



# ForeScout

## Cisco PIX/ASA Firewall Integration Module

### Configuration Guide

Version 2.2



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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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# About the Cisco PIX/ASA Firewall Integration Module

The Forescout® Cisco PIX/ASA Firewall Integration Module forwards host blocking requests to an external Cisco PIX or ASA firewall.

Blocking is implemented using access lists that reference a set of object groups. The Forescout platform maintains the object groups, adding and removing hosts from the group as needed.

## Requirements

The module requires the following:

- Forescout version 8.1.
- A firewall user account unique to Forescout. See [Configuring the Firewall](#) for privileges and access requirements for this user.
- (Flexx licensing) A valid Forescout eyeControl (ForeScout CounterACT Control) license, to use enforcement actions provided by the plugin/component. If you do not have this license, these actions will be disabled in the Console. Refer to the *Forescout Flexx Licensing How-to Guide* for more information about managing Flexx licenses and how to request/purchase this license.

## Configuring the Firewall

Enter the following commands at each firewall while in configuration mode.

 *Record these values, and use them to configure Forescout communication with the firewall as described in [Install and Configure the Module](#).*

1. Enable SSH Access from a CounterACT Device:

Refer to Cisco documentation for general instructions on how to enable SSH access to the firewall. You will probably need to issue the following sequence of commands:

```
ca gen rsa key 1024
ca save all
aaa authentication ssh console LOCAL
write mem
```

To enable SSH access from a CounterACT device, select INSIDE or OUTSIDE depending on the interface to which the CounterACT device connects.

2. Define a user name (the default is `forescout`), password and restrictive privilege level (`priv_level`) (the default is 4) for the CounterACT device user:  
`username <user_name> password <user_password> privilege <priv_level>`

3. Define the privilege level permissions:

```
enable password <priv_password> level <priv_level>
privilege configure level <priv_level> mode enable command configure
privilege configure level <priv_level> command object-group
privilege show level <priv_level> command object-group
privilege configure level <priv_level> command network-object
privilege configure level <priv_level> command port-object
privilege configure level <priv_level> command pdm
```

## Install and Configure the Module

This section describes how to install and configure the Cisco PIX/ASA Firewall Integration Module.

### 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.*

**To configure:**

1. Select **Cisco PIX/ASA Firewall Integration** and then select **Configure**.  
The Select Appliances dialog box opens.
2. Select the required CounterACT devices and then select **OK**.  
The Cisco PIX/ASA Firewall Integration Module Configuration dialog box opens.

The following table summarizes Cisco PIX/ASA Firewall Integration configuration options:

Field Name	Description
Firewall name	The name of the PIX or ASA firewall
Firewall Address	The IP address of the PIX or ASA firewall
User	The CounterACT device SSH user name
User Password	The CounterACT device SSH user password
Privilege Level	The CounterACT device user privilege level
Privilege Level Password	The password to obtain the privilege level
Network Group Name Prefix	A label that identifies network object groups used by the Forescout platform. This prefix is combined with a numerical value to specify an object group. Together, the prefix and suffix define a set of object groups. See <a href="#">Apply Firewall Access Lists to a Host</a> for more information.

Field Name	Description
SSH Port	The port number for secure shell communication.
SSH version	The version of SSH used to access the PIX or ASA firewall
Maximum group size	The maximum size of a network object group
Show net group members on test	Specifies whether to list the members of the network object group when you test the module
Using clear local-host command.	Specifies whether to run the <code>clear local-host</code> command at the firewall after a host is added to or removed from a network group. This command clears all existing connections and NAT sessions associated with the endpoint on its local network segment.

- (Optional) Repeat Steps [0](#) and [2](#) to configure communication between remaining CounterACT devices and additional PIX/ASA firewalls.

## Verify That the Module Is Running

After configuring the module, verify that it is running.

### To verify:

- Select **Tools > Options** and then select **Modules**.
- Navigate to the module and select **Start** if the module is not running.

## Apply Firewall Access Lists to a Host

This module provides an action that adds a host to a network object group defined on PIX/ASA firewalls. These object groups are referenced by access list commands.

### To add a host to an access list:

- Define a network object group for use by the Forescout platform on the firewall.
- Define an access-list statement that refers to the Forescout platform network object group.  
Access list restrictions apply to all endpoints in the network object group.
- Create a policy that uses the [Cisco PIX/ASA Access-list Action](#) to assign hosts to the Forescout platform network object group.
  - Hosts that satisfy policy conditions are added to the object group on the target firewall(s). Access list restrictions apply to these hosts.
  - When hosts no longer satisfy policy conditions, they are removed from the object group. Access list restrictions no longer apply to these hosts.

