

MXsecurity User Manual

Version 4.0, October 2024

www.moxa.com/product

MOXA®

© 2024 Moxa Inc. All rights reserved.

MXsecurity User Manual

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

Copyright Notice

© 2024 Moxa Inc. All rights reserved.

Trademarks

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

Disclaimer

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

Technical Support Contact Information

www.moxa.com/support

Table of Contents

| | |
|---|-----------|
| 1. Introduction | 6 |
| Key Features | 6 |
| Centralized Management | 6 |
| Unified, Error-free Mass Deployment | 6 |
| Real-time Visibility and Monitoring | 6 |
| Event Logs and Alert Notifications | 6 |
| Interactive Map View | 6 |
| Comprehensive Reports | 6 |
| System Requirements | 7 |
| 2. Installation | 8 |
| Downloading MXsecurity | 8 |
| Setting Up the Virtual Machine | 9 |
| Installing MXsecurity on a VMware Workstation | 9 |
| Installing MXsecurity on a VMware ESXi System | 12 |
| Configuring the MXsecurity system | 17 |
| 3. Migration | 20 |
| Migrating to a Newer Version of MXsecurity (VMware Workstation) | 20 |
| Migrating to a Newer Version of MXsecurity (ESXi) | 24 |
| Migrating Licenses From MXsecurity v2.1.0 or Earlier to v2.2.0 | 28 |
| 4. Getting Started | 32 |
| Getting Started Task List | 32 |
| Opening the Management Console | 32 |
| Connecting Secure Routers to MXsecurity | 34 |
| 5. Dashboard and Widgets | 35 |
| Dashboard Widgets Overview | 35 |
| System Status | 35 |
| Node License Usage | 35 |
| Group Status | 36 |
| Top 5 Layer 3-7 Policy Events by Source IP | 37 |
| Top 5 Layer 3-7 Policy Events by Destination IP | 38 |
| Top 5 Layer 3-7 Policy Events by Severity | 39 |
| Top 5 Protocol Filter Policy Events by Source IP | 40 |
| Top 5 Protocol Filter Policy Events by Destination IP | 40 |
| Top 5 Protocol Filter Policy Events by Severity | 41 |
| Top 5 ADP Events by Source IP | 42 |
| Top 5 ADP Events by Destination IP | 42 |
| Top 5 IPS Events by Source IP | 43 |
| Top 5 IPS Events by Destination IP | 44 |
| Top 5 IPS Events by Severity | 46 |
| Top 5 IPS Events by Category | 46 |
| Connection Interface (Cellular Router) | 47 |
| Signal Quality (Cellular Router) | 47 |
| Device Log by Timeline | 48 |
| Firewall Log by Timeline | 48 |
| VPN Log by Timeline | 49 |
| Widget Management | 50 |
| Adding a Widget to the Dashboard | 50 |
| Removing a Widget from the Dashboard | 51 |
| Resizing a Widget | 51 |
| Moving the Widget Position | 52 |
| 6. Management | 53 |
| Device Group Management | 54 |
| Creating a New Device Group | 54 |
| Deleting a Device Group | 55 |
| Editing a Device Group | 56 |
| Firmware Management | 56 |
| Uploading a New Firmware | 56 |
| Deleting a Firmware | 57 |

| | |
|--|-----------|
| Exporting Firmware | 58 |
| Software Package Management | 58 |
| Checking the Security Package Status..... | 58 |
| Uploading a New Software Package | 59 |
| Deleting a Software Package..... | 60 |
| Exporting Software Packages | 60 |
| Viewing Detailed Information of a Software Package..... | 60 |
| Viewing Network Security Package Logs..... | 61 |
| Setting Up a Scheduled Security Package Update Check..... | 62 |
| Object Management..... | 62 |
| Creating a New Filter Object | 62 |
| Creating a New Interface Object..... | 64 |
| Editing an Object..... | 64 |
| Deleting an Object..... | 65 |
| Policy Profile Management | 65 |
| Creating a New Layer 3-7 Policy Profile | 65 |
| Creating a New Session Control Policy Profile..... | 68 |
| Creating a New DoS Policy Profile | 69 |
| Creating a New IPS Policy Profile..... | 71 |
| Editing a Policy Profile..... | 72 |
| Deleting a Policy Profile..... | 72 |
| Device Configuration Management..... | 72 |
| Uploading a Device Configuration File From a Local Host | 72 |
| Uploading a Configuration From a Device | 73 |
| 7. Deployment | 75 |
| Rebooting a Managed Device..... | 75 |
| Scheduling a Managed Device Reboot..... | 76 |
| Deleting a Managed Device Reboot Schedule..... | 77 |
| Sending a Control SMS..... | 77 |
| Removing a Managed Device..... | 79 |
| Deploying Policy Profiles to Managed Devices | 80 |
| Scheduling a Policy Profile Deployment for Managed Devices..... | 80 |
| Deleting a Policy Profile Deployment Schedule..... | 82 |
| Upgrading the Software Package of Managed Devices | 82 |
| Scheduling a Software Package Deployment for Managed Devices | 83 |
| Deleting a Software Package Deployment Schedule..... | 85 |
| Upgrading the Firmware of Managed Devices | 85 |
| Scheduling a Firmware Deployment for Managed Devices | 86 |
| Deleting a Firmware Deployment Schedule | 87 |
| Deploying a Configuration to Managed Devices..... | 88 |
| Scheduling a Configuration Deployment for Managed Devices | 89 |
| Deleting a Configuration Deployment Schedule..... | 90 |
| 8. Map View | 92 |
| Viewing Detailed Device Information | 93 |
| Editing the Location of a Device..... | 94 |
| 9. Report | 96 |
| Inventory Reports..... | 96 |
| Generating a Current Inventory Report | 96 |
| Scheduling an Inventory Report | 97 |
| Cellular Signal Reports | 99 |
| Scheduling a Cellular Signal Report | 99 |
| Data Usage Reports | 100 |
| Generating a Cellular Data Usage Report..... | 100 |
| Scheduling a Cellular Data Usage Report..... | 102 |
| Trail Reports | 103 |
| Generating a Trail Report | 103 |
| Scheduling a Trail Report | 104 |
| Viewing GPS Trajectories..... | 105 |
| Report Settings | 106 |
| Configure Report Time Zone Settings..... | 106 |

| | |
|--|------------|
| Editing a Report Schedule..... | 107 |
| 10. Logging..... | 108 |
| Event Log | 108 |
| Device Log | 108 |
| Firewall Log | 110 |
| VPN Log | 114 |
| Audit Log | 115 |
| Event Log Settings | 117 |
| Notifications..... | 118 |
| Adding a Notification..... | 118 |
| 11. Administration..... | 122 |
| User Accounts | 122 |
| User Roles..... | 122 |
| Account Input Format | 124 |
| Adding a User Account | 125 |
| Editing an Existing User Account | 126 |
| Deleting a User Account | 127 |
| Configuring the Password Policy | 127 |
| Changing Your Account Password | 128 |
| Licenses | 129 |
| Introduction to Licenses | 129 |
| Viewing Your Product License Information | 129 |
| Alert Messages..... | 130 |
| Adding a New License | 131 |
| Settings..... | 133 |
| Configuring Preferences | 133 |
| Configuring the System Time..... | 133 |
| Editing Email Settings | 134 |
| Editing Syslog Settings | 135 |

1. Introduction

MXsecurity is a management platform that provides centralized visibility and security management to easily monitor and identify cyberthreats and prevent security misconfigurations to create a robust threat defense. This industrial network security management suite translates complex network activity and threat intelligence into real-time visibility of cybersecurity statuses and actionable management for better detection and reaction against cyberthreats. With real-time dashboards, MXsecurity helps users track and react to OT network security events more efficiently.

Key Features

Centralized Management

Manage and monitor your secure router from one central location for better administration and maintenance. Devices can also be managed in groups based on geographic location, function, or responsibility to increase management efficiency.

Unified, Error-free Mass Deployment

Human error can lead to costly security breaches. Unified deployment of firewall policies, firmware upgrades, configuration files, and IPS signature updates prevents configuration errors and ensures your network is protected with the latest security intelligence.

Real-time Visibility and Monitoring

MXsecurity provides at-a-glance visibility, showing real-time network activity and threat analysis through highly customizable interactive widgets and a flexible dashboard.

Event Logs and Alert Notifications

MXsecurity automatically aggregates and monitors security logs at the appliance level and supports customizable instant real-time alerts for more efficient monitoring and faster troubleshooting.

Interactive Map View

MXsecurity features a map view which shows the real-time GPS location of the secure router. The map function is particularly useful to locate the secure router when it is used in mobile applications where the device is installed on moving equipment.

Comprehensive Reports

MXsecurity supports comprehensive reports for the OnCell Series, making it easier for administrators to conduct device audits and manage cellular signal and data usage. Additionally, the scheduling feature enables users to set up periodical reports that are automatically generated and sent to specified recipients.

System Requirements

The computer that MXsecurity is installed on must satisfy the following system requirements. The system requirements depend on the number of nodes that will be managed through MXsecurity.

| CPU (virtual cores) | 4 |
|----------------------------|--|
| RAM | 8 GB |
| Hard Disk Space | 64 GB |
| Supported Virtual Machines | VMWare ESXi 6.x or above, VM Workstation 14 or above |

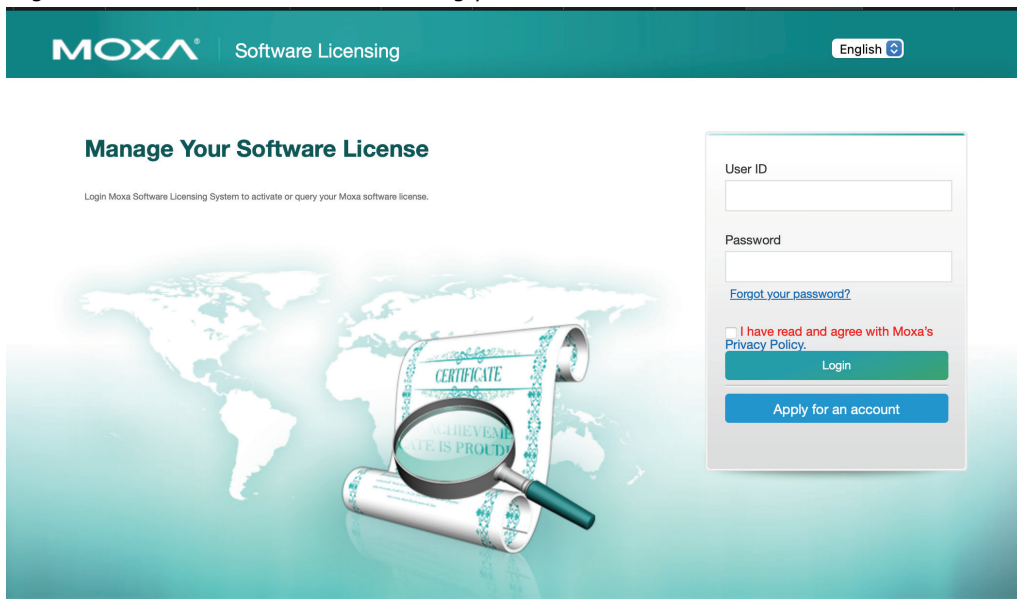
2. Installation

Downloading MXsecurity

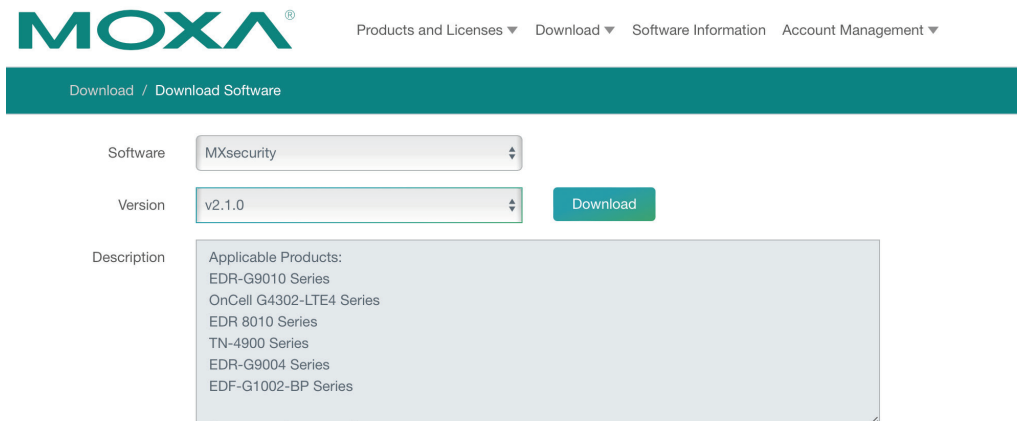
This section describes how to download the MXsecurity image file from the Moxa Software License Portal.

Steps:

1. Open a web browser and go to <https://netsecuritylicense.moxa.com>.
2. Log in to the Software License Portal using your Moxa account.



3. In the top toolbar, navigate to **Download > Download Software**.
4. Select **MXsecurity** and the image version. A changelog for each version is provided in the Description field.



5. Click **Download**.

Setting Up the Virtual Machine

Installing MXsecurity on a VMware Workstation

This section describes how to deploy MXsecurity to a VMware Workstation system.

Prerequisites

- The OVA packages provided by Moxa must be available and accessible to the VMware Workstation.
- VMware Workstation 14 or later is required.

Steps:

1. Start the VMware Workstation.
2. Go to **File > Open** in the menu bar.
3. Select the MXsecurity VM image file (*.ova) from your localhost file path and click **Open**.
4. Specify the name and the storage path for the new virtual machine and click **Import**.
5. Check the detailed VM information of the imported MXsecurity VM.



The screenshot displays the VMware Workstation interface for a virtual machine named "V1.0-22071510". The interface is divided into several sections:

- Actions:** Includes "Power on this virtual machine", "Edit virtual machine settings", and "Upgrade this virtual machine".
- Devices:** A list of hardware components:

| | |
|--------------------|---------------------|
| Memory | 16 GB |
| Processors | 4 |
| Hard Disk (SCSI) | 25 GB |
| Hard Disk 2 (SCSI) | 50 GB |
| CD/DVD (IDE) | Using file V1.0-... |
| Floppy | Using drive A: |
| Network Adapter | NAT |
| USB Controller | Present |
| Display | Auto detect |
- Description:** A text field for entering a description of the virtual machine.
- Virtual Machine Details:** Shows the state as "Powered off", the configuration file path, hardware compatibility as "Workstation 11.x virtual machine", and the primary IP address as "Network information is not available".

6. Add an external disk. MXsecurity requires one external disk with at least 20 GB of available storage, otherwise MXsecurity will not be able to finish initialization and the boot process will not be completed. The external disk is used to store the system configurations and event logs. You may attach the external disk of a terminated MXsecurity instance here instead of adding a new disk if you want to migrate the configurations and logs of the terminated instance to the new MXsecurity instance.

- a. Click **Edit virtual machine settings**.

V1.0-22071510

[Power on this virtual machine](#)
[Edit virtual machine settings.](#)
[Upgrade this virtual machine](#)

▼ **Devices**

| | |
|--------------------|---------------------|
| Memory | 16 GB |
| Processors | 4 |
| Hard Disk (SCSI) | 25 GB |
| Hard Disk 2 (SCSI) | 50 GB |
| CD/DVD (IDE) | Using file V1.0-... |
| Floppy | Using drive A: |
| Network Adapter | NAT |
| USB Controller | Present |
| Display | Auto detect |

▼ **Description**
Type here to enter a description of this virtual machine.

▼ **Virtual Machine Details**

State: Powered off
Configuration file:
Hardware compatibility: Workstation 11.x virtual machine
Primary IP address: Network information is not available

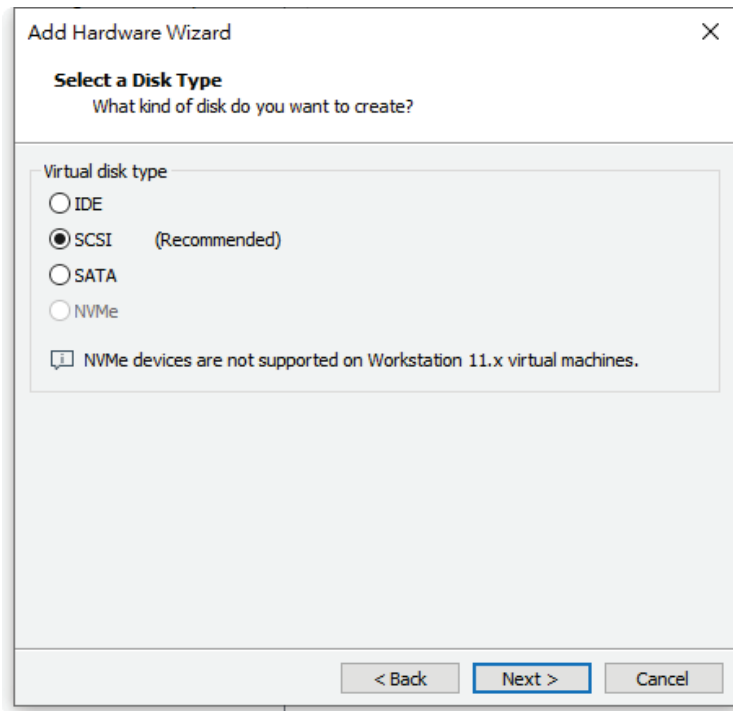
b. Click **Add**, then choose **Hard Disk**.

Add Hardware Wizard

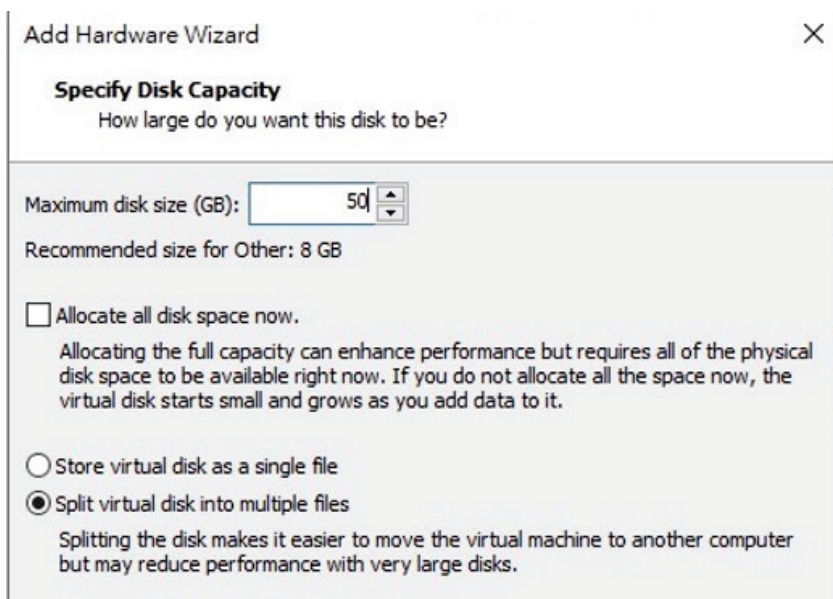
Hardware Type
What type of hardware do you want to install?

| Hardware types: | Explanation |
|--|------------------|
| <input checked="" type="checkbox"/> Hard Disk | Add a hard disk. |
| <input type="checkbox"/> CD/DVD Drive | |
| <input type="checkbox"/> Floppy Drive | |
| <input type="checkbox"/> Network Adapter | |
| <input type="checkbox"/> USB Controller | |
| <input type="checkbox"/> Sound Card | |
| <input type="checkbox"/> Parallel Port | |
| <input type="checkbox"/> Serial Port | |
| <input type="checkbox"/> Printer | |
| <input type="checkbox"/> Generic SCSI Device | |

- c. Select a disk type and click **Next**.



- d. Set the disk space of the new hard disk. You can configure the external disk size depending on the number of logs to be stored.



- e. Select the path to store the disk.
- f. Click **Finish**.
- g. **(Optional)** If necessary, you can increase the disk size to hold a larger number of MXsecurity logs:
- Power off the MXsecurity instance.
 - Increase the external disk size based on your requirements.
 - Power the MXsecurity instance back on.
7. **(Optional)** Adjust your MX MXsecurity instance to use proper resource configurations (Minimum: 4 CPU cores, 8 GB of memory).
- Click **Edit virtual machine settings**.
 - Configure the amount of memory.
 - Configure the number of CPU cores.

8. **(Optional)** Depending on your network environment, change the network adapter setting from 'NAT' to 'Bridged' if necessary.
 - a. Right-click the MXsecurity VM icon and select **Settings**.
 - b. Select **Network Adapter** and change the default setting from **NAT** to **Bridged**.
9. Boot the MXsecurity VM. The MXsecurity instance will initialize.

Installing MXsecurity on a VMware ESXi System

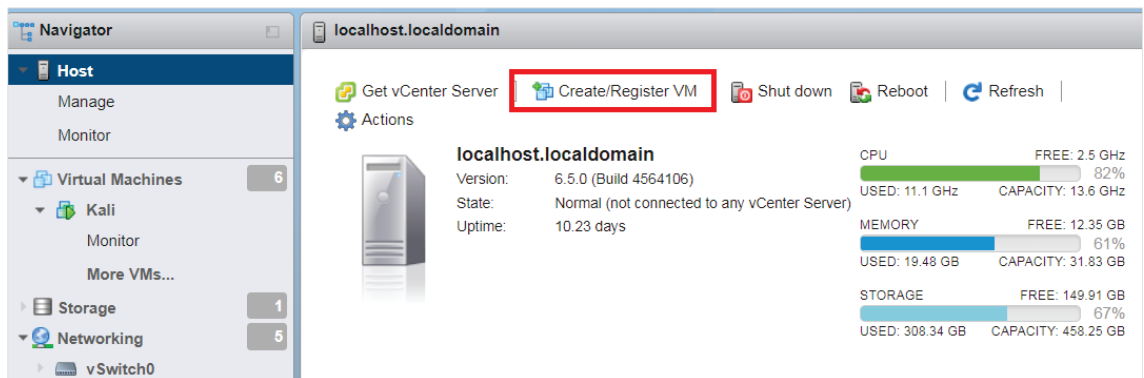
This section describes how to deploy MXsecurity to a VMware ESXi system.

Prerequisites

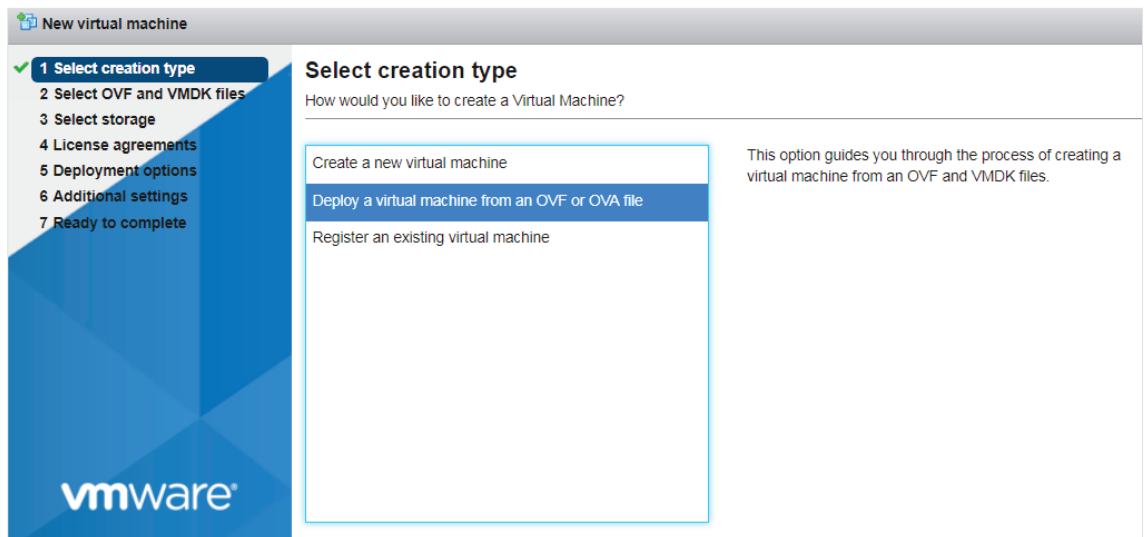
- The OVA packages provided by Moxa must be available and accessible to VMware ESXi.
- ESXi version 6 or above with the required specifications.
- The necessary networks have been properly created in ESXi.

Steps:

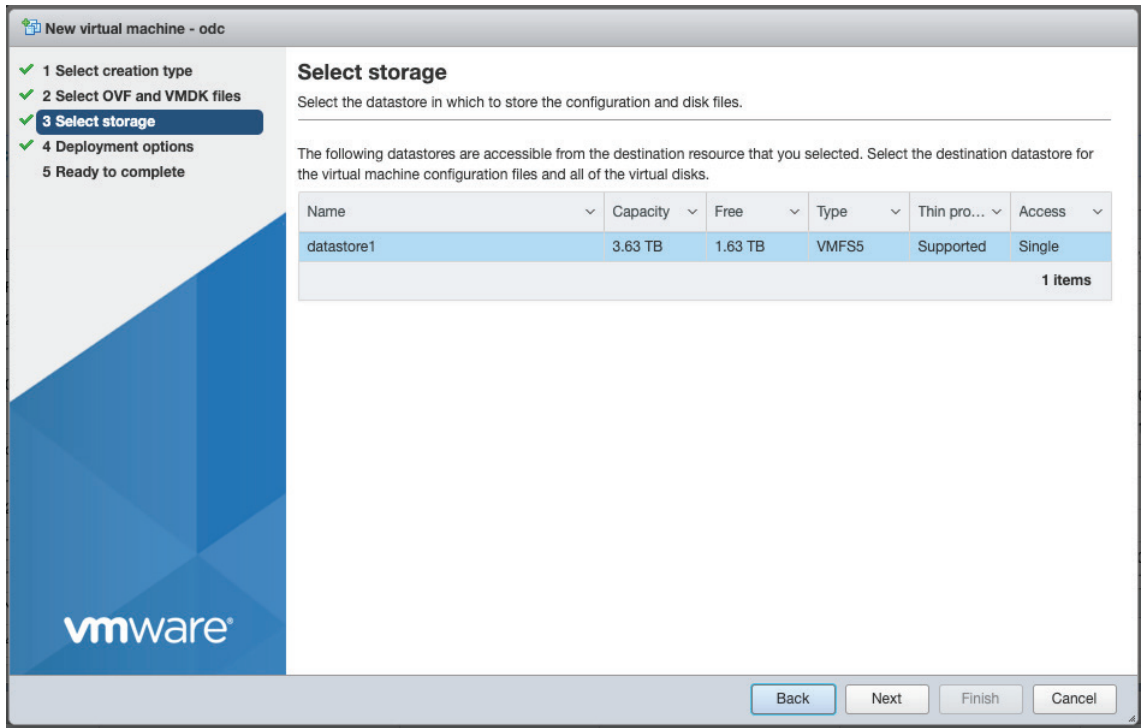
1. Log in to the VMware vSphere web client.
2. Under **Navigator**, click **Host** and then click **Create/Register VM**.



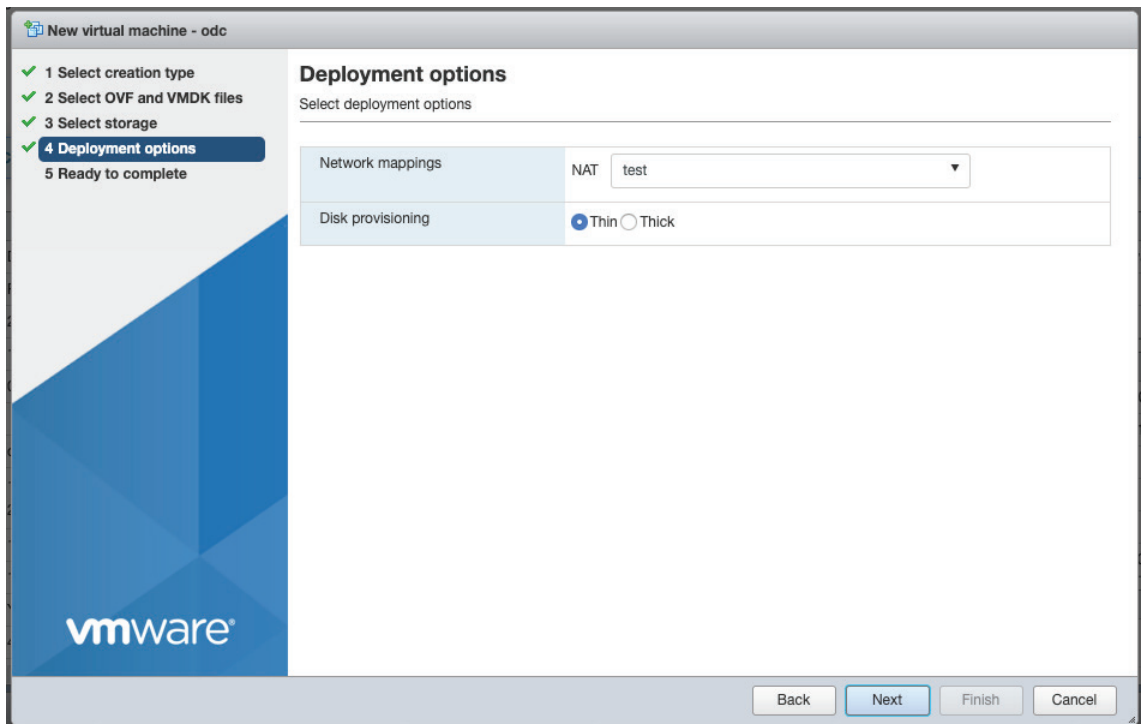
3. Select **Deploy a virtual machine from an OVF or OVA file**.



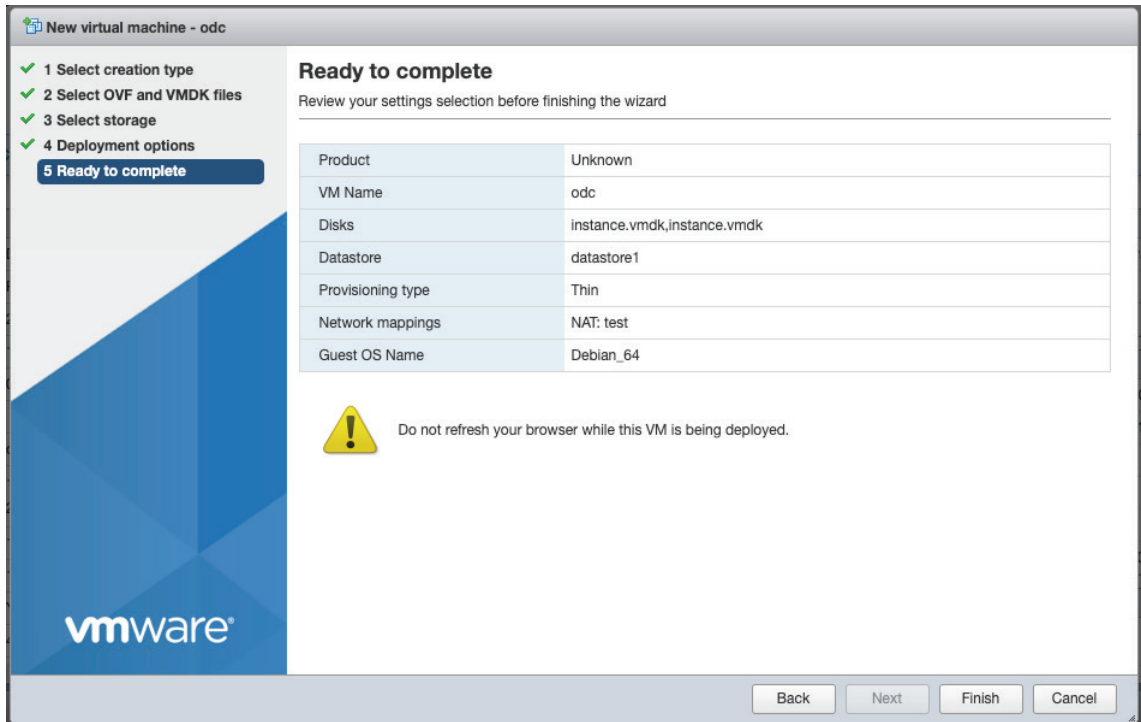
4. Enter a name for your MXsecurity instance and then select an MXsecurity image to upload.
5. Choose a storage location for the MXsecurity virtual machine.



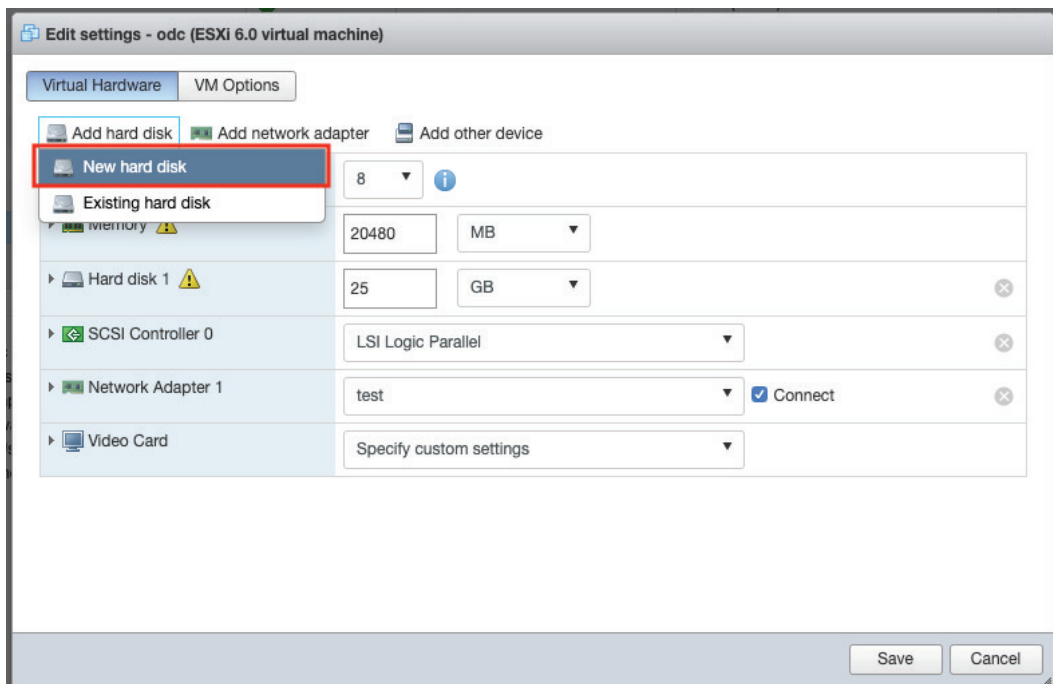
6. Select the deployment options.



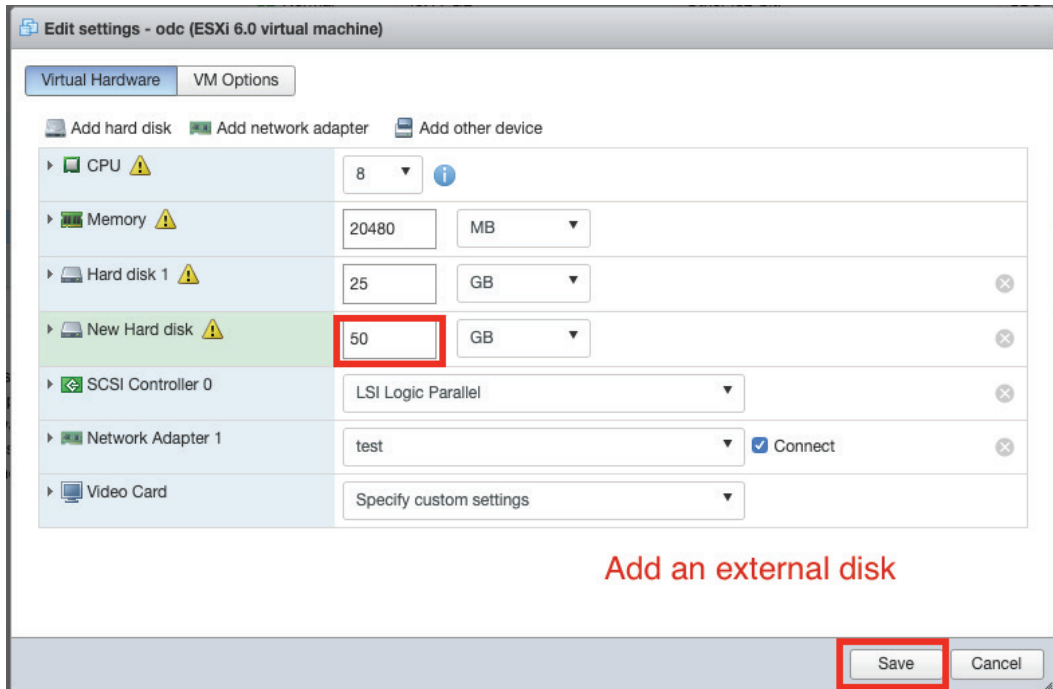
When you see the **Ready to complete** screen, click **Finish** to start the deployment.



7. Under the **Recent tasks** pane, you will see a progress bar indicating that the MXsecurity image is being uploaded. Wait until the upload has finished.
8. Add an external disk with at least 20 GB of available space to the MXsecurity instance:
 - a. Power off the MXsecurity instance if it is powered on.
 - b. Navigate to **Actions > Edit settings > Add hard disk > New hard disk**.



- c. Set the disk space of the new hard disk and click **Save**.
You can configure the external disk size depending on the number of logs to be stored.



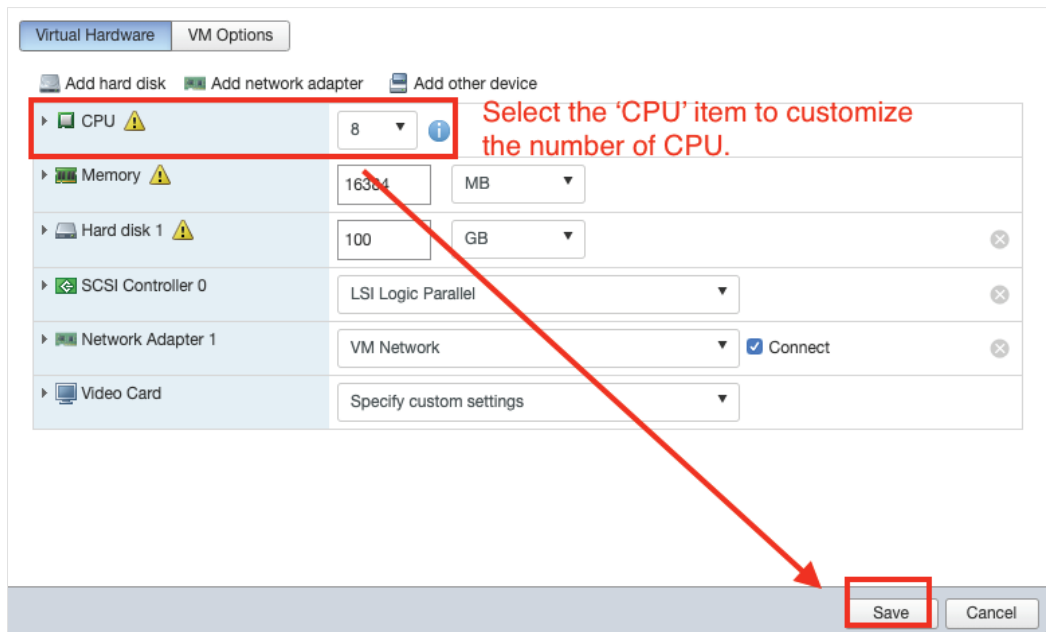
- a. **(Optional)** If necessary, you can increase the disk size to hold a larger number of MXsecurity logs:
- Power off the MXsecurity instance.
 - Increase the external disk size based on your requirements.
 - Power the MXsecurity instance back on.

If you want to migrate the existing MXsecurity settings to the newly launched VM, please refer to [Migration](#).

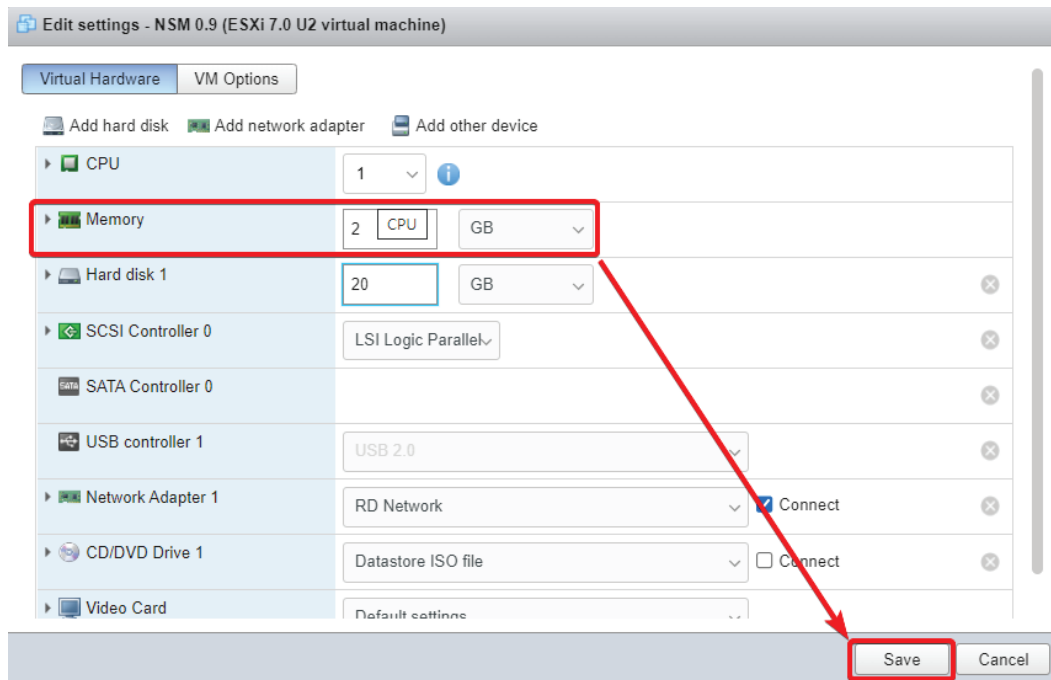
● NOTE

The external disk is used to store the system configurations and event logs. You may attach the external disk of a terminated MXsecurity instance instead of adding a new disk if you want to migrate the configurations and logs of the terminated instance to the new MXsecurity instance.

