



# ForeScout

eyeExtend for FireEye HX

Configuration Guide

Version 1.3



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## About the Documentation

- Refer to the Resources page on the Forescout website for additional technical documentation: <https://www.forescout.com/company/resources/>
- Have feedback or questions? Write to us at [documentation@forescout.com](mailto:documentation@forescout.com)

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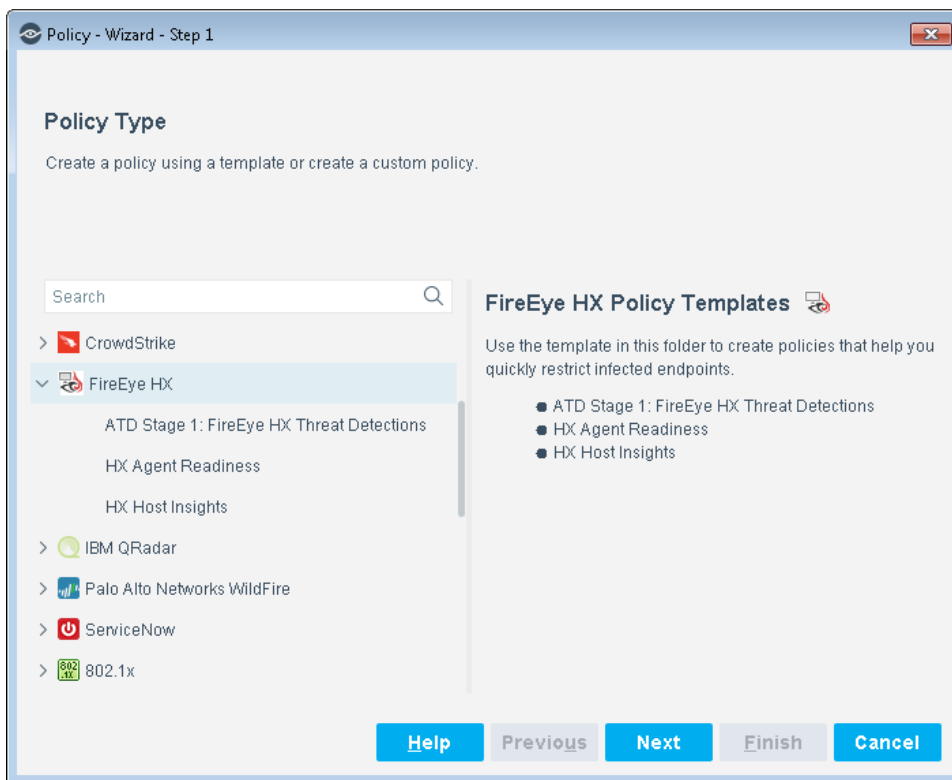
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## About the FireEye HX Integration

FireEye® Endpoint Security (HX Series) offers threat detection capabilities from the network core to the endpoint, enhancing endpoint visibility and enabling a flexible and adaptive defense against known and unknown threats.

The Forescout integration with FireEye HX helps security teams simplify the process of identifying, analyzing, and blocking advanced cyber-attacks. FireEye HX, unlike other FireEye components, gets into the endpoint security space. This integration combines the threat detection mechanisms of FireEye HX with the network visibility and compliance enforcement capabilities of the Forescout platform to multiply the benefits of working with an endpoint threat detection and response (EDR) product.

This integration leverages the FireEye HX agent installed on Windows endpoints to provide threat and endpoint information that complements information detected by the Forescout platform (for example, information reported by SecureConnector). Endpoints suspected of infection can be isolated, and remediation actions can be initiated automatically instead of requiring human intervention, allowing corporate security teams to deal with other high profile issues.



## Advanced Threat Detection with the IOC Scanner Plugin

This module works with the IOC Scanner Plugin, Forescout's action center for Advanced Threat Detection (ATD) and response. The IOC Scanner Plugin provides:

- A centralized repository of all threats and their Indicators of Compromise (IOCs) reported to the Forescout platform by third-party endpoint detection and response (EDR) systems, and other threat prevention systems, or added manually.
- Mechanisms that scan all Windows endpoints for threat and IOC information reported to the Forescout platform, evaluate the likelihood of compromise, and apply appropriate actions to endpoints.

Threat detection and response is implemented in the following stages:

- **ATD Stage 1 (Forescout eyeExtend for FireEye HX): Detect and report threats on endpoints:** FireEye HX instances in your environment report threats to this module as they are detected on endpoints. Use the template provided with this module to create policies that apply block, quarantine, or other Forescout actions based on the severity of detected threats.

In addition to this initial response, all threats reported by this module are automatically submitted to the IOC Scanner Plugin, which parses the threat to yield IOCs – measurable events or state properties that can be used as a "fingerprint" to identify the threat. The IOC Scanner Plugin uses these IOCs to mount further scan/analyze/remediate stages of the Forescout platform's ATD response.

- **ATD Stage 2 (IOC Scanner Plugin): Real-time hunt for endpoints of interest based on threats and IOCs:** The IOC Scanner Plugin detects endpoints with IOCs associated with recently reported threats.
- **ATD Stage 3 (IOC Scanner Plugin): Evaluation and remediation:** The IOC Scanner Plugin evaluates the profile of IOCs on endpoints of interest to determine the likelihood that an endpoint is compromised, and applies appropriate blocking/remediation actions.

For more information about IOC-based threat detection and remediation, refer to the *Forescout Core Extensions Module: IOC Scanner Plugin Configuration Guide*.

## Use Cases

This section describes important use cases supported by Forescout eyeExtend for FireEye HX. To understand how this module helps you achieve these goals, see [About This Module](#).

### Evaluate Endpoint Readiness

Use the HX Agent Readiness template to create a Forescout policy that:

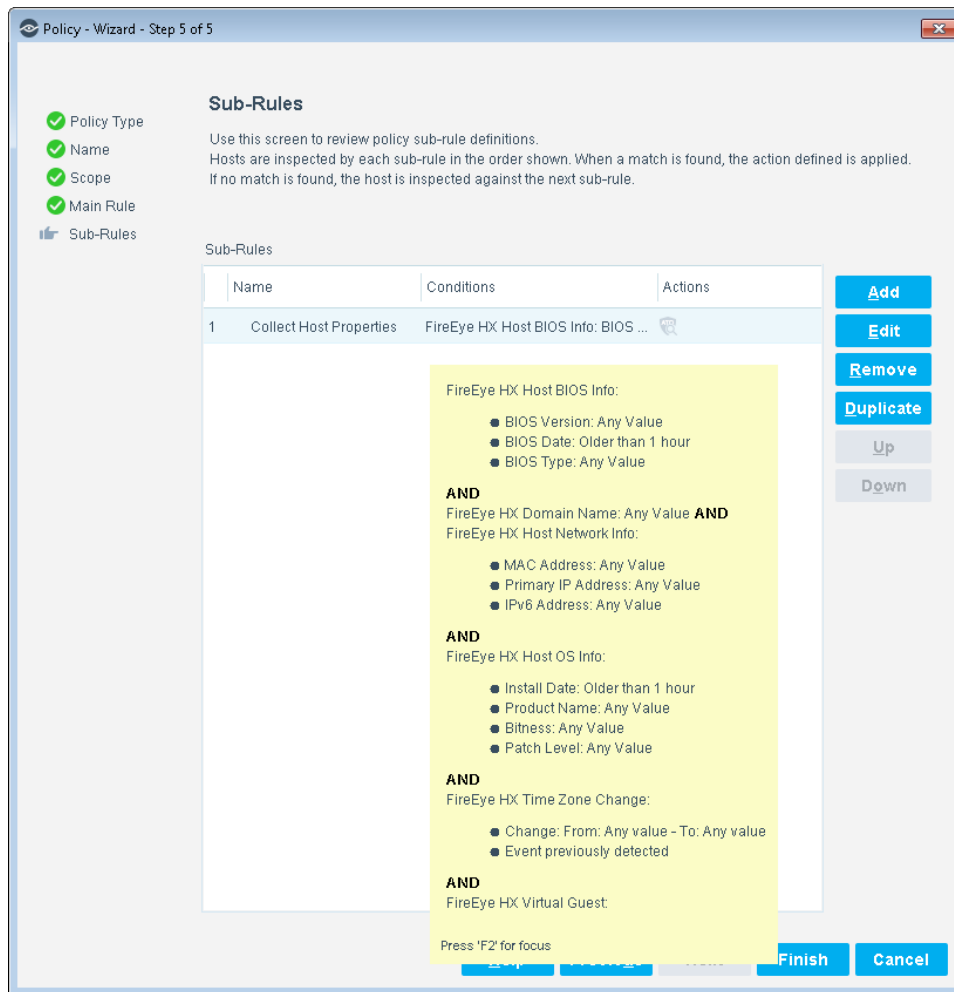
- Ensures that the FireEye HX agent is installed and running on all Windows endpoints supported by FireEye HX.

- Ensures that the FireEye HX agent can communicate with the defined FireEye HX server.

## Retrieve Endpoint Insights from FireEye HX

Leverage the presence of installed FireEye HX agents to receive the following endpoint information in situations where SecureConnector is not installed or Remote Inspection is not used:

- Threat information detected by FireEye HX on specific endpoints.
- Information on all endpoints monitored by the FireEye HX agent. For example, network and host BIOS information.



## Prevent Lateral Threat Propagation

Use a policy-based workflow to automatically handle endpoints on which FireEye HX detected specific threats, for example, by isolating the compromised endpoint so that no other machine can communicate with that endpoint.

