------------------------|--|
| 0 | Select Operation | | | ~ | | | |
| Ype keyword to search | Configuration | Device Control 🗸 😯 | Cybersecurity Controls | Run Script | ~ | | |
| Dashboard | □ 192.168.127.5-ABB |) Reboot | 3B | 192.168.127.5 | 0021c1569bb7 | | |
| Topology | 192.168.127.11-ENS | Create Snapshot | 0+G516E | 192.168.127.11 | 00:90:E8:54:E1:E6 | V6.3 build 23032200 | Test |
| Device Discovery | □ 192.168.127.12-EDS |) Restore from Snapsho | t ^{DS-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-408 | ۵. | EDS-408A | 192.168.127.13 | 00:90:E8:89:F8:C2 | V3.12 build 22101114 | Switch Location |
| Saved CLI Scripts | 192.168.127.14-EDS-G51 | 2E-8PoE | EDS-G512E-8PoE | 192.168.127.14 | 00:90:E8:4D:A7:32 | V6.2 build 20080519 | Switch Location |
| Device Configuration Center | 192.168.127.16EDS-4012 | 2-8P-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 | 3 | PT-07728 | 192.168.127.25 | 00:90:E8:71:1E:A5 | V6.3 build 22120913 | Switch Location |
| Notification Management | < 192.168.127.26-PT-G7728 | 3 | PT-G7728 | 192.168.127.26 | 00:90:E8:86:19:CD | V6.3 build 22120913 | Switch Location |
| Reports ~ | 192.168.127.27PT-G7728 | 3 | PT-G7728 | 192.168.127.27 | 00:90:E8:8E:F7:C6 | V6.3 build 22120913 | Switch Location |
| Integration ~ | 192.168.127.28PT-G7828 | 3 | PT-G7828 | 192.168.127.28 | 00:90:E8:79:23:82 | V6.3 build 22120913 | Switch Location |
| Help ~ | 192.168.127.29PT-G7728 | 3 | PT-07728 | 192.168.127.29 | 00:90:E8:99:E9:08 | V6.2 build 21110316 | Switch Location |
| | 192.168.127.32-Hirschma | ann | Hirschmann | 192.168.127.32 | 00:80:63:B3:B2:80 | | Hirschmann MACH |
| | 192.168.127.33-SDS-G30 | 08 | SDS-G3008 | 192.168.127.33 | 00:90:E8:00:00:00 | | |
| | 192.168.127.222-ICMP D | evice | 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:E8:89:9C:49 | | |
| | ✓ 192.168.128.12UC-1222/ | A | 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-2222 | A-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.

| IP | Alias | Model |
|----------------|--------------------------|------------|
| 192.168.128.12 | 192.168.128.12UC-1222A | UC-1222A |
| 192.168.128.22 | 192.168.128.22UC-2222A-T | UC-2222A-T |

- > **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.

| tore from Snapshot | | | |
|--------------------|--------------------------|------------|-------------|
| P | Alias | Model | Status |
| 192.168.128.12 | 192.168.128.12-UC-1222A | UC-1222A | In Progress |
| 192.168.128.22 | 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.

| Restore from Snap | shot | | |
|-------------------|--------------------------|------------|-----------------------------|
| 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. Select the device(s) to configure from the device list.

| ≡ MX view ©NE | | | | | | () English | _ admin ▼ |
|---------------|---|---------------------|----------------|-------------------|---------------------------|-----------------|-----------|
| 6 Se | elect Operation | ~ | - | _ | | | |
| 4 D | Vevice Configuration V 👗 Device Control V | Cybersecurity Contr | ols 🗸 🖸 Rur | n Script ✓ 🖽 | Web Console | | |
| | 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 2023_0217_1145 | | |
| | 192.168.127.12EDS-G4008 | EDS-G4008 | 192.168.127.12 | 00:90:E8:8F:F0:18 | v3.1 Build 2023_0217_1005 | аа | |
| | 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 | |
| | 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 | | |
| | 192.168.127.25PT-G7728 | PT-G7728 | 192.168.127.25 | 00:90:E8:71:1E:A5 | V6.3 build 22120913 | Switch Location | |
From the Cybersecurity Controls drop-down list, select Sticky MAC On/Off. The Sticky MAC On/Off screen will appear.

| \equiv MX view ONE | | | |
|-----------------------------|------------------------------------|-------------------------------|-------------------|
| 0 | Select Operation | | |
| Type keyword to search | Configuration V 🕺 Device Control V | Cybersecurity Controls 🗸 🧰 R | un Script 🗸 📃 |
| Dashboard | ☐ 192.168.127.4-ABB | 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.

| Sticky 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.

| ticky MAC On / Off | | | | |
|--------------------|-------------------------|-----------|----------|-------|
| IP | Alias | Model | Status | |
| 192.168.127.12 | 192.168.127.12EDS-G4008 | EDS-G4008 | Finished | |
| | | | | Close |

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. Select the device(s) to configure from the device list.

| ≡ MX view ©NE | | | | | () English | 💄 admin 🔻 |
|---|----------------------|----------------|-------------------|---------------------------|-------------------|-----------|
| Select Operation | | | | | | |
| A Device Configuration V 🕹 Device Control V | Cybersecurity Contro | ols 🗸 🛛 🙆 Rui | n Script 🗸 📃 | Web Console | | |
| 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 2023_0217_1145 | | |
| ✓ 192.168.127.12-EDS-G4008 | EDS-G4008 | 192.168.127.12 | 00:90:E8:8F:F0:18 | v3.1 Build 2023_0217_1005 | аа | |
| 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 | |
| 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 | | |
| 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 **Cybersecurity Controls** drop-down list, select **Relearn Dynamic Sticky MAC**. The **Relearn Dynamic Sticky MAC** screen will appear.

| \equiv MX view ONE | | | |
|-----------------------------|---|--------------------------------|-------------------|
| 0 | Select Operation | | |
| Type keyword to search | A Device Configuration V 🚶 Device Control V | 😯 Cybersecurity Controls 🗸 🤷 R | un Script 🗸 🔳 |
| Dashboard | □ 192.168.127.4ABB | Sticky MAC On / Off | 00:21:C1:50:52:95 |
| Topology | D 192.168.127.5-ABB | Relearn Dynamic Sticky MAC | 00:21:C1:56:9B:B7 |
| Device Discovery | 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.

| Relearn Dynamic Stic | ky MAC | | | |
|----------------------|-------------------------|-----------|----------|-------|
| IP | Alias | Model | Status | |
| 192.168.127.12 | 192.168.127.12EDS-G4008 | EDS-G4008 | Finished | |
| | | | | Close |

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. Select the device(s) to configure from the device list.

| ≡ MX view ONE | | | | | | |
|--|--|------------------------|----------------|-------------------|---------------------------|-----------------|
| Q Type keyword to search | Select Operation Select Operation Device Configuration Configuration | Cybersecurity Controls | ∽ 🛈 Run Si | cript 🗸 | | |
| Dashboard Topology | | | | | | |
| Device Discovery | Device Alias | Model | Device IP | MAC Address | Firmware 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 | 192.168.127.11-EDS-G516E | EDS-G516E | 192.168.127.11 | 00:90:E8:54:E1:E6 | V6.3 build 23032200 | Test |
| Device Configuration Center Event Management | 992.168.127.12-EDS-64008 | EDS-G4008 | 192.168.127.12 | 00:90:E8:8F:F0:18 | v3.1 Build 2023_0217_1005 | 88 |
| Notification 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 |
| Reports ~ | 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 |
| Integration ~ | 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 | |
| Administration ~ | 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 **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 | | |
|--------------------------|---|---|
| | Select Operation | |
| Q Type keyword to search | 🔧 Device Configuration 🛛 👗 Device Control 🗸 | Cybersecurity Controls V 🙆 Run Script V |
| Deelleerd | | Disable Unused Ethernet on |
| Dashboard | 192.168.127.4-ABB | Olisable onused Ethemet an4 00:21:C1:50:52:95 |
| Topology | □ 192 168 127 5ABB | Disable Insecure HTTP and 5 00:21:C1:56:9B:B7 |
| Device Discovery | | |
| Device Management | ✓ 192.168.127.11EDS-G516E | EDS-G516E 192.168.127.11 00:90:E8:54:E1:E6 |
| Device Management | _ | |
| 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.

| 2 | Alias | Model | Status |
|---------------|-------------------------|-----------|-------------|
| 92.168.127.11 | 192.168.127.11EDS-G516E | EDS-G516E | In Progress |
| .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. Select the device(s) to configure from the device list.

| ≡ MX view ONE | | | | | |
|-----------------------------|--|------------------------|--------------------------------|------------------------------|-----------------|
| C Type keyword to search | Select Operation Select Control A Device Control | Cybersecurity Controls | 🗸 🖸 Run Script 🗸 | | |
| Dashboard | | | | | |
| Topology | Device Alias | Model | Device IP MAC Address | Firmware 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 | 54 | |
| Firmware Management | ✓ 192.168.127.11–EDS-G516E | EDS-G516E | 192.168.127.11 00.90:E8:54:E1: | E6 V6.3 build 23032200 | Test |
| Device Configuration Center | V 192.168.127.12-EDS-G4008 | EDS-G4008 | 192.168.127.12 00:90:E8:8F:F0: | 18 v3.1 Build 2023_0217_1005 | aa |
| Notification Management | 192.168.127.13-EDS-408A | EDS-408A | 192.168.127.13 00:90:E8:89:F8: | V3.12 build 22101114 | Switch Location |
| 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-4GS | 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: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 | ✓ 192.168.127.11EDS-G516E | EDS-G516E 192.168.127.11 00:90:E8:54:E1:E6 |
| Saved CLI Scripts | 92.168.127.12EDS-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.

| Disable Insecure HTTP and Te | Inet Console | |
|------------------------------|-------------------------|--------------------------------|
| 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 |
| | | Cancel Disable HTTP and Telnet |

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

| Disable Insecure HTTP | Disable Insecure HTTP and Telnet Console | | | | | | |
|-----------------------|--|-----------|----------|-------|--|--|--|
| IP | Alias | Model | Status | | | | |
| 192.168.127.11 | 192.168.127.11EDS-G516E | EDS-G516E | Finished | | | | |
| 192.168.127.12 | 192.168.127.12EDS-G4008 | EDS-G4008 | Finished | | | | |
| | | | | Close | | | |

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.

| = | MX | view (| DNE | | | | | () E | nglish | 👤 admin▼ |
|---|--------------|------------|--|------------------------------|------------------------|--------------------|-----------------|-------------------------------|--------|----------|
| A | ccou | nt ar | nd Password Manag | gement Autor | mation | | | | | |
| | Account | Manager | nent Password Automation | Account Audit | Default Password Audit | Temporary Accounts | | | | |
| | Account | t Inforn | nation | | | | | | | |
| | Click the 'F | Refresh' b | utton to retrieve the account informatio | on for all devices. This may | y take some time. | | | | | |
| | Refresh | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | Q Search | | | |
| | | | Device Alias | | Compatible | Model | Device IP | Accounts | | |
| > | | 2, | 192.168.123.70AWK-3252A | | Yes | AWK-3252A | 192.168.123.70 | even,v3user,admin | | |
| | | 2, | 192.168.123.151-EDS-G516E | | Yes | EDS-G516E | 192.168.123.151 | adminTest,even,aaaa,admin,aaa | ab | |
| | | * / | 192.168.123.152-EDS-518A | | No | EDS-518A | 192.168.123.152 | N/A | | |
| | | 21 | 192.168.123.157-IEX-402-SHDSL | | No | IEX-402-SHDSL | 192.168.123.157 | N/A | | |
| | | * / | 192.168.127.2-ICMP Device | | No | ICMP Device | 192.168.127.2 | N/A | | |
| | | | | | | | | | 1 - 5 | of 5 |

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 | ime | • | |
|-----------------------------------|----------|-----|---|--|
| New Username * | | | | |
| Minimum 4 characters | 0/64 | | | |
| New Password * | 8 | | | |
| | | | | |

- 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.

| \equiv MX view ONE | | | | | | ¢ | DEnglish | 💄 admin▼ |
|--|---------------------|---------------|------------------------|--------------------|-----------|---------------------|----------|----------|
| Account and Pa | assword Manag | ement Autor | mation | | | | | |
| Account Management | Password Automation | Account Audit | Default Password Audit | Temporary Accounts | | | | |
| Password Automatio Last Executed: N/A Start Wizard | n | | | | | | | |
| Managed Devices | | | | | 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 Er |
| ,, | | | | |
| erifv Account and Pas | ssword Email Recipient | t(s) | | |
| Verify Account and Pas | ssword Email Recipient | t(s) | | |
| erify Account and Pas at Email Recipient * | ssword Email Recipient | t(s) | | |
| derify Account and Pas | ssword Email Recipient | i(\$) | | |
| terify Account and Pas t Email Recipient * ad Email Recipient | ssword Email Recipient | t(\$) | | |
| Perify Account and Pas at Email Recipient * ad 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 | de Con | ifirm | |
| Verification code expires Resend | in: 9:34 | | | |
| | | | | Close |

7. Select the device(s) to generate a randomized password for and click **Next**.

| | Ø 2 | | 3 | | 4 | 5 |
|--------|----------------------------------|-------------------|------------------|---------------|---------------------|---------------------------------|
| rify E | mail Recipient Select E | Devices | Set Password Cor | mplexity Ap | oply Password to De | evices Send Password Em |
| lect | the device(s) to generate a rand | omized password f | or. | | | |
| | Device Alias | C | ompatible | Model | Device IP | Applicable Accounts |
| | 10.123.35.195ICMP Device | N | 0 | ICMP Device | 10.123.35.195 | N/A |
| | 192.168.123.70-AWK-3252A | Ye | es , | AWK-3252A | 192.168.123.70 | even,v3user,admin |
| | 192.168.123.151EDS-G516E | Ye | es | EDS-G516E | 192.168.123.151 | adminTest,even,aaaa,admin,aaaab |
| | 192.168.123.152EDS-518A | N | 0 | EDS-518A | 192.168.123.152 | N/A |
| | 192.168.123.157-IEX-402-SHDSL | N | 0 | IEX-402-SHDSL | 192.168.123.157 | N/A |
| | 192.168.127.2ICMP Device | N | 0 | 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 (~!@#\$%^&*-_|;:,.<>[]{}())

| Password Automation Wizard | | | | | | | | | |
|--|---|----------------------------------|---------------------------|---------------------|--|--|--|--|--|
| \bigcirc — | | | | 5 | | | | | |
| Verify Email Recipient | Select Devices | Set Password Complexity | Apply Password to Devices | Send Password Email | | | | | |
| MXview One will gener | rate the random passw | ord for the selected devices. | | | | | | | |
| A Make the password | rd length is within the ma | ximum allowed password length on | the device(s). | | | | | | |
| 8 - 16 | | | | | | | | | |
| At least one digit (0-9): Enabl Mixed upper and lower case At least one special characte | ed letters (A-Z, a-z): Enabled r (~!@#\$%^&*];,,<>[]{}()): En | abled | | | | | | | |
| | | | | Close Next | | | | | |

9. MXview One will start generating new passwords for the selected devices.

Password Automation Wizard

| Verify Email Recipient Select Devices | | \odot | 4 | 5 |
|---------------------------------------|--------------|-------------------------|-------------------------|---------------------|
| | | Set Password Complexity | Apply Password to Devic | Send Password Email |
| Device Alias | Device Alias | | Device IP | Status |
| 192.168.127.11EDS-G516E | | 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 | \odot | \odot | 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 Interval * 90 30-365 Days Save | Schedule Start Time * AM 3:00 | <u>*</u> | | | | |
| Nanaged Devices | | | | | | | | |
| Nanaged Devices | | | | | ٩ | Search | | |
| Managed Devices Device Alias | | | Model | | Q Device IP | Search | 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 generate a new passwor | e following settings to rd for each device. |
| Password Strength Random Password Leng | gth: 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 |
| 192.168.127.11EDS-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.

| Model | Device IP | Status |
|-----------|--------------------|--|
| EDS-G516E | 192.168.127.11 | Finished |
| | Model EDS-G516E | Model Device IP EDS-G516E 192.168.127.11 |