- Power on the VM.
- (Optional)** Adjust your MXsecurity instance to use proper resource configurations (Minimum: 8 core CPU, 8 GB memory).
 - Shut down the instance of MXsecurity and click **Edit**.
The **Edit settings** window appears.
 - Configure the number of CPU cores.



c. Configure the amount of memory.



d. Click **Save**.

e. Boot the MXsecurity instance.

Configuring the MXsecurity system

Accessing the MXsecurity CLI

Steps:

1. Open the MXsecurity VM console.
2. Log in with username **admin** and password **moxa**.
3. Change the default password:

```
MXsecurity login: admin
Password:
You are required to change your password immediately (root enforced)
Changing password for admin.
(current) UNIX password:
New password:
```

The password must meet the following requirements:

- Minimum 8 characters long
- The new password cannot be the same as the old password
- The new password cannot contain the old password
- The password cannot be too simplistic or contain simple character sequences such as "abc", "123456", etc

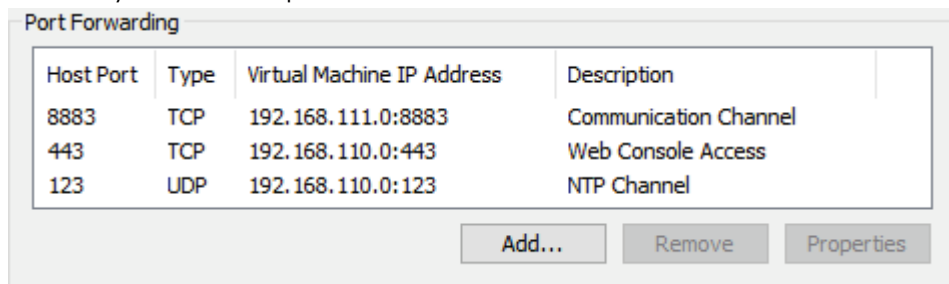
- b. Log in to the MXsecurity again with your new password.
4. **(Optional)** After logging in to the MXsecurity, type the "help" command to see a list of available commands.

```
MXsecurity# help
interface - Network operation
resolve   - DNS operation
ping      - Ping a host IP address
reboot    - Reboot the MXsecurity
poweroff  - Power off the MXsecurity
version   - The version and default value of MXsecurity
help      - Command line help
exit      - Exit the terminal
```

Getting the IP Address of the MXsecurity Instance

Steps:

1. Enter the **interface ls** command to get the IP address of the MXsecurity instance.
2. If your VMware network adapter setting is using NAT, you will need to create port forwarding rules to allow traffic to pass from connected devices to MXsecurity.
 - a. Navigate to **Edit > Virtual Network Editor**, select the right network subnet and click **NAT Settings**.
 - i. To allow users to configure the devices through MXsecurity including all configuration settings and commands and upload logs, forward packets from the host TCP port 8883 to the MXsecurity server IP TCP port 8883.
 - ii. To allow devices to synchronize their system time with MXsecurity, forward packets from the host UDP port 123 to the MXsecurity server IP UDP port 123.
 - iii. To access the web management console, forward packets from host TCP port 443 to the MXsecurity server IP TCP port 443.



| Host Port | Type | Virtual Machine IP Address | Description |
|-----------|------|----------------------------|-----------------------|
| 8883 | TCP | 192.168.111.0:8883 | Communication Channel |
| 443 | TCP | 192.168.110.0:443 | Web Console Access |
| 123 | UDP | 192.168.110.0:123 | NTP Channel |

● NOTE

Port 8883, 123, and 443 are the default port numbers. If you change the port numbers, make sure to use the correct port numbers in the NAT settings.

Configuring the IP Address Settings

You can manually configure the IP address if necessary.

Steps:

1. Use the **interface --update** command to update the settings of an existing network interface. For example, the following command sets the interface "eth0" to the static IP address 192.0.2.4/24 with the gateway IP address 192.0.2.254.

```
$ interface --update eth0 --method static --address 192.0.2.4 --gateway  
192.0.2.254 --netmask 255.255.255.0
```

2. Confirm the network interface settings are correct and execute the **--restart [interface]** command to have the new settings take effect.

```
$ interface --restart eth0
```

3. Execute the **interface --ls** command to view the network interface settings.

```
$ interface --ls
```

4. Use the **resolve --add** command to add a DNS server. For example, the following command adds "8.8.8.8" to the DNS server list.

```
$ resolve --add 8.8.8.8
```

5. Execute the **resolve --ls** command to view the DNS server settings.

```
$ resolve --ls
```

6. Execute the **reboot** command to reboot the VM.

```
$ reboot
```

3. Migration

This chapter provides information and instructions on how to migrate your MXsecurity data to a newer version of MXsecurity.

Migrating to a Newer Version of MXsecurity (VMware Workstation)

This section describes how to migrate to a newer version of MXsecurity with VMware Workstation.

● NOTE

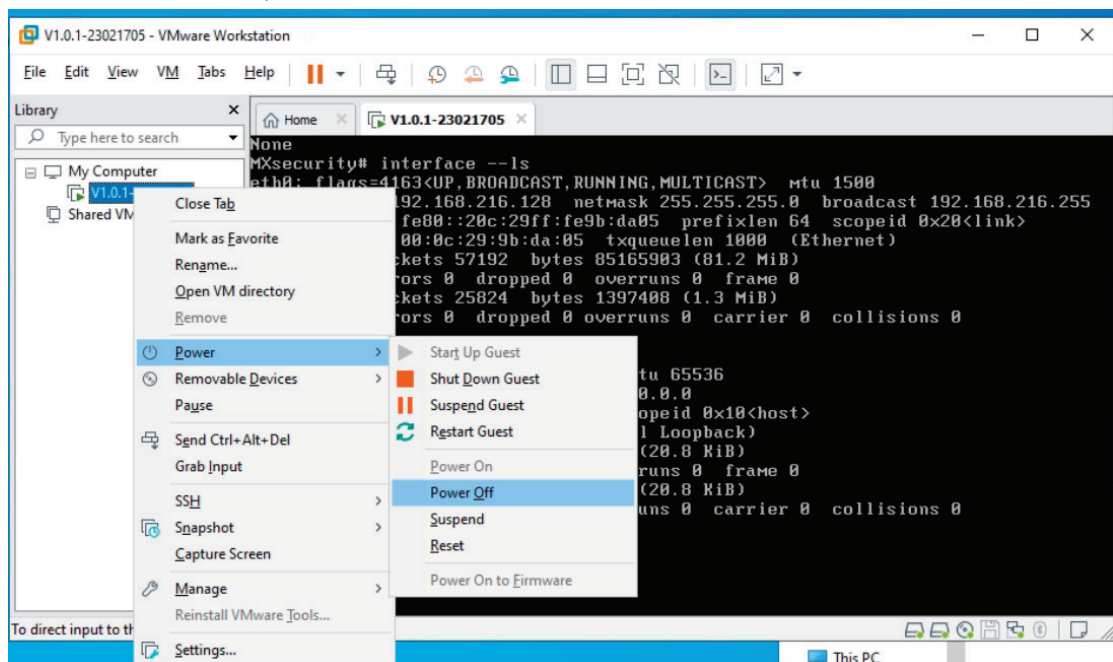
MXsecurity v1.1.0 has implemented enhanced connection security measures. To avoid issues, managed devices should be upgraded to a firmware version and MXsecurity Agent Package which is compatible with MXsecurity v1.1.0. The following device firmware versions are compatible with MXsecurity v1.1.0:

- EDR-G9010 Series FW v3.0 or higher, MXsecurity Agent Package v2.0.13 or higher
- EDR-8010 Series FW v3.0 or higher, MXsecurity Agent Package v2.0.13 or higher
- OnCell G4302 Series FW v3.0 or higher. MXsecurity Agent Package v2.0.13 or higher

If you have an older version of the MXsecurity Agent Package installed, you will need to manually upgrade it to v2.0.13 on the managed device first. To manually upgrade the software package, navigate to **System > System Management > Software Package Management > MXsecurity Agent Package** in the Secure Router's web interface.

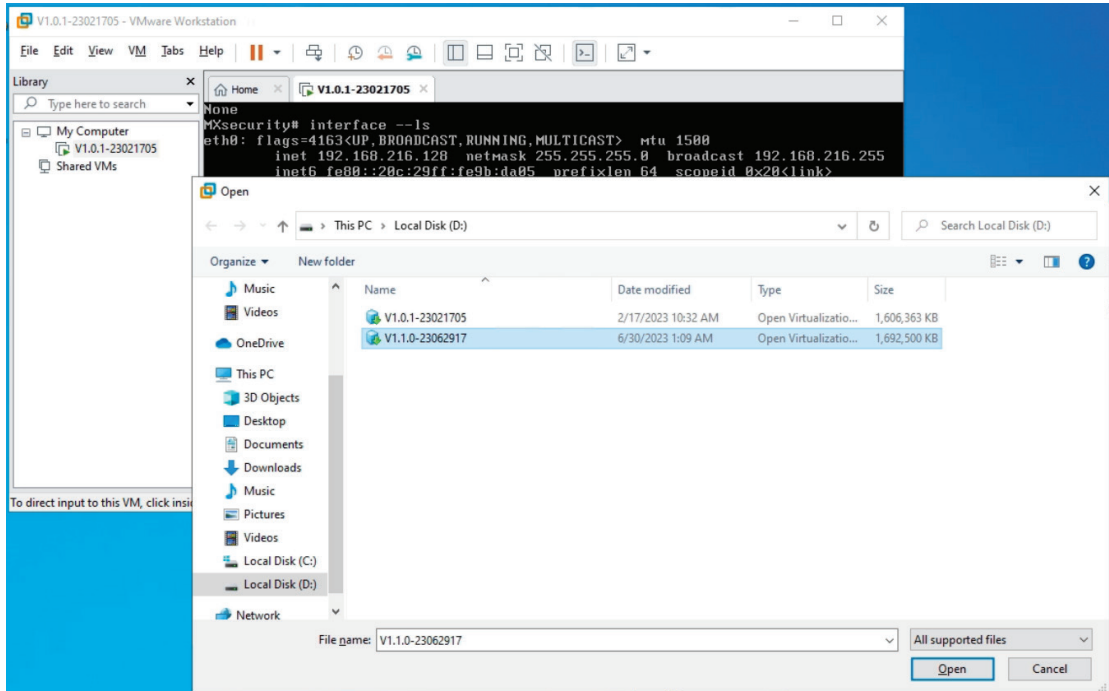
Steps:

1. Start the VMware Workstation.
2. Power off the MXsecurity instance.

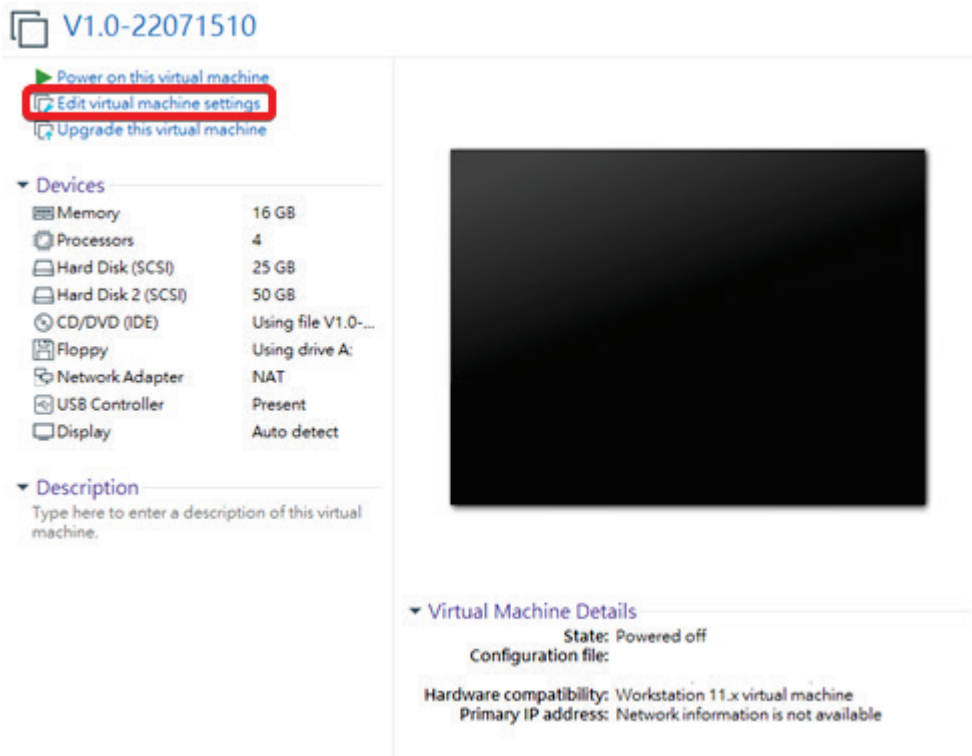


3. Go to **File > Open** in the menu bar.

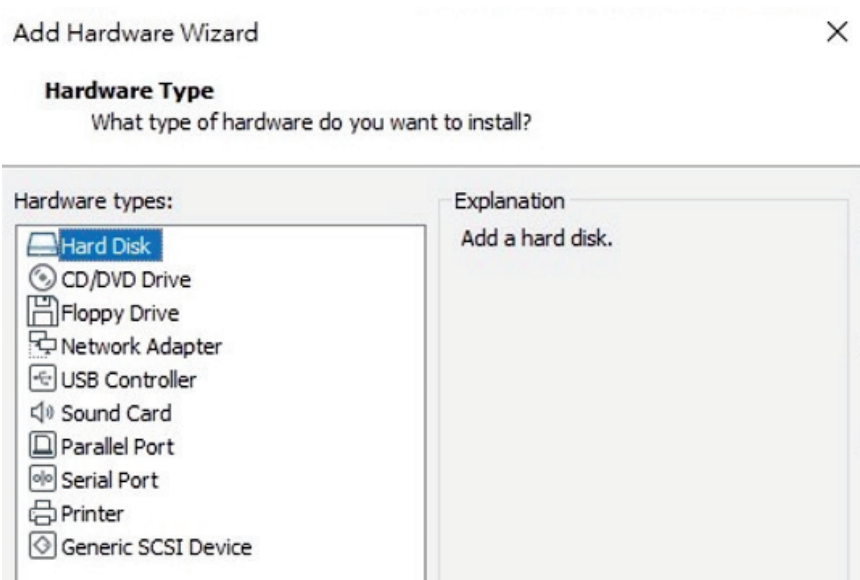
4. Select the VM image file (*.ova) of the new MXsecurity version from your localhost file path and click **Open**.



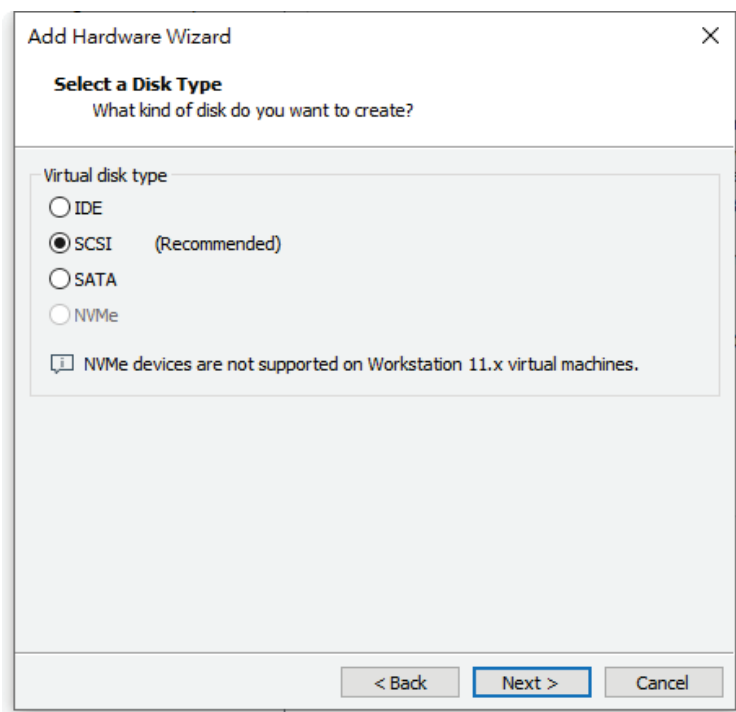
5. Add an existing Hard Disk.
a. Click **Edit virtual machine settings**.



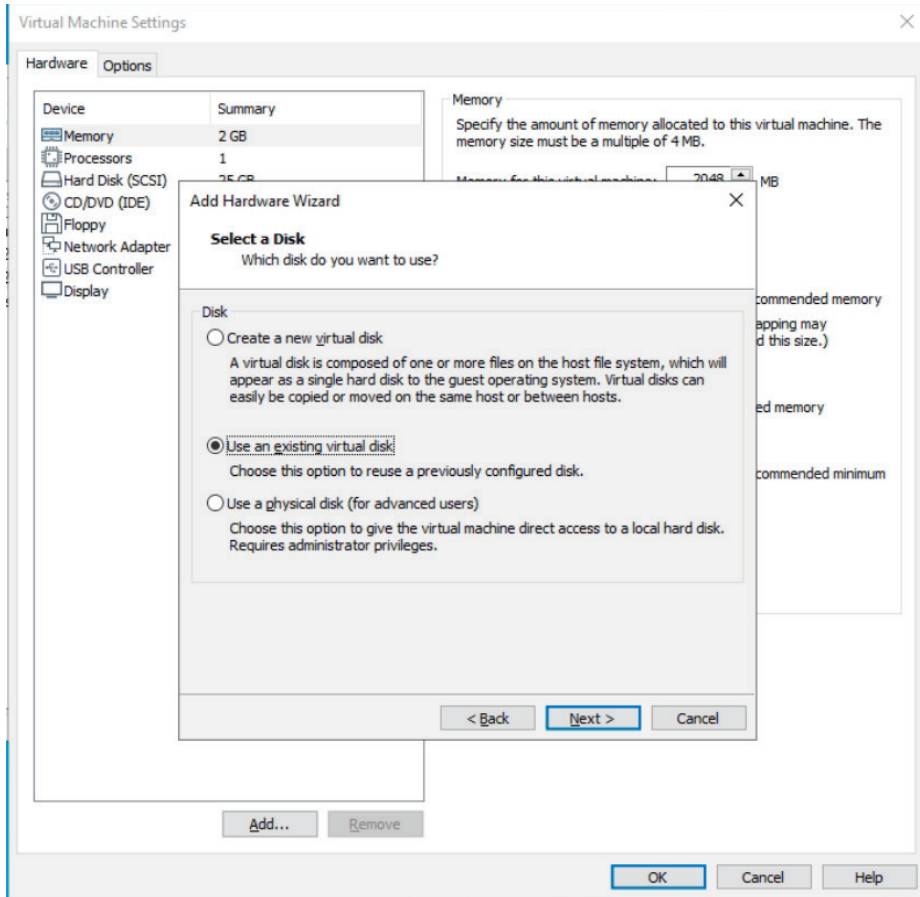
- b. Click **Add**, then choose **Hard Disk**.



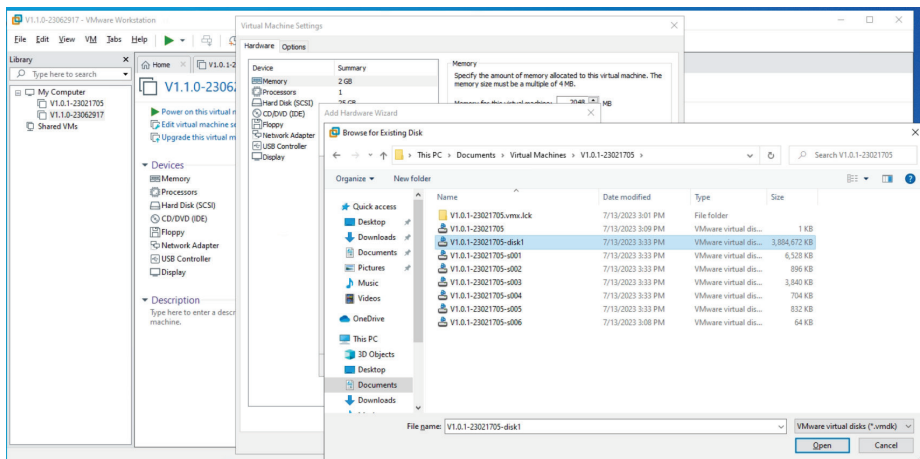
c. Select a disk type and click **Next**.



- d. Select **Using an existing virtual disk** and click **Next**.



- e. Navigate to the disk of the original MXsecurity instance and click **Open**.



6. Click **Finish**.

NOTE

After installing the new MXsecurity instance, you may need to reconfigure the IP address of the MXsecurity server. Refer to [Configuring the IP Address Settings](#) for instructions.

7. Log in to the MXsecurity web console and confirm the migration was successful.

Migrating to a Newer Version of MXsecurity (ESXi)

This section describes how to migrate to a newer version of MXsecurity with VMware ESXi.

● NOTE

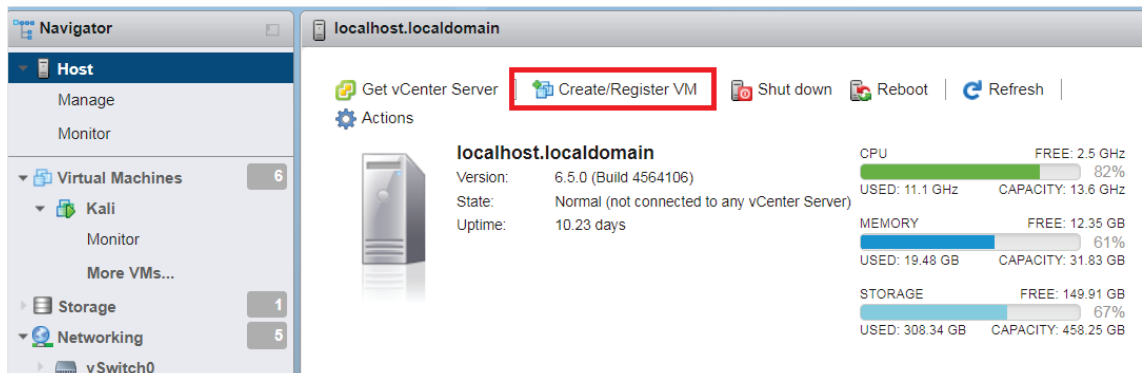
MXsecurity v1.1.0 has implemented enhanced connection security measures. To avoid issues, managed devices should be upgraded to a firmware version and MXsecurity Agent Package which is compatible with MXsecurity v1.1.0. The following device firmware versions are compatible with MXsecurity v1.1.0:

- EDR-G9010 Series FW v3.0 or higher, MXsecurity Agent Package v2.0.13 or higher
- EDR-8010 Series FW v3.0 or higher, MXsecurity Agent Package v2.0.13 or higher
- OnCell G4302 Series FW v3.0 or higher. MXsecurity Agent Package v2.0.13 or higher

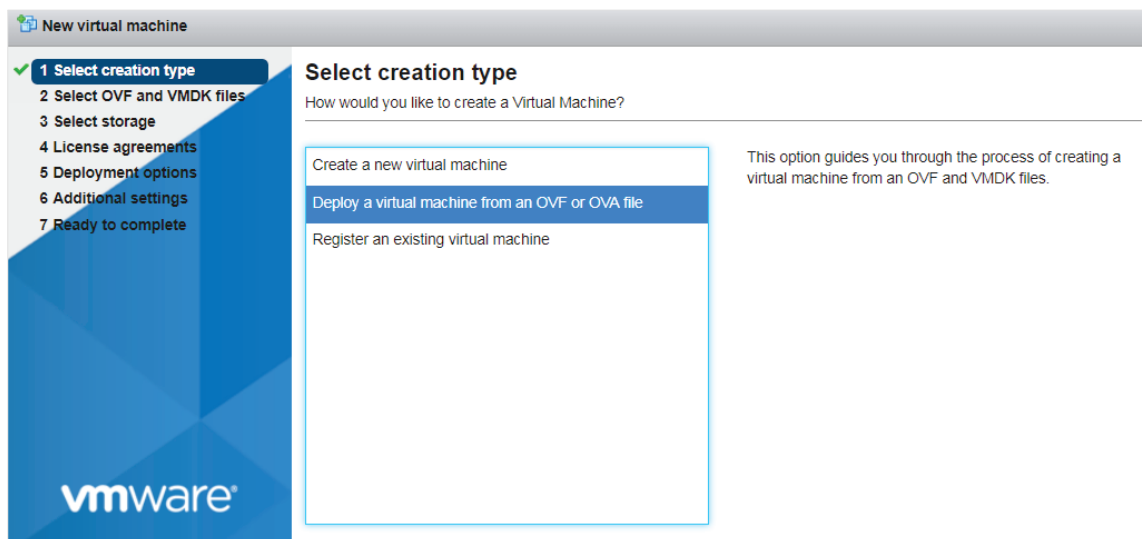
If you have an older version of the MXsecurity Agent Package installed, you will need to manually upgrade it to v2.0.13 on the managed device first. To manually upgrade the software package, navigate to **System > System Management > Software Package Management > MXsecurity Agent Package** in the Secure Router's web interface.

Steps:

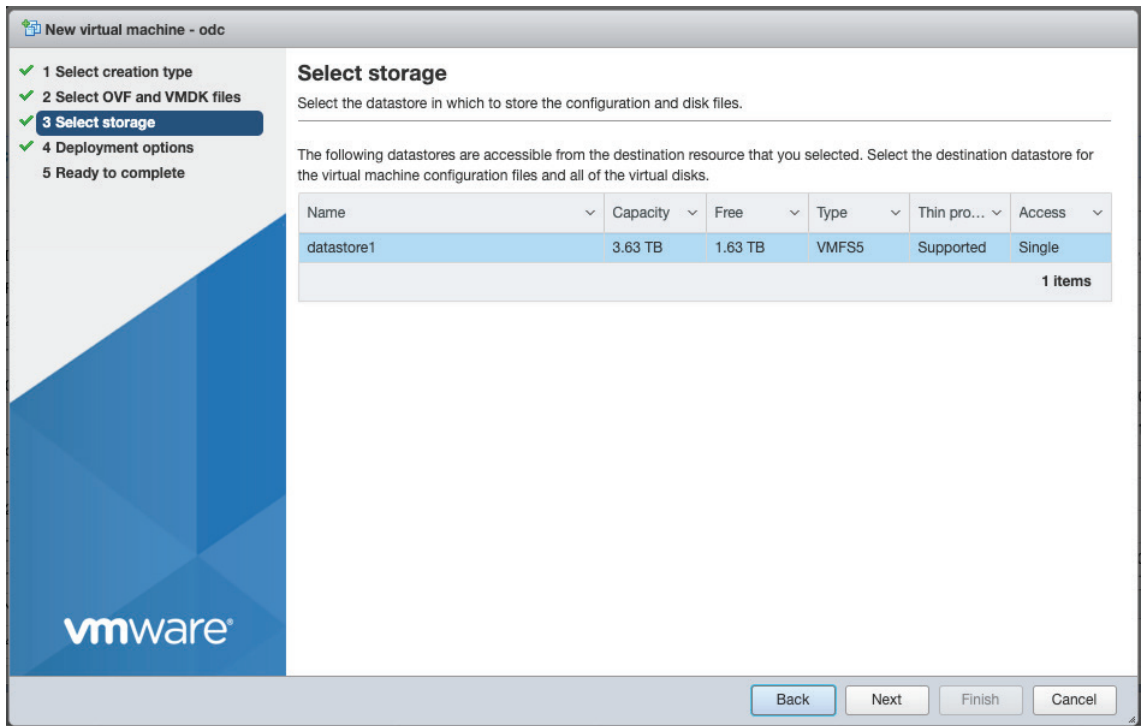
1. Start the VMware ESXi.
2. Power off the MXsecurity instance.
3. Under **Navigator**, click **Host** and then click **Create/Register VM**.



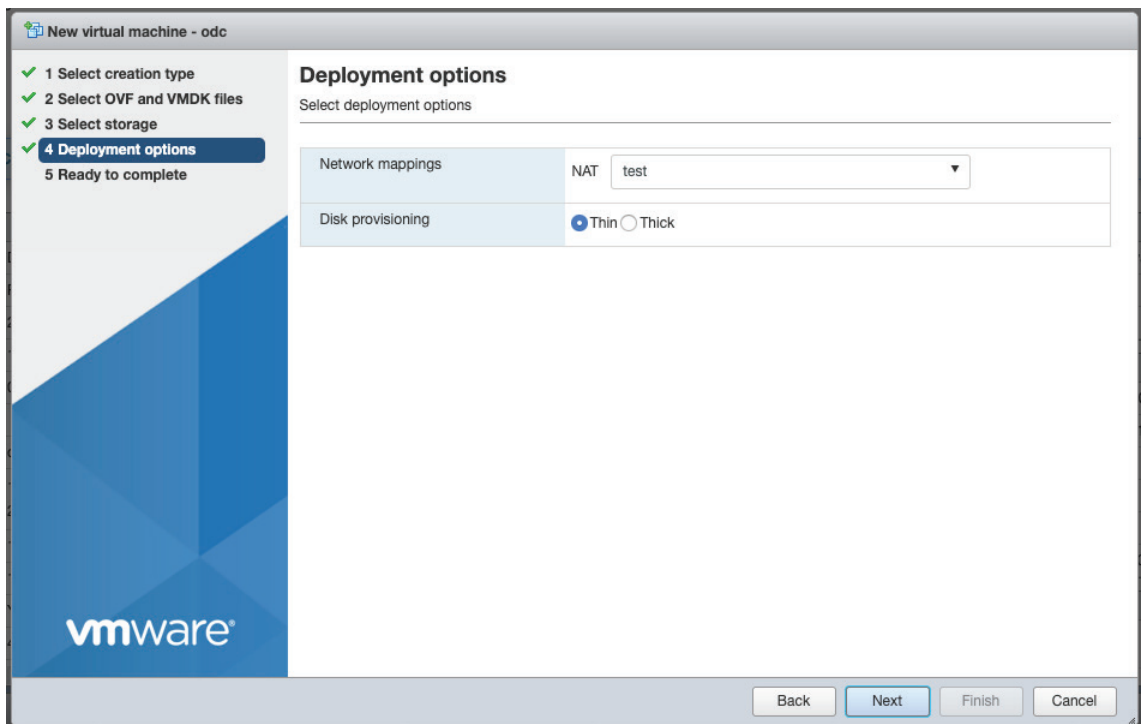
4. Select **Deploy a virtual machine from an OVF or OVA file**.



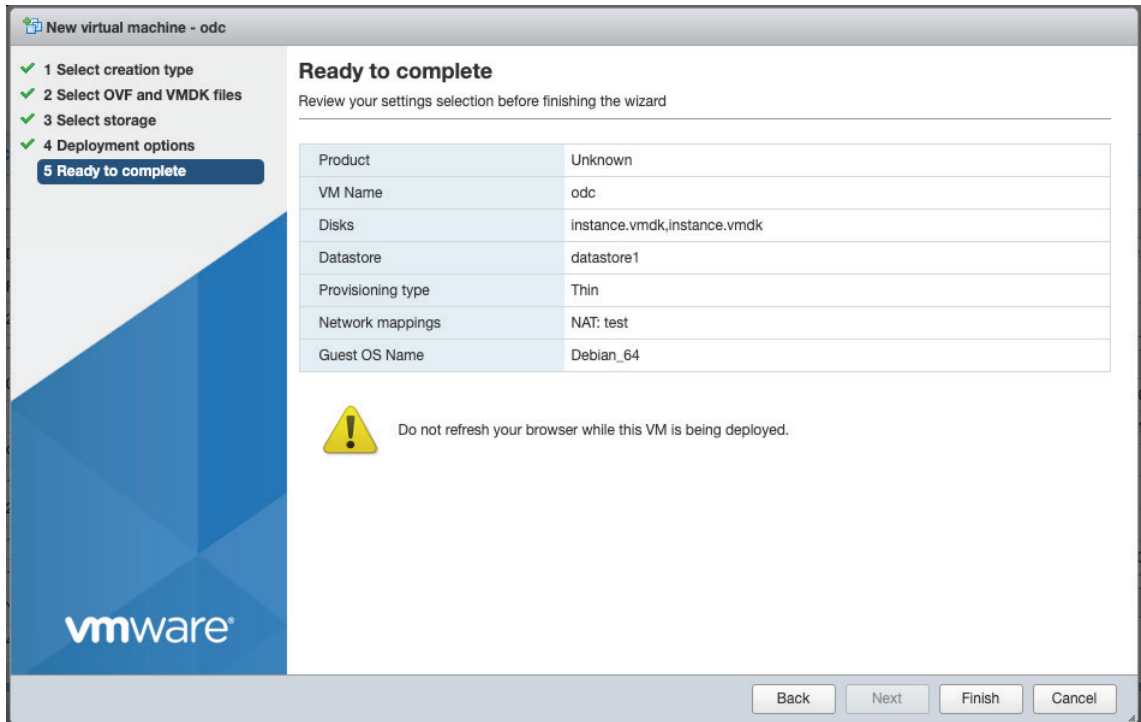
5. Enter a name for your MXsecurity instance and then the image file of the new MXsecurity version to upload.
6. Choose a storage location for the MXsecurity virtual machine.



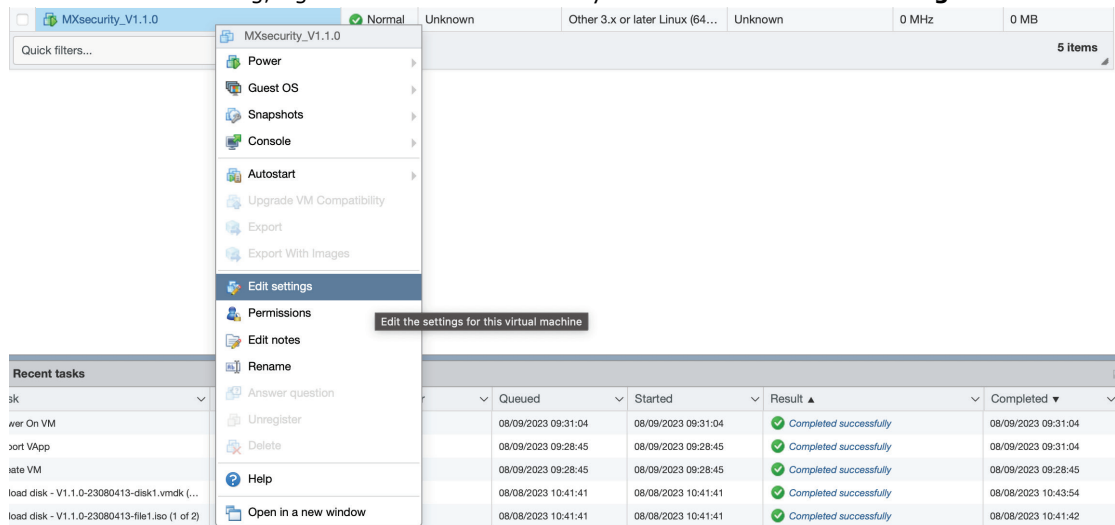
7. Select the deployment options.



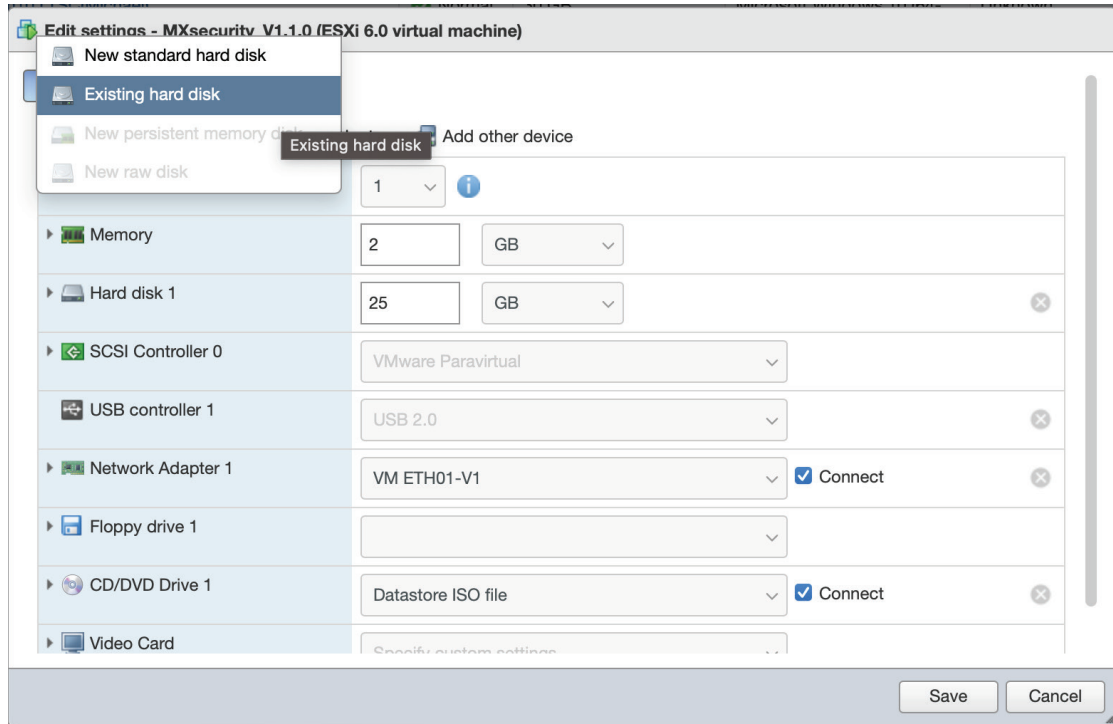
When you see the **Ready to complete** screen, click **Finish** to start the deployment.



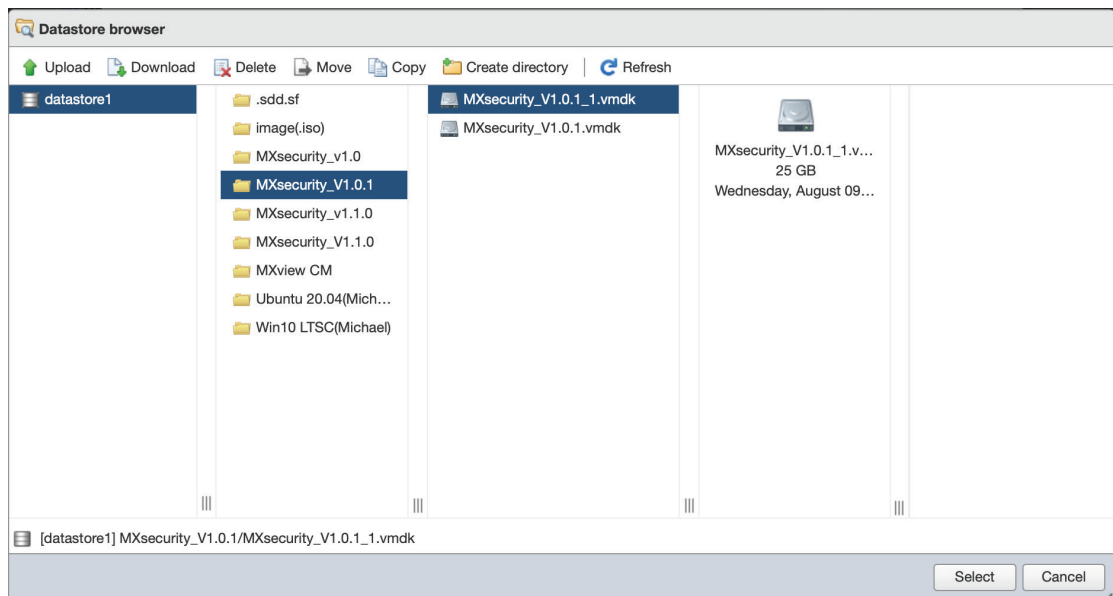
8. Under the **Recent tasks** pane, you will see a progress bar indicating that the MXsecurity image is being uploaded. Wait until the upload has finished.
9. When finished installing, right-click the new MXsecurity instance and click **Edit Settings**.



10. Click **Add Hard Disk > Existing hard disk**.



11. Navigate to the disk of the original MXsecurity instance and click **Select**.



12. Click **Save**.

● NOTE

After installing the new MXsecurity instance, you may need to reconfigure the IP address of the MXsecurity server. Refer to [Configuring the IP Address Settings](#) for instructions.

