

# **Monitor Configurations in Secure Workload**

The Monitoring options available to you vary depending on your role.

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### **Agent Monitoring**

The page displays the count of all monitored agents in a cluster based on the currently selected root scope.



**Note** Total Inventory count is the summation of all inventory observed on the network after applying collection rules.

# **Agent Monitoring Type**

To monitor agents, click Manage > Agents in the left navigation bar, then click the Monitor tab.

This page is only available for users that have **Site Admin** and **Customer Support** roles. **Scope owners** can see Inventory, Deep Visibility Agents, and Enforcement Agents.

Enforcement Agents	0	Contract Deep Visibility Agents	15
Agents Healthy!			Critical 0
		Anomalies	Warning
All Agents are active, up-to-date and healthy!		15	1
All Agents are active, up to take and nearthy.			Info 15
Critical Health Indicators			
Flow Export Operational	N/A	Critical Health Indicators	
Agent Active	N/A	Flow Export Operational	~
Enforcer Active	N/A	Agent Active	$\checkmark$
Enforcer Registration Successful	N/A	Enforcer Active	N/A
Warning Health Indicators		Enforcer Registration Successful	N/A
Upgrade Successful	N/A	Warning Health Indicators	
Agent Conversion Successful	N/A	Upgrade Successful	$\checkmark$
Mem Usage Normal	N/A	Agent Conversion Successful	~
CPU Quota Normal	N/A	Mem Usage Normal	$\checkmark$
Agent Running	N/A	CPU Quota Normal	$\checkmark$
Amount of Flows Observed is Normal	N/A	Agent Running	~
Pcap Running	N/A	Amount of Flows Observed is Normal	~
Info Health Indicators		Pcap Running	~
Convert Supported	N/A	Info Health Indicators	
		Convert Unsupported	15
dpoints			
AnyConnect Agents 0	0		
	0		
w Ingest			

#### Figure 1: Total Number of Installed Agents

The following table shows the differences between each agent type.

Agent Type	Description
Deep Visibility	Provides highest fidelity in terms of time series flow data, processes running on a host. Most Linux and Windows platforms are supported. See sw_agents_deployment-label
Enforcement	Provides all capabilities available in Deep Visibility Agents. In addition, Enforcement agents are capable of setting firewall rules on the installed host.

AnyConnect	Provides time series flow data on endpoints running AnyConnect Secure Mobility Agent with Network Visibility Module (NVM) without requiring any Cisc Secure Workload agent installation. IPFIX records generated by NVM are sent to Secure Workload AnyConnect Proxy connector. Windows, Mac, and certain smartphone platforms are supported.
ISE	Provides metadata about endpoints registered with Cisco ISE. Through ISE pxGrid, ISE connector collects the metadata, registers the ISE endpoints on Secure Workload as ISE agents pushes labels based on the attributes fetched from ISE appliance and LDAP attributes for the users logged in to the endpoints.
The following table provides a brief sum	mary of various appliance agents provided by Cisco Secure Workload
Appliance Agents	Description
SPAN	Provides the flow analysis without requiring any per-host agent installation. It runs in the Secure Workload ERSPAN VM appliance. It consumes ERSPAN packets sourced by any Cisco switch.

Note

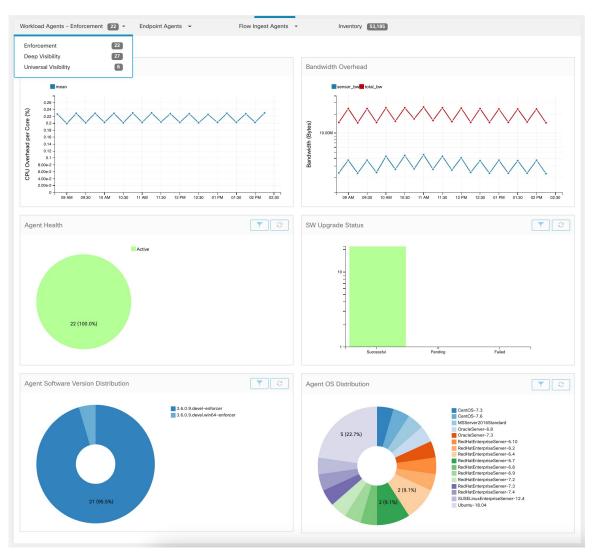
Appliance agents such as NetFlow, NetScaler, F5, AWS, and AnyConnect Proxy are now supported as connectors. For more information on connectors, see What are Connectors.

Any non-zero agent type button allows further drill-down into the distribution of each agent type.

## **Agent Status and Statistics**

To view the charts described in this topic, choose Manage > Agents, then click the Distribution tab.

The following charts are available for both Deep Visibility and Enforcement Agent types.



