



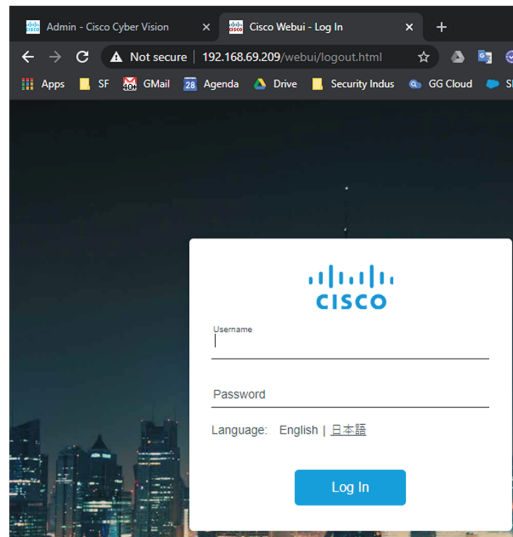
Procedure with the Local Manager


After the [Initial configuration](#), proceed to the steps described in this section.

- [Access the IOx Local Manager, on page 1](#)
- [Install the sensor virtual application, on page 4](#)
- [Configure the sensor virtual application, on page 5](#)
- [Generate the provisioning package, on page 12](#)
- [Import the provisioning package, on page 15](#)

Access the IOx Local Manager

1. Open a browser and navigate to the IP address you configured on the interface you are connected to.
2. Log in using the Cisco IR8340 admin user account and password.



 Cisco IR8340-K9
 17.8.20220220

- Dashboard
- Monitoring
- Configuration
- Administration
- Licensing
- Troubleshooting

Dashboard
Overview

CPU & Memory Pressure Graph
 Last Updated: 3/24/2022, 4:30:37 PM

CPU Utilization All CPUs are operating below threshold. 0.43% Slot:

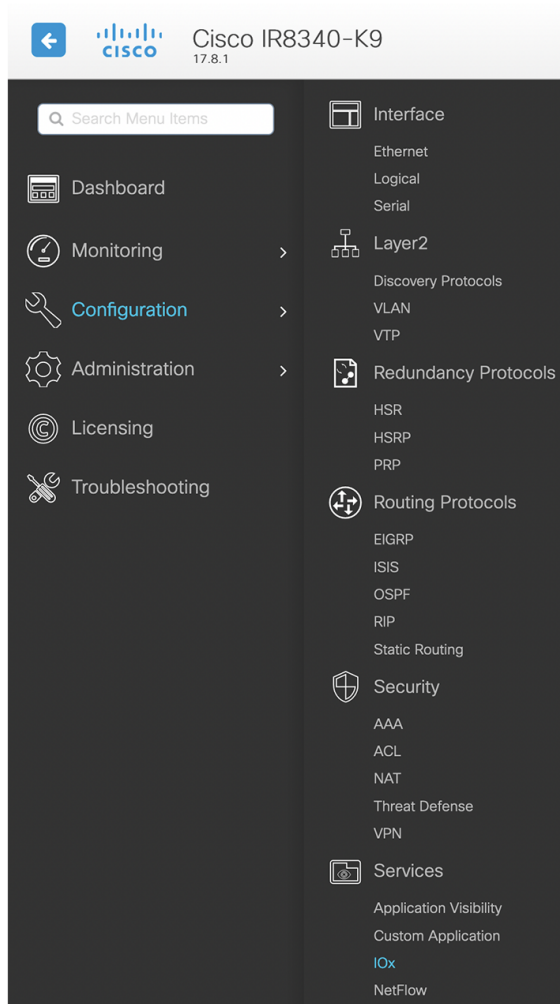
CPU:

Process	CPU (%)
User	0.70
System	3.70
Idle	95.60

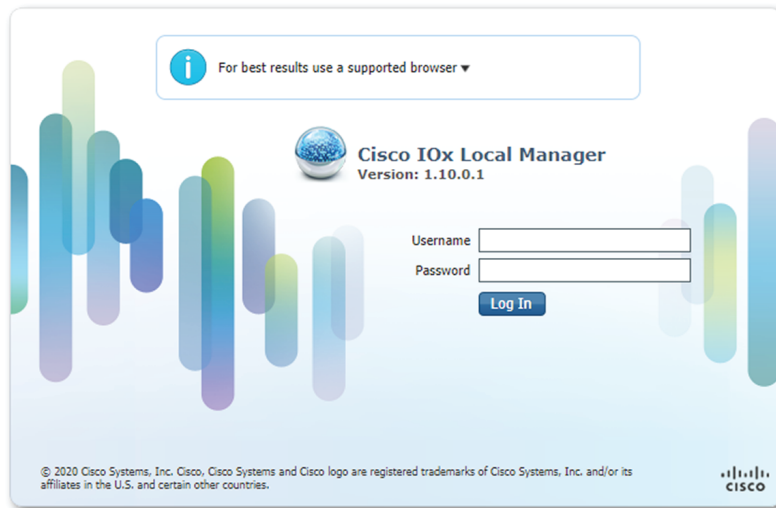
[Advanced CPU View](#)

CPU (%) vs Device Time

3. Once logged into the Local Manager, navigate to Configuration > Services > IOx.

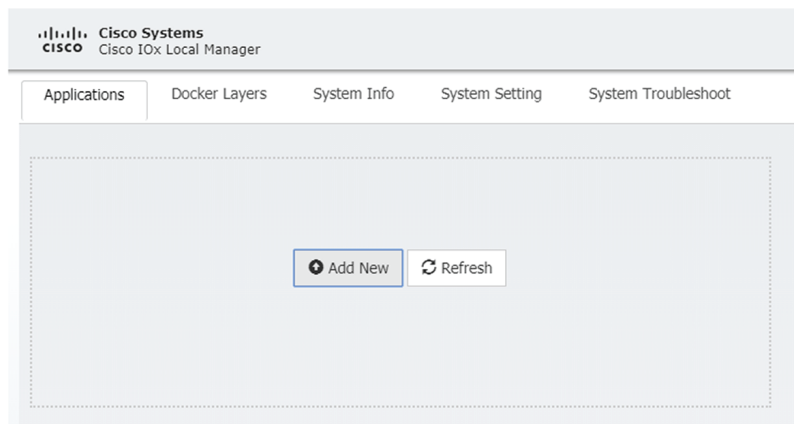


4. Log in using the user account and password.



Install the sensor virtual application

Once logged in, the following menu appears:

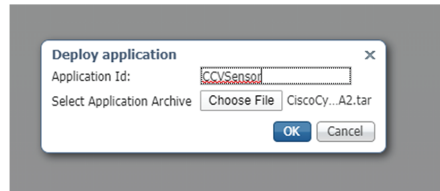


1. Click **Add New**.
2. Add an Application id name (e.g. CCVSensor).
3. Select the application archive file
(i.e. "CiscoCyberVision-IOx-x86-64-<version>.tar").

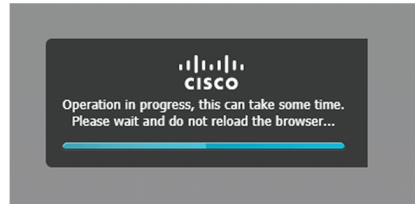


Note If you aim to install a sensor with **Active Discovery**, select the required application archive file

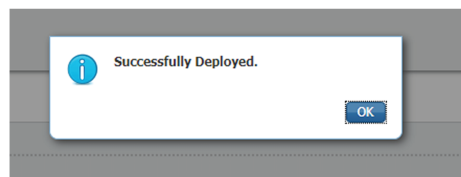
(i.e. "CiscoCyberVision-IOx-Active-Discovery-x86-64-<version>.tar").



The installation takes a few minutes.



