



Maintenance

- [Upgrade procedures, on page 1](#)
- [Certificate renewal, on page 8](#)

Upgrade procedures

Upgrade through the Cisco Cyber Vision sensor management extension

Before updating sensors, the Cisco Cyber Vision sensor management extension must be up-to-date.

Update the sensor management extension

The Cisco Cyber Vision sensor management extension must be up-to-date to update IOx sensors.

Procedure

- Step 1** Retrieve the sensor management extension file (i.e. CiscoCyberVision-sensor-management-<version>.ext) on cisco.com.
- Step 2** In Cisco Cyber Vision, navigate to Admin > Extensions.
- Step 3** Click **Update** to browse the new version of the extension file.

Extensions

From this page, you can manage Cyber Vision Extensions. Extensions are optional add-ons to Cyber Vision Center which provide more features, such as the management of new device types, additional detection engines, or integrations with external services.

Update
Uploading... Please do not quit or refresh the page.

Installed extensions

Name	Version	Actions
Cyber Vision sensor management	4.1.2	Update Remove

Update the sensors

Procedure

Step 1 In Cisco Cyber Vision, navigate to Admin > Sensors > Sensor Explorer.

Sensors that are not up-to-date have their version displayed in red.

Step 2 Click **Install sensor**, then **Update Cisco devices**.

Sensor Explorer

From this page, you can explore and manage sensors and sensors folders. Sensors can be remotely and securely rebo time, you must authorize it so the Center can receive its data.

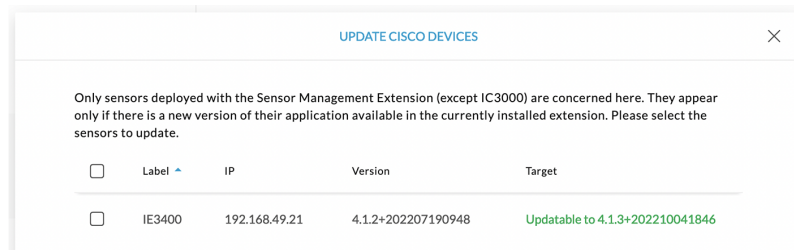
[Install sensor](#) [Manage Cisco devices](#) [Organize](#)
[Update Cisco devices](#) [Manage credentials](#)

Folders and sensors

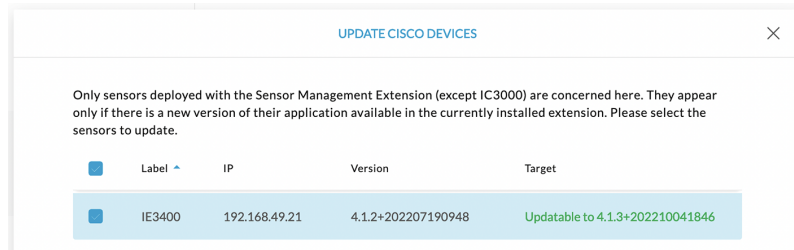
Filter 0 Selected MOVE SELECTION TO More Actions

	Label	IP Address	Version	Location	Health status
<input type="checkbox"/>	FOLDER1			Lyon	
<input type="checkbox"/>	FOLDER2			Paris	
<input type="checkbox"/>	IC3000	192.168.49.23	4.1.1+202205161124		Connected
<input type="checkbox"/>	IE3400	192.168.49.21	4.1.2+202207190948		Connected

The update Cisco devices window pops up listing all sensors that have been deployed with the sensor management extension.

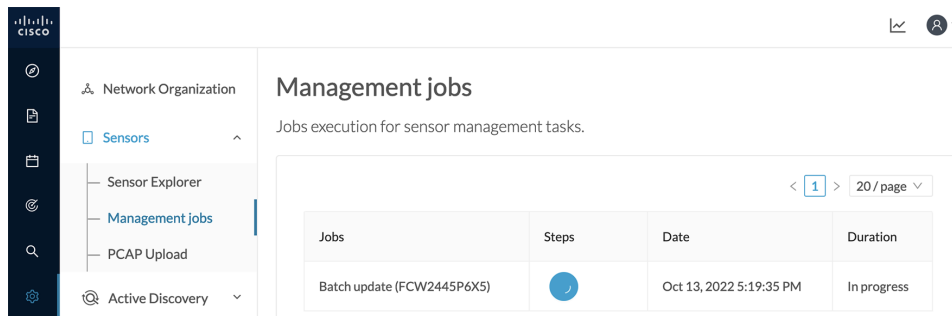


Step 3 Select the sensors you want to update.