Resending the Password Email

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 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: | end the d cipient(s) | evice ? |
| | 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 | 👤 admin▼ |
|---|---------------------|---------------------|---------------|------------------------|-----------------|-------------------|----------------|------------------|----------|
| A | ccount and Pa | assword Manag | jement Auton | nation | | | | | |
| | Account Management | Password Automation | Account Audit | Default Password Audit | Temporary Accou | nts | | | |
| | Accounts Baseline | | | | | | | | |
| | Last Executed: N/A | | | | | | | | |
| | Create | | | | | | | | |
| > | ۲ | | | | | | Q Search | | |
| | Device Alias | | Compatible | Model | Device IP | Baseline Accounts | Added Accounts | Deleted Accounts | |
| | 192.168.123.70AWK-3 | 3252A | Yes | AWK-3252A | 192.168.123.70 | N/A | N/A | N/A | |
| | 192.168.127.11EDS-G | 516E | 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

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 Automat | tion | | |
|-------------------------------------|---------------------|------|-----------------|------|
| Last Audited: 2024-07-23 PM 6:17:08 | Enable * Enabled | - | Interval 180 | |
| Next Audit: 2025-01-19 AM 2:00:00 | | | 7 - 365 | Days |
| Audit | Save | | | |

- > **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 P | assword Manag | gement Autor | nation | | | | | |
| | Account Management | Password Automation | Account Audit | Default Password Audit | Temporary Accounts | | | | |
| | Default Password Au | ıdit | | | | | | | |
| | 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.

| = MX view ONE | | | | | | | | | () Engli | sh 💄 admin▼ | | | | | |
|---------------|--|--------|--------|------------|--------------------------|-------------|------------|-----------------------|----------------|-------------|---------------|----------|--------|--------|------------|
| , | Account and Password Management Automation | | | | | | | | | | | | | | |
| | Accoun | it Man | agemei | nt | Password Automation | Account Aud | it D | efault Password Audit | Temporary Acco | unts | | | | | |
| | | | | | | | | | | | | Q Search | | | |
| | | | | | Device Alias | (| Compatible | Model | Device IP | Usernar | ne Start Time | End | 1 Time | Status | |
| | | +2 | å, | <u>*</u> - | 192.168.123.70AWK-3252A | , | Yes | AWK-3252A | 192.168.123.70 | | | | | | |
| | | +2 | å., | <u>*</u> - | 192.168.127.11-EDS-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.

| rice Alias | Model | Device IP | Status |
|----------------------|-----------|----------------|----------|
| | | | |
| 1/0 107 11 500 051/5 | EDC CE16E | 100 160 107 11 | Finished |

Deleting a Temporary Account

- 1. Navigate to Menu (≡) > Device Management > Account and Password.
- 2. Go to the **Temporary Accounts** tab.
- 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? | porary |
| Cancel | Delete |

4. Click **Delete**.

MXview One will show the status of the account deletion.

| ete Temporary Account | | | |
|-------------------------|-----------|----------------|-------------|
| Device Alias | Model | Device IP | Status |
| 192.168.127.11EDS-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 | Script scheduled tasks to run | CLI scripts at a specifier | date and time from the Administrat | 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 | ~ | | reioad-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 | 🔔 ad |
|---------------------|------------------|--|---|--|----------------|---------------|---|----|-------------|------|
| ved C | LIS | Scripts | | | | | | | | |
| CLI Script | ots | Execution Resul | Its Script Automation | Automation Buttons | | | | | | |
| | | | | | | | | | | |
| A Sche | duled | Script | | | | | | | | |
| A Sche You can c | eduled create | Script scheduled tasks to r | run CLI scripts at a specified | d date and time from the Admin | istration > Ma | iintenance Sc | heduler page. | | | |
| A Sche You can c | eduled create | Script scheduled tasks to r | run CLI scripts at a specified | d date and time from the Admin | istration > Ma | iintenance Sc | heduler page. Q. Search | | | |
| A Sche You can c | eduled create | Script scheduled tasks to r Name | run CLI scripts at a specified Description | d date and time from the Admin Linked Scheduled Tasks | istration > Ma | intenance Sc | heduler page. | | | |
| Sche You can c | eduled create | Script scheduled tasks to r Name reload-task | run CLI scripts at a specified Description reload-description | d date and time from the Admin Linked Scheduled Tasks | istration > Ma | iintenance Sc | heduler page. Q. Search Linked Script Automations start-btn, diff_cil-btn, same_cil_btn | n1 | | |
| Sche You can c | eduled create | Script scheduled tasks to r Name reload-task reload-task-new | run CLI scripts at a specifier Description reload-description reload-description-rew | d date and time from the Admin Linked Scheduled Tasks | istration > Ma | intenance Sc | heduler page. Q. Search Linked Script Automations start-btn, diff_cil-btn, same_cil_btn diff_cil-btn, same_cil_btn2 | n1 | | |

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 | | | |
|-----------------------------|----------|--------|-------|
| lane t | | | |
| nterface description | | | |
| escription * | 21 / 64 | | |
| Show interface description | | | |
| LL Script | 26 / 255 | | |
| show interfaces description | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | 27/9 |
| | | Cancel | Apple |

- 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 | 💄 admi |
|---------------|---|---|---|--|------------|--------|
| ved CLI | Scripts | | | | | |
| CLI Scripts | Execution Resu | Its Script Automation | Automation Buttons | | | |
| | od Seriet | | | | | |
| You can creat | e scheduled tasks to | run CLI scripts at a specified | date and time from the Administration > | Maintenance Scheduler page. | | |
| | | | | | | |
| 1 | | | | Q Search | | |
| Delete | Name | Description | Linked Scheduled Tasks | Q Search Linked Script Automations | | |
| | Name reload-task | Description reload-description | Linked Scheduled Tasks | Q Search Linked Script Automations start-bm, diff_cli-bm, same_cli_bbm1 | | |
| | Name reload-task reload-task-new | Description reload-description reload-description-new | Linked Scheduled Tasks | Q Search Linked Script Automations star+bm, diff_cil-bm, same_cil_btm1 diff_cil-bm, same_cil_btm2 | | |
| | Name reload-task reload-task-new Interface description | Description reload-description reload-description-new Show interface description | Linked Scheduled Tasks | C Search Linked Script Automations start-btn, diff_cli-btn, same_cli_btn1 diff_cli-btn, same_cli_btn2 | | |

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 ▼ |
|---------------------------------------|-------------|-----------|----------------------|-------------|-------------------|--------------------|---------|-----------|
| 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 * | | | |
| | // 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.

| М | ain | ten | anc | e S | Scheduler | | | | |
|---|-----|-----|-----|-----|-----------|------------------|-------------|-------------------|--------------------|
| | Ð | | | | | | | | Q Search |
| | | | | | Job Name | Action | Description | Scheduled Time | Registered Devices |
| | | / | Î | E | 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 Scripts | | | | | | | | |
|-----------------------|------------------------|--|--|--|--|--|--|--|
| CLI Scripts | Execution Results | | | | | | | |
| Download All Exect | ution Results | | | | | | | |
| Delete All CLI Scrip | t Execution Results | | | | | | | |
| Delete Script Execu | ution Results Prior to | | | | | | | |
| < 2024/07/22 | • | | | | | | | |
| Time * : Delete | | | | | | | | |

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.

| Ş | Saved CLI Scripts | | | | | | | | |
|---|---------------------|------------------------|--|--|--|--|--|--|--|
| | CLI Scripts | Execution Results | | | | | | | |
| | Download All Exec | cution Results | | | | | | | |
| | Delete All CLI Scri | pt Execution Results | | | | | | | |
| | Delete Script Exec | ution Results Prior to | | | | | | | |
| < | 2024/07/22 | ^D | | | | | | | |
| | Time * : | | | | | | | | |
| | Delete | | | | | | | | |

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.

| ę | Saved CLI Scripts | | | | | | | | |
|---|---------------------|------------------------|--------|--|--|--|--|--|--|
| | CLI Scripts | Execution Results | Script | | | | | | |
| | Download All Exec | cution Results | | | | | | | |
| | Download | | | | | | | | |
| | Delete All CLI Scri | pt Execution Results | | | | | | | |
| Г | Delete Script Exec | ution Results Prior to |) | | | | | | |
| < | Date * 2024/07/22 | • | | | | | | | |
| t | Time * | | | | | | | | |
| L | : | | | | | | | | |
| L | 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 Res | ults |
|----|---|------------|
| | Are you sure you want to delete all scrip execution results prior to 2024/07/22 12 | t 2:00? |
| | 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 | 💄 admin▼ |
|-----|--------------------|-------------------|-----------------------|--------------------|----------|------------|----------|
| S | aved CLI | Scripts | | | | | |
| | CLI Scripts | Execution Results | Script Automation | Automation Buttons | | | |
| | | | | | | | |
| ١., | • | | | | Q Search | | _ |
| | | Name | Desc | ription | | | |
| Ľ | □ / ∎ | start-btn | A-btn- | -192.168.123.152 | | | |
| | 🗌 🖍 📋 diff_cli-btn | | A-btn-192.168.123.153 | | | | |
| < | | same_cli_btn1 | 153& | 153&154 | | | |
| | - / 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.

| lame * | | | |
|--|----------|---|---|
| tart-btn | | | |
| | | 9 / 64 | |
| escription * | | | |
| | | | |
| A-btn-192.168.123.152 | | | |
| A-btn-192.168.123.152 | 2 | 21 / 255 | |
| k-btn-192.168.123.152 | 2 | 21 / 255 | |
| LI Scripts and Target Devices | 2 | 21 / 255 | |
| -btn-192.168.123.152 CLI Scripts and Target Devices Select Saved CLI Script * | 2 | 21 / 255 Target Devices * | |
| -btn-192.168.123.152 CLI Scripts and Target Devices Select Saved CLI Script* reload-task | 2 | 21 / 255 Target Devices * 192.168.123.152EDS-518A | Ţ |
| -btn-192.168.123.152 CLI Scripts and Target Devices Select Saved CLI Script* reload-task | 2 • 1 | 21 / 255 Target Devices * 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 scr 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 | Desi | cription | | | |
| | ⊴ ∕ ∎ | start-btn | A-btr | r-192.168.123.152 | | | |
| | | 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.

| Delete Script Automation | |
|---|------|
| Are you sure you want to delete these sc automations? | ript |
| 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 | | | | () Englis | sh 💄 admin ▼ |
|-------------|-------------------|-------------------|--------------------|-----------------------------|-----------|--------------|
| Saved CLI S | cripts | | | | | |
| CLI Scripts | Execution Results | Script Automation | Automation Buttons | | | |
| 1 | | | | | | |
| | | | | 153+154 | Unnam | ned |
| | | | | same_cli_btn1 same_cli_btn2 | start-btn | diff_cli-btn |
| | | | | | | |

4. Click the **Edit** (\checkmark) icon next to the group name of the group you want to edit.

| = MX | view O NE | I | | | | ⊕ English | 👤 admin 🔻 |
|-------|------------------|-------------------|-------------------|--------------------|-----------------------------|------------------|-----------|
| Saved | CLI Scr | ipts | | | | | |
| | Scripts | Execution Results | Script Automation | Automation Buttons | | | |
| 8 6 | | | | | | | |
| | | | | | 153+154 | Unnamed | <u>~</u> |
| | | | | | 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-htn | diff_cli-htn |

- 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 ON | NE | | | | () Engli | sh 💄 admin▼ |
|--------------|-------------------|-------------------|--------------------|-----------------------------|-----------------|--------------|
| Saved CLI So | cripts | | | | | |
| CLI Scripts | Execution Results | Script Automation | Automation Buttons | | | |
| 1 | | | | | | |
| - | | | | 153+154 | Unnar | ned |
| | | | | 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 O | NE | | | | | | | | | 🌐 English | Ladmin▼ |
|-------------|-------------------|-------------------|-------------------|--|--|--|---------------|---------------|-----------|-----------|---------|
| Saved CLI S | cripts | | | | | | | | | | |
| CLI Scripts | Execution Results | Script Automation | Automation Button | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | 153+ | 154 🖍 | Nev | N× | |
| | | | | | | | • | | | | / |
| | | | | | | | same_cli_btn1 | 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 | o / 64 | . 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.

| English 👱 adı | | | | | | NE | MX view OI |
|---------------|----------------|-----------------------------------|----------|--------------------|-------------------|-------------------|-------------|
| | | | | | | cripts | aved CLI S |
| | | | | Automation Buttons | Script Automation | Execution Results | CLI Scripts |
| | | | | | | | |
| New 🖍 | | 153+154 / | New2 / | | | | |
| 1 | | • | | (| | | |
| :li-btn | ne_cli_btn2 di | same_cli_btn1 same_c | tart-btn | s | | | |
| :11 | re_cli_btn2 | 153+154 / same_cli_btn1 same_c | New2 / | s | | | |

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 | | | | |
| | | | | | | | |
| 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.

| ripts | | | | | | |
|-------------------|-------------------|--------------------|--------------|--------------------|--|---|
| | | | | | | |
| Execution Results | Script Automation | Automation Buttons | | | | |
| | | | | | | |
| | | | 15 | 3+154 | Unname | d |
| | | | | | | |
| | | | same_cli_btr | 11 same_cli_btn2 | start-btn dif | f_cl |
| | | | | 15 same_cli_btr | 153+154 same_cli_btn1 same_cli_btn2 | 153+154 Unnamer same_cil_btn1 same_cil_btn2 star-btn dif |

4. Click the **Create and add to a new group** (**=**) icon in the top-left corner of the screen.

| $\equiv MX$ view OI | NE | | | | | English | 💄 admin ▼ |
|-----------------------|-------------------|-------------------|--------------------|---------|-----------------------------|--------------|-----------|
| Saved CLI S | cripts | | | | | | |
| CLI Scripts | Execution Results | Script Automation | Automation Buttons | | | | |
| | | | | | | | |
| Create and add to a n | ew group | | | New2 / | 153+154 / | New 🖌 | |
| | | | | | • • | • | |
| | | | st | art-btn | same_cli_btn1 same_cli_btn2 | diff_cli-btn | |
| | | | | | | | |

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 O | NE | | | | () English | 💄 admin 1 |
|-------------|-------------------|-------------------|--------------------|----------------|---------------|-----------|
| Saved CLI S | cripts | | | | | |
| CLI Scripts | Execution Results | Script Automation | Automation Buttons | | | |
| 802 | | | | | | |
| | | | Moxa | EU / New2 / | New 🖍 | |
| | | | | | ~ | |
| | | | start-btn | same_cil_btn i | | |
| | | | | Moxa Asia | 153+154. | · |
| > | | | | | same_cli_btn2 | |
| | | | | | | |

7. Click the **Save** (^B) icon to save your changes and leave edit mode.

| \equiv MX view OI | 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 | â |
| `` | | | | 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.

| ≡ MX view O | NE | | | | | () English | 👱 admin ▼ |
|-------------|-------------------|-------------------|--------------------|--------------|------------|-------------------|-----------|
| Saved CLI S | cripts | | | | | | |
| CLI Scripts | Execution Results | Script Automation | Automation Buttons | | | | |
| 1 | | | | | | | |
| | | | 153+154 | Ne | W | New2 | |
| | | | | diff all hts | | | |
| | | | same_cii_ouiz | | Start-Dtri | same_cit_burn | |

4. Click the **Widget Size** () icon in the top-left corner of the screen.

| DNE | | | | | | () English | 👤 admin V |
|-------------------|-------------------------------------|---|--|--|--|--|--|
| Scripts | | | | | | | |
| Execution Results | Script Automation | Automation Buttons | | | | | |
| | | | | | | | |
| | | | 153+154 🖌 | Nev | v / | New2 / | |
| | | | | • | • | | |
| | | same | e_cli_btn2 | diff_cli-btn | start-btn | same_cli_btn1 | |
| | DNE Scripts Execution Results | DNE Scripts Execution Results Script Automation | DNE Scripts Execution Results Script Automation Automation Buttons | DNE Scripts Execution Results Script Automation Automation Buttons | DNE Scripts Execution Results Script Automation Automation Buttons | DNE Scripts Execution Results Script Automation Automation Buttons | DNE Cripts Execution Results Script Automation Buttons |

The **Widget Size** window will appear.

| Widget Size | | |
|---------------------|----------------|----|
| Widget Size * | | |
| Large | | * |
| | | |
| Align all groups in | a single colum | in |

- 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

| ≡ MX view © | 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-btnstart-btn | same_cli_btn1 |

7. A confirmation will appear to verify the button was updated.

| | Updated successfully | |
|--|----------------------|--|
|--|----------------------|--|
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.

