FORESCOUT

Forescout

Classify Devices

How-to Guide

Forescout version 8.1

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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

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About Device Classification

Forescout provides powerful tools that let you continuously track, control and profile devices connected to your network.

Follow the step-by-step procedures in this guide to create a policy that:

- Resolves several endpoint classification properties, including the following:
  - Function
  - Operating System
  - Vendor and Model
- Demonstrates a broad policy-based classification of the devices according to the device types commonly found in many environments.

It is recommended to use the wizard-based *Primary Classification* policy template to create a policy that fully leverages the Forescout classification technology, and then enhance the policy to meet your needs. For example, if your environment contains many IP-connected security cameras from a particular vendor, you may want to create an additional sub-rule to group those devices.

After the policy is run, you can use Forescout tools to review an extensive range of information about each device and about the users connected to them.

> *This How-to guide provides basic configuration instructions designed for a quick setup. For more information on the extended configuration options, refer to the Forescout Administration Guide.*

Upgrading from Earlier Versions

Upgraded versions of Forescout might include legacy Asset Classification policies that provide limited information about endpoints. To take advantage of more precise classification profiles, it is recommended to create and run Primary Classification policies.

The Primary Classification policy provides more comprehensive classification in your environment than legacy Asset Classification policies. To use it as your primary classification policy, ensure that the Add to Group actions are enabled in the Primary Classification policy, and use the Policy Manager to stop your Asset Classification policies.

Groups Created by the Primary Classification Policy

Organizing all the connected devices into CounterACT groups makes it easier to create and manage other policies and track policy results. The following groups are created and populated by the *Add to Group* actions in the *Primary Classification* policy:

- CounterACT Devices
- NAT devices: Devices that may hide other devices.
- Printers
- VoIP devices

- Network devices: Networking equipment, such as WLAN controllers, routers, switches, and wireless controllers.
- Storage
- Windows
- Macintosh
- Linux/Unix
- Mobile devices
- Unclassified: If the Forescout platform does not know to which category an endpoint is associated. This may happen, for example, if network devices are new.

Prerequisites

This solution requires the following:

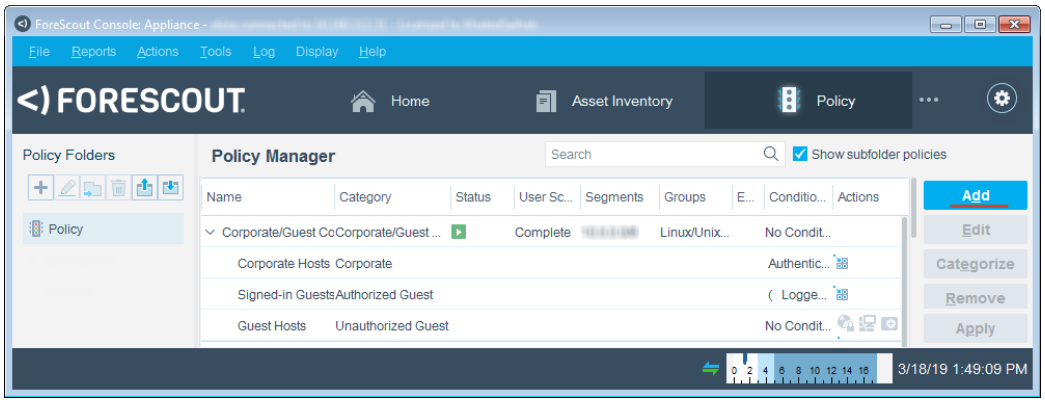
- Forescout version 8.1
- Forescout Core Extensions Module version 1.1, including the Device Classification Engine

Create a Primary Classification Policy

Follow these steps to detect and classify profiles of connected devices using a policy template.