## Additional FireEye HX Documentation

Refer to FireEye HX online documentation for more information about the FireEye HX solution:

<https://www.fireeye.com/products/hx-endpoint-security-products.html>

## About This Module

Forescout eyeExtend for FireEye HX lets you:

- Create policies that determine the readiness of the FireEye HX agent on Windows endpoints. See [HX Agent Readiness Policy](#).
  - If the agent is not installed, the policy can redirect users to a URL from which to install the agent.
  - If the agent is not running, the policy can run a script to start the agent.
  - If the agent is running but is not communicating with the defined FireEye HX server, the policy can notify the administrator.
- Create policies that collect endpoint information using the FireEye HX agent. See [HX Host Insights Policy Template](#).
- Create policies that immediately run appropriate actions, such as restrictive actions, on endpoints on which Forescout eyeExtend for FireEye HX detected a threat. You can apply different actions to endpoints based on the severity of the detected threat. See [Create an ATD Stage 1: FireEye HX Threat Detections Policy](#).
- [Create Custom FireEye HX Policies](#) that use properties provided by this module, and other Forescout properties and actions, to deal with issues not covered in the ATD Stage 1: FireEye HX Threat Detections policy template.
- View new IOCs related to threats reported by Forescout eyeExtend for FireEye HX and automatically added to the IOC repository. These IOCs are used by the IOC Scanner Plugin for Advanced Threat Detection (ATD) and recovery. Refer to the *Forescout Core Extensions Module: IOC Scanner Plugin Configuration Guide* for more information.
- Use Forescout inventory tools to display all threats and the corresponding endpoints on which they have been found.

To use the module, you should have a solid understanding of FireEye Endpoint Security (HX Series) concepts, functionality, and terminology, and understand how the Forescout platform's policies and other basic features work. Additionally, you should have a solid understanding of how to leverage threat intelligence distributed by IOCs.



## How It Works

The integration of FireEye HX with the Forescout platform enables communication and collaboration between the two systems and enables the processes described below.

### The Forescout Platform Queries FireEye HX for Endpoint Information

When the FireEye HX agent runs on corporate endpoints, it provides the FireEye HX server with endpoint information, such as the host time zone. This module presents this endpoint information in the Forescout platform as host properties, which can be included in the Forescout policy conditions. To evaluate these properties, the Forescout platform queries the FireEye HX server.

### Threat Notifications from FireEye HX

When FireEye HX detects suspicious activity on an endpoint, the FireEye HX server sends an alert notification in syslog format to a pre-defined connecting CounterACT® device. When the alert notification indicates a threat, Forescout eyeExtend for FireEye HX queries the FireEye HX server for more details. The Forescout platform presents the threat detection event as a host property, and passes detailed threat information to the IOC repository maintained by the IOC Scanner Plugin.

## What to Do

Perform the following steps to set up the integration:

1. Verify that all requirements are met. See [Requirements](#).
2. [Configure FireEye HX](#).
3. [Install the Module](#).
4. [Configure the Module](#).
5. [Create FireEye HX Policies Using Templates](#).
6. (Optional) [Create Custom FireEye HX Policies](#).

## Requirements

Verify that the following requirements are met:

- [Forescout Requirements](#)
- [FireEye HX Requirements](#)
- [Forescout eyeExtend \(Extended Module\) Licensing Requirements](#)
- [Core Extensions Module Information](#)

## Forescout Requirements

This module requires the following Forescout releases and other components:

- Forescout version 8.1.
- A module license for Forescout eyeExtend for FireEye HX. See [Forescout eyeExtend \(Extended Module\) Licensing Requirements](#).
- Core Extensions Module 1.1, with the following components running:
  - Syslog Plugin
  - IOC Scanner Plugin

## FireEye HX Requirements

This module requires the following FireEye HX components:

- FireEye Endpoint Security (HX Series) version 3.0.x, 3.1.x, or 4.0.x, with an appliance that is running and has an established connection to the Internet.
- A user defined on the appliance with the following roles:
  - The *admin* or *fe\_services* role for initial appliance configuration
  - The *api\_analyst* or *fe\_services* role for access to the appliance

## About Support for Dual Stack Environments

Forescout version 8.1 detects endpoints and interacts with network devices based on both IPv4 and IPv6 addresses. However, **IPv6 addresses are not yet supported by this module**. The functionality described in this document is based only on IPv4 addresses. IPv6-only endpoints are typically ignored or not detected by the properties, actions, and policies provided by this module.

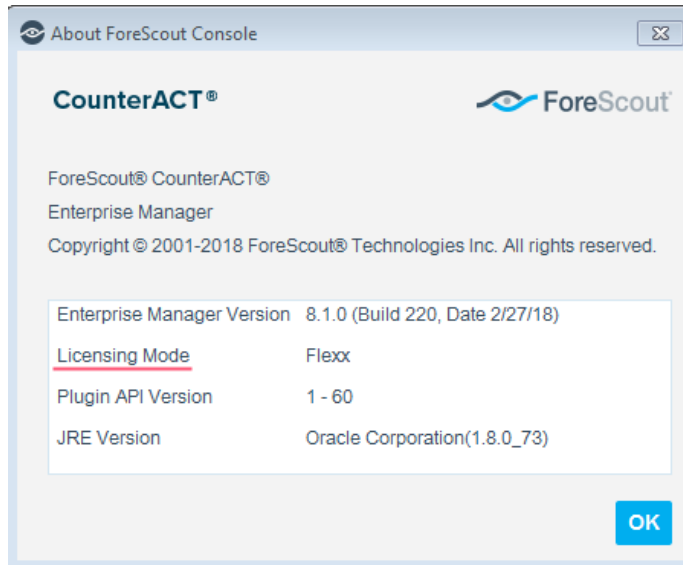
## Forescout eyeExtend (Extended Module) Licensing Requirements

This Forescout eyeExtend product requires a valid license. Licensing requirements differ based on which licensing mode your deployment is operating in:

- [Per-Appliance Licensing Mode](#)
- [Flexx Licensing Mode](#)

**To identify your licensing mode:**

- From the Console, select **Help > About ForeScout**.



## Per-Appliance Licensing Mode

When installing the module you are provided with a 90-day demo license.

If you would like to continue exploring the module before purchasing a permanent license, you can request a demo license extension. Consult with your Forescout representative before requesting the extension. You will receive email notification and alerts at the Console before the demo period expires.

*To continue working with the module after the demo period expires, you must purchase a permanent module license.*

Demo license extension requests and permanent license requests are made from the Console.

- 📖 *This module may have been previously packaged as a component of an Integration Module which contained additional modules. If you already installed this module as a component of an Integration Module, you can continue to use it as such. Refer to the section about module packaging in the Forescout Administration Guide for more information.*

## Requesting a License

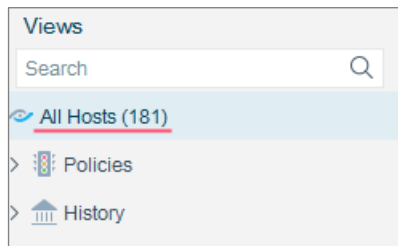
When requesting a demo license extension or permanent license, you are asked to provide the device *capacity* requirements. This is the number of devices that you want this license to handle. You must define at least the number of devices currently detected by the Forescout platform. You can request a license that handles more to ensure that you are licensed for support on additional devices as your deployment grows.

Enter this number in the **Devices** pane of the Module License Request wizard, in the Console Modules pane.




### To view the number of currently detected devices:

1. Select the **Home** tab.
2. In the Views pane, select the **All Hosts** folder. The number in parentheses displayed next to the **All Hosts** folder is the number of devices currently detected.



## Flexx Licensing Mode

When you set up your Forescout deployment, you must activate a license file containing valid licenses for each feature you want to work with in your deployment, including eyeExtend products. After the initial license file has been activated, you can update the file to add additional eyeExtend licenses or change endpoint capacity for existing eyeExtend products. For more information on obtaining eyeExtend licenses, contact your Forescout sales representative.

 *No demo license is automatically installed during system installation.*

License entitlements are managed in the [Forescout Customer Portal](#). After an entitlement has been allocated to a deployment, you can activate or update the relevant licenses for the deployment in the Console.

Each eyeExtend license has an associated capacity, indicating the number of endpoints the license can handle. The capacity of each eyeExtend license varies by module, but does not exceed the capacity of the Forescout eyeSight license.

- 📄 *Integration Modules, which package together groups of related licensed modules, are not supported when operating in Flexx Licensing Mode. Only eyeExtend products, packaging individual licensed modules are supported. The Open Integration Module is an eyeExtend product even though it packages more than one module.*

## More License Information

For more information on eyeExtend (Extended Module) licenses:

- **Per-Appliance Licensing.** Refer to the *Forescout Administration Guide*.
- **Flexx Licensing.** Refer to the *Flexx Licensing How-to Guide*.

You can also contact your Forescout sales representative for more information.

## Configure FireEye HX

For each FireEye HX server, designate a CounterACT device to receive FireEye HX syslog notifications. In the HX Series appliance, define the connecting CounterACT device as a remote syslog server, and configure the notification settings. Refer to the *FireEye HX & HXD Series System Administration Guide* for more information about configuring event notifications.