| \equiv MX view ONE | | | | | | | | () English | 💄 admin ▼ |
|--|---|--|---|---|---------------|---------------------------------------|------------------|-----------------------------------|-----------|
| Q Type keyword to search | 1 | irm | ware | Management | | | | | Î |
| Dashboard Topology Device Discovery Device Management Saved CLI Scripts Firmware Management | | Chec Moxa R Last Cl Check Chec | k Firmware Se hecked: 202 Interval: N/. ck Now | re Status rver Status: ©Connected 3/12/28 AM 11:37:21 A Enable Check Interval Ignored Models | | | | | |
| Device Configuration Center Event Management ~ | < |] | | | | | | Q Search | |
| Notification Management | L | | | Model Series | Device Status | Latest Version on the Firmware Server | Selected Version | Selected Firmware Download Status | |
| Integration ~ | L | | Ţ, | EDS-408A | 🙁 Not updated | v3.13 | i≡ None | | |
| Administration ~ | | | Ţ, | EDS-G4008 | Not updated | v3.2 | i≡ None | | |
| Help ~ | | | Ţ, | EDS-G512E-8PoE | Not updated | v6.4 | i≡ None | | |
| | | | Ţ, | EDS-G516E | Ovt 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 | | Ignored Models | | | | |
|-----------------------|------|----------------|-------------------|---------------------------------------|------------------|-----------------------------------|
| | | | | | | Q Search |
| | | Model Series | Device Status | Latest Version on the Firmware Server | Selected Version | Selected Firmware Download Status |
| | 1 | EDS-408A | Not updated | v3.13 | i≡ None | |
| | ₽. | EDS-G4008 | Not updated | v3.2 | i None | |
| | ļ į | EDS-G512E-8PoE | Not updated | v6.4 | i≡ None | |
| | Ţ, | EDS-G516E | Not updated | v6.4 | i≡ None | |
| | Ţ, | MDS-G4028 | Not updated | v4.0 | i≡ None | |
| | t i | PT-7728-PTP | Not updated | v3.6 | i≡ None | |
| | ŢŢ 🛉 | PT-G510 | Not updated | v6.5 | i≡ None | |
| | ļ | PT-G7728 | Partially updated | v6.3 | i≡ None | |
| | | AWK-1151C | 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: |
| | Partially updated: The firmware version of an 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. |
| | • No information available : There is no firmware version information available on the firmware server for this model. |
| Latest Version on the Firmware Server | 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 Selecting a Firmware Version. |
| Selected Firmware | After selecting a firmware version to download, this shows the firmware file |
| Download Status | download progress as a percentage. |

The following actions are available from this screen:

| Icon | Name | Description |
|------|--------------------------------------|---|
| ţ | 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 | |
| 10 | 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 | | |
| Enhancemen 1. Added sup 2. Added a m | ort for SFP auto-negotiation/forced mode CLI commands. chanism to prevent firmware downgrading to a version earlier than v6.2. | |
| Feature N/A | | |
| Fix 1. Login auth 2. If the ring port | ntication fails when using MS-CHAPv2 with certain RADIUS servers. orts and coupling port are configured in a sequence (e.g. ports 1, 2, 3) and s the last port in the sequence, the coupling link will not be established. | l the |
| Note 1. Due to son certain older prevent firm | e changes to the components of the product, the device will be incompati imware versions. To ensure device stability, a mechanism has been adde are downgrading to any version earlier than v6.2. | ble w d to |

- 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 | i ≡ v6.4 | 100% |
| - 4 | 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.

| ograde | Sequence | | | | |
|-----------|----------------|-------------------------|--------------|---------------------|------------------------|
| nart Sequ | iential 👻 | | | | |
| 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 Schedu | led Upgrade Upgrade No |

- 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.

| Firmware | Firmware Upgrade Status | | | | | | | |
|----------|-------------------------|-----------------------------------|-----------------------|------------------|-------------|--|--|--|
| A The f | irmware upgrade ma | ay take some time. Please wait fo | or the upgrade proces | s 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 | | | |
| 2 | 192.168.127.11 | 192.168.127.11EDS-G516E | EDS-G516E | v6.4 | In progress | | | |

 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 System Events

To access the **System** page, in the function tree, navigate to **Menu** (\blacksquare) > **Event Management** > **Event History** and go to the **System** tab. The **System** tab shows information about MXview One system events. Use the filters to customize the information displayed in the table. You can also export the data as a CSV file.

| E | vent l | Histor | у | | | | |
|---|--------|--------|------|----------------------------------|-------------------|--------------------|---------------------|
| | System | | Netw | Network and Device Cybersecurity | | | |
| | | ÎF 🖸 | ÷ | | | | |
| | | | ID | Source Source | e IP Device Alias | Description | Time Issued |
| > | | | 10 | MXview One | | User login: admin | 2025-01-19 12:11:01 |
| | | | 9 | MXview One | | User logout: admin | 2025-01-17 18:15:47 |
| | | | 8 | MXview One | | User login: admin | 2025-01-17 18:10:53 |
| | | | 7 | MXview One | | User login: admin | 2025-01-17 17:01:12 |

- 1. Navigate to Menu (≡) > Event Management > Event History.
- 2. Go to the **System** tab.

The **System** tab will display the following information in a table format:

| Column | Description | | |
|--------------|--|--|--|
| Acknowledge | Acknowledge status of the event | | |
| Show Details | The detailed information of this event | | |
| ID | The unique identifier of the event | | |
| Source | The source of the event | | |
| Source IP | The IP address of the device that issued the event | | |
| Device Alias | The unique name of the device | | |
| Description | The description of the event | | |
| Time Issued | The time the event was issued | | |