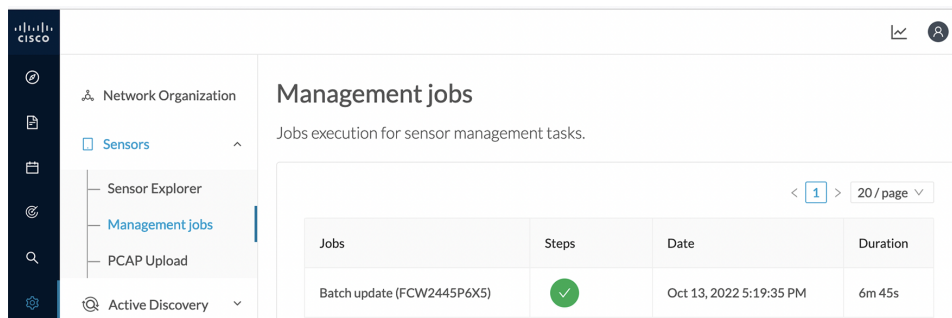


Step 4 Click **Update**.

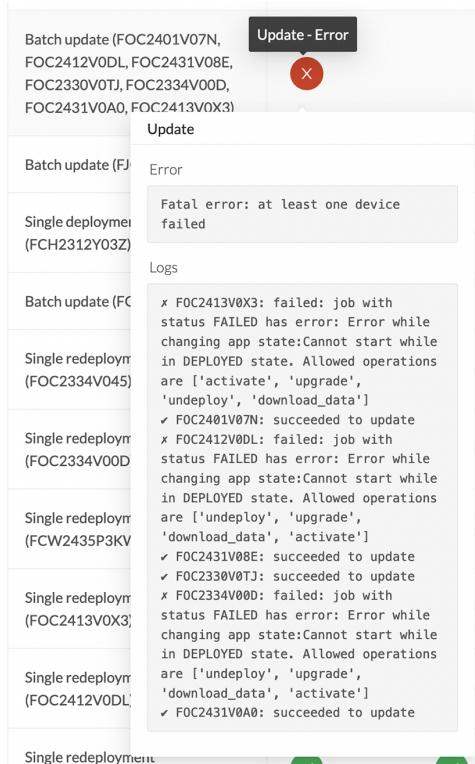
The sensors' update status appear in the Management jobs page in batches per sensor type and of maximum ten sensors per batch.



Herebelow the management jobs indicate that the batch of sensors updated successfully.



If the batch update fails, click the red update error icon to see logs.

