

# **User Control with the Passive Identity Agent**

The following topics discuss how to configure and use the passive identity agent.

- The Passive Identity Agent Identity Source, on page 1
- Deploy the Passive Identity Agent, on page 3
- How to Create a Passive Identity Agent Identity Source, on page 8
- Configure the Passive Identity Agent, on page 10
- Monitor the Passive Identity Agent, on page 22
- Manage the Passive Identity Agent, on page 24
- Troubleshoot the Passive Identity Agent, on page 25
- Security Requirements for the Passive Identity Agent, on page 26
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## The Passive Identity Agent Identity Source

The passive identity agent identity source sends session data from Microsoft Active Directory (AD) to the Cloud-Delivered Firewall Management Center. All you need is a supported Microsoft AD setup as discussed in About Realms and Realm Sequences.

The passive identity agent version 1.0 sends IPv4 user sessions only but Version 1.1 sends IPv4 and IPv6 user sessions.



Note

You do not need to configure the Cisco Identity Services Engine (ISE) to use this identity source.

### Passive identity agent roles

The passive identity agent supports the following roles:

- Standalone: A passive identity agent that is not part of a redundant pair. A standalone agent can download users and groups from multiple Active Directory servers and domain controllers, provided the software is installed on all of them.
- Primary: (Primary agent in a redundant pair.) Can be installed on a Microsoft AD domain controller, directory server, or any network client.

Handles all communication with the Cloud-Delivered Firewall Management Center unless it stops communicating, in which case communication is handled by secondary agents.

• Secondary: (Secondary, or backup, agent in a redundant pair.) Can be installed on a Microsoft AD domain controller, directory server, or any network client.

Monitors the health of the primary agent and takes over if the primary agent stops communicating with the Cloud-Delivered Firewall Management Center.

### Passive identity agent system requirements

The passive identity agent requires the following:

- If you install the passive identity agent on a Windows Active Directory server, the server must run Windows Server 2008 or later.
- If you install it on a Windows client attached to the domain, the client must run Windows 8 or later.
- The system clock on all systems must be synchronized. We strongly recommend using the same NTP servers on all of them. This means:
  - The Security Cloud Control.

For more information, see Configure NTP Server.

- All Windows Active Directory servers and domain controllers.
- The machine on which the passive identity agent is installed.
- Security Cloud Control must run November 8, 2024 or later.
- You must enable Snort 3 on the Secure Firewall Threat Defense devices.

#### **Passive identity agent limitations**

The passive identity agent the following limitations:

- Up to 10 agents simultaneously
- One passive identity agent identity source can monitor up to 50 AD directories
- Up to 300,000 concurrent user sessions
- IPv6 addresses are *not* supported (passive identity agent 1.0)
- IPv6 addresses are supported (passive identity agent 1.1)

### Deploy the passive identity agent

For information about deployment options, see Deploy the Passive Identity Agent, on page 3.



Note

We recommend you use the latest version of the passive identity agent. To see the available versions, go to software.cisco.com. To upgrade the passive identity agent, see Upgrade the Passive Identity Agent Software, on page 22

## **Deploy the Passive Identity Agent**

You can install the Passive Identity Agent software on any machine that is part of a Microsoft Active Directory (AD) domain you want to use for user awareness and control. In other words, you can install it on any of the following:

- The Microsoft Active Directory server
- A domain controller
- A client connected to the network that is neither the directory server nor a domain controller

Any particular passive identity agent can monitor one or several Active Directory domain controllers in the same domain.

The machine on which the passive identity agent must communicate with the Cloud-Delivered Firewall Management Center using the TLS/SSL protocol. For more information, see Internet Access Requirements for the Passive Identity Agent, on page 27.

### Types of agents

You can configure the following types of agents on the Microsoft AD directory server, domain controller, or on any client connected to the domain:

- Standalone agent: One agent that can monitor one or several Active Directory domain controllers in the same domain.
- Primary agent and secondary agent that can monitor one or several AD domain controllers in the same domain: To provide redundancy, you can install a primary and secondary agent on different machines.
   The primary is responsible for communicating with the Cloud-Delivered Firewall Management Center but if communication fails, the secondary agent takes over.

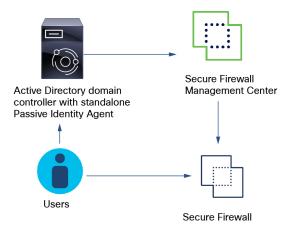
See one of the following topics for more information.

#### **Related Topics**

Simple Passive Identity Agent Deployment, on page 3
Single Passive Identity Agent Monitoring Multiple Domain Controllers, on page 4
Multiple Passive Identity Agents Monitoring Multiple Domain Controllers, on page 5
Passive Identity Agent Primary/Secondary Agent Deployments, on page 7

### **Simple Passive Identity Agent Deployment**

The following diagram shows the simplest passive identity agent deployment.