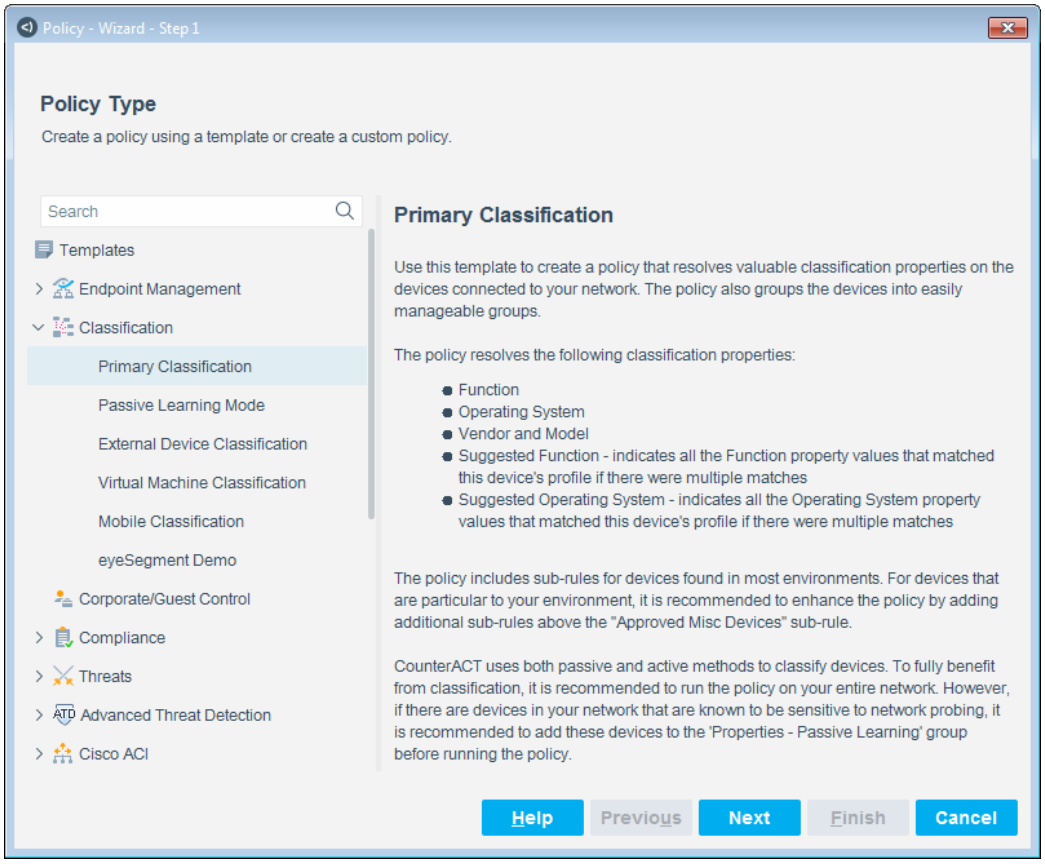
Select the Primary Classification Template

1. Log in to the Forescout Console.
2. On the Console toolbar, select the Policy tab. The Policy Manager opens.



3. Select **Add**. The Policy Wizard opens, guiding you through policy creation.

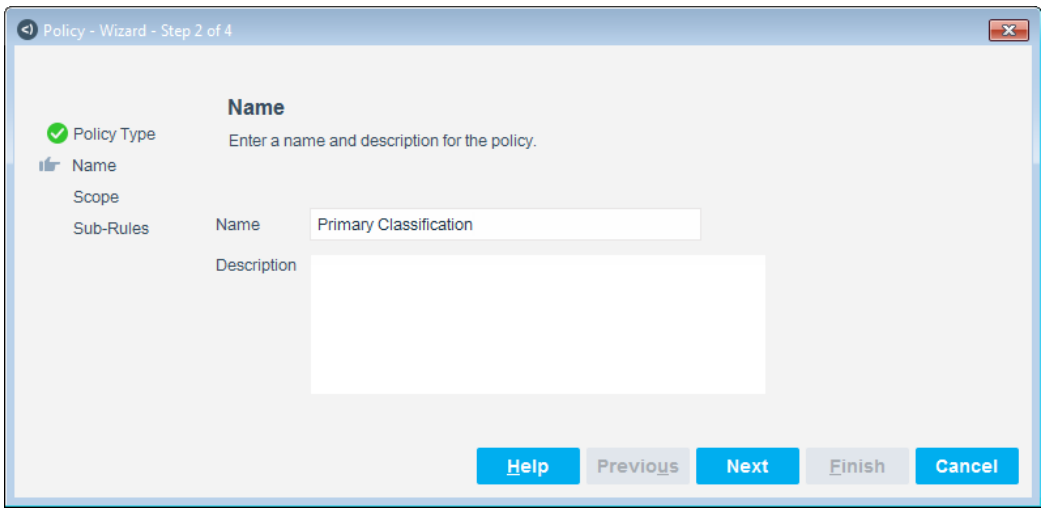
4. Under **Templates**, expand the **Classification** folder and select **Primary Classification**.