### To define a connecting CounterACT device as a remote syslog server:

1. Log in to the HX Series appliance CLI (command-line interface) as a user assigned the *admin* or *fe\_services* role for the HX Series appliance.
2. Enable the CLI configuration mode:

```
hostname > enable
hostname # configure terminal
```

3. Add a remote syslog server destination:

```
hostname # logging <remote-IP-address> trap none
hostname # logging <remote-IP-address> trap override class cef
priority info
```

where **<remote-IP-address>** is the connecting CounterACT device IP address

4. Save your settings:

```
hostname # write mem
```

When the operation completes, the following message is displayed:

```
Saving configuration file ... Done!
```

## Install the Module


This section describes how to install the module. Before you install this module, first install the IOC Scanner Plugin. See [Forescout Requirements](#).


### To install the module:

1. Navigate to one of the following Forescout download portals, depending on the licensing mode your deployment is using:
  - [Product Updates Portal](#) - **Per-Appliance Licensing Mode**
  - [Customer Portal, Downloads Page](#) - **Flexx Licensing Mode**

To identify your licensing mode, select **Help > About ForeScout** from the Console.

2. Download the module `.fpi` file.
3. Save the file to the machine where the Console is installed.
4. Log into the Console and select **Options** from the **Tools** menu.
5. Select **Modules**. The Modules pane opens.
6. Select **Install**. The Open dialog box opens.
7. Browse to and select the saved module `.fpi` file.
8. Select **Install**. The Installation screen opens.
9. Select **I agree to the License Agreement** to confirm that you have read and agree to the terms of the License Agreement, and select **Install**. The installation will not proceed if you do not agree to the license agreement.

 *The installation will begin immediately after selecting Install, and cannot be interrupted or canceled.*

 *In modules that contain more than one component, the installation proceeds automatically one component at a time.*

10. When the installation completes, select **Close** to close the window. The installed module is displayed in the Modules pane.

 *Some components are not automatically started following installation.*

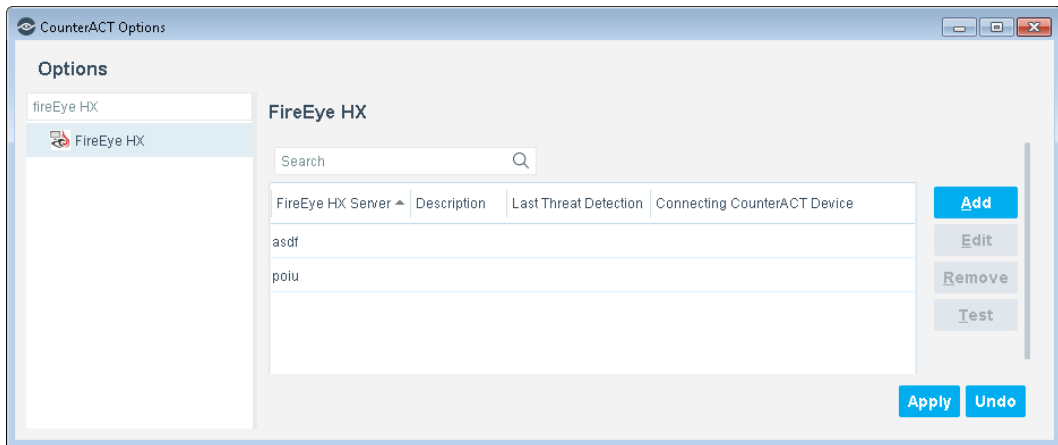
## Configure the Module

After Forescout eyeExtend for FireEye HX is installed, configure the module to ensure that the Forescout platform can communicate with the FireEye HX service.

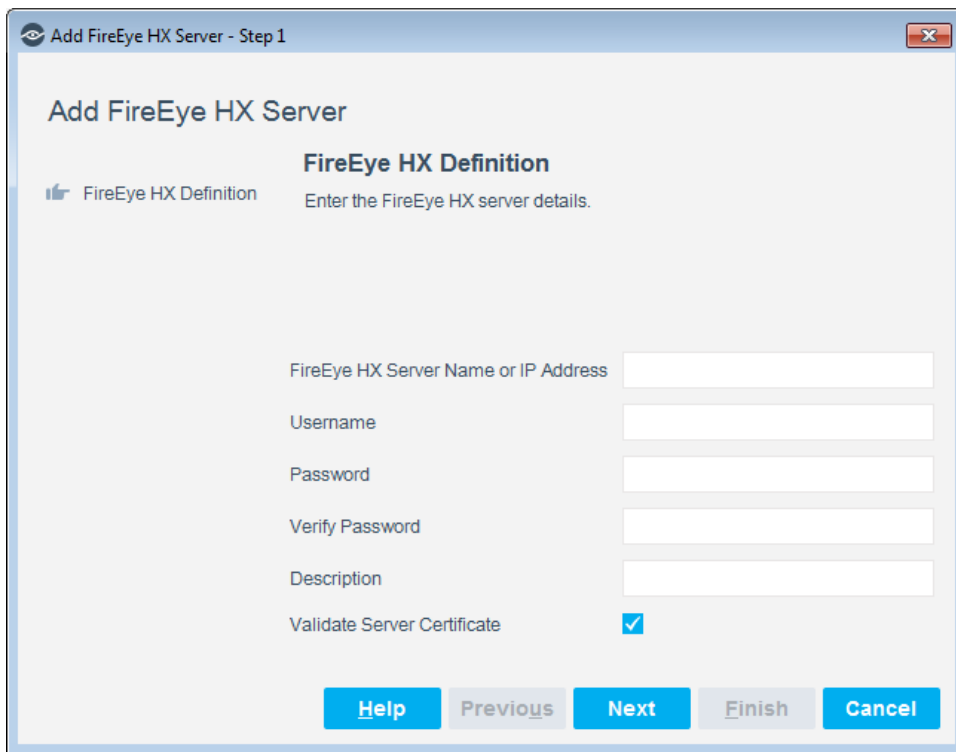
### To configure the module:

1. In the Console, select **Options** from the **Tools** menu. The Options dialog box opens.
2. Select **Modules**.

3. In the Modules pane, select **FireEye HX**, and then select **Configure**.



4. Select **Add** to define a FireEye HX server to communicate with the Forescout platform.

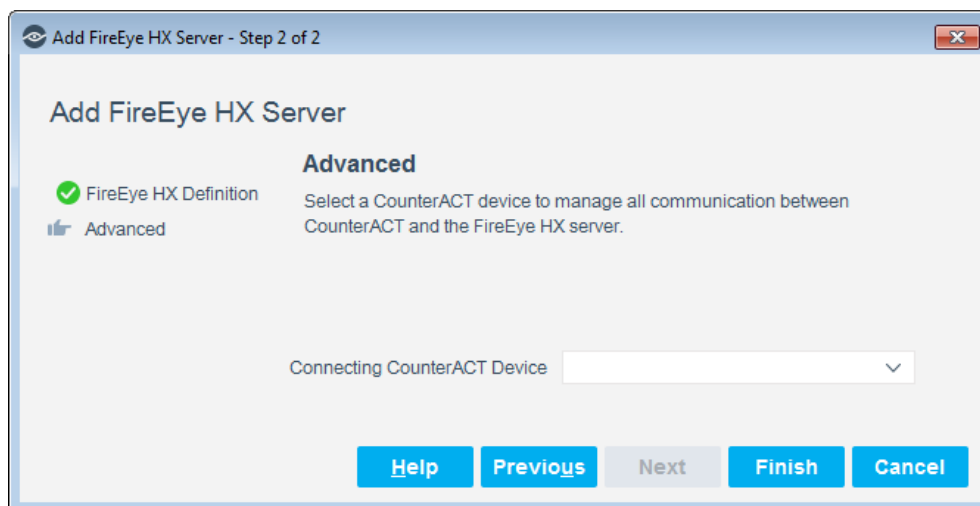


5. Configure the server settings as follows:

<p><b>FireEye HX Server Name or IP Address</b></p>	<p>Enter the server name or IPv4 address of the FireEye HX server that sends notifications to the Forescout platform. See <a href="#">Configure FireEye HX</a> for details.</p> <p>The server prefix (HTTP/HTTPS) and the port number are configurable via an <code>install.properties</code> file that comes with the module. See <a href="#">Configure Additional FireEye HX Server Details</a>.</p>
--	--

<b>Username</b>	Enter a username assigned the <i>api_analyst</i> or <i>fe_services</i> role for access to the HX Series appliance.
<b>Password</b>	Enter the password for the username.
<b>Verify Password</b>	Re-enter the password to verify it.
<b>Description</b>	Enter a text description of the FireEye HX server or a relevant comment.
<b>Validate Server Certificate</b>	<p>Select this option to validate the identity of the third-party server before establishing a connection, when the eyeExtend product communicates as a client over SSL/TLS. To validate the server certificate, either of the following certificate(s) must be installed:</p> <ul style="list-style-type: none"> <li>▪ Self-signed server certificate – the server certificate must be installed on the CounterACT Appliance</li> <li>▪ Certificate Authority (CA) signed server certificate – the CA certificate chain (root and intermediate CA certificates) must be installed on the CounterACT Appliance</li> </ul> <p>Use the Certificates &gt; Trusted Certificates pane to add the server certificate to the Trusted Certificate list. For more information about certificates, refer to the appendix, "Configuring the Certificate Interface" in the <i>Forescout Administration Guide</i>.</p>

**6.** Select **Next**.



- 7.** Select the CounterACT device that will handle all communication between FireEye HX and CounterACT devices.
- 8.** Select **Finish**. An entry for the FireEye HX server is added to the list in the FireEye HX pane.
- 9.** (Optional) Repeat the steps to define additional FireEye HX appliances as message sources.
- 10.** To test communication with FireEye HX servers, select a server, and select **Test**. After viewing the test results, select **Close**. The best practice is to perform a test after setting up a connection.