- 3. 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.
```

| Acknowle 🕶 | | | | | | × |
|------------|------|---|--------|---|--------|-------|
| Start Da 菌 | Hour | * | Minute | • | Second | • |
| End Date 菌 | Hour | • | Minute | Ŧ | Second | • |
| | | | | | Reset | Apply |

b. Specify any of the following criteria:

| Criteria | Description | | |
|-------------|---|--|--|
| 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.

- 4. 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 **System** tab:
 - a. Click the **Export** () icon.

| I = | |
|--------------------------|--|
| Export CSV | |
| Export All Events to CSV | 4 |
| | Export CSV Export All Events to CSV |

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.

Viewing Network and Device Events

To access the **Network and Device** page, in the function tree, navigate to **Menu** (\equiv) > Event

Management > Event History and go to the Network and Device tab.

The **Network and Device** tab shows information about all the network and device events in your topology. Use the filters to customize the information displayed in the table. You can also export the data as a CSV file.

| Eve | Event History | | | | | | | | |
|-----|---------------|------|---------|------------|----------------|-----------------------------|-------------------------|---------------------|--|
| | System | | Network | and Device | Cybersecurity | | | | |
| | ~ | î: 🖸 | Ŧ | | | | | | |
| | | | ID | Source | Source IP | Device Alias | Description | Time Issued | |
| LE. | | ¥ 8 | 2727 | MXview One | 192.168.127.62 | 192.168.127.62NPort-6250-G2 | Device ICMP reachable | 2024-12-28 14:46:21 | |
| | | | 2726 | MXview One | 192.168.127.62 | 192.168.127.62NPort-6250-G2 | Device ICMP unreachable | 2024-12-28 14:46:13 | |
| | | ¥ 8 | 2725 | MXview One | 192.168.127.62 | 192.168.127.62NPort-6250-G2 | Device ICMP reachable | 2024-12-28 14:42:41 | |
| | | | 2724 | MXview One | 192.168.127.62 | 192.168.127.62NPort-6250-G2 | Device ICMP unreachable | 2024-12-28 14:42:33 | |

The page will display the following information in a table format:

| Column | Description |
|--------------|---|
| Acknowledge | The acknowledgement status of the event. |
| Show Details | Detailed information about the event. |
| ID | The unique identifier of the event |
| Source | The source of the event. |
| Source IP | The IP address of the device that issued the event. |
| Device Alias | The unique name of the device. |
| Description | The description of the event. |
| Time Issued | The date and time the event was issued. |

- 1. Navigate to Menu (=) > Event Management > Event History.
- Go to the Network and Device tab. The Network and Device screen will appear:
- 3. To filter the information in the table according to specific criteria:
 - a. Click the **Filter** $(\overline{-})$ icon in the top-left corner.

The filter window will appear.

| Severity | | | | | | × |
|---------------------|---------|-------|--------|---|--------|-------|
| Group All Groups - | IP Addr | ess | | | | |
| Source • | Acknov | vle ¬ | - | | | |
| Start Date 💼 | Hour | • | Minute | Ŧ | Second | • |
| End Date 💼 | Hour | • | Minute | Ŧ | Second | * |
| | | | | | Reset | Apply |

- b. Specify any of the following criteria:
 - □ Severity: Select the severity level of the event.
 - Group: Select the group the device is assigned to.
 - □ IP Address: Specify the IP address of the device.
 - □ Source: Select the source of the event.
 - □ Acknowledge: Select the acknowledgement status of the event.
 - $\hfill\square$ Start Date: Specify the start date and time for which to display event data.
 - $\hfill\square$ End Date: Specify the end date and time for which to display event data.
- c. Click Apply.

- 4. To sort the data in a specific column, click the column header.
- 5. To acknowledge all events:
 - a. Click the **Ack All Events** (**≥**) icon in the top-left corner. The **Ack All Events** screen will appear.



- b. When prompted to confirm, click **Apply**.MXview One will acknowledge all events displayed in the table.
- 6. To delete all events:
 - a. Click the **Clear All Events** ($\mathbf{\overline{PF}}$) icon in the top-left corner.

| The Clear All Events screen will appear. |
|--|
| Clear All Events |
| All system events will be cleared. Are you sure you want to continue this process? |
| Cancel Apply |

- b. When prompted to confirm, click **Apply**.MXview One will delete all events displayed in the table
- 7. To export data displayed on the **Network and Device** tab:
 - a. Click the **Export** () icon.



b. Click **Export CSV** to only export the events on the first page or **Export All Events to CSV** to export all events.

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.
- In the Advanced section, expand Events. The Events settings will appear.

| Events | | , |
|-------------------------------------|----------|---|
| | | |
| Link Up * | | |
| Information | * | |
| Link Down * Critical Port Leoping * | * | |
| Warning | * | |
| | | _ |

- 3. Select one of the following severity levels for Link Up events:
 - > Information
 - > Warning
 - > Critical
- 4. Select one of the following severity levels for Link Down events:
 - > Information
 - > Warning
 - > Critical
- 5. Select one of the following severity levels for **Port Looping** events:
 - > Information
 - > Warning
 - > Critical
- 6. Click Save.

MXview One will update the event severity settings.

NOTE

Once you save the settings in the Global Device Settings section, the settings will synchronize to each device in the topology.

- 8. 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 | Ŧ |

- c. Select the **Severity** level for the event.
- 9. 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 | Se | everity | |
| 0 | V | /arning | ~ |
| | % | | |

- c. Select the **Severity** level for the event.
- 10. 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 | T |
| % | | |

- c. Select the **Severity** level for the event.
- 11. 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 | | |

- 12. 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 | | |

- 13. 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 | | |

- 14. 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 | | |

- 15. 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.

| SFP Temperature Over * | | | |
|------------------------|----|------------|---|
| Enabled | • | | |
| SFP Temperature Over * | | Severity * | |
| 50 | | Warning | • |
| 0 - 100 | °C | | |

| > | |
|-------------|--|
| | |
| A | |
| | |

NOTE

If the threshold is set as '0', the threshold function will be disabled.

16. 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
 - > Allow Self-signed Certificate
 - > 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.



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 **Notification Output** tab.

The Notification Output tab displays a list of registered actions (if any).

| N | lotifi | cation | Management | | | |
|---|----------|--------------|---------------------|-------|-------------------|------------|
| | Notifica | tion Setting | Notification Output | | | |
| | ٥ | | | | Q Search | |
| | | Ν | lame | Туре | Information | |
| > | | / 1 | est | Email | email@example.com | |
| | | | | | | 1 – 1 of 1 |

b. Click the **Add** (**b**) icon in the top-left corner.

The Add Notification Output screen will appear.

| Add Notific | ation Outpu | ıt | | |
|---------------|-------------|--------|--------|-----|
| Name * | | | | |
| | 0 / 63 | | | |
| Type * | • | | | |
| Information * | | | | |
| | | 0 / 64 | | |
| | | | Cancel | Add |

- c. In the $\ensuremath{\textbf{Name}}$ field, type a name to describe the action.
- d. From the **Type** drop-down list, select one of the following actions:
 - **E-mail:** Sends an email to the specified email address.
 - □ **Microsoft Teams:** Sends a message through Microsoft Teams.
 - □ **Message Box:** Displays a message box when the event occurs.
- e. Provide additional information required for the action (if any).
- f. Click Add.

The registered action appears in the table on the **Notification Output** tab.

- 3. To add a new event notification:
 - a. Click the Notification Setting tab.

The Notification Setting tab displays a list of configured event notifications (if any).

| N | otification | Management | | | |
|---|----------------------|---------------------|-------------------------|--------------------|--------------------|
| | Notification Setting | Notification Output | | | |
| | + • | | | Q Search | |
| | • | Notification Name | Event | Registered Devices | Registered Outputs |
| | | | | | |
| > | | Test | Device ICMP unreachable | 8 | Test; |

b. Click the Add (±) icon in the top-left corner.
 The Create Notification screen appears.

| Create Notification | |
|------------------------|------------|
| Notification Name * | |
| Event * | * |
| Registered Devices * 💌 | |
| Registered Outputs * 💌 | |
| | Cancel Add |

- c. In the **Notification Name** field, type a name to describe the event notification.
- d. From the **Event** 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 Outputs** 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 Setting** tab.

Adding a Microsoft Teams Action

Use the **Notification Output** tab on the **Notification Management** screen to add a Microsoft Teams notification action.

1. In Microsoft Teams, go to the channel you want to add the incoming webhook to.

2. Click **More options (...)** next to the channel name.

| Activity | Teams ···· Q ☑ ∨ |
|--------------|--|
| (E) Chat | Unread |
| teams | DiscoverMentions |
| Calendar | Teams and channels DP |
| Calls | V I More options |
| 0 | |

3. Select Manage channel.

| ↓ Channel notifica | tions |
|--------------------|-------|
| + Show in | > |
| 🕅 Hide | |
| Add members | |
| 🖉 Rename channe | I |
| හි Manage channe | I |

4. In the **Connectors** section on the **Settings** tab, click the **Edit** button.

| 測 | Teams Notification | Settings | Analytics | |
|---|--------------------|----------|---|--|
| | ✓ Channel details | | Edit channel name and description Teams Notification | |
| | | | Edit | |
| | ✓ Moderation | | Set channel moderation preferences General Channel: Anyone can post messages Anyone can post; show alert that posting will notify everyone (recommended for large teams) | |
| | | | Only owners can post messages | |
| | ✓ Connectors | | Manage the connectors that post to this channel Edit | |

5. Search for **Incoming Webhook** and click the **Configure** button. The **Incoming Webhook** will appear.



6. Enter a name for the webhook and upload a custom icon (optional), then click Create.

| Connectors for "Teams Notification" channel in $\hfill \times$ team | |
|--|---|
| The Incoming Webhook connector enables external services to notify you about activities that you want to track. To use this connector, you'll need to create certain settings on the other service, which needs to support a webhook that's compatible with the 'Office 365 connector format'. | Î |
| Fields marked with * are mandatory | |
| To set up an Incoming Webhook, provide a name and select Create. * | |
| Test1201 | |
| Customize the image to associate with the data from this Incoming Webhook. Upload Image Default Image | |
| Create | • |

- 7. Copy the URL shown in the pop-up window to your clipboard and click **Done**.
- 8. In MXview One, navigate to **Menu** (\equiv) > Notification Management.
- 9. Click the **Notification Output** tab.
- 10. Click the **Add** (1) icon in the top-left corner. The **Add Notification Output** screen will appear.
- 11. In the **Name** field, enter a descriptive name for action.
- 12. From the **Type** drop-down menu, select **Microsoft Teams**.
- 13. In the **Webhook** field, paste the webhook URL copied from the Microsoft Teams.

14. Click Test Connection to verify the webhook works properly.

| ction |
|-------|
| ction |

If successful, you will receive a message in the linked Microsoft Teams channel.

| Contract 1201 8:55 PM | New |
|---------------------------|-----|
| MXviewOne connection test | |

15. Click Add.

The registered action appears in the table on the Notification Output tab.

Editing or Exporting Registered Actions

Use the **Notification Output** 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.
- Click the Notification Output tab.
 The Notification Output 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 Output screen will appear.

| Edit Notifica | ation Ou | tput | | | | |
|------------------|----------|------|--|---|-------|-------|
| Name * | | | | | | |
| Test | | | | | | |
| Event * | | | | | | |
| Email | 1 | r | | | | |
| Receiver Email * | | | | | | |
| email@examp | le.com | | | | | |
| | | | | | | |
| | | | | С | ancel | Apply |

- b. Modify the following settings:
 - Name
 - Type

- Information
- c. Click Apply.

The Notification Output screen appears and displays the updated action information.

- 4. To export data displayed on the **Notification Output** tab:
 - a. Click the **Export** (🗳) icon.

| ۵ | ₽ | |
|---|------------|--|
| | Export CSV | |

b. Select **Export CSV**.

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

Editing or Exporting Notification Configurations

Use the **Notification Setting** 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.
- Click the Notification Setting tab.
 The Notification Setting tab displays a list of configured notifications.
- 3. To edit a notification:
 - a. Click the Edit (
 icon next to the notification you want to edit. The Edit Notification screen will appear.

| Notification Name * | | | | |
|----------------------|-------|--------|-----|----------|
| Test | | | | |
| Event * | | | | |
| Device ICMP unreach | nable | | Ψ. | |
| Registered Devices * | | | | |
| All devices | • | | | |
| Registered Outputs * | | | | |
| Test | • | | | |
| Contont | | | | |
| Content | | | | |
| | | 0 / 20 | 000 | |
| | | | | <u>.</u> |

- b. Modify the following settings:
 - Notification Name
 - Event
 - Registered Devices
 - Registered Outputs
- c. Click Apply.

The Notification Setting screen appears and displays the updated notification information.

- 4. To export data displayed on the **Notification Setting** tab:
 - a. Click the **Export** () icon.



b. Select **Export CSV**.

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

Custom Event Management

To access the **Custom Event** tab, in the function tree, navigate to **Menu** (**b**) > **Event Management** > **Event Settings** and go to the **Custom Event** tab.

The **Custom Event** screen provides information about all the custom events configured on MXview One. You can use the **Custom Event** tab to view whether a custom event is enabled or disabled, modify a custom event, or export custom event configurations as a CSV file.

| Event Setting | gs | | | | | | | |
|-----------------|---------------|------------|------------------|-------------|-------------|----------------------|----------|--------------------|
| Custom Event | Cybersecurity | Event | | | | | | |
| All (1) | | | | | | 0.500 | rah | |
| Critical (0) | | | | | | 4 Sea | cii | |
| Warning (0) | | Event Name | Enabled/Disabled | Condition | Description | Recovery Description | Duration | Registered Devices |
| Information (1) | • • | sysUpTime | Enabled | Not Equal 0 | | | 0 | 1 |
| | | | | | | | | 1 – 1 of 1 |
| | | | | | | | | |

Configuring Custom Events

The **Custom Event** tab allows you to define your own events to monitor with flexible detection thresholds, severity levels, and duration times.

- 1. Navigate to Menu (≡) > Event Management > Event Settings.
- 2. Go to the **Custom Event** tab.

The **Custom Event** screen will appear.

Click the Add (1) button in the top-left corner of the screen.
 The Add Custom Event screen will appear.

| Add Custom Eve | nt | |
|----------------------------------|-------------------|--------|
| Enable Custom Event * Enabled | * | |
| severity * | • | |
|)evice Properties * | | |
| Condition Operator * | Condition Value * | |
| Description | | |
| 0 | / 250 | |
| Recovery Description | | |
| 0 Duration * O | / 250 | |
| Consecutive Po | llings | |
| Registered Devices * | * | |
| | | Cancel |

- 4. Select the default event status:
 - > Enabled: MXview One monitors the event
 - > **Disabled:** MXview One does not monitor the event
- 5. Select one of the following severity levels for the event:
 - Information
 - Warning
 - Critical
- 6. Click the **Device Properties** and select the device property to monitor.
- 7. 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
- 8. (Optional) In the **Description** field, type a string (up to 250 characters in length) to describe the custom monitoring.
- 9. (Optional) In the **Recovery Description** field, type a string (up to 250 characters in length) to describe how to recover from the event.
- 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.
- 11. From the Register Devices drop-down list, select the devices to monitor for the custom event.
- 12. 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

- 1. Navigate to Menu (≡) > Event Management > Event Settings.
- 2. Go to the **Custom Event** tab.

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 |

3. 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.

4. 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.

- 6. To export data displayed on the **Custom Event** tab:
 - 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.

- 1. Navigate to Menu (≡) > Event Management > Event Settings.
- 2. Go to the **Custom Event** tab.

The **Custom Event** screen will appear and display a list of configured custom events.

3. Click the **Edit** () icon next to the event you want to enable/disable.

| screen will appear. |
|---------------------|
| |

| spuare outroin | Lych | | |
|-------------------------------------|----------|-------------------|--|
| Enable Custom Event * | | | |
| Enabled | • | | |
| Severity * | | | |
| Critical | * | | |
| Device Properties * | | | |
| DsILed1 | | | |
| Condition Operator * | | Condition Value * | |
| Over | • | 10 | |
| The DsILed1 is over | r 10. | | |
| Recovery Description | 23 / 250 | | |
| Recovery | | | |
| Duration * | 8 / 250 | | |
| 1 | | | |
| Consecutive Registered Devices * | Pollings | | |
| All devices | Ŧ | | |
| | | | |
| | | | |

- 4. From the Enable Custom Event drop-down list, select one of the following:
 - > Enabled
 - > Disabled
- 5. Modify any additional event settings you wish to change.
- 6. Click **Apply**.

The **Custom Event** screen will appear and display 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 | 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.

| = | MX view O | NE | | | | |) English | 👤 admin ▼ |
|---|----------------------|-------------------|---------------|----------|---------|------------------------------|-----------|------------------|
| S | Syslog Sett | ings | | | | | | |
| | Syslog Server Settir | ngs Syslog Viewer | Syslog Forwar | ding | | | | |
| | ≂ I ≇ | | | | | Q Search | | |
