Sensor configuration

The Active Discovery configuration procedure will vary depending on the sensor model, whether it is a switch, a router or a Cisco IC3000.

To configure Active Discovery on a switch or a router, the sensors must have been previously deployed using the IOx sensor application file with Active Discovery. In this case, the Active Discovery button should appear in the sensor right side panel in Cisco Cyber Vision's Sensor Explorer page.

On a Cisco IC3000, you can configure Active Discovery performing a manual configuration or redeploying the sensor via the sensor extension.

- Configure Active Discovery on a Cisco switch or router, on page 1
- Configure Active Discovery on a Cisco IC3000, on page 5

Configure Active Discovery on a Cisco switch or router

Before you begin

This procedure is applicable to:

- Cisco IE3300 10G, Cisco IE3400 and Cisco IE9300.
- Cisco Catalyst 9300 and Cisco Catalyst 9400.
- Cisco IR8340 Integrated Services Router Rugged

The sensors must have been deployed using the IOx sensor application file with Active Discovery.

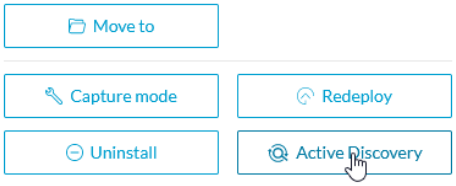
Step 1 Navigate to **Admin** > **Sensors** > **Sensor Explorer**.

Step 2 Select a sensor in the list.

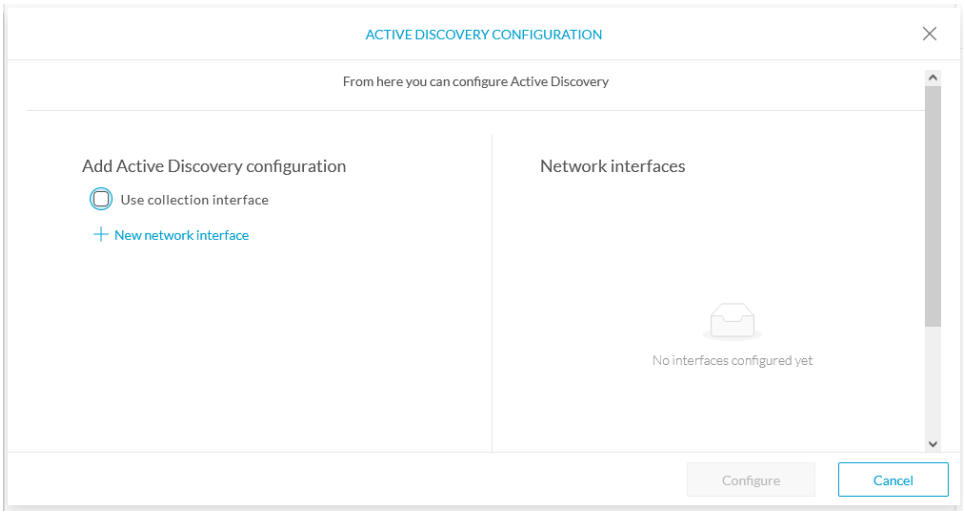
The sensor right side panel appears. The Active Discovery button is displayed if the sensor is compatible.

If there is no Active Discovery button in the panel, you must redeploy the sensor using the IOx application file with Active Discovery.

Step 3 Click the **Active Discovery** button.

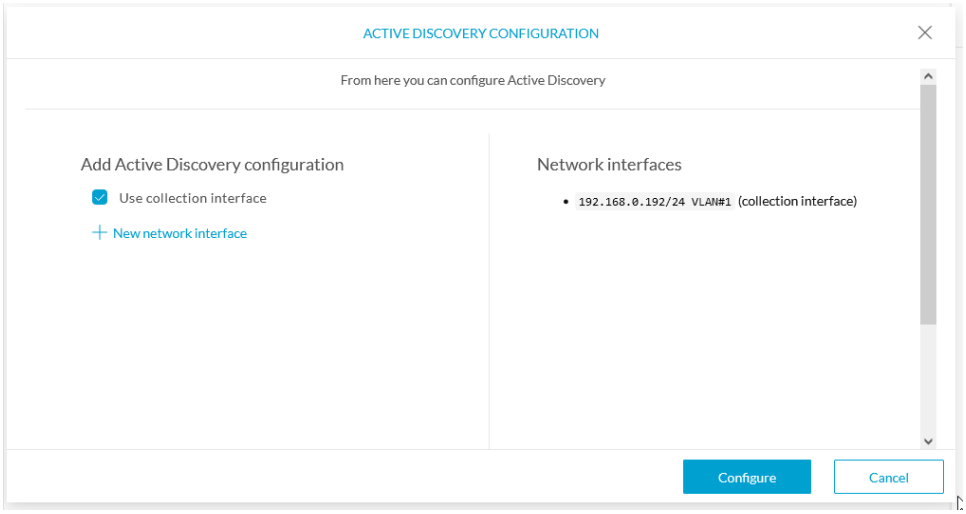


The Active Discovery Configuration window pops up:



Step 4 If necessary, tick the **Use collection interface** check box for Active Discovery to use the Collection network interface to do discovery on the same subnet as the sensor IP, or using the sensor Collection gateway.

The Collection network interface is added in the list on the right.

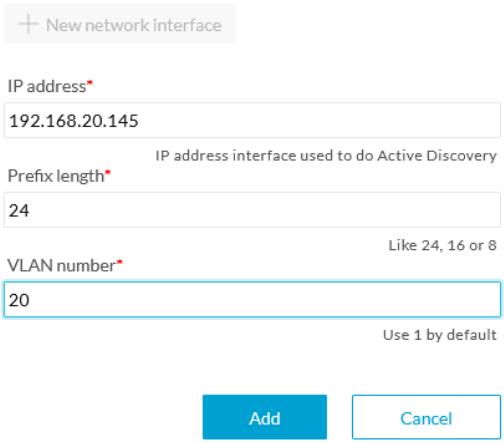


Step 5 Click **+ New network interfaces** for the sensor to perform Active Discovery on additional subnetworks.