When the application is installed, the following message is displayed and the sensor application appears:



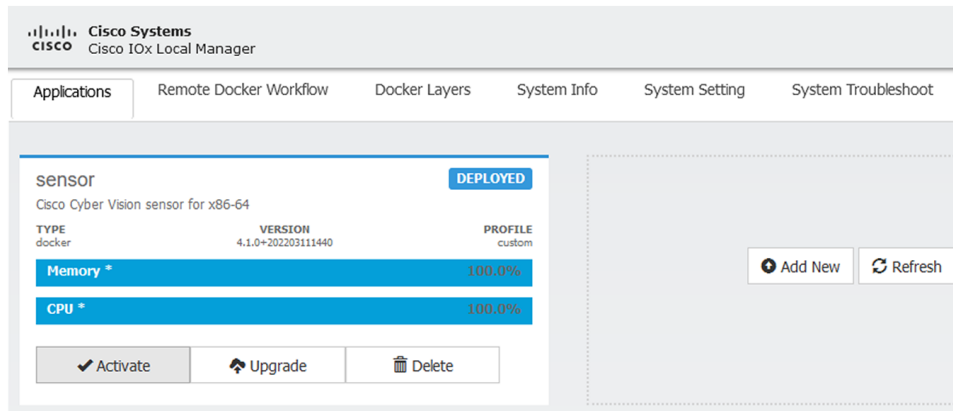
The screenshot shows the Cisco IOx Local Manager interface. The top navigation bar includes 'Applications', 'Remote Docker Workflow', 'Docker Layers', 'System Info', 'System Setting', and 'System Troubleshoot'. The main content area displays the 'sensor' application, which is marked as 'DEPLOYED'. Below this, there is a table with columns for 'TYPE', 'VERSION', and 'PROFILE'. The 'sensor' application is listed with 'TYPE: docker', 'VERSION: 4.1.0+202203111440', and 'PROFILE: custom'. Below the table, there are two progress bars: 'Memory *' at 100.0% and 'CPU *' at 100.0%. At the bottom of the application card, there are three buttons: 'Activate', 'Upgrade', and 'Delete'. To the right of the application card, there are 'Add New' and 'Refresh' buttons.

TYPE	VERSION	PROFILE
docker	4.1.0+202203111440	custom

Configure the sensor virtual application

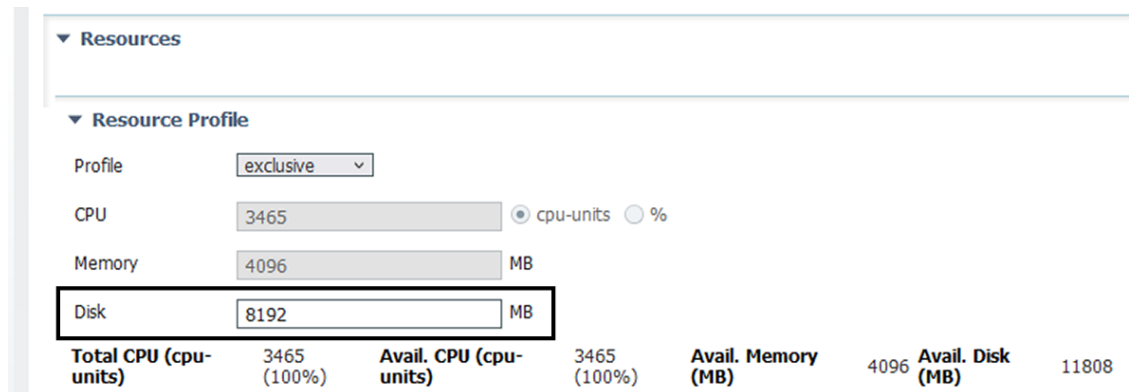
Procedure

Step 1 Click **Activate** to launch the configuration of the sensor application.



Step 2 Deploy the Resource Profile menu and set the disk size. The procedure differs whether the device has a SSD or not:

- If the device has a SSD, set the necessary disk size. It should be at least 4GB.



- If the device has no SSD, set the disk size to 128MB, then deploy the Advanced Settings menu and configure tmpfs by filling the docker options text area with:

```
--tmpfs /tmp:rw,size=512m
```

Resource Profile

Profile:

CPU: cpu-units %

Memory: MB

Disk: MB

Total CPU (cpu-units)	3465 (100%)	Avail. CPU (cpu-units)	3465 (100%)	Avail. Memory (MB)	4096	Avail. Disk (MB)	1372
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Advanced Settings

Specify "docker run" options to be used while spawning the container. These will override activation settings above.

Docker Options:

Auto delete container instance

Step 3 Bind the eth0, eth1 and eth3 interfaces in the container to an interface on the host in the Network Configuration menu.

eth0:

a) Click **edit** in the eth0 line.

