MXsecurity User Manual

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MXsecurity User Manual

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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

Setting Up the Virtual Machine

Installing MXsecurity on a VMware Workstation

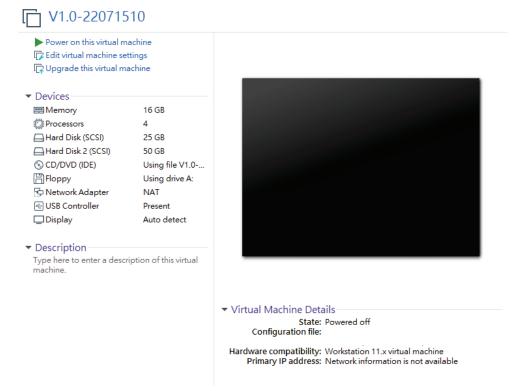
This section describes how to deploy MXsecurity to a VMware Workstation system.

Prerequisites

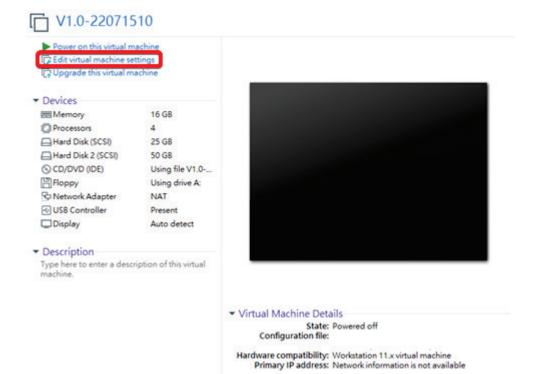
- The OVA packages provided by Moxa must be available and accessible to the VMware Workstation.
- VMware Workstation 14 or later is required.

Steps:

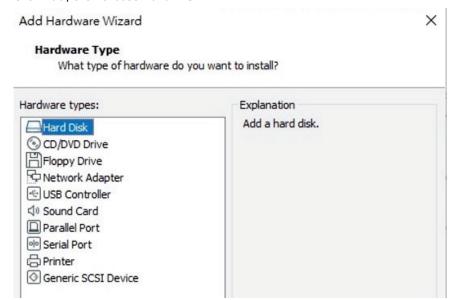
- 1. Start the VMware Workstation.
- 2. Go to **File > Open** in the menu bar.
- 3. Select the MXsecurity VM image file (*.ova) from your localhost file path and click Open.
- 4. Specify the name and the storage path for the new virtual machine and click Import.
- 5. Check the detailed VM information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



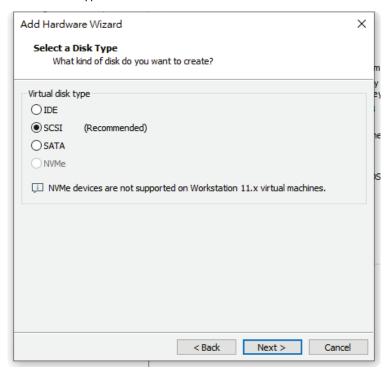
- 6. Add an external disk. MXsecurity requires one external disk with at least 20 GB of available storage, otherwise MXsecurity will not be able to finish initialization and the boot process will not be completed. The external disk is used to store the system configurations and event logs. You may attach 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.



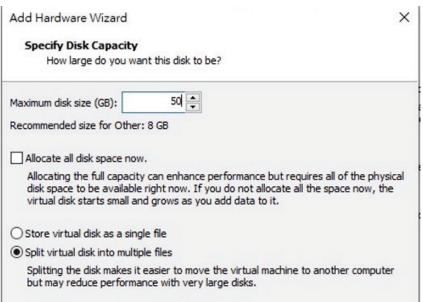
b. Click Add, then choose Hard Disk.



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:
 - i. Power off the MXsecurity instance.
 - ii. Increase the external disk size based on your requirements.
 - iii. 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).
 - a. Click Edit virtual machine settings.
 - b. Configure the amount of memory.
 - c. 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

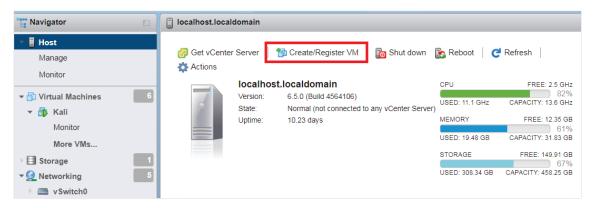
This section describes how to deploy MXsecurity to a VMware ESXi system.

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:

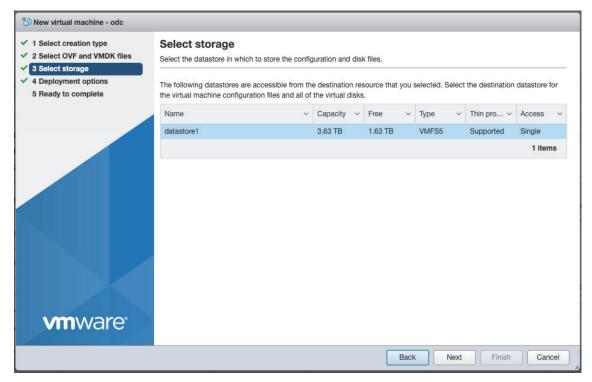
- 1. Log in to the VMware vSphere web client.
- 2. Under Navigator, click Host and then click Create/Register VM.



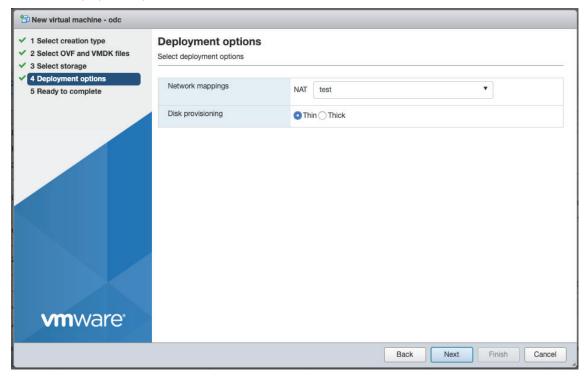
3. Select Deploy a virtual machine from an OVF or OVA file.



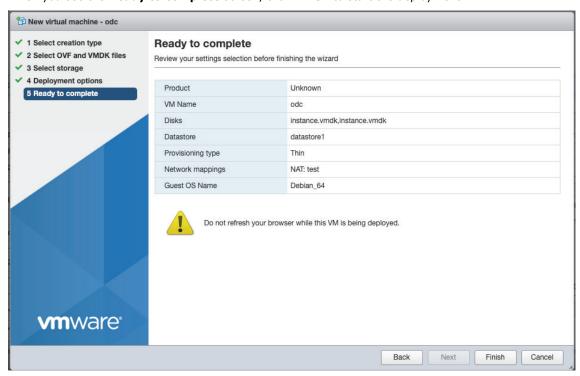
- 4. Enter a name for your MXsecurity instance and then select an MXsecurity image to upload.
- 5. Choose a storage location for the MXsecurity virtual machine.



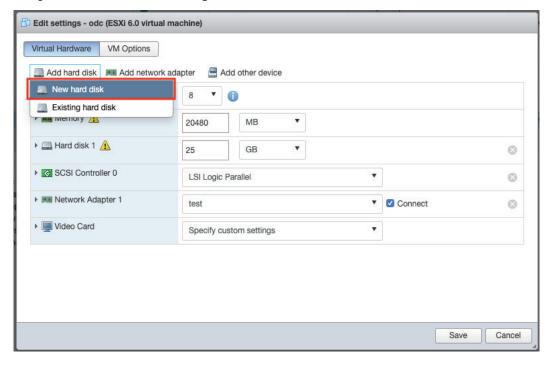
6. Select the deployment options.



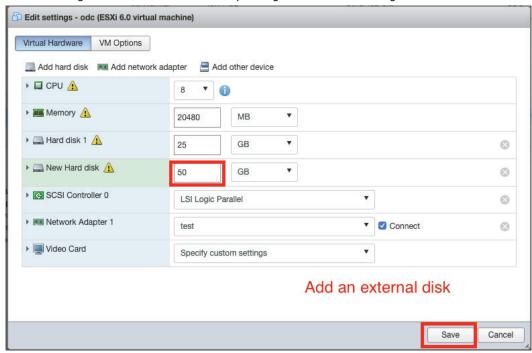
When you see the **Ready to complete** screen, click **Finish** to start the deployment.



- 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.



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:
 - i. Power off the MXsecurity instance.
 - ii. Increase the external disk size based on your requirements.
 - iii. Power the MXsecurity instance back on.

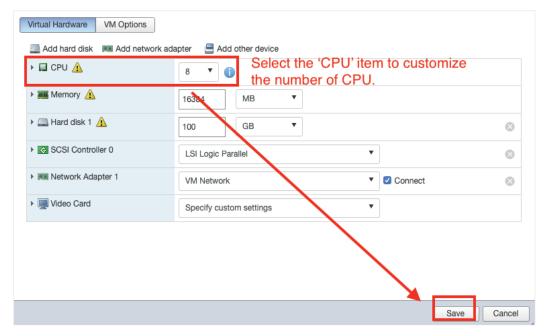
If you want to migrate the existing MXsecurity settings to the newly launched VM, please refer to <u>Migration</u>.



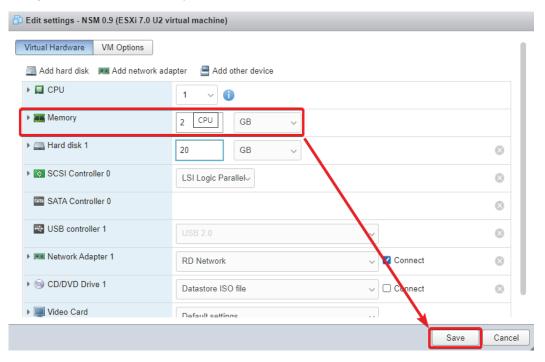
NOTE

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.

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

```
мхsecurity 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:

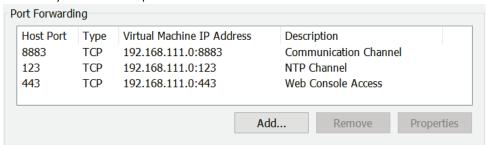
- > Minimum 8 characters long
- > The new password cannot be the same as the old password
- > The new password cannot contain the old password
- The password cannot be too simplistic or contain simple character sequences such as "abc", "123456", etc
- b. Log in to the MXsecurity again with your new password.
- (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 is 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.
 - 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 TCP port 123 to the MXsecurity server IP TCP port 123.
 - iii. To access the web management console, forward packets from host TCP port 443 to the MXsecurity server IP TCP port 443.





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 --Is** 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 --Is** command to view the DNS server settings.