Step 6 Fill the following parameters to set dedicated network interfaces:

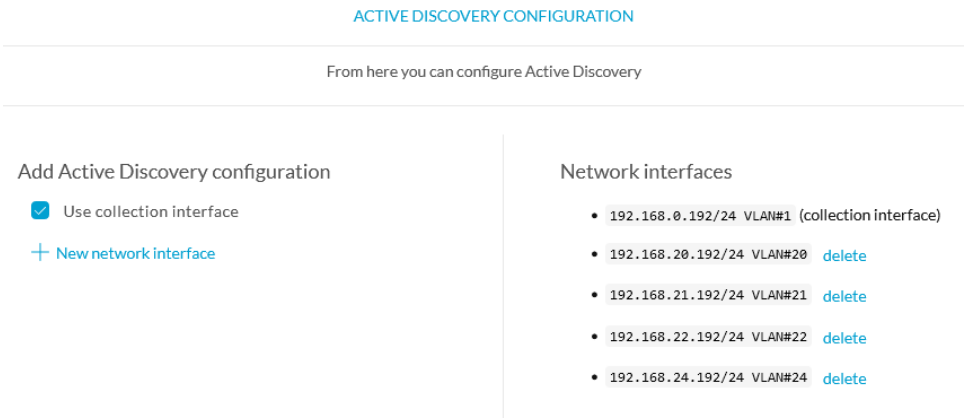
- IP address
- Prefix length

- VLAN number



Step 7 Click **Add**.

You can add as many network interfaces as needed, like below.



Step 8 Click **OK**.

The following schemas show how Active Discovery is created and how packets navigate inside the switch (in red).

Figure 1: IE3300 10G and IE3400:

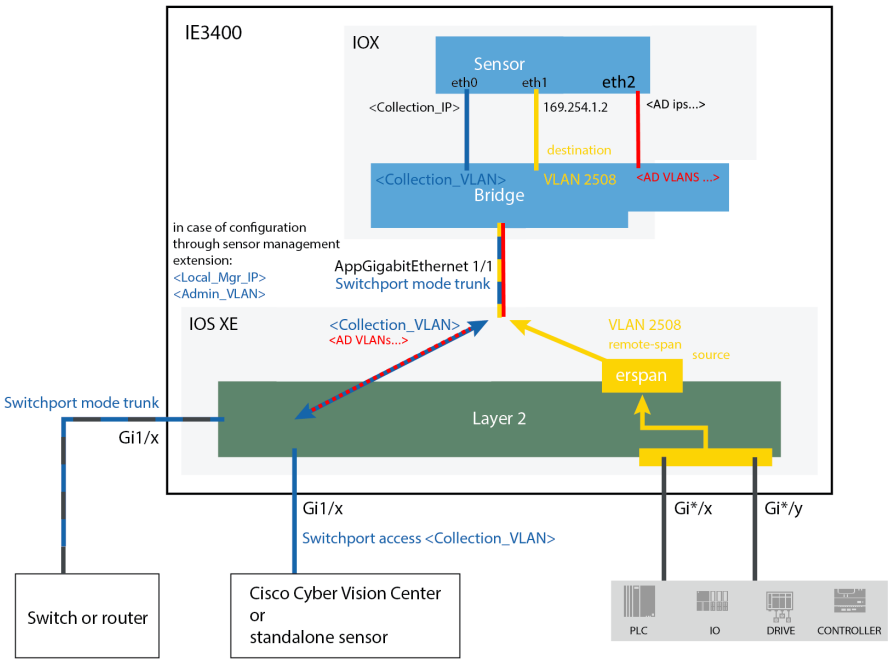


Figure 2: Catalyst 9300 and Catalyst 9400:

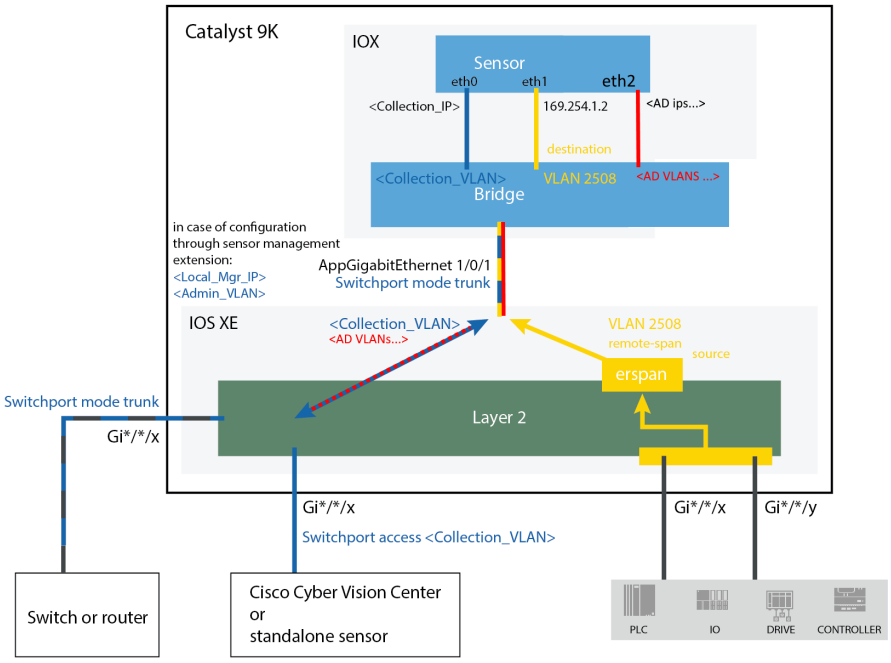
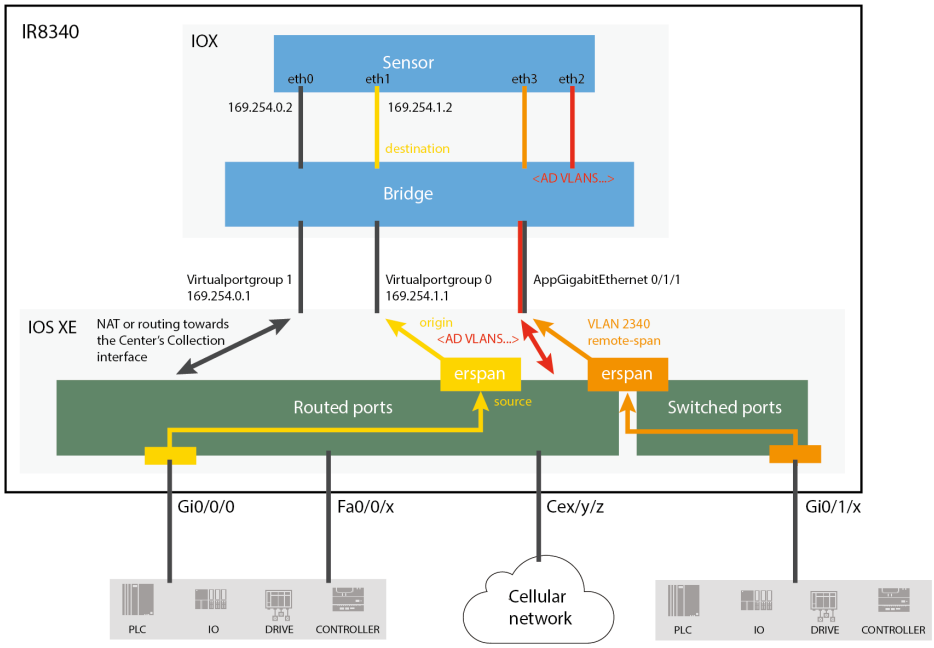