5. Select **Next**. The Name pane opens.

2 Name the Policy

1. In the Name pane, a default policy name appears in the **Name** field.



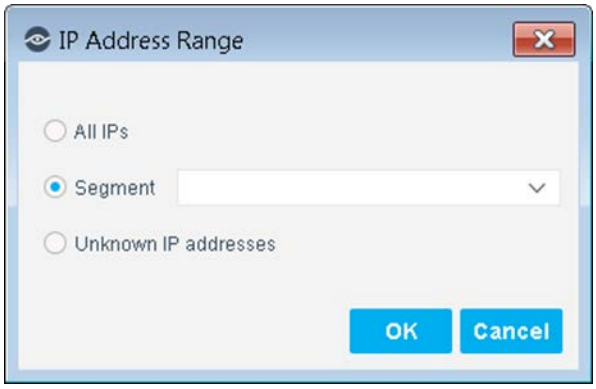
2. Accept the default name or create a new unique name, and add a description.
3. Select **Next**. The Scope pane and the IP Address Range dialog box open.

Choose the Endpoints to Inspect

To fully benefit from classification, it is recommended to run a classification policy on your entire network.

*If there are endpoints in your network that are known to be sensitive to network probing, it is recommended to the **Properties - Passive Learning** group.*

1. Use the IP Address Range dialog box to define which endpoints are inspected.



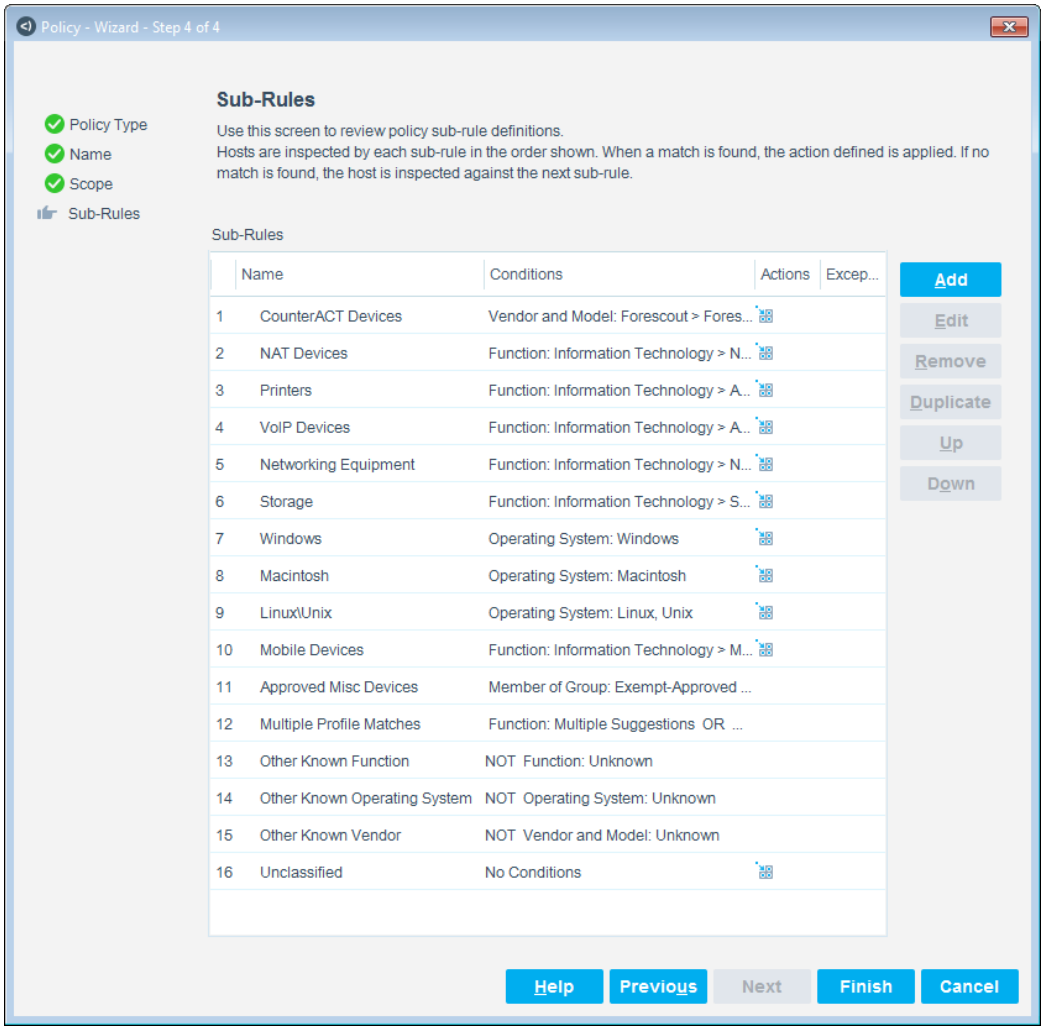
The following options are available:

- **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.

2. Select **OK**. The added range appears in the Scope list.
3. To filter the specified ranges or add exceptions, select (**Advanced**).
4. Select **Next**. The Sub-Rules pane opens.

Finish Policy Creation

The policy sub-rules instruct the Forescout platform how to detect endpoints (Conditions) and handle endpoints (Actions). Sub-rules are performed in order until a match is found.

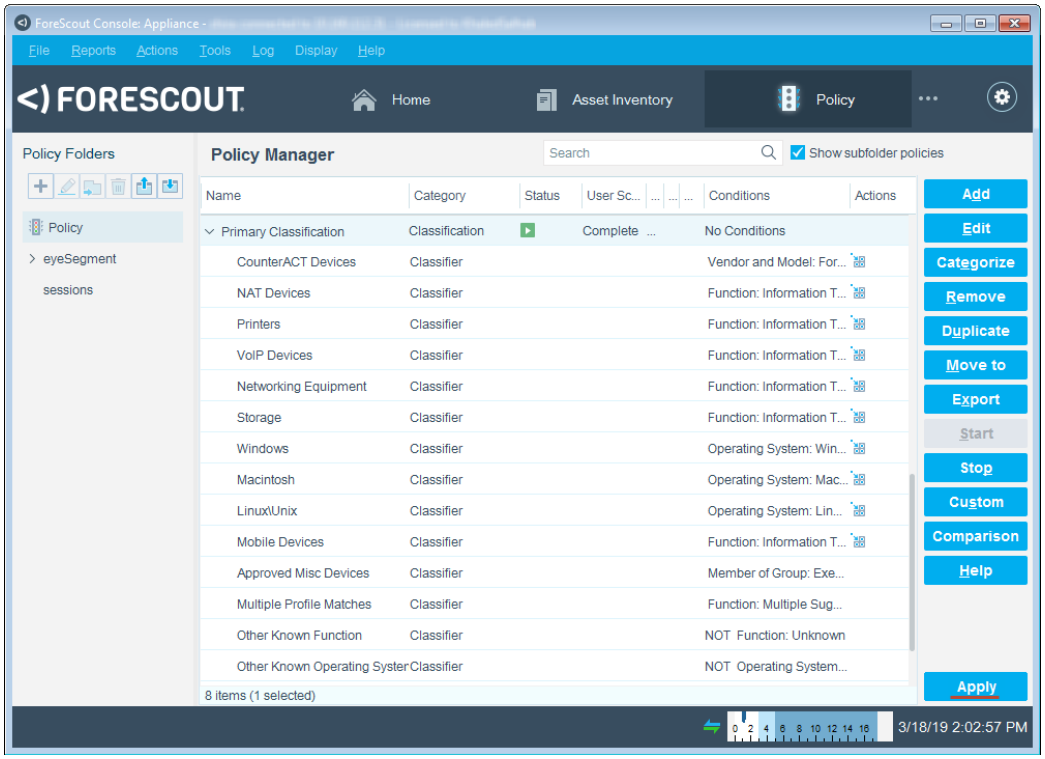


The sub-rule conditions of these policies detect endpoints of the specific device type. The actions sort the detected endpoints into their respective device groups.

If a device does not meet the criteria for any group or if the Forescout platform cannot evaluate the endpoint, it is Unclassified.