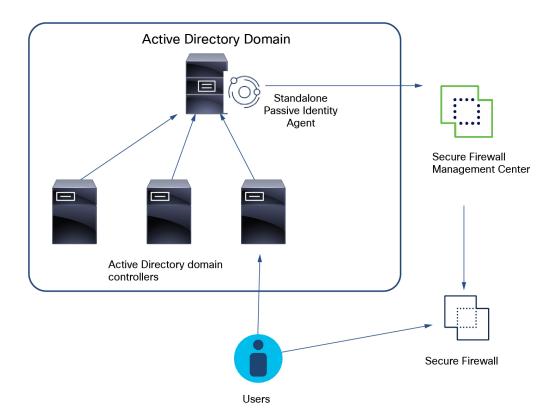


In the preceding example, a standalone passive identity agent is installed on the AD domain controller. Users log in and out of the AD domain and the agent sends user name and IP address information to the Cloud-Delivered Firewall Management Center. As users access the network, access control and identity policies deployed to the Secure Firewall Threat Defense determine whether or not, and how, access is allowed.

You can install a passive identity agent on the AD domain controller, directory server, or on any client connected to the domain you wish to monitor.

## **Single Passive Identity Agent Monitoring Multiple Domain Controllers**

The following diagram shows a standalone passive identity agent that monitors several AD domain controllers.



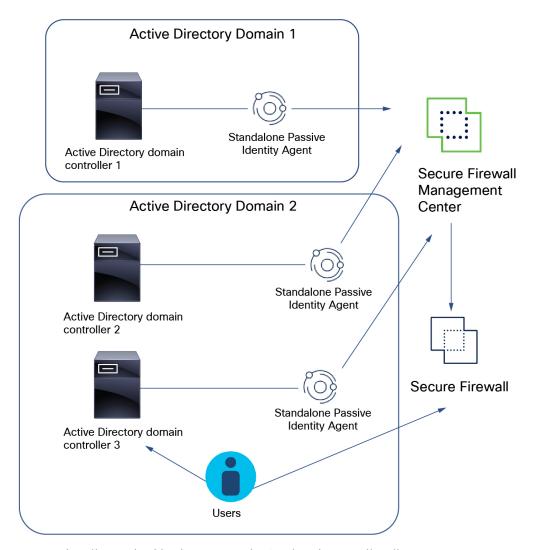
In the preceding diagram, the standalone passive identity agent is installed on a client attached to the AD domain (or on the domain controller itself). Users log in to any domain controller and the agent sends user and IP address information to the Cloud-Delivered Firewall Management Center. As users access the network, access control and identity policies deployed to the Secure Firewall Threat Defense determine whether or not, and how, access is allowed.

You can install a passive identity agent on the AD domain controller, directory server, or on any client connected to the domain you wish to monitor.

## **Multiple Passive Identity Agents Monitoring Multiple Domain Controllers**

The following figure shows standalone monitoring multiple AD domain controllers:

- In AD domain 1, a standalone passive identity agent installed on a machine attached to AD domain controller 1 sends user and IP address mapping data to the Cloud-Delivered Firewall Management Center.
- In AD domain 2, standalone agents installed on AD domain controllers 1 and 2 send user and IP address mapping data to the Cloud-Delivered Firewall Management Center.



You can install a passive identity agent on the AD domain controller, directory server, or on any client connected to the domain you wish to monitor.

The preceding figure shows three passive identity agents, each configured as a standalone. To do this:

- Create two Microsoft AD realms: one for each AD domain.
   See Create an LDAP Realm or an Active Directory Realm and Realm Directory.
- 2. For AD domain 2, create two directories, one for each domain controller.
- 3. Install the Passive Identity Agent software on a client that can log in to the domain.
  Configure each passive identity agent individually to communicate with the Cloud-Delivered Firewall Management Center on which you configure the passive identity agent source.
  See Install the Passive Identity Agent Software, on page 19.
- **4.** Create the passive identity agent identity source.

  See Create a Primary or Secondary Passive Identity Agent Identity Source, on page 13.

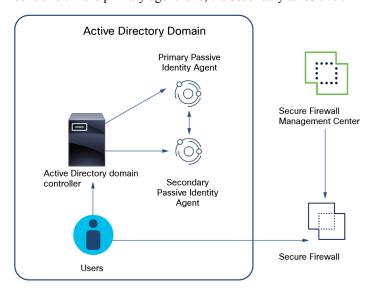
## **Passive Identity Agent Primary/Secondary Agent Deployments**

To provide redundancy and to avoid a single point of failure, you can configure primary and secondary passive identity agents in any of the ways shown in this topic.

You can install a passive identity agent on the AD domain controller, directory server, or on any client connected to the domain you wish to monitor.

### Single AD domain controller with primary and secondary agents

The following figure shows how to set up primary and secondary passive identity agents on one AD domain controller. If the primary agent fails, the secondary takes over.