Figure 3: IR8340:



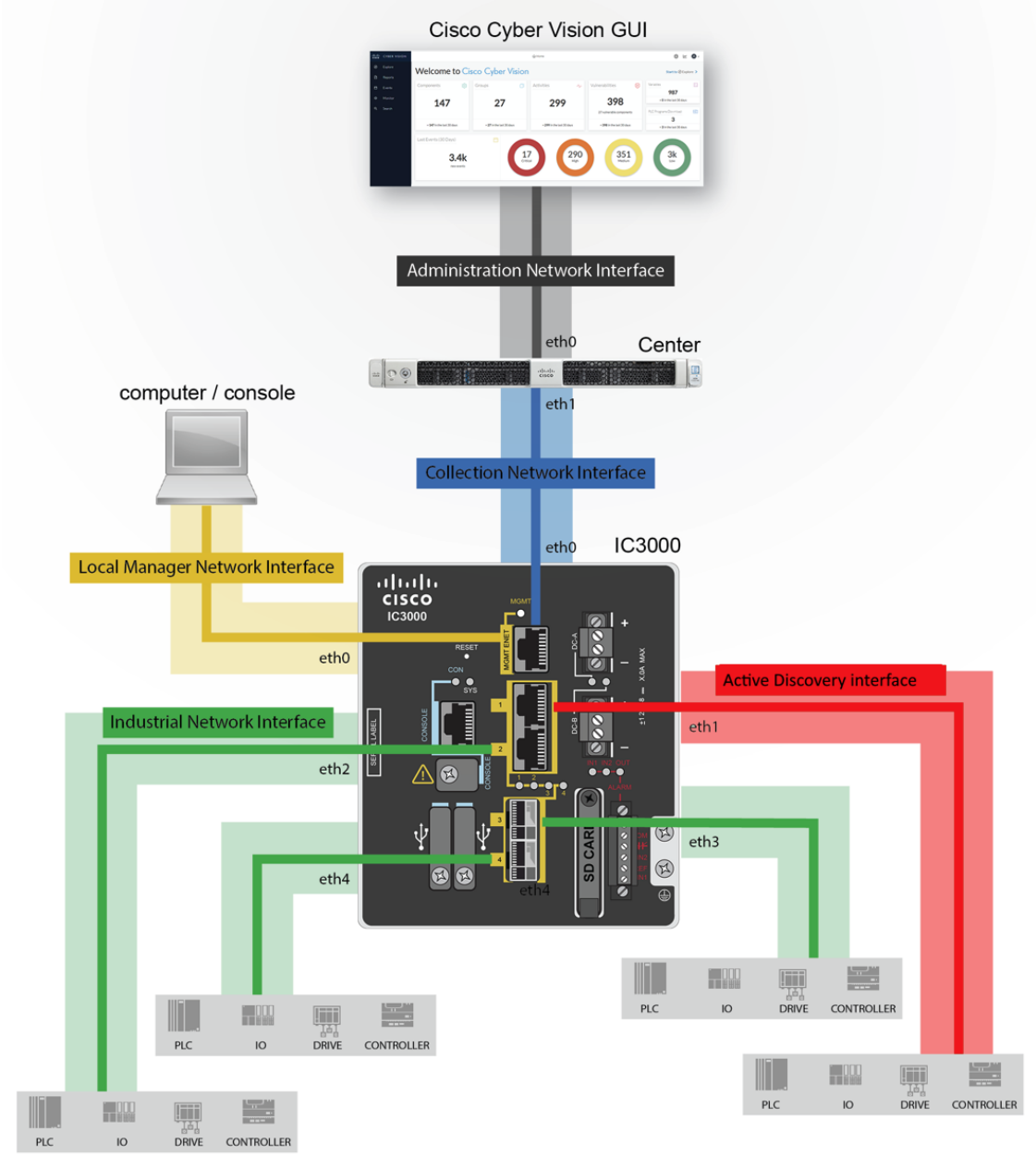
What to do next

Proceed to Policies configuration.

Configure Active Discovery on a Cisco IC3000

An interface must be defined on the Cisco IC3000 for Active Discovery to be enabled. Active Discovery can be set on the Collection network interface (i.e. the management port), or one of the four other interfaces of the Cisco IC3000 (i.e. int 1 to int 4).