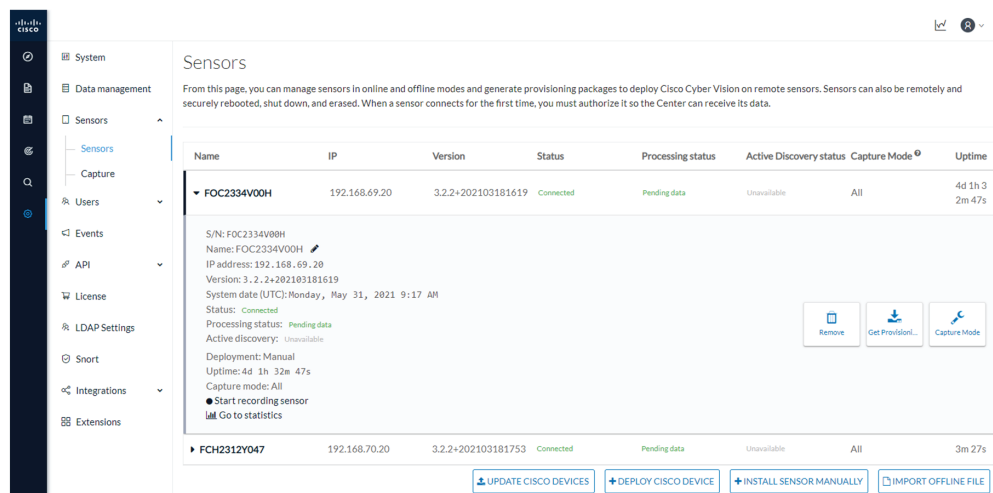


Upgrade through the IOx Local Manager

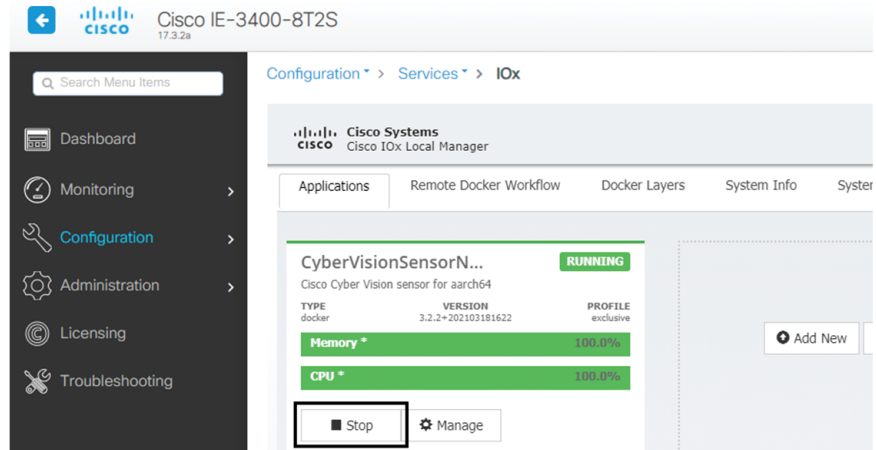
The following section explains how to upgrade the sensor through the IOx Local Manager.

In the example below, the sensor is upgraded from Cisco Cyber Vision version 3.2.2 to version 3.2.3.

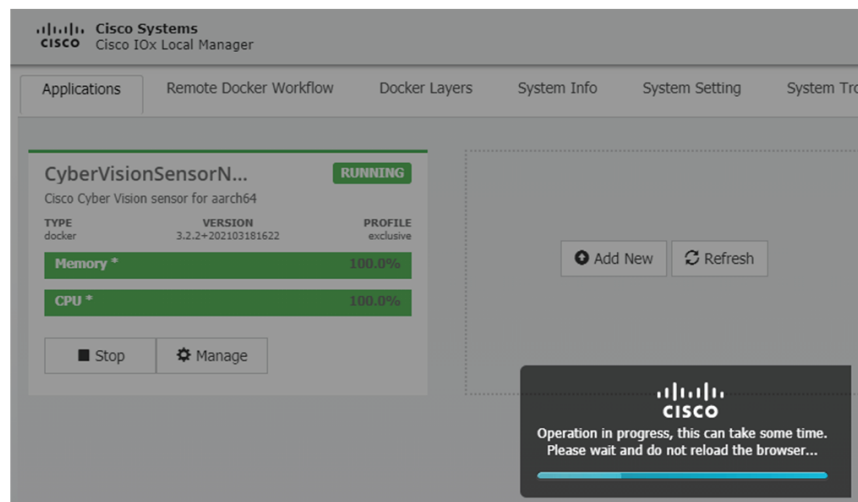
Figure 1: The sensor in version 3.2.2 in the Sensors administration page of Cisco Cyber Vision



1. Access the IOx Local Manager.
2. Stop the application.



The operation takes a few moments.



The application status switches to STOPPED.

In Cisco Cyber Vision, the sensor status switches to Disconnected.

Sensors

From this page, you can manage sensors in online and offline modes and generate provisioning packages to deploy Cisco Cyber Vision on remote sensors. Sensors can also be remotely and securely rebooted, shut down, and erased. When a sensor connects for the first time, you must authorize it so the Center can receive its data.

Name	IP	Version	Status	Processing status	Active Discovery status	Capture Mode	Uptime
FOC2334V00H	192.168.69.20	3.2.2+202103181619	Disconnected	Disconnected	Unavailable	All	N/A
S/N: FOC2334V00H Name: FOC2334V00H IP address: 192.168.69.20 Version: 3.2.2+202103181619 System date (UTC): Monday, May 31, 2021 9:20 AM Status: Disconnected Processing status: Disconnected Active discovery: Unavailable Deployment: Manual Capture mode: All Go to statistics							
FCH2312Y047	192.168.70.20	3.2.2+202103181753	Connected	Pending data	Unavailable	All	10m

[UPDATE CISCO DEVICES](#)
[DEPLOY CISCO DEVICE](#)
[INSTALL SENSOR MANUALLY](#)
[IMPORT OFFLINE FILE](#)

3. In the IOx Local Manager, click the **Deactivate** button.

The application status moves to **DEPLOYED**.