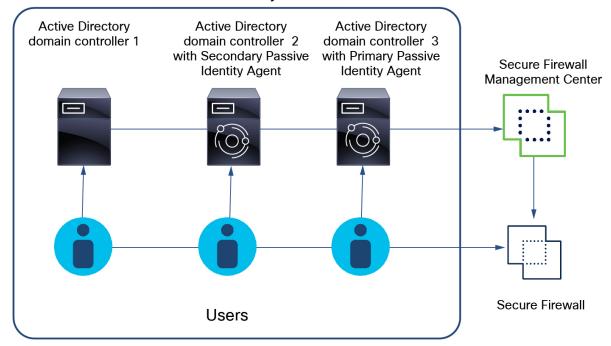
To set this up:

- Create a Microsoft AD realm that has one directory for the domain controller.
   See Create an LDAP Realm or an Active Directory Realm and Realm Directory.
- 2. Install the passive identity agent software on any two network machines connected to the domain controller. Configure each passive identity agent individually to communicate with the Cloud-Delivered Firewall Management Center on which you configure the passive identity agent source.
  - See Install the Passive Identity Agent Software, on page 19.
- 3. Create the identity source.

See Create a Primary or Secondary Passive Identity Agent Identity Source, on page 13.

### Multiple AD domain controllers, primary and secondary agents

### **Active Directory Domain**



The preceding figure shows how to configure primary and secondary agents to monitor three AD domain controllers. If the primary agent fails, the secondary agent takes over.

### To set this up:

- Create a Microsoft AD realm that has one directory for the domain controller.
   See Create an LDAP Realm or an Active Directory Realm and Realm Directory.
- 2. Install the passive identity agent software on any machine connected to the domain controller.
  Configure each passive identity agent individually to communicate with the Cloud-Delivered Firewall Management Center on which you configure the passive identity agent source.
  See Install the Passive Identity Agent Software, on page 19.
- Create the identity source.
   See Create a Primary or Secondary Passive Identity Agent Identity Source, on page 13.

## **How to Create a Passive Identity Agent Identity Source**

The following provides high-level tasks required to configure the passive identity agent identity source in the Cloud-Delivered Firewall Management Center and to deploy agent software to your Microsoft Active Directory (AD) servers.

### **Procedure**

	Command or Action	Purpose
Step 1	Create a realm for your Microsoft AD domain and domain controllers.	Realms are connections between the Cloud-Delivered Firewall Management Center and the user accounts on the servers you monitor. They specify the connection settings and authentication filter settings for the server.
		For more information, see Create an LDAP Realm or an Active Directory Realm and Realm Directory.
Step 2	Create a passive identity agent identity source.	The identity source allows the Cloud-Delivered Firewall Management Center and passive identity agent to communicate with each other. Create standalone, primary, or secondary agents, depending on your needs.
		For more information, see:
		About Passive Identity Agent Roles, on page 15
		Create a Passive Identity Agent Identity Source, on page 10
Step 3	Create a passive identity agent user on the Cloud-Delivered Firewall Management Center.	We provide a role sufficient for the agent and manager to communicate with each other. We recommend using that role and no other for the passive identity agent user.
Step 4	Install the passive identity agent software.	The way you install the agent depends on your deployment.
		You can install a passive identity agent on the AD domain controller, directory server, or on any client connected to the domain you wish to monitor.
		For more information, see:
		• Deploy the Passive Identity Agent, on page 3
		• Install the Passive Identity Agent Software, on page 19

### What to do next

Create an LDAP Realm or an Active Directory Realm and Realm Directory.

## **Configure the Passive Identity Agent**

The following topics discuss how to configure the passive identity agent.

### **Related Topics**

Create an LDAP Realm or an Active Directory Realm and Realm Directory Create a Passive Identity Agent Identity Source, on page 10 Install the Passive Identity Agent Software, on page 19

### **Create a Microsoft Active Directory Realm**

The passive identity agent requires you to create a Microsoft Active Directory (AD) realm and directories in the Cloud-Delivered Firewall Management Center as discussed in Create an LDAP Realm or an Active Directory Realm and Realm Directory.

### **Create a Passive Identity Agent Identity Source**

This task discusses how to create a passive identity agent that sends user session activity to the Cloud-Delivered Firewall Management Center.

### Before you begin

Complete the following:

- Review passive identity agent roles as discussed in About Passive Identity Agent Roles, on page 15.
- Create a Microsoft AD realm as discussed in Create an LDAP Realm or an Active Directory Realm and Realm Directory.

#### **Procedure**

- **Step 1** Log in to the Firewall in Security Cloud Control.
- Step 2 Click Policies > Threat Defense > Integration > Other Integrations > Identity Sources.
- Step 3 Click Passive Identity Agent.
- Step 4 Click Create Agent.
- **Step 5** In the Configure Agent dialog box, enter the following information:

Item	Description
Name	Enter a unique name to identify this passive identity agent.
Description	Enter an optional description.