Example: Active Discovery set on int1 (in red):



In any case, to configure Active Discovery on a Cisco IC3000, you have two options:

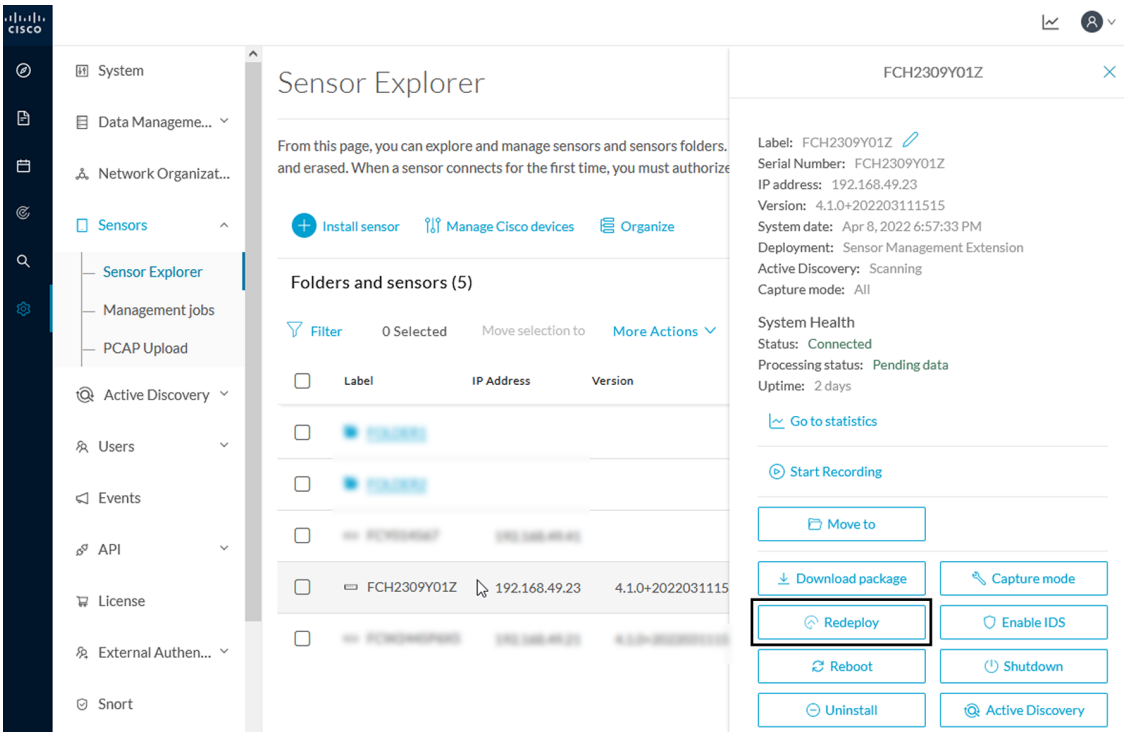
- To redeploy the Cisco IC3000 sensor with Active Discovery through the sensor management extension on Cisco Cyber Vision.
- To set up Active Discovery on the sensor, retrieve the provisioning package and deploy it on the device through the Local Manager.

Redeploy the Cisco IC3000 with Active Discovery

Redeploy the sensor to enable and configure Active Discovery on the Cisco IC3000.

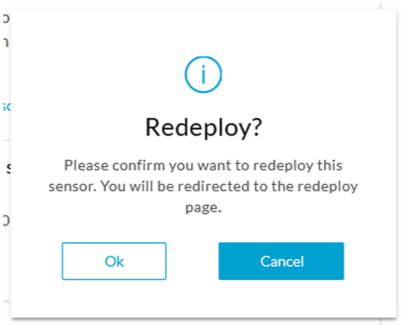
Step 1 On the Sensor Explorer page, click the sensor to reconfigure/redeploy. The sensor right side panel appears.

Step 2 Click **Redeploy**.



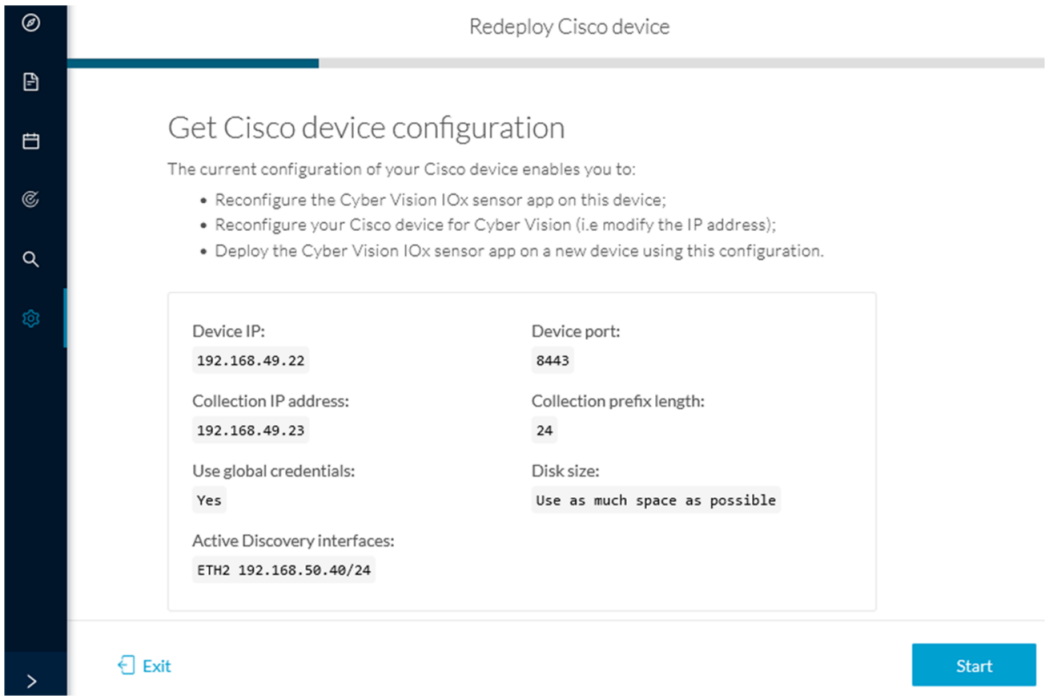
A pop up asking to confirm the redeployment of the sensor appears.

Step 3 Click **OK** to proceed.

