Maintenance

Certificate renewal

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

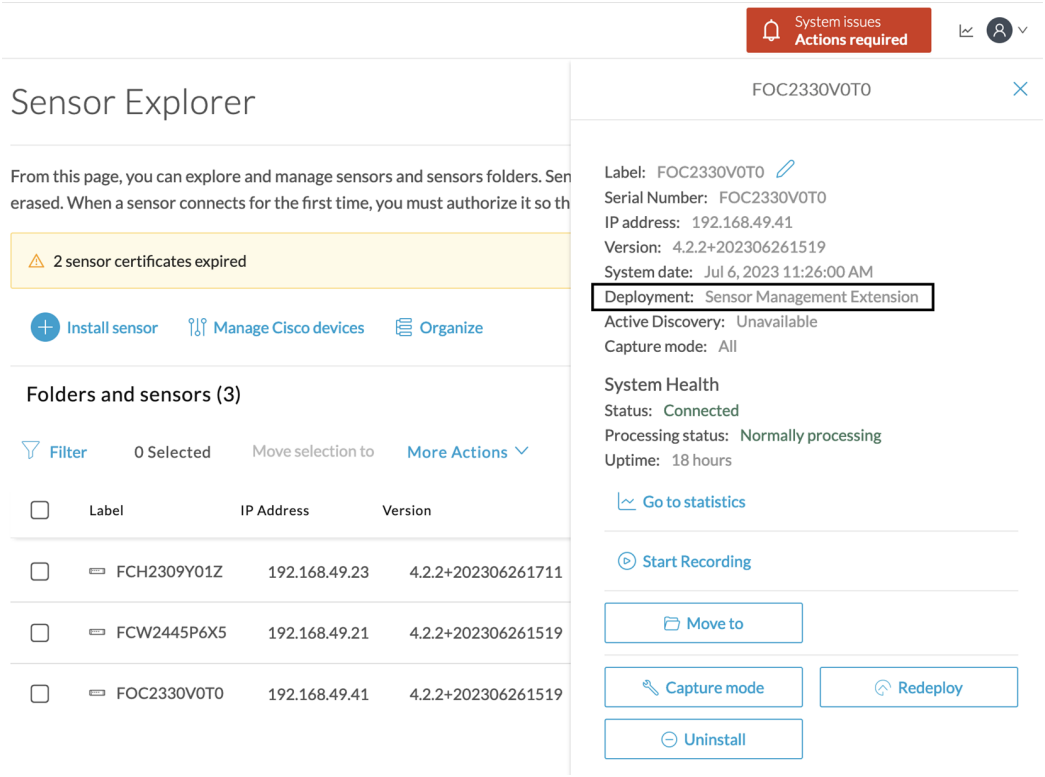
Sensor certificates must be renewed manually. The procedure used differs whether the certificate is already expired or not and whether the sensor has been deployed using the sensor management extension.

- If the certificate is still valid, refer to Sensor certificate renewal, on page 1.
- If the sensor was deployed with the sensor management extension, refer to Sensor certificate renewal, on page 1.
- If the certificate is outdated, and was deployed manually, refer to Sensor certificate renewal through the Local Manager, on page 5.

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).

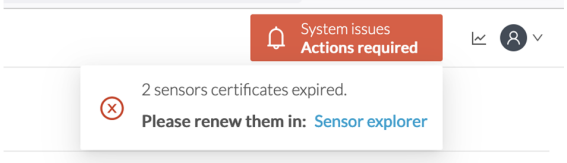


- In the case of sensors deployed manually, it only applies if the sensors certificate have not expired yet (i.e. the sensor certificate status is Expire Soon).