Item	Description
Role	Click one of the following:
	• <b>Primary</b> : The agent responsible for communicating with the Cloud-Delivered Firewall Management Center.
	Not available if you choose <b>Standalone</b> .
	Secondary: Becomes the primary if the primary loses contact with the Cloud-Delivered Firewall Management Center.
	Not available if you choose <b>Standalone</b> .
	• Standalone: If there is only one passive identity agent.
	For more information about roles, see About Passive Identity Agent Roles, on page 15.

### **Step 6** Continue with:

- Create a Standalone Passive Identity Agent Identity Source, on page 11
- Create a Primary or Secondary Passive Identity Agent Identity Source, on page 13

### **Create a Standalone Passive Identity Agent Identity Source**

This task discusses how to configure a standalone passive identity agent.

### Before you begin

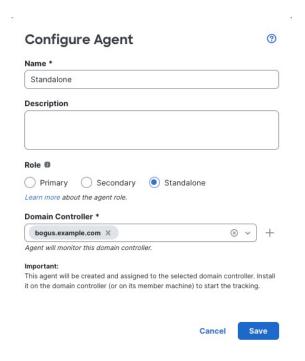
Complete the tasks discussed in Create a Passive Identity Agent Identity Source, on page 10.

### **Procedure**

**Step 1** In the Configure Agent dialog box, enter the following information:

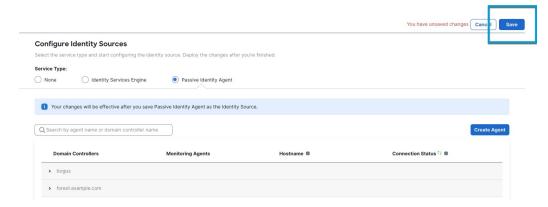
Item	Description
Role	Click Standalone.
Domain Controller	From the list, select the check box next to each domain controller that has a passive identity agent you wish to use for identity management and user control.  (Optional.) Click <b>Add</b> ( ) to add a new one.

The following figure shows an example of a standalone passive identity agent identity source.



- **Step 2** In the Configure Agent dialog box, click **Save**.
- **Step 3** In the top right corner of the page, click **Save**.

The following figure shows an example.



#### Note

The passive identity agent won't be active until you create a user and install the software.

### What to do next

- See Get an API Token for the Passive Identity Agent, on page 17
- See About Passive Identity Agent Installation, on page 17

### **Create a Primary or Secondary Passive Identity Agent Identity Source**

The following task continues from Create a Passive Identity Agent Identity Source, on page 10.

### Before you begin

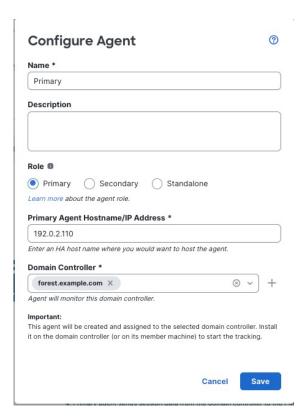
Complete the tasks discussed in Create a Passive Identity Agent Identity Source, on page 10.

### **Procedure**

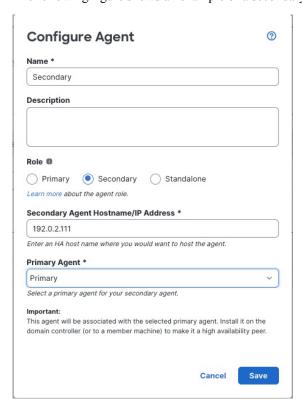
**Step 1** In the Configure Agent dialog box, enter the following information:

Item	Description
Role	Click one of the following:
	• <b>Primary</b> : The agent responsible for communicating with the Cloud-Delivered Firewall Management Center.
	• <b>Secondary</b> : Becomes the primary if the primary loses contact with the Cloud-Delivered Firewall Management Center.
	For more information about roles, see About Passive Identity Agent Roles, on page 15.
Primary Agent Hostname/IP Address	(Primary agent only.) Enter the fully qualified domain name or IP address of the server on which the primary passive identity agent is installed.
	The passive identity agent version 1.0 supports IPv4 addresses and fully qualified domain names only. Version 1.1 supports IPv4, IPv6, and fully qualified domain names.
Secondary Agent Hostname/IP Address	(Secondary agent only.) Enter the fully qualified host name or IP address of the server on which the secondary passive identity agent is installed.
	The passive identity agent version 1.0 supports IPv4 addresses and fully qualified domain names only. Version 1.1 supports IPv4, IPv6, and fully qualified domain names.
Primary Agent	(Secondary agent only.) From the list, click the name of the primary passive identity agent.
Domain Controller	(Primary agent only.) From the list, select the check box next to each domain controller that has a passive identity agent you wish to use for identity management and user control.

The following figure shows an example of a primary agent:

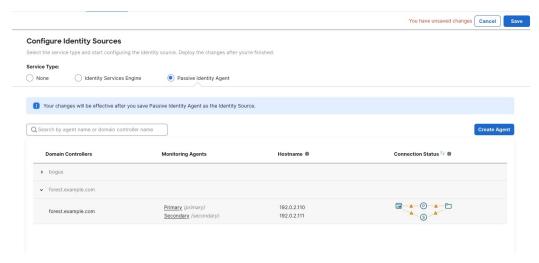


The following figure shows an example of a secondary agent:



- **Step 2** In the Configure Agent dialog box, click **Save**.
- **Step 3** In the top right corner of the page, click **Save**.