4. Click **Upgrade**.

CyberVisionSensorN... **DEPLOYED**

Cisco Cyber Vision sensor for aarch64

TYPE	VERSION	PROFILE
docker	3.2.2+202103181622	exclusive

Memory * 100.0%

CPU * 100.0%

Activate
 Upgrade
 Delete

The pop up Upgrade application appears.

Upgrade application

Application Id: CyberVisionSensorNetwork

Select Application Archive: Choose File No file chosen

Preserve Application Data

OK Cancel

5. Select the **Preserve Application Data** option.

6. Select the new version of the application archive file.

e.g. CiscoCyberVision-IOx-aarch64-3.2.3.tar

Upgrade application

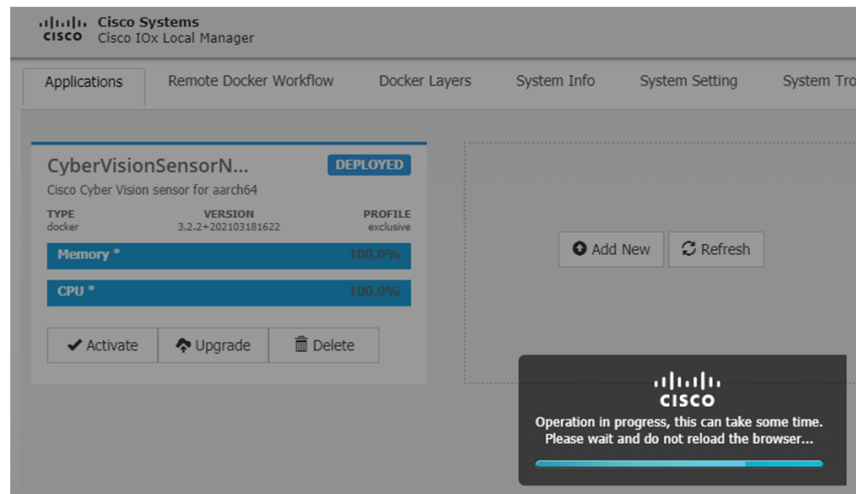
Application Id: CyberVisionSensorNetwork

Select Application Archive: Choose File CiscoCyber...h64-3.2.3.tar

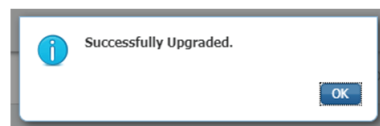
Preserve Application Data

OK Cancel

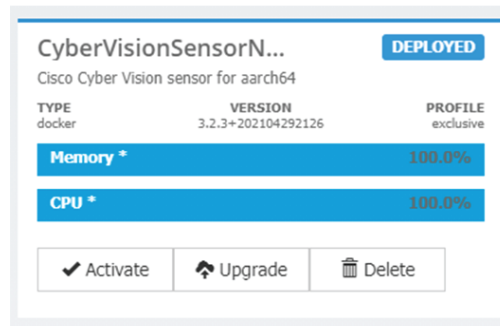
The operation takes a few moments.



A message indicating that the sensor has been successfully upgraded is displayed.



7. Check the number of the new version.
8. Click **Activate**.



9. Check configurations.
10. Click the **Activate App** button.
The application status moves to **ACTIVATED**.
11. Click the **Start** button.
The application status changes to **RUNNING**.

In Cisco Cyber Vision, the sensor is upgraded from version 3.2.2 to 3.2.3 and its status moves to Connected.

Sensors

From this page, you can manage sensors in online and offline modes and generate provisioning packages to deploy Cisco Cyber Vision on remote sensors. Sensors can also be remotely and securely rebooted, shut down, and erased. When a sensor connects for the first time, you must authorize it so the Center can receive its data.