```
$ resolve --ls
```

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

```
$ reboot
```

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 MXview (VMware Workstation)

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



NOTE

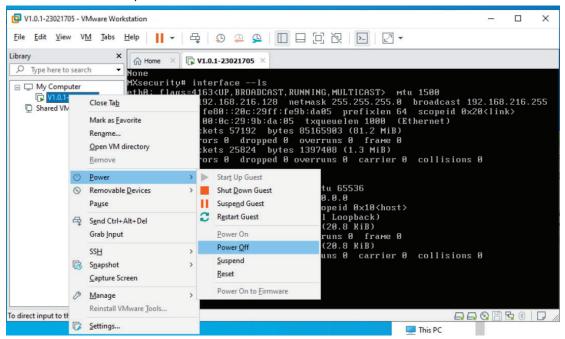
MXsecurity v1.1.0 has implemented enhanced connection security measures. To avoid issues, managed devices should be upgraded to a firmware version and MXsecurity Agent Package which is compatible with MXsecurity v1.1.0. The following device firmware versions are compatible with MXsecurity v1.1.0:

- 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.

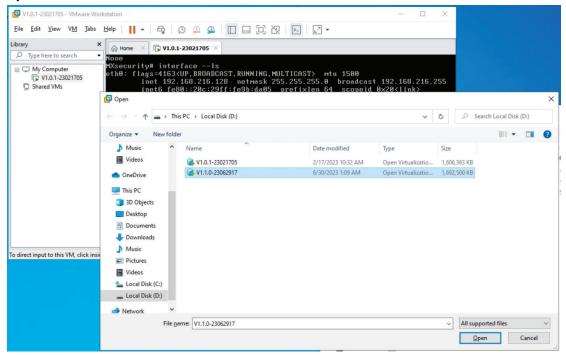
Steps:

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

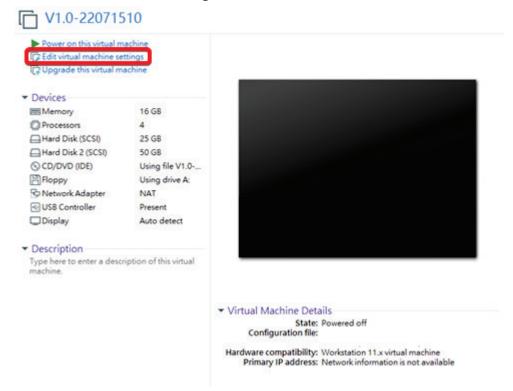


3. Go to **File > Open** in the menu bar.

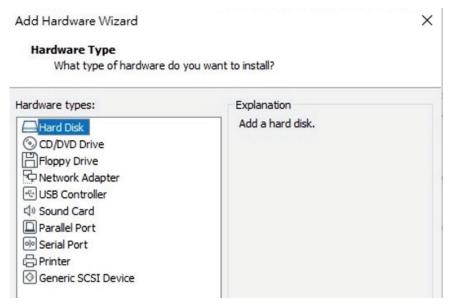
4. Select the VM image file (*.ova) of the new MXsecurity version from your localhost file path and click **Open**.



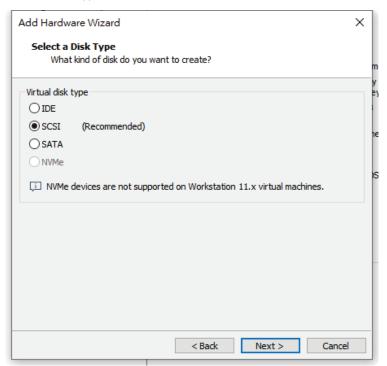
- 5. Add an existing Hard Disk.
 - a. Click Edit virtual machine settings.



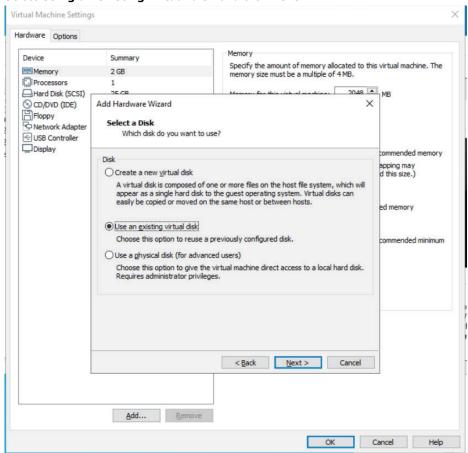
b. Click Add, then choose Hard Disk.



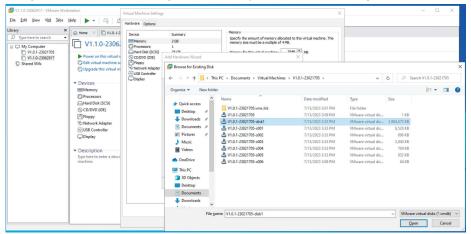
c. Select a disk type and click Next.



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

Migrating to a Newer Version of MXview (ESXi)

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



NOTE

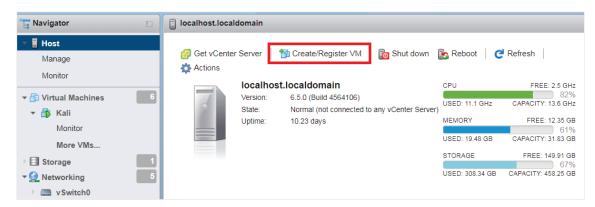
MXsecurity v1.1.0 has implemented enhanced connection security measures. To avoid issues, managed devices should be upgraded to a firmware version and MXsecurity Agent Package which is compatible with MXsecurity v1.1.0. The following device firmware versions are compatible with MXsecurity v1.1.0:

- 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

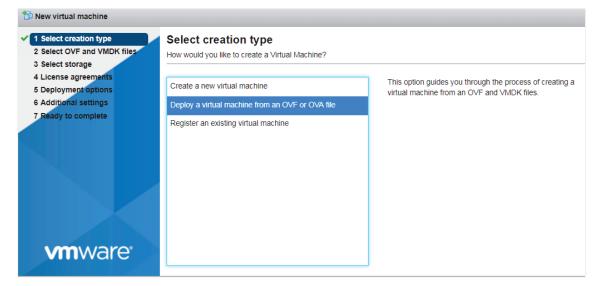
If you have an older version of the MXsecurity Agent Package installed, you will need to manually upgrade it to v2.0.13 on the managed device first. To manually upgrade the software package, navigate to **System** > **System Management** > **Software Package Management** > **MXsecurity Agent Package**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

Steps:

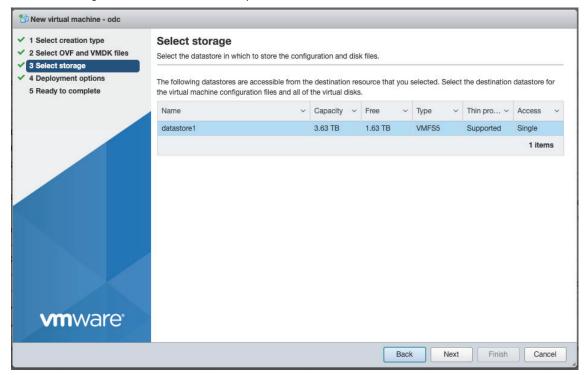
- 1. Start the VMware ESXi.
- 2. Power off the MXsecurity instance.
- 3. Under Navigator, click Host and then click Create/Register VM.



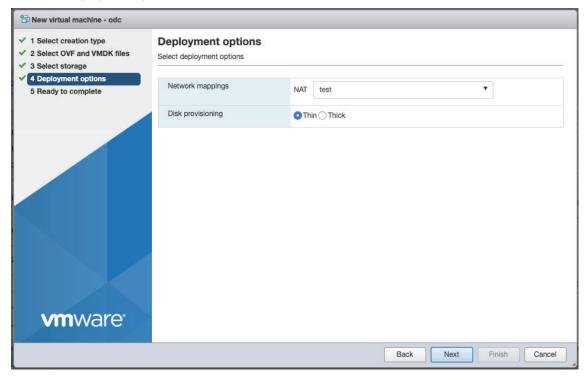
4. Select Deploy a virtual machine from an OVF or OVA file.



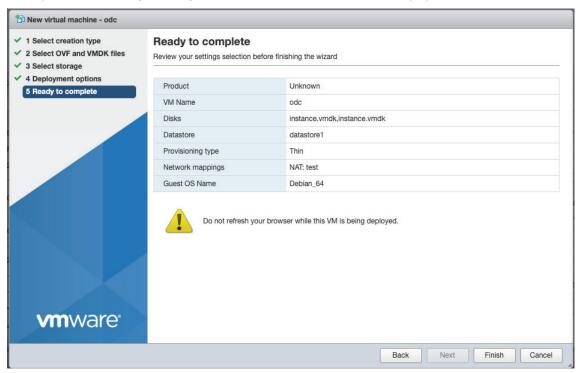
- 5. Enter a name for your MXsecurity instance and then the image file of the new MXsecurity version to upload.
- 6. Choose a storage location for the MXsecurity virtual machine.



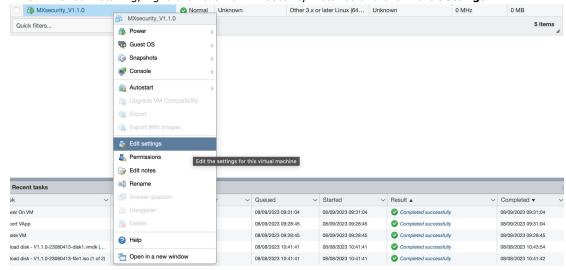
7. Select the deployment options.



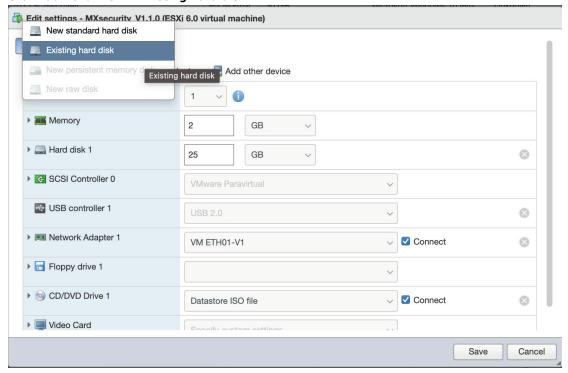
When you see the **Ready to complete** screen, click **Finish** to start the deployment.



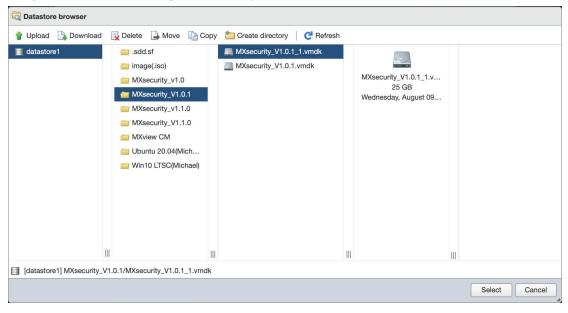
- 8. Under the **Recent tasks** pane, you will see a progress bar indicating that the MXsecurity image is being uploaded. Wait until the upload has finished.
- 9. When finished installing, right-click the new MXsecurity instance and click Edit Settings.



10. Click Add Hard Disk > Existing hard disk.



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



- 12. Click Save.
- 13. Log in to the MXsecurity web console and confirm the migration was successful.

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 <u>Changing Your Account Password</u>.
- 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 <u>Device Group Management</u> and <u>Policy Profile Management</u>.

Creating user accounts.
 For more information, see <u>User Accounts</u>

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

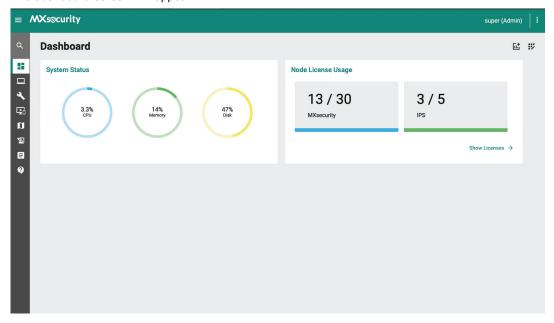
You must change the default login name and password before you can access the management console.

- 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.

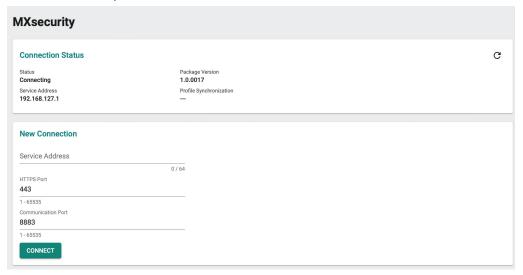


Connecting Secure Routers to MXsecurity

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. Click **CONNECT**.

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

Setting	Description
	The status of the connection to MXsecurity.
Status	Disconnected : The secure router is not connected to MXsecurity.
Status	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.
	The status of the policy profile synchronization with MXsecurity.
	Unsynchronized : Failed to sync the policy profile settings with MXsecurity.
Profile Synchronization	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.

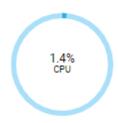
Dashboard Widgets Overview

This section describes available widgets on the dashboard.

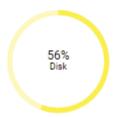
System Status

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

System Status



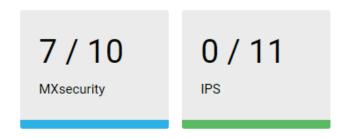




Node License Usage

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

Node License Usage

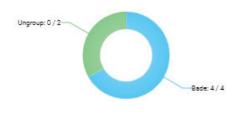


Show Licenses →

Group Status

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

Group Status

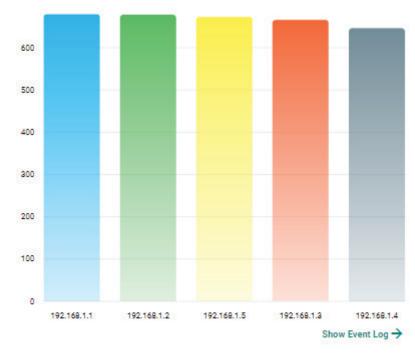


Show Device Group →

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.

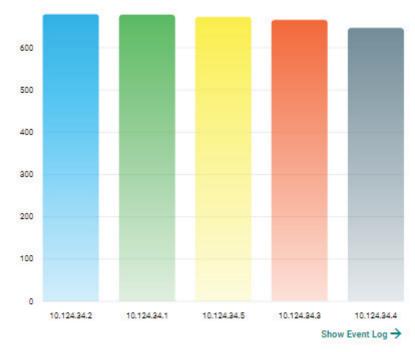
Top 5 Layer 3-7 Policy Events by Source IP



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.

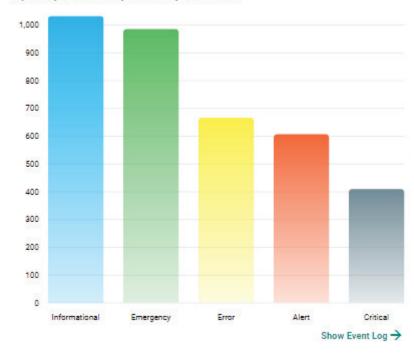
Top 5 Layer 3-7 Policy Events by Destination IP



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.

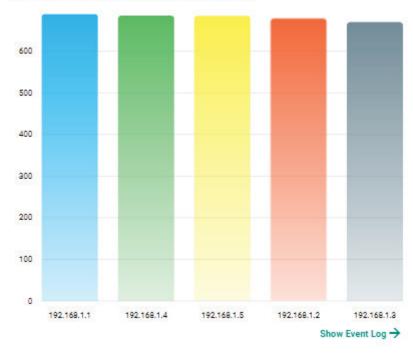
Top 5 Layer 3-7 Policy Events by Severities



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 Destination IP

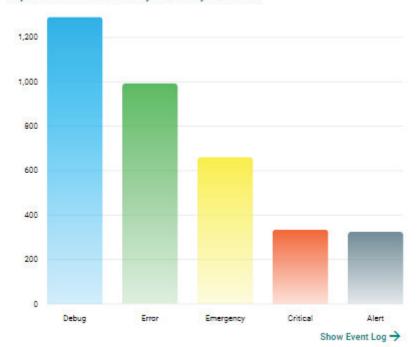
This widget displays the top 5 destination IP addresses in the selected device group(s) where the most Protocol Filter Policy Events were detected within the last 24 hours.