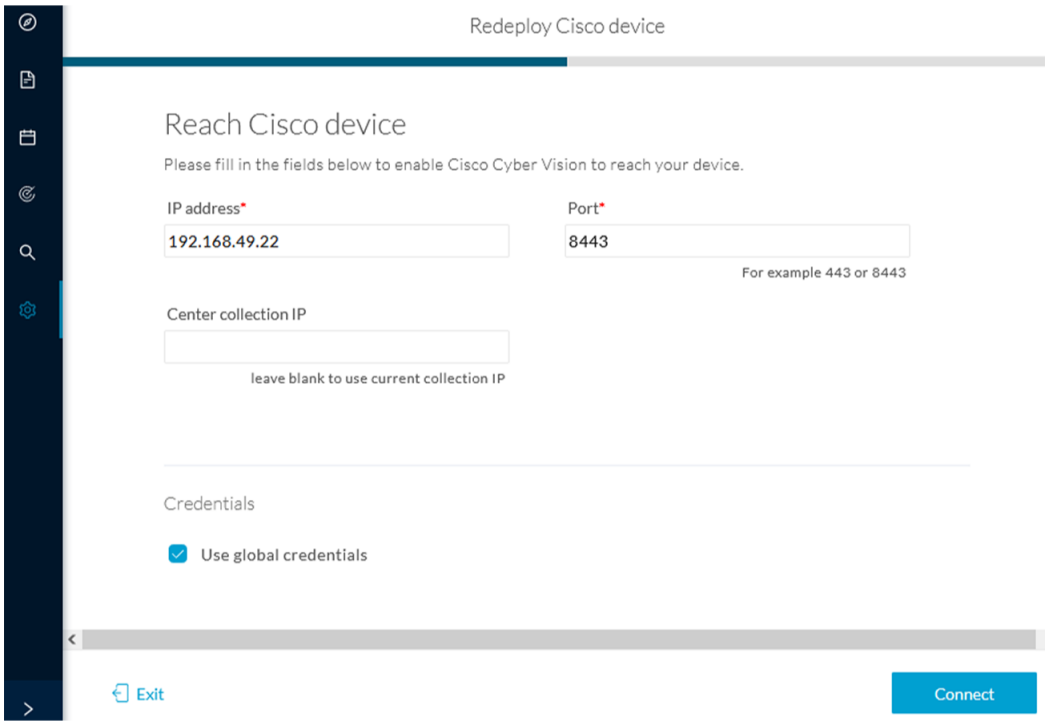


A summary of the sensor configuration is displayed.

Step 4 Click **Start**.



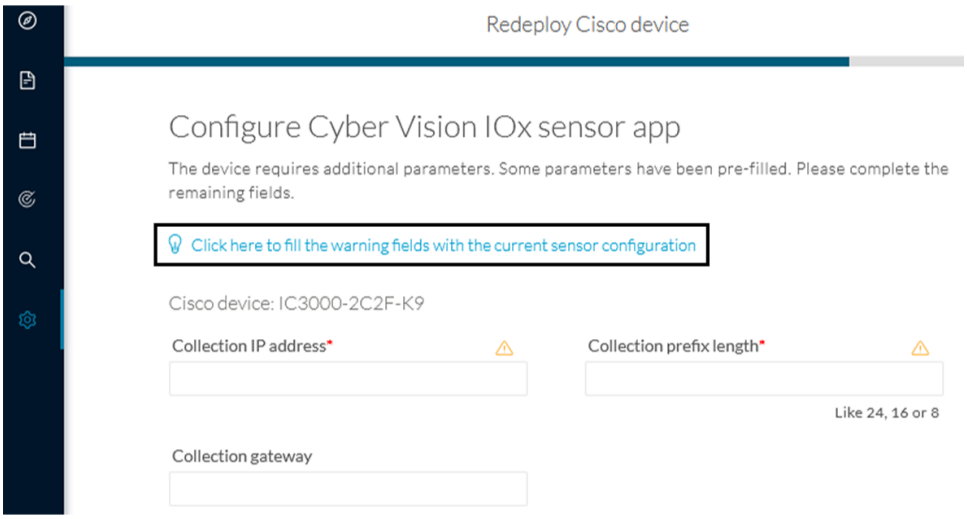
The reach Cisco device window appears. The device's IP address and port are displayed.



Step 5 Enter the credentials to reach the device or tick **Use global credentials**.

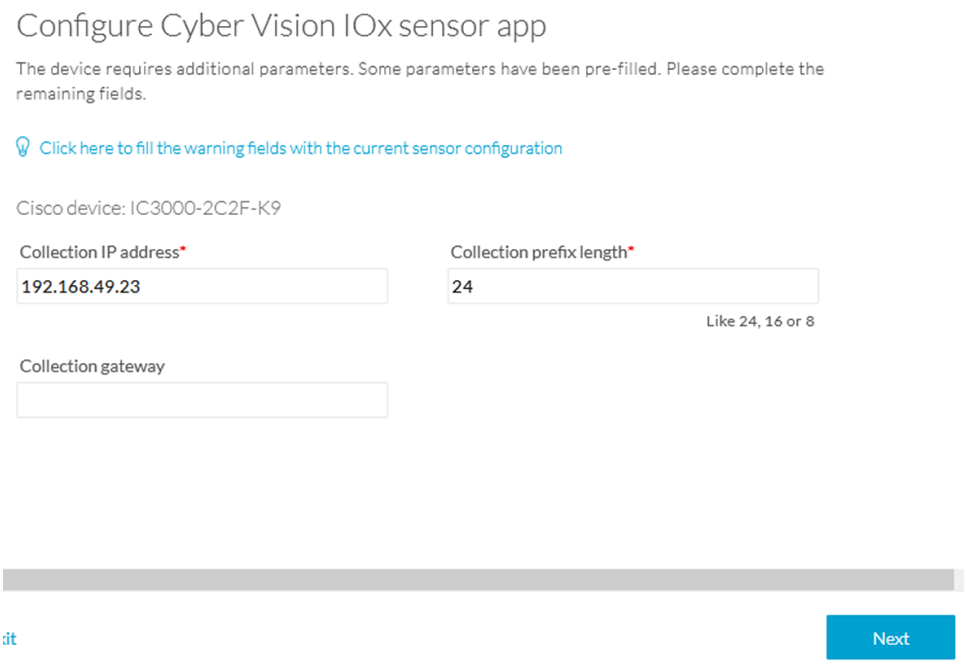
Step 6 Click **Connect**.

The Configure Cyber Vision IOx sensor app window appears.