Network Configuration

Name	Network Config	Description	Action
eth0	VPG0	none	edit
eth1	Not Configured	none	edit
eth3	Not Configured	none	edit

b) Select the **VPG1** interface.

Network Configuration

Name	Network Config	Description	Action
eth0	VPG0	none	edit
eth1	Not Configured	none	edit
eth3	Not Configured	none	edit

eth0

Description (optional):

VPG0 VirtualPortGroup via intsvc0

VPG1 VirtualPortGroup via intsvc1

mgmt-bridge300 L2br AppGigEth Port 1 - bridge

mgmt-bridge-v2340 Dynamic vlan 2340 - bridge

c) Click **Interface Setting**.

▼ Network Configuration

Name	Network Config	Description	Action
eth0	VPG0	none	edit
eth1	Not Configured	none	edit
eth3	Not Configured	none	edit

eth0 VPG1 VirtualPortGroup via intsv ▼ [Interface Setting](#)

Description (optional):

The Interface Setting window pops up.

- d) Apply the following configurations:
- Set IPv4 as **Static**.
 - IP/Mask: 169.254.0.2 / 30
 - Default gateway: 169.254.0.1
 - **Disable** IPv6.

Interface Setting [X]

IPv4 Setting

Static Dynamic Disable

IP/Mask: /

DNS:

Default Gateway IP:

IPv6 Setting

Static Dynamic Disable

- e) Click **OK** to save the interface settings.
You're back to the Network Configuration menu.

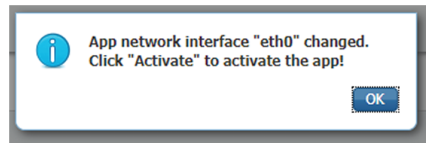
▼ Network Configuration

Name	Network Config	Description	Action
eth0	VPG0	none	edit
eth1	Not Configured	none	edit
eth3	Not Configured	none	edit

eth0 [Interface Setting](#)

Description (optional):

- f) Click **OK** to save the network configurations.
 A popup that confirms changes appears.



- g) Click **OK**.

Step 4 eth1:

- a) Click **edit** in the eth1 line.
 b) Select **mgmt-bridge300**.

▼ Network Configuration

Name	Network Config	Description	Action
eth0	VPG0	none	edit
eth1	Not Configured	none	edit
eth3	Not Configured	none	edit

eth1 [Interface Setting](#)

Description (optional):

- c) Click **Interface setting**.
 d) Apply the following configurations:
- Set IPv4 as **Static**.
 - IP/Mask: 169.254.2.2 / 30
 - Set IPv6 as **Dynamic**.
 - Vlan ID: VLAN in the Cisco IR8340 dedicated to traffic mirroring for the switched ports (e.g. 2340).
 - Set Mirror mode as **Enabled**.

- e) Click **OK**, and click **OK** again when you're back to the Network Configuration menu to save the interface settings.

Step 5 eth3:

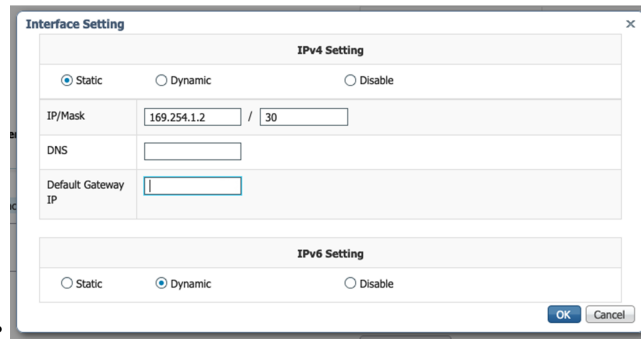
- a) Apply the following configurations to eth3:
- Select the **VPG0** interface.

Network Configuration			
Name	Network Config	Description	Action
eth0	VPG0	none	edit
eth1	mgmt-bridge300	none	edit
eth3	Not Configured	none	edit

eth3 VPG0 VirtualPortGroup via intsvc [Interface Setting](#)

Description (optional):

- Set IPv4 as **Static**.
- IP/Mask: 169.254.1.2/30.
- Set IPv6 as **Dynamic**.
- Leave the DNS and default gateway IP fields blank.



b) Click **OK**, and click **OK** again when you're back to the Network Configuration menu to save the interface settings.