600
500
400
200
10.124.34.1 10.124.34.4 10.124.34.5 10.124.34.2 10.124.34.3 Show Event Log →

Top 5 Protocol Filter Policy Events by Destination IP

Top 5 Protocol Filter Policy Events by Severity

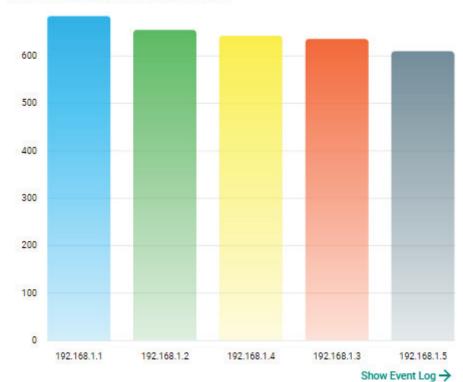
This widget displays the number of the Protocol Filter Policy Events in the selected device group(s) within the last 24 hours categorized by severity level.



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.

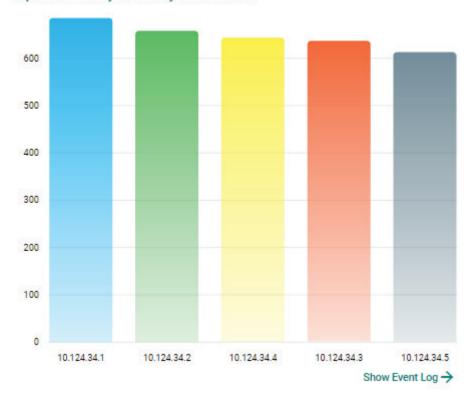


Top 5 ADP Policy Events by Source IP

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.

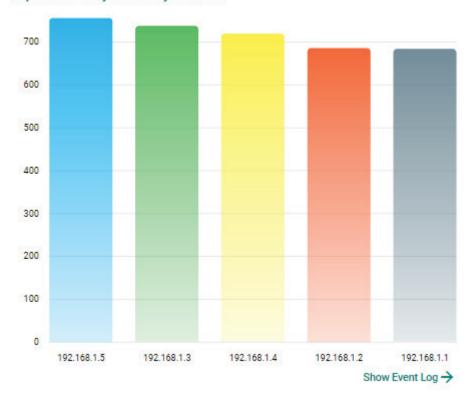




Top 5 IPS Events by Source IP

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.

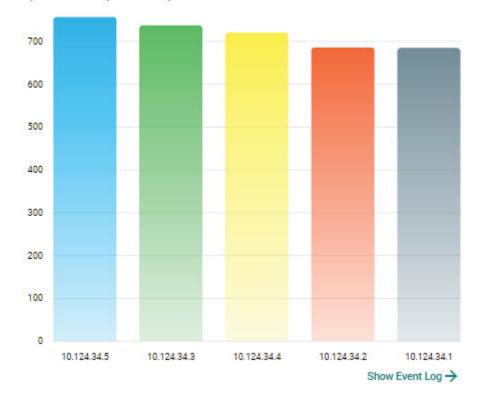
Top 5 IPS Policy Events by Source IP



Top 5 IPS Events by Destination IP

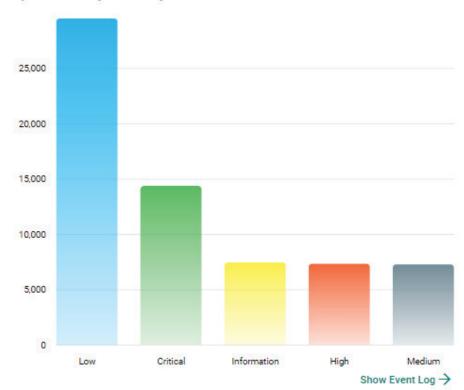
This widget displays the top 5 destination IP addresses in the selected device group(s) where the most IPS Events were detected within the last 24 hours.

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.

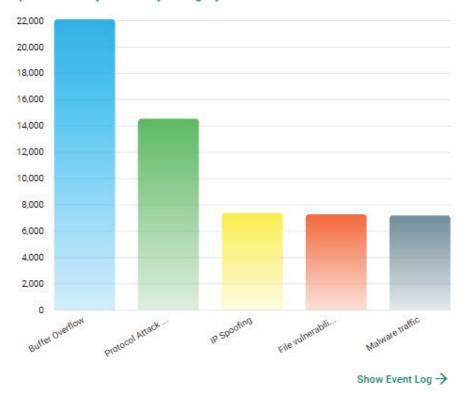


Top 5 IPS Policy Events by Severities

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.

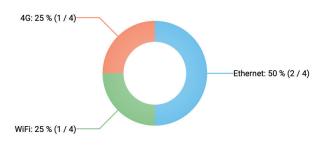
Top 5 IPS Policy Events by Category



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)

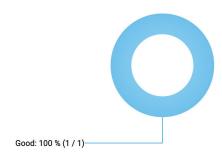


Show Map View →

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 \rightarrow

Widget Management

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

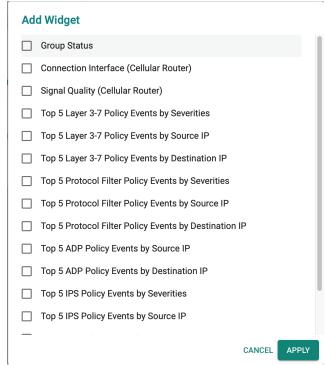
Adding a Widget to the Dashboard

Steps:

1. Click the icon to add widgets.



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

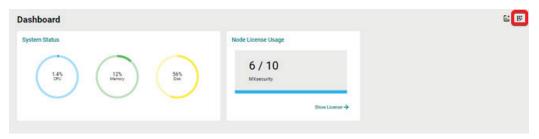


3. Click **APPLY** to add the selected widget(s) to the tab.

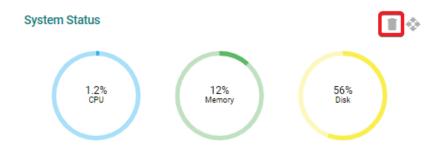
Removing a Widget from the Dashboard

Steps:

1. Click the icon to edit the dashboard.



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

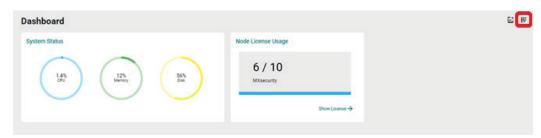


3. Click the icon again to save your changes and leave edit mode.

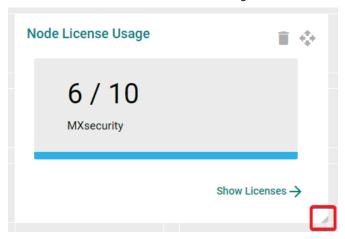
Resizing a Widget

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

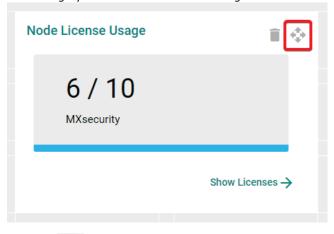
Steps:

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.

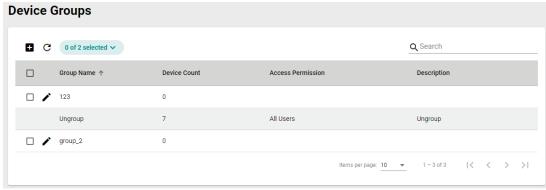
The configurations and policies that can be shared are:

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

Creating a New Device Group

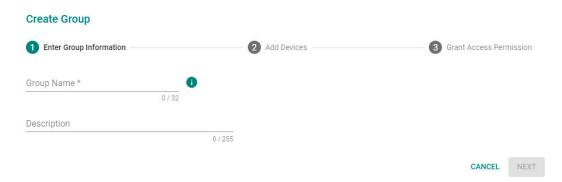
Steps:

1. Navigate to Management > Device Groups.

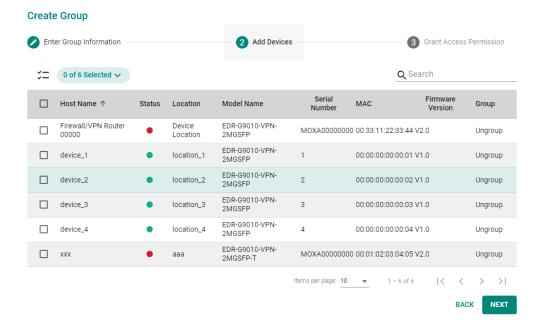


- 2. Click the icon to create a new group.
- 3. Provide a name and description for the group and click **NEXT**.

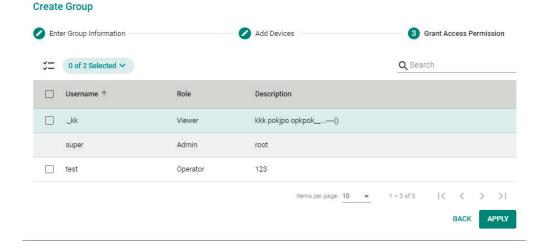
The group name can be up to 32 characters long and supports a-z, A-Z, 0-9, periods (.), and underscores (_).



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



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

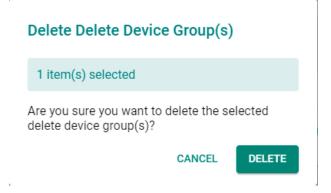


Deleting a Device Group

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).

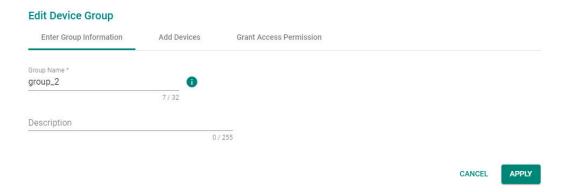
4. When prompted to confirm, click **DELETE**.



Editing a Device Group

Steps:

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



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

Firmware Management

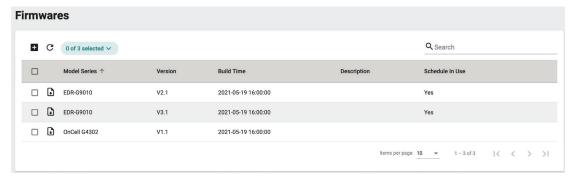
This section describes how to manage the local firmware database from MXsecurity.

Uploading a New Firmware

Steps:

1. Navigate to Management > Firmwares.

2. Click the icon to add a new firmware.





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.

Description 0 / 255 Upload a firmware file (.rom) Drag and drop a file here, or browse. CANCEL UPLOAD

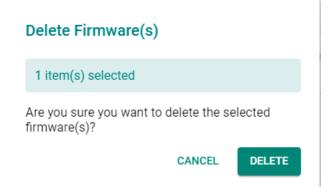
4. Click UPLOAD.

Upload Firmware

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**.



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 local software package database from MXsecurity.

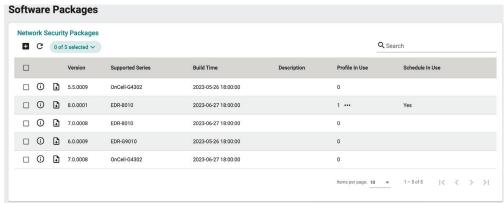
The following packages can be managed in MXsecurity:

Network Security Package

Uploading a New Software Package

Steps:

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



✓ 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



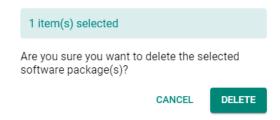
4. Click UPLOAD.

Deleting a Software Package

Steps:

- 1. Navigate to Management > Software Packages.
- 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)



Exporting Software Packages

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

Steps:

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

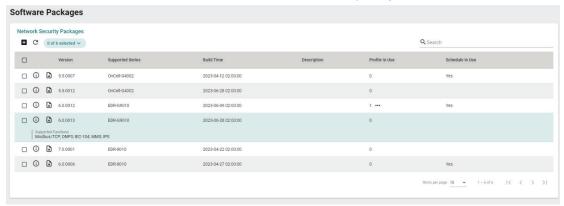
Viewing Detailed Information of a Software Package

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.

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



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.

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:

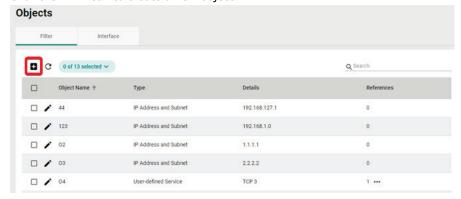
- **Filter Objects**: Contain the IP address and subnet, network service, industrial application service, and user-defined service that you can apply to a policy rule.
- Interface Objects: Contain the VLAN interface and bridge interface that you can apply to a policy rule.

Creating a New Filter Object

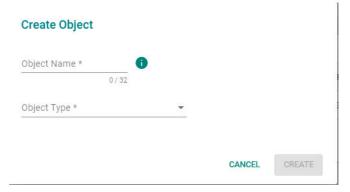
Steps:

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

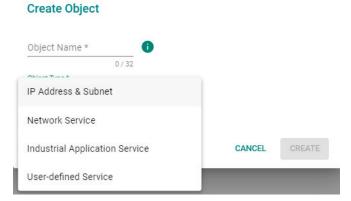
3. Click the icon to create a new object.



4. Enter a name for the object.



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



a. IP Address and Subnet:

i. Depending on the selected IP Type, enter the IP address, IP range, or subnet.

b. Network Service:

i. Check the box next to the service(s) you want to add to the object.

c. Industrial Application Service:

. Check the box next to the industrial application service(s) you want to add to the object.

d. User-defined Service:

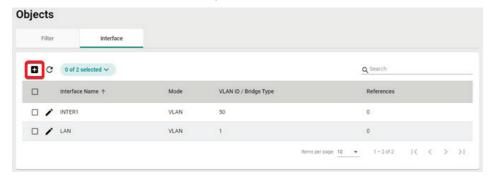
- i. Select an IP protocol.
- ii. Depending on the select protocol, specify the port, port range, ICMP Type and Code, or protocol decimal.

6. 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.



- 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.
- Modify the object settings.
 For Filter Objects, refer to <u>Creating a New Filter Object</u>.
 For Interface Objects, refer to <u>Creating a New Interface Object</u>.
- 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:

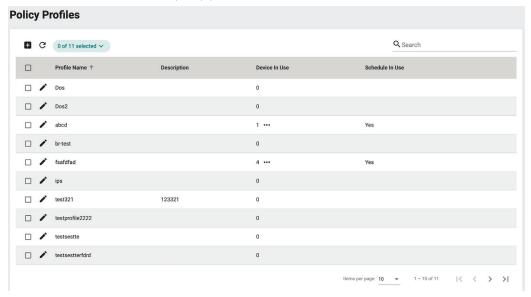
- Layer 3-7 Policy: Provides secure traffic control, allowing users to control network traffic based on security needs.
- Session Control: Protects network hosts or services from exceeding performance limitations.
- **DoS Policy**: Provides different DoS protection functions for detecting or defining 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.

2. Click the icon to create a policy profile.



✓ 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.

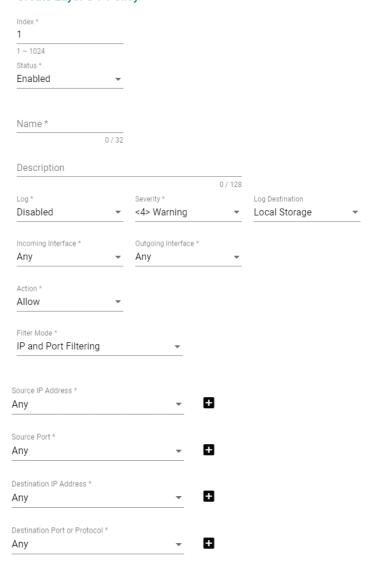
- 3. Enter a name and description for the policy profile.
- 4. Expand the Layer 3-7 profile options.



- 5. Configure the global policy and log settings:
 - a. **Enforcement**: Enable or disable the Layer 3-7 policy profiles.
 - b. **Default Action**: Choose to deny or allow packets if the packets do not match any configured rules.
 - c. **Log**: Enable or disable logging Layer 3-7 policy events.
- 6. 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



- 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.
- $\label{eq:h.incoming} \textbf{Incoming/Outgoing Interface} : \textbf{Select the incoming and outgoing interfaces}.$
- 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:

IP and Port Filtering:

- Source/Destination IP Address: Select Any or a preconfigured Filter Object. Refer to Creating a New Filter Object.
- 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 <u>Creating a New Filter Object</u>.

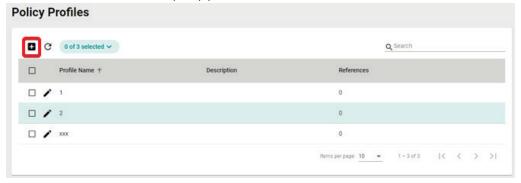
Source MAC Filtering:

- 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.



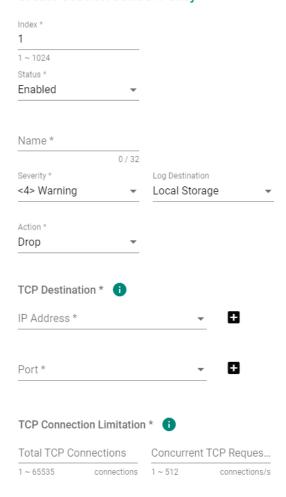
- 3. Enter a name and description for the policy profile.
- 4. Expand the **Session Control** profile options.



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

6. Configure the Session Control Profile settings:

Create Session Control Policy



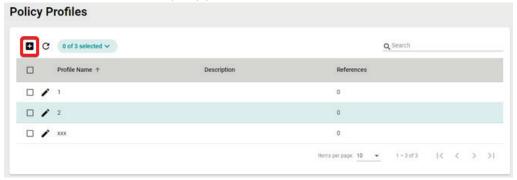
- a. **Index**: Specify the index for the policy profile.
- b. **Status**: Enable or disable the policy profile.
- c. Name: Enter a description for the policy profile.
- d. **Severity**: Select the log severity level.
- e. **Log Destination**: If logging is enabled, choose where the logs will be stored. 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 ${f CREATE}$ to create the Session Control Policy.
- 8. Click APPLY.

Creating a New DoS Policy Profile

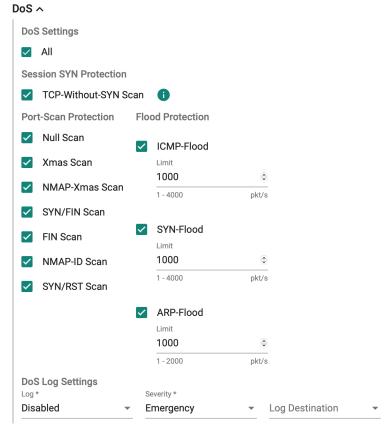
Steps:

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 **DoS** profile options.
- 5. Configure the following settings:

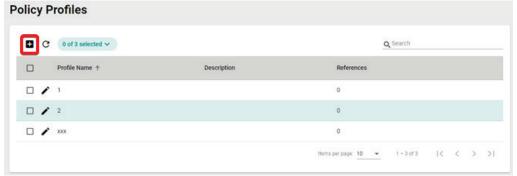


- a. **DOS Setting**: Check the box of the DoS types you want to enable. If you selected ICMP-Death, SYN-Flood, or ARP-Flood, specify the packet limit.
- b. Log: Enable or disable event logs.
- c. **Severity**: Select the log severity level.
- d. **Log Destination**: If logging is enabled, choose where the logs will be stored. Multiple options can be selected.
- 6. Click **APPLY**.

Creating a New IPS Policy Profile

Steps:

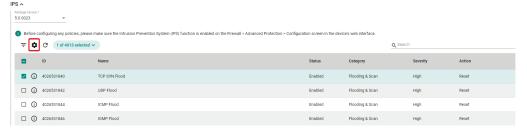
- 1. Navigate to Management > Policy Profiles.
- 2. Click the lacktriangle icon to create a policy profile.



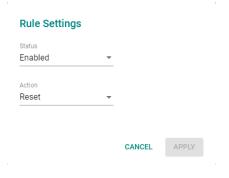
- 3. Enter a name and description for the policy profile.
- 4. Expand the IPS profile options.
- Select a previously uploaded IPS software package version.
 Refer to <u>Software Package Management</u> for more information.



- 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:



- 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.
- Modify the profile settings.
 For Layer 3-7 policy profiles, refer to <u>Creating a New Layer 3-7 Policy Profile</u>.
 For Session Control policy profiles, refer to <u>Creating a New Session Control Policy Profile</u>.
 For DoS policy profiles, refer to <u>Creating a New DoS Policy Profile</u>.
 For IPS policy profiles, refer to <u>Creating a New IPS Policy Profile</u>.
- 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 \blacksquare 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

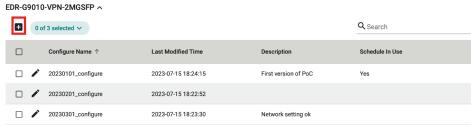
Device Configuration Management

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

Uploading a Device Configuration File From a Local Host

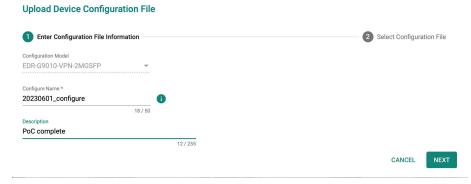
Steps:

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

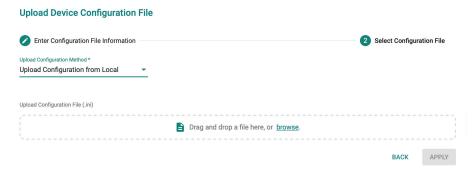


1 – 3 of 3

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



- 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.

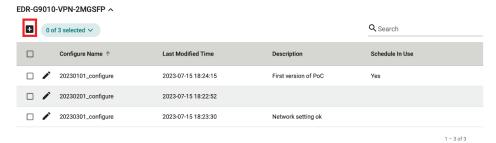


7. Click APPLY.

Uploading a Configuration From a Device

Steps:

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



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

Upload Device Configuration File

1 Enter Configuration File Information

Configuration Model

EDR-G9010-VPN-2MGSFP

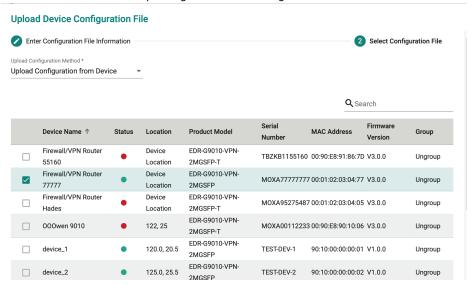
Configure Name *
20230601_configure

18 / 50

Description
PoC complete

12 / 255

- 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.



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:

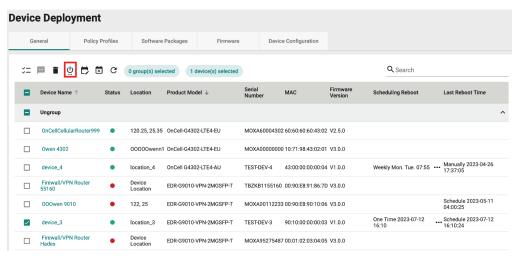
- General: Remove and reboot devices.
- Policy Profiles: Deploy policy profiles to managed devices.
- **Software Packages:** Upgrade the software package of managed devices.
- Firmware: Upgrade the firmware of managed devices.