Name	IP	Version	Status	Processing status	Active Discovery status	Capture Mode ⁶	Uptime
▼ FOC2334V00H	192.168.69.20	3.2.3+202104292032	Connected	Pending data	Unavailable	All	4d 1h 49m
<p>S/N: FOC2334V00H Name: FOC2334V00H IP address: 192.168.69.20 Version: 3.2.3+202104292032 System date (UTC): Monday, May 31, 2021 9:33 AM Status: Connected Processing status: Pending data Active discovery: Unavailable Deployment: Manual Uptime: 4d 1h 49m Capture mode: All ● Start recording sensor 📊 Go to statistics</p> <div style="text-align: right;"> Remove Get Provision... Capture Mode </div>							
▶ FCH2312Y047	192.168.70.20	3.2.2+202103181753	Connected	Pending data	Unavailable	All	19m 34s

UPDATE CISCO DEVICES DEPLOY CISCO DEVICE INSTALL SENSOR MANUALLY IMPORT OFFLINE FILE

Certificate renewal

The certificates generated by Cisco Cyber Vision have a validity of two years.

Sensor certificates must be renewed manually. The procedure used differs whether the certificate is already expired or not and whether the sensor has been deployed using the sensor management extension.

- If the certificate is still valid, refer to [Sensor certificate renewal, on page 8](#).
- If the sensor was deployed with the sensor management extension, refer to [Sensor certificate renewal, on page 8](#).
- If the certificate is outdated, and was deployed manually, refer to [Sensor certificate renewal through the Local Manager, on page 12](#).

Sensor certificate renewal

The following procedure applies to:

- Sensors deployed with the sensor management extension, whether the certificate expiration date is exceeded or not (i.e. the deployment method is indicated in the sensor's right side panel).

The screenshot shows the 'Sensor Explorer' page. At the top right, there is a red banner for 'System Issues Actions required'. Below it, the sensor 'FOC2330V0T0' is selected. A yellow warning box states '2 sensor certificates expired'. The main area contains a table of sensors and a detailed view for the selected sensor.

	Label	IP Address	Version
<input type="checkbox"/>	FCH2309Y01Z	192.168.49.23	4.2.2+202306261711
<input type="checkbox"/>	FCW2445P6X5	192.168.49.21	4.2.2+202306261519
<input type="checkbox"/>	FOC2330V0T0	192.168.49.41	4.2.2+202306261519

Sensor Details for FOC2330V0T0:

- Label: FOC2330V0T0
- Serial Number: FOC2330V0T0
- IP address: 192.168.49.41
- Version: 4.2.2+202306261519
- System date: Jul 6, 2023 11:26:00 AM
- Deployment: Sensor Management Extension
- Active Discovery: Unavailable
- Capture mode: All
- System Health: Status: Connected, Processing status: Normally processing, Uptime: 18 hours

Actions available: Move to, Capture mode, Redeploy, Uninstall.

- In the case of sensors deployed manually, it only applies if the sensors certificate have not expired yet (i.e. the sensor certificate status is Expire Soon).

If sensors have been deployed manually and the certificate expiration date is exceeded, refer to [Sensor certificate renewal through the Local Manager, on page 12](#).

Procedure

Step 1

In Cisco Cyber Vision, navigate to Admin > Sensors > Sensor Explorer or click the top banner alert to access the Sensor Explorer page directly.

The screenshot shows a red banner for 'System Issues Actions required'. Below it, a white alert box with a red 'X' icon states: '2 sensors certificates expired. Please renew them in: [Sensor explorer](#)'.

Another alert is displayed.

The screenshot shows the Cisco Sensor Explorer interface. On the left is a navigation sidebar with options like System, Data Management, Network Organization, Sensors, Active Discovery, Users, Events, API, License, External Authentication, and Snort. The main content area is titled "Sensor Explorer" and includes a notification banner: "2 sensor certificates expired and 1 will expire soon" with a "Manage certificates" link. Below the notification are buttons for "Install sensor", "Manage Cisco devices", and "Organize". A table titled "Folders and sensors (3)" lists three sensors with columns for Label, IP Address, Version, Location, Health status, and Processing status.

Label	IP Address	Version	Location	Health status	Processing status
FCH2309Y01Z	192.168.49.23	4.2.2+202306261711		Connected	Normally pro
FCW2445P6X5	192.168.49.21	4.2.2+202306261519		Connected	Normally pro
FOC2330V0T0	192.168.49.41	4.2.2+202306261519		Connected	Normally pro

Step 2 Click **Manage certificates** in the alert or **Manage Cisco devices > Manage certificates**.