The following figure shows an example.



#### Note

The passive identity agent won't be active until you create a user and install the software.

### What to do next

- See Get an API Token for the Passive Identity Agent, on page 17
- See About Passive Identity Agent Installation, on page 17

### **About Passive Identity Agent Roles**

The passive identity agent has the following roles:

- Standalone: A passive identity agent that is not part of a redundant pair. A standalone agent can download users and groups from multiple Active Directory servers and domain controllers, provided the software is installed on all of them.
- Primary: (Primary agent in a redundant pair.) Can be installed on a Microsoft AD domain controller, directory server, or any network client.
- Handles all communication with the Cloud-Delivered Firewall Management Center unless it stops communicating, in which case communication is handled by secondary agents.
- Secondary: (Secondary, or backup, agent in a redundant pair.) Can be installed on a Microsoft AD domain controller, directory server, or any network client.
- Monitors the health of the primary agent and takes over if the primary agent stops communicating with the Cloud-Delivered Firewall Management Center.

The can monitor several AD domain controllers that art part of the same domain.

### **Troubleshoot the Passive Identity Agent**

This topic discusses how you can troubleshoot the passive identity agent software on your Windows AD domain controller or directory server.

### (Optional.) Set the log level

By default, the passive identity agent logs at the INFO level. To optionally change the log level, open C:\Program Files\Program Files (x86)\Cisco\Cisco Passive Identity

**Agent\CiscoPassiveIdentityAgentService.exe.config** in a text editor, save the file, and restart the Cisco Passive Identity Agent service.

### Do not rename the logging service

Do not rename C:\Program Files\Program Files (x86)\Cisco\Cisco Passive Identity

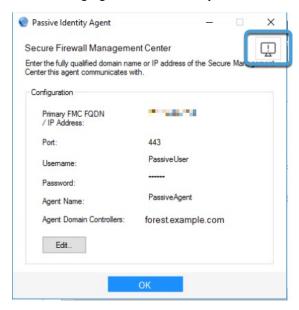
Agent\CiscoPassiveIdentityAgentService.exe.config; otherwise, the passive identity agent will stop generating log files. Do not remove or change the .exe.config file extension.

### Generate troubleshooting files

To generate a .zip containing troubleshooting files:

- 1. Log in to the Microsoft Active Directory domain controller.
- 2. Start the passive identity agent software.
- 3. Click the Troubleshooting button in the top right corner of the window.

The following figure shows an example.



A confirmation message is displayed.

Your troubleshoot logs are saved to your system's Downloads folder; the file name starts with **TroubleshootLogs**.

### Manually view log files

Passive identity agent log files are stored in plain text format in the agent's installation directory: C:\Program Files\Program Files (x86)\Cisco\Cisco Passive Identity Agent.

Use Notepad or another text editor to view these files. Log files rotate after reaching 10MB in size.

### **Use the Microsoft Active Directory event viewer**

In the event you are not seeing user sessions in the Cloud-Delivered Firewall Management Center, you can look on your Microsoft Active Directory server's event viewers for the following Kerberos-related events:

- 4770
- 4768

For general information about audit policy, see Audit Policy Recommendations on learn.microsoft.com.

For more information about Windows Group Policy Object settings, see Group Policy Objects on learn.microsoft.com.

## **Get an API Token for the Passive Identity Agent**

This task discusses how to get the API token, which is used by the passive identity agent to authenticate with the Cloud-Delivered Firewall Management Center. It applies *only* to using the passive identity agent with the Cloud-Delivered Firewall Management Center.

### Required role:

- · Super Admin
- Admin

#### **Procedure**

- **Step 1** Log in to Cisco Security Cloud Control.
- Step 2 Click Administration > Firewall Management Center.
- **Step 3** Check the box next to the Cloud-Delivered Firewall Management Center with which you want to use the passive identity agent.
- **Step 4** In the right pane, click **Passive Identity**.
- **Step 5** Copy the token to the clipboard.

### What to do next

Install the Passive Identity Agent Software, on page 19.

## **About Passive Identity Agent Installation**

The following topics discuss prerequisites and tasks required to install the passive identity agent.



Note

We recommend you use the latest version of the passive identity agent. To see the available versions, go to software.cisco.com. To upgrade the passive identity agent, see Upgrade the Passive Identity Agent Software, on page 22

### **Related Topics**

Prerequisites to Installing the Passive Identity Agent, on page 18 Install the Passive Identity Agent Software, on page 19

### **Prerequisites to Installing the Passive Identity Agent**

The following task shows how to configure Windows Group Policy Object (GPO) security settings to enable the passive identity agent to log successful and unsuccessful Kerberos authentication attempts. This setting is required for the passive identity agent to function properly.