> *The Primary Classification template includes a sub-rule that indicates if a member of the* Exempt-Approved Misc Devices *group does not meet the criteria for a classification category. It is recommended to add to this group all the endpoints that the Forescout platform does not classify, but that you know about and specifically do not want to fall into the Unclassified group.*

1. Select **Finish**. The policy automatically appears highlighted in the Policy Manager, where it can be activated.

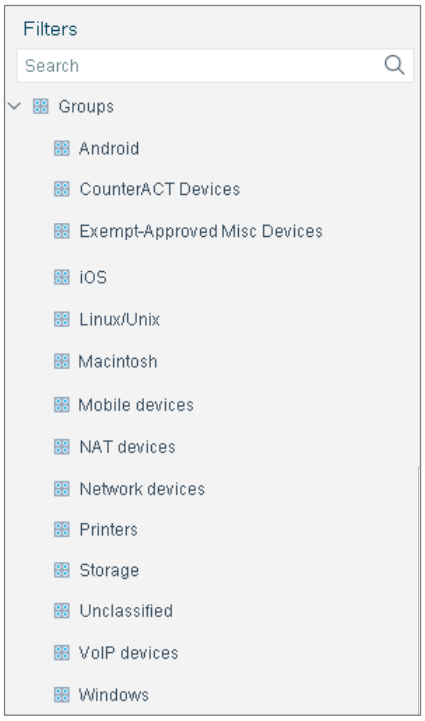


Activate the Policy

1. Select **Apply**. The policy is activated.

   The Forescout platform detects the connected devices at the addresses you specified in the Scope pane and resolves their classification properties. It also adds them to their appropriate groups.

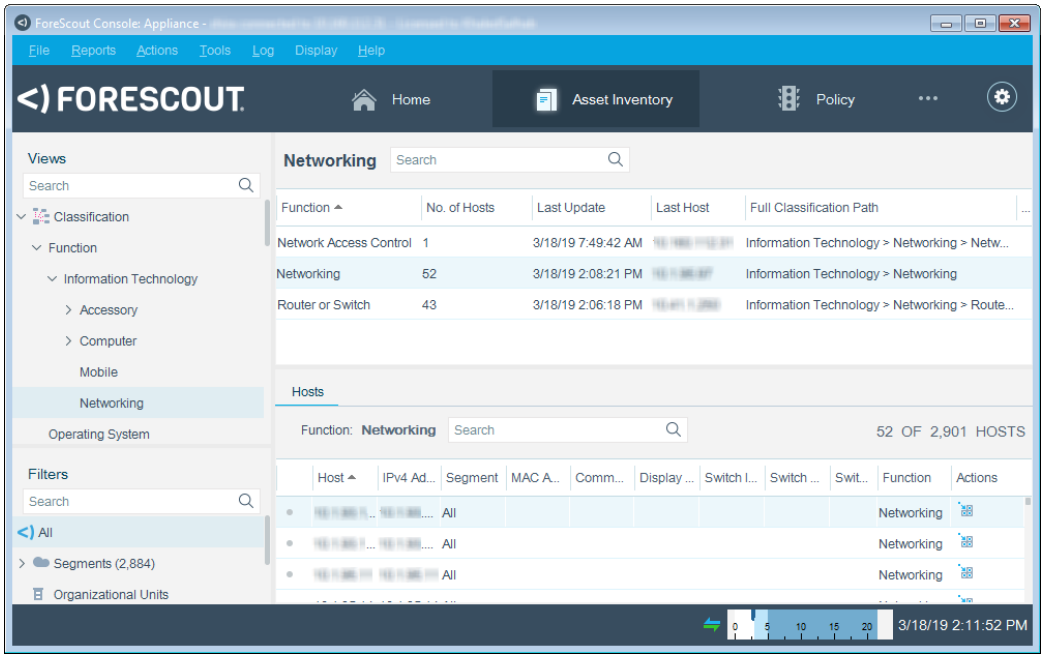
2. To see the created groups, on the Console toolbar, select the Home tab, and in the Filters pane, expand the **Groups** folder and scroll to view the groups.



View Endpoints per Classification Metric

To view the connected endpoints per classification metric:

1. On the Console toolbar, select the Asset Inventory tab.
2. In the Views pane, expand the Classification node and select a metric.