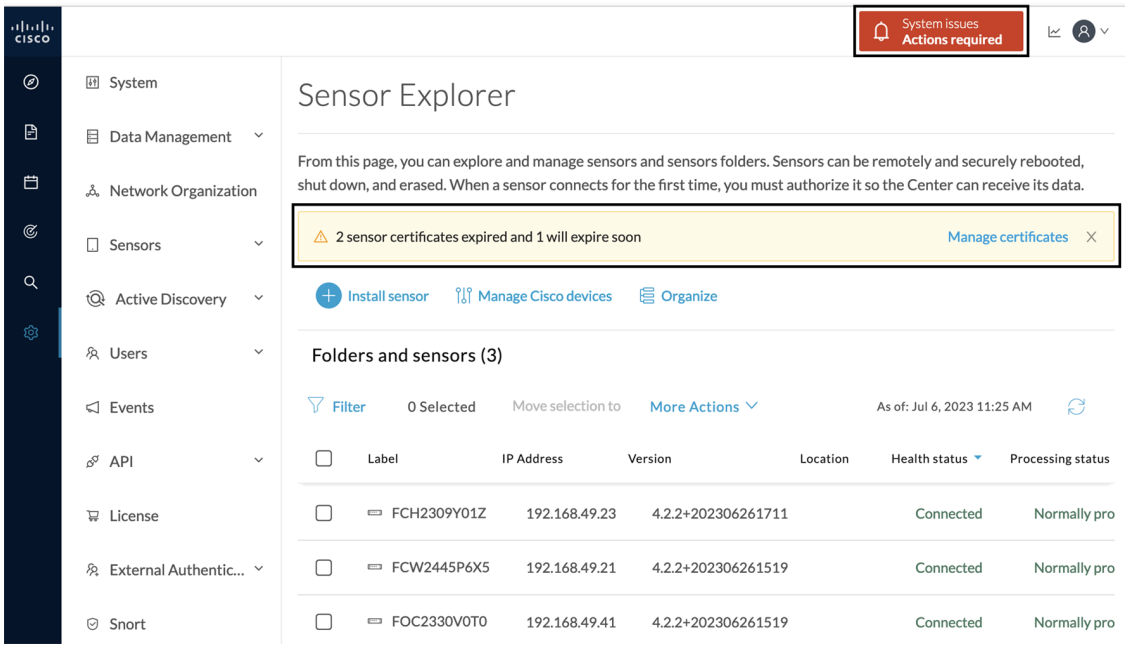
If sensors have been deployed manually and the certificate expiration date is exceeded, refer to Sensor certificate renewal through the Local Manager, on page 5.

Procedure

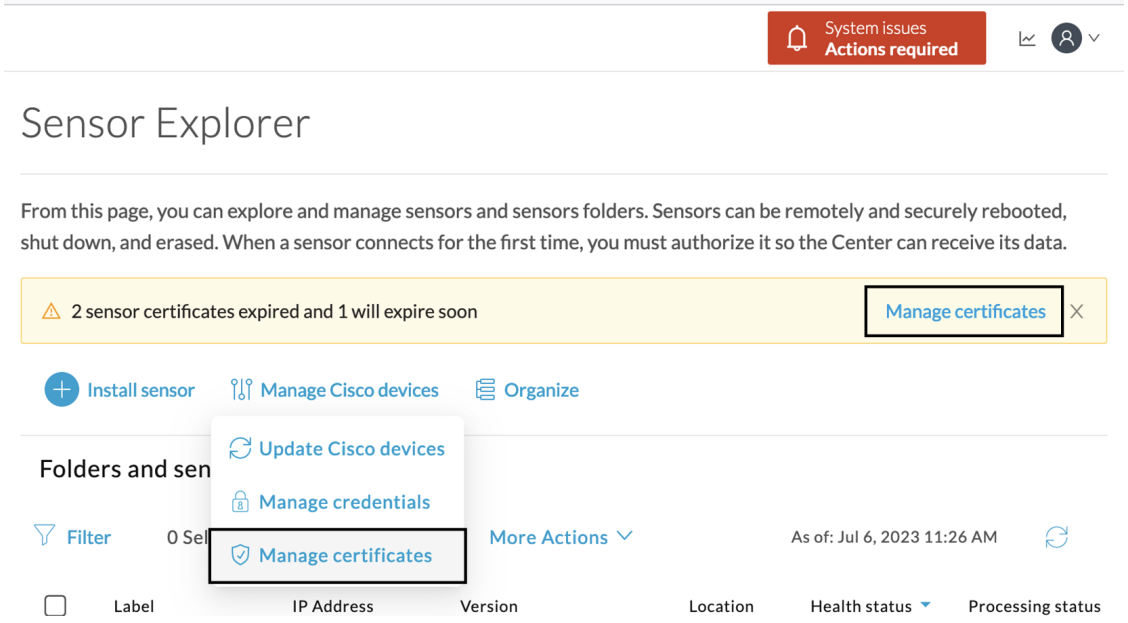
Step 1 In Cisco Cyber Vision, navigate to Admin > Sensors > Sensor Explorer or click the top banner alert to access the Sensor Explorer page directly.