13. Log in to the MXsecurity web console and confirm the migration was successful.

Migrating Licenses From MXsecurity v2.1.0 or Earlier to v2.2.0

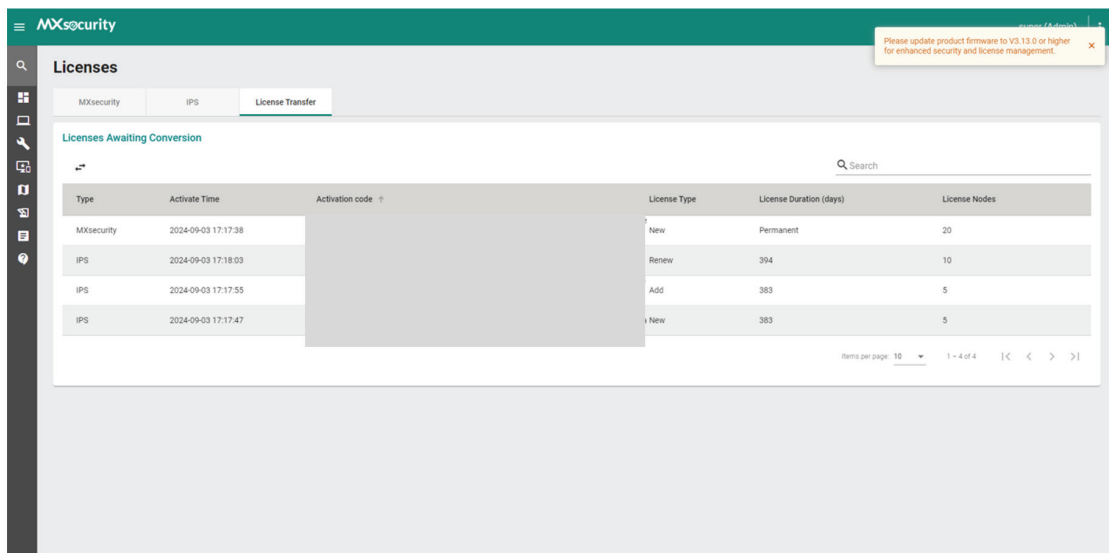
For security reasons, MXsecurity v2.2.0 introduces an improved license generation mechanism. As a result, users operating MXsecurity v2.1.0 or an earlier version must transfer all licenses when upgrading to v2.2.0.


● NOTE

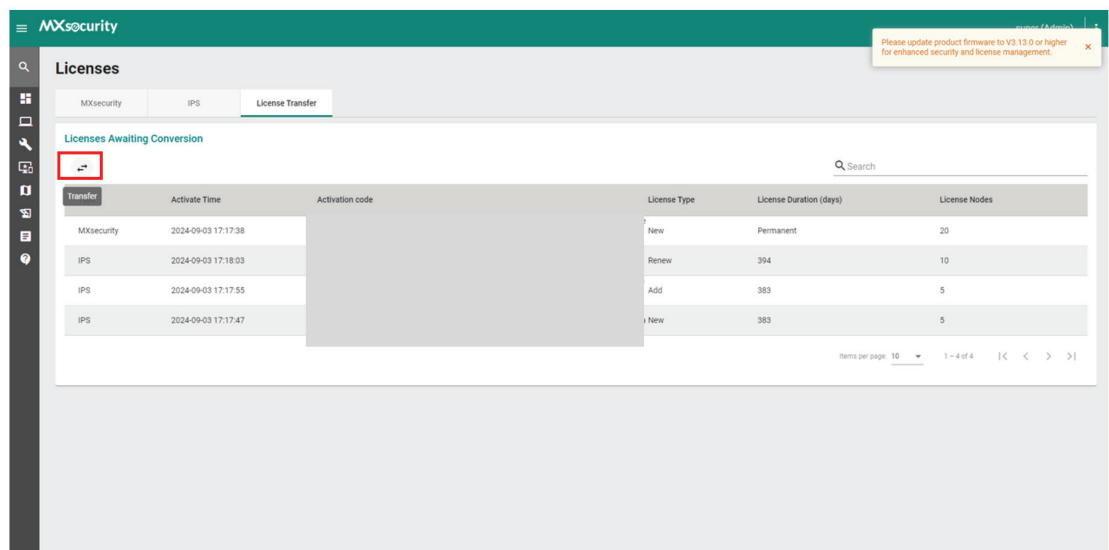
To ensure optimal security and avoid compatibility issues, we strongly recommend upgrading MXsecurity to v2.2.0 and the firmware of MXsecurity devices to v3.13.0. Using older versions may lead to security vulnerabilities and limitations to certain functions.

Steps:

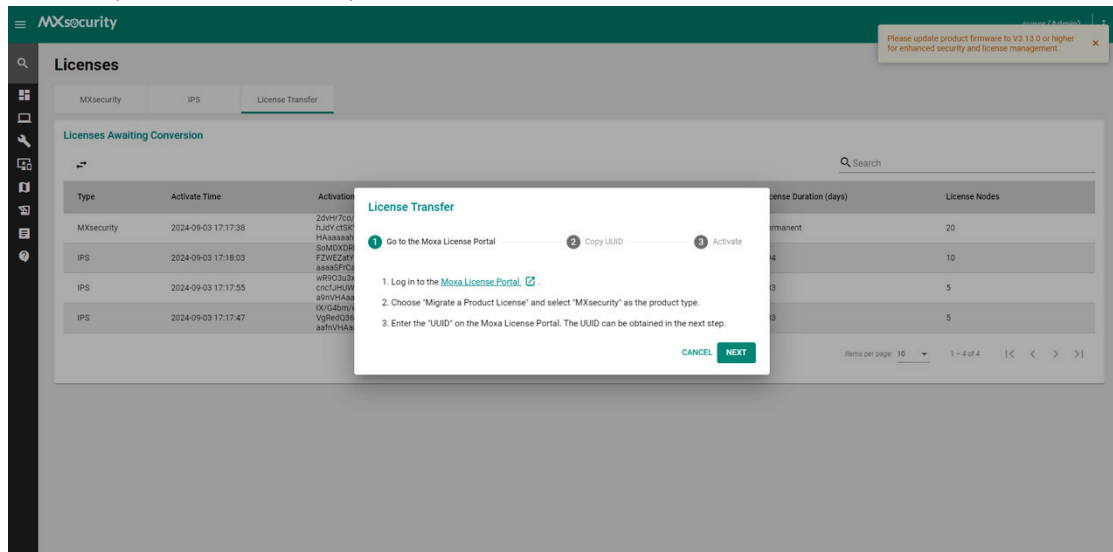
1. Upgrade MXsecurity to v2.2.0.
2. Log in to MXsecurity.
3. Navigate to **System > Licenses > License Transfer**.
The table will show a list of licenses that need to be transferred.



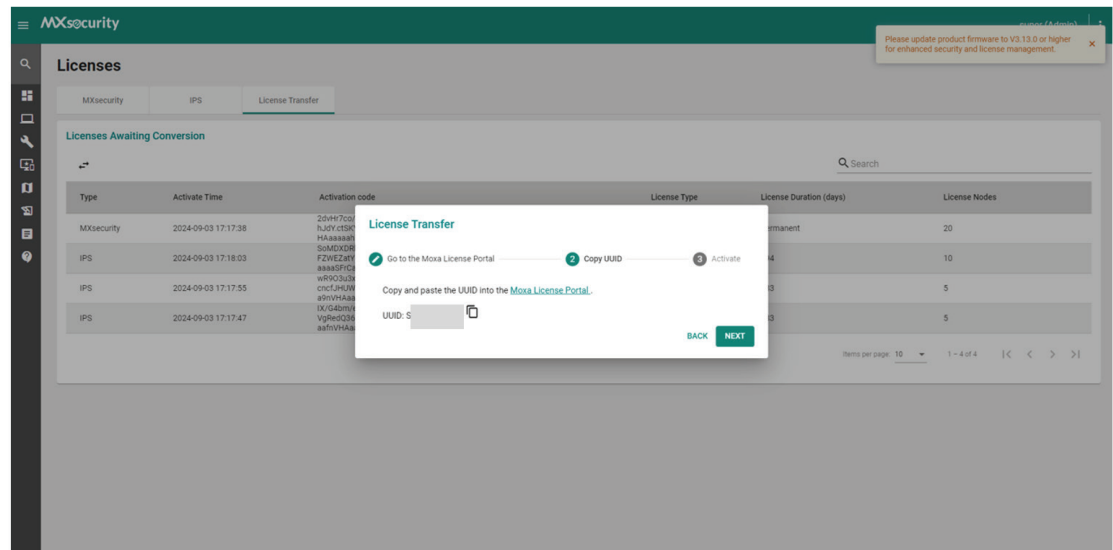
4. Click the  icon to start the license migration process.



- In the **License Transfer** window, click the link to the **Moxa License Portal** and click **NEXT**. This will open the Moxa license portal in a new browser window.



- When prompted, log in to the Moxa license portal using your Moxa account.
- In the license portal, navigate to **Products and Licenses > Migrate a Product License**.
- In MXsecurity, copy the UUID and click **NEXT**.



- In the license portal, enter the UUID and click **Query**. A list of all licenses that need to be migrated will show.
- Click **Migrate** to start the migration process. When finished, the system will send the license migration results in CSV format to the email registered

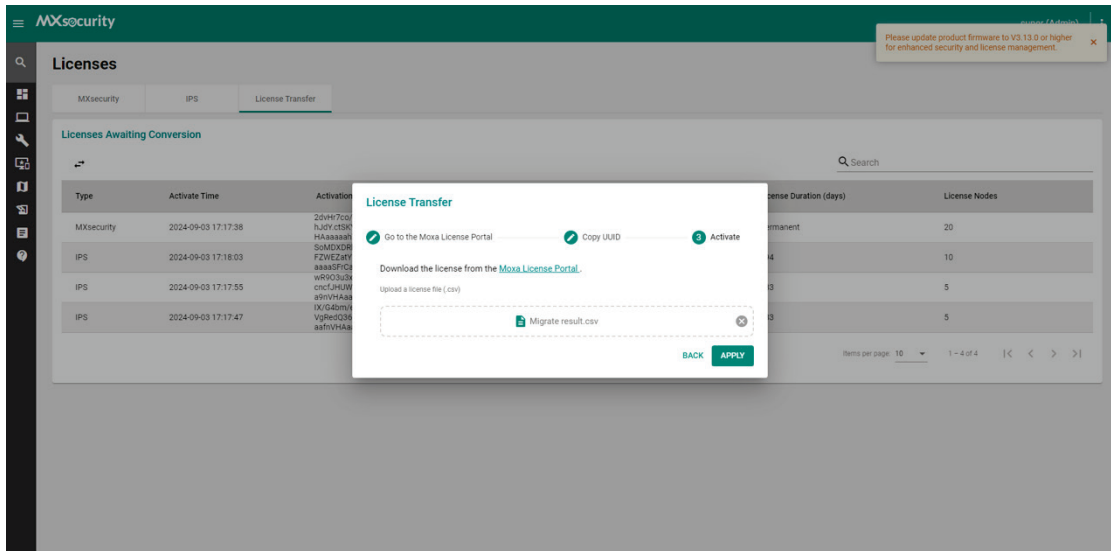
to your Moxa account.

The screenshot shows the Moxa web portal interface. At the top, there is a navigation bar with 'Products and Licenses' and 'Migrate a Product License' (highlighted with a red box). Below the navigation, there is a search bar for 'UUID' with a 'Query' button. A table displays license information with columns for 'License Type', 'Registration Code', 'v2.1.0 ActivationCode', and 'v2.2.0 ActivationCode'. The table content is mostly obscured by a grey box. To the right, an orange box lists 'About to expire' licenses: SDC - 0, IEF - 0, IEC - 0, MRC Quick Link - 0, MXview One - 0, MXview One CM - 0, MXSecurity - 1, and Security Package - 1. Below the table, there are 'Migrate' and 'Download' buttons. At the bottom, there is a 'Privacy Policy' link.

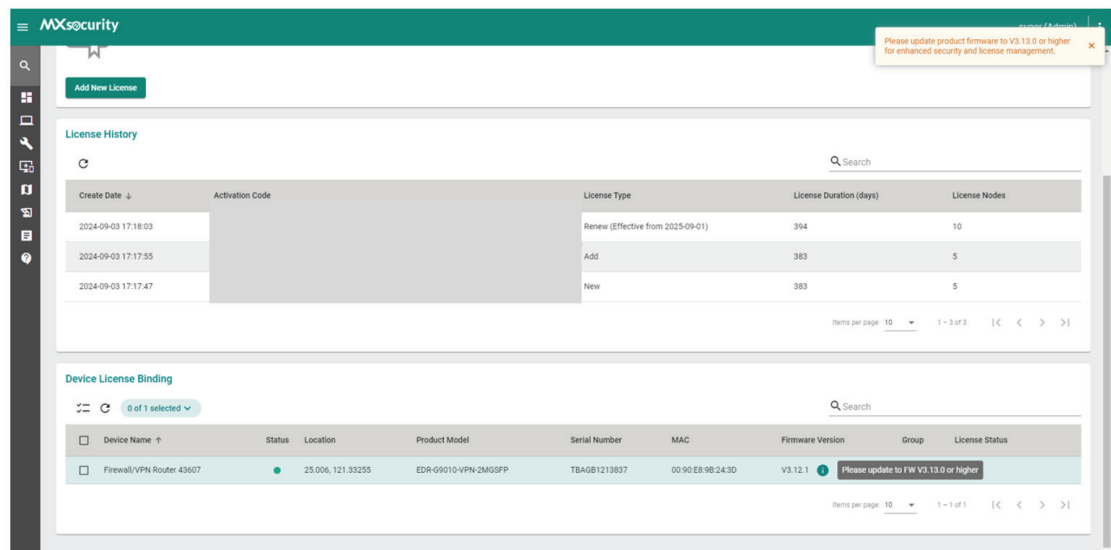
11. Download the **Migrate result.csv** file from the email you received.

The screenshot shows an email interface. The sender is 'license-manager@moxa.com'. The subject is 'Your licenses migrated successfully'. The email body contains the following text: 'Dear Customer, Your Licenses are migrated successfully. Here is the .csv file, and you could import it into the MXsecurity server. Thank you.' The attachment 'Migrate result.csv' (2 KB) is highlighted with a red box. The email footer includes the Moxa logo, social media icons, a 'PRIVACY POLICY' link, and the copyright notice '© 2020 Moxa Inc. All rights reserved.'.

- In MXsecurity, import the **Migrate result.csv** file and click **APPLY**.



- Confirm the licenses were migrated successfully by confirming the **License Transfer** tab is no longer visible.
- Navigate to **Licenses > IPS**.
- In the **Device License Binding** section, confirm the firmware of all MXsecurity devices is upgraded to v3.13.0 or later. Refer to [Firmware Management](#) for instructions on how to upgrade firmware.



4. Getting Started

This chapter describes how to get started with MXsecurity and perform the initial configuration.

Getting Started Task List

The Getting Started task list provides a high-level overview of all procedures required to get MXsecurity (MXsecurity) up and running as quickly as possible. Each step links to more detailed instructions later in the document.

1. Open the management console.
For more information, see [Opening the Management Console](#).
2. Change the administrator's default login name and password after logging in for the first time.
For more information, see [Changing Your Account Password](#).
3. Activate your product license.
For more information, see [Licenses](#).
4. Configure the system time.
For more information, see [Configuring the System Time](#).
5. Assigning policies to the device groups.
For more information, see [Device Group Management](#) and [Policy Profile Management](#).
6. Creating user accounts.
For more information, see [User Accounts](#)

Opening the Management Console

MXsecurity provides a built-in management console that you can use to configure and manage the product. View the management console using a web browser.

● NOTE

View the management console using Google Chrome version 103 or later.

Steps:

1. In a web browser, type the address of the MXsecurity in the following format:
`https://<target server IP address or FQDN>`
The login screen will appear.
2. Enter your username and password.
If you are logging in for the first time, use the default administrator credentials:
 - Username: admin
 - Password: moxa
3. Click **LOG IN**.
If this is your first time logging in, the Change Password window will appear.

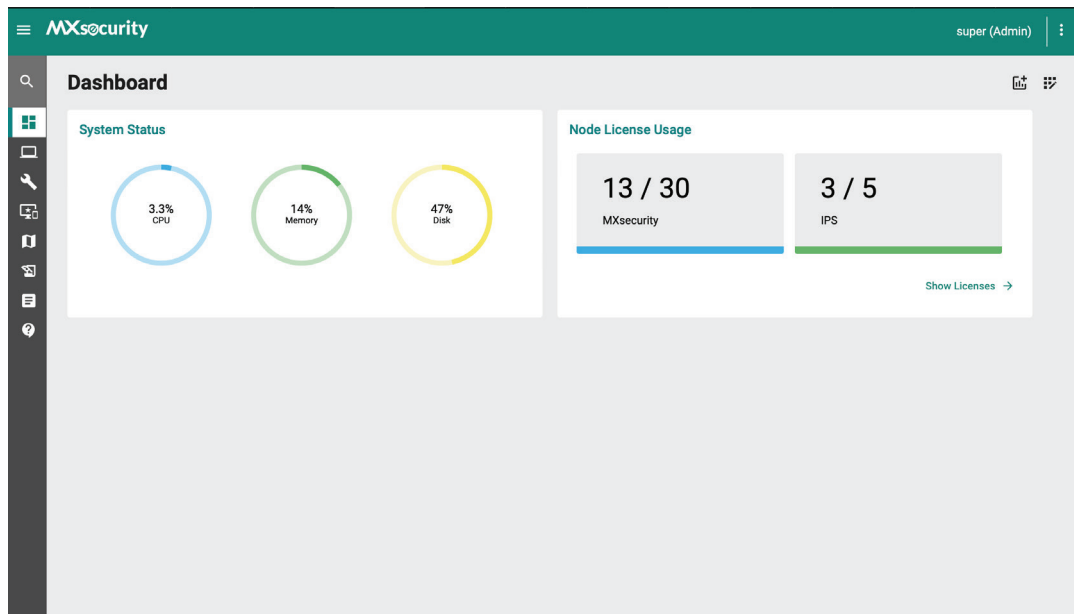
● NOTE

You must change the default login name and password before you can access the management console.

- a. Enter your new login details.
 - i. Current Password
 - ii. New Password
 - iii. Confirm New Password
- b. Click **Confirm**.

You will be automatically logged out of the system. The login screen will appear again.
- c. Log in again using your new credentials.

The dashboard screen will appear.



Connecting Secure Routers to MXsecurity

To manage secure routers through MXsecurity, the device needs to be synced to MXsecurity.

Steps:

1. Open a web browser and navigate to the secure router's web management interface by entering its IP address into the address bar.
2. Navigate to **System > Management Interface > MXsecurity**.
3. Enter the MXsecurity IP address field in the **Service Address** field.
4. **(Optional)** Configure the HTTPS port and Communication ports based on the MXsecurity server settings.

The screenshot shows the MXsecurity configuration page. It is divided into two main sections: 'Connection Status' and 'New Connection'.

Connection Status: This section displays the current state of the connection. The status is 'Connecting'. The package version is '1.0.0017'. The service address is '192.168.127.1'. The profile synchronization status is indicated by three dashes '---'. There is a refresh icon in the top right corner of this section.

New Connection: This section allows for configuring a new connection. It includes input fields for 'Service Address' (with a character count of 0 / 64), 'HTTPS Port' (set to 443), and 'Communication Port' (set to 8883). There are also fields for profile synchronization, both set to '1 - 65535'. A green 'CONNECT' button is located at the bottom of this section.

5. Click **CONNECT**.

The secure router's MXsecurity page also shows the current connection status. Refer to the table below for more information.

| Setting | Description |
|-------------------------|---|
| Status | The status of the connection to MXsecurity. Disconnected: The secure router is not connected to MXsecurity. Connecting: A connection to MXsecurity is being established. Connected: The secure router is connected to MXsecurity. |
| Package Version | The currently installed MXsecurity Agent Package. |
| Service Address | The IP address or domain name of the MXsecurity server. |
| Profile Synchronization | The status of the policy profile synchronization with MXsecurity. Unsynchronized: Failed to sync the policy profile settings with MXsecurity. Synchronized: The policy profile settings are synced with MXsecurity. Out of Synchronization: The policy profile settings were manually modified on the device, causing a mismatch the MXsecurity profile settings. |

5. Dashboard and Widgets

Monitor the system status, security assets, and threat detection on the Dashboard page. By default, the Dashboard includes widgets for System Status, Node License Usage, Group Status, Top 5 Layer 3-7 Policy Events, Top 5 Protocol Filter Policy Events, Top 5 ADP Events, and Top 5 IPS Events.

● NOTE

The amount of statistical information shown depends on your user account role and whether permission to manage each device group has been shared with you.

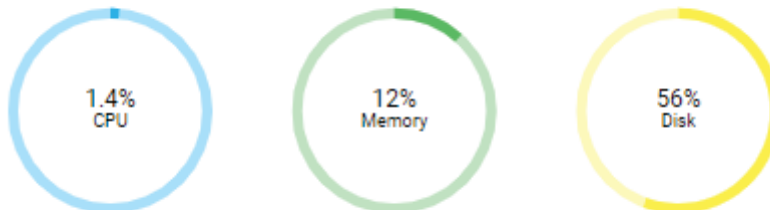
Dashboard Widgets Overview

This section describes available widgets on the dashboard.

System Status

This widget shows the CPU usage, memory usage, and disk usage of the system running the MXsecurity instance.

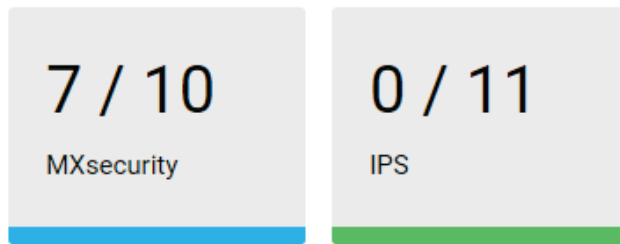
System Status



Node License Usage

This widget displays the number of registered devices and the number of unused node licenses.

Node License Usage



[Show Licenses →](#)

Group Status

This widget lists the information of device groups and device status.

Group Status

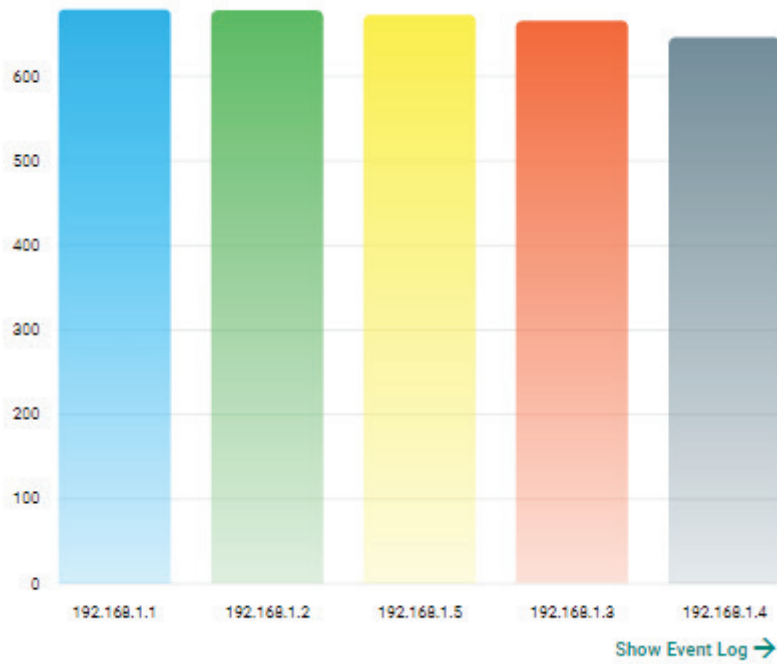


[Show Device Group →](#)

Top 5 Layer 3-7 Policy Events by Source IP

This widget displays the top 5 source IP addresses in the selected device group(s) where the most Layer 3-7 Policy Events were detected within the last 24 hours.

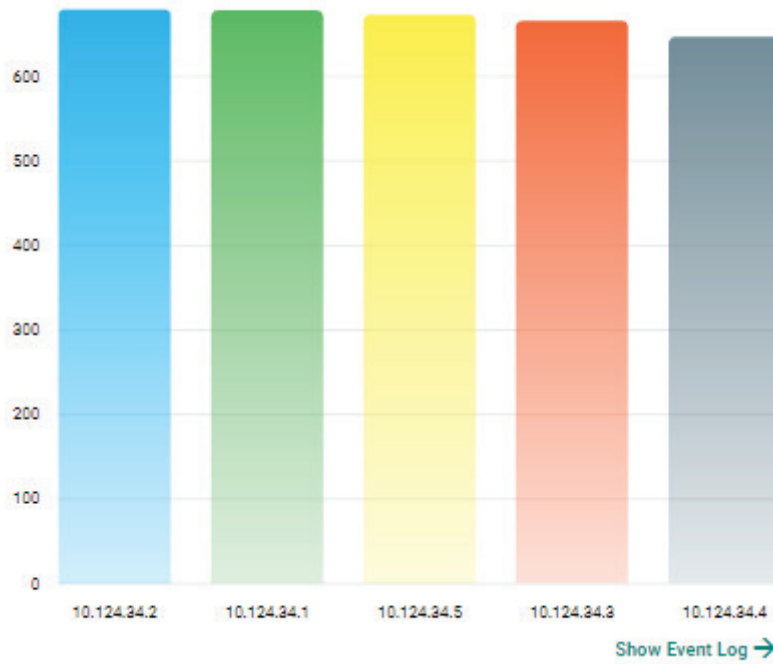
Top 5 Layer 3-7 Policy Events by Source IP



Top 5 Layer 3-7 Policy Events by Destination IP

This widget displays the top 5 destination IP addresses in the selected device group(s) where the most Layer 3-7 Policy Events were detected within the last 24 hours.

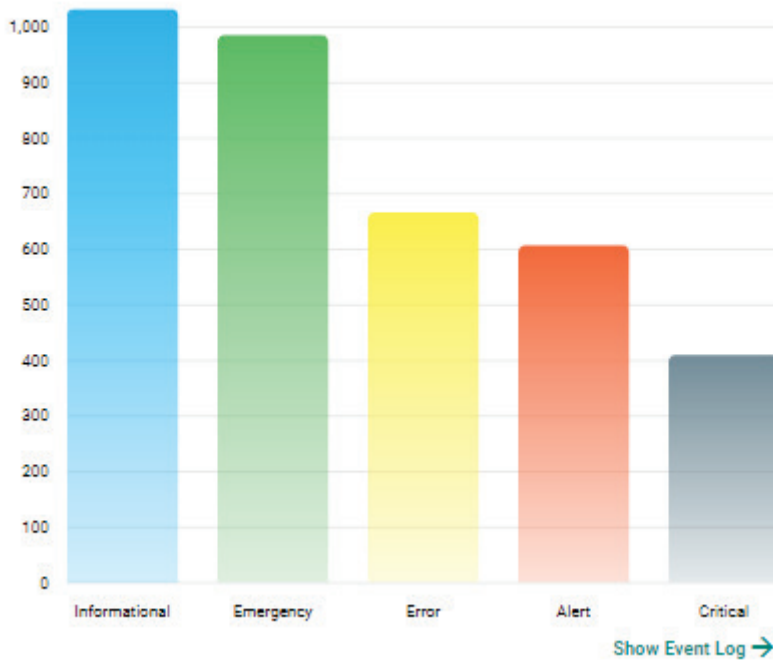
Top 5 Layer 3-7 Policy Events by Destination IP



Top 5 Layer 3-7 Policy Events by Severity

This widget displays the number of Layer 3-7 Policy Events in the selected device group(s) within the last 24 hours categorized by severity level.

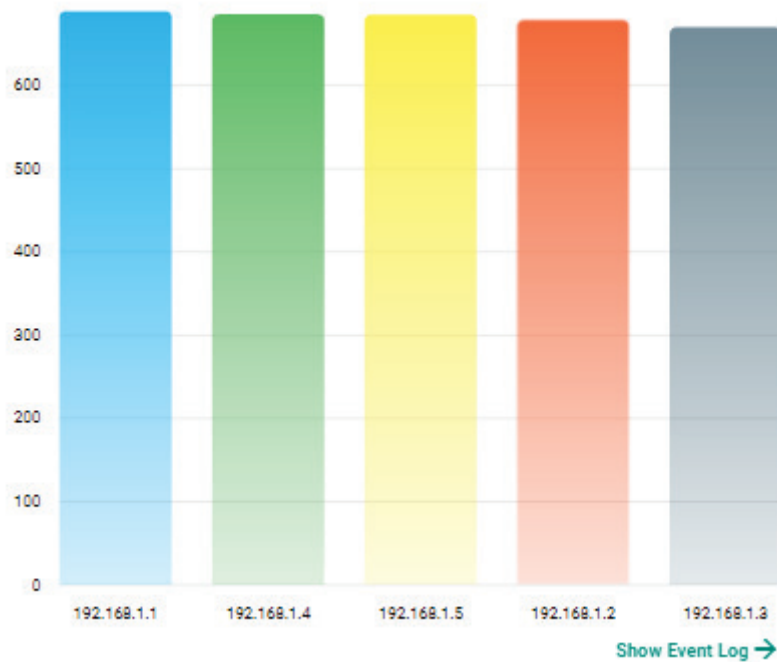
Top 5 Layer 3-7 Policy Events by Severities



Top 5 Protocol Filter Policy Events by Source IP

This widget displays the top 5 source IP addresses in the selected device group(s) where the most Protocol Filter Policy Events were detected within the last 24 hours

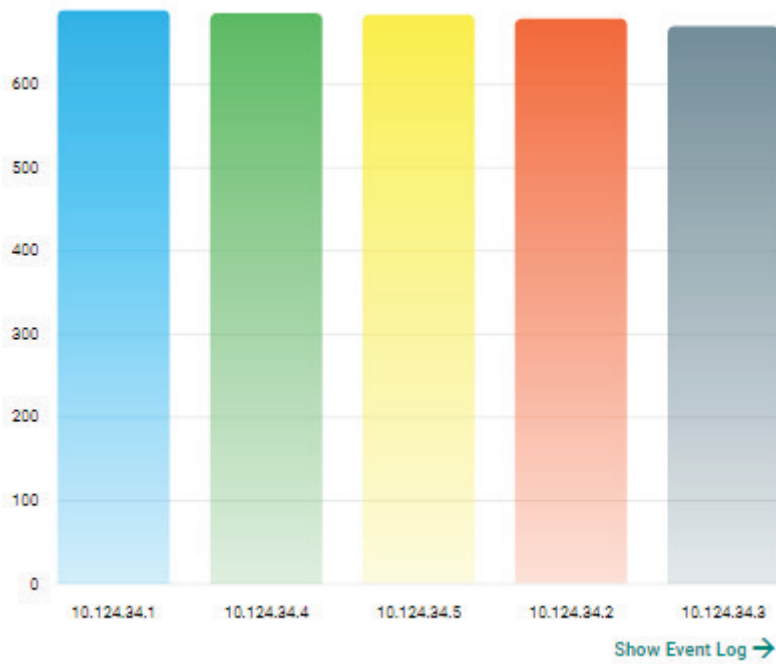
Top 5 Protocol Filter Policy Events by Source IP



Top 5 Protocol Filter Policy Events by Destination IP

This widget displays the top 5 destination IP addresses in the selected device group(s) where the most Protocol Filter Policy Events were detected within the last 24 hours.

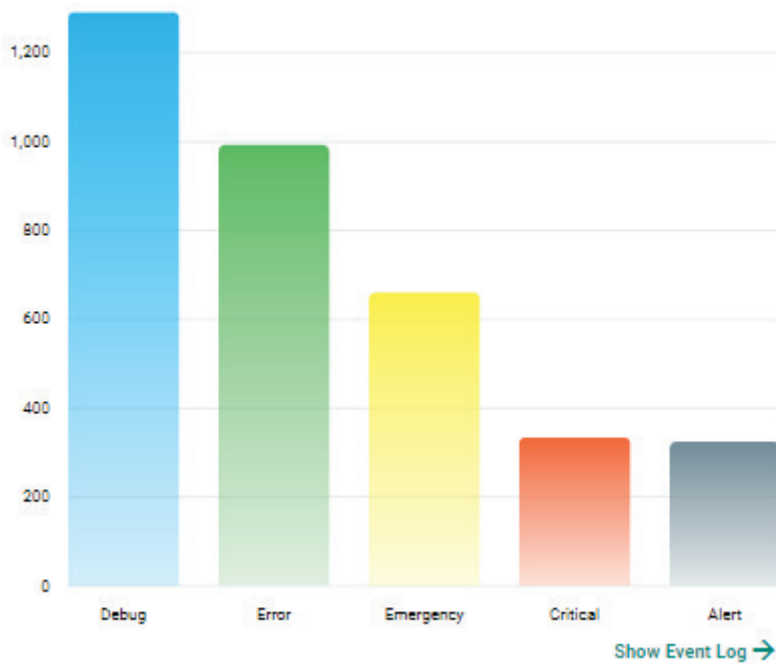
Top 5 Protocol Filter Policy Events by Destination IP



Top 5 Protocol Filter Policy Events by Severity

This widget displays the number of the Protocol Filter Policy Events in the selected device group(s) within the last 24 hours categorized by severity level.

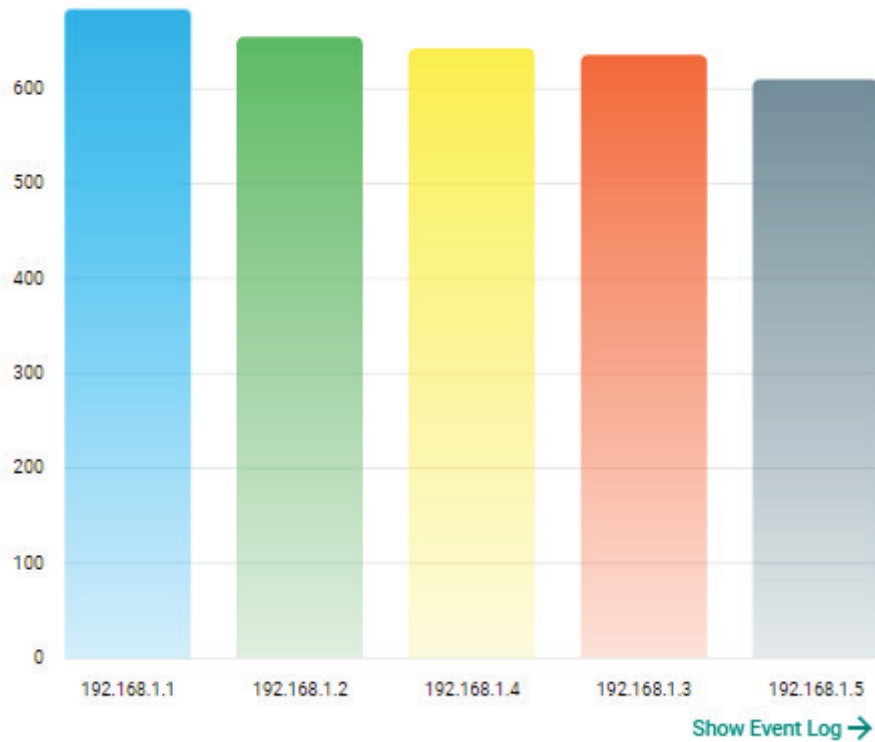
Top 5 Protocol Filter Policy Events by Severities



Top 5 ADP Events by Source IP

This widget displays the top 5 source IP addresses in the selected device group(s) where the most ADP Events were detected within the last 24 hours.

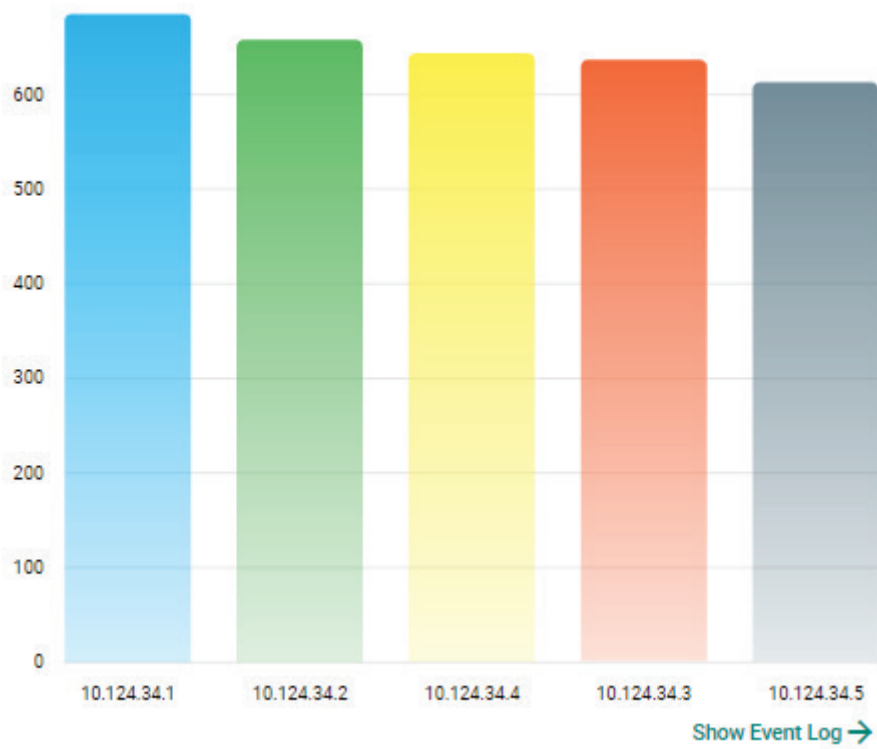
Top 5 ADP Policy Events by Source IP



Top 5 ADP Events by Destination IP

This widget displays the top 5 destination IP addresses in the selected device group(s) where the most ADP Events were detected within the last 24 hours.

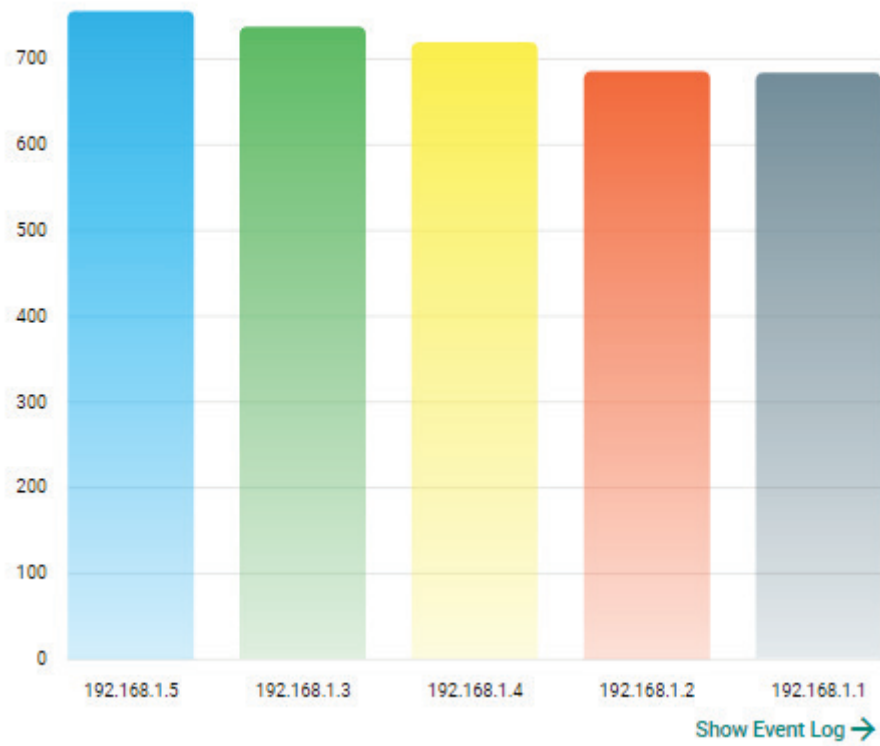
Top 5 ADP Policy Events by Destination IP



Top 5 IPS Events by Source IP

This widget displays the top 5 source IP addresses in the selected device group(s) where the most IPS Events were detected within the last 24 hours.