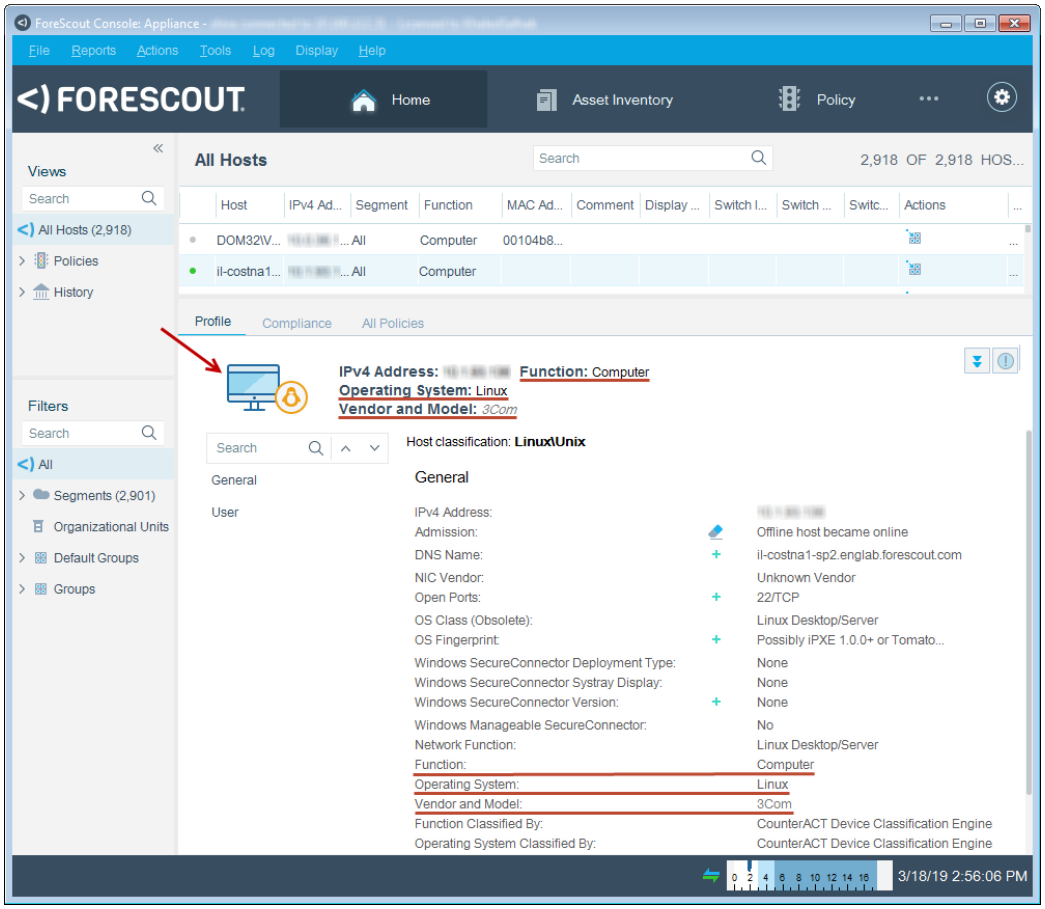


View Classifications per Endpoint

After activating a classification policy, you can view an extensive range of details about connected endpoints.

To evaluate devices:

1. On the Console toolbar, select the Home tab.
2. In the Views pane, expand the **Policy** folder and select the policy containing your device classification policy.
3. In the Detections pane, select a host. Host information is displayed in the Details pane.



4. To customize the information displayed about hosts and users connected to assets, right-click a column heading, select **Add/Remove Columns**, and select the information of interest to you. You can also reorder the columns.

Fine-Tune Device Classification

After policies are run, you can manually fine-tune the device classification when a *Function* or *Operating System* property value set by the Device Classification Engine is not the optimal classification for your compliance and control policies.

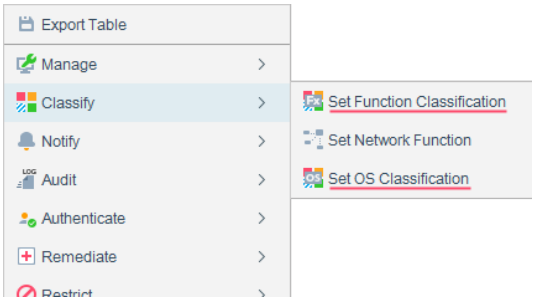
- Improve Classification for Individual Endpoints
- Improve Classification Using a Policy