This screenshot shows the same Cisco Sensor Explorer interface as above, but with a dropdown menu open over the "Manage Cisco devices" button. The dropdown menu contains three options: "Update Cisco devices", "Manage credentials", and "Manage certificates". The "Manage certificates" option is highlighted with a black border. The notification banner and table from the previous screenshot are also visible.

The **Manage sensors certificates** window opens.

MANAGE SENSORS CERTIFICATES

Select a sensor to renew its certificate.
If a sensor cannot be selected, it means that its certificate cannot be renewed automatically.

Filter

Certificate status is Expired × Certificate status is Expiring Soon ×

	Sensor Label	IP	Certificate Status	Expiration Date
<input type="radio"/>	FCH2309Y01Z	192.168.49.23	Expired	Jul 2, 2023
<input type="radio"/>	FOC2330V0T0	192.168.49.41	Expired	Jul 2, 2023
<input checked="" type="radio"/>	FCW2445P6X5	192.168.49.21	Expiring Soon	Jul 14, 2023

Cancel Renew certificate

- Step 3** Select the sensor with the status Expiring Soon.
- Step 4** Click **Renew certificate**.

MANAGE SENSORS CERTIFICATES

Select a sensor to renew its certificate.
If a sensor cannot be selected, it means that its certificate cannot be renewed automatically.

The certificate has been successfully renewed.

Filter

Certificate status is Expired × Certificate status is Expiring Soon ×

	Sensor Label	IP	Certificate Status	Expiration Date
<input type="radio"/>	FOC2330V0T0	192.168.49.41	Expired	Jul 2, 2023
<input type="radio"/>	FCH2309Y01Z	192.168.49.23	Expired	Jul 2, 2023
<input type="radio"/>	FCW2445P6X5	192.168.49.21	Valid	Sep 3, 2025

Cancel Renew certificate

The certificate is renewed and automatically sent to the sensor. Its status switches to Valid and the new expiration date appears.

Sensor certificate renewal through the Local Manager

In case of certificate expiration, communication with the sensor is no longer possible if it was deployed manually (i.e. without the sensor management extension). In this case, the certificate is renewed by sending it to the sensor manually. As the certificate is part of the provisioning package, the action consists in generating the provisioning package and sending it to the sensor application through the Local Manager.

The screenshot shows the Cisco Cyber Vision Sensor Explorer interface. At the top right, there is a red notification banner that says "System issues Action required". Below this, the "Sensor Explorer" page is displayed. A yellow notification box at the top left of the main content area states "1 sensor certificate expired". Below the notification, there are three buttons: "Install sensor", "Manage Cisco devices", and "Organize". A table titled "Folders and sensors (3)" is shown, with columns for "Label", "IP Address", and "Version". The table contains three rows of sensor data. To the right of the table, a detailed view for the selected sensor "FCH2309Y01Z" is shown, including its label, serial number, IP address, version, system date, and deployment method (Manual). Below this, there are several action buttons: "Go to statistics", "Start Recording", "Move to", "Download package", "Capture mode", "Enable IDS", "Reboot", "Shutdown", and "Uninstall".

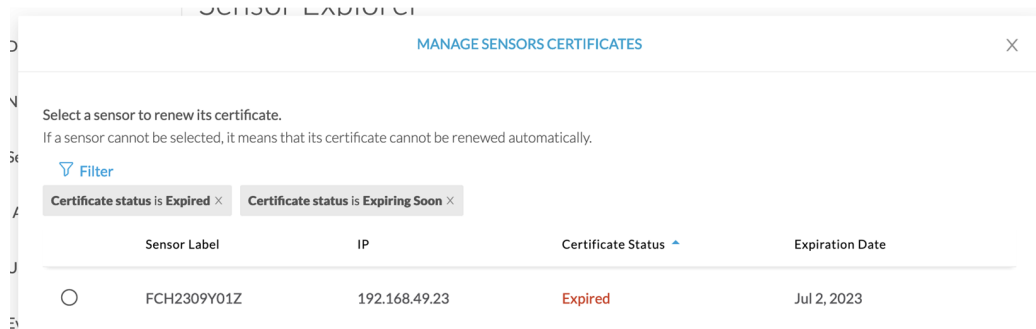
Label	IP Address	Version
FCH2309Y01Z	192.168.49.23	4.2.2+202306261711
FCW2445P6X5	192.168.49.21	4.2.2+202306261519
FOC2330V0T0	192.168.49.41	4.2.2+202306261519