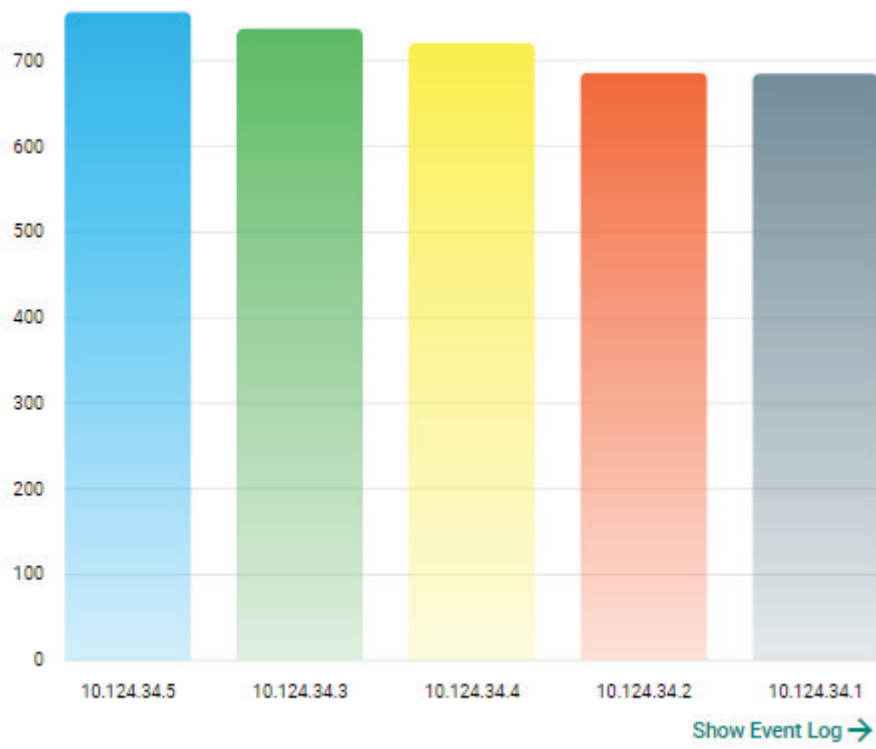
Top 5 IPS Policy Events by Source IP



Top 5 IPS Events by Destination IP

This widget displays the top 5 destination IP addresses in the selected device group(s) where the most IPS Events were detected within the last 24 hours.

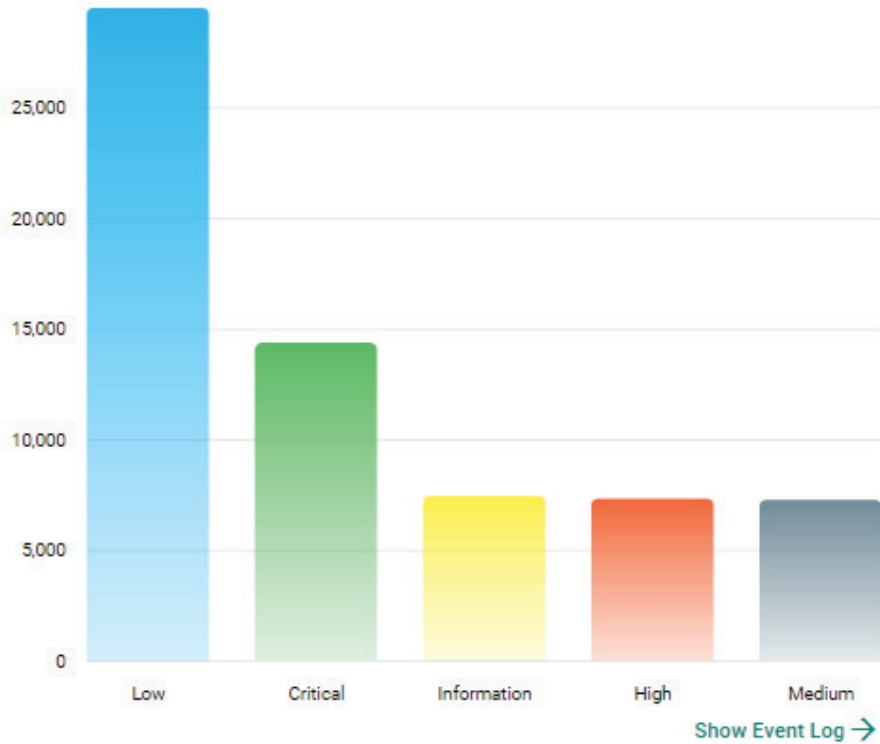
Top 5 IPS Policy Events by Destination IP



Top 5 IPS Events by Severity

This widget displays the number of IPS Events in the selected device group(s) within the last 24 hours categorized by severity level.

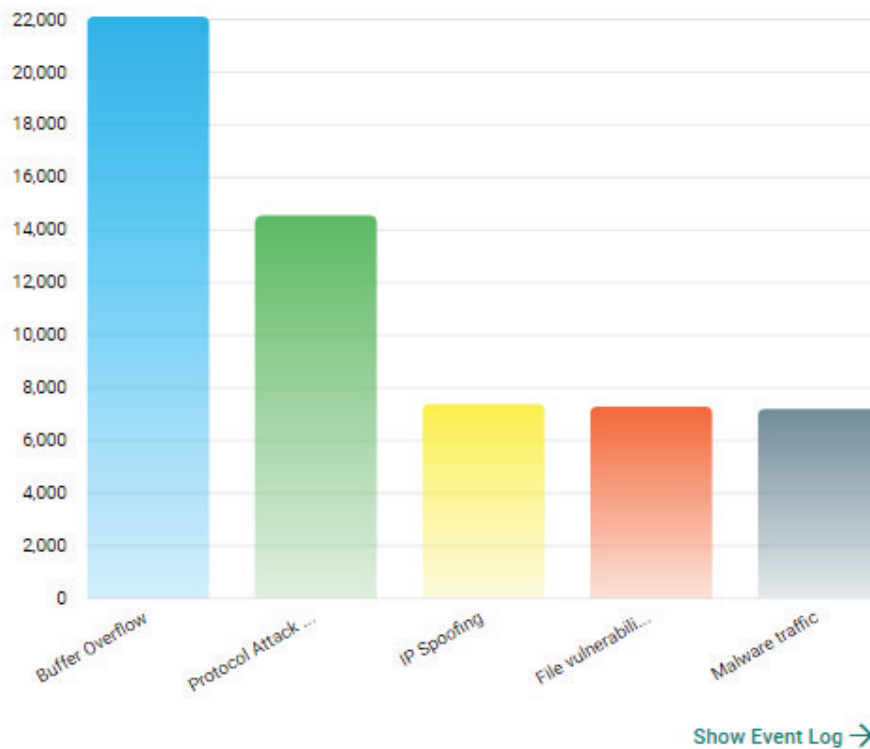
Top 5 IPS Policy Events by Severities



Top 5 IPS Events by Category

This widget displays the number of IPS Events in the selected device group(s) within the last 24 hours categorized by category.

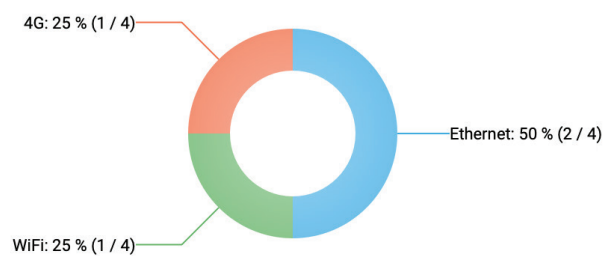
Top 5 IPS Policy Events by Category



Connection Interface (Cellular Router)

This widget displays a summary of the type of interface currently being used for internet connectivity across all OnCell Series routers. The categories include 5G, 4G, 3G, 2G, Ethernet, and Wi-Fi.

Connection Interface (Cellular Router)

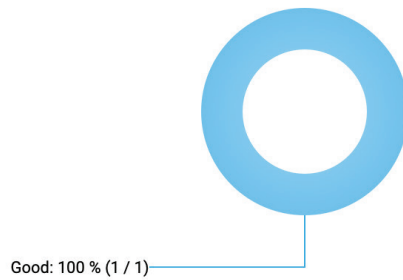


[Show Map View →](#)

Signal Quality (Cellular Router)

This widget displays a summary of the cellular interface signal quality across all OnCell Series routers, including Good, Fair, Poor, and No Signal.

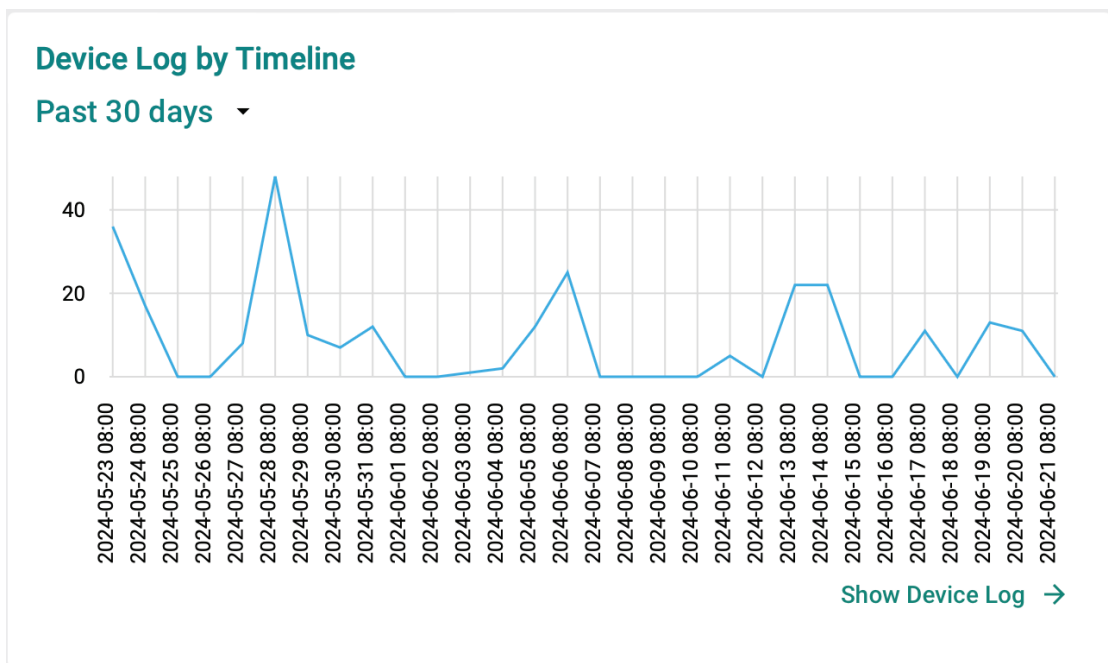
Signal Quality (Cellular Router)



[Show Map View](#) →

Device Log by Timeline

This widget provides a visual representation of device log events over a specified period. Users can configure the timeline to display events for either the past 24 hours or the past 30 days.

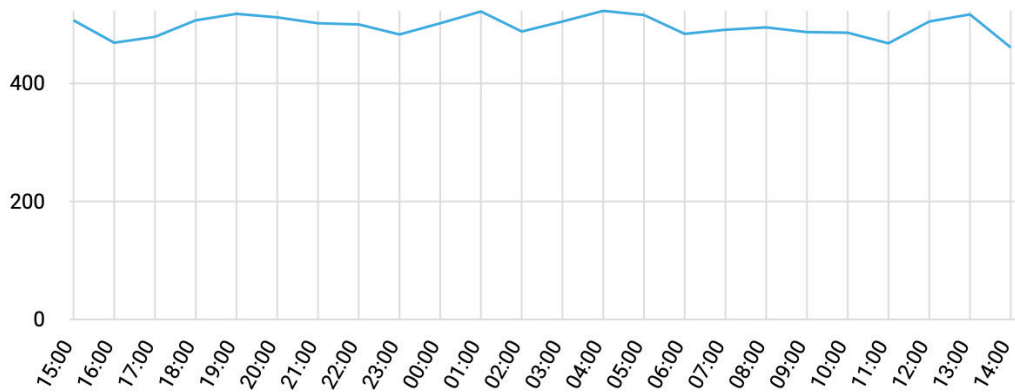


Firewall Log by Timeline

This widget offers a visual representation of firewall events over a specified period. Users can configure the timeline to display events for either the past 24 hours or the past 30 days. Additionally, users can select different subcategories of firewall events, such as DoS policy, to display on the 24-hour or 30-day view.

Firewall Log by Timeline

Trusted Access ▾ Past 24 hours ▾



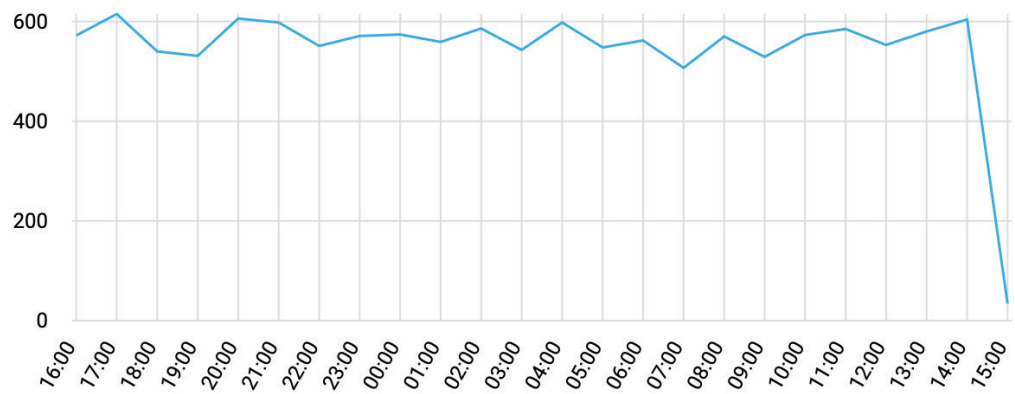
[Show Firewall Log →](#)

VPN Log by Timeline

This widget provides a visual representation of VPN events over a specified period. Users can configure the timeline to display events for either the past 24 hours or the past 30 days.

VPN Log by Timeline

Past 24 hours ▾




[Show VPN Log →](#)

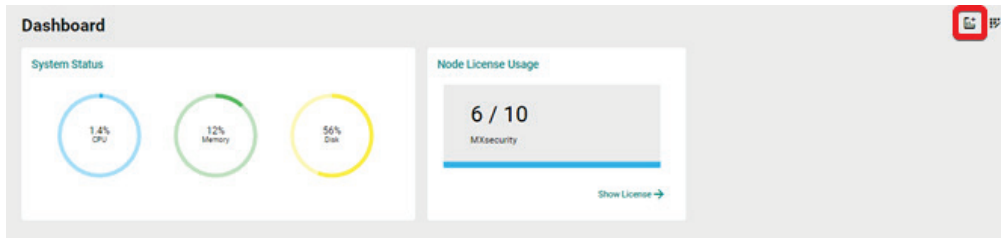
Widget Management

This section describes how to manage the widgets on the MXsecurity Dashboard.

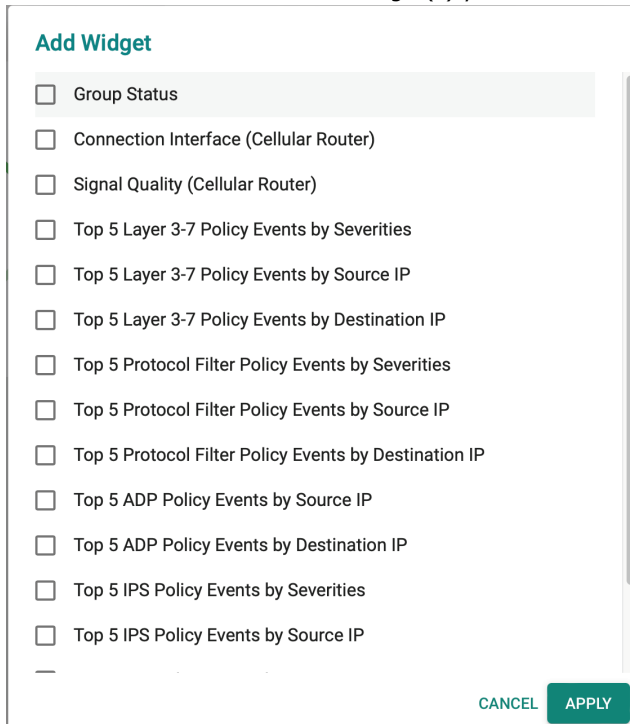
Adding a Widget to the Dashboard

Steps:

1. Click the  icon to add widgets.




2. Check the checkbox next to the widget(s) you want to add.

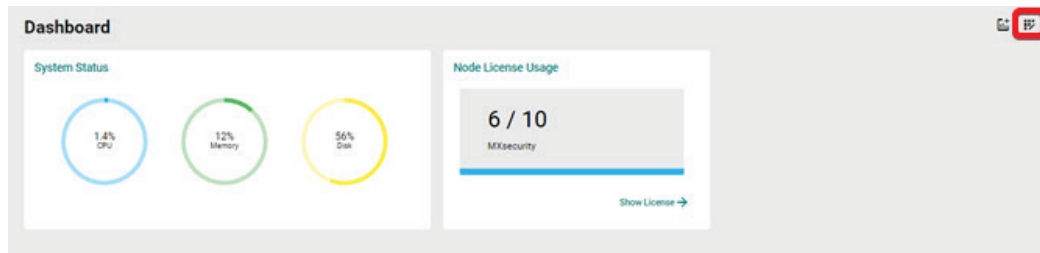


3. Click **APPLY** to add the selected widget(s) to the tab.

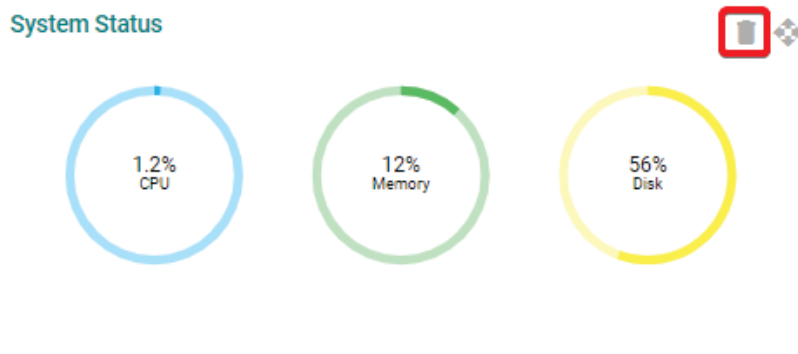
Removing a Widget from the Dashboard


Steps:

1. Click the  icon to edit the dashboard.




2. Click the  icon of the widget you want to remove.

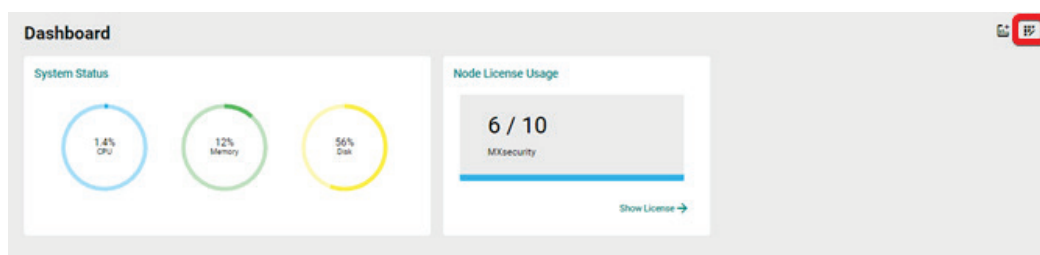


3. Click the  icon again to save your changes and leave edit mode.

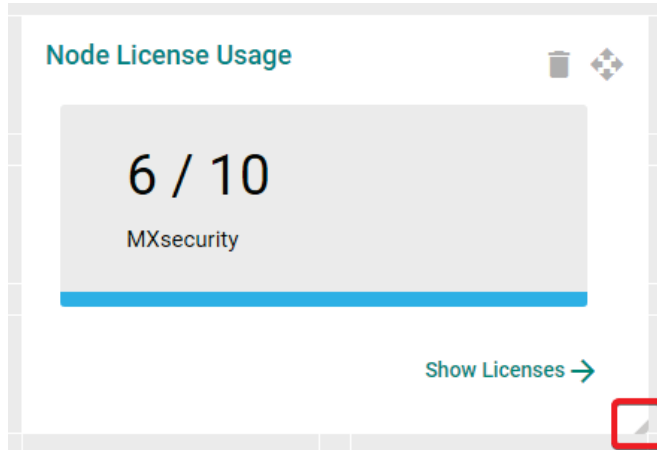
Resizing a Widget


Steps:

1. Click the  icon to edit the dashboard.




2. Hover the mouse cursor over the bottom-right corner of the widget until the resize icon is visible.

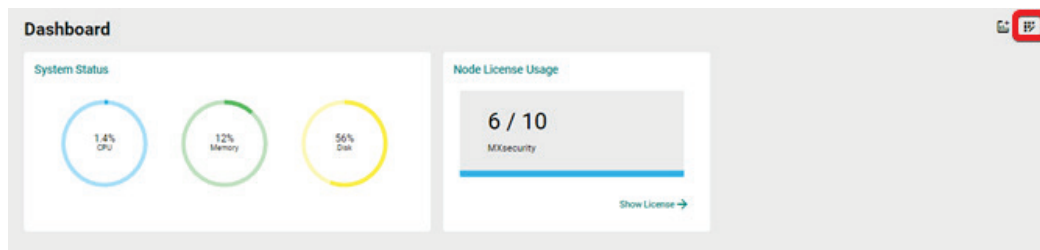



3. Click and drag the corner of the widget to the desired size, then release the mouse. The dark grey area in the Dashboard background indicates the final size of the widget.
4. Click the  icon again to save your changes and leave edit mode.

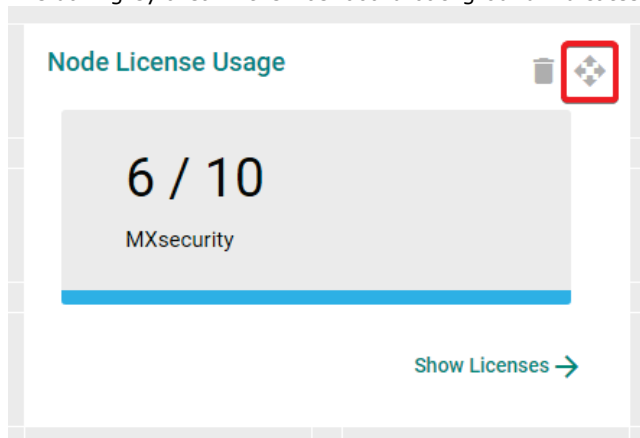
Moving the Widget Position


Steps:

1. Click the  icon to edit the dashboard.



2. Click and hold the  icon then drag the widget to the desired position and release the mouse. The widget will automatically snap into place. The dark grey area in the Dashboard background indicates the final location of the widget.



3. Click the  icon again to save your changes and leave edit mode.

6. Management

The Management page lets you manage device groups, and system databases for firmware software, packages, objects, policy profiles, and device configuration files. With these databases, you can deploy each device individually or arrange them in groups to share the same configuration and policy.

- **NOTE**

The information shown depends on your user account role and whether the permission to manage the device groups has been shared with you.

Device Group Management

To easily manage a large number of devices using MXsecurity, devices can be conveniently grouped so that the same security policy configurations can be shared among the devices that belong to the same group.

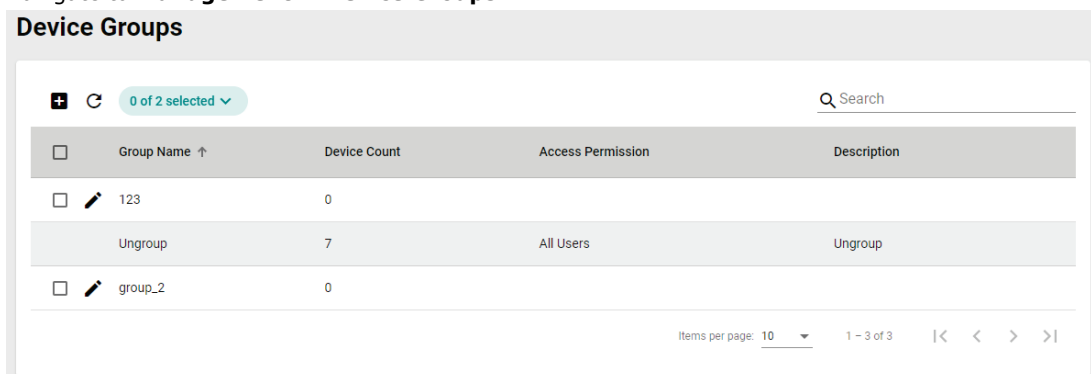
The configurations and policies that can be shared are:


- Firmware
- Software packages
- Objects
- Policy profiles
- Device configurations

Creating a New Device Group

Steps:


1. Navigate to **Management > Device Groups**.



2. Click the  icon to create a new group.
3. Provide a name and description for the group and click **NEXT**.
The group name can be up to 32 characters long and supports a-z, A-Z, 0-9, periods (.), and underscores (_).

Create Group

1 Enter Group Information — 2 Add Devices — 3 Grant Access Permission

Group Name * 0 / 32 

Description 0 / 255

[CANCEL](#) [NEXT](#)

4. Check the box of the device(s) that you want to add to the group and click **NEXT**.

Create Group

1 Enter Group Information — 2 Add Devices — 3 Grant Access Permission

0 of 6 Selected

Search

| <input type="checkbox"/> | Host Name ↑ | Status | Location | Model Name | Serial Number | MAC | Firmware Version | Group |
|--------------------------|---------------------------|--------|-----------------|------------------------|---------------|-------------------|------------------|---------|
| <input type="checkbox"/> | Firewall/VPN Router 00000 | ● | Device Location | EDR-G9010-VPN-2MGSFP | MOXA00000000 | 00:33:11:22:33:44 | V2.0 | Ungroup |
| <input type="checkbox"/> | device_1 | ● | location_1 | EDR-G9010-VPN-2MGSFP | 1 | 00:00:00:00:00:01 | V1.0 | Ungroup |
| <input type="checkbox"/> | device_2 | ● | location_2 | EDR-G9010-VPN-2MGSFP | 2 | 00:00:00:00:00:02 | V1.0 | Ungroup |
| <input type="checkbox"/> | device_3 | ● | location_3 | EDR-G9010-VPN-2MGSFP | 3 | 00:00:00:00:00:03 | V1.0 | Ungroup |
| <input type="checkbox"/> | device_4 | ● | location_4 | EDR-G9010-VPN-2MGSFP | 4 | 00:00:00:00:00:04 | V1.0 | Ungroup |
| <input type="checkbox"/> | xxx | ● | aaa | EDR-G9010-VPN-2MGSFP-T | MOXA00000000 | 00:01:02:03:04:05 | V2.0 | Ungroup |

Items per page: 10 1 - 6 of 6

BACK NEXT

5. Check the box of the username(s) that you want to assign to the group and click **APPLY**.

Create Group

1 Enter Group Information — 2 Add Devices — 3 Grant Access Permission

0 of 2 Selected

Search


| <input type="checkbox"/> | Username ↑ | Role | Description |
|--------------------------|------------|----------|--------------------------|
| <input type="checkbox"/> | _kk | Viewer | kkk pokjpo opkpk_...--() |
| <input type="checkbox"/> | super | Admin | root |
| <input type="checkbox"/> | test | Operator | 123 |

Items per page: 10 1 - 3 of 3

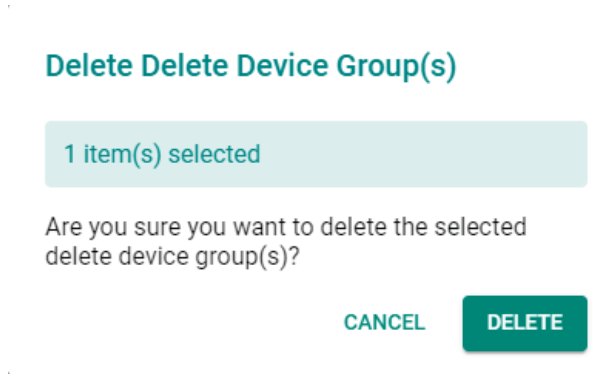
BACK APPLY

Deleting a Device Group

Steps:


1. Navigate to **Management > Device Groups**.
2. Check the box of the group(s) you want to delete.
3. Click the  icon to delete the selected group(s).

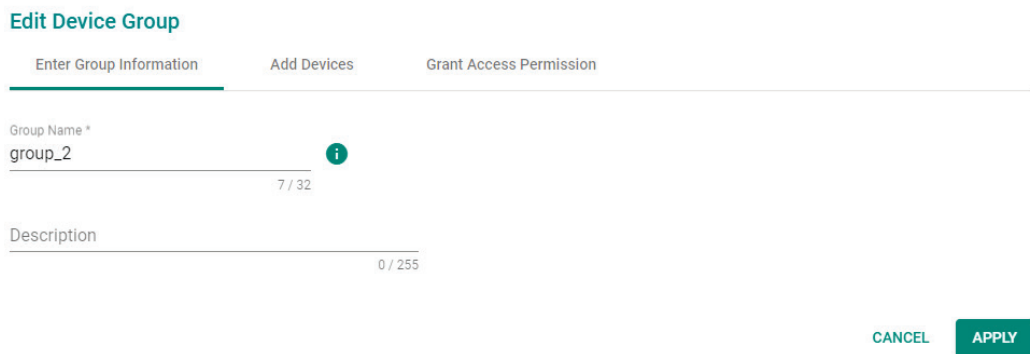
- When prompted to confirm, click **DELETE**.



Editing a Device Group

Steps:

- Navigate to **Management > Device Groups**.
- Click the  icon to edit a device group.
- Edit the device group information, add devices, or grant access permissions.



- Click **APPLY** to save the changes.


Firmware Management

This section describes how to manage the local firmware database from MXsecurity.



Uploading a New Firmware




Steps:

- Navigate to **Management > Firmwares**.

2. Click the  icon to add a new firmware.

Firmwares

  0 of 3 selected Search

| <input type="checkbox"/> | Model Series ↑ | Version | Build Time | Description | Schedule In Use |
|--------------------------|--|---------|---------------------|-------------|-----------------|
| <input type="checkbox"/> |  EDR-G9010 | V2.1 | 2021-05-19 16:00:00 | | Yes |
| <input type="checkbox"/> |  EDR-G9010 | V3.1 | 2021-05-19 16:00:00 | | Yes |
| <input type="checkbox"/> |  OnCell G4302 | V1.1 | 2021-05-19 16:00:00 | | |

Items per page: 10 1 - 3 of 3 |< < > >|

● NOTE


"Schedule in Use" indicates there is an upcoming scheduled deployment to apply this firmware to the device. To avoid any disruptions or deployment process failures, firmware files with planned deployments cannot be deleted.

3. Drag and drop or browse to the firmware file on the local machine and enter a description.

Upload Firmware

Description 0 / 255

Upload a firmware file (.rom)


 Drag and drop a file here, or [browse](#).

CANCEL UPLOAD

4. Click **UPLOAD**.

Deleting a Firmware

Steps:

1. Navigate to **Management > Firmwares**.
2. Check the box of the firmware you want to delete.
3. Click the  icon to delete the selected firmware.
4. When prompted to confirm, click **DELETE**.

Delete Firmware(s)

1 item(s) selected

Are you sure you want to delete the selected firmware(s)?


CANCEL

DELETE

Exporting Firmware

You can export the firmware files from MXsecurity to the local computer.

Steps:

1. Navigate to **Management > Firmwares**.
2. Click the  icon to download the firmware.

Software Package Management

This section describes how to manage the software package either manually from a local PC or automatically by syncing to the Moxa server.

The following packages can be managed in MXsecurity:


- Network Security Package


This section contains the following tabs:

- **Software Packages File:** Manage software package files for supported devices.
- **Log:** Shows software package-related event logs.
- **Sync:** Configure scheduled software package update checks.

Checking the Security Package Status

The **Software Packages Update Check** section provides information about the Moxa server connection status, the time and date of the last check, and the result of the last check. To access this section, navigate to **Management > Software Packages > Software Packages File**.

Software Packages Update Check 

Server :  Connected [CHECK NOW](#)

Last Connection Check : 2024-06-21 15:11:58

Last Software Package Update Result : No new version detected (2024-06-21 15:11:58, manually)

[CHECK SOFTWARE PACKAGE](#)

The widget shows the following information:

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

To check for software package updates, click the **CHECK SOFTWARE PACKAGE** button. A list of models and any available software package updates will be shown. The models shown in the list are configured in

the **Sync Settings** tab. Refer to [Setting Up a Scheduled Security Package Update Check](#).

Software Package Check


0 of 0 selected Search

| Version |
|--------------------------------------|
| EDF-G1002 |
| Software Package already up-to-date. |
| EDR-8010 |
| Software Package already up-to-date. |
| EDR-G9004 |
| Software Package already up-to-date. |
| EDR-G9010 |
| Software Package already up-to-date. |
| OnCell-G4302 |

CLOSE

Uploading a New Software Package

Steps:

1. Navigate to **Management > Software Packages > Software Packages File**.
2. Click the  icon to upload a new software package.

Software Packages

Network Security Packages

0 of 5 selected Search

| | Version | Supported Series | Build Time | Description | Profile In Use | Schedule In Use |
|--------------------------|----------|------------------|---------------------|-------------|----------------|-----------------|
| <input type="checkbox"/> | 5.5.0009 | OnCell-G4302 | 2023-05-26 18:00:00 | | 0 | |
| <input type="checkbox"/> | 8.0.0001 | EDR-8010 | 2023-06-27 18:00:00 | | 1 ... | Yes |
| <input type="checkbox"/> | 7.0.0008 | EDR-8010 | 2023-06-27 18:00:00 | | 0 | |
| <input type="checkbox"/> | 6.0.0009 | EDR-G9010 | 2023-05-26 18:00:00 | | 0 | |
| <input type="checkbox"/> | 7.0.0008 | OnCell-G4302 | 2023-06-27 18:00:00 | | 0 | |

Items per page: 10 1 - 5 of 5

NOTE

"Profile in Use" indicates the number of policy profiles the file is being used by. Files used by policy profiles cannot be deleted. Click the "... " icon in the column to see details of the referenced policy profile(s).

NOTE


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

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

Upload Package

Description 0 / 255

Upload a package file (.pkg)


 Drag and drop a file here, or [browse](#).

CANCEL UPLOAD

4. Click **UPLOAD**.

Deleting a Software Package

Steps:

1. Navigate to **Management > Software Packages > Software Packages File**.
2. Check the box of the package(s) you want to delete.
3. Click the  icon to delete the selected software package(s).
4. When prompted to confirm, click **DELETE**.

Delete Software Package(s)

1 item(s) selected

Are you sure you want to delete the selected software package(s)?


CANCEL

DELETE

Exporting Software Packages

You can export the software packages from MXsecurity to the local computer.

Steps:


1. Navigate to **Management > Software Packages > Software Packages File**.
2. Click the  icon to download the software packages.

Viewing Detailed Information of a Software Package

You view more detailed information about each software package, including the supported products, build time, and how many devices use the software package.

Steps:

1. Navigate to **Management > Software Packages > Software Packages File**.

- Click the  icon to show detailed information for the software package.

Software Packages

Network Security Packages

0 of 6 selected

Search

| <input type="checkbox"/> | Version | Supported Series | Build Time | Description | Profile in Use | Schedule in Use |
|--------------------------|---|------------------|---------------------|-------------|----------------|-----------------|
| <input type="checkbox"/> | 5.5.0007 | OnCell-G4302 | 2023-04-12 02:00:00 | | 0 | Yes |
| <input type="checkbox"/> | 5.5.0012 | OnCell-G4302 | 2023-06-28 02:00:00 | | 0 | |
| <input type="checkbox"/> | 6.0.0012 | EDR-G9010 | 2023-06-09 02:00:00 | | 1 ... | Yes |
| <input type="checkbox"/> | 6.0.0013 | EDR-G9010 | 2023-06-28 02:00:00 | | 0 | |
| | Supported Functions: Modbus/TCP, DNP3, IEC-104, MMS, IPS | | | | | |
| <input type="checkbox"/> | 7.0.0001 | EDR-8010 | 2023-04-22 02:00:00 | | 0 | |
| <input type="checkbox"/> | 6.0.0006 | EDR-8010 | 2023-04-27 02:00:00 | | 0 | Yes |

Items per page: 10 | 1 - 6 of 6 | [< >]

● NOTE

"Profile in Use" indicates the number of policy profiles the file is being used by. Files used by policy profiles cannot be deleted. Click the "... " icon in the column to see details of the referenced policy profile(s).


● NOTE

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


Viewing Network Security Package Logs

Steps:

- Navigate to **Management > Software Packages > Log**.
- You can perform the following actions:

- Click the  button to export the current search results as a CSV file.



- Click the  button to renew the search results.



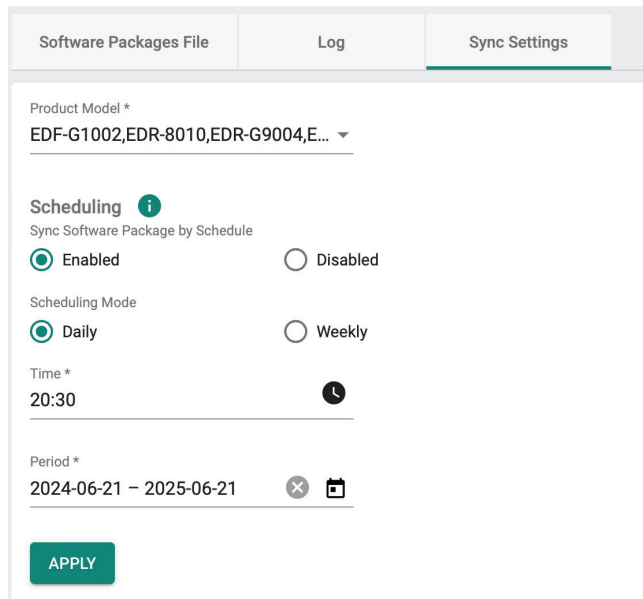
The following table describes the log's fields.

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

Setting Up a Scheduled Security Package Update Check

Steps:

1. Navigate to **Management > Software Packages**.
2. Click the **Sync Settings** tab.



The screenshot shows the 'Sync Settings' tab in a web interface. At the top, there are three tabs: 'Software Packages File', 'Log', and 'Sync Settings'. Below the tabs, there is a 'Product Model *' dropdown menu with the value 'EDF-G1002,EDR-8010,EDR-G9004,E...'. Underneath, there is a 'Scheduling' section with an information icon. It contains a 'Sync Software Package by Schedule' section with two radio buttons: 'Enabled' (selected) and 'Disabled'. Below that is a 'Scheduling Mode' section with two radio buttons: 'Daily' (selected) and 'Weekly'. There is a 'Time *' field with the value '20:30' and a clock icon. At the bottom, there is a 'Period *' field with the value '2024-06-21 - 2025-06-21' and a calendar icon. An 'APPLY' button is located at the bottom left of the form.

3. In the Product Model field, select the product models to include the software package update check.
4. Set the Sync Software Package by Schedule radio to **Enabled** to enable scheduled update checks.
5. Select a Scheduling Mode, either daily or weekly:
 - a. If daily: Set the time of the day to perform the check.
 - b. If weekly: Set the day of the week and time of the day to perform the check.
6. In the Period field, specify the check period. The system will only perform update checks on the specified time and date during this period.
7. Click **APPLY**.

Object Management

This section describes how to manage the local object database from MXsecurity. The objects simplify policy management by storing configurations that can be used by the device group they are associated with.


You can configure the following types of objects in MXsecurity:

- **Filter Objects:** Contain the IP address and subnet, network service, industrial application service, and user-defined service that you can apply to a policy rule.
- **Interface Objects:** Contain the VLAN interface and bridge interface that you can apply to a policy rule.

Creating a New Filter Object


Steps:

1. Navigate to **Management > Objects**.
2. Click the **Filter** tab.

- Click the  icon to create a new object.

Objects

Filter | Interface

 0 of 13 selected

Search

| <input type="checkbox"/> | Object Name ↑ | Type | Details | References |
|--------------------------|---------------|-----------------------|---------------|------------|
| <input type="checkbox"/> | 44 | IP Address and Subnet | 192.168.127.1 | 0 |
| <input type="checkbox"/> | 123 | IP Address and Subnet | 192.168.1.0 | 0 |
| <input type="checkbox"/> | 02 | IP Address and Subnet | 1.1.1.1 | 0 |
| <input type="checkbox"/> | 03 | IP Address and Subnet | 2.2.2.2 | 0 |
| <input type="checkbox"/> | 04 | User-defined Service | TCP 3 | 1 ... |

- Enter a name for the object.

Create Object


Object Name *  0 / 32

Object Type *

CANCEL **CREATE**

- Select the Object Type. Depending on the select type, configure the following settings:

Create Object

Object Name *  0 / 32

Object Type *


- IP Address & Subnet
- Network Service
- Industrial Application Service
- User-defined Service

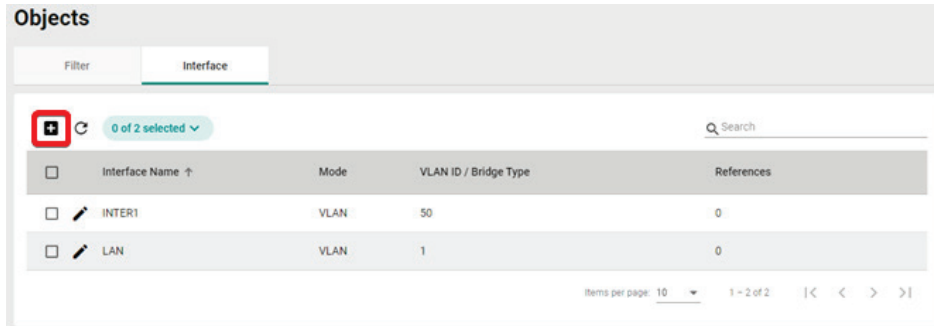
CANCEL **CREATE**

- IP Address and Subnet:**
 - Depending on the selected IP Type, enter the IP address, IP range, or subnet.
 - Network Service:**
 - Check the box next to the service(s) you want to add to the object.
 - Industrial Application Service:**
 - Check the box next to the industrial application service(s) you want to add to the object.
 - User-defined Service:**
 - Select an IP protocol.
 - Depending on the select protocol, specify the port, port range, ICMP Type and Code, or protocol decimal.
- Click **CREATE**.