| > | Severity | Time Stamp | IP Address | Facility | Message | | | |
| | | | | | | Items per page: 100 - 0 of 0 | I< < 3 | > >I |

- 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 📋 Hou | ur | ▼ Minute ▼ | |
| End Date 📋 Hou | ur | ✓ 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 |
| | • 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 * | | | | | |
| | | | | | |
| 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 Filters (1/128) | | | |
|--------------------------|----------------------|-----------------------|---|
| i You can enter multiple | source IP addresses, | separated by a comma. | |
| Ð | | | |
| Source IP | | Severity * | |
| 192.168.127.1,19 | 92.168.127.2 | All | • |

Severity: Select the event severity level(s) that will be forwarded.

| All | 1 |
|--------------|---|
| Debug(7) | |
| ✓ Info(6) | |
| Votice(5) | |
| ✓ Warning(4) | |
| _ | • |

NOTE

MXview One supports a maximum of 128 syslog forwarding filtering rules.

- c. To delete a filtering rule, click the **Delete** (\blacksquare) 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.

| A | ssets and Warranty | | | | | | | |
|---|-------------------------------|----------------|-----------------|-------------------|---------------------------|---------------|-------------------|---------------------------------------|
| | Asset List Warranty Manag | ement Warranty | Notifications | | | | | |
| | . ≡∕ | | | | | | Q Search | |
| | Alias | Model | IP | MAC Address | Firmware Version | Serial Number | Warranty End Date | Channel Extended Warranty End Date |
| | 192.168.123.70AWK-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 |
| | 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 |
| | 192.168.127.2ICMP 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 | The 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 | | o |
| H | IP | | ο |
| : | MAC Address | | ο |
| # | Firmware Version | | O |
| : | Serial Number | | Ø |
| : | Warranty End Date | | o |
| # | Channel Extended Warranty End Date | | Ø |
| | | 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.

| Asse | ts and Warranty | | | | | | | | | |
|-------------------------------------|--|-----------------------------------|-------------------|----------------------------|-------------------|---------------------|-------------------|---------------------------------------|---|-----------------|
| A | sset List Warranty Mana | gement Warran | ty Notifications | | | | | | | |
| Checl Moxa V Last Up Retri | k Warranty Status Varranty Server Status: Available dotate: 2024-07-22 PM 02:41:54 eve Data | Manu Search & Serial Che | ually Check War | ranty ▼ 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 |
| | 192.168.123.70-AWK-3252A | 192.168.123.70 | 00:90:E8:00:04:12 | | | | | ▶ N/A | | N/A |
| | 192.168.123.71-Unknown Device | 192.168.123.71 | | | | | | / N/A | | 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.

| dit | Columns | | |
|------|------------------------------------|-------|------|
| djus | table Columns | R | eset |
| 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 |
| | Warrantv Status | | 0 |
| | | Close | Sa |

- 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 (ii) 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 ir | ו the | top-left | corner | of the | page. |
|--------|----------|----------|----------|-------|-----------------|--|-----------|-------|----------|--------|--------|-------|
|--------|----------|----------|----------|-------|-----------------|--|-----------|-------|----------|--------|--------|-------|

| [| | | Q Searc | h | | | | | | |
|----------|--------------------------|----------------|-------------|---------------|-------------------|---------------------|-------------------|---------------------------------------|---|-----------------|
| - | 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/vv | | |
|-------------|----|-------|
| min, aa, jj | уу |) |
| | | - |

- 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 | d 🕕 | Warranty Status |
|-------------------------|----------------|-------------|---------------|-------------------|---------------------|-------------------|-------------------------------------|-----|-----------------|
| 192.168.123.70AWK-3252A | 192.168.123.70 | | | | | | 2024-12-31 | | 🚫 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 Extender 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 Detection | | | | |
|------------------------------------|-----------------|------------------------|-------------------------------------|--|
| 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 | ine 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



ΝΟΤΕ

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 | 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** (=) > **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 Devi | ice Settings De | vice Baseline C | Current Rogue Devices Rogue Device His | ory |
|------------|-------------------|-----------------|--|----------|
| • | 1 | | | Q Search |
| | MAC Address | IP Address | NIC Vendor | |
| | 00:90:E8:44:52:AE | 192.168.123.151 | Moxa Technologies CORP. 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.

| R | ogu | e Device De | etection | | | | |
|---|---------|--------------------|------------------|------------------------|----------------------|-------------------------------|-----------------------------|
| | Rogue I | Device Settings | Device Baseline | Current Rogue Devices | Rogue Device History | | |
| | ٠ | | | | | | Q Search |
| | | MAC Address | IP Address | First Seen | Last Seen | Connected Switch/Port | NIC Vendor |
| | | + 00:90:E8:05:17:4 | 45 192.168.123.7 | 2 2024-07-23 AM 03:50: | :59 2024-07-23 AM 10 | 0:12:45 192.168.123.70 | Moxa Technologies CORP. Ltd |
| | | + 00:0C:29:29:C6: | 3C 192.168.123.2 | 2024-07-23 AM 03:51: | :36 2024-07-23 AM 10 |):12:43 192.168.123.152/Port1 | Vmware Inc |

| | This page | displays th | e followina | information | in a | table | format: |
|--|-----------|-------------|-------------|-------------|------|-------|---------|
|--|-----------|-------------|-------------|-------------|------|-------|---------|

| 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

| | | | | | | Q Search |
|------------|-------------------|-----------------|------------------------|------------------------|-----------------------|------------|
| | 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 |
| Z 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.

| Rogue Dev | ice Detection | | | | |
|------------------|-----------------------|-----------------------|------------------------|------------------------|--|
| Rogue Device Set | tings Device Baseline | Current Rogue Devices | Rogue Device History | | |
| i: 🖸 | | | | | 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 ([•]) 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 you sure you want to continue? | |
| 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 | lilei | | |
|---------------------|---------------|--------------|----------|----------|
| Configuration | Backup | Restore | | |
| DB Backup & Restore | | | | |
| Plug-in Manager | Name * | Backup test | | |
| Certificate | | | 11/255 | |
| | Save | | | |
| | Historical ba | ckups | | |
| | Versio | n 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**.

| Configuration Center | | | | | | | |
|----------------------|-------------|------------|---------|-------|--|----------|---|
| Backup | , | Restore | Records | | | | |
| Device List | t | | | | | | |
| ⊽ 🖸 | | | | | | 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 | 5 |

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** (**\overline{a}**) 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.

| evic | Backup |) F | Restore | Reco | rds | | |
|------|--------|-----------------|----------------|------------|---|--------|------|
| 8 | | | | | | | |
| | | IP Address | Alias Name | | Back Up Configuration | | |
| | 8 | 192.168.127.152 | 192.168.127.15 | 52EDS-518 | MXview One will archive these configuration files | | |
| | 8 | 192.168.127.153 | 192.168.127.15 | 53EDS-405 | 192.168.127.152 192.168.127.153 | | |
| | 8 | 192.168.127.154 | 192.168.127.15 | 54NPort-St | 192.168.127.154 | | |
| | 8 | 192.168.127.155 | 192.168.127.15 | 55NPort-St | 192.168.127.155 192.168.127.156 | | |
| | B | 192 168 127 156 | 192 168 127 15 | 56IEX-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.

| Conf | Configuration Center | | | | | | | | |
|-------------|---|---|---------|------------------------------|----------|--|--|--|--|
| E | Jackup | Restore | Records | | | | | | |
| Devic | Device List | | | | | | | | |
| ₹ | | | | | Q Search | | | | |
| | IP Address | Alias Name | | Group | | | | | |
| Ð | 10.81.10.10 | EDS-510E | | Root | | | | | |
| Ð | 10.01.10.11 | | | | | | | | |
| | 10.81.10.11 | EDS-510E | | Root | | | | | |
| Ð | 10.81.10.11 | EDS-510E EDS-510E | | Root | | | | | |
| Ф Ф | 10.81.10.11 | EDS-510E EDS-510E EDS-510E | | Root Root Root | | | | | |
| 0 0 0 | 10.81.10.12 10.81.10.13 10.81.10.14 | EDS-510E EDS-510E EDS-510E EDR-810 | | Root Root Root 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 Conferencies Local File | - |
| | 10.82.10.3_20210805_2223.ini | |
| | 10.82.10.3_20210805_2304.ini | Арріу |
| tc 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 10:47 | :00 |
| Cancel | 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.

| • | |
|--------|--------|
| | |
| | |
| Cancel | Apply |
| | Cancel |

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 | rds | | | |
|------------|-------------------------------|---------------------|---------------------|----------|--|
| figuration | File | | | | |
| - | | | | Q Search | |
| | Configuration File | Createing Time | Last Checking Time | | |
| a 🕯 | 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 | | |
| a 🕯 | 10.82.10.3_20210806_1109.ini | 2021-09-22 10:10:00 | 2021-08-06 11:09:00 | | |
| 16 | 10.81.10.11_20200722_1722.ini | 2021-09-22 10:10:00 | 2020-11-26 10:47:00 | | |
| a 🕯 | 10.81.10.11_20210409_1812.ini | 2021-09-22 10:10:00 | 2021-04-09 18:12:00 | | |
| 16 | 10.81.10.12_20201211_1508.ini | 2021-09-22 10:10:00 | 2020-12-11 15:08:00 | | |
| a 🕯 | 10.81.10.12_20210409_1812.ini | 2021-09-22 10:10:00 | 2021-08-05 23:04:00 | | |
| i 6 | 10.85.10.20_20201215_1342.ini | 2021-09-22 10:10:00 | 2020-12-15 13:42:00 | | |
| 16 | 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.

| Compa | are Configurations | | |
|-----------------------------------|--|----|---|
| Compare Device List 192.168 | e Basement: 192.168.127.13_20240125_0922.ini * .127.13 | | |
| Compare T | arget | | |
| 192.168 | .127.13_20240125_0932.ini - | | |
| б | # System Identification # | 6 | # 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 | # [Oautaat]. Maintainan Oautaat Infa | 00 | # [Oantaat]. Maintainan Oantaat Infa |
| | | | Cancel Compare |

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 ~ | | | | | | | | |
| Inventory Management | | | | | | | | |
| | | | | | | | | |
| OPC UA Server | | | | | | | | |
| API Key Management | | | | | | | | |
| Embedded Web Widget | | | | | | | | |
| Administration ^ | | | | | | | | |

Viewing the OPC Tags Table

- 1. 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:

| Column | Description |
|--------------------|---|
| Status | Shows the status of the OPC tag. |
| Device Property | Shows the SNMP device property of the tag name. |
| 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 |
| Registered Devices | Device Alias 192.168.123.152EDS-518A 192.168.123.157IEX-402-SHDSL |
| | Close |

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.

| Status * | | | | |
|----------------------|------------|---------|-------|---------|
| Enabled | | • | | |
| Device Property * | | | | |
| cpuLoading300s | | | | |
| Tag Name * | | | | |
| CPU_Loading_300s | | | | |
| Registered Devices * | 1 | 6/64 | | |
| All devices | | • | | |
| | Clos | e | Add | |
| onfirmation will a | ppear to v | erifv t | aa wa | s creat |

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 | - |
| evice Property | |
| Availability | |
| ag Name * | |
| Availability | |
| egistered 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 |
| | | - | | | |
| | / | 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

- 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:

| ≡ | MX view ONE | |
|---|---|--------------------------------------|
| 0 | PC UA Servei | r |
| | OPC Tags | Server Settings |
| | Endpoint URL: opc. Enable OPC UA Server * Enabled | tcp://127.0.0.1:4840/MXviewOne/OPCUA |
| | IP/Domain Name * 127.0.0.1 | |
| | 9. Port * 4840 | / 253 |
| | Authentication Set | tings |
| | Anonymous | |
| | Security Mode Allow No Security * Disabled | · |
| | | |
| | Supported Security Basic128Rsa15 Basic2565Na256 Aes128Sha256Rsa0a Aes256Sha256RsaPs Save | r Policies lep Is |
| | | |

- > **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.

| ÷ | | | | | Q Search | |
|-------|----------------|---------------------|--------------|---|----------|----------|
| Ap | plication Name | Create Time | Access Count | API Key | | |
| 🗌 tes | st | 2021-10-28 10:20:10 | 183 | eyJhbGciOiJIUz11NilsInR5cCl6lkpXVCJ9.eyJ1c2VybmFlZSl6inRyeW14dmlldylsImlhdCl6MTY zNTM4NzYxMCwianRpljoiNWEyN2E4ZGY2Y2NiYJ2hOGY1ZjkwN2JIOTIiMGVkYTUyYWYyZWQ 4MiJ9.i9ZVczIAcES0o1IrD7bmwSv1LJXhp17JAr8YDz5Q0uA | | |
| | | | | | | 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.

| API | Key Manag | ement | | | | |
|-----|------------------|---------------------|--------------|---|----------|------|
| ĩ | C | | | | Q Search | |
| | Application Name | Create Time | Access Count | API Key | | |
| E | test | 2021-10-28 10:20:10 | 183 | eyJhbGciOiJUlz11NilsInR5cCl6lkpXVCJ9.eyJ1c2VybmFtZSl6inRyeW14dmlldylsImlhdCl6MTY zNTM4NzYxMCwianRpljoiNWEyN2E4ZGY2Y2NiYjZhOGY1ZjkwN2JIOTliMGVkYTUyYWYyZWQ 4MiJ9.i9ZVczIAoES0o1ltD7bmwSv1LJXhp17JAr8YDz5Q0uA | | |
| | | | | | 1-10 | 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** (a) 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.

| A document of API for accessing data from MXview One API user guide | |
|---|-----------|
| Servers http://127.0.0.1/ ~ | Authorize |
| 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) |
| 95 | Windows 11 (64-bit) |
| 03 | 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 Add-on 90-Day free trial through the license management page.

| \equiv MX view ONE | | | | 🌐 English | 💄 admin 👻 |
|--|--|--|--|-----------|------------|
| License Management | | | | | |
| MXview One Node License Mode: Authorized Currently Used: 50 Total Number of Licen | Wireless Add-on License Mode: None | Power Add-on License Mode: None | Security Add-on License Mode: None | | |
| Moxa License Site(2) Add New License License Type Licenses Licenses Type: Node License Licensed Node: 2000 Activation Code: xWiJjAR3NJhPK3V8UJJ ZDin8J9Ut5xWW4iFz2eiyWLjSehmxAlzse License Start: 2024-06-12 21:49:57 | DhY1GEYupzkXb4vSNk0WhciNztEvU9+C01MR923 K7aKY/FuwsEY+hR3AoYDaXI21MmTP6uyvTdJM | ıDUe7ZEK2ifh/W6YCj7zy+8Do83 9wwZOprHxq31nizQEfjYvuqN89 | KFcKzESWXzC2reT5AVxmP0+Zp0E62/nP72Br3/ o6o4MJErmJmWeWmCs= | | Deactivate |
| Wireless Add-on Start to experience the MXview One Wireless Add-on | Power Add-on Start to experience the MXview One Power Add-on | Security Add-on Start to experience the MXvier Security Add-on | w One Use both the Deactivation Code and a User Code to re-activate your license. Re-activate. | | |
| Start Trial | Start Trial | Start Trial | 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 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.

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 include a **Wireless** tab and show AP Traffic Load and the Wireless Device Summary information.

To access the **Dashboard**, navigate to **Menu** (\equiv) > **Dashboard** and go to the **Wireless** tab.

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.

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**.

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 A :E8:88:41:11 | | | | Last 30 minutes 👻 C | | | | | |
| 192.168.126.101 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 | | | | | | | | |
| | 12/24/25 | | UTC +08:00 | | | | | | |
| | Time: | 🗆 F | ах: 🗆 тх | : | | | | | |
| | CPU Utilization | | | | | | | | |
| | 15% | | | | | | | | |
| | 10% | | | | | | | | |

The AP Device Dashboard shows the following information:

| Parameter | Description | | | | | | |
|--------------------|--|--|--|--|--|--|--|
| | Managed | The total number of wireless clients connected to this AP that are managed | | | | | |
| Client Count | | 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 | The total time the wireless AP has been online since the last restart | | | | | |
| Traffic Load | The current and historical traffic throughput of the wireless interface | | | | | | |
| CPU Utilization | The current 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 versions) | | | | | | |

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 | | | | | | |
| CDU Utilization | The current and historical CPU utilization of the client (only supported by certain | | | | | | |
| | firmware versions) | | | | | | |
| Momony Utilization | The current and historical memory utilization of the client (only supported by certain | | | | | | |
| Memory Ounzation | 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 | Vireless Device Summary | | | | | | | | | | | |
| All (5) | с | | | Q Search | | | | | | | | |
| Client (3) | Op | peration Mode | IP Address | MAC Address | BSSID | Channel | Noise Floor | Signal Strength (dBm) | | | | |
| > | AP - 192.168.127.168 (Site Name: Site BRANDONYANG-PC / MAC Address: 00:90:E8:52:39:50 / Channel: 1) | | | | | | | | | | | |
| | Cli | ient | 192.168.127.165 | 00:90:E8:52:39:75 | 06:90:E8:52:39:50 | 1 | -88 | -23 | | | | |
| | ^ AP - 192 | .168.127.169 (\$ | ite Name: Site BRA | NDONYANG-PC / M | AC Address: 00:90:E | 8:7C:C3:01 / | Channel: 1) | | | | | |
| | Cli | ient | 192.168.127.166 | 00:90:E8:63:A7:6C | 06:90:E8:7C:C3:01 | 1 | -91 | -22 | | | | |
| | Unmanaged AP (Site Name: Site BRANDONYANG-PC) | | | | | | | | | | | |
| | Cli | ient | 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 | I< < | > > |
| 4 | | | | | | ^ | | | | | | Þ |

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**.

| Ō | Time I | Range | e: Da | ^{ate} /22/2 | 021 | Ē | |
|-----|-----------|-------|-------|-------------------------|-----|-------------------|----|
| | | | | | | | |
| | DEC | 2020 | * | | | < | > |
| | S | Μ | 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 |
| | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| | 27 | 28 | 29 | 30 | 31 | | |
| le: | Date 12/2 | 5/202 | 0 | • | O1: | t Time – 42 PN | 1 |

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 Add-on 90-day free version through the License Management page.

| \equiv MX view ONE | | | | 🌐 English | 💄 admin 👻 |
|--|---|--|--|-----------|------------|
| License Management | | | | | |