#### Figure 2: Agents Distribution

For each agent type, this page provides an overview and the health of registered agents including overall CPU overhead, bandwidth overhead, missed packets, OS/version distribution and agent upgrade status.

### **CPU Overhead Chart**

The CPU Overhead chart provides an aggregated view of CPU overhead per core from all agents. Per-agent CPU Overhead is provided as part of the Workload Profile. This chart is only available for Deep Visibility and Enforcement Agent Types.

#### **Bandwidth Overhead Chart**

The Bandwidth Overhead chart provides aggregated stats of total bandwidth and bandwidth used by agents. Per-agent bandwidth overhead is provided as part of the Workload Profile. This chart is only available for Deep Visibility and Enforcement Agent Types.

#### **Agent Health Chart**

The Agent Health chart provides the number of active or inactive agents. Active agents are the ones checking in with config server for upgrade on regular intervals. The checking interval is 30 minutes. If we see that an agent has missed more than two check-in periods from an agent, it would be declared as an inactive agent.

### Software Agent Updates to Latest Revision Chart

Every time an agent checks in with the config server, the agent would also provide its current RPM version. If an agent is configured to a specific version and is not able to update after 2 check-in periods, the agent would be declared as not able to upgrade to the latest version.

#### **Agent Packet Missed Chart**

In rare occasions when the traffic volume traversing a host is greater than the rate at which the agent is able to inspect, some packets are skipped from being analyzed. The number of missed packets and the corresponding agent name are displayed in this chart.

#### Agent Software Version and OS Distribution Charts

These charts show the agent version distribution and parent OS platform of all agents registered with the Secure Workload cluster.

### **Enforcement Status**

To view enforcement status, click **Defend** > **Enforcement Status** in the navigation bar at the left side of the window.

This page is available for site admin/customer support users and scope owners to get an overview of the current status of all the enforcement agents, including the cloud connectors that are enforcing a policy.

If any of the charts shows red or orange, see the applicable topic:

Chart	Result	Take Action
Agent Enforcement Enabled	Not Enabled	Make sure enforcement is enabled in the agent configuration. See Create an Agent Configuration Profile.
Agent Policy Config	Stale Policies	This situation is generally temporary and typically doesn't require any action. It occurs because a Secure Workload deployment based on labels updates inventory and policies dynamically. However, if this situation persists for any individual workloads, contact Cisco TAC.
Agent Concrete Policies	Skipped	This indicates that policies weren't pushed to some agents.

#### **Table 1: Enforcement Status Charts**

- To view status for individual scopes or for the entire tenant, use the **Filter by Scope** option at the top-left side of the page.
  - If the charts indicate a problem, identify which workloads have the problem by clicking the relevant part of a chart.

The table displays the affected workloads.

- Alternatively, to see filtering options, click the (i) button in the **Filter** box below the charts.
- To view a wealth of additional details, click the IP address link in the filtered list of workloads to display the Workload Profile page.

The following table describes the fields shown in the enforcement status table.

Field	Description
Host Name	Host name of the workload.
Address	IP addresses of all the interfaces on the workload.
Enforcement Enabled	Indicates whether enforcement is enabled or not on the agent.
Concrete Policies in Sync	This indicates whether the desired version of concrete policies are currently enforced on the agent.
Concrete Policies	If this value shows <b>Skipped</b> for any host, this means the limit on policies is reached for the agent on that host. (See Limits Related to Policies.)
Policy Count	The number of concrete policies on the agent.
Status	The status of the latest policy config enforcement. If the status is <b>CONFIG_SUCCESS</b> , it indicates that current version is enforced without any issue.

## **Enforcement Status for Cloud Connectors**

If you have set up AWS or Azure cloud connectors:

All interfaces enforcement status are displayed on the enforcement status page. If the policies are applied successfully, the policies are in sync else the corresponding error messages are displayed.

Policy count in the enforcement status page is Secure Workload accounting but not AWS or Azure rule accounting.

(AWS only) The hostname field on this page is derived from public DNS. If the public DNS is not enabled on the given VPC, the hostname field is empty.

## **Pause Policy Updates**

### <u>^</u> Caution

This option pauses policy updates for ALL workloads in ALL scopes.

This feature requires site admin or customer support privileges.

To pause rule updates for all enforcement endpoints in all scopes:

- 1. From the navigation pane, choose **Defend** > **Enforcement**.
- 2. Click the status beside Policy Updates.
- **3.** Read and accept the caution.

Figure 3: Firewall Rules are being Updated Continuously

Policy Updates	Current state allows policy updates for all workspaces and push policy	
Agent Enforceme	enforcement rules to all endpoints. (Recommended)	
	Enabled Not Enabled	

Figure 4: Firewall Rule Updates are Paused

Policy Update	s Paused	)
Filter By Scor	Current state prevents firewall rule updates on all enforcement points.	
Agent Enforc	ement Enabled	
	Enabled Not Enabled	