Creating a New Interface Object

Steps:

1. Navigate to **Management > Objects**.
2. Click the **Interface** tab.
3. Click the  icon to create a new object.



4. Enter a name for the object.

Create Interface

Interface Name 0 / 32 ⓘ

Mode

VLAN Bridge

VLAN *


1 ~ 4094

CANCEL APPLY

5. Select the Mode. Depending on the selected mode, configuring the following settings:
 - a. **VLAN:**
 - i. Enter the VLAN ID.
 - b. **Bridge:**
 - i. Select a bridge mode.
6. Click **CREATE**.


Editing an Object

Steps:

1. Navigate to **Management > Objects**.
2. Depending on the object you want to edit, click the **Filter** or **Interface** tab.
3. Click the  icon to edit the object.
4. Modify the object settings.
For Filter Objects, refer to [Creating a New Filter Object](#).
For Interface Objects, refer to [Creating a New Interface Object](#).
5. When finished, click **APPLY** to save the changes.

Deleting an Object

Steps:

1. Navigate to **Management > Objects**.
2. Depending on the object you want to delete, click the **Filter** or **Interface** tab.
3. Check the box of the object(s) that you want to delete.
4. Click the  icon to delete the selected object(s).
5. When prompted to confirm, click **DELETE**.

Delete Interface(s)

2 item(s) selected

Are you sure you want to delete the selected interface(s)?

CANCEL

DELETE

Policy Profile Management

This section describes how to manage the local policy profile database from MXsecurity. Policy profiles aggregate various firewall policies and can be deployed to device groups based on network security requirements.


You can configure the following types of policies in MXsecurity:

- **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.

Creating a New Layer 3-7 Policy Profile

Steps:

1. Navigate to **Management > Policy Profiles**.

- Click the  icon to create a policy profile.

Policy Profiles

0 of 11 selected Search

| <input type="checkbox"/> | Profile Name ↑ | Description | Device In Use | Schedule In Use |
|--------------------------|-----------------|-------------|---------------|-----------------|
| <input type="checkbox"/> | Dos | | 0 | |
| <input type="checkbox"/> | Dos2 | | 0 | |
| <input type="checkbox"/> | abcd | | 1 ... | Yes |
| <input type="checkbox"/> | br-test | | 0 | |
| <input type="checkbox"/> | fsafdfad | | 4 ... | Yes |
| <input type="checkbox"/> | ips | | 0 | |
| <input type="checkbox"/> | test321 | 123321 | 0 | |
| <input type="checkbox"/> | testprofile2222 | | 0 | |
| <input type="checkbox"/> | testseste | | 0 | |
| <input type="checkbox"/> | testsesterfdrd | | 0 | |

Items per page: 10 1 - 10 of 11 |< < > >|

● **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 of the referenced device(s).

● **NOTE**

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

- Enter a name and description for the policy profile.
- Expand the **Layer 3-7** profile options.


Layer 3 - 7 ^

| | | | |
|-----------------------|----------------|-----------------------------|--|
| Policy Global Setting | | Policy Event Global Setting | |
| Enforcement | Default Action | Log | |
| Disabled | Deny All | Enabled | |

0 of 0 Selected Search

| <input type="checkbox"/> | Index | Enforce | Policy Name | Event | Incoming Interface | Outgoing Interface | Filter Mode | Source Address | Source Port | Destination Address | Destination Port or Protocol | Action | Description |
|--------------------------|-------|---------|-------------|-------|--------------------|--------------------|-------------|----------------|-------------|---------------------|------------------------------|--------|-------------|
|--------------------------|-------|---------|-------------|-------|--------------------|--------------------|-------------|----------------|-------------|---------------------|------------------------------|--------|-------------|

Items per page: 10 0 of 0 |< < > >|

- Configure the global policy and log settings:
 - Enforcement:** Enable or disable the Layer 3-7 policy profiles.
 - Default Action:** Choose to deny or allow packets if the packets do not match any configured rules.
 - Log:** Enable or disable logging Layer 3-7 policy events.
- Click the  icon to create a Layer 3-7 policy profile.

7. Configure the Layer 3-7 Policy Profile settings:

Create Layer 3-7 Policy

Index *
1
1 ~ 1024

Status *
Enabled

Name *
0 / 32

Description
0 / 128

Log *
Disabled

Severity *
<4> Warning

Log Destination
Local Storage

Incoming Interface *
Any

Outgoing Interface *
Any

Action *
Allow

Filter Mode *
IP and Port Filtering

Source IP Address *
Any

Source Port *
Any

Destination IP Address *
Any

Destination Port or Protocol *
Any

- a. **Index:** Specify the index for the policy profile.
- b. **Status:** Enable or disable the policy profile.
- c. **Name:** Enter a description for the policy profile.
- d. **Description:** Enter a description for the policy profile.
- e. **Log:** Enable or disable event logs.
- f. **Severity:** Select the log severity level.
- g. **Log Destination:** If logging is enabled, choose where the logs will be stored. Multiple options can be selected.
- h. **Incoming/Outgoing Interface:** Select the incoming and outgoing interfaces.
- i. **Action:** Select the action when traffic matches the policy rule.
- j. **Filter Mode:** Select a filtering mode. Depending on the selected mode, configure the following settings:
 - i. **Source/Destination IP Address:** Select Any or a preconfigured Filter Object. Refer to [Creating a New Filter Object](#).
 - ii. **Source Port/Destination Port or Protocol:** Select Any or a preconfigured Interface Object. Refer to [Creating a New Interface Object](#).

IP and Source MAC Binding:


- i. **Source MAC Address:** Specify the source MAC address.
- ii. **Source IP Address:** Select a preconfigured Filter Object. Refer to [Creating a New Filter Object](#).

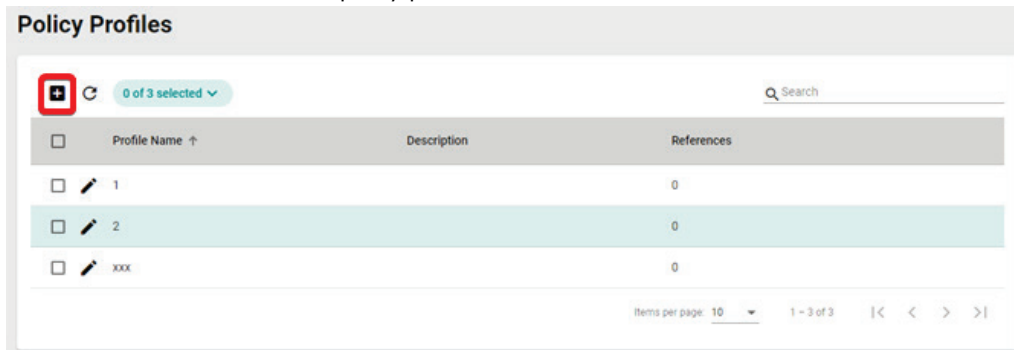
Source MAC Filtering:

- i. Source MAC Address: Specify the source MAC address.
8. Click **CREATE** to create the Layer 3-7 Policy Profile.
9. Click **APPLY**.

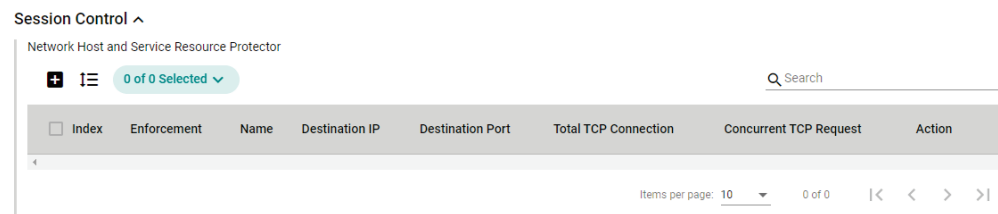
Creating a New Session Control Policy Profile


Steps:

1. Navigate to **Management > Policy Profiles**.
2. Click the  icon to create a policy profile.



3. Enter a name and description for the policy profile.
4. Expand the **Session Control** profile options.



5. Click the  icon to create a Session Control policy profile.

6. Configure the Session Control Profile settings:

Create Session Control Policy


Index *
1
1 ~ 1024


Status *
Enabled


Name *
0 / 32


Severity * <4> Warning Log Destination Local Storage

Action *
Drop

TCP Destination * 

IP Address * 

Port * 

TCP Connection Limitation * 


| Total TCP Connections | Concurrent TCP Reques... |
|-----------------------|--------------------------|
| 1 ~ 65535 connections | 1 ~ 512 connections/s |

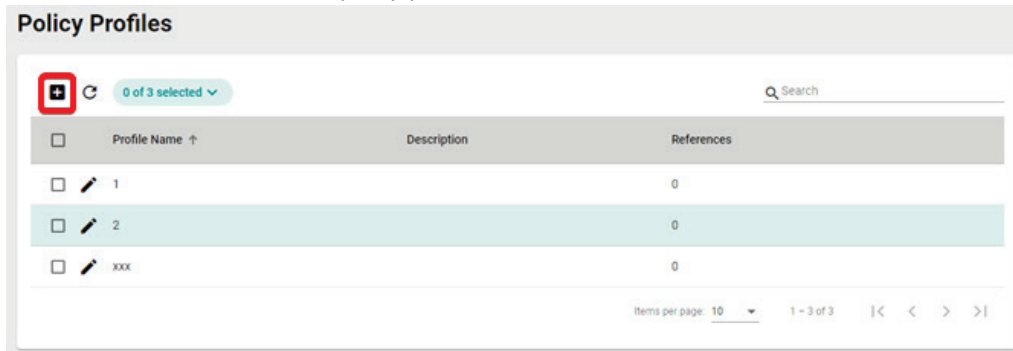
- a. **Index:** Specify the index for the policy profile.
 - b. **Status:** Enable or disable the policy profile.
 - c. **Name:** Enter a description for the policy profile.
 - d. **Severity:** Select the log severity level.
 - e. **Log Destination:** If logging is enabled, choose where the logs will be stored. Multiple options can be selected.
 - f. **Action:** Select the action when traffic matches the policy rule.
 - g. **IP Address:** Select Any or a preconfigured Filter Object. Refer to [Creating a New Filter Object](#).
 - h. **Port:** Select Any or a preconfigured Interface Object. Refer to [Creating a New Interface Object](#).
 - i. **Total TCP Connections:** Specify the maximum allowed TCP connections.
 - j. **Concurrent TCP Requests:** Specify the maximum allowed concurrent connections.
7. Click **CREATE** to create the Session Control Policy.
 8. Click **APPLY**.

Creating a New DoS Policy Profile

Steps:

1. Navigate to **Management > Policy Profiles**.

- Click the  icon to create a policy profile.



- Enter a name and description for the policy profile.
- Expand the **DoS** profile options.
- Configure the following settings:

DoS ^

DoS Settings

All

Session SYN Protection

TCP-Without-SYN Scan i

Port-Scan Protection **Flood Protection**

Null Scan ICMP-Flood

Xmas Scan Limit

NMAP-Xmas Scan 1000

SYN/FIN Scan 1 - 4000 pkt/s

FIN Scan SYN-Flood

NMAP-ID Scan Limit

SYN/RST Scan 1000

 1 - 4000 pkt/s

 ARP-Flood

 Limit

 1000

 1 - 2000 pkt/s

DoS Log Settings


Log * Severity * Log Destination

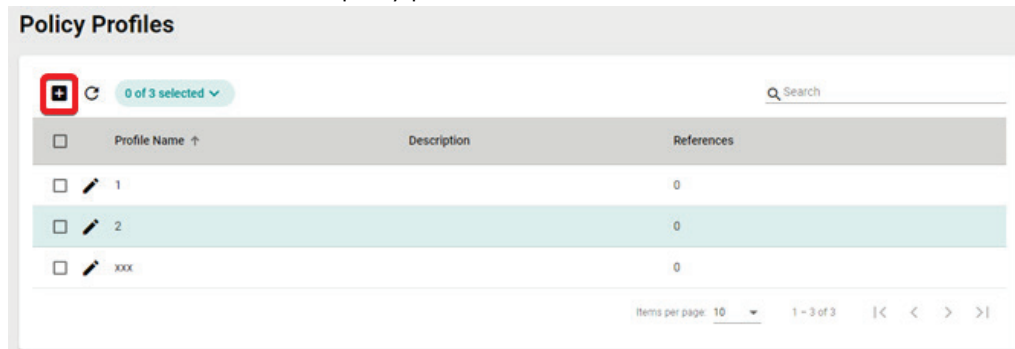
Disabled Emergency

- DoS Setting:** Check the box of the DoS types you want to enable. If you selected ICMP-Death, SYN-Flood, or ARP-Flood, specify the packet limit.
 - 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.
- Click **APPLY**.

Creating a New IPS Policy Profile

Steps:


1. Navigate to **Management > Policy Profiles**.
2. Click the  icon to create a policy profile.




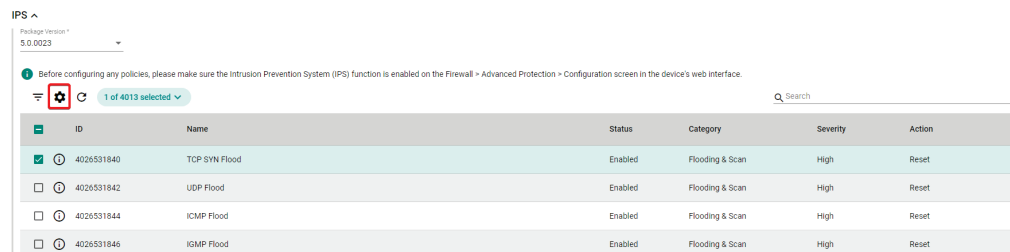
3. Enter a name and description for the policy profile.
4. Expand the **IPS** profile options.
5. Select a previously uploaded IPS software package version. Refer to [Software Package Management](#) for more information.

IPS ^

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.

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



8. Configure the following settings:

Rule Settings


Status
Enabled

Action
Reset

[CANCEL](#) [APPLY](#)


- a. **Status:** Enable or disable the rule.
 - b. **Action:** Select the action when traffic matches the policy rule.
9. Click **APPLY** to save the changes.
 10. On the Policy Profiles screen, click **APPLY**.

Editing a Policy Profile

1. Navigate to **Management > Policy Profiles**.
2. Click the  icon to edit the policy profile.
3. Modify the profile settings.
For Layer 3-7 policy profiles, refer to [Creating a New Layer 3-7 Policy Profile](#).
For Session Control policy profiles, refer to [Creating a New Session Control Policy Profile](#).
For DoS policy profiles, refer to [Creating a New DoS Policy Profile](#).
For IPS policy profiles, refer to [Creating a New IPS Policy Profile](#).
4. Click **APPLY**.

Deleting a Policy Profile

Steps:

1. Navigate to **Management > Policy Profiles**.
2. Check the box of the policy profile(s) you want to delete.
3. Click the  icon to delete the selected profile(s).
4. When prompted to confirm, click **DELETE**.

Delete Profile(s)

1 item(s) selected

Are you sure you want to delete the selected profile(s)?

CANCEL


DELETE

Device Configuration Management




This section describes how to manage the device configuration database from MXsecurity.

Uploading a Device Configuration File From a Local Host

Steps:

1. Navigate to **Management > Device Configuration**.
2. Click the  icon to add a device configuration.

EDR-G9010-VPN-2MGSFP ^

| <input type="checkbox"/> | Configure Name ↑ | Last Modified Time | Description | Schedule In Use |
|--------------------------|--|---------------------|----------------------|-----------------|
| <input type="checkbox"/> |  20230101_configure | 2023-07-15 18:24:15 | First version of PoC | Yes |
| <input type="checkbox"/> |  20230201_configure | 2023-07-15 18:22:52 | | |
| <input type="checkbox"/> |  20230301_configure | 2023-07-15 18:23:30 | Network setting ok | |

1 - 3 of 3

3. Enter the name and description for the configuration file.

The screenshot shows a form titled "Upload Device Configuration File" with two steps. Step 1, "Enter Configuration File Information", is active. It includes a "Configuration Model" dropdown set to "EDR-G9010-VPN-2MGSFP", a "Configure Name*" text field with "20230601_configure" and a character count of "18 / 50", and a "Description" text field with "PoC complete" and a character count of "12 / 255". There are "CANCEL" and "NEXT" buttons at the bottom right.


4. Click **NEXT**.
5. Select **Upload Configuration from Local** from the Upload Configuration Method drop-down menu.
6. Drag and drop or browse to the device configuration file on the local machine.

The screenshot shows the same form, now at step 2, "Select Configuration File". The "Upload Configuration Method*" dropdown is set to "Upload Configuration from Local". Below it is a dashed box for "Upload Configuration File (.in)" with the instruction "Drag and drop a file here, or browse.". There are "BACK" and "APPLY" buttons at the bottom right.


7. Click **APPLY**.

Uploading a Configuration From a Device




Steps:

1. Navigate to **Management > Device Configuration**.
2. Click the  icon to add a device configuration.

EDR-G9010-VPN-2MGSFP ^

 0 of 3 selected v

Search

| <input type="checkbox"/> | Configure Name ↑ | Last Modified Time | Description | Schedule In Use |
|--------------------------|--|---------------------|----------------------|-----------------|
| <input type="checkbox"/> |  20230101_configure | 2023-07-15 18:24:15 | First version of PoC | Yes |
| <input type="checkbox"/> |  20230201_configure | 2023-07-15 18:22:52 | | |
| <input type="checkbox"/> |  20230301_configure | 2023-07-15 18:23:30 | Network setting ok | |

1 - 3 of 3

3. Enter the name and description for the configuration file.

Upload Device Configuration File

1 Enter Configuration File Information 2 Select Configuration File

Configuration Model
EDR-G9010-VPN-2MGSFP

Configure Name *
20230601_configure 18 / 50

Description
PoC complete 12 / 255

CANCEL **NEXT**

4. Click **NEXT**.
5. Select **Upload Configuration from Device** from the Upload Configuration Method drop-down menu.
6. Select the device to back up and generate the configuration file from.

Upload Device Configuration File

1 Enter Configuration File Information 2 Select Configuration File

Upload Configuration Method *
Upload Configuration from Device

Search

| | Device Name ↑ | Status | Location | Product Model | Serial Number | MAC Address | Firmware Version | Group |
|-------------------------------------|------------------------------|--------|--------------------|----------------------------|---------------|-------------------|------------------|---------|
| <input type="checkbox"/> | Firewall/VPN Router 55160 | ● | Device Location | EDR-G9010-VPN- 2MGSFP-T | TBZKB1155160 | 00:90:E8:91:86:7D | V3.0.0 | Ungroup |
| <input checked="" type="checkbox"/> | Firewall/VPN Router 77777 | ● | Device Location | EDR-G9010-VPN- 2MGSFP | MOXA77777777 | 00:01:02:03:04:77 | V3.0.0 | Ungroup |
| <input type="checkbox"/> | Firewall/VPN Router Hades | ● | Device Location | EDR-G9010-VPN- 2MGSFP-T | MOXA95275487 | 00:01:02:03:04:05 | V3.0.0 | Ungroup |
| <input type="checkbox"/> | OOOwen 9010 | ● | 122, 25 | EDR-G9010-VPN- 2MGSFP-T | MOXA00112233 | 00:90:E8:90:10:06 | V3.0.0 | Ungroup |
| <input type="checkbox"/> | device_1 | ● | 120.0, 20.5 | EDR-G9010-VPN- 2MGSFP | TEST-DEV-1 | 90:10:00:00:00:01 | V1.0.0 | Ungroup |
| <input type="checkbox"/> | device_2 | ● | 125.0, 25.5 | EDR-G9010-VPN- 2MGSFP | TEST-DEV-2 | 90:10:00:00:00:02 | V1.0.0 | Ungroup |

7. Click **APPLY**.

NOTE

Each device model can have a maximum of five configuration files. When this limit is reached, the **Add** button will become unavailable.

7. Deployment

The Deployment section lets users configure multiple device groups at a time and check the synchronization status between MXsecurity and the managed devices.

You can configure the following types of deployments in MXsecurity:

- **General:** Remove and reboot devices.
- **Policy Profiles:** Deploy policy profiles to managed devices.
- **Software Packages:** Upgrade the software package of managed devices.
- **Firmware:** Upgrade the firmware of managed devices.
- **Device Configure:** Deploy device configuration files to managed devices.

Rebooting a Managed Device

Steps:

1. Navigate to **Device Deployment > General**.
2. Check the box of the device(s) you want to reboot.



Click the  icon to reboot the selected device(s).

Device Deployment

General | Policy Profiles | Software Packages | Firmware | Device Configuration

0 group(s) selected | 1 device(s) selected

| Device Name | Status | Location | Product Model | Serial Number | MAC | Firmware Version | Scheduling Reboot | Last Reboot Time |
|--|--------|-----------------|-----------------------|---------------|-------------------|------------------|---------------------------|------------------------------|
| Ungroup | | | | | | | | |
| <input type="checkbox"/> OnCellCellularRouter999 | ● | 120.25, 25.35 | OnCell-G4302-LTE4-EU | MOXA60004302 | 60:60:60:60:43:02 | V2.5.0 | | |
| <input type="checkbox"/> Owen 4302 | ● | 00000wenn1 | OnCell-G4302-LTE4-EU | MOXA00000000 | 10:71:98:43:02:01 | V3.0.0 | | |
| <input type="checkbox"/> device_4 | ● | location_4 | OnCell G4302-LTE4-AU | TEST-DEV-4 | 43:00:00:00:00:04 | V1.0.0 | Weekly Mon. Tue. 07:55 | Manually 2023-04-26 17:37:05 |
| <input type="checkbox"/> Firewall/VPN Router 55160 | ● | Device Location | EDR-G9010-VPN-2MGSP-T | TBZKB1155160 | 00:90:E8:91:86:7D | V3.0.0 | | Schedule 2023-05-11 04:00:25 |
| <input type="checkbox"/> 000wen 9010 | ● | 122, 25 | EDR-G9010-VPN-2MGSP-T | MOXA00112233 | 00:90:E8:90:10:06 | V3.0.0 | | Schedule 2023-07-12 16:10:24 |
| <input checked="" type="checkbox"/> device_3 | ● | location_3 | EDR-G9010-VPN-2MGSP-T | TEST-DEV-3 | 90:10:00:00:00:03 | V1.0.0 | One Time 2023-07-12 16:10 | Manually 2023-07-12 16:10:24 |
| <input type="checkbox"/> Firewall/VPN Router Hades | ● | Device Location | EDR-G9010-VPN-2MGSP-T | MOXA95275487 | 00:01:02:03:04:05 | V3.0.0 | | |

3. When prompted to confirm, click **REBOOT**.

Reboot Device(s)

1 item(s) selected

Are you sure you want to reboot the selected device(s)?


CANCEL

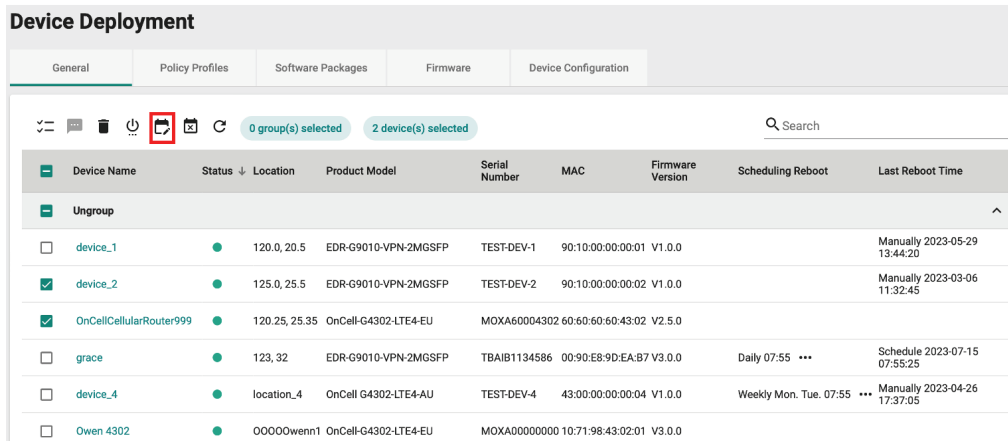
REBOOT

Scheduling a Managed Device Reboot

Rebooting a device may disrupt services or operations. To minimize the potential impact of rebooting devices, users can schedule device reboots 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.

Steps:

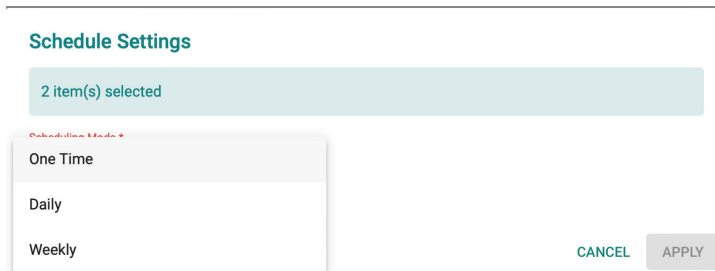
1. Navigate to **Device Deployment > General**.
2. Check the box of the device(s) you want to reboot.
3. Click the  icon to configure a reboot schedule for the selected device(s).



The screenshot shows the 'Device Deployment' interface with the 'General' tab selected. A table lists several devices with columns for Device Name, Status, Location, Product Model, Serial Number, MAC, Firmware Version, Scheduling Reboot, and Last Reboot Time. Two devices, 'device_2' and 'OnCellCellularRouter999', are selected. A red box highlights the reboot icon (a power button with a circular arrow) in the top toolbar.

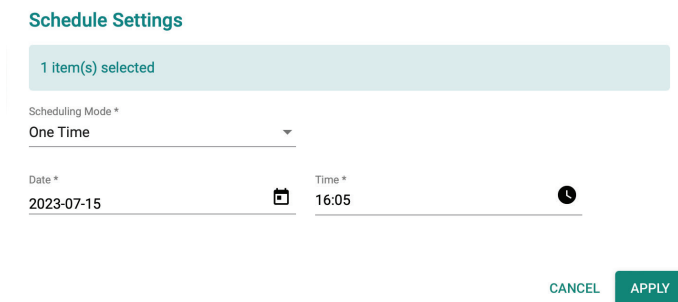
| Device Name | Status | Location | Product Model | Serial Number | MAC | Firmware Version | Scheduling Reboot | Last Reboot Time |
|-------------------------|--------|---------------|----------------------|---------------|-------------------|------------------|----------------------------|------------------------------|
| device_1 | ● | 120.0, 20.5 | EDR-G9010-VPN-2MGSFP | TEST-DEV-1 | 90:10:00:00:00:01 | V1.0.0 | | Manually 2023-05-29 13:44:20 |
| device_2 | ● | 125.0, 25.5 | EDR-G9010-VPN-2MGSFP | TEST-DEV-2 | 90:10:00:00:00:02 | V1.0.0 | | Manually 2023-03-06 11:32:45 |
| OnCellCellularRouter999 | ● | 120.25, 25.35 | OnCell-G4302-LTE4-EU | MOXA60004302 | 60:60:60:60:43:02 | V2.5.0 | | |
| grace | ● | 123, 32 | EDR-G9010-VPN-2MGSFP | TBAIB1134586 | 00:90:E8-9D:EA:B7 | V3.0.0 | Daily 07:55 ... | Schedule 2023-07-15 07:55:25 |
| device_4 | ● | location_4 | OnCell G4302-LTE4-AU | TEST-DEV-4 | 43:00:00:00:00:04 | V1.0.0 | Weekly Mon, Tue, 07:55 ... | Manually 2023-04-26 17:37:05 |
| Owen 4302 | ● | 00000wenn1 | OnCell-G4302-LTE4-EU | MOXA00000000 | 10:71:98:43:02:01 | V3.0.0 | | |

4. Select a scheduling mode:



The screenshot shows the 'Schedule Settings' dialog box with '2 item(s) selected'. The 'Scheduling Mode' dropdown menu is open, showing options for 'One Time', 'Daily', and 'Weekly'. 'CANCEL' and 'APPLY' buttons are visible at the bottom right.

- a. **One Time:** Select the date and time the device(s) will reboot. One-time schedules can be configured for up to 30 days in the future. The reboot time should be set in 5-minute increments, for example 16:05.



The screenshot shows the 'Schedule Settings' dialog box with '1 item(s) selected'. The 'Scheduling Mode' is set to 'One Time'. The 'Date' is set to '2023-07-15' and the 'Time' is set to '16:05'. 'CANCEL' and 'APPLY' buttons are visible at the bottom right.

- b. **Daily:** Select the time and the schedule period. Daily schedules can be configured for up to 90 days in the future. For example, the selected device(s) will reboot every day at 05:00 from July 15

through October 13.

Schedule Settings

1 item(s) selected

Scheduling Mode *
Daily

Time *
05:00

Period *
2023-07-15 – 2023-10-13

CANCEL APPLY

- c. **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. For example, the selected device(s) will reboot every Monday, Wednesday, and Friday at 05:00 from July 15 through October 13.

Schedule Settings

1 item(s) selected

Scheduling Mode *
Weekly

Weekly Day *
Mon. Wed. Fri.

Time *
05:00


Period *
2023-07-15 – 2023-10-13

CANCEL APPLY

5. Click **APPLY**.

Deleting a Managed Device Reboot Schedule

Steps:

1. Navigate to **Device Deployment > General**.
2. Check the box of the device(s) with the reboot schedule you want to delete.
3. Click the  icon to delete the selected reboot schedules.
4. When prompted to confirm, click **DELETE**.

Delete Scheduling

2 item(s) selected

Are you sure you want to delete the selected scheduling?

CANCEL DELETE

Sending a Control SMS

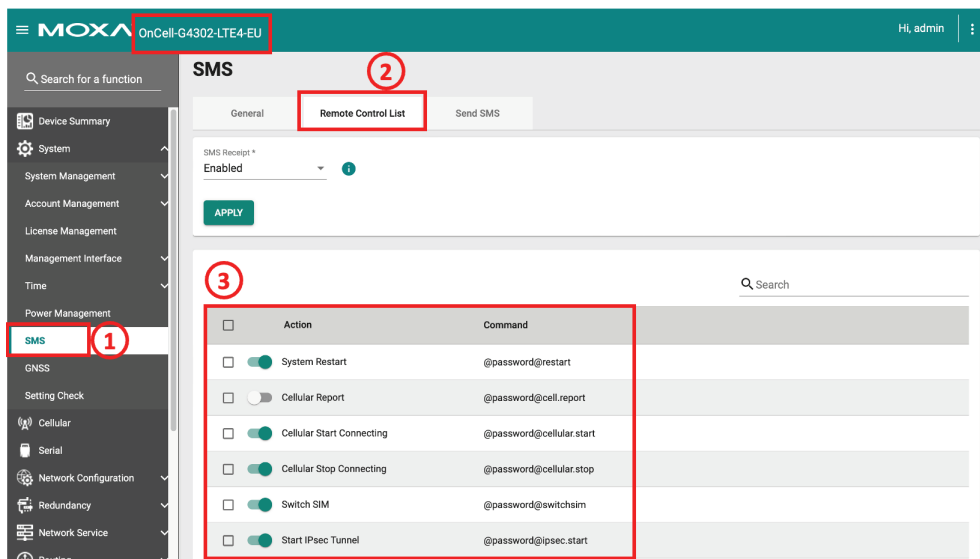
The OnCell Series routers may be installed in areas outside the range of the base station coverage. If a connection can be established, the signal may be extremely weak, leading to interruptions for applications. It also makes it challenging for users to restore the device's external network connection via the web console or SSH.


However, if the cellular router's SIM card can receive SMS messages, MXsecurity can remotely control the cellular router by sending SMS commands. Refer to the table below for an overview of available SMS commands.

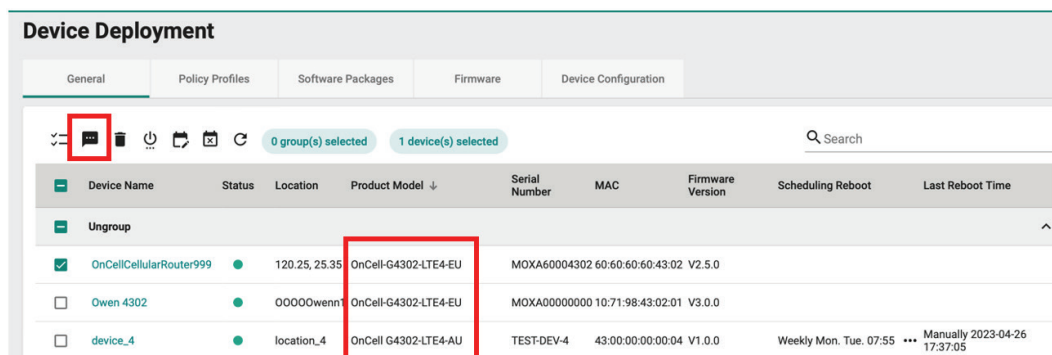
| Command | Description |
|---------------------------|---|
| System Restart | The device will reboot. |
| Cellular Start Connecting | The device will enable the cellular data connection. |
| Cellular Stop Connecting | The device will disable the cellular data connection. |
| Start IPsec Tunnel | The device will establish the IPsec tunnel. |
| Stop IPsec Tunnel | The device will disconnect the IPsec tunnel. |
| Set DO On | The device will turn the status of the relay output to On. |
| Set DO Off | The device will turn the status of the relay output to Off. |
| Switch SIM | The device will restart the cellular module and switch to the SIM card installed in the other SIM slot. |

Steps:

1. Enable remote control functions on the OnCell secure router:
 - a. Log in to the OnCell secure router's web console.
 - b. Navigate to **System > SMS > Remote Control List**.
 - c. Enable the function(s) that you want to remotely control by SMS through MXsecurity. For security reasons, all functions are disabled by default.



2. In MXsecurity, navigate to **Device Deployment > General**.
3. Check the box of an OnCell secure router.
4. Click the  icon to send a control SMS.



5. Select the SMS command you want to execute.
6. Click **Send**.

● **NOTE**

There is a one-minute wait timer between each SMS message. Once the wait timer expires runs out, another SMS message can be sent.

● **NOTE**

MXsecurity can send a maximum of 200 SMS control messages per device each month. A counter in the top-right of Remote SMS Control page shows the number of sent messages.


Removing a Managed Device

Steps:

1. Navigate to **Device Deployment > General**.
2. Check the box of the device(s) you want to remove.

The screenshot shows the 'Device Deployment' interface with the 'General' tab selected. At the top, there are tabs for 'General', 'Policy Profiles', 'Software Packages', and 'Firmware'. Below the tabs, there are icons for filtering, deleting (highlighted with a red box), power, and refresh. Two status indicators show '0 group(s) selected' and '2 device(s) selected'. A table below lists devices with columns for Host Name, Status, Location, and Model Name. The first two rows are checked, and the third is not.

| <input type="checkbox"/> | Host Name | Status | Location | Model Name |
|-------------------------------------|-----------|--------|------------|-----------------------|
| <input checked="" type="checkbox"/> | device_1 | ● | location_1 | ONCELL-G4300-OWEN-ABC |
| <input checked="" type="checkbox"/> | device_1 | ● | location_1 | EDR-G9010-VPN-2MGSFP |
| <input type="checkbox"/> | device_2 | ● | location_2 | ONCELL-G4300-OWEN-ABC |

3. Click the  icon to remove the selected device(s).
4. When prompted to confirm, click **DELETE**.

Delete Device(s)

1 item(s) selected

Are you sure you want to delete the selected device(s)?

CANCEL

DELETE


Deploying Policy Profiles to Managed Devices

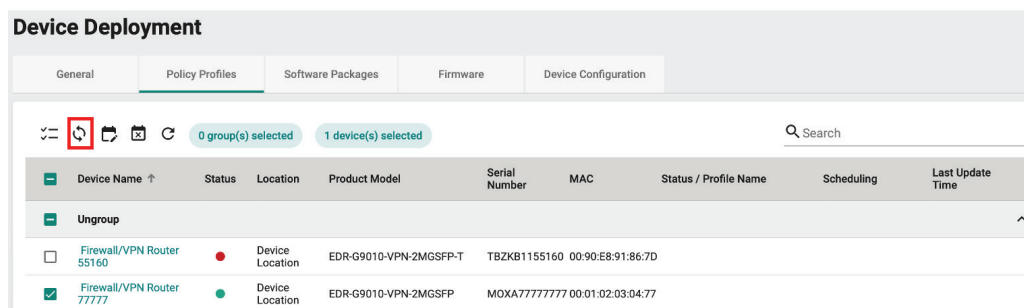
You can deploy specific policy profiles to managed devices and check the synchronization status between the device and MXsecurity.

The synchronization status can be one of the following:

- **Sync:** The policy profile has been successfully synced between MXsecurity and the device.
- **Not Sync:** The policy profile failed to synchronize between MXsecurity and the device.
- **Out of Sync:** Indicates the deployed policy profile has been modified on the device side.
- **Sync (modified):** Indicates the deployed policy profile has been modified in MXsecurity.

Steps:

1. Navigate to **Device Deployment > Policy Profiles**.
2. Check the box of the device(s) you want to deploy a policy profile to.
3. Click the  icon to deploy a policy profile to the selected device(s).

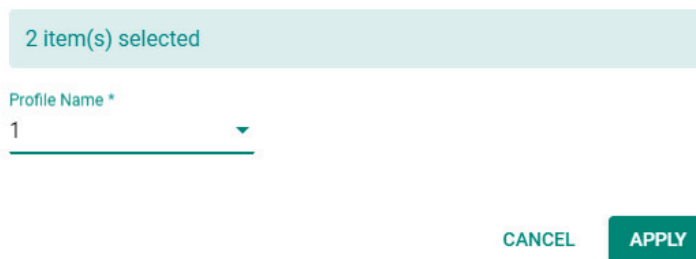


The screenshot shows the 'Device Deployment' interface with the 'Policy Profiles' tab selected. A table lists two devices, both of which are selected with checkboxes. The table columns are: Device Name, Status, Location, Product Model, Serial Number, MAC, Status / Profile Name, Scheduling, and Last Update Time.

| Device Name | Status | Location | Product Model | Serial Number | MAC | Status / Profile Name | Scheduling | Last Update Time |
|---------------------------|----------|-----------------|------------------------|---------------|-------------------|-----------------------|------------|------------------|
| Firewall/VPN Router 55160 | Not Sync | Device Location | EDR-G9010-VPN-2MGSFP-T | TBZKB1155160 | 00:90:E8:91:86:7D | | | |
| Firewall/VPN Router 77777 | Sync | Device Location | EDR-G9010-VPN-2MGSFP | MOXA77777777 | 00:01:02:03:04:77 | | | |

4. Select a previously configured policy profile.
Refer to [Policy Profile Management](#) for instructions on how to create policy profiles.

Sync Profile To Device(s)




The dialog box shows '2 item(s) selected' and a 'Profile Name' dropdown menu with '1' selected. There are 'CANCEL' and 'APPLY' buttons at the bottom.

5. Click **APPLY**.

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.

Steps:

1. Navigate to **Device Deployment > Policy Profiles**.
2. Check the box of the device(s) to configure.
3. Click the  icon to configure a policy profile deployment schedule for the selected device(s).

Device Deployment

General | Policy Profiles | Software Packages | Firmware | Device Configuration

0 group(s) selected 2 device(s) selected

| Device Name | Status | Location | Product Model | Serial Number | MAC | Firmware Version | Scheduling Reboot | Last Reboot Time |
|---|--------|---------------|----------------------|--------------------------------|-------------------|------------------|----------------------------|------------------------------|
| Ungroup | | | | | | | | |
| <input type="checkbox"/> device_1 | ● | 120.0, 20.5 | EDR-G9010-VPN-2MGSFP | TEST-DEV-1 | 90:10:00:00:00:01 | V1.0.0 | | Manually 2023-05-29 13:44:20 |
| <input checked="" type="checkbox"/> device_2 | ● | 125.0, 25.5 | EDR-G9010-VPN-2MGSFP | TEST-DEV-2 | 90:10:00:00:00:02 | V1.0.0 | | Manually 2023-03-06 11:32:45 |
| <input checked="" type="checkbox"/> OnCellCellularRouter999 | ● | 120.25, 25.35 | OnCell-G4302-LTE4-EU | MOXA60004302 60:60:60:60:43:02 | | V2.5.0 | | |
| <input type="checkbox"/> grace | ● | 123, 32 | EDR-G9010-VPN-2MGSFP | TBAIB1134586 | 00:90:E8:9D:EA:B7 | V3.0.0 | Daily 07:55 ... | Schedule 2023-07-15 07:55:25 |
| <input type="checkbox"/> device_4 | ● | location_4 | OnCell G4302-LTE4-AU | TEST-DEV-4 | 43:00:00:00:00:04 | V1.0.0 | Weekly Mon. Tue. 07:55 ... | Manually 2023-04-26 17:37:05 |
| <input type="checkbox"/> Owen 4302 | ● | OOOOwenn1 | OnCell-G4302-LTE4-EU | MOXA00000000 | 10:71:98:43:02:01 | V3.0.0 | | |

4. Select a scheduling mode:

Schedule Settings

2 item(s) selected

Scheduling Mode *

- One Time
- Daily
- Weekly

CANCEL APPLY

- a. **One Time:** Select the date and time the device(s) will reboot. One-time schedules can be configured for up to 30 days in the future. The reboot time should be set in 5-minute increments, for example 16:05.