## Naming Forescout Object Groups

Use this naming convention when you define network object groups for use by the Forescout platform.

The name of the network object groups used by the Forescout platform is constructed using the values of two string variables as follows:

**<Network\_Group\_Name><Netgroup\_suffix>**

- The **Network Group Name** is a value you specified when you configured the firewall in the module. The default value for this string is `FS_GROUP_`.
- A numerical **Netgroup suffix** you specify in the *Cisco PIX/ASA Access-list* action.

This creates a series of object group names. For example, the default **Network Group Name** string `FS_GROUP_` can be combined with various **Netgroup suffix** values to yield the following series of object groups:

`FS_GROUP_0`      `FS_GROUP_1`      `FS_GROUP_2` ...

The **Netgroup suffix** value is policy-specific: you define the value when you use the *Cisco PIX/ASA Access-list* action in a Forescout platform policy. This means that each policy can use its own object group. At the firewall, you can apply different access list restrictions to each object group.

For example, you can configure the firewall to block internal network access for all members of `FS_GROUP_0`, and to block access to the finance server for all members of `FS_GROUP_1`. Different policies add hosts to each group.

## Sample Firewall Commands

The following sample commands define a network object group that uses the Forescout platform's naming convention:

```
object-group network FS_GROUP_3
network-object host 0.0.0.1
```

- 📄 *You cannot define an empty group. A dummy host 0.0.0.1 is added to the group.*

The following sample code applies access list restrictions to the Forescout network object group defined in the previous command:

```
access-list 101 deny ip object-group FS_GROUP_3 any
access-group 101 in interface outside
```

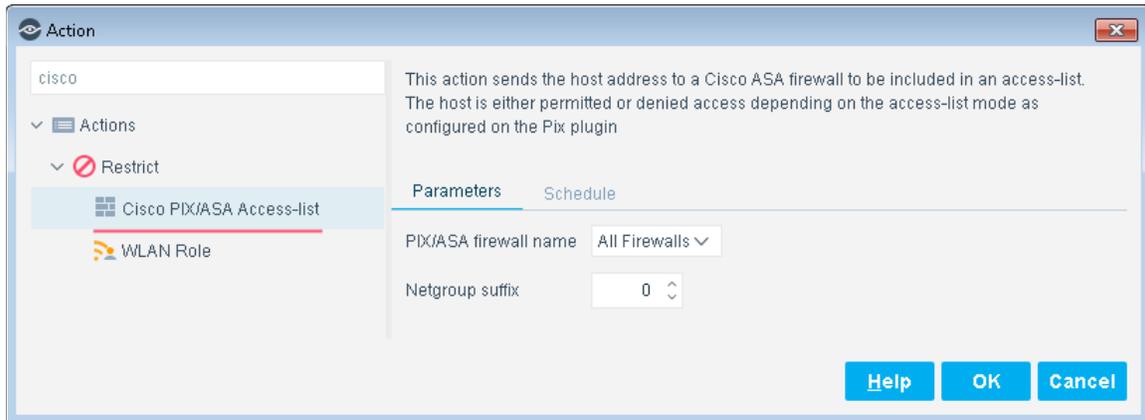
The access-list restrictions apply to the hosts in the `FS_GROUP_3` network object group.

Remember to:

- Define all target firewalls in the module configuration pane.
- Copy these object group and access-list definitions to all the firewalls on which you want to implement the action.

## Cisco PIX/ASA Access-list Action

This action adds hosts that satisfy the conditions of a policy to a network object group on PIX/ASA firewalls. This object group is referenced by a predefined access list. (Flexx licensing) To use this action, ensure that you have a valid *Forescout eyeControl* license. Refer to the *Forescout Flexx Licensing How-to Guide* for more information about managing licenses.



The following options are available for this action:

- **PIX/ASA firewall name** – specifies the firewall on which the host is added to the network object group. Select **All Firewalls** to add the host on all firewalls defined in the Forescout platform.
- **Netgroup suffix** – a numerical suffix that specifies the target network object group. This suffix is combined with the Network Group Name label configured for the module.

Select the **Schedule** tab to apply standard action scheduling options to this action.

## 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).