▼ Network Configuration

Name	Network Config	Description	Action
eth0	VPG1	none	edit
eth1	mgmt-bridge300	none	edit
eth3	VPG0	none	edit

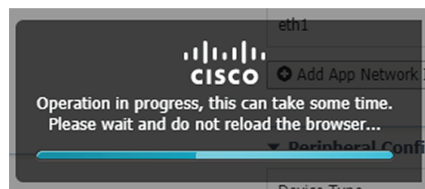
➕ Add App Network Interface

Step 6 If installing a sensor with **Active Discovery**, an additional eth2 interface appears in the Network Configuration menu. To configure this interface:

- Bind eth2 with mgmt-bridge300.
- Make sure IPv4 and IPv6 are set to Dynamic.

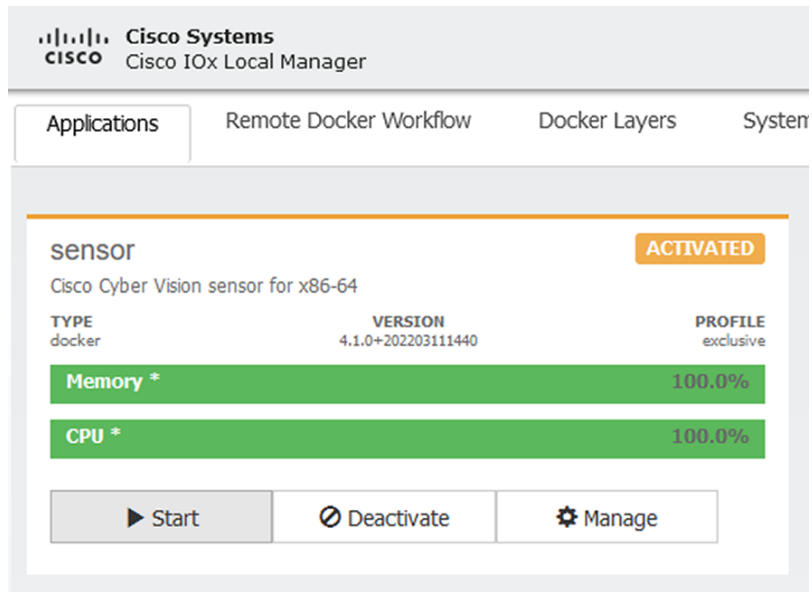
Step 7 Click the **Activate App** button.

The operation takes several seconds.



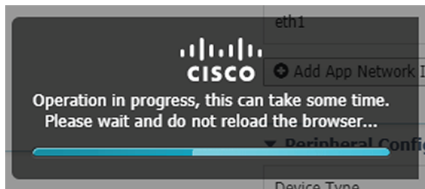
Step 8 Go to the Applications menu to see the application's status.

The application is activated and needs to be started.



Step 9 Click the **Start** button.

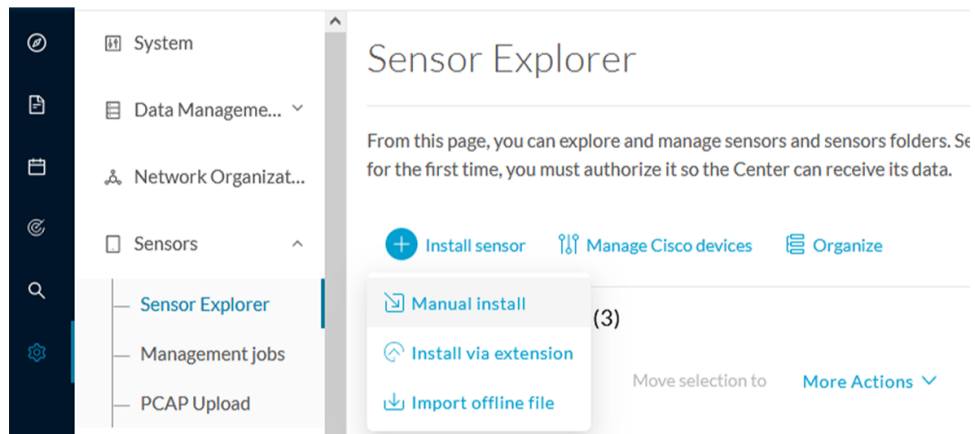
The operation takes several seconds.