- **Device Configure**: Deploy device configuration files to managed devices.

Rebooting a Managed Device

Steps:

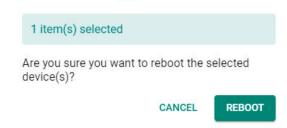
- 1. Navigate to **Device Deployment > General**.
- 2. Check the box of the device(s) you want to reboot.

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



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

Reboot Device(s)

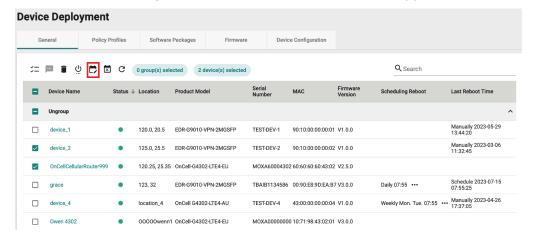


Scheduling a Managed Device Reboot

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:

- 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).



4. 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.

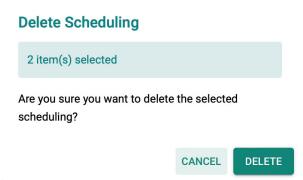


5. Click APPLY.

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**.



Sending a Control SMS

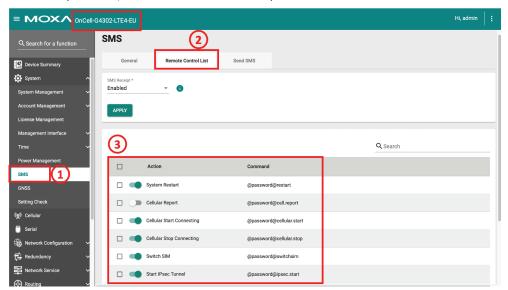
The OnCell Series routers may be installed in areas outside the range of the base station coverage. If a connection can be established, the signal may be extremely weak, leading to interruptions for applications. It also makes it challenging for users to restore the device's external network connection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

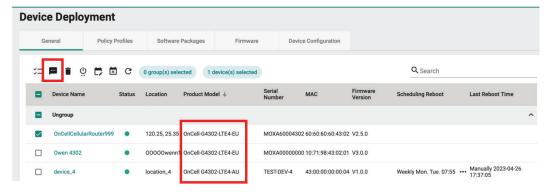
Command	Description
System Restart	The device will reboot.
Cellular Start Connecting	The device will enable the cellular data connection.
Cellular Stop Connecting	The device will disable the cellular data connection.
Start IPsec Tunnel	The device will establish the IPsec tunnel.
Stop IPsec Tunnel	The 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.



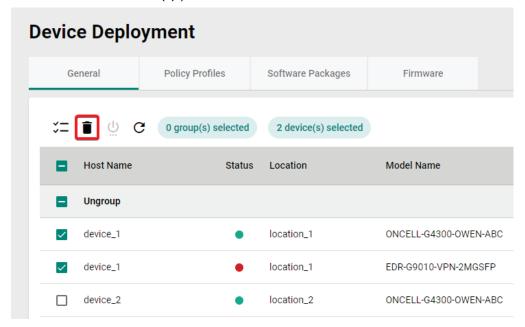
NOTE

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

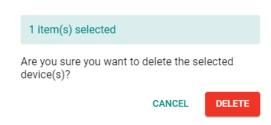
Steps:

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



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

Delete Device(s)



Deploying Policy Profiles to Managed Devices

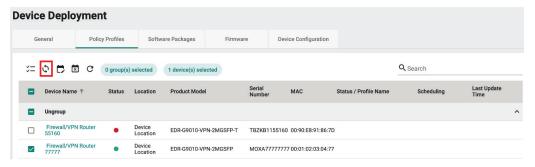
You can deploy specific policy profiles to managed devices and check the synchronization status between the device and MXsecurity.

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).



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)



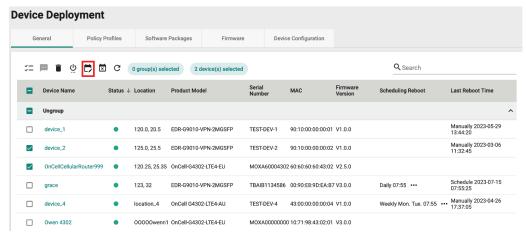
5. Click APPLY.

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:

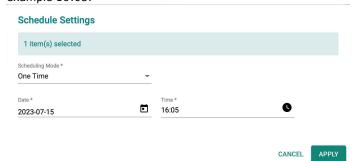
- Navigate to Device Deployment > Policy Profiles.
- 2. Check the box of the device(s) to configure.
- 3. Click the icon to configure a policy profile deployment schedule for the selected device(s).



4. 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.

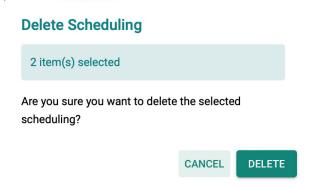


5. Click APPLY.

Deleting a Policy Profile Deployment Schedule

Steps:

- 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**.



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.

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

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



Select a previously uploaded software package to upgrade to.
 Refer to <u>Software Package Management</u> for instructions on how to upload software packages.

Upgrade Package



5. Click **UPGRADE**.

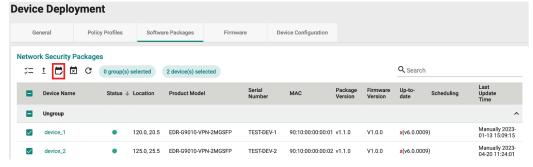
Scheduling a Software Package Deployment for Managed Devices

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.
- 2. Check the box of the device(s) to configure.
- 3. Click the icon to configure a software package deployment schedule for the selected device(s).



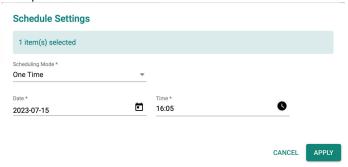
Select the software package version to deploy.
 If you select **Up-to-date**, MXsecurity will deploy the latest version of the software package available in

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:



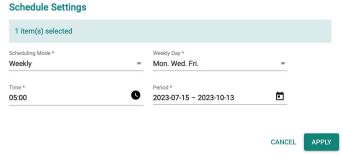
a. **One Time**: Select the date and time the device(s) will reboot. One-time schedules can be configured for up to 30 days in the future. The reboot time should be set in 5-minute increments, for example 16:05.



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:

- 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**.



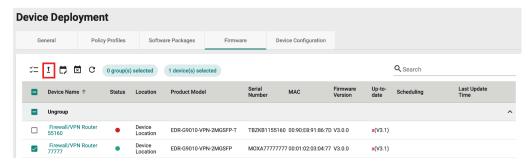
Upgrading the Firmware of Managed Devices

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

You can check the following firmware information:

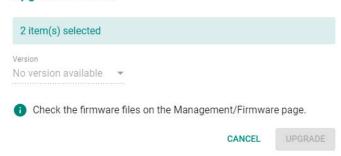
- Package Version: Shows the firmware version currently installed on the device.
- **Up-To-Date**: Indicates if the currently installed version is up to date. If not, the latest available version will be shown.

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



Select a previously uploaded firmware to upgrade to.
 Refer to <u>Firmware Management</u> for instructions on how to upload firmware.

Upgrade Firmware



5. 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:

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



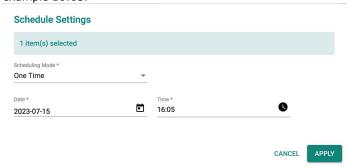
4. Select the firmware version to deploy.

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.

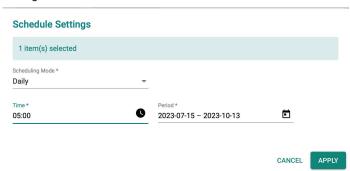
5. Select a scheduling mode:



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.



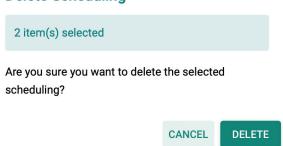
6. Click APPLY.

Deleting a Firmware Deployment Schedule

- 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.

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

Delete Scheduling

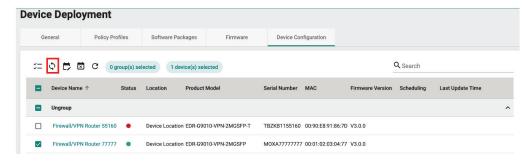


Deploying a Configuration to Managed Devices

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:

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



Select a previously uploaded device configuration to deploy.
 Refer to <u>Device Configuration Management</u> for instructions on how to upload a configuration.

Sync Configuration To Device(s)



10. 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).



4. Select a previously uploaded configuration file to deploy.