For more information, see Audit Policy Recommendations on learn.microsoft.com.

### Before you begin

Make sure your systems meet the following requirements:

- If you install the passive identity agent on a Windows Active Directory server, the server must run Windows Server 2008 or later.
- If you install it on a Windows client attached to the domain, the client must run Windows 8 or later.
- The system clock on all systems must be synchronized. We strongly recommend using the same NTP servers on all of them. This means:
  - The Security Cloud Control.

For more information, see Configure NTP Server.

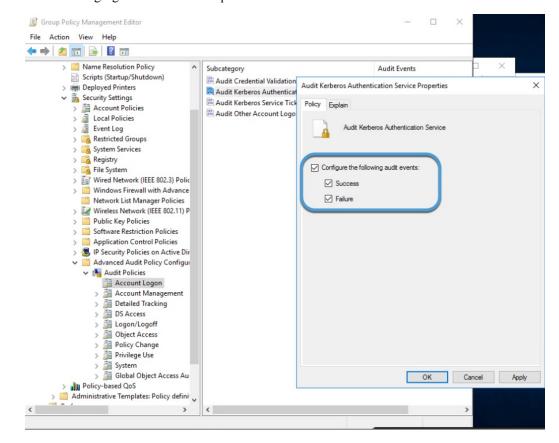
- All Windows Active Directory servers and domain controllers.
- The machine on which the passive identity agent is installed.
- Security Cloud Control must run November 8, 2024 or later.
- You must enable Snort 3 on the Secure Firewall Threat Defense devices.

### Procedure

- **Step 1** Log in to the Active Directory Server as an administrator.
- **Step 2** As Administrator, open a DOS command prompt.
- Step 3 Enter gpmc.msc to start the Group Policy Management Editor.
- **Step 4** If necessary, create a new GPO; if one already exists, edit it.

For more information about creating a GPO, see a resource like Create a Group Policy Object on learn.microsoft.com.

- Step 5 In your GPO, expand Computer Configuration > Policies > Windows Settings > Security Settings > Advanced Policy Configuration > Audit Policies.
- Step 6 Click Account Logon.
- Step 7 In the right pane, double-click Audit Kerberos Authentication Service.
- **Step 8** In the dialog box that is displayed, select all checkboxes which enables the system to log successes and failures. The following figure shows an example.



- **Step 9** Follow the prompts on your screen to save the changes.
- **Step 10** (Optional.) To update GPO immediately, enter **gpupdate** /force in your DOS command prompt window.

#### What to do next

See Install the Passive Identity Agent Software, on page 19.

### **Install the Passive Identity Agent Software**

This task discusses how to install the passive identity agent software. For a simple installation, you can install it on your Microsoft Active Directory (AD) domain controller; for other options, see Deploy the Passive Identity Agent, on page 3.



Note

We recommend you use the latest version of the passive identity agent. To see the available versions, go to software.cisco.com. To upgrade the passive identity agent, see Upgrade the Passive Identity Agent Software, on page 22

### Before you begin

See Get an API Token for the Passive Identity Agent, on page 17.

See Prerequisites to Installing the Passive Identity Agent, on page 18.

#### **Procedure**

- **Step 1** Download the passive identity agent from software.cisco.com.
- **Step 2** Log in as a member of the Administrators group to the machine on which to install the passive identity agent.
- Step 3 Double-click CiscoPassiveIdentityAgentInstaller-1.1.msi.
- Step 4 Click Next.
- **Step 5** Choose a folder in which to install the passive identity agent and click **Next**.

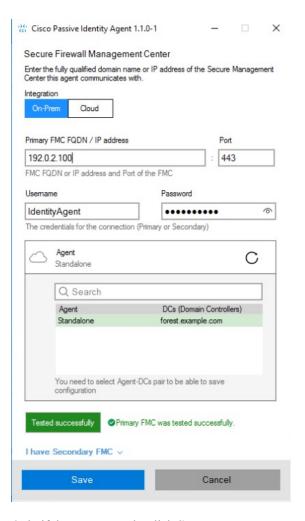
The default installation folder is Program Files\Program Files (x86)\Cisco\Cisco Passive Identity Agent.

- Step 6 Click Next.
- Step 7 Click Install.
- **Step 8** When the installation is done, click **Finish** and optionally check the box to start the passive identity agent.
- **Step 9** When the passive identity agent starts, click the **On-Prem** tab if you are using the agent with an on-premises Secure Firewall Management Center (physical or virtual) or click the **Cloud** tab if you are using the agent with Cloud-Delivered Firewall Management Center.
- **Step 10** In the Cisco Passive Agent dialog box, enter the following information:

Item	Description
FMC FQDN / IP Address	Enter the fully qualified domain name, IPv4, or IPv6 address of the Cloud-Delivered Firewall Management Center on which you created the passive identity agent identity source.
Token	Enter the API token you found in Get an API Token for the Passive Identity Agent, on page 17.
Agent	Click the list to locate the domain controller of the passive identity agent you created previously on the Cloud-Delivered Firewall Management Center.