**11.** In the FireEye HX pane, select **Apply**. An Enterprise Manager Console dialog box opens.

**12.** Select **Yes** to save the module configuration, and then select **Close**.

The table in the FireEye HX pane has two additional display-only columns. These columns display information on threats reported by FireEye HX appliances:

- **Last Threat Report Time.** Indicates the latest date/time when the Forescout platform received a threat alert from this FireEye HX appliance.
- **Receiving CounterACT Appliance.** The IP address of the connecting CounterACT device that received the last threat notification from this FireEye HX appliance. This is one of the CounterACT devices defined as rsyslog targets at the FireEye HX appliance. See [Configure FireEye HX](#).

## Configure Additional FireEye HX Server Details

The server prefix (HTTP/HTTPS) and the port number are configurable via an `install.properties` file that comes with the module.

### To configure additional server details:

- 1.** Log in to the connecting CounterACT device as root.
- 2.** Access the `Install.Properties` file in the folder where the module is installed.
- 3.** To change the server prefix, edit the property `config.rest_api_prefix.value` using one of the following values:
  - (1) http
  - (2) https
- 4.** To change the port value, edit the `config.rest_api_port.value` property. The value must be a positive integer. The default value is 3000.

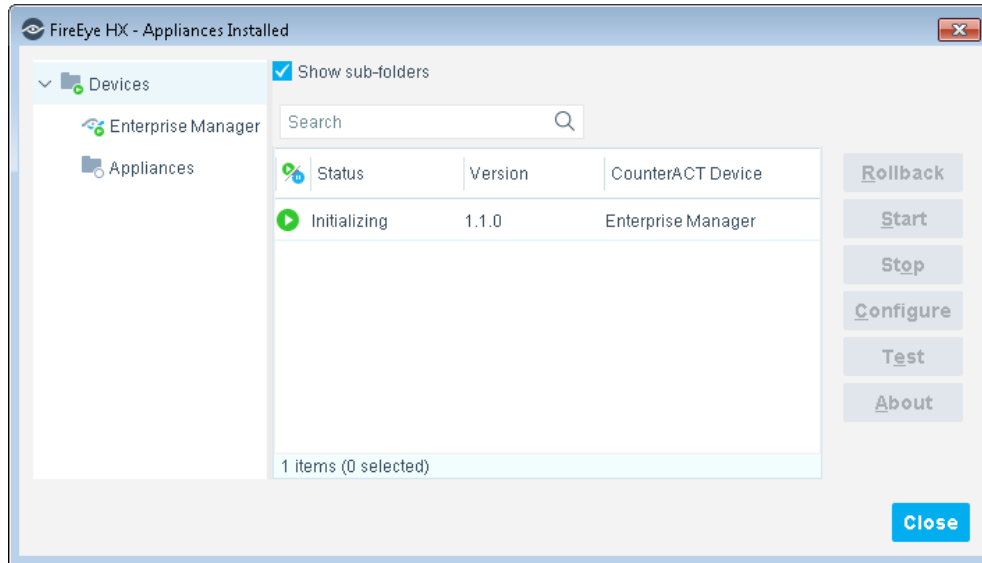
## Restart the Module – Traffic Throttling

Typically, the module is started and runs after installation. During operation, the module may suspend some functions if the volume of threat notifications from FireEye HX exceeds an internal threshold. In this case, it is necessary to restart the module.

Forescout eyeExtend for FireEye HX lets you customize threat criteria. This potentially causes relatively common actions or events to be classified as threats, resulting in a large volume of threats reported to the Forescout platform. A throttling function limits the number of threats that Forescout eyeExtend for FireEye HX can report to the Forescout platform: after the Forescout platform receives 100 threat notifications within 600 seconds (10 minutes), the module ceases to report notifications to the IOC Scanner Plugin, and an event is written to the module log file.

**To restart the module after a traffic throttling event:**

1. In the Console, select **Options** from the **Tools** menu. The Options dialog box opens.
2. Select **Modules**.
3. In the Modules pane, double-click **FireEye HX**.



4. Select the communicating Appliance and select **Stop**. When prompted for confirmation, select **Yes**. The Forescout platform stops the module on the device.
5. With the communicating device still selected, select **Start**. When prompted for confirmation, select **Yes**. The Forescout platform starts the module on the device.

## Create FireEye HX Policies Using Templates

Forescout templates help you quickly create important, widely used policies that easily control endpoints and can guide users to compliance.

Predefined actions – instructions regarding how to handle endpoints – are generally disabled by default when working with templates. You should only enable actions after testing and fine-tuning the policy.

This section describes how to use FireEye HX templates to create policies to detect and manage endpoints. Refer to the following sections:

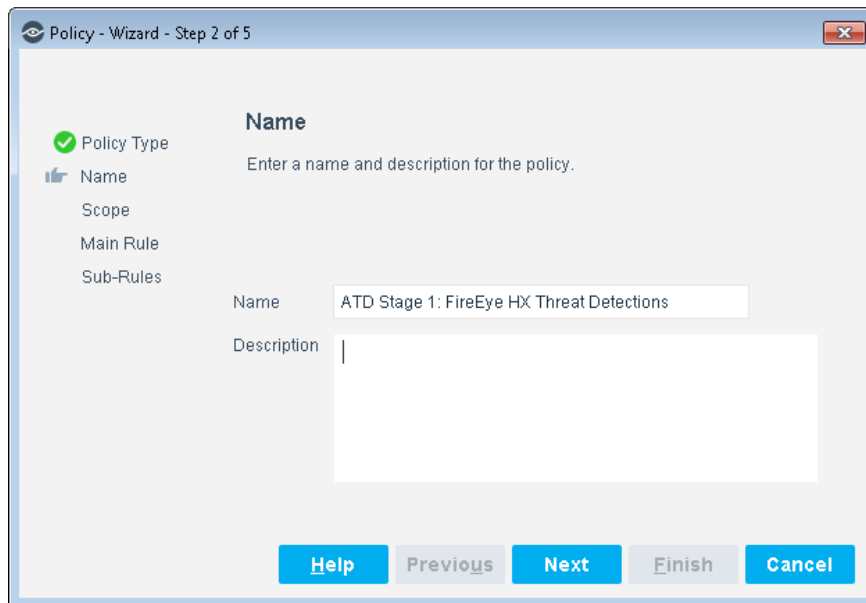
- [Create an ATD Stage 1: FireEye HX Threat Detections Policy](#)
- [HX Agent Readiness Policy](#)
- [HX Host Insights Policy Template](#)

## Create an ATD Stage 1: FireEye HX Threat Detections Policy


Use the ATD Stage 1: FireEye HX Threat Detections template to create a policy that responds to threats detected by FireEye HX and reported to the Forescout platform. You can define different responses to threats based on their severity as reported by FireEye HX.

### To create a policy:

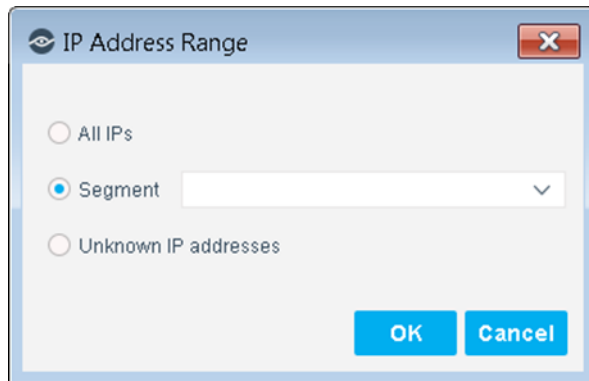
1. Log in to the Console and select **Policy**.
2. Select **Add** from the Policy Manager. The Policy Wizard opens.
3. Expand the **FireEye HX** folder and select **ATD Stage 1: FireEye HX Threat Detections**. The ATD Stage 1: FireEye HX Threat Detections pane opens.
4. Select **Next**.



The screenshot shows a window titled "Policy - Wizard - Step 2 of 5". On the left, a sidebar lists steps: "Policy Type" (checked with a green checkmark), "Name" (selected with a blue highlight), "Scope", "Main Rule", and "Sub-Rules". The main content area is titled "Name" and contains the instruction "Enter a name and description for the policy." Below this, there are two input fields: "Name" with the text "ATD Stage 1: FireEye HX Threat Detections" and "Description" which is currently empty. At the bottom of the window, there are five buttons: "Help", "Previous", "Next", "Finish", and "Cancel".

5. Define a unique name for the policy you are creating based on this template, and enter a description.
    - Make sure names are accurate and clearly reflect what the policy does. For example, do not use a generic name such as My\_Compliance\_Policy.
    - Use a descriptive name that indicates what your policy is verifying and which actions will be taken.
    - Ensure that the name indicates whether the policy criteria must be met or not met.
    - Avoid having another policy with a similar name.
-  *Policy names are displayed in the Policy Manager, the Views pane, NAC Reports and in other features. Precise names make working with policies and reports more efficient.*

6. Select **Next**. Both the Scope pane and the IP Address Range dialog box open.
7. Use the IP Address Range dialog box to define which endpoints are inspected.