The applications' status changes to RUNNING.

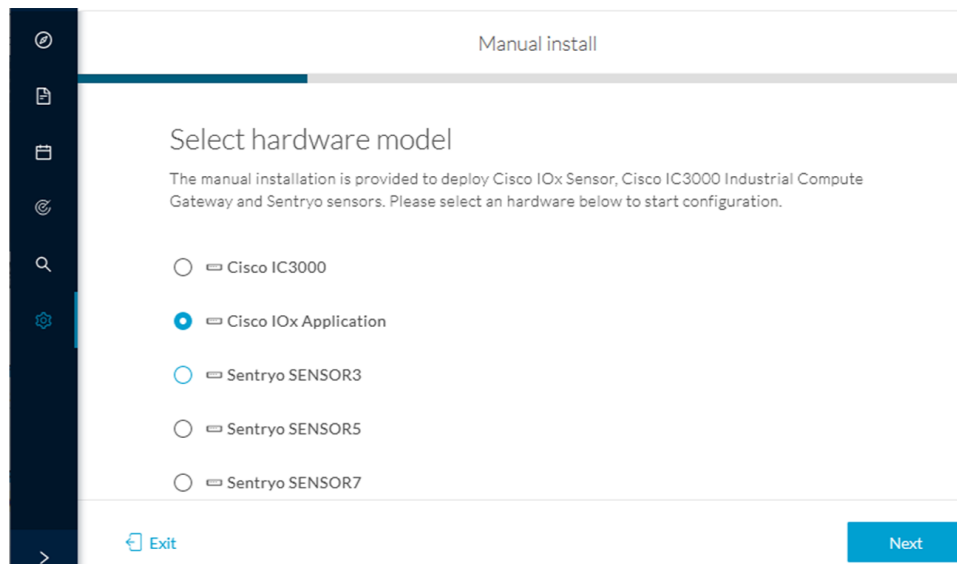
Generate the provisioning package

1. In Cisco Cyber Vision, navigate to Admin > Sensors > Sensor Explorer and click **Install sensor**, then **Manual install**.



The manual install wizard appears.

2. Select **Cisco IOx Application** and click **Next**.



3. Fill the fields to configure the sensor provisioning package:
 - The serial number of the hardware.
 - Center IP: leave blank.
 - Gateway: add if necessary.
 - Optionally, select a capture mode.
 - Optionally, select RSPAN (only with Catalyst 9x00 and if using ERSPAN is not possible).

Configure provisioning package

Please fill in the fields below to add configuration to the provisioning package to install.

Sensor Application

Serial number*

Center collection IP

leave blank to use current collection IP

Gateway

Capture mode

- Optimal (default): analyze the most relevant flows
- All: analyze all the flows
- Industrial only: analyze industrial flows
- Custom: set your filter using a packet filter in tcpdump-compatible syntax

Monitor session type

- ERSPAN: recommended choice for all devices
- RSPAN: use it only with Catalyst 9X00 and when using ERSPAN is not possible

4. Click **Create sensor**.

5. Click the link to download the provisioning package.

This will download the provisioning package which is a zip archive file with the following name structure: sbs-sensor-config-<serialnumber>.zip (e.g. "sbs-sensor-configFCW23500HDC.zip").

6. Click **Finish**.

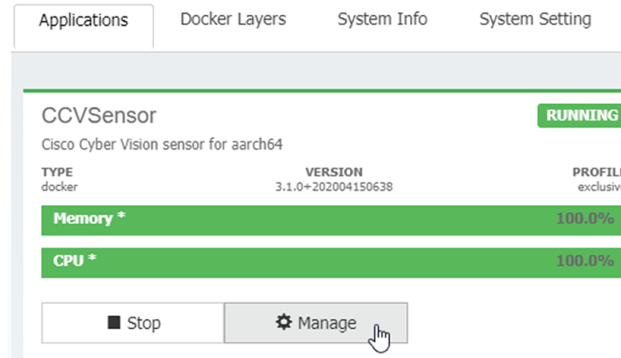
7. A new entry for the sensor appears in the Sensor Explorer list.

The sensor status will switch from Disconnected to Connected.