- Step 11 Click the Agent list.
- **Step 12** From the list, click the name of the domain controller to monitor.
- Step 13 Click Test.

The following figure shows an example.



**Step 14** Only if the test succeeds, click **Save**.

### What to do next

- Specify users to control and other options using an identity policy as described in Create an Identity Policy.
- Associate the identity rule with an access control policy, which filters and optionally inspects traffic, as discussed in Associating Other Policies with Access Control.
- Deploy your identity and access control policies to managed devices as discussed in Deploy Configuration Changes.
- Monitor user activity .

### **Uninstall the Passive Identity Agent Software**

This task discusses how to uninstall the passive identity agent software from your Microsoft AD servers.

#### **Procedure**

- **Step 1** Log in as an administrator to the machine on which the passive identity agent is installed.
- **Step 2** Search for Add or Remove Programs.
- Step 3 Click Cisco Passive Identity Agent.
- Step 4 Click Uninstall.
- **Step 5** You are required to confirm the uninstallation.

### **Upgrade the Passive Identity Agent Software**

To upgrade to a newer version of the passive identity agent, you must uninstall the earlier version the install the later version.

See the following information:

- Uninstall the Passive Identity Agent Software, on page 21
- About Passive Identity Agent Installation, on page 17

# **Monitor the Passive Identity Agent**

The passive identity agent indicates whether or not it can communicate with the Cisco Security Cloud Control and other agents if it's configured as primary-secondary. You can view the status at **Integration > Other Integrations > Identity Sources**.

### **Deployments**

A standalone passive identity agent is represented as follows.



A primary-secondary pair is represented as follows.



The following table explains the meaning of the indicators.

Object	Meaning
▲ III	Cloud-Delivered Firewall Management Center
A	Standalone Passive Identity Agent

Object	Meaning
	Active Directory domain controller
P	Primary agent
<u>S</u>	Secondary agent

### **Status indicators and colors**

The passive identity agent indicates status using lines (that indicate whether communication with the Cloud-Delivered Firewall Management Center is active or standby) and colors (that indicate whether or not communication is successful).

The following table shows the meanings of lines and colors:

Object	Meaning
Solid line	The agent that is responsible for communicating with the Cloud-Delivered Firewall Management Center.
Dashed line	Primary/secondary configuration only. The agent that is acting as the backup agent. In the event of a communication failure between the active (solid line) agent, this agent communicates with the Cloud-Delivered Firewall Management Center.
Green	Agent communication is normal.
Amber	Agent has never successfully communicated with the Cloud-Delivered Firewall Management Center. A newly created agent line is amber and remains so until configuration is complete.
Red	Communication is failing. To resolve the issues:  • Check sure the network connections between agents and the Cloud-Delivered Firewall Management Center.  • Make sure you have completed configuring the system (Microsoft AD server, domain controllers, and the Cloud-Delivered Firewall Management Center).  For more information, see How to Create a Passive Identity Agent Identity Source, on page 8.

## **Manage the Passive Identity Agent**

### **Related Topics**

Edit Passive Identity Agents, on page 24

Delete a Standalone Passive Identity Agent, on page 24

Delete Primary and Secondary Passive Identity Agents, on page 25

Uninstall the Passive Identity Agent Software, on page 21

### **Edit Passive Identity Agents**

This task discusses how to edit passive identity agents you previously configured in the Firewall in Security Cloud Control.

#### **Procedure**

Step 1	Log in to the Firewall in Security Cloud Control.
OLUB I	Log in to the racwan in Security Cloud Control.

- **Step 2** Click Policies > Threat Defense > Integration > Other Integrations > Identity Sources.
- Step 3 Click Passive Identity Agent.
- **Step 4** Click **Edit** ( ) next to the agent to edit.
- **Step 5** Make the desired changes.
- Step 6 Click Save.

## **Delete a Standalone Passive Identity Agent**

This task discusses how to delete a standalone passive identity agent.

### **Procedure**

- **Step 1** Log in to the Firewall in Security Cloud Control.
- Step 2 Click Policies > Threat Defense > Integration > Other Integrations > Identity Sources.
- Step 3 Click Passive Identity Agent.
- **Step 4** Click **Edit** ( ) next to the agent to delete.
- Step 5 Click Delete.
- **Step 6** You are required to confirm the action.

### **Delete Primary and Secondary Passive Identity Agents**

This task discusses how to delete primary and secondary passive identity agents. You must delete a secondary agent before you can delete a primary agent.

#### **Procedure**

Step 1	Log in to the Firewall in Security Cloud Control.	
Step 2	Click Policies > Threat Defense > Integration > Other Integrations > Identity Sources.	
Step 3	Click Passive Identity Agent.	
Step 4	Click <b>Edit</b> ( ) next to a secondary agent to delete.	
Step 5	Click <b>Delete</b> .	
Step 6	You are required to confirm the action.	
Step 7	If you wish to delete a primary agent, first delete all secondary agents.	