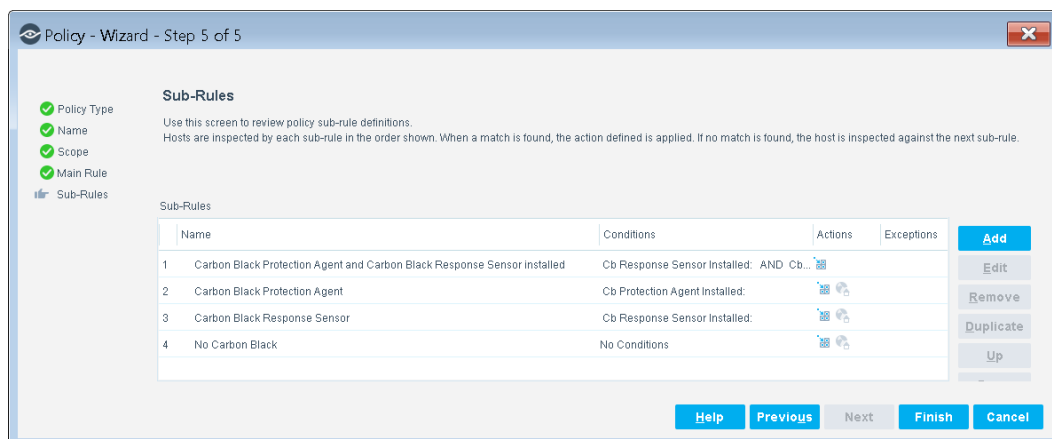


The following options are available:

- **All IPs:** Include all IP addresses in the Internal Network.
  - **Segment:** Select a previously defined segment of the network. To specify multiple segments, select **OK** or **Cancel** to close this dialog box, and select **Segments** from the Scope pane.
  - **Unknown IP addresses:** Apply the policy to endpoints whose IP addresses are not known. Endpoint detection is based on the endpoint MAC address.
8. Select **OK**. The added range is displayed in the Scope pane.
  9. Select **Next**. The Main Rule pane opens.

The main rule of this policy detects threat detections reported to the Forescout platform in the last week. For details on the default policy logic, see [How Endpoints Are Detected and Handled](#).

10. Select **Next**.



The sub-rules of this policy detect threats based on their reported severity. For details, see [Sub-Rules](#).

11. In the Sub-Rules pane, select **Finish**.

12. In the Console, select **Apply** to save the policy.

## Sub-Rules

The sub-rules of this policy detect threats based on their reported severity.

- For threats with *Critical* severity:



An optional Send Message to Syslog action to send a notification.



An optional Switch Block action is available.

By default, these actions are disabled.

- For threats with *High* severity:



An optional Send Message to Syslog action to send a notification.



An optional Switch Block action is available.

By default, these actions are disabled.

- For threats with *Medium* severity:



An optional Send Message to Syslog action to send a notification. By default, this action is disabled.

- For threats with *Low* severity:



An optional Send Message to Syslog action to send a notification. By default, this action is disabled.

## Create a HX Agent Readiness Policy

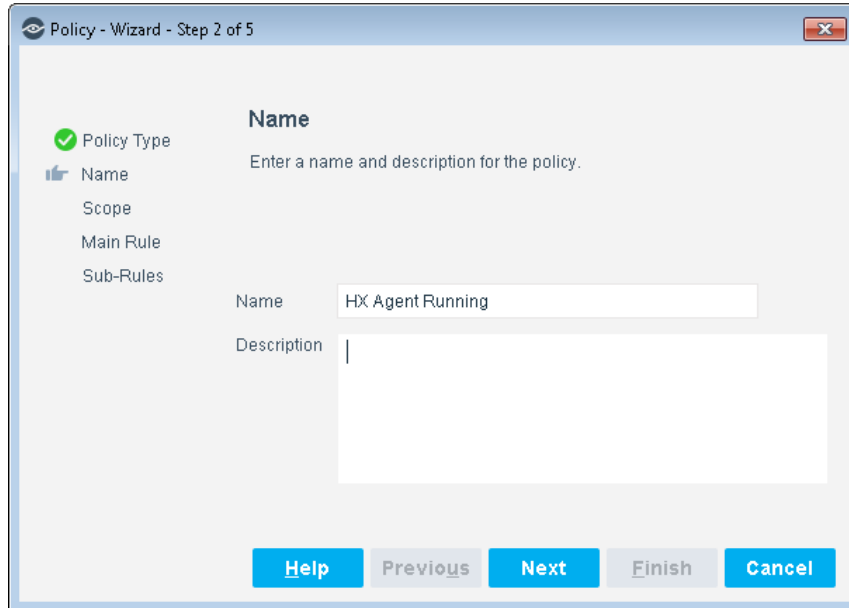
Use the HX Agent Readiness Policy template to create a Forescout policy that detects Windows endpoints on which:

- The FireEye HX agent is not installed.
  - An optional action redirects users to a URL from which to install the agent. It is recommended that the URL be available from outside the corporate network to ensure that the user can access the FireEye HX agent installer. This action is disabled by default.
- The FireEye HX agent is installed but not running.
  - An optional remediation action runs a script to start the agent. This action is disabled by default.
- The FireEye HX agent is running but is not communicating with the defined FireEye HX server.
  - An optional action notifies the administrator by email that the FireEye HX agent is not communicating with the defined FireEye HX server. This action is disabled by default.


### To create a policy:

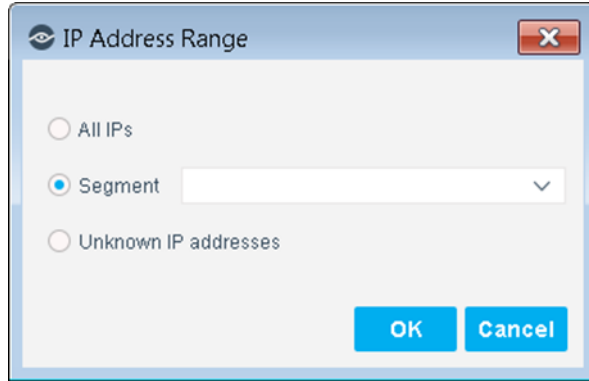
1. Log in to the Console and select **Policy**.

2. Select **Add** from the Policy Manager. The Policy Wizard opens.
3. Expand the **FireEye HX** folder and select **HX Agent Readiness**. The **HX Agent Readiness** pane opens.
4. Select **Next**.



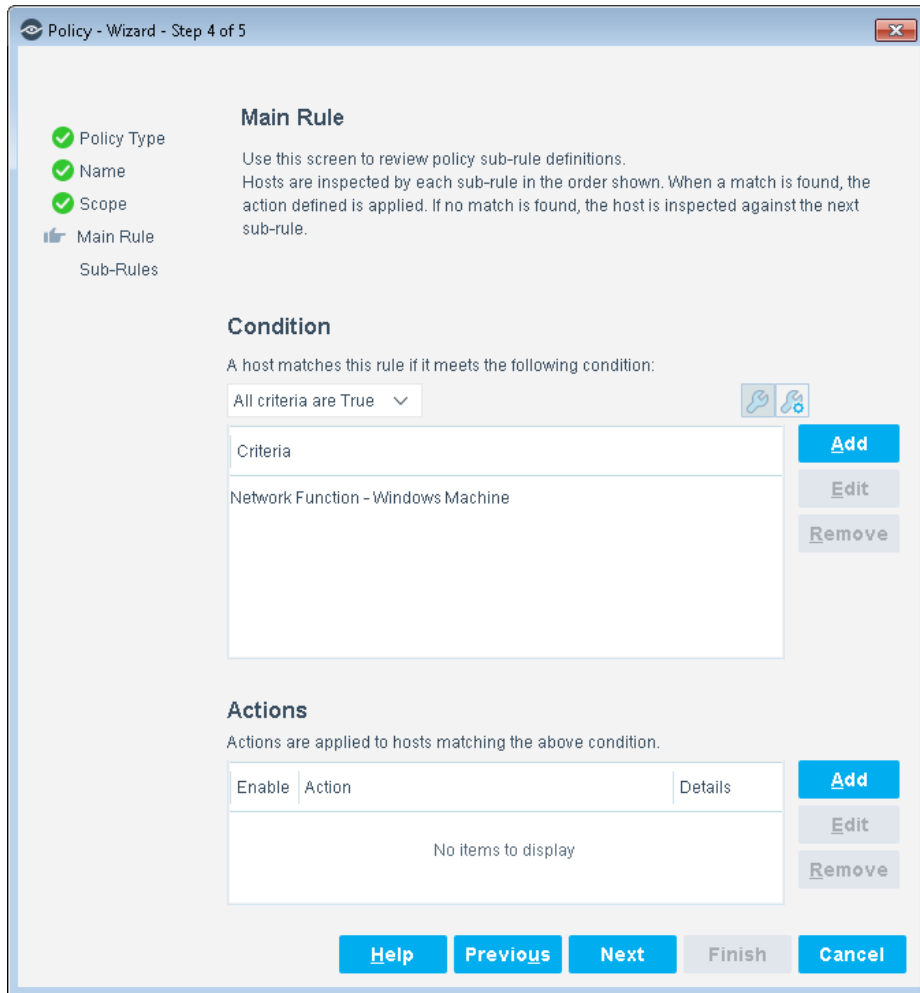
5. Define a unique name for the policy you are creating based on this template, and enter a description.
  - Make sure names are accurate and clearly reflect what the policy does. For example, do not use a generic name such as My\_Compliance\_Policy.
  - Use a descriptive name that indicates what your policy is verifying and which actions will be taken.
  - Use a name that indicates whether policy criteria must be met or not met.
  - Avoid having another policy with a similar name.