Schedule Settings

1 item(s) selected

Scheduling Mode *

One Time

Date * 2023-07-15

Time * 16:05

CANCEL APPLY

- b. **Daily:** Select the time and the schedule period. Daily schedules can be configured for up to 90 days in the future. For example, the selected device(s) will reboot every day at 05:00 from July 15 through October 13.

Schedule Settings

1 item(s) selected

Scheduling Mode *

Daily

Time * 05:00

Period * 2023-07-15 – 2023-10-13

CANCEL APPLY

- c. **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. For example, the selected device(s) will reboot every Monday, Wednesday, and Friday at 05:00 from July 15 through October 13.

Schedule Settings

1 item(s) selected

Scheduling Mode *
Weekly

Weekly Day *
Mon. Wed. Fri.

Time *
05:00


Period *
2023-07-15 – 2023-10-13

CANCEL APPLY

5. Click **APPLY**.

Deleting a Policy Profile Deployment Schedule

Steps:

1. Navigate to **Device Deployment > Policy Profiles**.
2. Check the box of the device(s) with the deployment schedule you want to delete.
3. Click the  icon to delete the selected deployment schedules.
4. When prompted to confirm, click **DELETE**.

Delete Scheduling

2 item(s) selected

Are you sure you want to delete the selected scheduling?

CANCEL DELETE

Upgrading the Software Package of Managed Devices


You can upgrade the software package of managed devices and check basic software package version information.

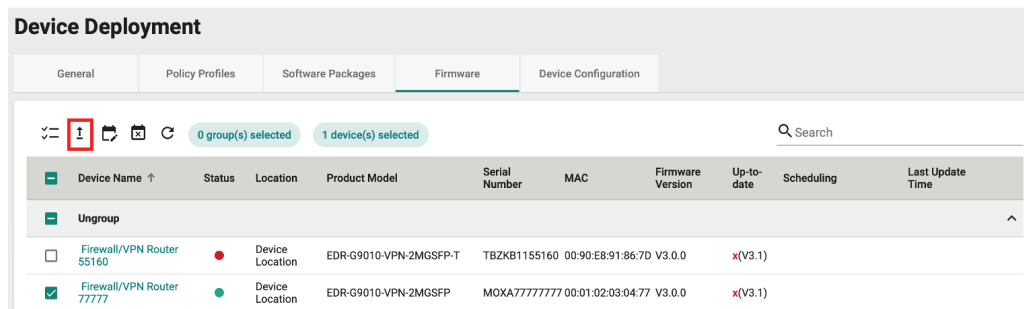
You can check the following software package information:

- **Package Version:** Shows the version of the software 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.

Steps:

1. Navigate to **Device Deployment > Software Packages**.
2. Check the box of the device(s) you want to upgrade the software package for.

- Click the  icon to upgrade the software package for the selected device(s).



Device Deployment

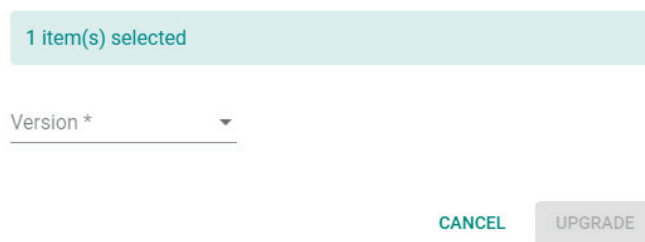
General Policy Profiles Software Packages Firmware Device Configuration

0 group(s) selected 1 device(s) selected

| Device Name ↑ | Status | Location | Product Model | Serial Number | MAC | Firmware Version | Up-to-date | Scheduling | Last Update Time |
|---|--------|-----------------|------------------------|---------------|-------------------|------------------|------------|------------|------------------|
| Ungroup | | | | | | | | | |
| <input type="checkbox"/> Firewall/VPN Router 55160 | ● | Device Location | EDR-G9010-VPN-2MGSFP-T | TBZKB1155160 | 00:90:E8:91:86:7D | V3.0.0 | x(V3.1) | | |
| <input checked="" type="checkbox"/> Firewall/VPN Router 77777 | ● | Device Location | EDR-G9010-VPN-2MGSFP | MOXA77777777 | 00:01:02:03:04:77 | V3.0.0 | x(V3.1) | | |

- Select a previously uploaded software package to upgrade to. Refer to [Software Package Management](#) for instructions on how to upload software packages.

Upgrade Package



1 item(s) selected

Version *

CANCEL UPGRADE


- Click **UPGRADE**.

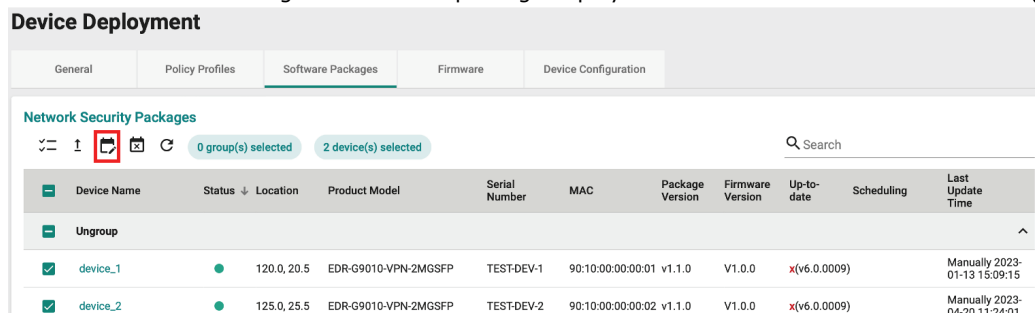
Scheduling a Software Package Deployment for Managed Devices

Deploying a software package to a device may disrupt services or operations. To minimize the potential impact of software 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 have the flexibility to choose either a specific version or the "Up-to-date" option for the security package. If the "Up-to-date" option is selected, MXsecurity will deploy the most-recent version available in the management database to the devices.

Steps:

- Navigate to **Device Deployment > Software Packages**.
- Check the box of the device(s) to configure.
- Click the  icon to configure a software package deployment schedule for the selected device(s).



Device Deployment

General Policy Profiles Software Packages Firmware Device Configuration

Network Security Packages

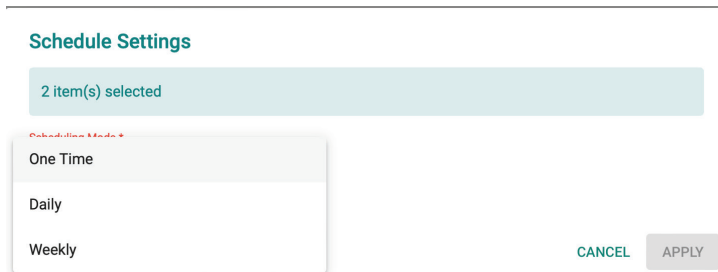
0 group(s) selected 2 device(s) selected

| Device Name | Status ↓ | Location | Product Model | Serial Number | MAC | Package Version | Firmware Version | Up-to-date | Scheduling | Last Update Time |
|--|----------|-------------|----------------------|---------------|-------------------|-----------------|------------------|--------------|------------|------------------------------|
| Ungroup | | | | | | | | | | |
| <input checked="" type="checkbox"/> device_1 | ● | 120.0, 20.5 | EDR-G9010-VPN-2MGSFP | TEST-DEV-1 | 90:10:00:00:00:01 | v1.1.0 | V1.0.0 | x(v6.0.0009) | | Manually 2023-01-13 15:09:15 |
| <input checked="" type="checkbox"/> device_2 | ● | 125.0, 25.5 | EDR-G9010-VPN-2MGSFP | TEST-DEV-2 | 90:10:00:00:00:02 | v1.1.0 | V1.0.0 | x(v6.0.0009) | | Manually 2023-04-20 11:24:01 |

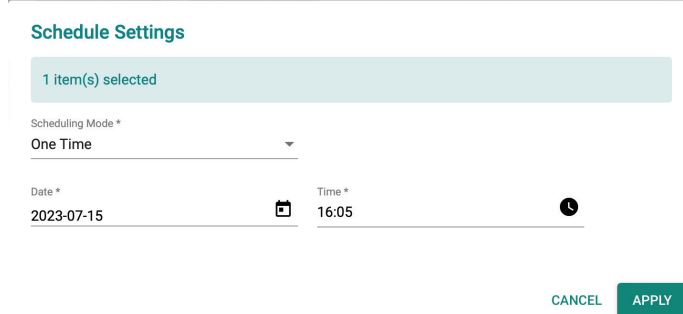
- Select the software package version to deploy. If you select **Up-to-date**, MXsecurity will deploy the latest version of the software package available in

the database. If the device's software package version is the same or newer than the latest database version, the system will not perform the upgrade.

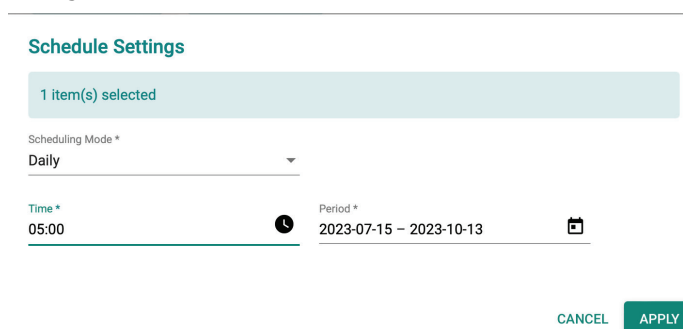
5. Select a scheduling mode:



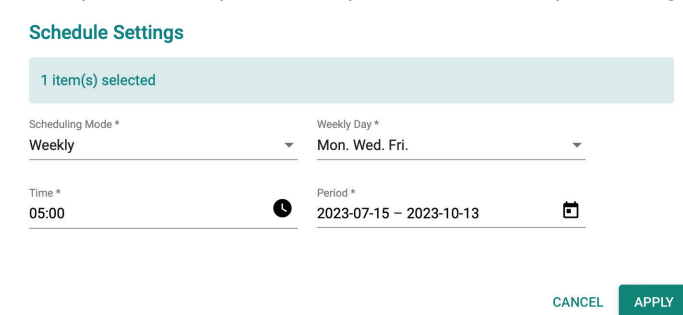
- a. **One Time:** Select the date and time the device(s) will reboot. One-time schedules can be configured for up to 30 days in the future. The reboot time should be set in 5-minute increments, for example 16:05.



- b. **Daily:** Select the time and the schedule period. Daily schedules can be configured for up to 90 days in the future. For example, the selected device(s) will reboot every day at 05:00 from July 15 through October 13.




- c. **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. For example, the selected device(s) will reboot every Monday, Wednesday, and Friday at 05:00 from July 15 through October 13.



6. Click **APPLY**.

Deleting a Software Package Deployment Schedule

Steps:

1. Navigate to **Device Deployment > Software Packages**.
2. Check the box of the device(s) with the deployment schedule you want to delete.
3. Click the  icon to delete the selected deployment schedules.
4. When prompted to confirm, click **DELETE**.

Delete Scheduling

2 item(s) selected

Are you sure you want to delete the selected scheduling?

CANCEL

DELETE


Upgrading the Firmware of Managed Devices

You can upgrade the firmware of managed devices and check basic firmware version information.

You can check the following firmware information:

- **Package Version:** Shows the firmware version 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.

Steps:

1. Navigate to **Device Deployment > Firmware**.
2. Check the box of the device(s) you want to upgrade the firmware for.
3. Click the  icon to upgrade the firmware for the selected device(s).

| Device Deployment | | | | | | | | | | |
|-------------------------------------|---------------------------|-------------------|------------------------|-------------------|-------------------|------------------|------------|----------------------|------------------|--|
| General | | Policy Profiles | | Software Packages | | Firmware | | Device Configuration | | |
| Device Name ↑ | Status | Location | Product Model | Serial Number | MAC | Firmware Version | Up-to-date | Scheduling | Last Update Time | |
| Ungroup | | | | | | | | | | |
| <input type="checkbox"/> | Firewall/VPN Router 55160 | ● Device Location | EDR-G9010-VPN-2MGSFP-T | TBZKB1155160 | 00:90:E8:91:86:7D | V3.0.0 | x(V3.1) | | | |
| <input checked="" type="checkbox"/> | Firewall/VPN Router 77777 | ● Device Location | EDR-G9010-VPN-2MGSFP | MOXA77777777 | 00:01:02:03:04:77 | V3.0.0 | x(V3.1) | | | |

- Select a previously uploaded firmware to upgrade to.
Refer to [Firmware Management](#) for instructions on how to upload firmware.

Upgrade Firmware

2 item(s) selected

Version
No version available

Check the firmware files on the Management/Firmware page.

CANCEL UPGRADE

- Click **UPGRADE**.

Scheduling a Firmware Deployment for Managed Devices

Deploying firmware to a device may disrupt services or operations. To minimize the potential impact of firmware 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 have the flexibility to choose either a specific version or the "Up-to-date" option for the firmware. If the "Up-to-date" option is selected, MXsecurity will deploy the most-recent version available in the management database to the devices.

Steps:

- Navigate to **Device Deployment > Firmware**.
- Check the box of the device(s) to configure.
- Click the icon to configure a firmware deployment schedule for the selected device(s).

Device Deployment

General Policy Profiles Software Packages **Firmware** Device Configuration

0 group(s) selected 1 device(s) selected

| Device Name | Status | Location | Product Model | Serial Number | MAC | Firmware Version | Up-to-date | Scheduling | Last Update Time |
|---|--------------------------------------|-----------------|------------------------|---------------|-------------------|------------------|------------|------------|------------------|
| Ungroup | | | | | | | | | |
| <input type="checkbox"/> Firewall/VPN Router 55160 | ● | Device Location | EDR-G9010-VPN-2MGSPF-T | TBZKB1155160 | 00:90:E8:91:86:7D | V3.0.0 | x(V3.1) | | |
| <input checked="" type="checkbox"/> Firewall/VPN Router 77777 | ● | Device Location | EDR-G9010-VPN-2MGSPF | MOXA77777777 | 00:01:02:03:04:77 | V3.0.0 | x(V3.1) | | |

- Select the firmware version to deploy.
If you select **Up-to-date**, MXsecurity will deploy the latest version of the firmware available in the database. If the device's firmware version is the same or newer than the latest database version, the system will not perform the upgrade.
- Select a scheduling mode:

Schedule Settings

2 item(s) selected

Scheduling Mode

One Time

Daily

Weekly

CANCEL APPLY

- a. **One Time:** Select the date and time the device(s) will reboot. One-time schedules can be configured for up to 30 days in the future. The reboot time should be set in 5-minute increments, for example 16:05.

Schedule Settings

1 item(s) selected

Scheduling Mode *
One Time

Date * 2023-07-15 Time * 16:05

CANCEL APPLY

- b. **Daily:** Select the time and the schedule period. Daily schedules can be configured for up to 90 days in the future. For example, the selected device(s) will reboot every day at 05:00 from July 15 through October 13.

Schedule Settings

1 item(s) selected

Scheduling Mode *
Daily

Time * 05:00 Period * 2023-07-15 – 2023-10-13

CANCEL APPLY

- c. **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. For example, the selected device(s) will reboot every Monday, Wednesday, and Friday at 05:00 from July 15 through October 13.

Schedule Settings

1 item(s) selected

Scheduling Mode *
Weekly

Weekly Day *
Mon. Wed. Fri.


Time * 05:00 Period * 2023-07-15 – 2023-10-13

CANCEL APPLY

6. Click **APPLY**.

Deleting a Firmware Deployment Schedule

Steps:

1. Navigate to **Device Deployment > Firmware**.
2. Check the box of the device(s) with the deployment schedule you want to delete.
3. Click the  icon to delete the selected deployment schedules.

- When prompted to confirm, click **DELETE**.

Delete Scheduling

2 item(s) selected

Are you sure you want to delete the selected scheduling?


CANCEL

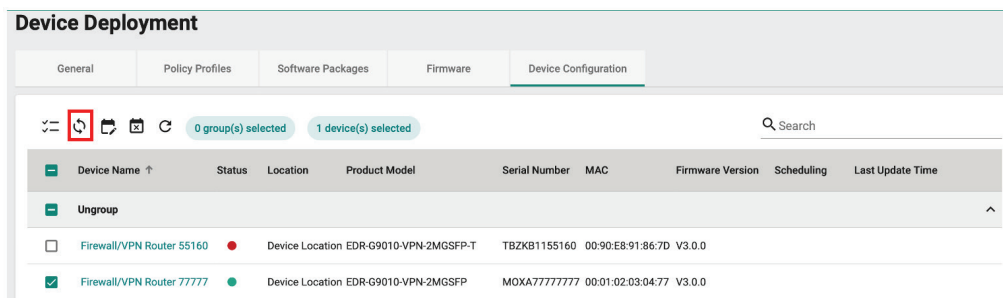
DELETE

Deploying a Configuration to Managed Devices

You can deploy a previously uploaded configuration to managed devices. This is useful for quickly deploying an identical configuration to multiple devices at once.

Steps:

- Navigate to **Device Deployment > Device Configuration**.
- Check the box of the device(s) you want to deploy the configuration to.
- Click the  icon to deploy the configuration to the selected device(s).



The screenshot shows the 'Device Deployment' interface with the 'Device Configuration' tab selected. A table lists devices with columns for Device Name, Status, Location, Product Model, Serial Number, MAC, Firmware Version, Scheduling, and Last Update Time. One device, 'Firewall/VPN Router 77777', is selected with a checkmark. The interface also shows '0 group(s) selected' and '1 device(s) selected'.

| Device Name | Status | Location | Product Model | Serial Number | MAC | Firmware Version | Scheduling | Last Update Time |
|---|--------------------------------------|--|---------------|---------------|-------------------|------------------|------------|------------------|
| Ungroup | | | | | | | | |
| <input type="checkbox"/> Firewall/VPN Router 55160 | ● | Device Location EDR-G9010-VPN-2MGSFP-T | | TBZKB1155160 | 00:90:E8:91:86:7D | V3.0.0 | | |
| <input checked="" type="checkbox"/> Firewall/VPN Router 77777 | ● | Device Location EDR-G9010-VPN-2MGSFP | | MOXA77777777 | 00:01:02:03:04:77 | V3.0.0 | | |

- Select a previously uploaded device configuration to deploy. Refer to [Device Configuration Management](#) for instructions on how to upload a configuration.

Sync Configuration To Device(s)

1 item(s) selected

Select Configuration File *

20230101_configure

CANCEL


APPLY

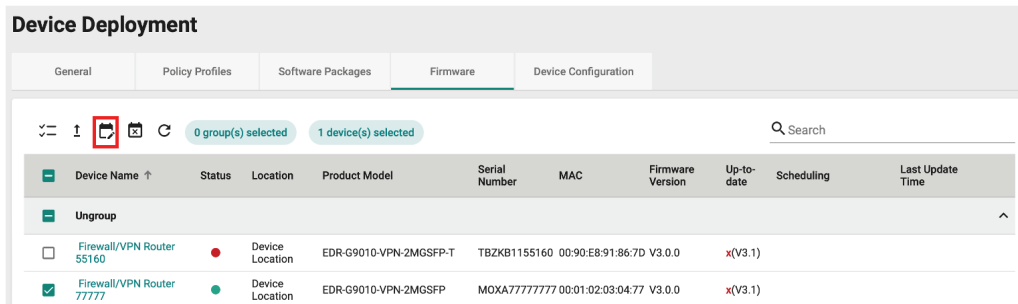
- Click **APPLY**.

Scheduling a Configuration Deployment for Managed Devices

Deploying a configuration to a device may disrupt services or operations. To minimize the potential impact of configuration 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.

Steps:

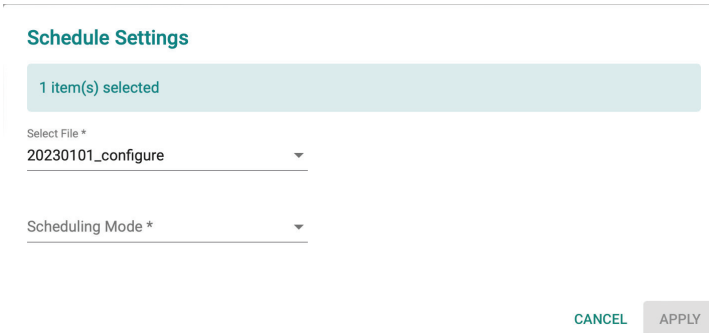
1. Navigate to **Device Deployment > Device Configuration**.
2. Check the box of the device(s) to configure.
3. Click the  icon to configure a configuration deployment schedule for the selected device(s).



The screenshot shows the 'Device Deployment' interface with the 'Device Configuration' tab selected. A table lists two devices, with the second one selected. The table columns are: Device Name, Status, Location, Product Model, Serial Number, MAC, Firmware Version, Up-to-date, Scheduling, and Last Update Time.

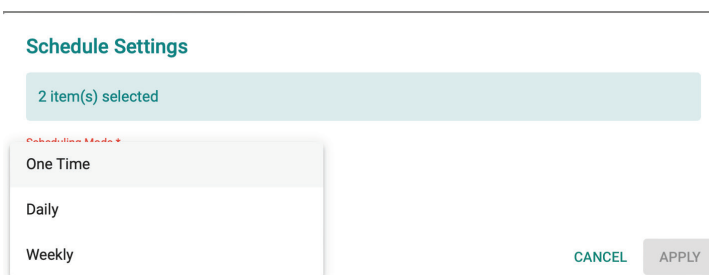
| Device Name | Status | Location | Product Model | Serial Number | MAC | Firmware Version | Up-to-date | Scheduling | Last Update Time |
|---------------------------|--------|-----------------|-----------------------|---------------|-------------------|------------------|------------|------------|------------------|
| Ungroup | | | | | | | | | |
| Firewall/VPN Router 55160 | ● | Device Location | EDR-G9010-VPN-2MGSP-T | TBZKB1155160 | 00:90:E8:91:86:7D | V3.0.0 | x(V3.1) | | |
| Firewall/VPN Router 77777 | ● | Device Location | EDR-G9010-VPN-2MGSP | MOXA77777777 | 00:01:02:03:04:77 | V3.0.0 | x(V3.1) | | |

4. Select a previously uploaded configuration file to deploy.



The 'Schedule Settings' dialog box shows '1 item(s) selected'. It includes a 'Select File *' dropdown menu with '20230101_configuration' selected, and a 'Scheduling Mode *' dropdown menu. 'CANCEL' and 'APPLY' buttons are at the bottom right.

5. Select a scheduling mode:



The 'Schedule Settings' dialog box shows '2 item(s) selected'. The 'Scheduling Mode *' dropdown menu is open, showing options: 'One Time', 'Daily', and 'Weekly'. 'CANCEL' and 'APPLY' buttons are at the bottom right.

- a. **One Time:** Select the date and time the device(s) will reboot. One-time schedules can be configured for up to 30 days in the future. The reboot time should be set in 5-minute increments, for

example 16:05.

Schedule Settings

1 item(s) selected

Scheduling Mode *
One Time

Date * 2023-07-15 Time * 16:05

CANCEL APPLY

- b. **Daily:** Select the time and the schedule period. Daily schedules can be configured for up to 90 days in the future. For example, the selected device(s) will reboot every day at 05:00 from July 15 through October 13.

Schedule Settings

1 item(s) selected

Scheduling Mode *
Daily

Time * 05:00 Period * 2023-07-15 – 2023-10-13

CANCEL APPLY

- c. **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. For example, the selected device(s) will reboot every Monday, Wednesday, and Friday at 05:00 from July 15 through October 13.

Schedule Settings

1 item(s) selected

Scheduling Mode * Weekly Weekly Day * Mon. Wed. Fri.


Time * 05:00 Period * 2023-07-15 – 2023-10-13

CANCEL APPLY

6. Click **APPLY**.

Deleting a Configuration Deployment Schedule

Steps:

1. Navigate to **Device Deployment > Device Configuration**.
2. Check the box of the device(s) with the deployment schedule you want to delete.
3. Click the  icon to delete the selected deployment schedules.

4. When prompted to confirm, click **DELETE**.

Delete Scheduling

2 item(s) selected

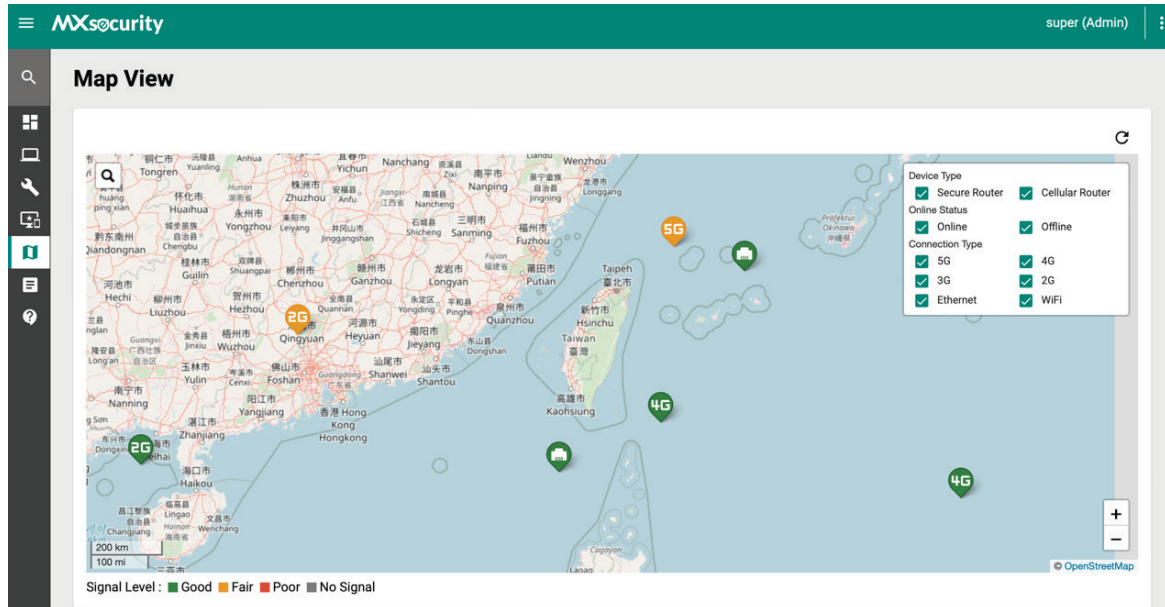
Are you sure you want to delete the selected scheduling?

CANCEL

DELETE

8. Map View

The Map View feature allows network administrators to identify the current location of devices, the interfaces in use, and the quality of the connection. For secure routers equipped with a GPS module such as OnCell devices, the map will display their exact location on the map if the GPS function is enabled on the device. For devices without a GPS module, users can manually enter the latitude and longitude details.



Refer to the following sections for more information about each function of the map.

Basic Functions

From the Map View screen, you can perform the following basic functions.

| Icon | Function | Description |
|------|-------------|--|
| | Refresh | Click the Refresh button to update the map with the latest GPS data. |
| | Search | Search for a device by serial number, device name, or MAC address. |
| | Filter | Filter the devices to display on the map based on device type, online status, and connection type |
| | Zoom in/out | Click the corresponding icon to zoom in or zoom out on the map. When zoomed out too far, devices in an adjacent area will be grouped together and shown as a single, numbered dot (2). The number inside the dot represents the number of devices in that area. Zoom in to view the device icons individually. |

Signal Level







The map shows the current signal strength of managed devices. Refer to the table below for an overview of each status.

| Icon | Description |
|------|---|
| | The cellular signal RSSI is higher than -73 dBm or the Ethernet WAN link is up. |
| | The cellular signal RSSI is between -73 to -89 dBm. |
| | The cellular signal RSSI is between -89 to -113 dBm. |

| | |
|---|--|
|  No Signal | No cellular signal or the Ethernet interface link is down. |
|---|--|

Interface in Use

The device icons on the map show which interface is being used to connect to the Internet. Refer to the table below for an overview of each interface.

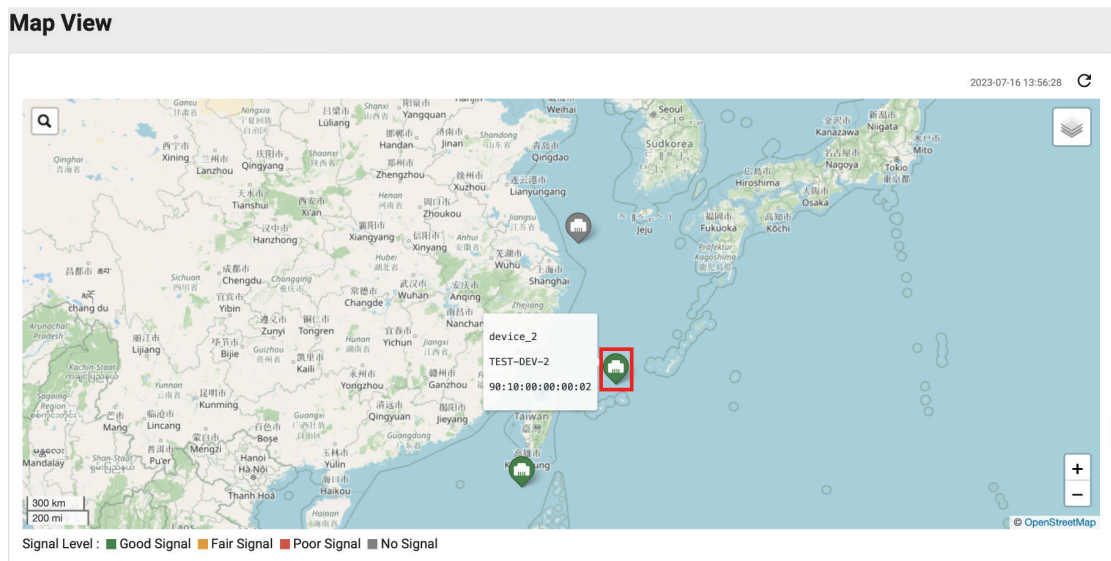
| Icon | Description |
|---|--|
|  | The device is using Ethernet WAN to connect to the internet. |
|  | The device is using cellular 5G to connect to the internet. |
|  | The device is using cellular 4G to connect to the internet. |
|  | The device is using cellular 3G to connect to the internet. |
|  | The device is using cellular 2G to connect to the internet. |
|  | The device is using Wi-fi to connect to the internet. |

Viewing Detailed Device Information

Clicking the device icon on the map or the device name from the No Location Devices list will bring up additional information about the device.

Steps:

1. Navigate to **Map View**.
2. Click the device's icon on the map or the device name in the No Location Devices list.



3. Depending on the selected device, the following information will be shown:

- a. **Basic Information:** Basic information about the device, including device name, model, S/N, IP LAN/WAN address, MAC address, location, and firmware version.

Device device_2 Information



● Online
System Uptime
1d23h21m55s

| Basic Information | | |
|---|--|--|
| Device Name device_2 | Serial Number TEST-DEV-2 | Product Model EDR-G9010-VPN-2MGSPF |
| MAC Address 90:10:00:00:00:02 | LAN IP Address 202.212.5.254 | Firmware Version V1.0.0 |
| Location 125.0, 25.5 | WAN IP Address 130.254.165.196 | |

CLOSE

- b. **Cellular Information:** Information about the cellular interface, connection, carrier, and SIM. This is only available for OnCell devices.

Device device_4 Information



● Online
System Uptime
1d23h20m17s

| Basic Information | Cellular Information | |
|---|-------------------------------|--------------------------------------|
| Cellular Module Enabled | Cellular Signal --- | Phone Number +886920629279 |
| Cellular SIM SIM1 | Cellular Mode --- | IMSI 933653273918636 |
| Cellular Carrier CHUNGHWA TELECOM | Cellular Band WCDMA | IMEI 353251085809483 |


CLOSE

Editing the Location of a Device

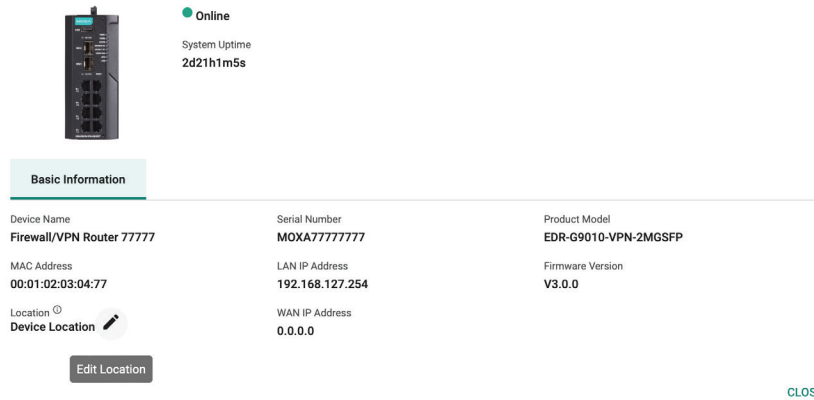
For managed devices that do not support GPS or have their GPS module disabled, users can manually enter geographic coordinates to display the device on the map.

Steps:


1. Navigate to **Map View**.
2. In the No Location Devices list, click the device name.

3. Click  the icon in the Location field.

Device Firewall/VPN Router 77777 Information





The screenshot shows a web interface for a device. At the top, there is a status indicator 'Online' with a green dot and 'System Uptime 2d21h1m5s'. Below this is a 'Basic Information' tab. Under the tab, there is a table of device details:

| | | |
|---|-----------------------------------|---------------------------------------|
| Device Name Firewall/VPN Router 77777 | Serial Number MOXA77777777 | Product Model EDR-G9010-VPN-2MGSFP |
| MAC Address 00:01:02:03:04:77 | LAN IP Address 192.168.127.254 | Firmware Version V3.0.0 |
| Location ⓘ Device Location  | WAN IP Address 0.0.0.0 | |


Below the table is an 'Edit Location' button. To the right of the panel is a 'CLOSE' link.

4. Enter the longitude and latitude coordinates.

Location ⓘ  

12 / 80

5. Click .

6. Click the  icon on the map to refresh the map.
The device will now appear on the map based on the specified coordinates.

9. Report

The Report function simplifies audits and reviewing cellular secure router performance. Users can also set up an email server to send reports directly to network administrators.

This section will provide information for the following reports:

- **Inventory Reports:** List of all assets of the devices in the field.
- **Cellular Signal Reports:** The signal status of managed cellular secure routers.
- **Data Usage Reports:** The status of the managed cellular secure routers' SIM card data usage.
- **Trail Reports:** The GPS movement tracking records of managed cellular secure routers.

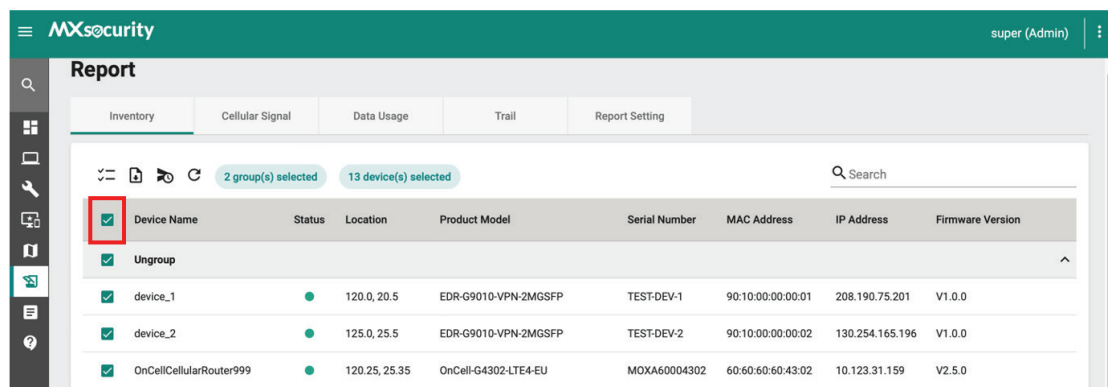
Inventory Reports

Generating a Current Inventory Report

Inventory reports make it easier for users to conduct audits and to monitor the number of field devices and their status.

Steps:

1. Navigate to **Report > Inventory**.
2. Select all devices.



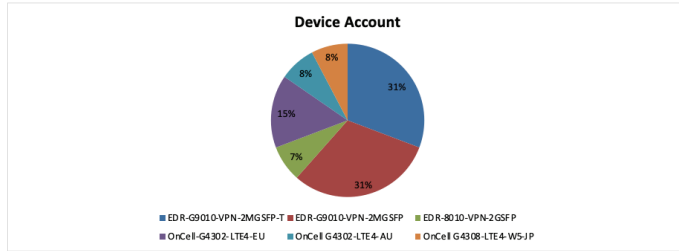
3. Click the  icon to generate a report in CSV format.

The inventory report includes the following information:

| | |
|-----------------------|------------|
| Create Account | super |
| Report Generated Date | 2023/07/16 |
| Report Generated Time | 04:22 PM |

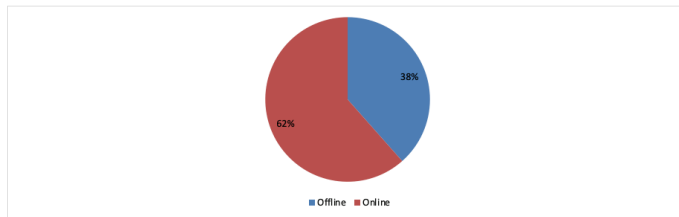
Product Model Statistics

| Product Model | Device Account |
|-------------------------|----------------|
| EDR-G9010-VPN-2MGSFP-T | 4 |
| EDR-G9010-VPN-2MGSFP | 4 |
| EDR-8010-VPN-2GSFP | 1 |
| OnCell-G4302-LTE4-EU | 2 |
| OnCell G4302-LTE4-AU | 1 |
| OnCell G4308-LTE4-W5-JP | 1 |



Online / Offline Statistics

| Status | Device Account |
|---------|----------------|
| Offline | 5 |
| Online | 8 |



Device List

| Device Name | Status | Location | Product Model | Serial Number | MAC | IP Address | Firmware Version |
|---------------------------|---------|-----------------|-------------------------|---------------|-------------------|-----------------|------------------|
| Firewall/VPN Router 55160 | Offline | Device Location | EDR-G9010-VPN-2MGSFP-T | TBZKB1155160 | 00:90:E8:91:86:7D | 10.123.31.163 | V3.0.0 |
| Firewall/VPN Router 77777 | Online | Device Location | EDR-G9010-VPN-2MGSFP | MOXA77777777 | 00:01:02:03:04:77 | 0.0.0.0 | V3.0.0 |
| Firewall/VPN Router Hades | Offline | Device Location | EDR-8010-VPN-2GSFP | MOXA00000000 | 00:90:E8:A7:72:C0 | 10.123.31.42 | V3.0.0 |
| Firewall/VPN Router Hades | Offline | Device Location | EDR-G9010-VPN-2MGSFP-T | MOXA95275487 | 00:01:02:03:04:05 | 10.123.31.176 | V3.0.0 |
| OOOwen 9010 | Offline | 122, 25 | EDR-G9010-VPN-2MGSFP-T | MOXA00112233 | 00:90:E8:90:10:06 | 10.123.34.80 | V3.0.0 |
| OnCellCellularRouter999 | Online | 120.25, 25.35 | OnCell-G4302-LTE4-EU | MOXA60004302 | 60:60:60:60:43:02 | 10.123.31.159 | V2.5.0 |
| Owen 4302 | Online | OOOOOwenn1 | OnCell-G4302-LTE4-EU | MOXA00000000 | 1071:98:43:02:01 | 0.0.0.0 | V3.0.0 |
| device 1 | Online | 120.0, 20.5 | EDR-G9010-VPN-2MGSFP | TEST-DEV-1 | 90:10:00:00:00:01 | 208.190.75.201 | V1.0.0 |
| device 2 | Online | 125.0, 25.5 | EDR-G9010-VPN-2MGSFP | TEST-DEV-2 | 90:10:00:00:00:02 | 130.254.165.196 | V1.0.0 |
| device 3 | Online | location 3 | EDR-G9010-VPN-2MGSFP-T | TEST-DEV-3 | 90:10:00:00:00:03 | 225.19.107.191 | V1.0.0 |
| device 4 | Online | location 4 | OnCell G4302-LTE4-AU | TEST-DEV-4 | 43:00:00:00:00:04 | 90.118.128.136 | V1.0.0 |
| grace | Offline | 123, 32 | EDR-G9010-VPN-2MGSFP | TBAIB1134586 | 00:90:E8:9D:EA:B7 | 10.123.34.94 | V3.0.0 |
| device 5 | Online | location 5 | OnCell G4308-LTE4-W5-JP | TEST-DEV-5 | 43:00:00:00:00:05 | 27.63.9.214 | V1.0.0 |

The following table describes the report's fields.

| Field | Description |
|-----------------------------|---|
| Create Account | The MXsecurity account used to generate the report. |
| Report Generated Date | The date the report was generated. |
| Report Generated Time | The time the report was generated. |
| Product Model Statistics | A summary of the total number of managed devices, organized according by product model. |
| Online / Offline Statistics | A summary of the total number of managed devices, organized according by status. |

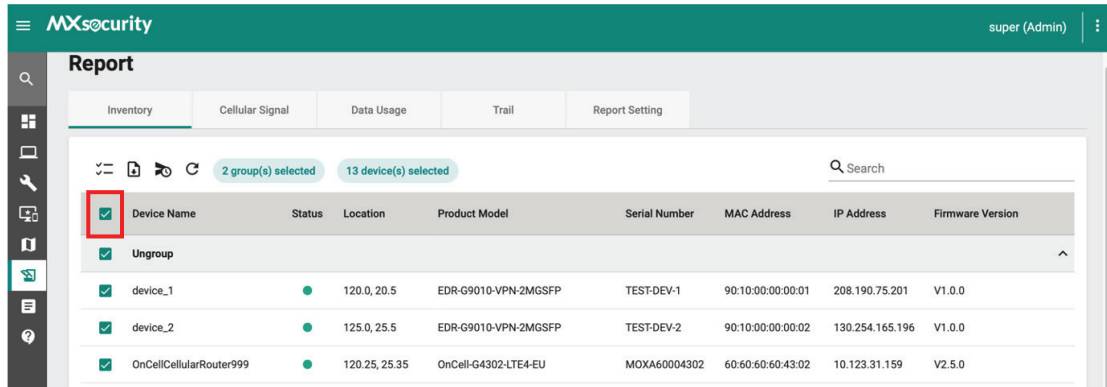
Scheduling an Inventory Report


Users can generate inventory reports according to a pre-configured schedule and automatically send it to specified recipients by email.