| MXview One Node License Mode: Authorized Currently Used: 50 Total Number of Licen | Wireless Add-on License Mode: None | Power Add-on License Mode: None | Security Add-on License Mode: None | | |
| License Steel License Type: Node License Licenses Licensed Node: 2000 Activation Code: xWiJJAR3NJNFK3V8UJJ ZDin8J9Ut5zWW4IF22eiyWLjSehmxAlzst License Start: 2024-06-12 21:49:57 | DhY1GEYupzkXb4vSNkOWftciNztEvU9+C01MR925 :K7aKY/FuwsEY+hR3AoYDaXI21MmTP6uyvTdJMf | ıDUe7ZEK2ifh/W6YCj7zy+8Do8Xi 9vwZOprHxq31nizQEfjYvuqN89o | FeKzESWXzC2reTSAVxmP0+Zp0E62/nP72Br3/ >6o4MJErmJmWeWmCs= | | Deactivate |
| Wireless Add-on Start to experience the MXview One Wireless Add-on | Power Add-on Start to experience the MXview One Power Add-on | Security Add-on Start to experience the MXview Security Add-on | v One Use both the Deactivation Code and a User Code to re-activate your license. Re-activate. | | |
| Start Trial | Start Trial | Start Trial | 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.

| All | > Site DESKTOP-L | .8CNQNO > R | oot |
|----------------|---|--------------|------------|
| | deintenen er de | | |
| _ ~ _ ∣ | vantenance V | 🔧 Tools 🗸 | 🖍 Change G |
| Q | | | |
| Cho | ose a GOOSE publisher | | |
| F | REF620 | | - |
| 4 | Control_DataSet 0x3001 / 01:0C:CD:01:0 | 10:01 | |
| | gcbgcbtest 0x0001 / 01:0C:CD:01:0 | 10:02 | |
| F | REF615 | | |
| | gcbGOOSE 0x0002 / 01:0C:CD:01:0 | 10:05 Tamper | red |

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 | × |
|---|---------------|---|
| v | Device IP | |
| ~ | Device Role | |
| ~ | Bottom Label | |
| - | | |
| ~ | Port Number | |
| | Port Number | 1 |
| | Port Number | 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** () > **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.



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 Centrol, DataSet 0x01 / 01:0c:ed:01:00:01 G00SE 0x01 / 01:0c:ed:01:00:02 |
| V | 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): 192.168.127.4 | |
| 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.



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 Security Add-on Module provides a set of features to help you easily monitor and manage the overall cybersecurity condition of your network. The add-on enables you to manage and deploy firewall policy rules and security packages to multiple devices simultaneously. Through the security dashboard featuring statistical charts, users can get important information at a glance and take necessary actions.

Additionally, the Security module instantly notifies you of any security-related issues on your network, enabling quick and easy troubleshooting.

System Requirements

The computer that the MXview Security 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

The MXview Security Add-on Module supports the following devices:

- EDR-8010 Series
- EDR-G9004 Series
- EDR-G9010 Series
- EDF-G1002-BP Series
- TN-4900 Series

Getting Started With the Security Add-on Module

In order to use the MXview Security Add-on module, you will need to activate it first. You can choose to activate a new license or enable the Security Add-on 90-day free version through the License Management page.

| \equiv MX view ONE | | | | | 🌐 English | 💄 admin 👻 |
|--|---|--|---|------|-----------|------------|
| License Management | | | | | | |
| MXview One Node License Mode: Authorized Currently Used: 50 Total Number of Lice Moxe License Site@ | Wireless Add-on License Mode: None | Power Add-on License Mode: None | Security Add-on License Mode: None | | | |
| Add New License Licenses Licenses Type: Node License Licensed Node: 2000 Activation Code: xWiJJAR3NJhPK3V8UJ ZDinJ.8JUDSzWWH722e9WUJSehmxAzze License Start: 2024-06-12 21:49:57 | 10hY1GEYupzkXb4vSNkOWftciNztEvU9+CO1MR92 ccK7aKY/FuwsEY+hR3AoYDaXI21MmTP6ugvTdJM | ıDUe7ZEK2ifh/W6YCj7zy+8Do8 9wwZOprHxq31nizQEfyYvuqN89 | KFcKzESWXzC2reT5AVxmP0+Zp0E62/nP72 66o4MJErmJmWeWmCs= | Br3/ | 1 | Deactivate |
| Wireless Add-on Start to experience the MXview One Wireless Add-on Start Trial | Power Add-on Start to experience the MXview One Power Add-on Start Trial | Security Add-on Start to experience the MXvie Security Add-on Start Trial | w One Use both the Deactivate Use both the Deactivate User Code to re-activate Re-activate. Re-activate | e | | |

The system will automatically restart after you activate the module. A message will appear telling you to wait while the module activates. Once done, click **OK** to refresh your browser and enable the Security Add-on features.

- For detailed information on how to activate the MXview Security Add-on Module, refer to Chapter 4: License Management.
- To add secure devices to your MXview One network, refer to Using Device Discovery.

NOTE

Please activate the Node-based License and then the Security Add-on License.

Checking Registered Devices

MXview One can automatically check for and register devices that support MXview Security features.

You can see the registration status on the Topology or Device Management page.

- 1. To check the device registration status from the **Topology** screen:
 - a. Navigate to **Menu** (\blacksquare) > **Topology**.

b. Click the List View (💷) icon.

Devices in the topology will be shown in a list.

| = | MX view ONE | | | | | 🌐 Eni | glish 💄 | admin | - |
|------|--------------------------|-----------------|-----------|----------------|-------------------|-----------------------|----------|-------|----|
| Root | | | | | | | | | |
| 1 | dit 🗸 | | | | | | | * | 0 |
| Ŧ | ٥ | | | | | Q Search | | | |
| | Device Alias | Security Add-On | Model | Device IP | MAC Address | Firmware Version | Location | | |
| | 192.168.127.11-EDS-G516E | N/A | EDS-G516E | 192.168.127.11 | 00:90:E8:54:E1:E6 | | | | |
| | 192.168.127.35-EDR-9010 | Registered | EDR-9010 | 192.168.127.35 | 00:90:E8:91:86:82 | Switch Location | | | |
| | 192.168.127.82EDR-8010 | Unregistered | EDR-8010 | 192.168.127.82 | 00:90:E8:91:86:82 | Switch Location | | | |
| | | | | | Items per pa | ge: 50 💌 1 · 10 of 10 | ۲ ۲ | > | >1 |

2. To check the device registration status from the **Device Management** screen:

a. Navigate to Menu (=) > Device Management> Configuration and Control.

| \equiv MX view ONE | | | | | () (| inglish 💄 admin 👻 |
|---|------------------|------------------|----------------|-------------------|--------------------|-------------------|
| Select Operation | | | | | | |
| 🔧 Device Configuration 👻 🤒 Levice Control 👻 | Cybersecurity Co | ontrol 🗸 🔹 Execu | ite CLI 🗸 | | | |
| ∓ ∎ | | | | | Q Search | |
| Device Alias | Security Add-On | Model | Device IP | MAC Address | Firmware Version | Location |
| 192.168.127.11-EDS-G516E | N/A | EDS-G516E | 192.168.127.11 | 00:90:E8:54:E1:E6 | | |
| 192.168.127.35-EDR-9010 | Registered | EDR-9010 | 192.168.127.35 | 00:90:E8:91:86:82 | Switch Location | |
| 192.168.127.82-EDR-8010 | Unregistered | EDR-8010 | 192.168.127.82 | 00:90:E8:91:86:82 | Switch Location | |
| | | | | lterns per pag | e: 50 👻 1-10 of 10 | |

- 3. Check the registration status of the device in the Security Add-on column:
 - Registered: The device can be managed in the Security Add-on module and has been successfully registered.
 - Unregistered: The device can be managed in the Security Add-on module, but it has not been successfully registered yet. Some functions such as firewall policies cannot be deployed on unregistered devices.
 - > **N/A**: The device cannot be managed in the Security Add-on module.



NOTE

If the status is **Unregistered**, confirm the device account and password in **Device Configuration** > **Device Accounts** are correct or reboot the device.

Security Module Features

The MXview Security Add-on Module offers a set of features specifically designed to help you monitor and troubleshoot your network more easily.

Main Dashboard

If the Security module is activated, the MXview One Dashboard will include a Cybersecurity tab with widgets showing cybersecurity event statistics.

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

| shboard | | | | | | | | | | | | |
|------------------|------------|---------------|-----------|-------------|----------|-------------|---------|----------|------------|-----------|------------|-----------|
| General | Wi | reless | Cyl | bersecurity | | | | | | | C Refre | esh All |
| st Update: 2024- | 09-19 15:1 | 7:20 C | | | _ | | | | | | F Set a | s Default |
| Top 5 Layer 3-7 | Policy E | vents by S | Source IP | | | Top 5 Lay | ver 3-7 | Policy E | vents by S | Source IP | | |
| 192.168.1.7 | | | | | | 192.168.1.7 | | | | | | |
| 192.168.1.6 | | | | | | 192.168.1.6 | | | | | | |
| 192.168.1.8 | | | | | | 192.168.1.8 | | | | | | |
| 192.168.1.9 | | | | | | 192.168.1.9 | | | | | | |
| 192.168.1.2 | | | | | | 192.168.1.2 | | | | | | |
| 0 | 200 | 400 | 600 | 800 | 1000 | | 0 | 200 | 400 | 600 | 800 | 1000 |
| | | | | Show Eve | nt Log → | | | | | | Show Ev | ent Log→ |
| Top 5 IPS Polic | y Events I | by Source | IP | | | Top 5 IPS | Polic | y Events | by Destina | ation IP | | |
| 192.168.1.7 | | | | | | 192.168.1.7 | | | | | | |
| 192.168.1.6 | | | | | | 192.168.1.6 | | | | | | |
| 192.168.1.8 | | | | | | 192.168.1.8 | | | | | | |
| 192.168.1.9 | | | | | | 192.168.1.9 | | | | | | |
| 192.168.1.2 | | | | | | 192.168.1.2 | | | | | | |
| 0 | 200 | 400 | 600 | 800 | 1000 | | 0 | 200 | 400 | 600 | 800 | 1000 |
| | | | | Change Free | | | | | | | Change Day | |

The following widgets will appear in the Cybersecurity tab, depending on the types of security events that have occurred on the network. Click the **Refresh All** ($^{\circ}$) icon in the top-right to update the data of all the widgets.

- Top 5 Layer 3-7 Policy Events by Source IP
- Top 5 Layer 3-7 Policy Events by Destination IP
- Top 5 IPS Policy Events by Source IP
- Top 5 IPS Policy Events by Destination IP
- Top 5 Protocol Filter Policy Events by Source IP
- Top 5 Protocol Filter Policy Events by Destination IP
- Top 5 ADP Policy Events by Source IP
- Top 5 ADP Policy Events by Destination IP

To check detailed information, click the bar of the corresponding IP address in the widget, or click **Show Event Log** at the bottom of each widget to jump to the cybersecurity event log.

Policy Profile Management

This section allows users to manage policy profiles, inspection objects, and interface objects that can be applied to multiple devices.

This section contains the following tabs:

- Policy Profile: Manage policy profiles for devices.
- Inspection Object: Manage inspection objects for policy profiles.
- Interface Object: Manage interface objects for policy profiles.

Policy Profiles

To access the **Policy Profile** page, in the function tree, navigate to **Menu** (=) > **Firewall Policy Management** > **Policy Profile Management** and go to the **Policy Profile** tab.

Policy Profile Management

| Policy P | rofile Inspection Object | t Interface Object | | | |
|----------|--------------------------|-----------------------|---------------|-----------------|------------|
| e G | 0 of 2 selected 💙 | | | Q Search | |
| | Profile Name | Description | Device In Use | Schedule In Use | |
| • / | Profile 1 | Profile 1 Description | 1 ••• | Yes | |
| • 🖍 | Profile 2 | Profile 2 Description | 1 ••• | Yes | |
| | | | | | 1 - 2 of 2 |
| | | | | | |

Policy profiles aggregate various firewall policies and can be deployed to devices based on network security requirements.

You can configure the following types of policies:

- Layer 3-7 Policy: Provides secure traffic control, allowing users to control network traffic based on security needs.
- Session Control: Protects network hosts or services from exceeding performance limitations.
- **DoS Policy**: Provides different DoS protection functions for detecting or defining abnormal packet formats or traffic flows.
- **IPS Policy**: Performs intrusion detection and prevention to protect networks from security threats.



NOTE

"**Device in Use**" indicates the number of devices the policy profile is being used by. Policy profiles applied to devices cannot be deleted. Click the "..." icon in the column to see details about the referenced device(s).



NOTE

"**Schedule in Use**" indicates there is an upcoming scheduled deployment to apply this policy profile to the referenced device(s). To avoid any disruptions or deployment failures, policy profiles with planned deployments cannot be deleted.

Creating a Layer 3-7 Policy Profile

- 1. Navigate to Menu (=) > Firewall Policy Management > Policy Profile Management.
- 2. Go to the **Policy Profile** tab.
- 3. Click the Add () icon in the top-left corner to create a new policy profile.

| Policy | Profile Managen | nent | | | | |
|------------|---------------------------|-----------------------|---------------|-----------------|----------|------------|
| Policy F | Profile Inspection Object | ct Interface Object | | | | |
| 8 C | 0 of 2 selected 🗸 | | | | Q Search | |
| | Profile Name | Description | Device In Use | Schedule In Use | | |
| • / | Profile 1 | Profile 1 Description | 1 ••• | Yes | | |
| • • | Profile 2 | Profile 2 Description | 1 ••• | Yes | | |
| | | | | | , | 1 - 2 of 2 |
| | | | | | | |

The Create Policy Profile will appear.

| = MX view ONE | | 🌐 English | 💄 admin 👻 |
|---|-------------------------------------|-----------|-----------|
| < Create Policy | Profile | | |
| Profile Name * Profile 1 Description Profile 1 Description | 8/19 | | |
| Layer 3-7 | Configure Layer 3-7 Firewall Policy | | ~ |
| Session Control | Configure Session Control Policy | | ~ |
| DoS | Configure DoS Policy | | ~ |
| IPS | Configure IPS Policy | | ~ |
| Apply Cancel | | | |

- 4. Enter a name and description for the profile.
- 5. Expand the Layer 3-7 profile options.

| Layer 3-7 | | Cor | nfigure Layer | 3-7 Firewall Policy | | | | | | | | | | |
|--|----------|------------|---------------|---------------------------|--------------------|-----------------------|-----------------------|------------------------------------|-------------|---------------------|-----------------------------|--------|---------------|--|
| Global Firewa Enable * Disabled | II Setti | ngs | - E | vent Log * nabled | | | | | | | | | | |
| Default Policy Action * Deny All | / Settin | gs | - E | ^{og *} nabled | * | Severity * Warning | | Log Destination * Local Storage | | | | | | |
| Ξ 1Ξ | 0 of | 2 selected | ~ | | | | | | | | | Q | Search | |
| | Index | Status | Name | Event | Incoming Interface | Outgoing Interface | Filter Mode | Source Address | Source Port | Destination Address | Destination Port or Protoco | Action | Description | |
| • / | 1 | Enabled | Policy_1 | Disabled/Warning | LAN | Any | IP and Port Filtering | range | test | test1 | Any | Allow | Policy_1_Desc | |
| • / | 2 | Enabled | Policy_2 | Enabled/Warning | Bridge | Bridge | IP and Port Filtering | test1 | Any | subnet | Remote-Desktop | Allow | Policy_2_Desc | |
| | 1025 | Enabled | default-rule | | Any | Any | IP and Port Filtering | Any | Any | Any | Any | | | |
| | | | | | | | | | | | | | | |

- 6. Configure global firewall settings:
 - > Enforcement: Enable or disable Layer 3-7 policy profiles.
 - **Event Log**: Enable or disable logging Layer 3-7 policy events.
- 7. Configure the default policy settings:
 - > Action: Choose to allow or deny packets that do not match any configured policy rules.
 - > Log: Enable or disable logging Layer 3-7 policy events.
 - > Severity: Select the severity level for the event. The default is Warning.
 - **Log Destination**: Choose where to store the event logs. The default is **Local Storage**.

8. Click the **Add** (**I**) icon to add a Layer 3-7 policy.

| Index* | | | | | | |
|----------------------------|-------|----------------------|-------|-----------------|---|--|
| 1 | | | | | | |
| 1-1024 | | | | | | |
| Status * | | | | | | |
| Enabled | * | | | | | |
| Mama X | | | | | | |
| Name - | 0/32 | | | | | |
| Description | | | | | | |
| Description | | | 0/128 | | | |
| Log * | | Severity * | | Log Destination | | |
| Disabled | * | Warning | * | Local Storage | * | |
| Incoming Interface * | | Outgoing Interface * | | | | |
| Any | * | Any | * | | | |
| Action * | | | | | | |
| Allow | * | | | | | |
| Filter Mode * | | | | | | |
| IP and Port Filtering | 9 | * | | | | |
| Source IP Address * | | | | | | |
| Any | | * | ÷ | | | |
| Source Port * | | | | | | |
| Any | | * | ÷ | | | |
| Destination IP Address * | | | | | | |
| Any | | * | ÷ | | | |
| Destination Port or Protoc | col * | | | | | |
| A | | * | + | | | |

The Create Layer 3-7 Policy screen will appear.

- 9. Configure the following settings:
 - > **Index**: Specify the index for the policy profile.
 - > **Status**: Enable or disable the policy profile.
 - > **Name**: Enter a name for the policy profile.
 - > **Description**: Enter a description for the policy profile.
 - > Log: Enable or disable event logs.
 - > **Severity**: Select the log severity level.
 - Log Destination: If logging is enabled, choose where the logs will be stored. Multiple options can be selected.
 - > **Incoming/Outgoing Interface**: Select the incoming and outgoing interfaces.
 - > Action: Select the action when traffic matches the policy rule.
 - Filter Mode: Select a filtering mode. Depending on the selected mode, configure the following settings:
 - **IP and Port Filtering:**
 - □ **Source/Destination IP Address**: Select **Any** or a preconfigured filter object. Refer to <u>Creating an Inspection Object</u>.
 - □ **Source Port/Destination Port or Protocol**: Select **Any** or a preconfigured interface object. Refer to <u>Creating an Interface Object</u>.
 - **IP and Source MAC Binding:**
 - □ Source MAC Address: Specify the source MAC address.
 - □ **Source IP Address**: Select a preconfigured filter object. Refer to <u>Creating an Inspection</u> <u>Object</u>.
 - Source MAC Filtering:
 - □ Source MAC Address: Specify the source MAC address.
- 10. Click **Create** to create the Layer 3-7 policy.

11. Click Apply.

Creating a Session Control Policy Profile

- 1. Navigate to Menu (=) > Firewall Policy Management > Policy Profile Management.
- 2. Go to the **Policy Profile** tab.
- 3. Click the **Add** (•) icon in the top-left corner to create a new policy profile.

| Ρ | olicy | Profile Managen | nent | | | | |
|---|------------|---------------------------|-----------------------|---------------|-----------------|----------|----------|
| L | Policy | Profile Inspection Object | t Interface Object | | | | |
| I | 8 G | 0 of 2 selected 🗸 | | | | Q Search | |
| | | Profile Name | Description | Device In Use | Schedule In Use | | |
| | • | Profile 1 | Profile 1 Description | 1 ••• | Yes | | |
| | • | Profile 2 | Profile 2 Description | 1 ••• | Yes | | |
| | | | | | | | 1-2 of 2 |

The Create Policy Profile will appear.

| \equiv MX view ONE | | 🌐 English | 💄 admin 👻 |
|---|-------------------------------------|-----------|-----------|
| < Create Policy F | Profile | | |
| Profile Name * Profile 1 Description Profile 1 Description | 8/20 20/20 | | |
| Layer 3-7 | Configure Layer 9-7 Firewall Policy | | ~ |
| Session Control | Configure Session Control Policy | | ~ |
| DoS | Configure DoS Policy | | ~ |