 *Policy names are displayed in the Policy Manager, the Views pane, NAC Reports and in other features. Precise names make working with policies and reports more efficient.*
6. Select **Next**. Both the Scope pane and the IP Address Range dialog box open.
7. Use the IP Address Range dialog box to define which endpoints are inspected.



The following options are available:

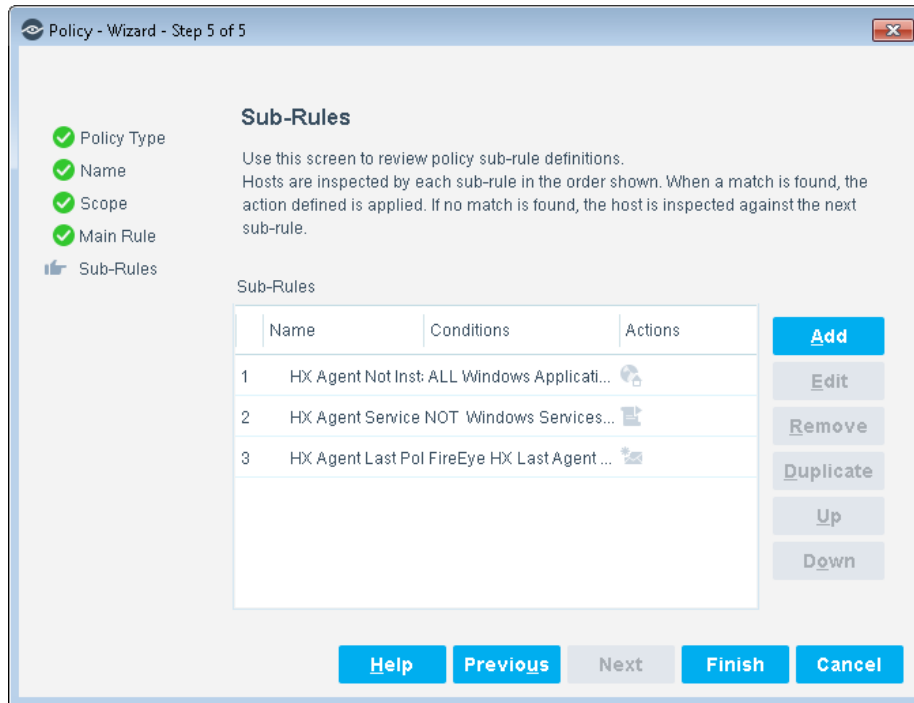
- **All IPs:** Include all IP addresses in the Internal Network.
  - **Segment:** Select a previously defined segment of the network. To specify multiple segments, select **OK** or **Cancel** to close this dialog box, and select **Segments** from the Scope pane.
  - **Unknown IP addresses:** Apply the policy to endpoints whose IP addresses are not known. Endpoint detection is based on the endpoint MAC address.
- 8.** Select **OK**. The added range is displayed in the Scope pane.
  - 9.** Select **Next**.



The main rule of this policy detects if the endpoint is a Windows machine. Non-Windows machines are not inspected by the sub-rules. For details on the default policy logic, see [How Endpoints Are Detected and Handled](#).

**10. Select Next.**





11. The sub-rules of this policy detect if the FireEye HX agent is installed and running on the endpoint, and if the agent has polled the FireEye HX server recently.
  - If the FireEye HX agent is not installed, an optional remediation action can be used to direct users to a URL from which to install the agent. If you enable this action, open it for editing, and then enter the URL in the **Redirect to Site** field. It is recommended that the URL be available from outside the network.
  - If the FireEye HX agent is installed but not running, an optional remediation action runs a script to start the agent.
  - If the FireEye HX agent has not polled the FireEye HX server recently, an optional remediation action can be used to send an email notification. If you enable this action, open it for editing, and then enter the administrator email address in the **To** field.

12. Select **Finish** to create the policy.

13. In the Console, select **Apply** to save the policy.

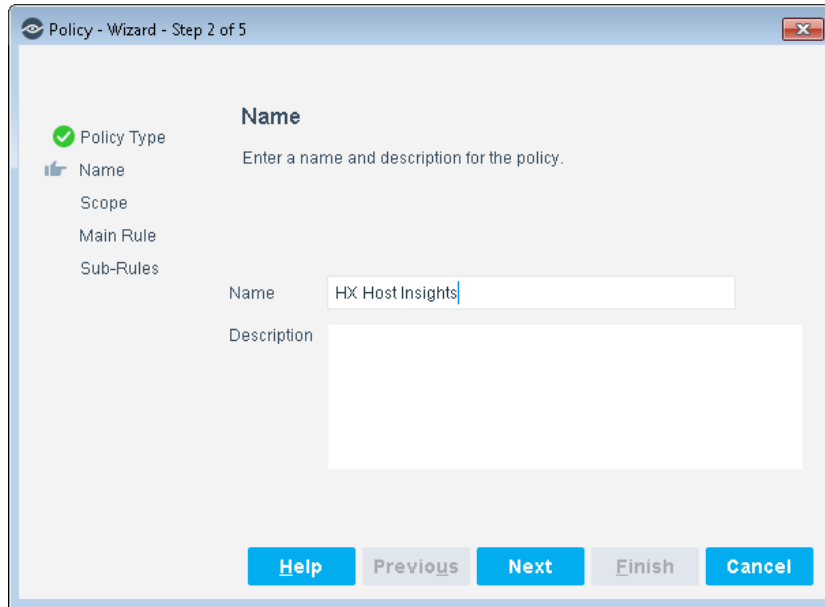
## HX Host Insights Policy Template

Use this template to create a Forescout policy that collects endpoint information using the FireEye HX agent.


### To create a policy:

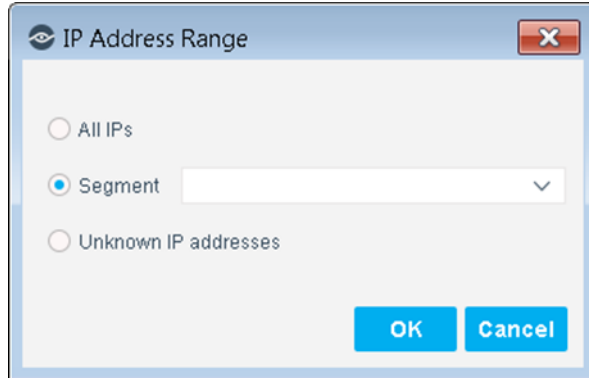
1. Log in to the Console and select **Policy**.
2. Select **Add** from the Policy Manager. The Policy Wizard opens.

- Expand the **FireEye HX** folder and select **HX Host Insights**. The **HX Host Insights** pane opens.
- Select **Next**.



- Define a unique name for the policy you are creating based on this template, and enter a description.
  - Make sure names are accurate and clearly reflect what the policy does. For example, do not use a generic name such as My\_Compliance\_Policy.
  - Use a descriptive name that indicates what your policy is verifying and which actions will be taken.
  - Ensure that the name indicates whether the policy criteria must be met or not met.

 *Avoid having another policy with a similar name. Policy names are displayed in the Policy Manager, the Views pane, NAC Reports and in other features. Precise names make working with policies and reports more efficient.*
- Select **Next**. Both the Scope pane and the IP Address Range dialog box open.
- Use the IP Address Range dialog box to define which endpoints are inspected.

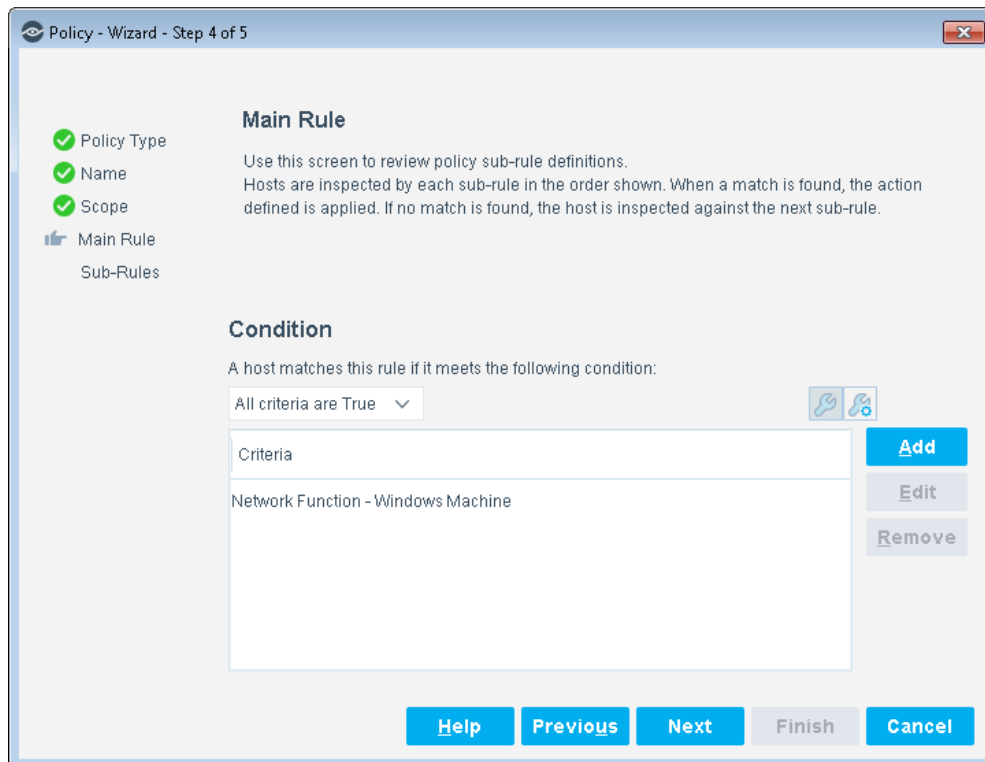


The following options are available:

- **All IPs:** Include all IP addresses in the Internal Network.
- **Segment:** Select a previously defined segment of the network. To specify multiple segments, select **OK** or **Cancel** to close this dialog box, and select **Segments** from the Scope pane.
- **Unknown IP addresses:** Apply the policy to endpoints whose IP addresses are not known. Endpoint detection is based on the endpoint MAC address.