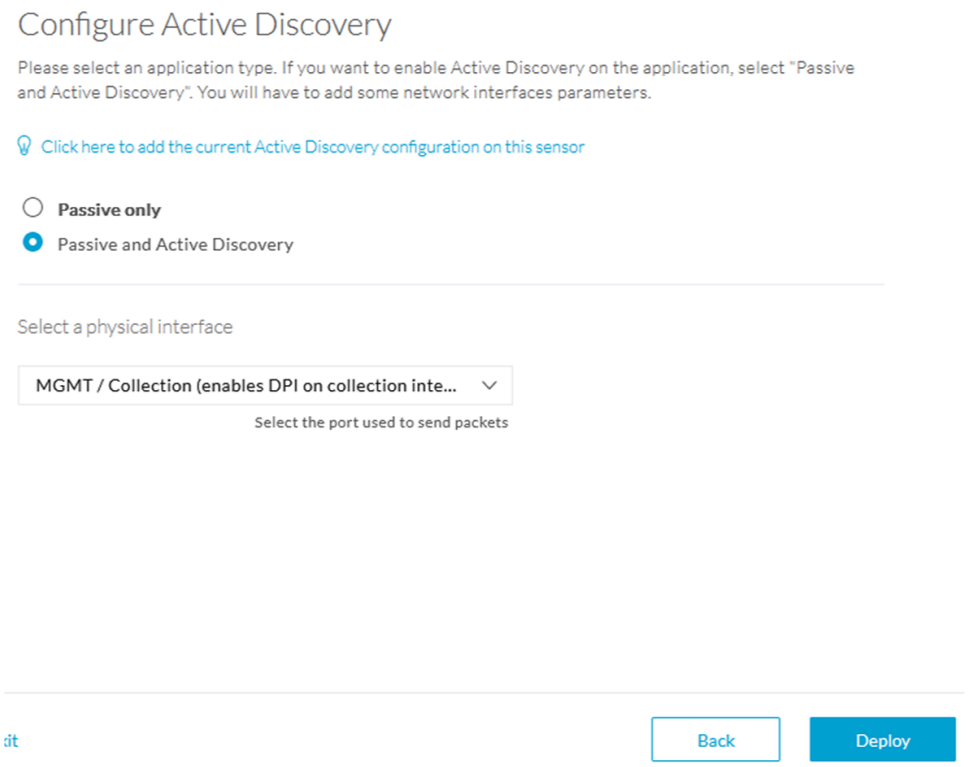
Step 7 Click the blue link to fill the warning fields with the current sensor configuration.

The Collection IP address and Collection prefix length are automatically filled.



Step 8 Click **Next**.

The Configure Active Discovery window appears.

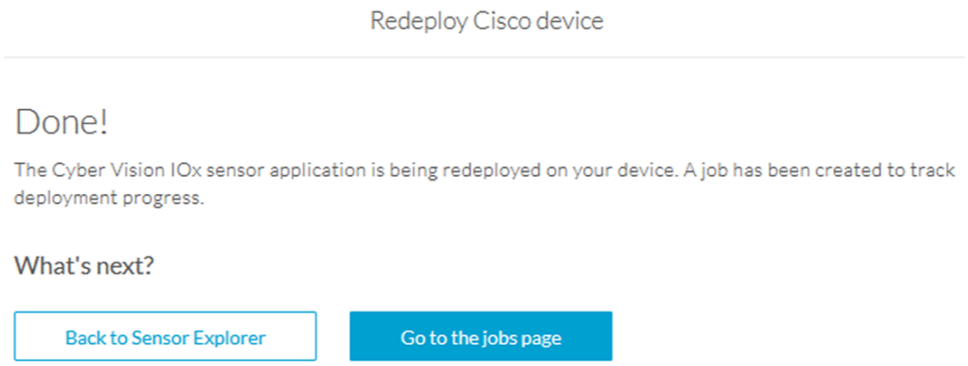


Step 9 Select **Passive and Active Discovery**.

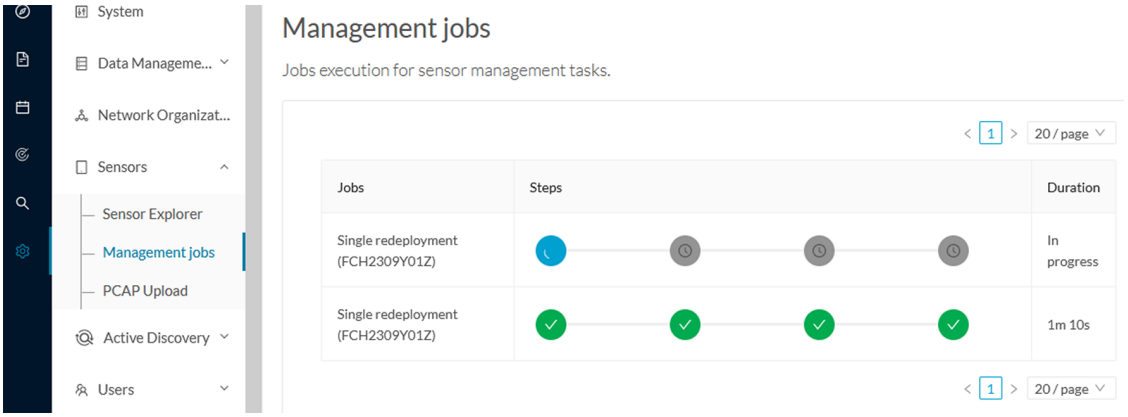
Step 10 Select a physical interface.

Step 11 Click **Deploy**.

A message saying that the sensor is being redeployed appears. You can either go the jobs page or go back to the Sensor Explorer page.