Steps:

1. Navigate to **Report > Inventory**.

2. Select all devices.



3. Click the  icon to configure a report schedule.
4. Specify the email recipients for the report. You can specify up to 5 recipients.
5. Enter the subject. This will act as the report email subject.

Schedule an Email to Send Inventory Report

13 item(s) selected

Receiver Email *

test1@moxa.com × Test2@moxa.com × i

Test3@moxa.com ×

3 / 5

Subject *

Inventory report of Tapei Site i

30 / 50

6. Select a scheduling mode:
 - a. **One Time:** Select the report date. One-time schedules can be configured for up to one year in the future.

Scheduling i

Scheduling Mode *

One Time Monthly

Report sending date

The report will be sent at 0:30 on the selected date and will include the **data** for the **selected date**.

Date *

2023-07-17 📅

i Current time zone at UTC+8, user can modify in the report setting.

- b. **Monthly:** Select the report date and period. Monthly schedules can be configured for up to one year in the future.

Schedule Settings

1 item(s) selected

Scheduling Mode *

Daily ▼

Time *

05:00 🕒

Period *

2023-07-15 – 2023-10-13 📅

CANCEL APPLY


7. Click **APPLY**.
The schedule will appear on the **Report > Report Setting > Schedule Report** page.

Cellular Signal Reports

Scheduling a Cellular Signal Report

Users can generate cellular signal reports according to a pre-configured schedule and automatically send it to specified recipients by email.


Steps:

1. Navigate to **Report > Cellular Signal**.
2. Select the device(s) you want to generate a report for.
3. Click the  icon to configure a report schedule.
4. Specify the email recipients for the report. You can specify up to 5 recipients.
5. Enter the subject. This will act as the report email subject.

Schedule an Email to Send Cellular Signal Report

4 item(s) selected


Receiver Email *

test1@moxa.com × test2@moxa.com × 

test3@moxa.com ×


3 / 5

Subject *

Cellular Signal Report of Tapei Site 

36 / 50

6. Select a scheduling mode:
 - a. **One Time**: Select the report date. One-time schedules can be configured for up to one year in the future. To ensure complete 24-hour data, the report data will be of the day prior to the report date.

Scheduling 


Scheduling Mode *


One Time Daily

Report sending date


The report will be sent at 0:30 on the selected date and will include the **data** for the **previous date**.

Date *

2023-07-17 

 Current time zone at UTC+8, user can modify in the report setting.

- b. **Daily**: Select the report period. Monthly schedules can be configured for up to one year in the future. To ensure complete 24-hour data, the report data will be of the day prior to the report date.

Scheduling 


Scheduling Mode *


One Time Daily

Report sending date

The report will be sent at 0:30 on the selected date and will include the **data** for the **previous date**.

Period *

2023-07-17 ~ 2024-07-15 

 Current time zone at UTC+8, user can modify in the report setting.


7. Click **APPLY**.
The schedule will appear on the **Report > Report Setting > Schedule Report** page.

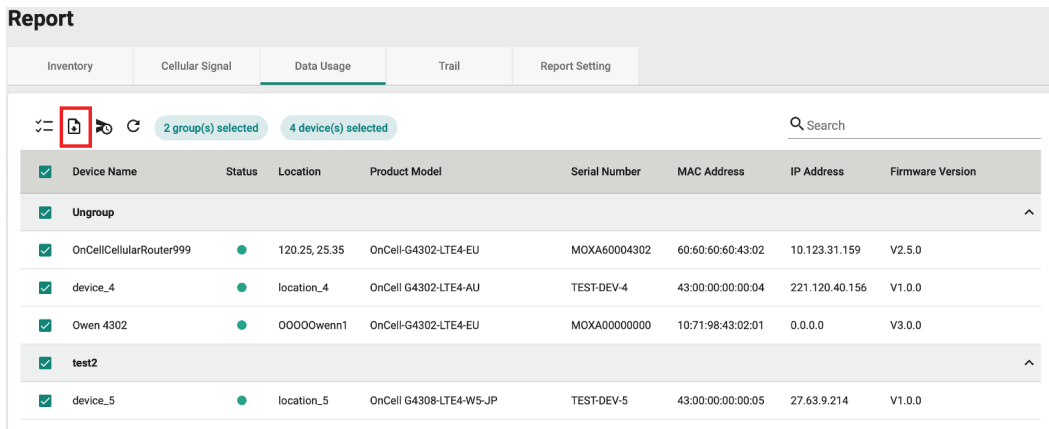
Data Usage Reports

Generating a Cellular Data Usage Report

Cellular data usage reports provide useful insights into the data usage of SIM cards for a specific period. The report will include a separate CSV file for each selected OnCell secure router.

Steps:

1. Navigate to **Report > Data Usage**.
2. Select the device(s) you want to generate a report for.
3. Click the  icon to generate a report in CSV format.



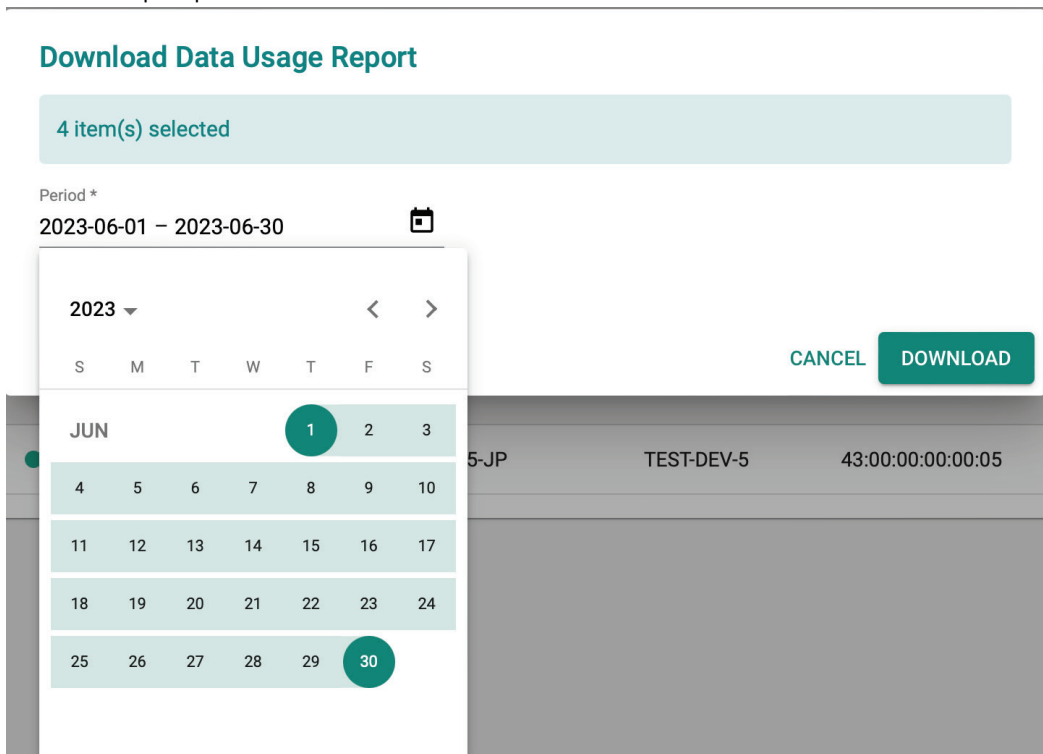
Report

Inventory Cellular Signal **Data Usage** Trail Report Setting

2 group(s) selected 4 device(s) selected

| Device Name | Status | Location | Product Model | Serial Number | MAC Address | IP Address | Firmware Version |
|-------------------------|--------|---------------|-------------------------|---------------|-------------------|----------------|------------------|
| OnCellCellularRouter999 | ● | 120.25, 25.35 | OnCell-G4302-LTE4-EU | MOXA60004302 | 60:60:60:60:43:02 | 10.123.31.159 | V2.5.0 |
| device_4 | ● | location_4 | OnCell-G4302-LTE4-AU | TEST-DEV-4 | 43:00:00:00:00:04 | 221.120.40.156 | V1.0.0 |
| Owen 4302 | ● | 00000wenn1 | OnCell-G4302-LTE4-EU | MOXA00000000 | 10:71:98:43:02:01 | 0.0.0.0 | V3.0.0 |
| device_5 | ● | location_5 | OnCell-G4308-LTE4-W5-JP | TEST-DEV-5 | 43:00:00:00:00:05 | 27.63.9.214 | V1.0.0 |

4. Select the report period.



Download Data Usage Report

4 item(s) selected

Period *
2023-06-01 – 2023-06-30

2023

S M T W T F S

JUN

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

CANCEL DOWNLOAD

● **NOTE**

You can select a period of up to 30 days within the last 90 days.

● **NOTE**

If you select the current day, the data included in the report will span from 00:00 of that day to the present time.

5. Click **DOWNLOAD**.

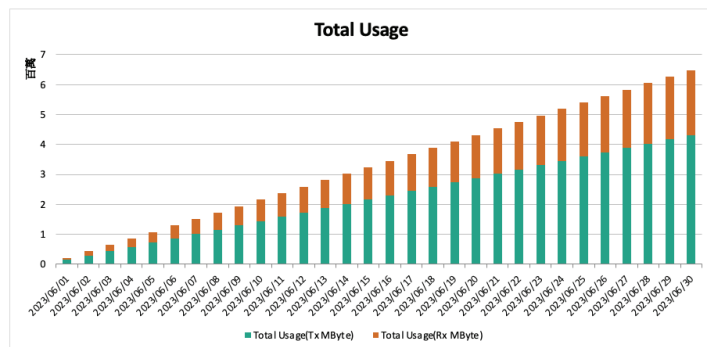
The cellular data usage report includes the following information:

Data Usage Report

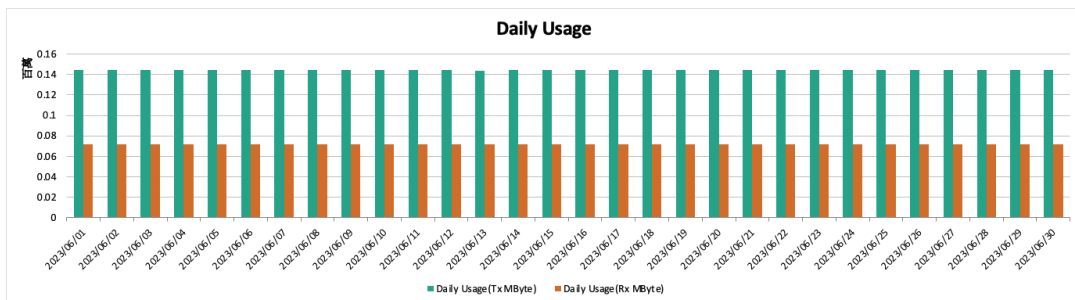
| | |
|------------------------------|-------------------------|
| Create Account | super |
| Report Generated Date | 2023/07/16 |
| Report Generated Time | 06:01 PM |
| Data Period | 2023/06/01 - 2023/06/30 |
| Device Name | device_4 |
| Device MAC Address | 43:00:00:00:00:04 |
| Device Serial Number | TEST-DEV-4 |

Data Usage(Total Usage)

| Item | Data Usage |
|----------------------|------------|
| Total Usage(TxMByte) | 4.3201 |
| Total Usage(RxMByte) | 2.16005 |
| Total Usage | 6.48015 |



Data Usage(Daily Usage)




The following table describes the report's fields.

| Field | Description |
|--------------------------|--|
| Create Account | The MXsecurity account used to generate the report. |
| Report Generated Date | The date the report was generated. |
| Report Generated Time | The time the report was generated. |
| Data Period | The period for which the data was collected. |
| Device Name | The name of the device. |
| Device MAC Address | The device MAC address. |
| Device Serial Number | The device serial number. |
| Data Usage (Total Usage) | Summary chart showing the cumulative total data usage in MB. |
| Data Usage (Daily Usage) | Summary chart showing the daily data usage in MB. |

Scheduling a Cellular Data Usage Report

Users can generate cellular data usage reports according to a pre-configured schedule and automatically send it to specified recipients by email.


Steps:

1. Navigate to **Report > Data Usage**.
2. Select the device(s) you want to generate a report for.
3. Click the  icon to configure a report schedule.
4. Specify the email recipients for the report. You can specify up to 5 recipients.
5. Enter the subject. This will act as the report email subject.

Schedule an Email to Send Data Usage Report

4 item(s) selected


Receiver Email *

test1@moxa.com × Test2@moxa.com × 

Test3@moxa.com ×

3 / 5

Subject *

Data Usage report of Tapei Site 

31 / 50

6. Select a scheduling mode:
 - a. **One Time**: Select the report date. One-time schedules can be configured for up to one year in the future. To ensure complete 30-day data, the report data will be of the month prior to the report date.

Scheduling 

Scheduling Mode *


One Time Monthly

Report sending date

The report will be sent at 0:30 on the selected date and will include the **data** for the **previous month**.

Date *

2023-07-17 

 Current time zone at UTC+8, user can modify in the report setting.

- b. **Monthly**: Select the report date and period. Monthly schedules can be configured for up to one year in the future. To ensure complete 30-day data, the report data will be of the month prior to the report date.

Scheduling 


Scheduling Mode *

One Time Monthly


Report sending date

The report will be sent at 0:30 on the selected date and will include the **data** for the **previous month**.

Generate Report Date * Period *

17  2023-07-17 - 2024-07-15

1 ~ 31

 Current time zone at UTC+8, user can modify in the report setting.


7. Click **APPLY**.
The schedule will appear on the **Report > Report Setting > Schedule Report** page.

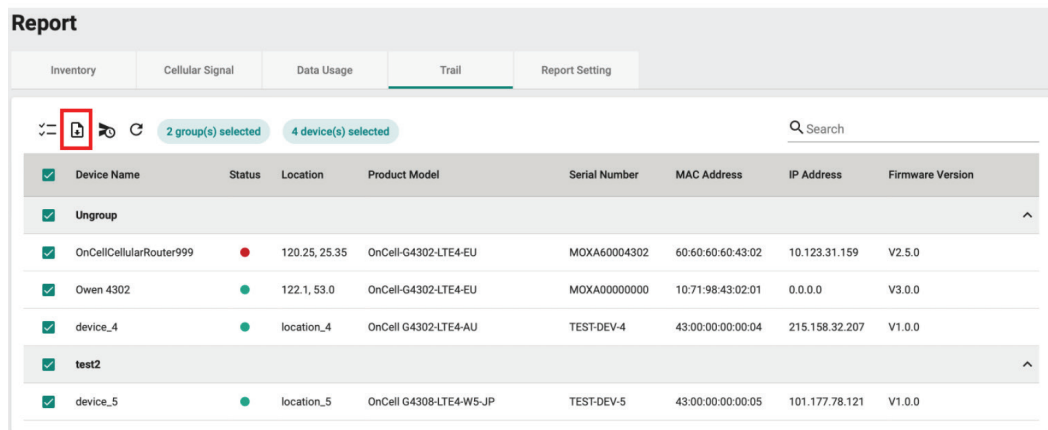
Trail Reports

Generating a Trail Report

Trail reports let users compile GPS trail records for each device. This information is useful for auditing and management purposes. The collected data can help optimize operations in a variety of applications. For example, trail reports can show the trajectory of a vehicle with an OnCell secure router on board using GPS trail records. Based on this report data, administrators can optimize vehicles routes and schedules.

Steps:

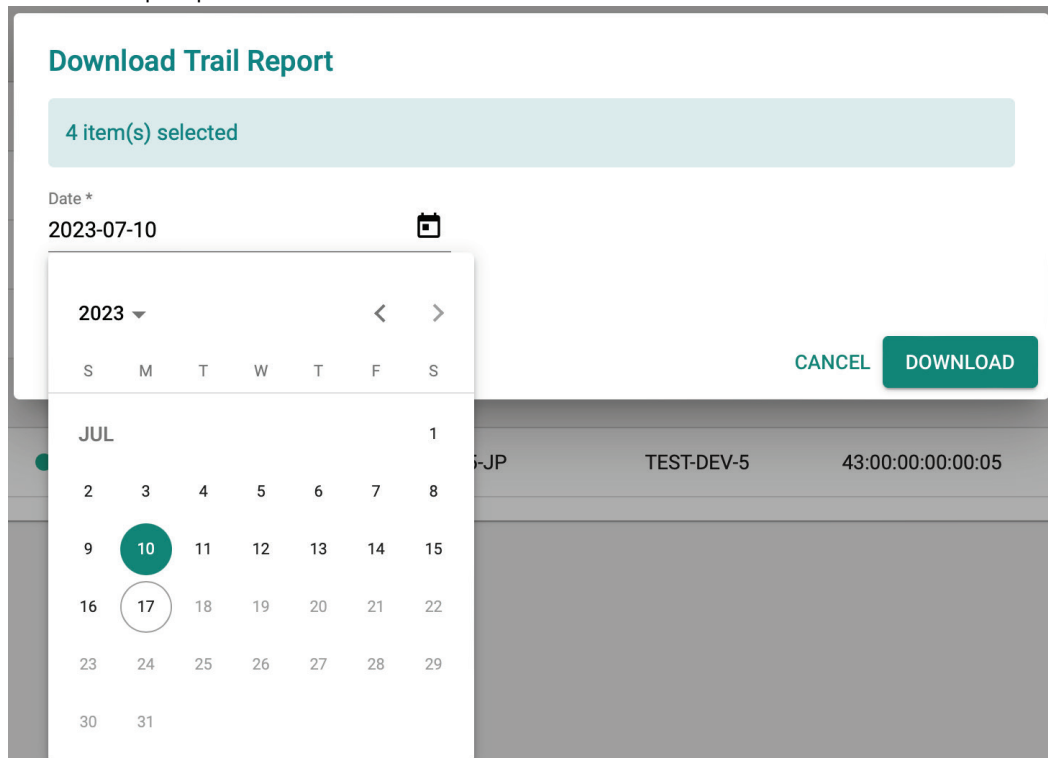
1. Navigate to **Report > Trail**.
2. Select the device(s) you want to generate a report for.
3. Click the  icon to generate a report in CSV format.



The screenshot shows the 'Report Trail' interface. At the top, there are tabs for 'Inventory', 'Cellular Signal', 'Data Usage', 'Trail', and 'Report Setting'. Below the tabs, there are icons for filtering, a download icon (highlighted with a red box), and refresh. Below these icons, it says '2 group(s) selected' and '4 device(s) selected'. A search bar is also present. The main part of the interface is a table with the following columns: Device Name, Status, Location, Product Model, Serial Number, MAC Address, IP Address, and Firmware Version. The table contains five rows of data, each with a checkbox in the first column. The rows are: 'Ungroup', 'OnCellCellularRouter999', 'Owen 4302', 'device_4', and 'test2', followed by 'device_5'.

| Device Name | Status | Location | Product Model | Serial Number | MAC Address | IP Address | Firmware Version |
|-------------------------|--------|---------------|-------------------------|---------------|-------------------|----------------|------------------|
| Ungroup | | | | | | | |
| OnCellCellularRouter999 | ● | 120.25, 25.35 | OnCell-G4302-LTE4-EU | MOXA60004302 | 60:60:60:60:43:02 | 10.123.31.159 | V2.5.0 |
| Owen 4302 | ● | 122.1, 53.0 | OnCell-G4302-LTE4-EU | MOXA00000000 | 10:71:98:43:02:01 | 0.0.0.0 | V3.0.0 |
| device_4 | ● | location_4 | OnCell G4302-LTE4-AU | TEST-DEV-4 | 43:00:00:00:00:04 | 215.158.32.207 | V1.0.0 |
| test2 | ● | | | | | | |
| device_5 | ● | location_5 | OnCell G4308-LTE4-W5-JP | TEST-DEV-5 | 43:00:00:00:00:05 | 101.177.78.121 | V1.0.0 |

4. Select the report period.



The screenshot shows the 'Download Trail Report' dialog box. At the top, it says '4 item(s) selected'. Below this, there is a 'Date *' field with the value '2023-07-10' and a calendar icon. A calendar is open, showing the month of July 2023. The date '10' is selected. To the right of the calendar, there are 'CANCEL' and 'DOWNLOAD' buttons. Below the dialog box, a portion of the table from the previous screenshot is visible, showing the row for 'device_5'.

● NOTE

You can select a period of up to 30 days within the last 90 days.

● NOTE

If you select the current day, the data included in the report will span from 00:00 of that day to the present time.

5. Click **DOWNLOAD**.


The trail report includes the timestamps and GPS coordinates of the device. Users can import this data into third-party software to visualize the locations of the device.

| A | B | C |
|------------------|----------|-----------|
| Time | Latitude | Longitude |
| 2023/07/14 00:00 | 29.31019 | 124.8241 |
| 2023/07/14 00:01 | 29.21019 | 124.7241 |
| 2023/07/14 00:02 | 29.26019 | 124.6741 |
| 2023/07/14 00:03 | 29.36019 | 124.7241 |
| 2023/07/14 00:04 | 29.31019 | 124.7741 |
| 2023/07/14 00:05 | 29.21019 | 124.8741 |
| 2023/07/14 00:06 | 29.16019 | 124.8241 |
| 2023/07/14 00:07 | 29.06019 | 124.9241 |
| 2023/07/14 00:08 | 29.16019 | 125.0241 |
| 2023/07/14 00:09 | 29.11019 | 124.9241 |
| 2023/07/14 00:10 | 29.06019 | 124.8241 |
| 2023/07/14 00:11 | 29.16019 | 124.9241 |
| 2023/07/14 00:12 | 29.21019 | 124.9741 |
| 2023/07/14 00:13 | 29.16019 | 125.0741 |
| 2023/07/14 00:14 | 29.26019 | 125.1741 |
| 2023/07/14 00:15 | 29.21019 | 125.2241 |
| 2023/07/14 00:16 | 29.26019 | 125.2741 |
| 2023/07/14 00:17 | 29.21019 | 125.3241 |
| 2023/07/14 00:18 | 29.16019 | 125.2741 |
| 2023/07/14 00:19 | 29.26019 | 125.3241 |
| 2023/07/14 00:20 | 29.21019 | 125.2741 |
| 2023/07/14 00:21 | 29.11019 | 125.3241 |
| 2023/07/14 00:22 | 29.01019 | 125.2241 |
| 2023/07/14 00:23 | 28.96019 | 125.3241 |

Scheduling a Trail Report

Users can generate trail reports according to a pre-configured schedule and automatically send it to specified recipients by email.

Steps:

1. Navigate to **Report > Trail**.
2. Select the device(s) you want to generate a report for.
3. Click the  icon to configure a report schedule.
4. Specify the email recipients for the report. You can specify up to 5 recipients.

5. Enter the subject. This will act as the report email subject.

Schedule an Email to Send Trail Report

4 item(s) selected

Receiver Email *

test1@moxa.com × test2@moxa.com × i

test3@moxa.com ×

3 / 5

Subject *

Trail Report of OnCell Devices i

30 / 50

6. Select a scheduling mode:
 - a. **One Time**: Select the report date. One-time schedules can be configured for up to one year in the future. To ensure complete 24-hour data, the report data will be of the day prior to the report date.

Scheduling i

Scheduling Mode *

One Time Daily

Report sending date

The report will be sent at 0:30 on the selected date and will include the **data** for the **previous date**.

Date *

2023-07-18 📅

- b. **Daily**: Select the report date and period. Monthly schedules can be configured for up to one year in the future. To ensure complete 24-hour data, the report data will be of the day prior to the report date.

Scheduling i

Scheduling Mode *

One Time Daily

Report sending date

The report will be sent at 0:30 on the selected date and will include the **data** for the **previous date**.

Period *

2023-07-18 – 2024-07-16 📅

i Current time zone at UTC+8, user can modify in the report setting.

7. Click **APPLY**.
The schedule will appear on the **Report > Report Setting > Schedule Report** page.

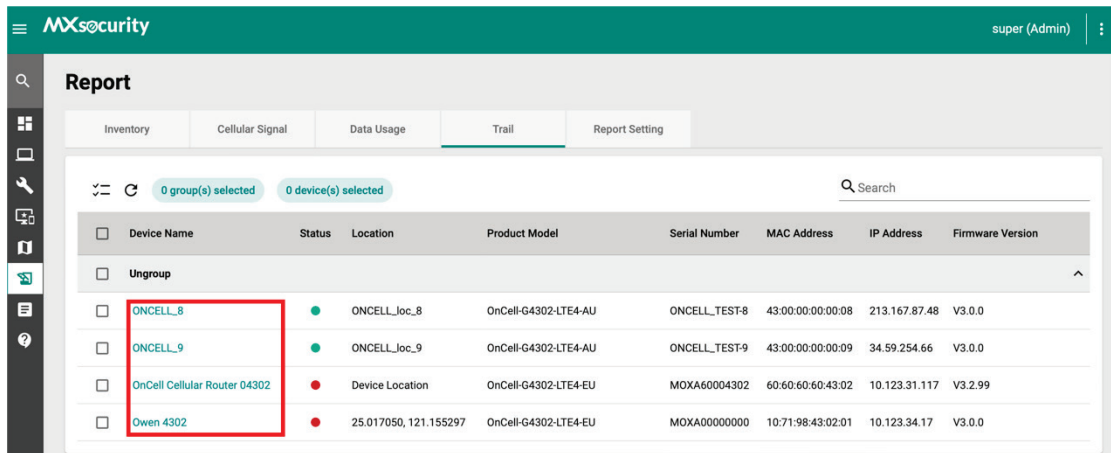
Viewing GPS Trajectories

To visualize and improve the quality of trail reports, MXsecurity supports an online GPS trajectory view for trail reports. This feature allows users to easily track and analyze movement patterns within their network, providing a more intuitive and efficient way to understand network dynamics.

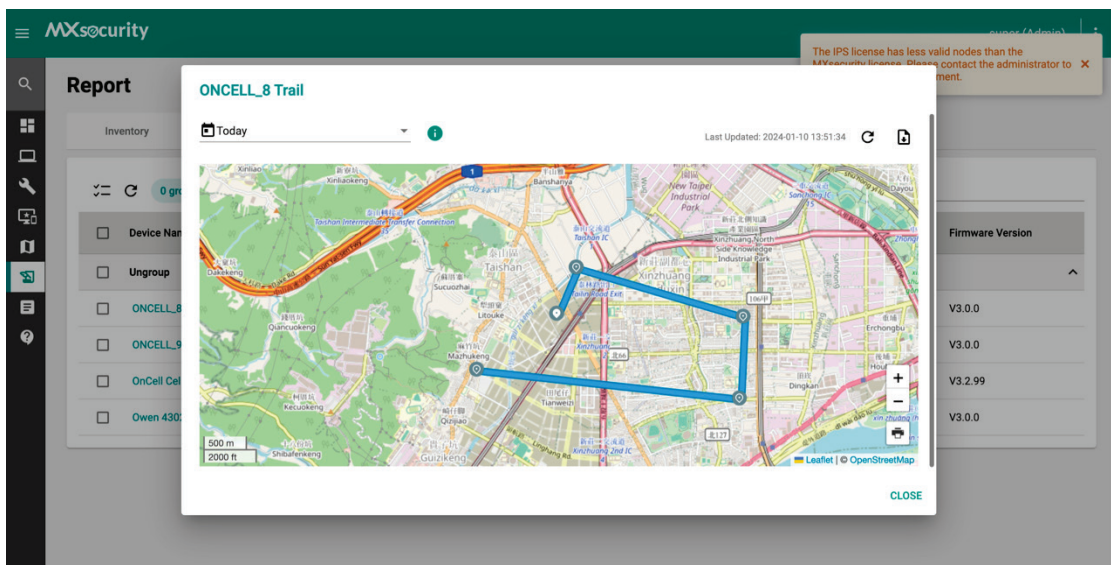
Steps:

1. Navigate to **Report > Trail**.

- Click on the device name.
The device's GPS trajectory map will appear.



- Select a date to show the device's GPS movement history up until that day.



Report Settings

From the Report Settings tab, users can set the report time zone and manage configured report schedules.

Configure Report Time Zone Settings


The device and MXsecurity might be deployed in different time zones. To ensure correct report data, users can configure the time zone for reports.

Steps:

- Navigate to **Report > Report Setting > Time Zone Setting**.
- Select the time zone from the drop-down menu.
- Click **APPLY**.

Editing a Report Schedule

Steps:

1. Navigate to **Report > Report Setting > Schedule Report**.
2. Select the schedule you want to modify.
3. Click the  icon to edit the schedule.
4. When finished editing the schedule, click **APPLY**.

10. Logging

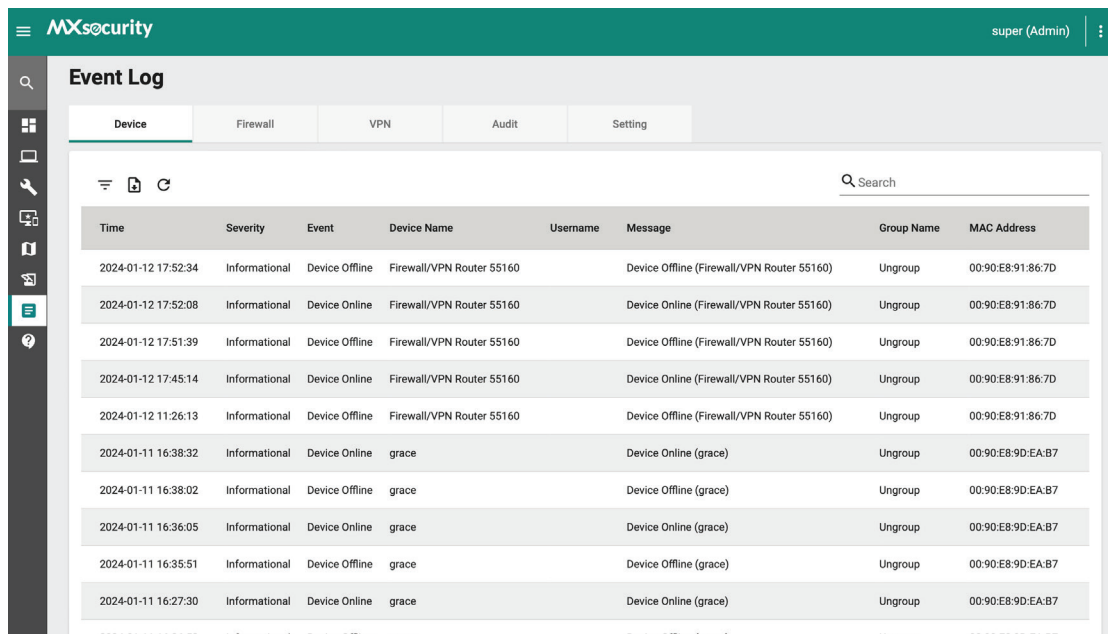
This chapter covers the event log and notification functions. Users can view logs related to the device, firewall, VPN, and audits. The notification function enables users to receive notifications for particular event logs. Users can send these notifications to designated email recipients or a syslog server.

Event Log

The event log contains all system- and device-related logs. Logs are categorized by type, including device, firewall, VPN, and audit logs. Refer to the following sections for more information about each log type.

Device Log

The device log records interactions between the device and MXsecurity, such as Device Added, Device Deleted, Device Online/Offline, Device Deployment Success/Failure, and Send SMS.




The screenshot shows the MXsecurity Event Log interface. The top navigation bar includes the MXsecurity logo and the user 'super (Admin)'. The main content area is titled 'Event Log' and features a sidebar with navigation icons. Below the title, there are tabs for 'Device', 'Firewall', 'VPN', 'Audit', and 'Setting', with 'Device' selected. A search bar is located on the right. The main table displays a list of events with the following columns: Time, Severity, Event, Device Name, Username, Message, Group Name, and MAC Address. The table contains several rows of device online and offline events for various devices, including 'Firewall/VPN Router 55160' and 'grace'.

| Time | Severity | Event | Device Name | Username | Message | Group Name | MAC Address |
|---------------------|---------------|----------------|---------------------------|----------|--|------------|-------------------|
| 2024-01-12 17:52:34 | Informational | Device Offline | Firewall/VPN Router 55160 | | Device Offline (Firewall/VPN Router 55160) | Ungroup | 00:90:E8:91:86:7D |
| 2024-01-12 17:52:08 | Informational | Device Online | Firewall/VPN Router 55160 | | Device Online (Firewall/VPN Router 55160) | Ungroup | 00:90:E8:91:86:7D |
| 2024-01-12 17:51:39 | Informational | Device Offline | Firewall/VPN Router 55160 | | Device Offline (Firewall/VPN Router 55160) | Ungroup | 00:90:E8:91:86:7D |
| 2024-01-12 17:45:14 | Informational | Device Online | Firewall/VPN Router 55160 | | Device Online (Firewall/VPN Router 55160) | Ungroup | 00:90:E8:91:86:7D |
| 2024-01-12 11:26:13 | Informational | Device Offline | Firewall/VPN Router 55160 | | Device Offline (Firewall/VPN Router 55160) | Ungroup | 00:90:E8:91:86:7D |
| 2024-01-11 16:38:32 | Informational | Device Online | grace | | Device Online (grace) | Ungroup | 00:90:E8:9D:EA:B7 |
| 2024-01-11 16:38:02 | Informational | Device Offline | grace | | Device Offline (grace) | Ungroup | 00:90:E8:9D:EA:B7 |
| 2024-01-11 16:36:05 | Informational | Device Online | grace | | Device Online (grace) | Ungroup | 00:90:E8:9D:EA:B7 |
| 2024-01-11 16:35:51 | Informational | Device Offline | grace | | Device Offline (grace) | Ungroup | 00:90:E8:9D:EA:B7 |
| 2024-01-11 16:27:30 | Informational | Device Online | grace | | Device Online (grace) | Ungroup | 00:90:E8:9D:EA:B7 |
| 2024-01-11 16:26:52 | Informational | Device Offline | grace | | Device Offline (grace) | Ungroup | 00:90:E8:9D:EA:B7 |

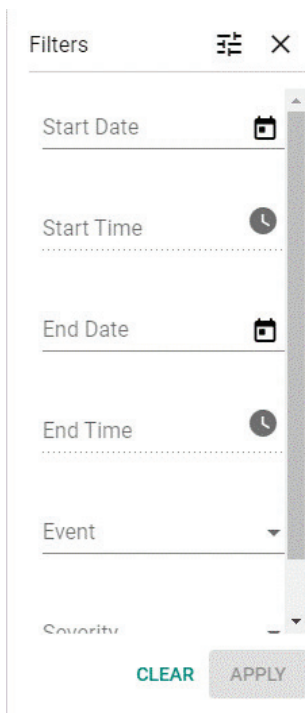
Viewing Device Logs


Steps:


1. Navigate to **Logging > Event Log > Device**.
2. You can perform the following actions:

- a. Click the  icon to open the filter menu. Select a start/end day and time or log severity from the respective drop-menu.






Click the  button to configure advanced filters. Check the box of the specific event(s) you want to filter. Click **APPLY**. The logs will renew immediately to reflect the selected criteria.

- b. Click the  button to export the current search results as a CSV file.



- c. Click the  button to renew the search results.



The following table describes the log's fields.

| Field | Description |
|-------------|--|
| Time | The time the log entry was created. |
| Severity | The severity level assigned to the system event. |
| Event | The category of the system event. |
| Device Name | The hostname of the device that generated the log. |
| Username | The username of the user that generated the log. |
| Message | This field displays a detailed description of the event. |
| Group Name | The group name of the device group that generated the log. |
| MAC Address | The MAC address of the device that generated the log. |

Firewall Log

The firewall logs include logs detected by the Trusted Access, Malformed Packets, DoS policy, L3-L7 policies, protocol filter policies, ADP, IPS and Session Control features.

| Index | Time | Severity | Device Name | Group Name | EtherType | IP Protocol | Incoming Interface | Source MAC | Source IP | Source Port | Outgoing Interface | Destination IP | Destination Port | TCP Flags | ICMP Type | ICMP Code | Action | Addition Message |
|---------|---------------------|-----------|-------------|--------------|-----------|-------------|--------------------|-------------------|--------------|-------------|--------------------|----------------|------------------|-----------|-----------|-----------|--------|------------------|
| 8747347 | 2024-01-14 23:22:11 | Emergency | ROUTER_7 | Ungroup 2048 | | TCP | WAN | 00:26:0A:25:B2:00 | 192.168.1.70 | | | 10.124.34.7 | 0 | | | | Allow | |
| 8747346 | 2024-01-14 23:22:11 | Error | ROUTER_5 | Ungroup 2048 | | TCP | WAN | 00:26:0A:25:B2:00 | 192.168.1.30 | | | 10.124.34.3 | 0 | | | | Allow | |
| 8747345 | 2024-01-14 23:22:11 | Emergency | ROUTER_6 | Ungroup 2048 | | TCP | WAN | 00:26:0A:25:B2:00 | 192.168.1.70 | | | 10.124.34.7 | 0 | | | | Allow | |
| 8747344 | 2024-01-14 23:22:10 | Error | ROUTER_1 | Ungroup 2048 | | TCP | WAN | 00:26:0A:25:B2:00 | 192.168.1.80 | | | 10.124.34.8 | 0 | | | | Allow | |
| 8747343 | 2024-01-14 23:21:11 | Emergency | ROUTER_7 | Ungroup 2048 | | TCP | WAN | 00:26:0A:25:B2:00 | 192.168.1.40 | | | 10.124.34.4 | 0 | | | | Allow | |
| 8747342 | 2024-01-14 23:21:11 | Error | ROUTER_7 | Ungroup 2048 | | TCP | WAN | 00:26:0A:25:B2:00 | 192.168.1.90 | | | 10.124.34.9 | 0 | | | | Allow | |
| 8747341 | 2024-01-14 23:21:11 | Error | ROUTER_6 | Ungroup 2048 | | TCP | WAN | 00:26:0A:25:B2:00 | 192.168.1.80 | | | 10.124.34.8 | 0 | | | | Allow | |
| 8747340 | 2024-01-14 23:21:11 | Critical | ROUTER_3 | Ungroup 2048 | | TCP | WAN | 00:26:0A:25:B2:00 | 192.168.1.50 | | | 10.124.34.5 | 0 | | | | Allow | |
| 8747339 | 2024-01-14 23:21:11 | Warning | ROUTER_3 | Ungroup 2048 | | TCP | WAN | 00:26:0A:25:B2:00 | 192.168.1.10 | | | 10.124.34.1 | 0 | | | | Allow | |

Viewing Firewall Logs

Steps:


1. Navigate to **Logging > Event Log > Firewall**.

2. Select the firewall function event log type from the drop-down menu.

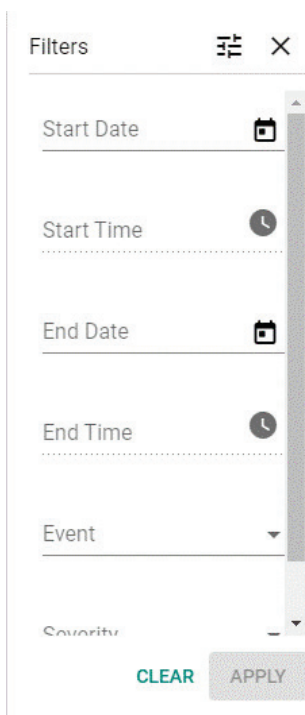
The screenshot shows the 'Event Log' interface with the 'Firewall' tab selected. A dropdown menu is open for 'Trusted Access', displaying a list of event log types with their corresponding severity and group names.


| | Severity | Group Name |
|------------------------|-----------|------------|
| Trusted Access | | |
| Malformed Packets | | |
| DoS Policy | Error | Ungrou |
| Layer 3-7 Policy | Notice | Ungrou |
| Protocol Filter Policy | Alert | Ungrou |
| ADP | Notice | Ungrou |
| IPS | Emergency | Ungrou |
| Session Control | Alert | Ungrou |
| Layer 2 Policy | Alert | Ungrou |


3. You can perform the following actions:

- a. Click the  icon to open the filter menu. Select a start/end day and time or log severity from the respective drop-menu.






Click the  button to configure advanced filters. Check the box of the specific event(s) you want to filter. Click **APPLY**. The logs will renew immediately to reflect the selected criteria.

- b. Click the  button to export the current search results as a CSV file.



- c. Click the  button to renew the search results.