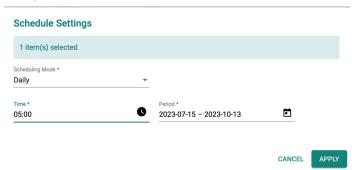
5. Select a scheduling mode:



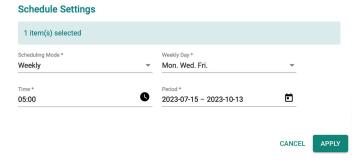
a. **One Time**: Select the date and time the device(s) will reboot. One-time schedules can be configured for up to 30 days in the future. The reboot time should be set in 5-minute increments, for



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.



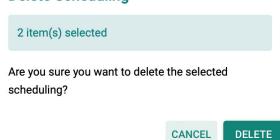
6. Click APPLY.

Deleting a Configuration Deployment Schedule

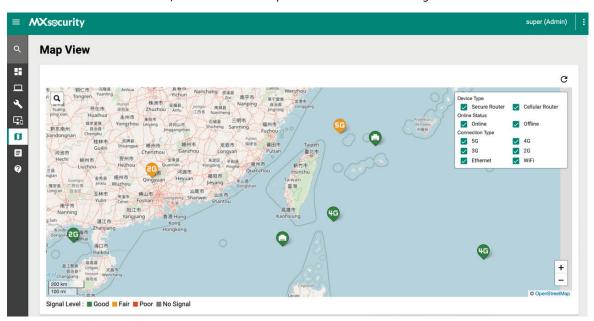
- 1. Navigate to **Device Deployment > Device Configuration**.
- 2. Check the box of the device(s) with the deployment schedule you want to delete.
- 3. Click the icon to delete the selected deployment schedules.

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

Delete Scheduling



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
G	Refresh	Click the Refresh button to update the map with the latest GPS data.
Q	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
■ Good Signal	The cellular signal RSSI is higher than -73 dBm or the Ethernet WAN link is up.
Fair Signal	The cellular signal RSSI is between -73 to -89 dBm.
■ Poor Signal	The cellular signal RSSI is between -89 to -113 dBm.

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.

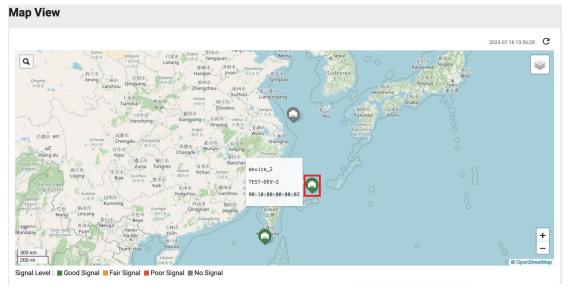
Icon	Description
Q	The device is using Ethernet WAN to connect to the internet.
51 0	The device is using cellular 5G to connect to the internet.
46	The device is using cellular 4G to connect to the internet.
315	The device is using cellular 3G to connect to the internet.
GE	The device is using cellular 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.

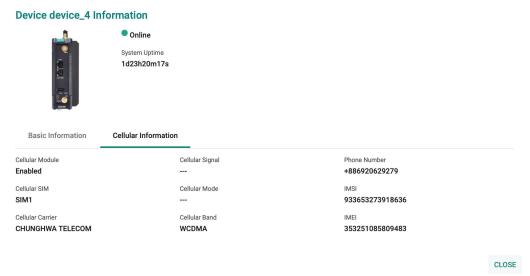


3. Depending on the selected device, the following information will be shown:

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



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



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.

CLOSE

3. Click the icon in the Location field.



4. Enter the longitude and latitude coordinates.



- 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.

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.

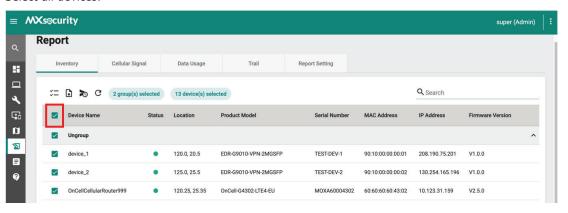
Inventory Reports

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.

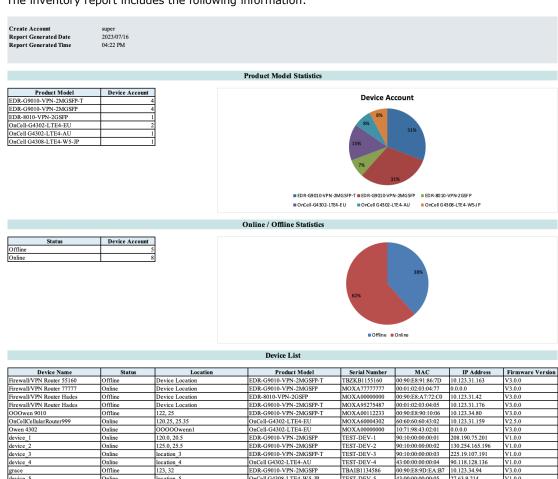
Steps:

- 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:



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.

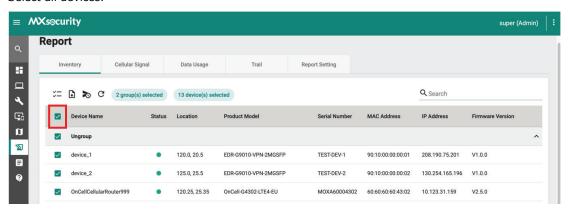
Scheduling an Inventory Report

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

Steps:

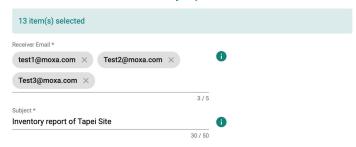
1. Navigate to **Report > Inventory**.

2. Select all devices.

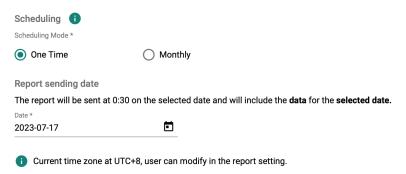


- 3. Click the icon to configure a report schedule.
- 4. Specify the email recipients for the report. You can specify up to 5 recipients.
- 5. Enter the subject. This will act as the report email subject.

Schedule an Email to Send Inventory Report



- 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.



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



7. Click APPLY.

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

Cellular Signal Reports

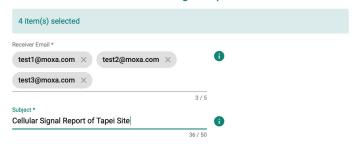
Scheduling a Cellular Signal Report

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

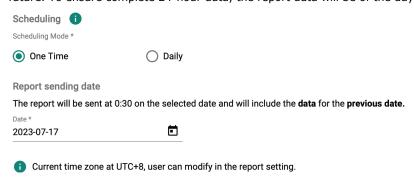
Steps:

- 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.

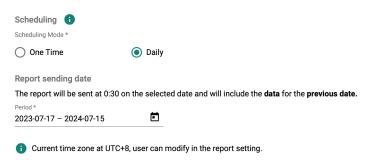
Schedule an Email to Send Cellular Signal Report



- 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.



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 data.



7. Click APPLY.

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

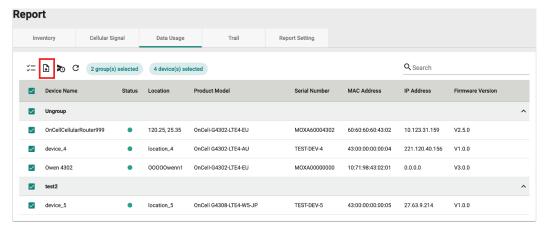
Data Usage Reports

Generating a Cellular Data Usage Report

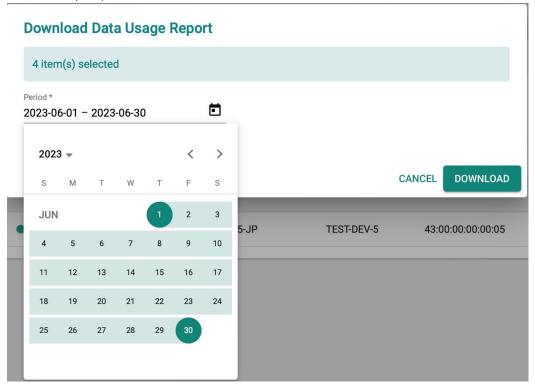
Cellular data usage reports provide useful insights into the data usage of SIM cards for a specific period. The report will include a separate CSV file for each selected OnCell secure router.

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.



4. Select the report period.





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.

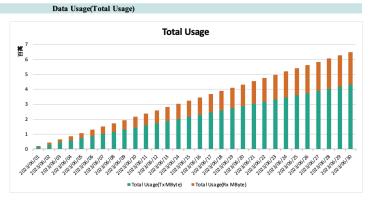
5. Click **DOWNLOAD**.

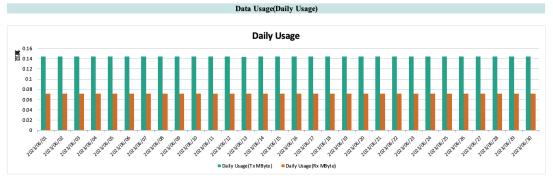
The cellular data usage report includes the following information:

Data Usage Report



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





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.

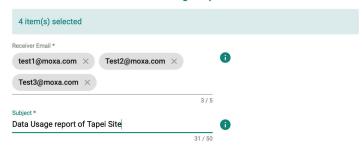
Scheduling a Cellular Data Usage Report

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

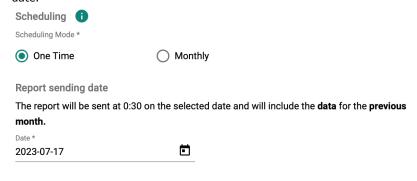
Steps:

- 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.

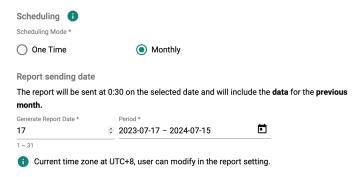
Schedule an Email to Send Data Usage Report



- 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



- 1 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.



7. Click **APPLY**.

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

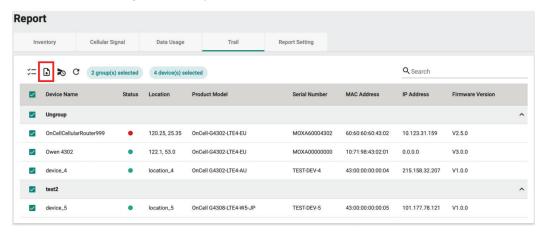
Trail Reports

Generating a Trail Report

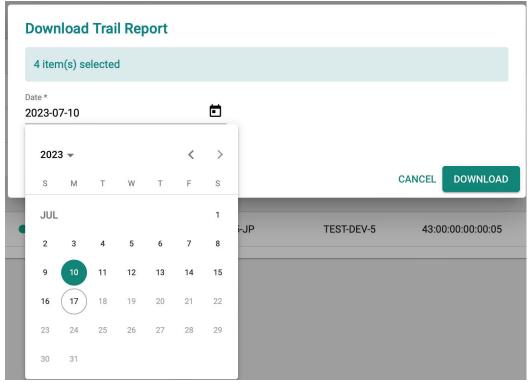
Trail reports let users compile GPS trail records for each device. This information is useful for auditing and management purposes. The collected data can help optimize operations in a variety of applications. For example, trail reports can show the trajectory of a vehicle with an OnCell secure router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



4. Select the report period.





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	В	С
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

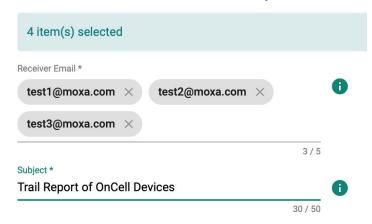
Scheduling a Trail Report

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

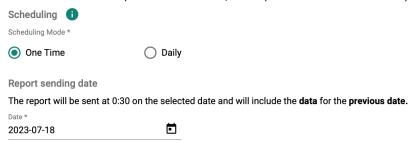
- 1. Navigate to **Report > Trail**.
- 2. Select the device(s) you want to generate a report for.