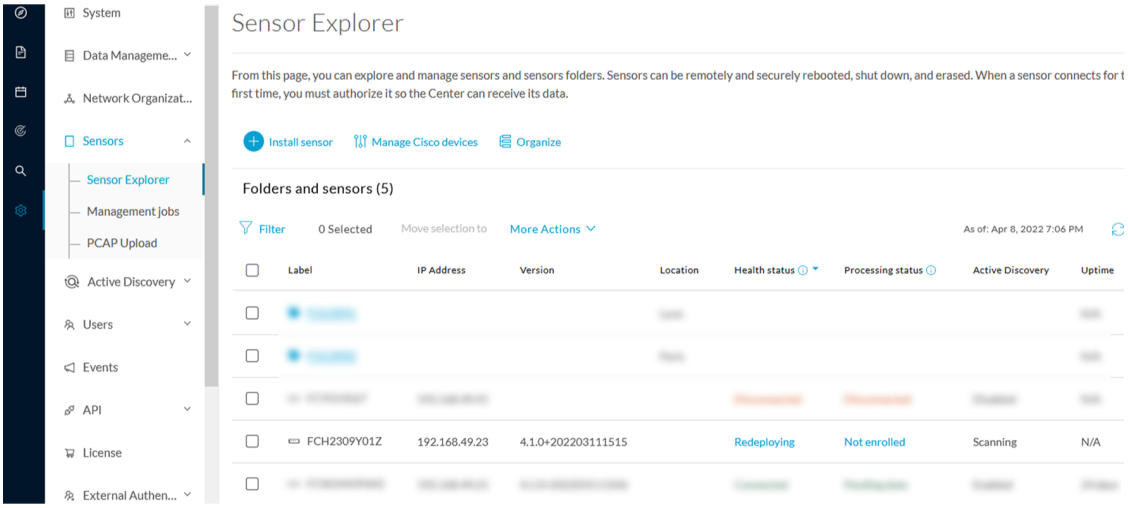


If you click **Go to the jobs page** you are redirected to the Management jobs page.

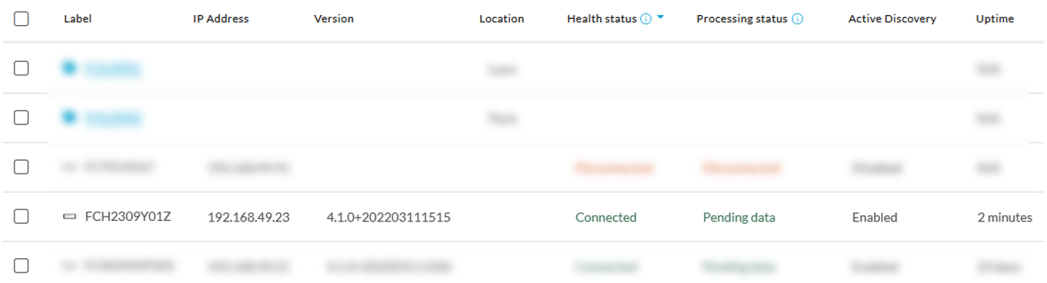


You can see the redeployment advancement. This can take several minutes.

If you go back to the Sensor Explorer page, you will see that the sensor is in Redeploying status.



Once the redeployment is finished, the sensor will switch status to Connected and Active Discovery to Enabled.



What to do next

Proceed to Policies configuration.

Manually configure Active Discovery on the Cisco IC3000

To do so, you will:

1. Set up the Cisco IC3000 sensor with Active Discovery on Cisco Cyber Vision and download the provisioning package.
2. Deploy the provisioning package on the Cisco IC3000 device through the Local Manager.

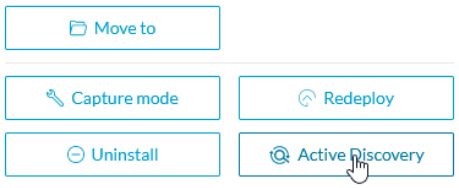
Set up Active Discovery on Cisco Cyber Vision

Step 1 Navigate to **Admin** > **Sensors** > **Sensor Explorer**.

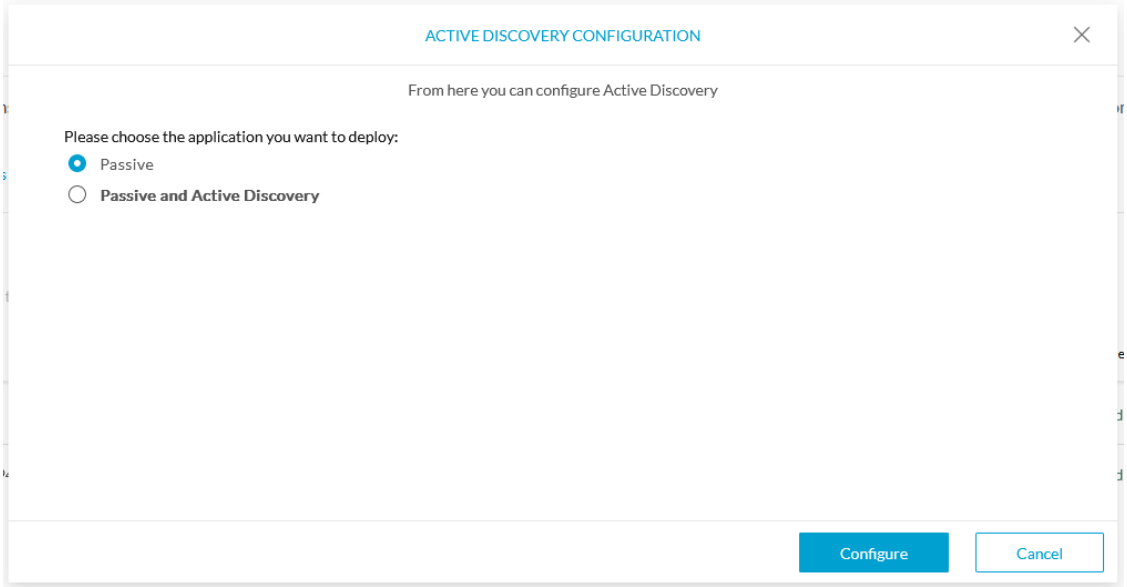
Step 2 Select a sensor in the list.

The sensor right side panel appears.

Step 3 Click the **Active Discovery** button.