Procedure

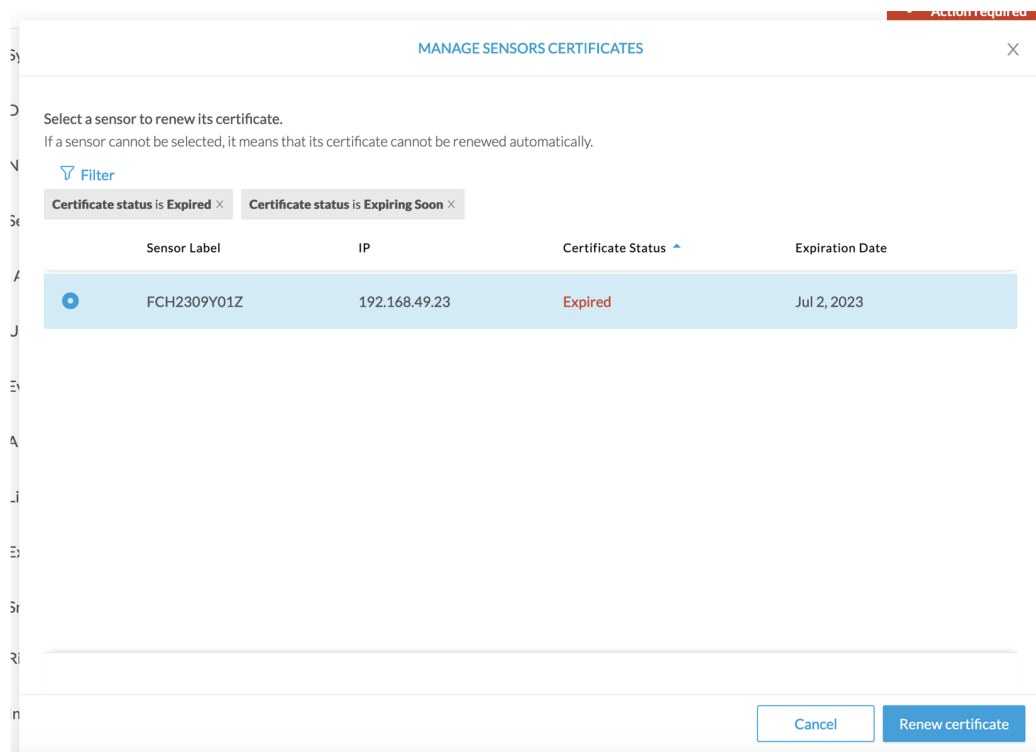
Step 1 In Cisco Cyber Vision, navigate to Admin > Sensors > Sensor Explorer.

Step 2 Click **Manage Certificates**.

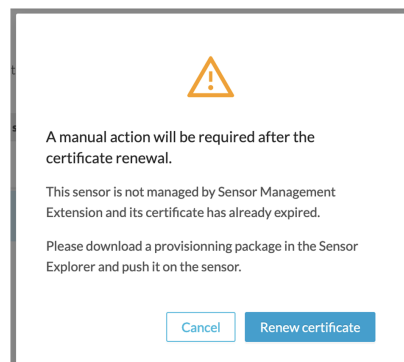
The Manage sensors certificates window appears.



Step 3 Select the sensor and click **Renew Certificate**.

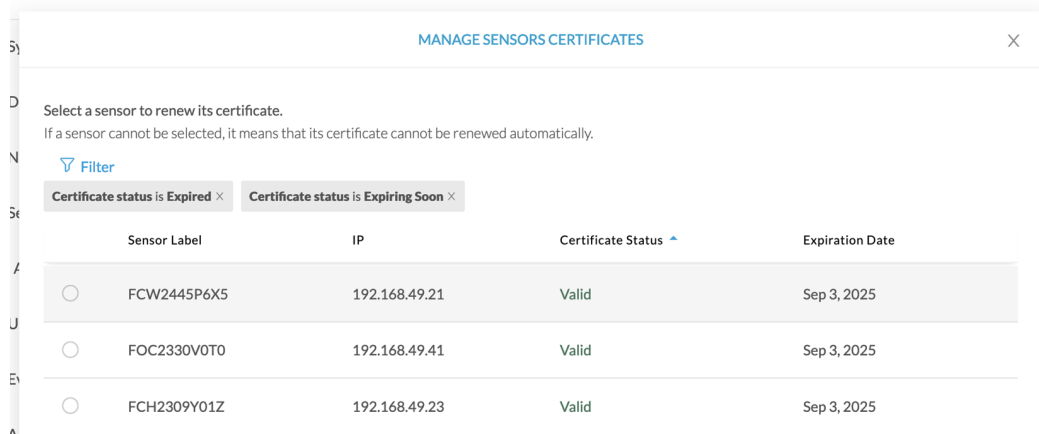


A message is displayed.