| IPS | Configure IPS Policy | | ~ |
| Apply Cancel | | | |

- 4. Enter a name and description for the profile.
- 5. Expand the Session Control profile options.

| Session Control C | onfigure Session Control Policy | | | | | | ^ |
|---|---------------------------------|------------------|-----------------------|-------------------------|---------|--|---|
| t t t t t t t t | · • | | | | | Q Search | |
| Index Status | Name Destination IP | Destination Port | Total TCP Connections | Concurrent TCP Requests | Action | | |
| 🗌 🧨 1 Enabled | Session_1 Computer_1 | Any | 10 | 10 | Drop | | |
| 🗌 🖍 2 Enabled | Session_2 range | DB_Port | 20 | 20 | Monitor | | |
| | | | | | | Items per page: 10 \bullet 1-2 of 2 < < > > | |

6. Click the **Add** (¹¹) icon to add a Session Control policy.

The Create Session Control Policy screen will appear.

| Index * | | | | |
|--|-------------|------------------------------|----------------------|--|
| 1 | | | | |
| 1 - 64 | | | | |
| Status * | | | | |
| Enabled | • | | | |
| Name * | | | | |
| | 0/32 | | | |
| Severity * | | Log Destination | | |
| Warning | - | Local Storage | - | |
| Action * | | | | |
| Drop | | | | |
| Diop | Ŧ | | | |
| TCP Destinat | • tion * | | | |
| TCP Destinat | tion * | - | 0 | |
| TCP Destinat | tion * | • | 0 | |
| TCP Destinat IP Address * Port * TCP Connect | tion * | • • | 0 | |
| TCP Destinal IP Address * Port * TCP Connect Total TCP Cor | tion * | • • • Concurrent TC | + + P Requests | |

- 7. Configure the following settings:
 - > **Index**: Specify the index for the policy profile.
 - > **Status**: Enable or disable the policy profile.
 - > **Name**: Enter a name for the policy profile.
 - > **Severity**: Select the log severity level.
 - Log Destination: If logging is enabled, choose where the logs will be stored. Multiple options can be selected.
 - > **Action**: Select the action when traffic matches the policy rule.
 - IP Address: Select Any or a preconfigured inspection object. Refer to <u>Creating an Inspection</u> <u>Object</u>.
 - > Port: Select Any or a preconfigured interface object. Refer to <u>Creating an Interface Object</u>.
 - > **Total TCP Connections**: Specify the maximum allowed TCP connections.
 - > **Concurrent TCP Requests**: Specify the maximum allowed concurrent connections.
- 8. Click **Create** to create the Session Control policy.
- 9. Click Apply.

Creating a DoS Policy Profile

- 1. Navigate to Menu (=) > Firewall Policy Management > Policy Profile Management.
- 2. Go to the **Policy Profile** tab.

3. Click the Add (1) icon in the top-left corner to create a new policy profile.

| Polic | y Profile Ma | anagemen | t | | | | |
|-------|------------------|-----------------|--------------------|---------------|-----------------|----------|------------|
| Poli | y Profile Ins | spection Object | Interface Object | | | | |
| 0 | C 0 of 2 selecte | d 🗸 | | | | Q Search | |
| | Profile Name | Des | scription | Device In Use | Schedule In Use | | |
| | Profile 1 | Pro | file 1 Description | 1 ••• | Yes | | |
| | Profile 2 | Pro | file 2 Description | 1 ••• | Yes | | |
| | | | | | | | 1 - 2 of 2 |

The Create Policy Profile will appear.

| \equiv MX view ONE | | 4 English 🗶 admin 👻 |
|---|-------------------------------------|---------------------|
| < Create Policy F | Profile | |
| Profile Name * Profile 1 Description Profile 1 Description | 8/79 | |
| Layer 3-7 | Configure Layer 3-7 Firewall Policy | ~ |
| Session Control | Configure Session Control Policy | ~ |
| DoS | Configure DoS Policy | ~ |
| IPS | Configure IPS Policy | ~ |
| Apply Cancel | | |

- 4. Enter a name and description for the profile.
- 5. Expand the **DoS** profile options.

| All Protection Types | | | | |
|----------------------------|----------------------|------------------|---------------|-------|
| ssion SYN Protection | Port-Scan Protection | Flood Protection | 1 | |
| TCP Sessions Without SYN 🕕 | Null Scan | CMP-Flood | Limit | |
| | 🗹 Xmas Scan | | 1000 | pkt/s |
| | NMAP-Xmas Scan | SYN-Flood | Limit | |
| | SYN/FIN Scan | | 1000 | pit/s |
| | FIN Scan | ARP-Flood | Limit | |
| | NMAP-ID Scan | | 1000 | pkt/s |
| | SYN/RST Scan | UDP-Flood | Limit 2000 | |
| | | | 1 - 8000 | pkt/s |

- 6. Configure the following settings:
 - DoS Settings: Check the box of the DoS types you want to enable. If necessary, specify the packet limit.
 - > Log: Enable or disable event logs.
 - > **Severity**: Select the log severity level.
 - Destination: If logging is enabled, choose where the logs will be stored. Multiple options can be selected.
- 7. Click Apply.

Creating an IPS Policy Profile

- 1. Navigate to Menu (=) > Firewall Policy Management > Policy Profile Management.
- 2. Go to the **Policy Profile** tab.

3. Click the **Add** (•) icon in the top-left corner to create a new policy profile.

| Policy | olicy Profile Management | | | | | | | |
|------------|--------------------------|-----------------------|---------------|-----------------|----------|------------|--|--|
| Policy | Profile Inspection Obje | ct Interface Object | | | | | | |
| B C | 0 of 2 selected 🗸 | | | | Q Search | | | |
| | Profile Name | Description | Device In Use | Schedule In Use | | | | |
| • • | Profile 1 | Profile 1 Description | 1 ••• | Yes | | | | |
| • • | Profile 2 | Profile 2 Description | 1 ••• | Yes | | | | |
| | | | | | | 1 - 2 of 2 | | |

The Create Policy Profile will appear.

| \equiv MX view ONE | | 🌐 English | 💄 admin 👻 |
|---|-------------------------------------|-----------|-----------|
| < Create Policy F | rofile | | |
| Profile Name * Profile 1 Description Profile 1 Description | 8/20 20/20 | | |
| Layer 3-7 | Configure Layer 3-7 Firewall Policy | | ~ |
| Session Control | Configure Session Control Policy | | ~ |
| DoS | Configure DoS Policy | | ~ |
| IPS | Configure IPS Policy | | ~ |
| Apply Cancel | | | |

- 4. Enter a name and description for the profile.
- 5. Expand the **IPS** profile options.

| Bolic province Conceptione parameters Conceptione parameters | IPS | Config | gure IPS Policy | | | | | | | | ^ |
|---|-----------------------|--|---|--|--|---|---|----------|---|--|---|
| Before configuring any policies, please make sure the intruston Prevention System (IPS) function is enabled on the Firewall > Advanced Protection > Configuration screen in the device's web interface. | Package V 8.0.0015 | ersion * | | | | | | | | | |
| C C 0 0 2 search C 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Before | Before configuring any policies, please make sure the intrusion Prevention System (IPS) function is enabled on the Firewall > Advanced Protection > Configuration screen in the device's web interface. | | | | | | | | | |
| ID Name Status Category Severity Action Image: | Ŧ | C 0 of 2 selected V | | | | | | Q Search | h | | |
| Image: ModeSide Side Side Side Side Side Side Sid | | ID | Name | Status | Category | Severity | Action | | | | |
| O 443307667 IGMP Bid Exable Protocol Attack Protection Medium Monitor Impact Impact Intermedia Biology 701 ON Flood works by sanding severing sever | | 4026531840 40265 40265 40265 4026 4026 4026 4026 4026 4026 4026 4026 4026 402 4 | TCP SYN Flood | Enabled | Flooding & Scan | High | Reset | | | | |
| Impact Deal of service Informat Deal of service Informat Deal Deal Deal Deal Deal Deal Deal Deal | | 4043309067 | IGMP Bad | Enabled | Protocol Attack Protection | Medium | Monitor | | | | |
| палгорен силиеськие в несему жееринд не зекчен по н сазывад. | | Impact Denial of service Reference MISC.RFC 793 Description SYN Flood works by sendir for the pending TCP conne (reset) message to the ser address. The SYN-ACK me period of time. If there are connections. In some case half-open connections ther | ig several SYN packets ction. The source addir ver, freeing the memory asage will time out and enough half-open TCP s, the server will crash eby keeping the server | with fake source IP add ses cannot be an active set aside by the initial 3 the server will send it a connections, the server because there is no free from crashing. | resses to the victim server. The se P address because if it were, that YM packet. The server then sends agin, keeping memory allocated to will run out of memory and cannot memory. Some servers implemen | rver then alloca host would sen a SYN-ACK to t the connection allow additiona t a limit to the r | tes memory a IGT for a longer TOP United TOP United of | | | | |

6. Select a previously uploaded IPS software package version. Refer to <u>Security Package Management</u> for more information.

| IPS A |
|---|
| Package Version * |
| - · · |
| |
| Before configuring any policies, please make sure the Intrusion Prevention System (IPS) function is enabled on the Firewall > Advanced Protection > Configuration screen in the device's web interface. |

7. In the IPS rule table, check the box of the rule(s) you want to configure. You can select multiple rules at once.

8. Click the **Rule Settings** ([‡]) icon.

The Rule Settings screen will appear.

| Status * | | |
|----------|---|--|
| Enabled | * | |
| Action * | | |
| Reset | • | |
| | | |

- 9. Configure the following settings:
 - > **Status**: Enable or disable the selected rule(s).
 - > Action: Select the action when traffic matches the policy rule.
- 10. Click Apply.
- 11. On the **Policy Profile** screen, click **Apply**.

Editing a Policy Profile

- 1. Navigate to Menu (≡) > Firewall Policy Management > Policy Profile Management.
- 2. Go to the **Policy Profile** tab.
- 3. Click the **Edit** (🖍) icon of the profile you want to edit.
- 4. Modify the profile settings. Refer to the corresponding section for settings information:
 - Creating a Layer 3-7 Policy Profile
 - Creating a Session Control Policy Profile
 - Creating a DoS Policy Profile
 - > Creating an IPS Policy Profile
- 5. Click Apply.

Deleting a Policy Profile

- 1. Navigate to Menu (=) > Firewall Policy Management > Policy Profile Management.
- 2. Go to the **Policy Profile** tab.
- 3. Check the box of the policy profile(s) you want to delete.
- 4. Click the **Delete** (¹) icon.
- 5. When prompted to confirm, click **Delete**.

Inspection Objects

To access the **Inspection Object** page, in the function tree, navigate to **Menu** (\equiv) > **Firewall Policy Management** > **Policy Profile Management** and go to the **Inspection Object** tab.

| Polic | y Profile Man | agement | | | | |
|-------|-------------------|------------------------------|----------------------------|------------|----------|------------|
| Poli | cy Profile Inspec | tion Object Interface Object | | | | |
| ۰ | C 0 of 2 selected | • | | | Q Search | |
| | Name | Туре | Detail | References | | |
| | 🖍 UDP | User-defined Service | UDP 5555 | 0 | | |
| | / IP Range | IP Address and Subnet | 192.168.1.1 - 192.168.1.10 | 1 ••• | | |
| | | | | | | 1 - 2 of 2 |
| | | | | | | |

Inspection objects contain the IP address and subnet, network services, industrial application services, and user-defined services that are applied to policy rules using the object.

Creating an Inspection Object

- 1. Navigate to Menu (=) > Firewall Policy Management > Policy Profile Management.
- 2. Go to the Inspection Object tab.
- 3. Click the Add () icon in the top-left corner to create a new inspection object.

The Create Object window will appear.

| 32 | Name * | 0 | | |
|----|---------------|------|---|--|
| | | 0/32 | | |
| | Object Type * | | • | |
| | | | | |
| | | | | |

- 4. Configure the following settings:
 - > **Name**: Enter a name for the object.
 - Object Type: Select the object type. Depending on the selected object, configure the following settings:
 - □ **IP Address and Subnet**: Depending on the selected IP Type, enter the IP address, IP range, or subnet.
 - □ Network Service: Check the box of the service(s) you want to add to the object.
 - □ **Industrial Application Service**: Check the box of the industrial application service(s) you want to add to the object.
 - □ **User-defined Service**: Select the IP protocol. Depending on the selected protocol, specify the port, port range, ICMP Type and Code, or protocol decimal
- 5. Click Create.

Editing an Inspection Object

- 1. Navigate to Menu (≡) > Firewall Policy Management > Policy Profile Management.
- 2. Go to the Inspection Object tab.
- 3. Click the **Edit** (🖍) icon of the object you want to edit.
- 4. Modify the object settings.
- 5. Click **Apply**.

Deleting an Inspection Object

- 1. Navigate to Menu (≡) > Firewall Policy Management > Policy Profile Management.
- 2. Go to the **Inspection Object** tab.
- 3. Check the box of the object(s) you want to delete.
- 4. Click the **Delete** (¹) icon.
- 5. When prompted to confirm, click **Delete**.

Interface Objects

To access the **Interface Object** page, in the function tree, navigate to **Menu** (\equiv) > **Firewall Policy Management** > **Policy Profile Management** and go to the **Interface Object** tab.

| Policy | olicy Profile Management | | | | | | | | | |
|--------|---|---------|-----------|------------------------|-----------|--------|--|--|--|--|
| Polic | Policy Profile Inspection Object Interface Object | | | | | | | | | |
| 0 | C 0 of 2 selected | * | | | Q, Search | _ | | | | |
| | Interface Na | me Mode | VLAN ID / | Bridge Type References | | | | | | |
| | 🖍 VLAN 1 | VLAN | 1 | 0 | | | | | | |
| | Bridge 1 | Bridge | Zone | 1 | | | | | | |
| | | | | | 1- | 2 of 2 | | | | |

Interface objects contain the VLAN interface and bridge interface that are applied to policy rules using the object.

Creating an Interface Object

- 1. Navigate to Menu (=) > Firewall Policy Management > Policy Profile Management.
- 2. Go to the **Interface Object** tab.

The Create Interface window will appear

3. Click the Add ([■]) icon in the top-left corner to create a new interface object.

| Create Interfac | e | | |
|------------------|----------|--------|-------|
| Interface Name * | • | | |
| | 0 / 50 | | |
| Mode | | | |
| VLAN | O Bridge | | |
| VLAN * | | | |
| 1 ~ 4094 | | | |
| | | | |
| | | CANCEL | APPLY |

- 4. Configure the following settings:
 - > **Name**: Enter a name for the object.
 - Mode: Select the interface mode. If set to VLAN, specify the VLAN ID. If set to Bridge, select the Bridge mode.
- 5. Click Apply.

Editing an Interface Object

- 1. Navigate to Menu (=) > Firewall Policy Management > Policy Profile Management.
- 2. Go to the **Interface Object** tab.
- Click the Edit (
) icon of the object you want to edit.
- 4. Modify the object settings.
- 5. Click Apply.

Deleting an Interface Object

- 1. Navigate to Menu (=) > Firewall Policy Management > Policy Profile Management.
- 2. Go to the Interface Object tab.
- 3. Check the box of the object(s) you want to delete.
- 4. Click the **Delete** (¹) icon.
- 5. When prompted to confirm, click **Delete**.

Policy Profile Deployment

To access the **Policy Profile Deployment** page, in the function tree, navigate to **Menu** (=) > **Firewall Policy Management** > **Policy Profile Deployment**.

| Po | olicy Profile Deployment | | | | | | | | | | |
|----|--------------------------|----------------------|--------|-----------------------|-----------------------|------------------------------|----------------------|----------------|-------------------|---------------|--------------|
| ¢ | 3 | 0 device(s) selected | | | | | | | Q. : | Search | |
| 0 | | Device Name | Online | Status / Profile Name | Scheduling | Last Update Time | Product Model | Device IP | MAC | Serial Number | Location |
| C | | ROUTER_1 | • | Synced / Profile_1 | Weekly Sun. 18:30 ••• | Schedule 2024-09-04 14:18:02 | EDR-G9010-VPN-2MGSFP | 192.168.127.35 | 00:90:E8:91:86:82 | TBZKB1155165 | ROUTER_loc_1 |
| 0 | P | ROUTER_2 | • | Synced / Profile_2 | | Manually 2024-09-03 18:15:42 | EDR-8010-VPN-2MGSFP | 192.168.127.82 | 00:90:E8:80:10:A4 | TBZKB1155166 | ROUTER_loc_2 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

From this screen, users can deploy policy profiles to multiple managed devices at a time and check the synchronization status.

Deploying Policy Profiles to Managed Devices

- 1. Navigate to Menu (≡) > Firewall Policy Management > Policy Profile Deployment.
- 2. Check the box of the device(s) you want to apply a policy profile to.
- 3. Click the **Sync Profile** (\bigcirc) icon in the top-left corner.

The Sync Profile to Device(s) window will appear.

| Sync Profile To Device(s) | | |
|--|--------|-------|
| 2 item(s) selected | | |
| Profile Name * EDtest-policyProfile • | | |
| | CANCEL | APPLY |

- 4. Select a previously configured policy profile. Refer to <u>Policy Profile Management</u> for instructions on how to create policy profiles.
- 5. Click **Apply**.

NOTE

You can also deploy policy profiles via **Topology > Cybersecurity Controls > Policy Profile Deployment** or via **Device Management > Configuration and Control > Cybersecurity Controls > Policy Profile Deployment**.

Scheduling a Policy Profile Deployment for Managed Devices

Deploying a policy profile to a device may disrupt services or operations. To minimize the potential impact of policy profile deployments, users can schedule the deployment for specific times where they are least likely to affect operations. Schedules can be configured to execute only once, or on a daily or weekly recurring basis.

- 1. Navigate to Menu (≡) > Firewall Policy Management > Policy Profile Deployment.
- 2. Check the box of the device(s) you want to configure a scheduled deployment for.

3. Click the **Schedule Settings** (\Box) icon in the top-left corner.

The $\ensuremath{\textbf{Schedule Settings}}$ window will appear.

| Schedule Settings | | | |
|--------------------|---|--------|-------|
| 2 item(s) selected | | | |
| Select File * | • | | |
| Scheduling Mode * | • | | |
| | | CANCEL | APPLY |

- 4. Configure the following settings:
 - > Select File: Select a policy profile to apply to the selected device(s).
 - Scheduling Mode: Select a scheduling mode. Depending on the selected mode, configure the following settings:
 - **One Time**: Select the date and time. One-time schedules can be configured for up to 30 days in the future.
 - **Daily**: Select the time and the schedule period. Daily schedules can be configured for up to 90 days in the future.
 - □ **Weekly**: Select the day of the week, the time, and schedule period. Weekly schedules can be configured for up to 90 days in the future.
- 5. Click Apply.

Deleting a Scheduled Profile Policy Deployment

- 1. Navigate to Menu (≡) > Firewall Policy Management > Policy Profile Deployment.
- 2. Check the box of the device(s) with the scheduled deployment you want to delete.
- 3. Click the **Delete Schedule** (^I) icon.
- 4. When prompted to confirm, click **Delete**.

Security Package Management

This section describes how to manage the security package either manually from a local PC or automatically by updating to the Moxa Update Server.

This section contains the following tabs:

- Security Package Files: Manage security package files for supported devices.
- Log: Shows security package-related event logs.