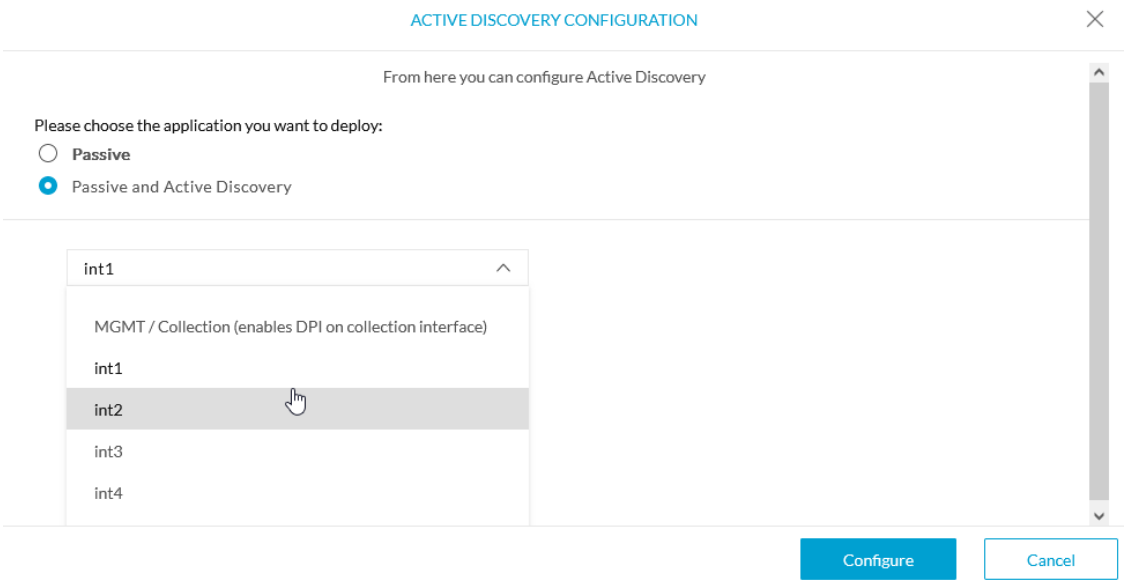


The Active Discovery configuration window pops up.



Step 4 Select the **Passive and Active Discovery** option.

A list of network interfaces appears.



Step 5 Select the network interface dedicated to Active Discovery, i.e. the management port or one of the four interfaces.

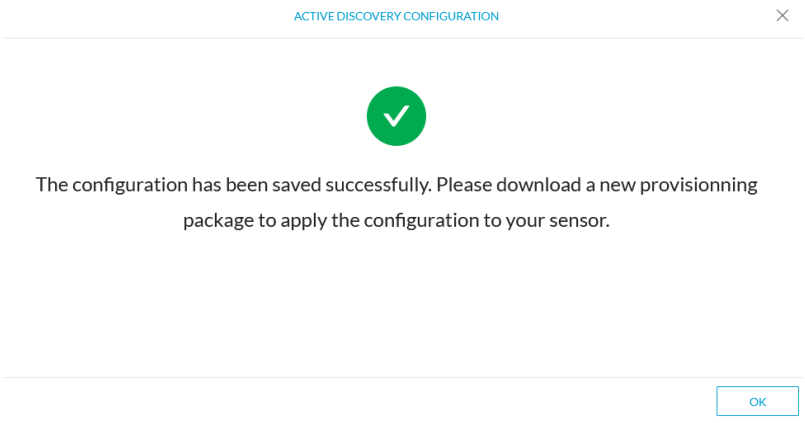
The following fields appears:

- IP address
- Prefix length

Step 6 Fill them with the proper network information.

Step 7 Click **Configure**.

The following message appears:



Step 8 Click **OK**.

Step 9 In the sensor list, click the Cisco IC3000 you just set with Active Discovery.

Its right side panel appears.

Step 10 Click **Download package**.

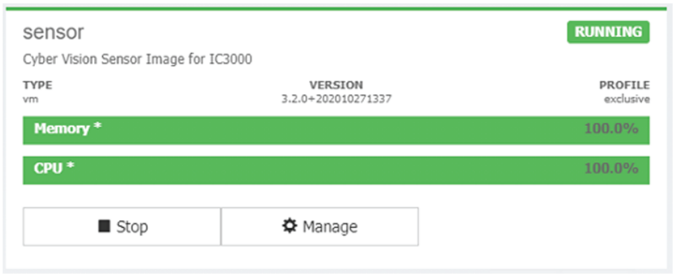
The provisioning package including the Active Discovery configuration is downloaded.

What to do next

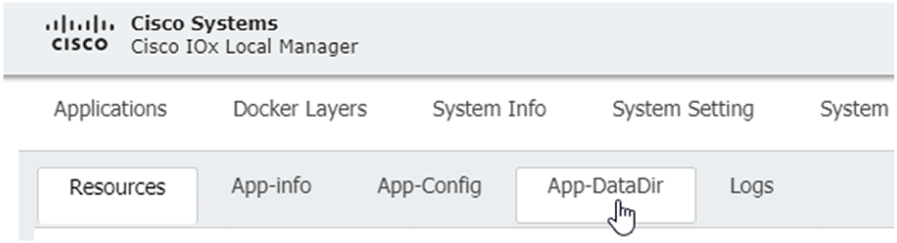
Import the provisioning package in the Cisco IC3000 device through the Local Manager.

Import the provisioning package

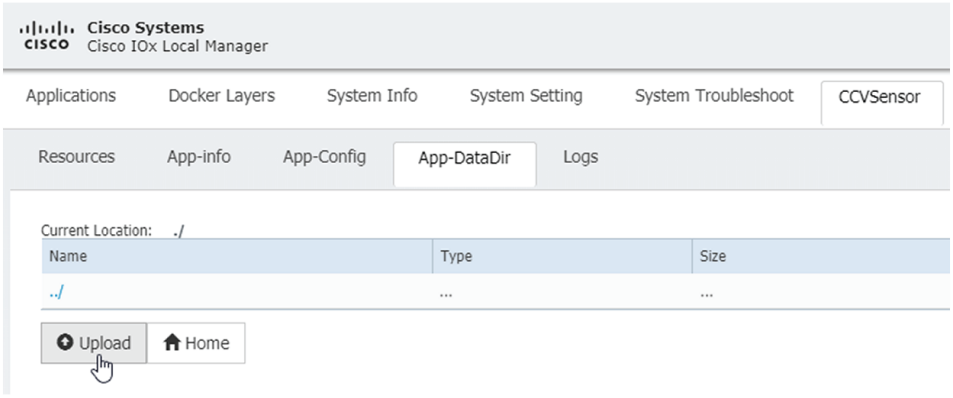
1. In the Local Manager, in the IOx configuration menu, click **Manage**.



2. Navigate to **App_DataDir**.



3. Before browsing the file, you must unzip the provisioning package.
4. Click **Upload**.



5. Navigate to the folder with the sensor serial name (i.e. FCH2312Y03F) > appconfigs, and select cybervision-sensor-config.zip.

6. Make sure the path contains the entire file name (with .zip).

7. Click **OK**.