Improve Classification for Individual Endpoints

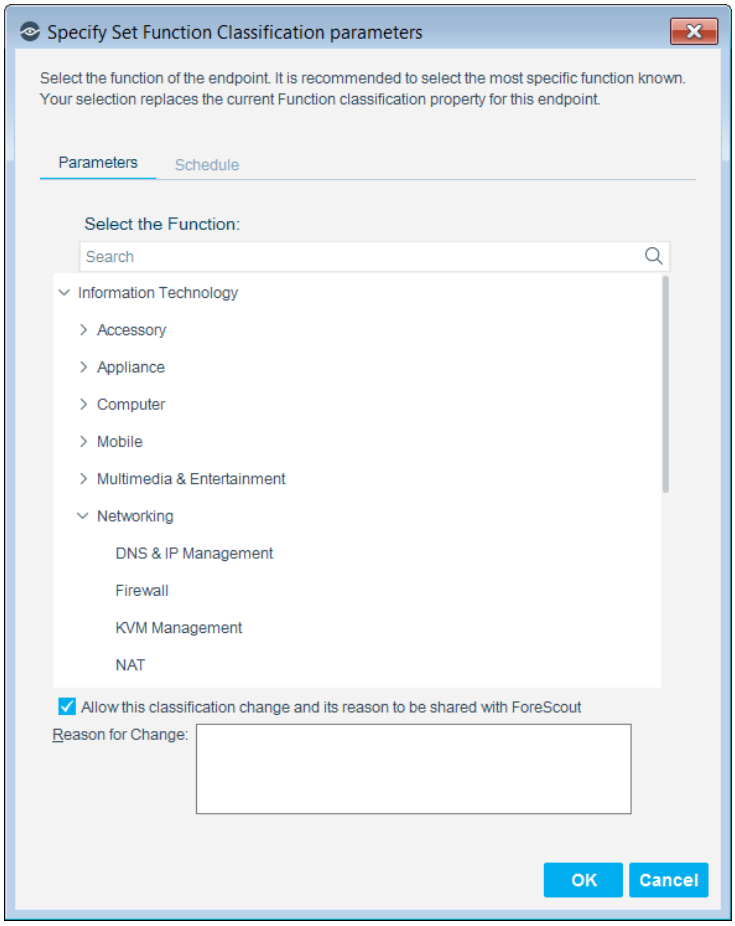
To re-classify devices:

1. In the Views pane of the Console Home tab, expand the Policies folder and select your device classification policy.

2. In the Detections pane, right-click one or more devices to be re-classified to a common value, and select **Classify > Set Function Classification** or **Set OS Classification**.



3. In the Parameters tab, select the most detailed correct function or operating system classification from the list.



4. If you agree to provide Forescout with information regarding the change, select the checkbox, and enter:

   – the reason why the selected classification is appropriate for this endpoint
   – the ideal classification for this endpoint, if it is not in the classification list

   The feedback that you enter in this field will be sent to Forescout to help provide better classification services.

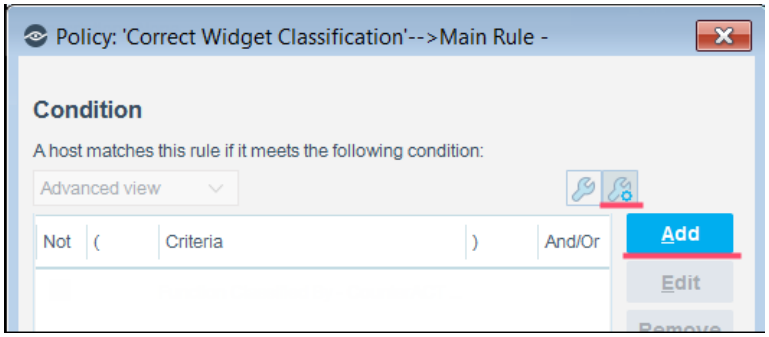
To ensure that your changes are shared with Forescout, first go to Tools > Options > Advanced > Data Sharing, and select ***Allow selected endpoint properties to be shared with ForeScout****. For more information about data sharing, refer to* The Forescout Research and Intelligent Analytics Program *section in the Forescout Administration Guide. See Additional Forescout Documentation for information on how to access the guide.*

5. Select **OK**.

Improve Classification Using a Policy

To re-classify devices:

1. In the Console Policy tab, add a custom policy, and define the endpoint scope.
2. In the policy rule Condition area, select (**Advanced**).