- Update Settings: Configure scheduled security package update checks.

Security Package Files

From the Security Package Files tab, you can update and manage security package files.

Checking the Security Package Status

The **Update Security Package** section provides information about the Moxa Update Server connection status, the time and date of the last update check, and the result of the last check.

To access this section, navigate to Menu (=) > Firewall Policy Management > Security Package Management.

Security Package Management

| | • |
|-------------------------------------|---|
| Update Security Package 1 | |
| Moxa Update Server Status | : 📀 Connected Check Now |
| Last Connection Check | : 2024-09-04 17:03:00 |
| Last Security Package Update Result | : No new version detected (2024-09-04 14:55:41, manually) |
| Check Security Package | |

The widget shows the following information:

| Field | Description |
|-----------------------|---|
| Moxa Update Server | Shows the current status of the connection to the Moxa update server. |
| Status | |
| Last Connection Check | Shows the date and time of the last connection check. |
| Last Security Package | Shows the result of the most recent security package update check. |
| Update Result | |

To manually check for security package updates, click the **Check Security Package** button. A list of models and any available security package updates will be shown. The models shown in the list are configured in the **Update Settings** tab. To set up a scheduled update check, refer to <u>Scheduling a Security</u> <u>Package Update Check</u>.

| Secu | ity Package Check | |
|------|---------------------------------|----------|
| G | 0 of 3 selected 🛩 | Q Search |
| | Version | |
| | EDF-G1002 | ~ |
| | Security package is up to date. | |
| | EDR-8010 | ~ |
| | (i) v10.0.25 | |
| | EDR-G9004 | ~ |
| | ⑦ v10.0.25 | |
| | EDR-G9010 | ~ |
| | Security package is up to date. | |
| | TN-4900 | ~ |
| | () v10.0.25 | |
| | | Close |

Uploading a Security Package

- 1. Navigate to Menu (≡) > Firewall Policy Management > Security Package Management.
- 2. Go to the **Security Package Files** tab.
- Click the Add (¹) icon in the top-left corner to upload a security package. The Upload Package window will appear.

4. Drag and drop or browse to the package file on the local computer and enter a description for the file.

| Description | | |
|-------------------------|---|--|
| | 0 / 255 | |
| Upload a package file (| .pkg) | |
| | Drag and drop a file here, or <u>browse</u> . | |

5. Click Upload.

••

NOTE

"**Profile in Use**" indicates the number of policy profiles using the corresponding security package. Package files used by policy profiles cannot be deleted. Click the "..." icon in the column to see details about the referenced policy profile(s).

NOTE

"**Schedule in Use**" indicates there is an upcoming scheduled deployment to apply this security package to the referenced device(s). To avoid any disruptions or deployment failures, security packages with planned deployments cannot be deleted.

Viewing Detailed Security Package Information

- 1. Navigate to Menu (≡) > Firewall Policy Management > Security Package Management.
- 2. Go to the Security Package Files tab.
- 3. In the package file list, click the **Info** (\bigcirc) icon of the package file you want to view details for.
- 4. Click the **Info** (\bigcirc) icon again to close the details section.

Downloading a Security Package

- 1. Navigate to Menu (≡) > Firewall Policy Management > Security Package Management.
- 2. Go to the **Security Package Files** tab.
- 3. In the package file list, click the **Download** () icon of the package file you want to download.

Deleting a Security Package

- 1. Navigate to Menu (≡) > Firewall Policy Management > Security Package Management.
- 2. Go to the Security Package Files tab.
- 3. Check the box of the package(s) you want to delete.
- 4. Click the **Delete** (¹) icon.
- 5. When prompted to confirm, click **Delete**.

Event Logs

From the **Event Logs** tab, you can view security package files event logs.

Viewing Security Package Logs

- 1. Navigate to Menu (≡) > Firewall Policy Management > Security Package Management.
- 2. Go to the **Event Logs** tab.
- 3. You can perform the following actions:
 - a. Click the **Download All Logs** () icon to export the current search results as a CSV file.
 - b. Click the **Refresh** ($^{m{C}}$) icon to update the event log table.

The event log table shows the following information:

| Field | Description |
|----------|---|
| Time | The time the log entry was created. |
| Severity | The severity level assigned to the event. |
| Event | The category of the event. |
| Message | Additional details about the event. |

Scheduled Update Check

From the **Scheduled Update Check** tab, you can configure a scheduled time and period to automatically check the Moxa server for security package updates.

Scheduling a Security Package Update Check

- 1. Navigate to Menu (≡) > Firewall Policy Management > Security Package Management.
- 2. Go to the **Update Settings** tab.

| Update Security Packa | ge 🚯 | |
|---|---|---|
| Moxa Update Server Status | : 🥝 Conne | cted Check Now |
| Last Connection Check | : 2025-01-19 | 17:40:53 |
| Last Security Package Update | Result : 2/2 file dow | nloaded (2025-01-17 00:09:21, manually) |
| Check for Package Update | s | |
| Security Packages File | Event Logs | Scheduled Update Check |
| Automatically check for secur | ity package updates for | the specified models based on a user-specified schedu |
| Automatically check for secur Enabled Scheduling Mode Daily | ity package updates for Disabled | the specified models based on a user-specified schedu |
| Automatically check for secur Enabled Scheduling Mode Daily Time * | ity package updates for Disabled Weekly | the specified models based on a user-specified schedu |
| Automatically check for secur Enabled Check for secur Enabled Daily Time * Period * | ity package updates for Disabled Weekly | the specified models based on a user-specified schedu |
| Automatically check for secur Enabled Scheduling Mode Daily Time * Period * Product Model * EDF-G1002,EDR-8010,EDR | Vity package updates for Disabled Weekly C C C C C C C C C C C C C C C C C C C | the specified models based on a user-specified schedu |

- 3. Set Scheduled Update Check to Enabled.
- 4. Choose a scheduling mode:

- > **Daily**: Set the time of the day to perform the check.
- > **Weekly**: Set the day of the week and time of the day to perform the check.
- 5. Configure the update period. The system will only perform update checks on the specified time and date during this period.
- Select the product model(s). The system will only check for security package updates applicable to the select product models.
- 7. Click Apply.

Security Package Deployment

This section allows users to deploy security packages to managed devices.

Upgrading the Security Package of Managed Devices

Users can manually upgrade the security package of managed devices and check basic security package version information.

The table shows the following security package information:

- **Package Version**: Shows the version of the security package currently installed on the device.
- **Up-to-date**: Indicates if the currently installed version is up to date. If not, the latest available version will be shown.

| Secu | irity Package Deplo | yment | | | | | | | | | | |
|------|---------------------------|--------|----------------------|----------------|---------------|-------------------|-----------------|------------------|------------|------------|------------------|-----------------|
| 1 | C 2 device(s) select | ed | | | | | | | C | Search | | |
| | Device Name 🕆 | Online | Product Model | Device IP | Serial Number | MAC | Package Version | Firmware Version | Up-to-date | Scheduling | Last Update Time | Location |
| ~ | Firewall/VPN Router 00000 | • | EDR-8010-VPN-2GSFP | 192.168.127.82 | TBZKB1155166 | 00:90:E8:80:10:A4 | v10.0.0023 | V3.13.99 | | | | 25.058, 121.453 |
| ~ | Firewall/VPN Router 55165 | • | EDR-G9010-VPN-2MGSFP | 192.168.127.35 | TBZKB1155165 | 00:90:E8:91:86:82 | v10.0.0023 | V3.13.99 | | | | Device Location |
| 4 | | | | | | | | | | | | ÷ |

- 1. Navigate to Menu (≡) > Firewall Policy Management > Security Package Deployment.
- 2. Check the box of the device(s) you want to upgrade the security package for.
- Click the Upgrade (¹) icon to upgrade the security package for the selected device(s). The Upgrade Package window will appear.



- 4. Select a previously uploaded security package to upgrade to. Refer to <u>Uploading a Security Package</u> for instructions on how to upload security packages.
- 5. Click Upgrade.

Scheduling a Security Package Deployment for Managed Devices

Deploying a security package to a device may disrupt services or operations. To minimize the potential impact of security package deployments, users can schedule the deployment for specific times where they are least likely to affect operations. Schedules can be configured to execute only once, or on a daily or weekly recurring basis.

Users can choose to deploy a specific version or the most-recent version of the security package available in the management database.

- 1. Navigate to Menu (=) > Firewall Policy Management > Security Package Deployment.
- 2. Check the box of the device(s) you want to configure a scheduled deployment for.
- 3. Click the **Schedule Settings** (\Box) icon in the top-left corner.

The **Schedule Settings** window will appear.

| Schedule Settings | | | | |
|---------------------|--|--|--------|-------|
| 1 item(s) selected | | | | |
| Select File * | | | | |
| Up-to-date | | | | |
| Onkash dina Manda W | | | | |
| One Time | | | | |
| Daily | | | | |
| Weekly | | | Cancel | Apply |

- 4. Configure the following settings:
 - > Select File: Select a security package version to apply to the selected device(s).
 - Scheduling Mode: Select a scheduling mode. Depending on the selected mode, configure the following settings:
 - One Time: Select the date and time. One-time schedules can be configured for up to 30 days in the future.
 - **Daily**: Select the time and the schedule period. Daily schedules can be configured for up to 90 days in the future.
 - □ Weekly: Select the day of the week, the time, and schedule period. Weekly schedules can be configured for up to 90 days in the future.
- 5. Click Apply.

Deleting a Scheduled Security Package Deployment

- 1. Navigate to Menu (≡) > Firewall Policy Management > Security Package Deployment.
- 2. Check the box of the device(s) with the scheduled deployment you want to delete.
- 3. Click the **Delete Schedule** (^I) icon.
- 4. When prompted to confirm, click **Delete**.

Cybersecurity Event Log

If the MXview Security add-on license is activated, an additional Cybersecurity tab will be available on the **Event History** page, showing security events occurring on devices. The events include logs detected by the Trusted Access, Malformed Packets, DoS Policy, L2 Policy, L3-L7 Policy, Protocol Filter Policy, ADP, IPS, and Session Control functions. Refer to <u>Viewing Event History</u>.

Event History

| | System | Network a | ind Device Cybe | rsecurity | | | | | | | | | | | | | | |
|---|---------------------|-----------|------------------------|-----------|-------------|-------------|--------------------|-------------------|-----------------|-------------|--------------------|----------------|------------------|--------------|-----------|------------|--------|-----------------------|
| | DoS Policy 👻 | | | | | | | | | | | | | | | | | |
| | ÷ 🕽 G | | | | | | | | | | | | Q Sea | ch | | | | |
| | Time | Severity | Device Name | EtherType | Subcategory | IP Protocol | Incoming Interface | Source MAC | Source IP | Source Port | Outgoing Interface | Destination IP | Destination Port | TCP Flags | ICMP Type | ICMP Code | Action | Additional Message |
| | 2025-01-17 19:21:54 | Warning | Firewall/VPN Router 24 | 523 2048 | SYN-Flood | TCP | LAN | 5C:92:5E:D7:4C:9F | 192.168.127.200 | 65313 | | 192.168.127.93 | 443 | SYN | | | DROP | |
| | 2025-01-17 19:21:45 | Warning | Firewall/VPN Router 24 | 523 2048 | SYN-Flood | TCP | LAN | 5C:92:5E:D7:4C:9F | 192.168.127.200 | 65196 | - | 192.168.127.93 | 443 | SYN | | - | DROP | |
| | 2025-01-17 19:21:45 | Warning | Firewall/VPN Router 24 | 523 2048 | SYN-Flood | TCP | LAN | 5C:92:5E:D7:4C:9F | 192.168.127.200 | 65195 | - | 192.168.127.93 | 443 | SYN | | - | DROP | |
| 1 | | | | | | | | | | | | | | ltems per pr | ige: 50 + | 1 – 3 of 3 | < < | > >1 |
| J | | | | | | | | | | | | | | | | | | |

The table shows the following information:

| Field | Description |
|--------------------|--|
| Time | The time the event entry was created. |
| Severity | The severity level assigned to the event. |
| Device Name | The host name of the device that generated the event. |
| IPS Severity | The severity level assigned to the IPS event. |
| IPS Category | The category of the IPS event. |
| Ether Type | The Ethernet type of the connection. |
| IP Protocol | The IP protocol of the connection. |
| Incoming Interface | The name of the incoming interface where the event was registered. |
| Source MAC | The source MAC address of the connection. |
| Source IP | The source IP address of the connection. |
| Source Port | The source port of the connection. |
| Outgoing Interface | The name of the outgoing interface where the event was registered. |
| Destination IP | The destination IP address of the connection. |
| Destination Port | The destination port of the connection. |
| TCP Flags | The TCP flags of the TCP protocol. |
| ІСМР Туре | The ICMP type of the ICMP protocol. |
| ICMP Code | The ICMP Code of the ICMP protocol. |
| Action | The action performed based on the policy settings. |
| Additional Message | The additional message provided with the event. |

Viewing Cybersecurity Events

- 1. Navigate to Menu (≡) > Event Management > Event History > Cybersecurity.
- 2. Select the event type from the drop-down menu.

Event History

| | System | Network and Device | | Cybersecurity | |
|---|------------------------|--------------------|----------------|---------------|-----|
| | Trusted Access - | | | | |
| | Trusted Access | | | | |
| | Malformed Packets | Severity | Device Name | EtherType | Pro |
| | DoS Policy | | Nume | | 110 |
| | Layer 2 Policy | | | | |
| - | Layer 3-7 Policy | | | | |
| | Protocol Filter Policy | | | | |
| < | ADP | | | | |
| | IPS | | | | |
| | Session Control | | | | |

3. To filter event logs:

a. Click the **Filter** (=) icon to open the filter menu. Select a start/end date and time or severity from the respective drop-menu.

| ilters | - | ⊈ × |
|------------|-------|-------|
| Start Date | | • |
| Start Time | | g |
| End Date | | ÷ |
| End Time | | g |
| Severity | | |
| c | Clear | Apply |

- b. Click the **Options** (³) icon to configure advanced filters. Check the box of the specific event(s) you want to filter and click **Apply**. The event log will refresh immediately to reflect the selected criteria.
- 4. To export logs:
 - a. Click the **Download All Logs** () icon to export the current results as a CSV file
- 5. To refresh the event log data:
 - a. Click the **Refresh** ($^{m{C}}$) icon to renew the search results.

Cybersecurity Event Settings

If the MXview Security add-on license is activated, an additional **Cybersecurity Event** tab will be added to the **Event Settings** screen. From this tab, users can configure events for specific cybersecurity events. Refer to <u>Events and Notifications</u>.

| | | | Q Search |
|-------------------|----------------------------------|---|---|
| Description | Device Count | Event | Filter Rule |
| Filter Omron FINS | 1 | Protocol Filter Policy | Application Protocol ••• |
| | | | Items per page: 1 - 2 of 2 < < > > |
| | | | |
| | Description Filter Omron FINS | Description Device Count Filter Omron FINS 1 | Description Device Count Event Filter Omron FINS 1 Protocol Filter Policy |

Adding a Cybersecurity Event

1. Navigate to Menu (≡) > Event Management > Event Settings > Cybersecurity Event.

2. Click the **Add** () icon in the top-left corner.

| he Add Cybe | ersecurity Eve | nt window will appear | r. |
|-----------------------------|----------------|-----------------------|---------------------------|
| Add Cybersecurity | y Event | | |
| 1 Notification Informat | tion | 2 Choose Devices | 3 Choose Event and Filter |
| Status * | | | |
| Enabled | O Disabled | | |
| Event Name * | 0 | | |
| | 0 / 50 | | |
| Description | | | |
| | | 0 / 255 | |
| | | | Cancel Next |

- 3. Enter a name and description for the event.
- 4. Click Next.
- 5. Select the device(s) that will send notifications for the specified event(s).

| Add C | Cybersecurity Event | | | | | | |
|------------|------------------------------|--------|--------------------|-------------------------|------------------|---------------------|---------------------|
| 🖉 No | tification Information | | | 2 Choose Devices | | 3 Choo | se Event and Filter |
| ; = | 0 of 2 selected 🗸 | | | | | Q _{Search} | |
| | Device Name 🕈 | Status | Location | Product Model | Serial Number | MAC Address | Firmware Version |
| | Firewall/VPN Router 00000 | • | 25.058, 121.453 | EDR-8010-VPN-2GSFP | TBZKB1155166 | 00:90:E8:80:10:A | 4 V3.13.99 |
| | Firewall/VPN Router 55165 | • | Device Locatio | on EDR-G9010-VPN-2MGSFP | TBZKB1155165 | 00:90:E8:91:86:8 | 2 V3.13.99 |
| | | | | ltems per pa | ge: 10 👻 | 1 − 2 of 2 < | < > > |
| | | | | | | | Back Next |

- 6. Click Next.
- 7. Select the event type and configure the filter rules.
 - a. Select the notification event type from the drop-down menu.

| Add Cybersecurity E | vent | |
|--|-------------------|-------------------------|
| Notification Information | Choose Devices | Choose Event and Filter |
| Notification Event * Trusted Access - | | |
| Event Filter Rule | | |
| Severity Rule | ✓ Severity Mode ✓ | |
| Source IP | Destination IP | |
| Source IP | 1 Destination IP | |
| | | Back Apply |

b. Specify the notification filter rules to determine when the device will send a notification for the event. Filter rule options may differ depending on the selected event type.

| Notification Information | Choose Devices | 3 Choose Event and Filte |
|--------------------------------------|-------------------|--------------------------|
| tification Event * usted Access ~ | | |
| rent Filter Rule | | |
| Severity | | |
| Severity Rule | ▼ Severity Mode ▼ | |
| Source IP | Destination IP | |
| Source IP | Destination IP | |

8. Click Apply.

Adding a Cybersecurity Event Notification

If the MXview Security is enabled, an additional **Cybersecurity Event** category will be added to the **Notification Management** function. This allows users to set up notifications to alert users when specific cybersecurity events occur on the network.

Refer to <u>Configuring New Event Notifications</u> for information and instructions on how to configure event notifications.