Step 4 Click **Renew certificate** again.

The sensor certificate status appears as valid.



Step 5 Close the Manage sensors certificates window.

The sensor's health and processing status appear as Disconnected.

Sensor Explorer

From this page, you can explore and manage sensors and sensors folders. Sensors can be remotely and securely rebooted, shut down, and erased. When a sensor connects for the first time, you must authorize it so the Center can receive its data.

[+ Install sensor](#) [? Manage Cisco devices](#) [📁 Organize](#)

Folders and sensors (3)

[Filter](#) 0 Selected Move selection to [More Actions](#) As of: Jul 6, 2023 11:41 AM [Refresh](#)

<input type="checkbox"/>	Label	IP Address	Version	Location	Health status	Processing status	Active Di
<input type="checkbox"/>	☞ FCH2309Y01Z	192.168.49.23	4.2.2+202306261711		Disconnected	Disconnected	Disa
<input type="checkbox"/>	☞ FCW2445P6X5	192.168.49.21	4.2.2+202306261519		Connected	Normally processing	Una
<input type="checkbox"/>	☞ FOC2330V0T0	192.168.49.41	4.2.2+202306261519		Connected	Normally processing	Una

Step 6 Click the sensor in the list.

Its right side panel opens.

Step 7 Click the **Download package** button.

Sensor Explorer

FCH2309Y01Z ✕

From this page, you can explore and manage sensors and sensors folders. Sensors can be remotely and securely rebooted, shut down, and erased. When a sensor connects for the first time, you must authorize it so the Center can receive its data.

[+ Install sensor](#)
[🔧 Manage Cisco devices](#)
[📁 Organize](#)

Folders and sensors (3)

[Filter](#)
0 Selected
Move selection to
More Actions ▾

<input type="checkbox"/>	Label	IP Address	Version	Location
<input type="checkbox"/>	FCH2309Y01Z	192.168.49.23	4.2.2+202306261711	
<input type="checkbox"/>	FCW2445P6X5	192.168.49.21	4.2.2+202306261519	
<input type="checkbox"/>	FOC2330V0T0	192.168.49.41	4.2.2+202306261519	

Label: FCH2309Y01Z [✎](#)
 Serial Number: FCH2309Y01Z
 IP address: 192.168.49.23
 Version: 4.2.2+202306261711
 System date: Jul 6, 2023 11:36:49 AM
 Deployment: Manual
 Active Discovery: Disabled
 Capture mode: All

System Health
 Status: Disconnected
 Processing status: Disconnected
 Uptime: N/A

[Go to statistics](#)

Move to

Enable IDS

Download package

Reboot

Uninstall

Shutdown

Step 8**Step 9**

The sensor's health status switches to Connected and its processing status to Normally processing.

Sensor Explorer

From this page, you can explore and manage sensors and sensors folders. Sensors can be remotely and securely rebooted, shut down, and erased. When a sensor connects for the first time, you must authorize it so the Center can receive its data.

[+ Install sensor](#)
[🔧 Manage Cisco devices](#)
[📁 Organize](#)

Folders and sensors (3)

[Filter](#)
0 Selected
Move selection to
More Actions ▾
As of: Jul 6, 2023 11:56 AM

<input type="checkbox"/>	Label	IP Address	Version	Location	Health status ▾	Processing status	Active Di
<input type="checkbox"/>	FCH2309Y01Z	192.168.49.23	4.2.2+202306261711		Connected	Normally processing	Disal
<input type="checkbox"/>	FCW2445P6X5	192.168.49.21	4.2.2+202306261519		Connected	Normally processing	Unav
<input type="checkbox"/>	FOC2330V0T0	192.168.49.41	4.2.2+202306261519		Connected	Normally processing	Unav