- 3. Click the icon to configure a report schedule.
- 4. Specify the email recipients for the report. You can specify up to 5 recipients.

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

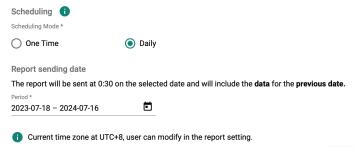
Schedule an Email to Send Trail Report



- 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.



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.



Click APPLY.

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

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.

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

3. Click APPLY.

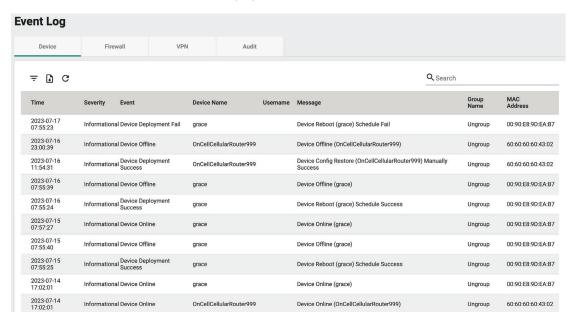
Editing a Report Schedule

- 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**.

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.

Device Log

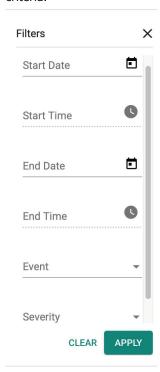
The device log records interactions between the device and MXsecurity, such as Device Added, Device Deleted, Device Online/Offline, Device Deployment Success/Failure, and Send SMS.



Viewing Device Logs

- 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 and 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 $\begin{tabular}{c|c} \end{tabular}$ button to renew the search results.

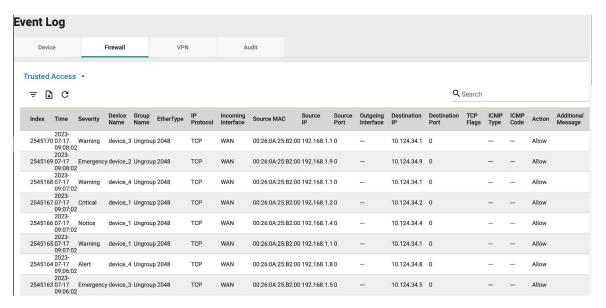


The following table describes the log's fields.

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.

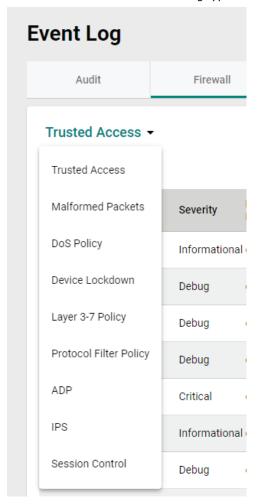


Viewing Firewall Logs

Steps:

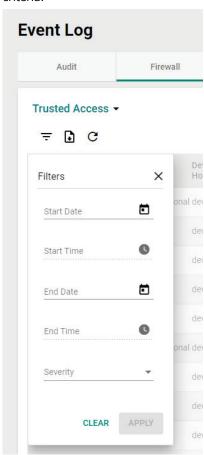
1. Navigate to Logging > Event Log > Firewall.

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



- 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 and 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.



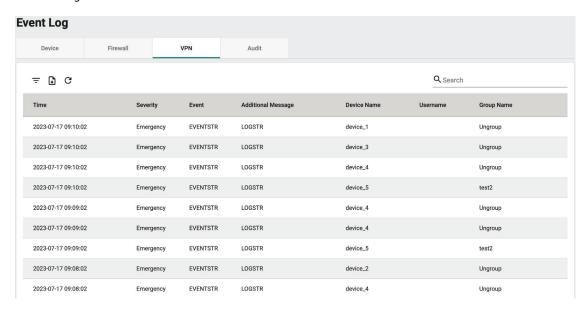
The following table describes the log's fields.

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.

Field	Description
Incoming Interface	The name of the incoming interface where the event was registered.
Source MAC	The source MAC address of the connection.
Source IP	The source IP address of the connection.
Source Port	The source port of the connection.
Outgoing Interface	The name of the outgoing interface where the event was registered.
Destination IP	The destination IP address of the connection.
Destination Port	The destination port of the connection.
TCP Flags	The TCP flags of the TCP protocol.
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 Logs

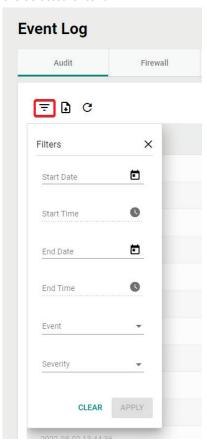
The VPN logs shows details about the status of tunnel connections and related events.



Viewing VPN Logs

- 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, event category, or log severity from the respective drop-menu and 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 $\begin{tabular}{c|c} \hline \end{tabular}$ button to renew the search results.

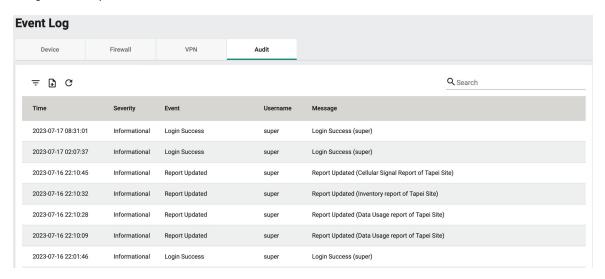


The following table describes the log's fields.

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 Logs

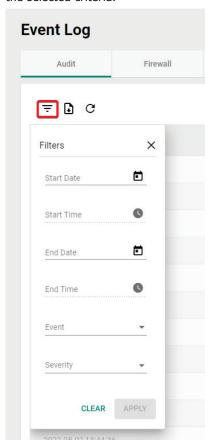
The audit logs show details about user access, configuration changes, and other events that occurred when using MXsecurity.



Viewing Audit Logs

- 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, event category, or log severity from the respective drop-menu and 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 $\begin{tabular}{c|c} \hline \end{tabular}$ 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 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.

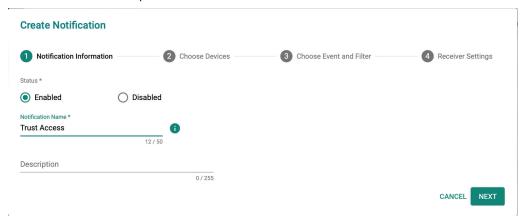
Notifications

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.

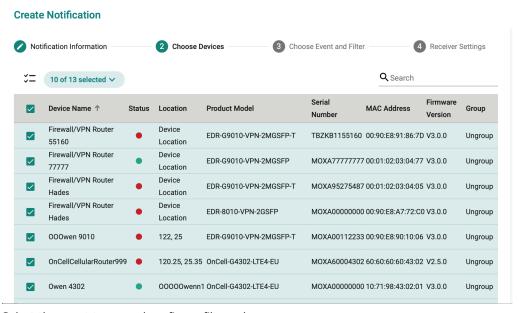
Adding a Notification

Steps:

- 1. Navigate to Logging > Notifications.
- 2. Click the icon to add a notification.
- 3. Enter a name and description for the notification.

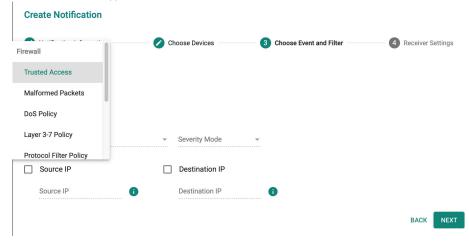


- 4. Click NEXT.
- 5. Select the device(s) that will send notifications for the specified events.



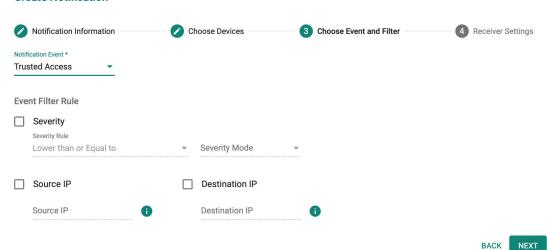
6. Select the event types and configure filter rules:

a. Select the event type.



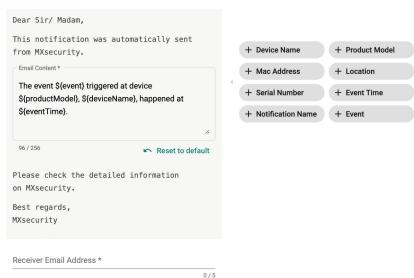
b. Specify the notification filter rules to determine when the device will send a notification for the event. Depending on the select notification event, filter rule options will be different.

Create Notification



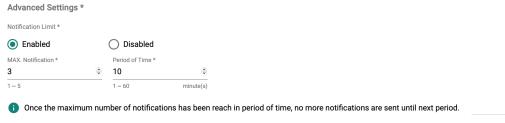
7. Configure the notification content and recipient settings.

Create Notification



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.



- 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 <u>Deleting a User Account</u> .		
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	Click Password Policy to adjust password restrictions.		
policy	For more information, see <u>Configuring the Password Policy</u> .		

User Roles

The following table describes the permissions matrix for user roles.

Dashboard

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

System Tab

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

Management Tabs

		User Roles	;	
Configuration Screen	Action	Admin	Operator	Viewer
Device Group	View	Yes	VG	No
Device Group	All operations	Yes	No	No
Firmwares	View	Yes	Yes	No
Filliwales	All operations	Yes	No	No
Software Packages	View	Yes	Yes	No
Sultware Packages	All operations	Yes	No	No
Objects	View	Yes	Yes	No
	All operations	Yes	No	No
Doliny Drofiles	View	Yes	Yes	No
Policy Profiles	All operations	Yes	No	No
Dovice Configuration	View	Yes	VG	No
Device Configuration	All operations	Yes	No	No

1

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

		User Roles		
Configuration Screen	Action	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

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

Report

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

Logging

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



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

Create User

Description

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