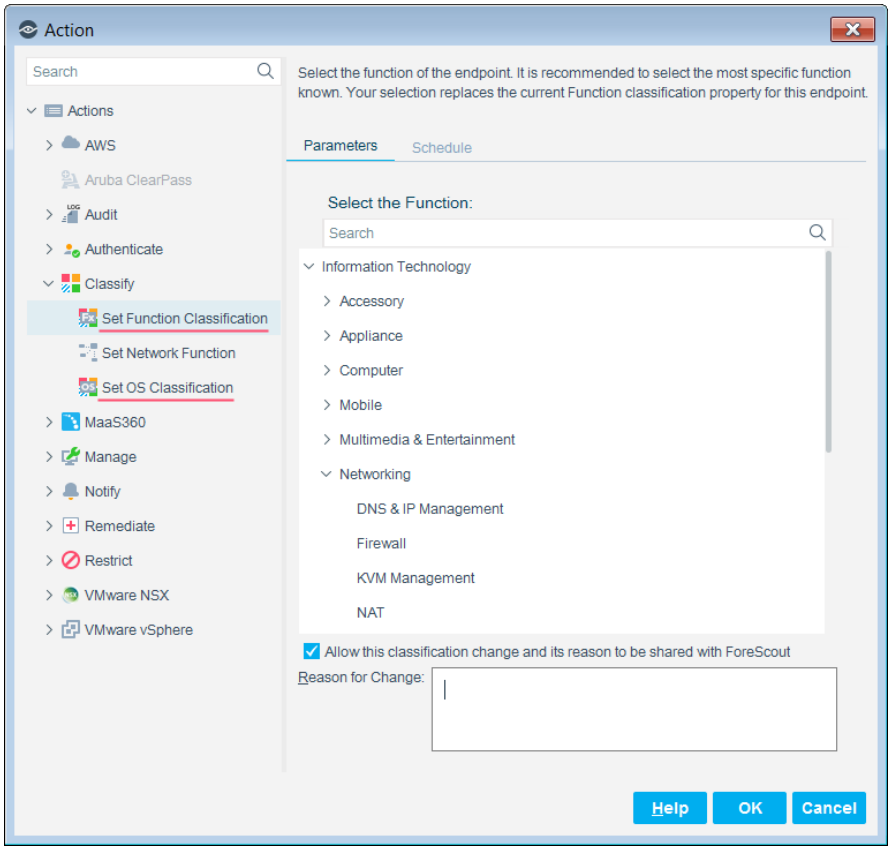


3. In Condition area, create the following condition and enclose it within parentheses:
   a. The **Classification (Advanced) > Function Classified By** or **Classification (Advanced) > Operating System Classified By** property equals **CounterACT Device Classification Engine**.
   b. The **Classification > Function** or **Classification > Operating System** property equals the specific classification that needs to be changed.
   c. If necessary, other conditions that ensure that only the intended devices match the policy rule.
4. In Condition area, create another condition and enclose it within parentheses:
   a. The **Classification (Advanced) > Function Classified By** or **Classification (Advanced) > Operating System Classified By** property equals **Policy or manual action**.
   b. The **Classification > Function** or **Classification > Operating System** property equals the correct classification for devices that match the first condition.

   The second condition ensures that the policy does not undo classification changes already applied by this policy.

5. Between the two conditions, change **AND** to **OR**.

6. In the Actions area, add **Classify > Set Function Classification** or **Set OS Classification**.



7. In the Parameters tab, select the most detailed correct function or operating system classification for devices that match the first condition.
8. If you agree to provide Forescout with information regarding the change, select the checkbox, and enter:
   - the reason why the selected classification is appropriate for this endpoint
   - the ideal classification for this endpoint, if it is not in the classification list

The feedback that you enter in this field will be sent to Forescout to help provide better classification services.

To ensure that your changes are shared with Forescout, first go to Tools > Options > Advanced > Data Sharing, and select ***Allow selected endpoint properties to be shared with ForeScout****. For more information about data sharing, refer to* The Forescout Research and Intelligent Analytics Program *section in the Forescout Administration Guide. See Additional Forescout Documentation for information on how to access the guide.*

9. Select **OK** and apply the policy.

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/ 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).