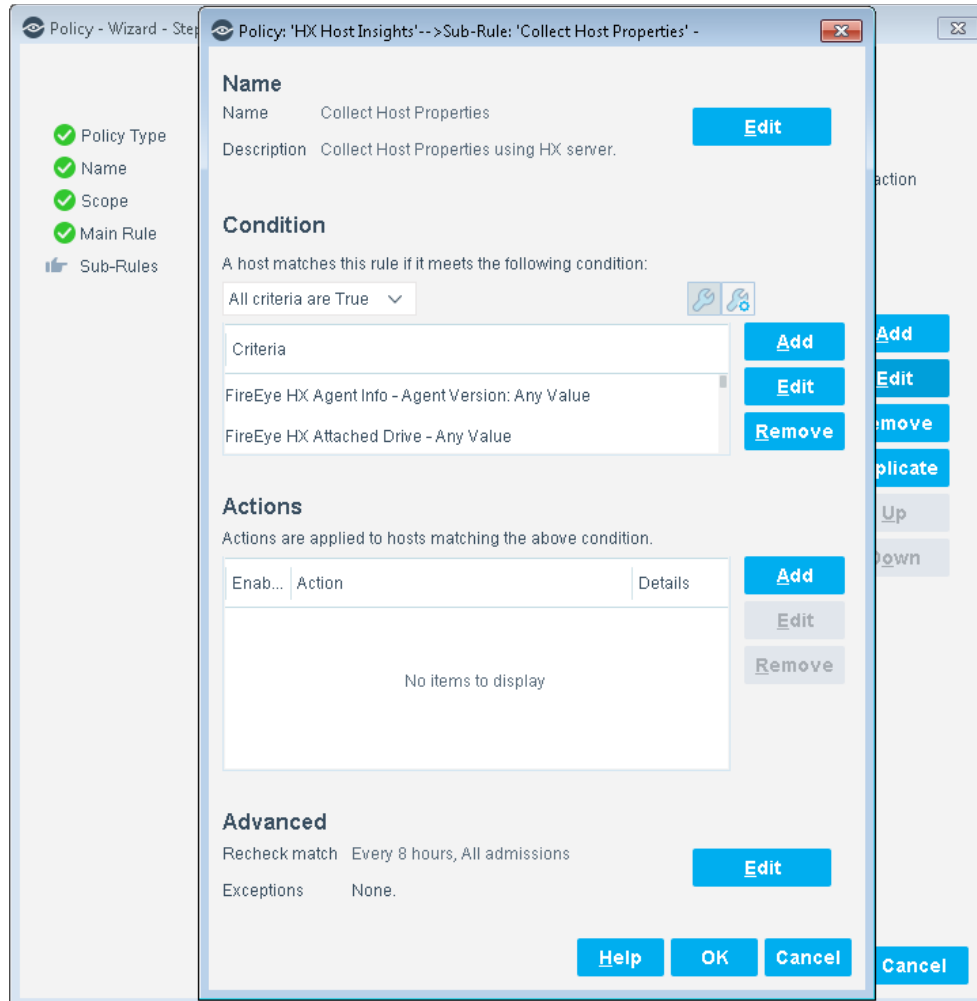
8. Select **OK**. The added range is displayed in the Scope pane.

9. Select **Next**.



The main rule of this policy detects if the endpoint is a Windows machine. Non-Windows machines are not inspected by the sub-rules. For details on the default policy logic, see [How Endpoints Are Detected and Handled](#).

Select **Next**.



The sub-rules of this policy detect endpoints based on host properties provided by this module that report information retrieved from FireEye HX. See [FireEye HX – Policy Properties](#).

**10.** Select **Finish** to create the policy.

**11.** In the Console, select **Apply** to save the policy.

## How Endpoints Are Detected and Handled

This section describes the main rule and sub-rules of the policy created by this template. Policy rules instruct the Forescout platform how to detect and handle endpoints defined in the policy scope.

Endpoints that match the Main Rule are included in the policy inspection. *Endpoints that do not match this rule are not inspected for this policy.* Sub-rules automatically follow up with endpoints after initial detection and handling, streamlining separate detection and actions into one automated sequence.

Sub-rules are performed in order until a match is found. When a match is found, the corresponding action is applied to the endpoint. If the endpoint does not match the requirements of the sub-rule, it is inspected by the next rule.

## Create Custom FireEye HX Policies

Forescout policies are powerful tools used for automated endpoint access control and management.

### Policies and Rules, Conditions and Actions

Forescout policies contain a series of rules. Each rule includes:

- Conditions based on host property values. The Forescout platform detects endpoints with property values that match the conditions of the rule. Several conditions based on different properties can be combined using Boolean logic.
- Actions can be applied to endpoints that match the conditions of the rule.

In addition to the bundled Forescout properties and actions available for detecting and handling endpoints, you can use the Scan and Remediate Known IOCs action and Advanced Threat Detection properties to create custom policies that:

- Scan potentially compromised Windows endpoints for IOCs reported by Forescout eyeExtend for FireEye HX.
- Remediate infected endpoints.

These items are available when you install the IOC Scanner Plugin.

#### To create a custom policy:

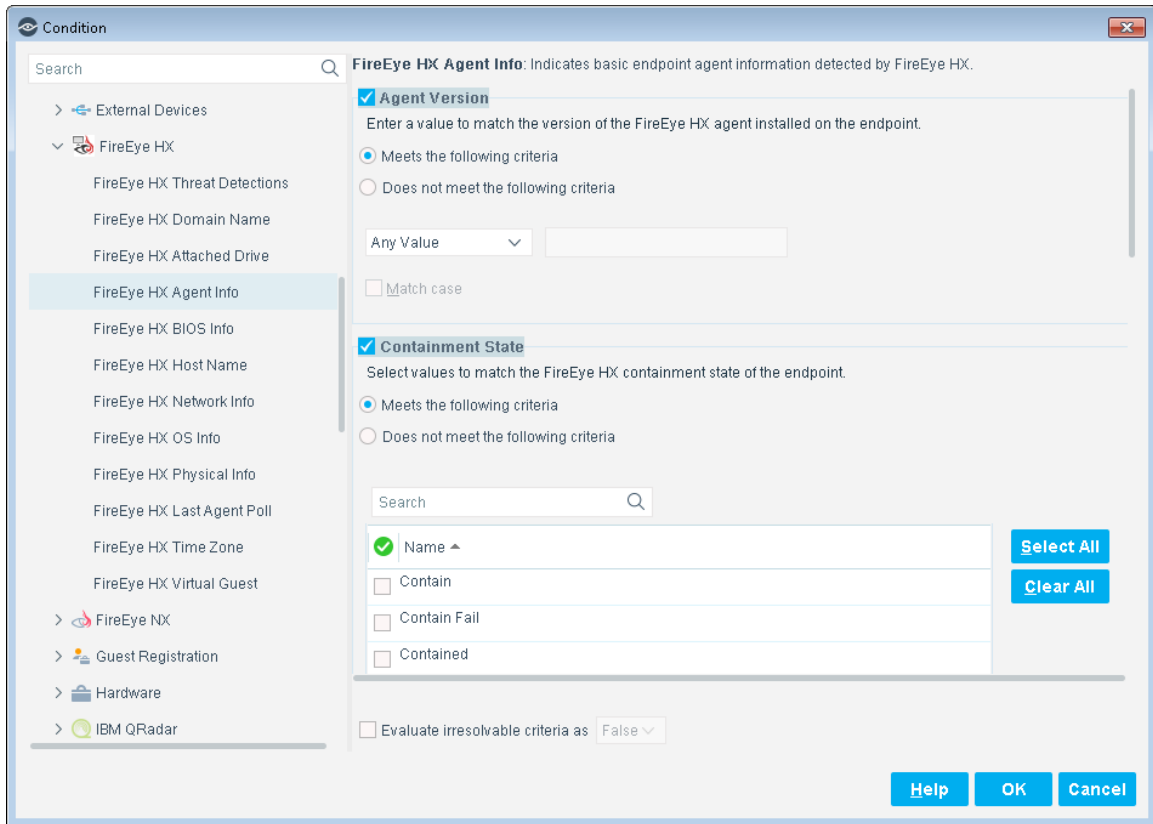
1. In the Console, select **Policy**. The Policy Manager opens.
2. Select **Add** to create a policy, or select **Help** for more information about working with policies.

## FireEye HX – Policy Properties

This section describes the FireEye HX properties that are available when you install Forescout eyeExtend for FireEye HX.