# **Troubleshoot the Passive Identity Agent**

This topic discusses how you can troubleshoot the passive identity agent software on your Windows AD domain controller or directory server.

### (Optional.) Set the log level

By default, the passive identity agent logs at the INFO level. To optionally change the log level, open C:\Program Files\Program Files (x86)\Cisco\Cisco Passive Identity

**Agent\CiscoPassiveIdentityAgentService.exe.config** in a text editor, save the file, and restart the Cisco Passive Identity Agent service.

### Do not rename the logging service

Do not rename C:\Program Files\Program Files (x86)\Cisco\Cisco Passive Identity

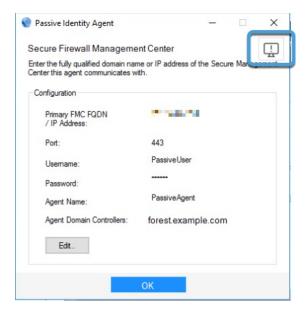
Agent\CiscoPassiveIdentityAgentService.exe.config; otherwise, the passive identity agent will stop generating log files. Do not remove or change the .exe.config file extension.

### **Generate troubleshooting files**

To generate a .zip containing troubleshooting files:

- 1. Log in to the Microsoft Active Directory domain controller.
- **2.** Start the passive identity agent software.
- **3.** Click the Troubleshooting button in the top right corner of the window.

The following figure shows an example.



A confirmation message is displayed.

Your troubleshoot logs are saved to your system's Downloads folder; the file name starts with **TroubleshootLogs**.

### Manually view log files

Passive identity agent log files are stored in plain text format in the agent's installation directory: C:\Program Files\Program Files (x86)\Cisco\Cisco Passive Identity Agent.

Use Notepad or another text editor to view these files. Log files rotate after reaching 10MB in size.

### Use the Microsoft Active Directory event viewer

In the event you are not seeing user sessions in the Cloud-Delivered Firewall Management Center, you can look on your Microsoft Active Directory server's event viewers for the following Kerberos-related events:

- 4770
- 4768

For general information about audit policy, see Audit Policy Recommendations on learn.microsoft.com.

For more information about Windows Group Policy Object settings, see Group Policy Objects on learn.microsoft.com.

# **Security Requirements for the Passive Identity Agent**

To safeguard the system, you should install the passive identity agent on a protected internal network. Although the passive identity agent is configured to have only the necessary services and ports available, you must make sure that attacks cannot reach it.

If the passive identity agent and the Security Cloud Control reside on the same network, you can connect the Security Cloud Control to the same protected internal network as the passive identity agent.

Regardless of how you deploy your appliances, inter-system communication is encrypted. However, you must still take steps to ensure that communications between appliances cannot be interrupted, blocked, or tampered with; for example, with a distributed denial of service (DDoS) or man-in-the-middle attack.

## **Internet Access Requirements for the Passive Identity Agent**

By default, the passive identity agent is configured to communicate with the Firepower System over the internet using HTTPS on port 443/tcp (HTTPS). If you do not want the passive identity agent to have direct access to the internet, you can configure a proxy server.

If your Cloud-Delivered Firewall Management Center cannot communicate with the machine on which the passive identity agent is installed, you must use a proxy with the HTTPS protocol enabled.

The way you do this is up to you; for example, you might have a commercial proxy and use a Windows system proxy with HTTPS enabled to communicate with it.

The following information informs you of the ports the passive identity agent use to communicate with each other, with the Security Cloud Control, and with Microsoft Active Directory.

Table 1: Passive Identity Agent port requirements

Port	Reason
443	Communicate with the Security Cloud Control.
135	Communicate with Microsoft Active Directory using the MSRPC protocol.
9095	Communicate with each other using the UDP protocol.

# **History for the Passive Identity Agent**

Table 2: History for the Passive Identity Agent

Feature	Minimum Firewall Management Center	Minimum Firewall Threat Defense	Details
Passive Identity Agent	November 8, 2024	7.1	This feature is introduced.  Passive Identity Agent version 1.1 is compatible with 7.6.0 and later and adds the following:  • You can use either FQDN, IPv4, or IPv6 to connect from the Passive Identity Agent to the Secure Firewall Management Center or Cisco
			<ul> <li>Security Cloud Control.</li> <li>Sends both IPv4 and IPv6 user sessions from Microsoft Active Directory (AD) to the Firewall Management Center.</li> <li>You can zip troubleshooting logs.</li> </ul>
			• When you start the Passive Identity Agent software, a list of prerequisites is displayed.
			The Passive Identity Agent identity source sends session data from Microsoft Active Directory (AD) to the Firewall Management Center. Passive identity agent software is supported on:
			Microsoft AD server (Windows Server 2008 or later)
			Microsoft AD domain controller (Windows Server 2008 or later)
			• Any client connected to the domain you want to monitor (Windows 8 or later)
			See: User Control With the Passive Identity Agent.