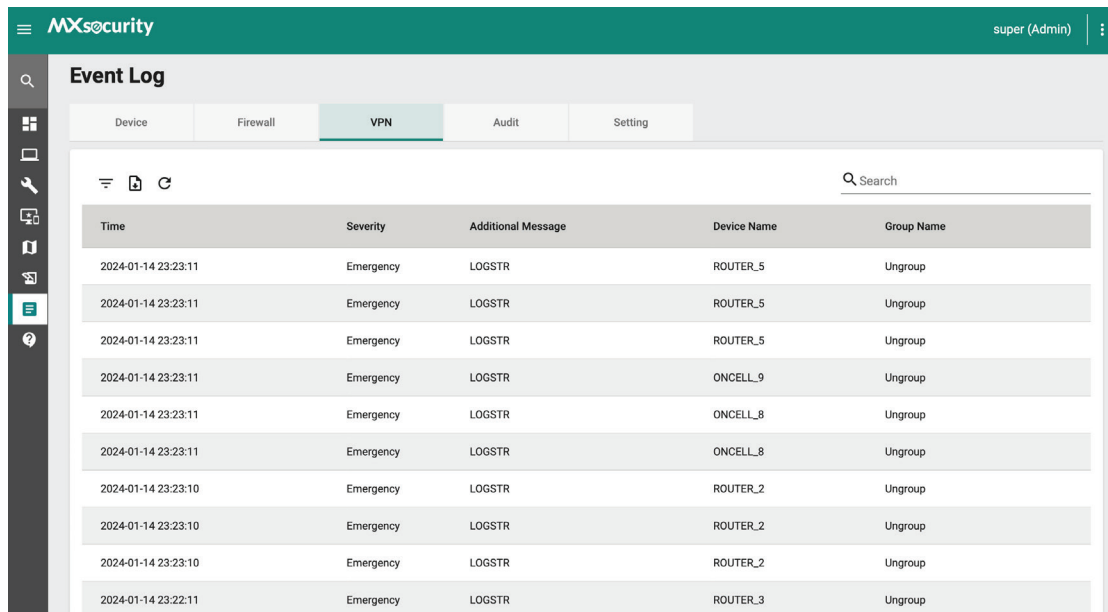
The following table describes the log's fields.

| Field | Description |
|--------------------|--|
| Index | The index of the log. |
| Time | The time the log entry was created. |
| Severity | The severity level assigned to the firewall event. |
| Device Hostname | The host name of the device that generated the log. |
| Group Name | The group name of the device group that generated the log. |
| IPS Severity | The severity level assigned to the IPS event. |
| IPS Category | The category of the IPS event. |
| Ethernet 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. |

| Field | Description |
|--------------------|--|
| 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. |
| ICMP Type | 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 log. |

VPN Log

The VPN logs show details about the status of tunnel connections and related events.




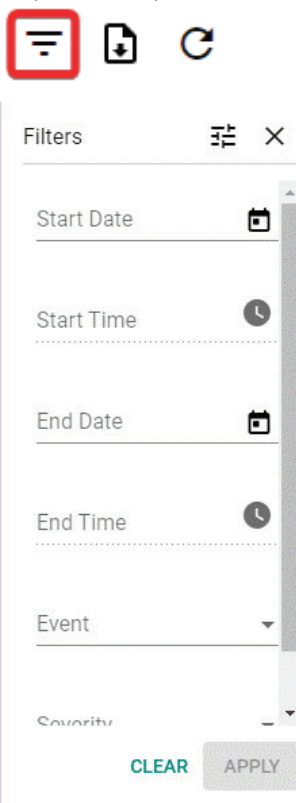
The screenshot shows the MXsecurity Event Log interface. The top navigation bar includes the MXsecurity logo and the user 'super (Admin)'. The main content area is titled 'Event Log' and has tabs for 'Device', 'Firewall', 'VPN', 'Audit', and 'Setting'. The 'VPN' tab is selected. Below the tabs is a search bar and a table of log entries. The table has columns for Time, Severity, Additional Message, Device Name, and Group Name. The log entries show 'Emergency' severity events with 'LOGSTR' messages from various devices like ROUTER_5, ONCELL_9, ONCELL_8, ROUTER_2, and ROUTER_3.

| Time | Severity | Additional Message | Device Name | Group Name |
|---------------------|-----------|--------------------|-------------|------------|
| 2024-01-14 23:23:11 | Emergency | LOGSTR | ROUTER_5 | Ungroup |
| 2024-01-14 23:23:11 | Emergency | LOGSTR | ROUTER_5 | Ungroup |
| 2024-01-14 23:23:11 | Emergency | LOGSTR | ROUTER_5 | Ungroup |
| 2024-01-14 23:23:11 | Emergency | LOGSTR | ONCELL_9 | Ungroup |
| 2024-01-14 23:23:11 | Emergency | LOGSTR | ONCELL_8 | Ungroup |
| 2024-01-14 23:23:11 | Emergency | LOGSTR | ONCELL_8 | Ungroup |
| 2024-01-14 23:23:10 | Emergency | LOGSTR | ROUTER_2 | Ungroup |
| 2024-01-14 23:23:10 | Emergency | LOGSTR | ROUTER_2 | Ungroup |
| 2024-01-14 23:23:10 | Emergency | LOGSTR | ROUTER_2 | Ungroup |
| 2024-01-14 23:22:11 | Emergency | LOGSTR | ROUTER_3 | Ungroup |


Viewing VPN Logs


Steps:

1. Navigate to **Logging > Event Log > Audit**.
2. You can perform the following actions:
 - a. Click the  icon to open the filter menu. Select a start/end day and time or log severity from the respective drop-menu.




The screenshot shows the filter menu in the Event Log interface. The menu is titled 'Filters' and has a close button (X). It contains several filter options: 'Start Date' with a calendar icon, 'Start Time' with a clock icon, 'End Date' with a calendar icon, 'End Time' with a clock icon, 'Event' with a dropdown arrow, and 'Severity' with a dropdown arrow. At the bottom of the menu are 'CLEAR' and 'APPLY' buttons.

Click the  button to configure advanced filters. Check the box of the specific event(s) you want to filter. Click **APPLY**. The logs will renew immediately to reflect the selected criteria.

b. Click the  button to export the current search results as a CSV file.



c. Click the  button to renew the search results.



The following table describes the log's fields.

| Field | Description |
|--------------------|--|
| Time | The time the log entry was created. |
| Severity | The severity level assigned to the system event. |
| Event | The category of the system event. |
| Additional Message | The additional message provided with the log. |
| Device Hostname | The host name of the device that generated the log. |
| Username | The username of the user that generated the log. |
| Group Name | The group name of the device group that generated the log. |

Audit Log


The audit logs show details about user access, configuration changes, and other events that occurred when using MXsecurity.

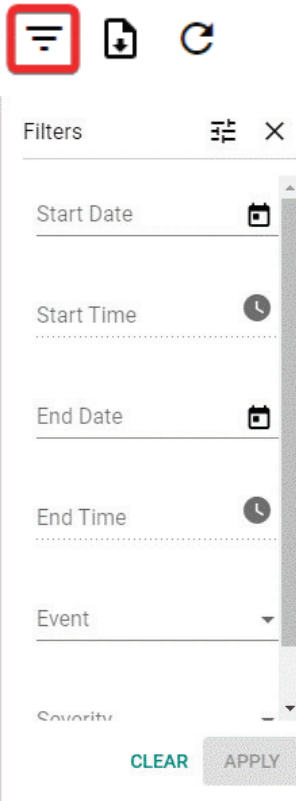
| Time | Severity | Event | Username | Message |
|---------------------|---------------|---------------|----------|-----------------------|
| 2024-01-14 22:21:08 | Informational | Login Success | super | Login Success (super) |
| 2024-01-12 09:15:48 | Informational | Login Success | super | Login Success (super) |
| 2024-01-12 00:40:03 | Informational | Login Success | super | Login Success (super) |
| 2024-01-11 10:55:24 | Informational | Login Success | super | Login Success (super) |
| 2024-01-11 10:38:30 | Informational | Login Success | super | Login Success (super) |
| 2024-01-11 01:48:43 | Informational | Login Success | super | Login Success (super) |
| 2024-01-11 01:48:35 | Informational | Login Failure | super | Login Failure (super) |
| 2024-01-10 17:37:44 | Informational | Login Success | super | Login Success (super) |
| 2024-01-10 17:37:16 | Informational | Login Success | super | Login Success (super) |
| 2024-01-10 17:22:15 | Informational | Login Success | super | Login Success (super) |


Viewing Audit Logs


Steps:

1. Navigate to **Logging > Event Log > Audit**.
2. You can perform the following actions:


- a. Click the  icon to open the filter menu. Select a start/end day and time or log severity from the respective drop-menu.



- Click the  button to configure advanced filters. Check the box of the specific event(s) you want to filter. Click **APPLY**. The logs will renew immediately to reflect the selected criteria.

- Click the  button to export the current search results as a CSV file.



- Click the  button to renew the search results.



The following table describes the log's fields.

| Field | Description |
|-------|-------------------------------------|
| Time | The time the log entry was created. |

| Field | Description |
|-----------------|--|
| Severity | The severity level assigned to the system event. |
| Event | The category of the system event. |
| Device Hostname | The host name of the device that generated the log. |
| Username | The username of the user that generated the log. |
| Group Name | The group name of the device group that generated the log. |

Event Log Settings

From the Setting tab, users can check the status of event logs stored on the local drive and configure log purging settings.

The screenshot displays the 'Event Log' settings interface. At the top, there are tabs for 'Device', 'Firewall', 'VPN', 'Audit', and 'Setting', with 'Setting' selected. The 'Disk Usage' section shows a bar chart with 6584 MB free of 24624 MB. The legend for the bar chart includes Audit Log (blue), Firewall Log (green), VPN Log (yellow), Device Log (orange), Others (grey), and Free (red). The 'Purge Settings' section contains three log types: Audit Log, Firewall Log, and VPN Log. Each log type has a 'Max Retention Time' dropdown set to '2 month(s)' and a 'Max Retention Entries' dropdown set to '100 thousand'.

Purging Event Logs

The log purging function allows users to configure automatic log purging based on the specified retention time and log amount. Purging logs may be useful when the system generates a lot of event logs, which may affect network performance.

When the retention time or the number of entries for a log type exceeds the set threshold, MXsecurity will start clearing the logs, starting with the oldest records.

1. Navigate to **Logging > Event Log > Setting**.
2. In the Disk Usage section, check the current used and available disk space.



3. In the Purge Settings section, select the retention time and number of entries to retain for each log type.

Purge Settings

Audit Log
Max Retention Time * 2 month(s) ▼ Max Retention Entries * 100 thousand ▼

Firewall Log
Max Retention Time * 2 month(s) ▼ Max Retention Entries * 100 thousand ▼

VPN Log
Max Retention Time * 2 month(s) ▼ Max Retention Entries * 100 thousand ▼

Device Log
Max Retention Time * 2 month(s) ▼ Max Retention Entries * 100 thousand ▼

4. (Optional) In the Event Log Auto Refresh section, disable or select the interval at which the event log data will refresh.

Event Log Auto Refresh

Event Log Auto Refresh
 Enabled Disabled

Event Log Auto Refresh Interval *
10 second(s) ▼

APPLY


5. Click **APPLY**.

Notifications

The Notification tab allows users to set up notifications for specific events. Users can configure these notifications to be sent by email or sent to a Syslog server.

Adding a Notification

Steps:

1. Navigate to **Logging > Notifications**.
2. Click the  icon to add a notification.

3. Enter a name and description for the notification.

Create Notification

1 Notification Information — 2 Choose Devices — 3 Choose Event and Filter — 4 Receiver Settings

Status *
 Enabled Disabled

Notification Name *
 Trust Access 12 / 50

Description 0 / 255

CANCEL NEXT

4. Click **NEXT**.
5. Select the device(s) that will send notifications for the specified events.

Create Notification

1 Notification Information — 2 Choose Devices — 3 Choose Event and Filter — 4 Receiver Settings

10 of 13 selected

| Device Name ↑ | Status | Location | Product Model | Serial Number | MAC Address | Firmware Version | Group |
|---|--------|-----------------|------------------------|---------------|-------------------|------------------|---------|
| <input checked="" type="checkbox"/> Firewall/VPN Router 55160 | ● | Device Location | EDR-G9010-VPN-2MGSFP-T | TBZKB1155160 | 00:90:E8:91:86:7D | V3.0.0 | Ungroup |
| <input checked="" type="checkbox"/> Firewall/VPN Router 77777 | ● | Device Location | EDR-G9010-VPN-2MGSFP | MOXA777777777 | 00:01:02:03:04:77 | V3.0.0 | Ungroup |
| <input checked="" type="checkbox"/> Firewall/VPN Router Hades | ● | Device Location | EDR-G9010-VPN-2MGSFP-T | MOXA95275487 | 00:01:02:03:04:05 | V3.0.0 | Ungroup |
| <input checked="" type="checkbox"/> Firewall/VPN Router Hades | ● | Device Location | EDR-8010-VPN-2GSFP | MOXA00000000 | 00:90:E8:A7:72:C0 | V3.0.0 | Ungroup |
| <input checked="" type="checkbox"/> OO0wen 9010 | ● | 122, 25 | EDR-G9010-VPN-2MGSFP-T | MOXA00112233 | 00:90:E8:90:10:06 | V3.0.0 | Ungroup |
| <input checked="" type="checkbox"/> OnCellCellularRouter999 | ● | 120.25, 25.35 | OnCell-G4302-LTE4-EU | MOXA60004302 | 60:60:60:60:43:02 | V2.5.0 | Ungroup |
| <input checked="" type="checkbox"/> Owen 4302 | ● | OOOOwenn1 | OnCell-G4302-LTE4-EU | MOXA00000000 | 10:71:98:43:02:01 | V3.0.0 | Ungroup |

6. Select the event types and configure filter rules:
 - a. Select the event type.

Create Notification

1 Notification Information — 2 Choose Devices — 3 Choose Event and Filter — 4 Receiver Settings

Firewall

- Trusted Access
- Malformed Packets
- DoS Policy
- Layer 3-7 Policy
- Protocol Filter Policy

Severity Mode

Source IP Destination IP

Source IP 1 Destination IP 1

BACK NEXT

- b. Specify the notification filter rules to determine when the device will send a notification for the event. Depending on the select notification event, filter rule options will be different.

Create Notification

1 Notification Information — 2 Choose Devices — 3 Choose Event and Filter — 4 Receiver Settings

Notification Event *
Trusted Access

Event Filter Rule

Severity
Severity Rule
Lower than or Equal to Severity Mode

Source IP Destination IP

Source IP Destination IP

[BACK](#) [NEXT](#)

7. Configure the notification content and recipient settings.

Create Notification

Dear Sir/ Madam,

This notification was automatically sent from MXsecurity.

Email Content *

The event \${event} triggered at device \${productModel}, \${deviceName}, happened at \${eventTime}.

96 / 256 [Reset to default](#)

Please check the detailed information on MXsecurity.

Best regards,
MXsecurity

Receiver Email Address *

0 / 5

- + Device Name
- + Product Model
- + Mac Address
- + Location
- + Serial Number
- + Event Time
- + Notification Name
- + Event

- a. Select the notification delivery method. Multiple methods can be selected.
 - b. Edit the notification content using the predefined variables.
 - c. If Email is selected, specify the email recipients. You can add up to 5 recipients separated by a comma.
8. Configure Advanced Settings. To prevent an influx of messages in a short period, users can configure a limit on the number of notifications for a specified interval. When exceeded, all additional notifications will be discarded until the next interval begins.

Advanced Settings *

Notification Limit *

Enabled Disabled

MAX. Notification * Period of Time *

3 10

1 ~ 5 1 ~ 60 minute(s)

i Once the maximum number of notifications has been reach in period of time, no more notifications are sent until next period.

- a. Enable or disable the notification limit.
- b. Specify the maximum number of notifications.

- c. Specify the interval duration.
9. Click **APPLY**.

11. Administration

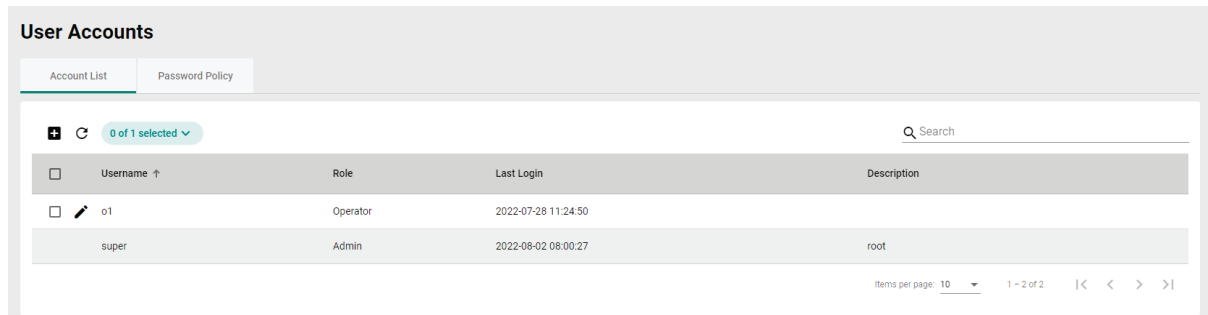
This chapter describes the available administrative settings for MXsecurity.

User Accounts




● NOTE

Log in to the management console using the default administrator account ("admin") or any account with administrator privileges to access the User Accounts screens.

MXsecurity uses role-based administration to grant and control access to the management console. Use this feature to assign specific management console privileges to user accounts and present them with only the tools and permissions necessary to perform specific tasks. Each account is assigned a specific role. A role defines the level of access to the management console. Users can log in to the management console using custom user accounts.



The following table outlines the tasks available on the **User Accounts** tab.

| Task | Description |
|-------------------------------|---|
| Add a user account | Click the  icon create a new user account. For more information, see Adding a User Account . |
| Delete an existing account | Select one or more existing user accounts and click the  icon. For more information, see Deleting a User Account . |
| Edit an existing account | Click the  icon next to an existing user account to view or modify the current account settings. For more information, see Editing an Existing User Account . |
| Configure the password policy | Click Password Policy to adjust password restrictions. For more information, see Configuring the Password Policy . |

User Roles

The following table describes the permissions matrix for user roles.

Dashboard

| Configuration Screen | Action | User Roles | | |
|----------------------|----------------|------------|----------|--------|
| | | Admin | Operator | Viewer |
| Dashboard | View | Yes | VG | VG |
| | All operations | Yes | VG | VG |

System Tab

| Configuration Screen | Action | User Roles | | |
|----------------------|----------------|------------|----------|--------|
| | | Admin | Operator | Viewer |
| User Accounts | View | Yes | No | No |
| | All operations | Yes | No | No |
| Licenses | View | Yes | No | No |
| | All operations | Yes | No | No |
| Settings | View | Yes | No | No |
| | All operations | Yes | No | No |

Management Tabs

| Configuration Screen | Action | User Roles | | |
|----------------------|----------------|------------|----------|--------|
| | | Admin | Operator | Viewer |
| Device Group | View | Yes | VG | No |
| | All operations | Yes | No | No |
| Firmwares | View | Yes | Yes | No |
| | All operations | Yes | No | No |
| Software Packages | View | Yes | Yes | No |
| | All operations | Yes | No | No |
| Objects | View | Yes | Yes | No |
| | All operations | Yes | No | No |
| Policy Profiles | View | Yes | Yes | No |
| | All operations | Yes | No | No |
| Device Configuration | View | Yes | VG | No |
| | All operations | Yes | No | No |

● NOTE

VG denotes that if the administrator has assigned/shared the device group permissions with a specific user account, then that user can view the information for that device group on the Management/Device Groups pages.

Device Deployment

| Configuration Screen | Action | User Roles | | |
|----------------------|----------------|------------|----------|--------|
| | | Admin | Operator | Viewer |
| Device Deployment | View | Yes | VG | No |
| | All operations | Yes | VG | No |

● NOTE

VG denotes that if the administrator has assigned/shared the device group permissions with a specific user account, then that user can view the information for that device group on the Device Deployment page.

Map View

| Configuration Screen | Action | User Roles | | |
|----------------------|----------------|------------|----------|--------|
| | | Admin | Operator | Viewer |
| Map View | View | Yes | VG | VG |
| | All operations | Yes | VG | No |

Report

| Configuration Screen | Action | User Roles | | |
|----------------------|----------------|------------------------------------|-----------|-----------|
| | | Admin | Operator | Viewer |
| Reports | View | Yes (All users) | VG (Self) | VG (Self) |
| | All operations | Write (Self) Delete (All users) | VG (Self) | VG (Self) |

Logging

| Configuration Screen | Action | User Roles | | |
|----------------------|----------------|------------------------------------|-----------|-----------|
| | | Admin | Operator | Viewer |
| Event Log | View | Yes | VG | VG |
| | All operations | Yes | VG | No |
| Notification | View | Yes | VG (Self) | VG (Self) |
| | All operations | Write (Self) Delete (All users) | VG (Self) | VG (Self) |


● NOTE

VG denotes that if the administrator has assigned/shared the device group permissions with a specific user account, then that user can view the information for that device group on the Logging/Event Log pages.



Account Input Format

Input format validation will apply to the account management form text fields. The following table describes the format restrictions for user input.


Create User

Username * 


 0 / 32

Password *  

 0 / 32

Confirm Password * 

 0 / 32

Role * 

Description

 0 / 255

CANCEL

APPLY

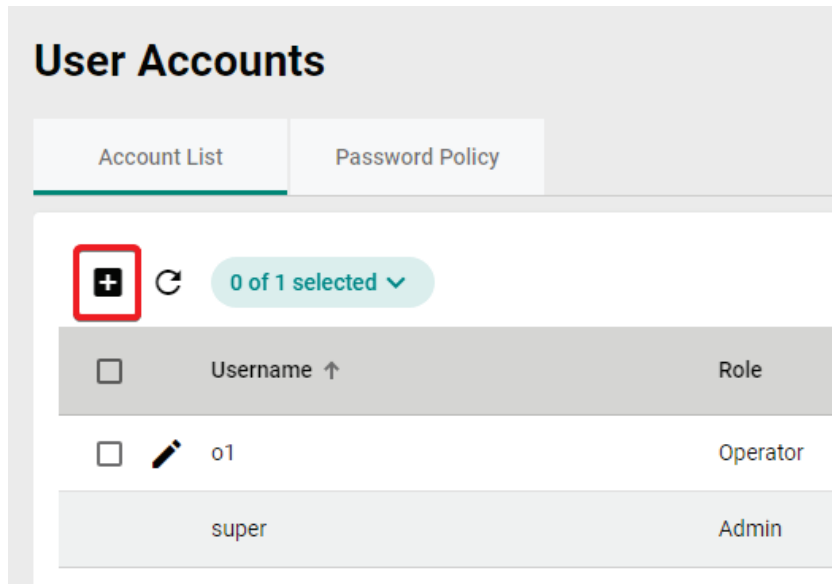
| Type | Length | Format | Reserved Name |
|-------------|---------------------|---|---|
| Username | 1 to 32 characters | Letters: a-z, A-Z Numbers: 0-9 Special characters: periods (.), underscores (_) | admin administrator viewer operator root auditor |
| Description | 0 to 255 characters | Letters: a-z, A-Z Numbers: 0-9 Special characters: periods (.), underscores (_), spaces, parenthesis [(,)], hyphens (-) | |

Adding a User Account

When logging in with an administrator account, you can create new user accounts for accessing MXsecurity.



Steps:


1. Navigate to **System > User Accounts > Account List**.
2. Click the  icon.



User Accounts

Account List Password Policy

  0 of 1 selected

| <input type="checkbox"/> | Username ↑ | Role |
|--------------------------|--|----------|
| <input type="checkbox"/> |  o1 | Operator |
| | super | Admin |

The **Create User** screen will appear.

Create User

Username * 0 / 32

Password * 0 / 32

Confirm Password * 0 / 32

Role *


Description 0 / 255

CANCEL APPLY

3. Configure the following settings:
 - a. **Username**: Enter the username used to log in to the management console.
 - b. **Password**: Enter the account password.
 - c. **Confirm Password**: Enter the account password again to confirm.
 - d. **Role**: Select a user role for this account. For more information, see [User Roles](#).
 - e. **Description**: Enter a description for this account.
4. Click **APPLY**.

Editing an Existing User Account

Steps:

1. Navigate to **System > User Accounts > Account List**.
2. Click the  icon next to the user account you want to modify.

User Accounts

Account List Password Policy


+ ↻ 0 of 1 selected

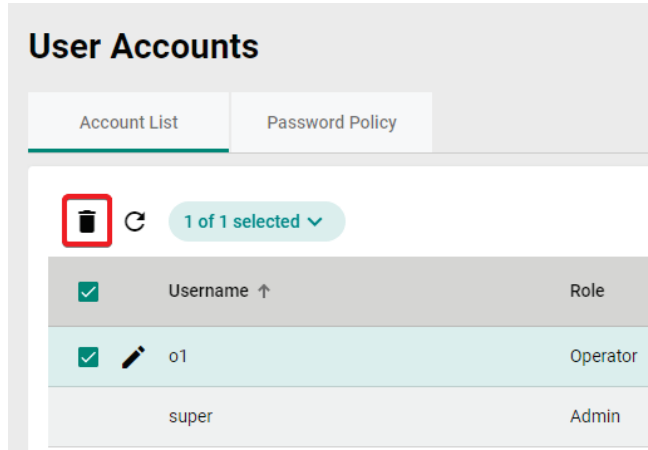
| <input type="checkbox"/> | Username ↑ | Role |
|--------------------------|------------|----------|
| <input type="checkbox"/> | o1 | Operator |
| <input type="checkbox"/> | super | Admin |

3. Modify the user account settings. Refer to [Adding a User Account](#) for more information.
4. Click **APPLY**.

Deleting a User Account

Steps:

1. Navigate to **System > User Accounts > Account List**.
2. Check the box of the user account(s) you want to delete.
3. Click the  icon to delete the selected user account(s).



4. When prompted to confirm, click **DELETE**.

Delete User(s)

1 item(s) selected

Are you sure you want to delete the selected user(s)?

CANCEL

DELETE

Configuring the Password Policy

To improve password strength, the administrator can customize the password policy from the **Password Policy** screen.

Steps:

1. Navigate to **System > User Accounts > Password Policy**.


2. Select the option(s) to apply to the password policy.

The screenshot shows the 'User Accounts' management console with the 'Password Policy' tab selected. The 'Minimum Length' is set to 8, with a range of 8 to 32. Several checkboxes are present: 'Cannot include the username' is checked, while 'Must include at least one uppercase character (A - Z)', 'Must include at least one lowercase character (a - z)', 'Must include at least one digit (0 - 9)', and 'Must include at least one special character (~!@#\$%^&* _+=`\|(){};:~" '<>.,?/)' are unchecked. The checkbox 'The new password cannot be the same as the last password' is checked. An 'APPLY' button is located at the bottom left of the configuration area.

3. Click **APPLY**.

Changing Your Account Password

Steps:

1. Click the  icon in the top-right of the management console banner.

The screenshot shows a user profile banner for 'super (Admin)'. A dropdown menu is open, displaying three options: 'Change Password' with a lock icon, 'Troubleshooting' with a magnifying glass icon, and 'Log Out' with a door icon.

2. Click **Change Password**.
The **Change Password** screen will appear.

The 'Change Password' form contains three input fields: 'Current Password *', 'New Password *', and 'Confirm New Password *'. Each field has a password strength indicator icon. The 'New Password' field also shows a character count of '0 / 32'. At the bottom right, there are 'CANCEL' and 'APPLY' buttons.

3. Configure the following settings:
 - a. **Current Password**: Enter your current password.

- b. **New Password:** Enter your new password.
- c. **Confirm New Password:** Enter your new password again.
4. Click **APPLY**. This will automatically log you out and return you to the login screen.

Licenses

From the **License** tab you can view license information and manage license keys to enable specific functions within MXsecurity.

● NOTE

Only user accounts with administrator privileges can access the Licenses screen.

Introduction to Licenses

MXsecurity supports two types of licenses:

- **MXsecurity licenses:** Determines the maximum number of nodes that can be managed by MXsecurity.
- **IPS licenses:** The number of seats allowed in the license should be equal to or greater than the nodes managed by MXsecurity, so that IPS functionality is enabled and can be managed via MXsecurity.

● NOTE

Only one IPS license can be used at any given time. When more than one IPS license is applied to MXsecurity, only the latest one will be kept.

Viewing Your Product License Information

Steps:

1. Navigate to **System > Licenses**.

The **Licenses** screen will appear.

| Update Date | Activation Code | License Type | License Duration (days) | License Nodes |
|---------------------|-----------------|--------------|-------------------------|---------------|
| 2024-01-08 14:07:39 | | New | Permanent | 5 |
| 2023-09-07 16:22:20 | | New | Permanent | 50 |
| 2023-08-29 16:36:31 | | New | Permanent | 30 |

2. Click the **MXsecurity** or **IPS** tab to view information for the respective license type.

The following table describes the license information.

| Field | Description |
|---------------|--|
| Name | The name of the license. |
| Valid for | The remaining duration the license is valid for. |
| Total Nodes | The number of nodes that can be managed by this license. |
| Used Nodes | The number of used nodes on the license. |
| Start Date | The start date of the license. |
| End Date | The expiration date of the license. |
| Status | The status of the license. |
| MXsecurity ID | The unique ID of this MXsecurity instance. |

The following table describes the license history.

| Message | Description |
|------------------|---------------------------------------|
| Update Date | The date of this license was entered. |
| Activation Code | The activation code of the license. |
| License Type | The type of license. |
| License Duration | The duration of the license. |
| License Nodes | The number of nodes of the license. |

Alert Messages

When a license is about to expire or has expired, alert messages will pop-up when the user logs in to the web management console.


| Message | Description |
|--|---|
| The (category) license expires in (days) days. To continue using all features, enter a new license code. | This message appears 30 days before the license expiration date. The (days) represents the days remaining before the license expires. |
| The (category) license has expired. To continue using all features, enter a valid license code. | The license has expired, and you will be required to purchase a new license to continue using the product. |

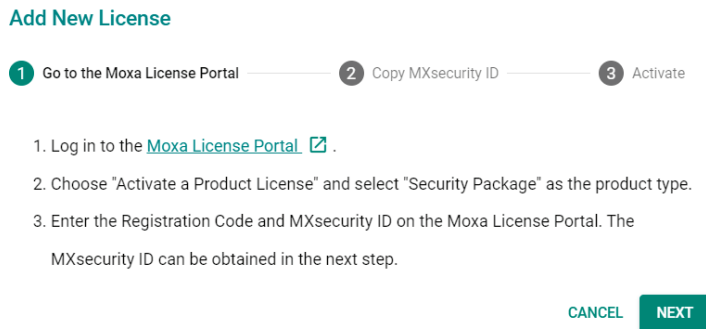
Adding a New License

You can activate a license using a valid license activation code.

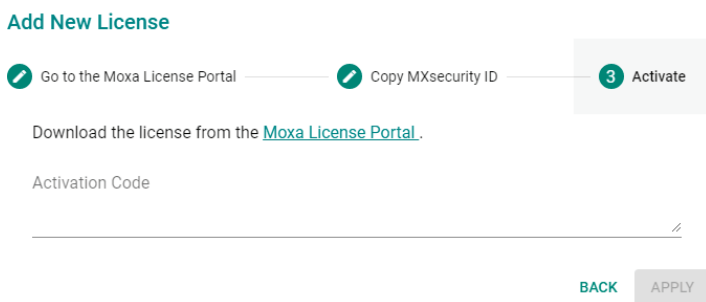
Steps:

1. Navigate to **System > Licenses**.

2. Click the  button.
The **Add New License** screen will appear.



3. Follow the on-screen instructions for activating the license in the Moxa License Portal.
4. Enter the activation code provided by the Moxa License Portal into MXsecurity.




5. Click **APPLY**.
6. Verify the license information is correct.

Binding a License to a Device

To enable specific functions on devices, you need to bind the appropriate license to the managed device first.

Steps:

1. Navigate to **System > Licenses**.
2. Click the **IPS** tab.
3. In the **Device License Binding** section, check the box of the device(s) you want to bind the license to.
4. Click the  icon to bind the license to the selected device(s).

- When prompted to confirm, click **APPLY**.

Apply a Device License

1 item(s) selected

Are you sure you want to apply the license to the selected device(s)?


CANCEL

APPLY

Unbinding a License From a Device

You can unbind a license from a managed device in order to assign it to another device. Note that unbinding a license will cause the relevant function to become unavailable on that device.

Steps:

- Navigate to **System > Licenses**.
- Click the **IPS** tab.
- Check the box of the device(s) you want to unbind the license from.
- Click the  icon to unbind the license from the selected device(s).
- When prompted to confirm, click **REMOVE**.

Remove a Device License

1 item(s) selected

Are you sure you want to remove the license from the selected device(s)?

CANCEL

REMOVE

Settings

From the **Settings** page, you can configure system preferences, time, and log purge settings.

Configuring Preferences

From the Preferences screen, you can confirm basic settings for the MXsecurity instance.

Steps:

1. Navigate to **System > Settings > Preferences**.
2. Select the duration and interval for the auto logout and dashboard auto refresh functions respectively.


The screenshot shows the 'Settings' page with the 'Preferences' tab active. The 'User Auto Logout After *' dropdown is set to '15 minute(s)' and the 'Dashboard Auto Refresh Interva...' dropdown is set to '15 second(s)'. An 'APPLY' button is located at the bottom of the form.

3. Click **APPLY**.

Configuring the System Time

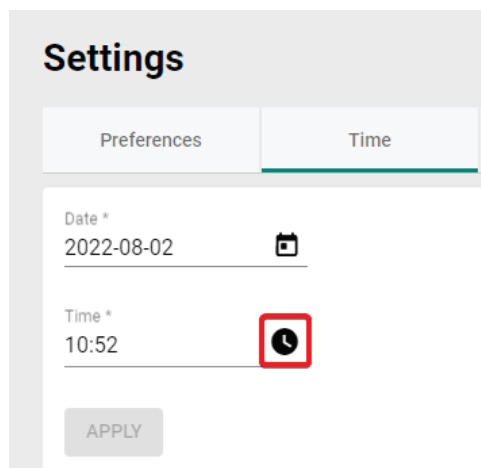
From the Time tab, you can manually set the system time. MXsecurity will automatically synchronize the system time with all managed nodes.

Steps:

1. Navigate to **System > Settings > Time**.
2. Click the  icon to select the date.

The screenshot shows the 'Settings' page with the 'Time' tab active. The 'Date *' field is set to '2022-08-02' and has a calendar icon to its right, which is highlighted with a red box. The 'Time *' field is set to '10:52' and has a clock icon to its right. An 'APPLY' button is located at the bottom of the form.

- Click the  icon to select the time.

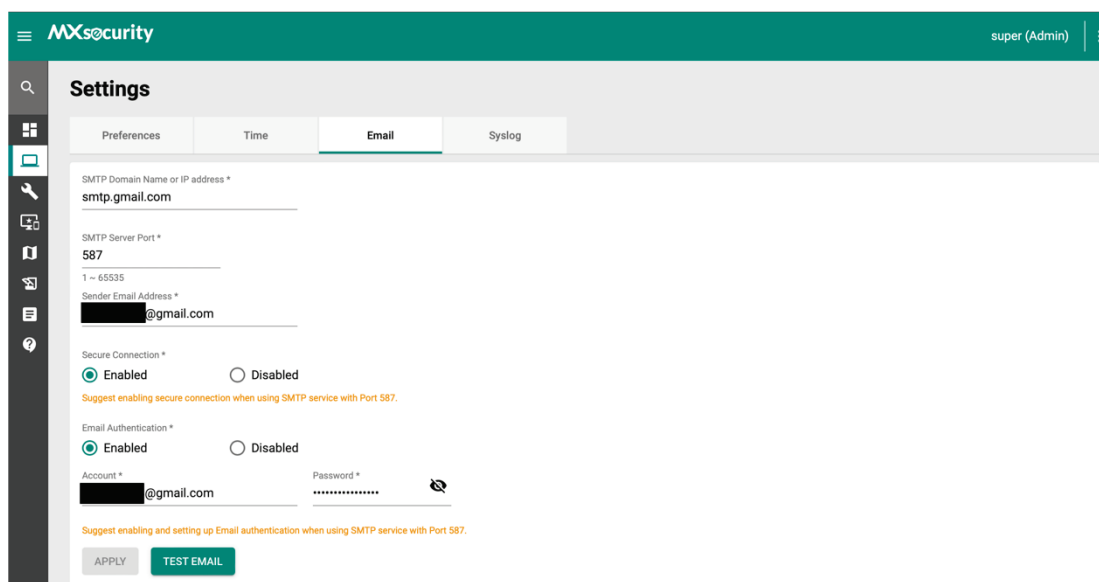


The screenshot shows the 'Settings' page with the 'Time' tab selected. The 'Date' field is set to '2022-08-02' and the 'Time' field is set to '10:52'. A red square highlights the 'Time' field, and a clock icon is visible next to it. An 'APPLY' button is at the bottom.

- Click **APPLY**.

Editing Email Settings

From the **Email** tab, you can configure email server settings. These settings must be configured to use certain functions, such as email notifications and scheduled report sending.



The screenshot shows the 'MXsecurity' interface with the 'Settings' page open to the 'Email' tab. The settings include:

- SMTP Domain Name or IP address: smtp.gmail.com
- SMTP Server Port: 587
- Sender Email Address: [redacted]@gmail.com
- Secure Connection: Enabled (radio button selected)
- Email Authentication: Enabled (radio button selected)
- Account: [redacted]@gmail.com
- Password: [redacted]

 There are 'APPLY' and 'TEST EMAIL' buttons at the bottom.

Refer to the table below for an overview of each setting.

| Field | Description |
|--------------------------------|--|
| SMTP Domain Name or IP address | The SMTP server domain name or IP address. |
| SMTP Server Port | The communication port of the SMTP server. The recommended port is 587. |
| Sender Email Address | The email address used to send notifications or reports. |
| Secure Connection | Enable or disable SSL (port 587) to establish a connection to the SMTP server. This function depends on the settings of the SMTP server. In most cases, servers require a secure connection. |
| Email Authentication | Enable or disable email authentication. If enabled, MXsecurity requires an account and password for email authentication with the SMTP server. |
| Account | If email authentication is enabled, enter email account name. |
| Password | If email authentication is enabled, enter the authentication account password. |

● NOTE

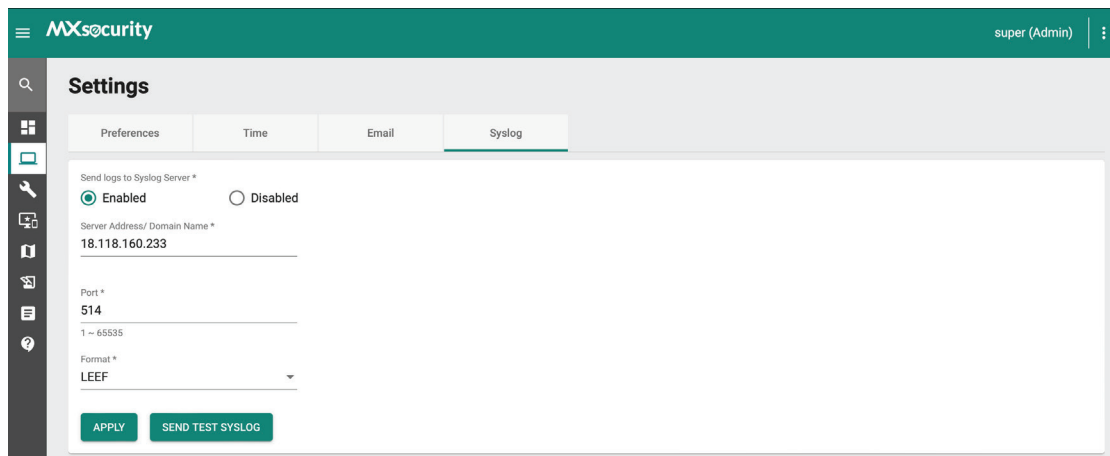
If you set a Gmail account as the sender address, we highly recommend enabling “2-step verification” and getting a 16-bit application password. For details, refer “[Gmail-Help center - Sign in with Passwords](#)” for more information.

Click **TEST EMAIL** to test the configuration.

When finished, click **APPLY**.

Editing Syslog Settings

From the **Syslog** tab, you can configure the syslog server to which MXsecurity will send syslog messages to.



The screenshot shows the MXsecurity web interface. At the top, there's a green header with the MXsecurity logo and a user profile 'super (Admin)'. Below the header is a navigation menu with icons for home, settings, and help. The main content area is titled 'Settings' and has four tabs: 'Preferences', 'Time', 'Email', and 'Syslog'. The 'Syslog' tab is active. It contains a form with the following fields: 'Send logs to Syslog Server*' with radio buttons for 'Enabled' (selected) and 'Disabled'; 'Server Address/ Domain Name*' with the value '18.118.160.233'; 'Port*' with the value '514'; and 'Format*' with a dropdown menu showing 'LEEF'. At the bottom of the form are two buttons: 'APPLY' and 'SEND TEST SYSLOG'.

Refer to the table below for an overview of each setting.

| Field | Description |
|-----------------------------|---|
| Send logs to Syslog server | Enable or disable sending syslog messages to the Syslog server. |
| Server Address/ Domain Name | The IP address or domain name of the syslog server. |
| Port | The port number of the syslog server. The default port is 514. |
| Format | The syslog event format used for the syslog server. The default format is LEEF. Available options include: CEF. |

Click **SEND TEST SYSLOG** to test the configuration.

When finished, click **APPLY**.