#### To access FireEye HX properties:

1. Go to the Properties tree from the Policy Conditions dialog box.
2. Expand the FireEye HX folder in the Properties tree.



The following properties are available:

<p><b>FireEye HX Agent Info</b></p>	<p>Indicates basic endpoint agent information detected by FireEye HX. The endpoint agent information detected is:</p> <ul style="list-style-type: none"> <li>▪ Agent Version</li> <li>▪ Containment State</li> <li>▪ Agent ID</li> <li>▪ Agent Status</li> </ul>
<p><b>FireEye HX Attached Drive</b></p>	<p>Indicates the drive letter of an attached drive that the FireEye HX agent detected on the endpoint. A Track Changes property indicates changes in the value(s) of this field.</p>

<b>FireEye HX BIOS Info</b>	<p>Indicates host information that the FireEye HX agent detected on the endpoint. The information detected is:</p> <ul style="list-style-type: none"> <li>▪ BIOS Date</li> <li>▪ BIOS Version</li> <li>▪ BIOS Type. Possible values are: <ul style="list-style-type: none"> <li>- BIOS: The FireEye HX Agent reports that Windows is running with a BIOS-type firmware interface.</li> <li>- UEFI: The FireEye HX Agent reports that Windows is running with a UEFI-type firmware interface. If a UEFI firmware is configured to run in BIOS-compatibility mode, the BIOS Type is reported as BIOS and not UEFI.</li> <li>- Unknown: The FireEye HX Agent cannot determine the BIOS type firmware interface.</li> </ul> </li> </ul> <p>A Track Changes property indicates changes in the value(s) of this field.</p>
<b>FireEye HX Domain Name</b>	<p>Indicates the domain name that the FireEye HX agent detected on the endpoint.</p> <p>A Track Changes property indicates changes in the value(s) of this field.</p>
<b>FireEye HX Host Name</b>	<p>Indicates the host name that the FireEye HX agent detected. A Track Changes property is defined for this property.</p>
<b>FireEye HX Last Agent Poll</b>	<p>Indicates the last time the FireEye HX agent on the endpoint connected to the HX server.</p>
<b>FireEye HX Network Info</b>	<p>Indicates network information that the FireEye HX agent detected on the endpoint. The endpoint information detected is:</p> <ul style="list-style-type: none"> <li>▪ Primary IP Address</li> <li>▪ MAC Address</li> <li>▪ IPv6 Address</li> <li>▪ DHCP Server</li> <li>▪ IP Gateway</li> </ul> <p>A Track Changes property indicates changes in the value(s) of this field.</p>
<b>FireEye HX OS Info</b>	<p>Indicates operating system information that the FireEye HX agent detected on the endpoint. The operating system information detected is:</p> <ul style="list-style-type: none"> <li>▪ Product Name</li> <li>▪ Patch Level</li> <li>▪ Bitness</li> <li>▪ OS Date</li> </ul>
<b>FireEye HX Physical Info</b>	<p>Indicates basic endpoint physical information detected by FireEye HX. The physical information detected is:</p> <ul style="list-style-type: none"> <li>▪ Processor</li> <li>▪ Physical Memory</li> <li>▪ Available Memory</li> </ul>

<b>FireEye HX Threat Detections</b>	Indicates threats that FireEye HX detected on the endpoint. You can use this property in Forescout policies to immediate remediate a threat detected by FireEye HX. For example, create a policy that detects if FireEye HX has detected a Critical severity threat, and trigger remediation when an endpoint meets this condition. The threat information detected is: <ul style="list-style-type: none"> <li>▪ Threat Severity</li> <li>▪ Threat Name</li> <li>▪ Threat File Name</li> <li>▪ Threat File Hash</li> <li>▪ Threat Hash Type</li> </ul>
<b>FireEye HX Time Zone</b>	Indicates the time zone that the FireEye HX agent detected on the endpoint. A Track Changes property indicates changes in the value(s) of this field.
<b>FireEye HX Virtual Guest</b>	Indicates if the FireEye HX agent detected a virtual guest operating system running on the endpoint. A Track Changes property indicates changes in the value(s) of this field.

### Related IOC Scanner Plugin Properties

In addition to the properties provided by this module, the IOC Scanner Plugin provides the IOCs Detected by CounterACT property, which contains data from threats detected by this module. Refer to the *Forescout Core Extensions Module: IOC Scanner Plugin Configuration Guide* for property details.

## Display Inventory Data

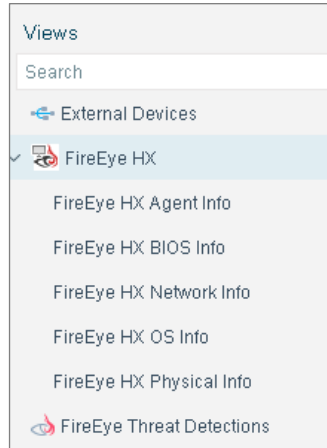
Use the Asset Inventory to view a real-time display of vulnerabilities detected by FireEye HX. The Asset Inventory lets you:

- Broaden your view of the organizational network from device-specific to activity-specific.
- View endpoint information reported by the FireEye HX agent.
- View endpoints that have been detected with specific threats.
- Easily track FireEye HX threat detection activity.
- Incorporate inventory detections into policies.

### To access the Access Inventory:


1. In the Console, select **Access Inventory**.
2. In the Views pane, expand the **FireEye HX** folder.





Based on the FireEye HX properties, the following information is available:

- FireEye HX Agent Info
- FireEye HX BIOS Info
- FireEye HX Network Info

 *For the FireEye HX Network Info Inventory view, the FireEye HX agent reports on both IPv4 and IPv6 network interfaces. When the agent reports on IPv6 interfaces, no value is reported for the Primary IP Address field. You can use the Last Host field to identify IPv4 and IPv6 network interfaces associated with a single endpoint.*

- FireEye HX OS Info
- FireEye HX Physical Info
- FireEye HX Threat Detections

Refer to *Working on the Console > Working with Inventory Detections* in the *ForeScout Administration Guide* or the Console Online Help for information about working with the ForeScout Asset Inventory.

## Core Extensions Module Information

The ForeScout Core Extensions Module provides an extensive range of capabilities that enhance the core ForeScout solution. These capabilities enhance detection, classification, reporting, troubleshooting and more. The following components are installed with the Core Extensions Module:

Advanced Tools Plugin	Dashboard Plugin	NBT Scanner Plugin
CEF Plugin	Device Classification Engine	Packet Engine
DHCP Classifier Plugin	External Classifier Plugin	Reports Plugin
DNS Client Plugin	Flow Analyzer Plugin	Syslog Plugin
DNS Enforce Plugin	Flow Collector	Technical Support Plugin

DNS Query Extension Plugin    IOC Scanner Plugin    Web Client Plugin  
IoT Posture Assessment Engine

The Core Extensions Module is a Forescout Base Module. Base Modules are delivered with each Forescout release. This module is automatically installed when you upgrade the Forescout version or perform a clean installation.

## Additional Forescout Documentation

For information about other Forescout features and modules, refer to the following resources:

- [Documentation Downloads](#)
- [Documentation Portal](#)
- [Forescout Help Tools](#)

### Documentation Downloads

Documentation downloads can be accessed from the [Forescout Resources Page](#), or one of two Forescout portals, depending on which licensing mode your deployment is using.

- **Per-Appliance Licensing Mode** – [Product Updates Portal](#)
- **Flexx Licensing Mode** – [Customer Portal](#)

 *Software downloads are also available from these portals.*

#### To identify your licensing mode:

- From the Console, select **Help > About Forescout**.

### Forescout Resources Page

The Forescout Resources Page provides links to the full range of technical documentation.

#### To access the Forescout Resources Page:

- Go to <https://www.Forescout.com/company/resources/>, select **Technical Documentation** and search for documents.

### Product Updates Portal

The Product Updates Portal provides links to Forescout version releases, Base and Content Modules, and eyeExtend products, as well as related documentation. The portal also provides a variety of additional documentation.

#### To access the Product Updates Portal:

- Go to <https://updates.forescout.com/support/index.php?url=counteract> and select the version you want to discover.

## Customer Portal

The Downloads page on the Forescout Customer Portal provides links to purchased Forescout version releases, Base and Content Modules, and eyeExtend products, as well as related documentation. Software and related documentation will only appear on the Downloads page if you have a license entitlement for the software.

### To access documentation on the Forescout Customer Portal:

- Go to <https://Forescout.force.com/support/> and select **Downloads**.

## Documentation Portal

The Forescout Documentation Portal is a searchable, web-based library containing information about Forescout tools, features, functionality, and integrations.

- *If your deployment is using Flexx Licensing Mode, you may not have received credentials to access this portal.*

### To access the Documentation Portal:

- Go to [https://updates.forescout.com/support/files/counteract/docs\\_portal/](https://updates.forescout.com/support/files/counteract/docs_portal/) and use your customer support credentials to log in.

## Forescout Help Tools

Access information directly from the Console.

### Console Help Buttons

Use context sensitive *Help* buttons to quickly access information about the tasks and topics you are working with.

### Forescout Administration Guide

- Select **Forescout Help** from the **Help** menu.

### Plugin Help Files

- After the plugin is installed, select **Tools > Options > Modules**, select the plugin and then select **Help**.

### Online Documentation

- Select **Online Documentation** from the **Help** menu to access either the [Forescout Resources Page](#) (Flexx licensing) or the [Documentation Portal](#) (Per-Appliance licensing).