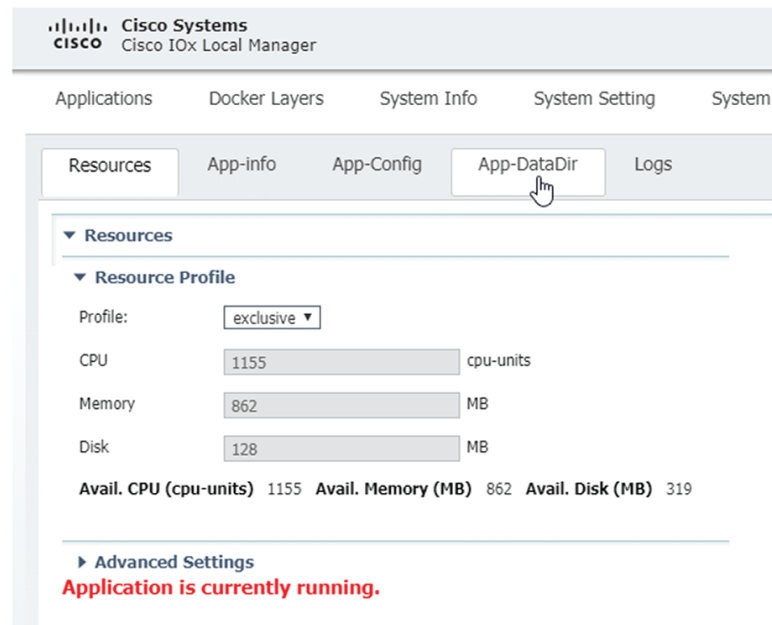
<input type="checkbox"/>	Label	IP Address	Version	Location	Health status	Processing status	Active Discovery	Uptime
<input type="checkbox"/>					Disconnected	Disconnected		0s
<input type="checkbox"/>								0s
<input type="checkbox"/>	FCW2445P6X5	192.168.49.21	4.1.0+202202151440		Connected	Pending data	Enabled	4 days

Import the provisioning package

1. In the Local Manager, in the IOx configuration menu, click **Manage**.

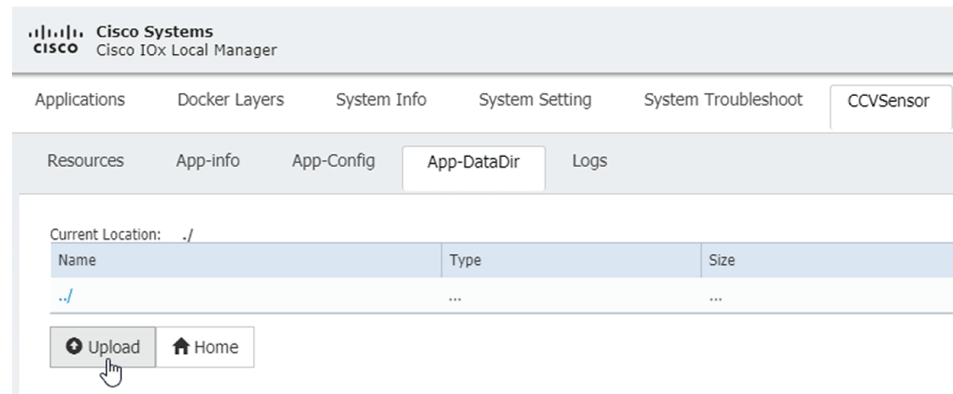


2. Navigate to **App-DataDir**.

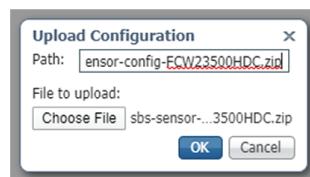


3. Click **Upload**.

Import the provisioning package



4. Choose the provisioning package downloaded (i.e. "sbs-sensor-config-FCW23500HDC.zip"), and add the exact file name in the path field (i.e. "sbs-sensor-config-FCW23500HDC.zip").
5. Click **OK**.



6. After a few seconds, the sensor appears as Connected in Cisco Cyber Vision.

<input type="checkbox"/>	FCW2445P6X5	192.168.49.21	4.1.0+202202151440	Connected	Pending data	Enabled	4 days
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