Username * 0/32 Password * Confirm Password * Role *

CANCEL

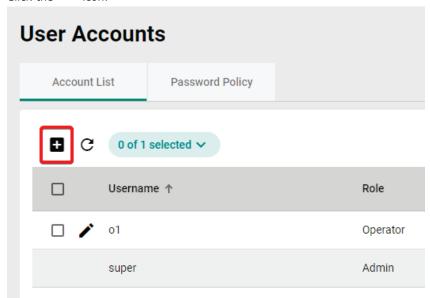
0 / 255

Туре	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 (-)	

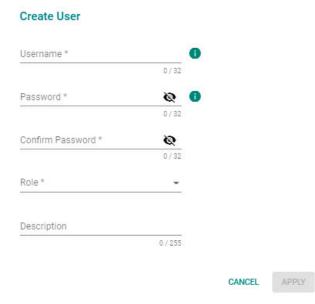
Adding a User Account

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

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



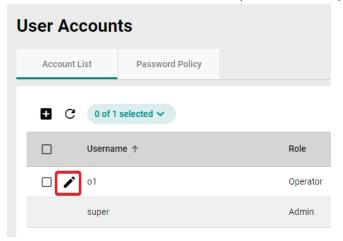
The **Create User** screen will appear.



- 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 <u>User Roles</u>.
 - e. **Description**: Enter a description for this account.
- 4. Click APPLY.

Editing an Existing User Account

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

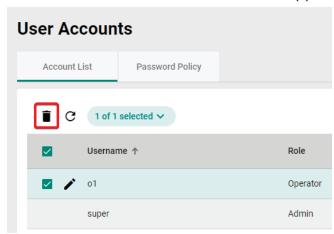


- 3. Modify the user account settings. Refer to Adding a User Account for more information.
- 4. Click APPLY.

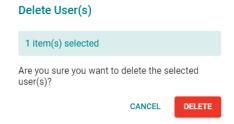
Deleting a User Account

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**.



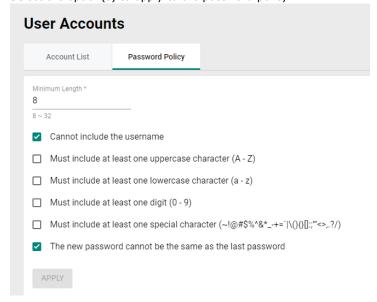
Configuring the Password Policy

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.

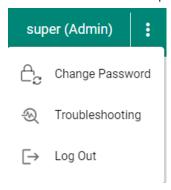


3. Click APPLY.

Changing Your Account Password

Steps:

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



2. Click Change Password.

Change Password

The **Change Password** screen will appear.

Current Password * New Password * O/32 Confirm New Password * O/32

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

CANCEL

- 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

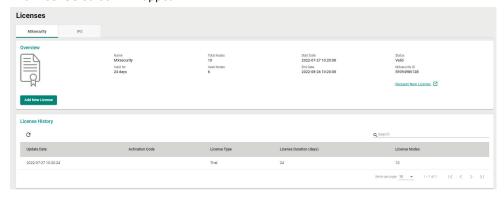
Only one MXsecurity and IPS license can be used at any given time. When more than one MXsecurity and IPS license is applied to MXsecurity, only the latest one will be kept.

Viewing Your Product License Information

Steps:

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

The **License** screen will appear.



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.

Field	Description
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.

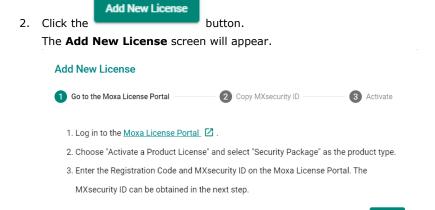
Message	Description
The (category) license expires in (days) days. To	This message appears 30 days before the license
continue using all features, enter a new license	expiration date. The (days) represents the days
code.	remaining before the license expires.
The (category) license has expired. To continue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

Adding a New License

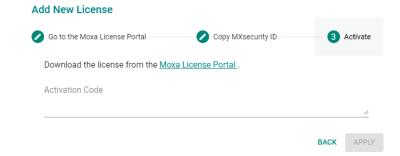
You can activate a license using a valid license activation code.

Steps:

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



- 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.

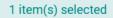
Binding a License to a Device

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

- 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 $\stackrel{\swarrow}{\bowtie}$ icon to bind the license to the selected device(s).

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

Apply a Device License



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

CANCEL



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:

- 1. Navigate to **System > Licenses**.
- 2. Click the **IPS** tab.
- 3. Check the box of the device(s) you want to unbind the license from.
- 4. Click the kicon to unbind the license from the selected device(s).
- 5. 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

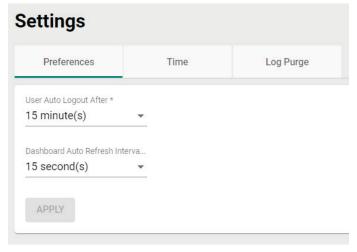
From the **Settings** page, you can configure system preferences, time, and log purge settings.

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.

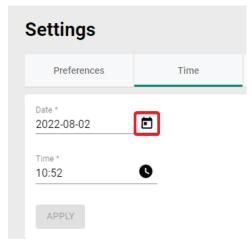


3. Click APPLY.

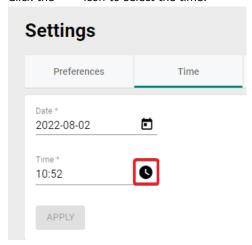
Configuring the System Time

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

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



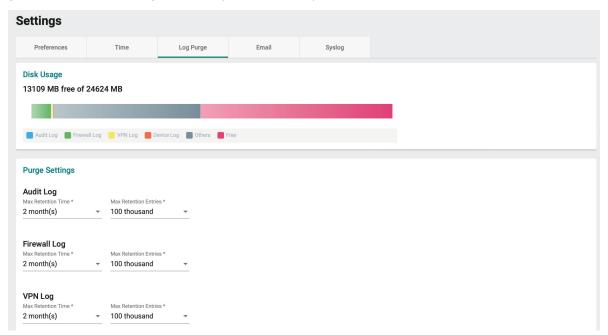
3. Click the icon to select the time.



4. Click APPLY.

Purging Logs

From the **Log Purge** window, you can view the status of the logs stored on the hard drive of the system running MXsecurity and configure log purging methods. Purging logs may be useful when the system generates a lot of event logs, which may affect network performance.



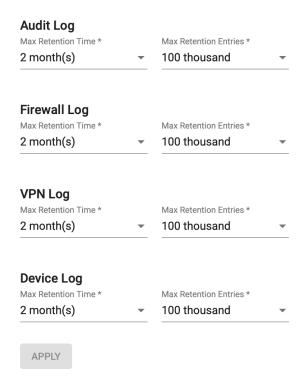
You can purge the logs in the following ways:

• Automatically purge logs: Logs are automatically deleted based on a specified threshold number of log entries, a retention period for log data, or both.

- 1. Navigate to **System > Settings > Log Purge.**
- 2. In the Disk Usage section, check the current used and available disk space.

3. In the Purge Setting section, select the log retention time and maximum retention entries for each log type.

Purge Settings



4. Click APPLY.

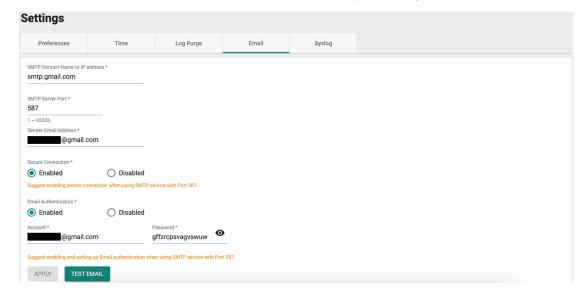


NOTE

When the number of entries for a log type reaches the set threshold value, MXsecurity will start clearing the logs, beginning with the oldest records.

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.



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

Field	Description
SMTP Domain Name or	The SMTP server domain name or IP address.
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

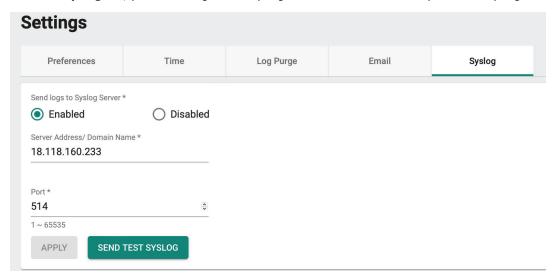
If you set a Gmail account as the sender address, we highly recommend enabling "2-step verification" and getting a 16-bit application password. For details, refer "Gmail-Help center - Sign in with Passwords" for more information.

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.



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

Field	Description
Send logs to Syslog	Enable or disable sending syslog messages to the Syslog server.
server	
Server Address/	The IP address or domain name of the syslog server.
Domain Name	
Port	The port number of the syslog server. The default port is 514.

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

When finished, click APPLY.