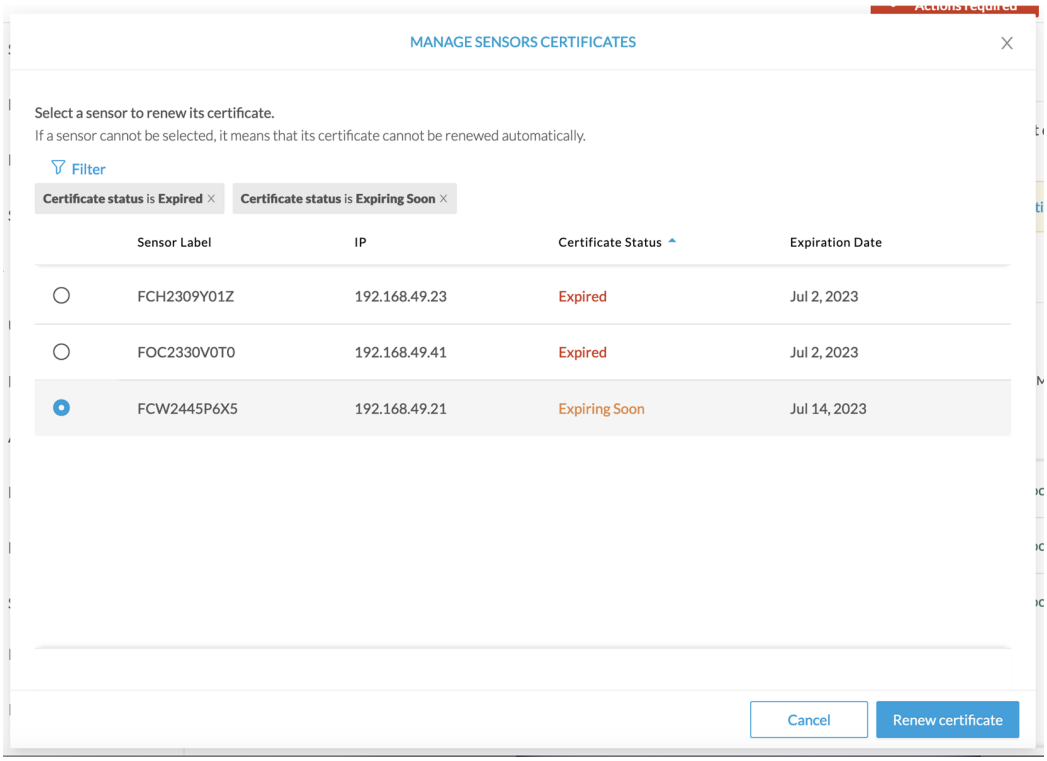
Another alert is displayed.



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

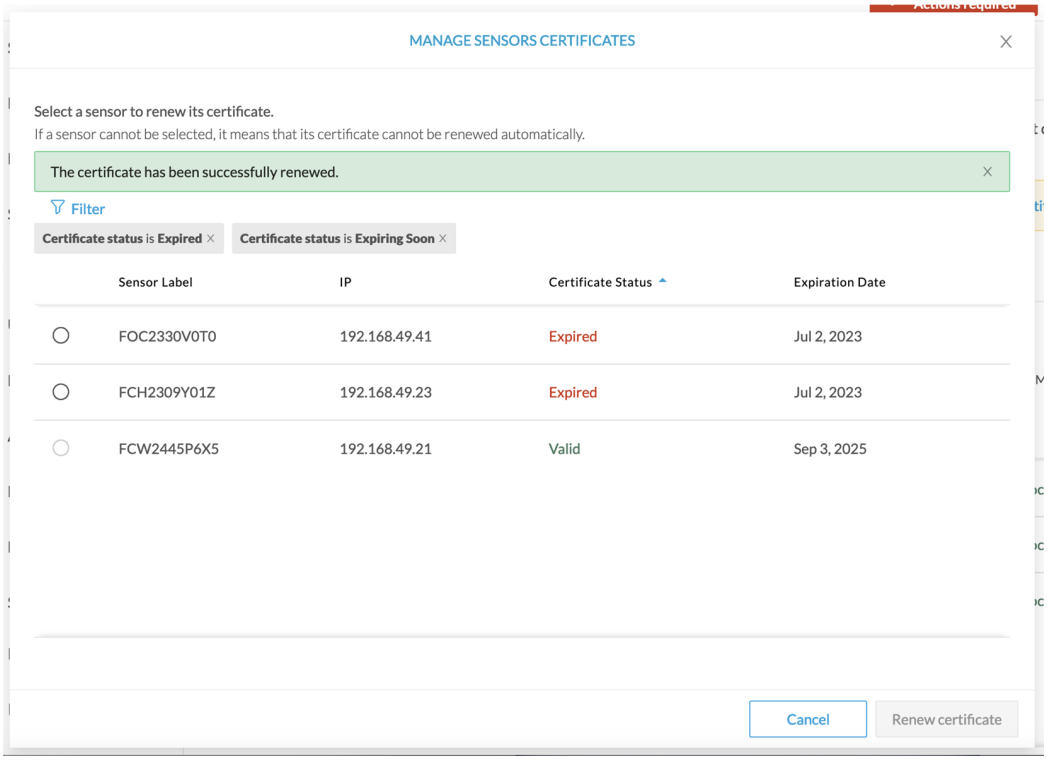


The **Manage sensors certificates** window opens.



Step 3 Select the sensor with the status Expiring Soon.

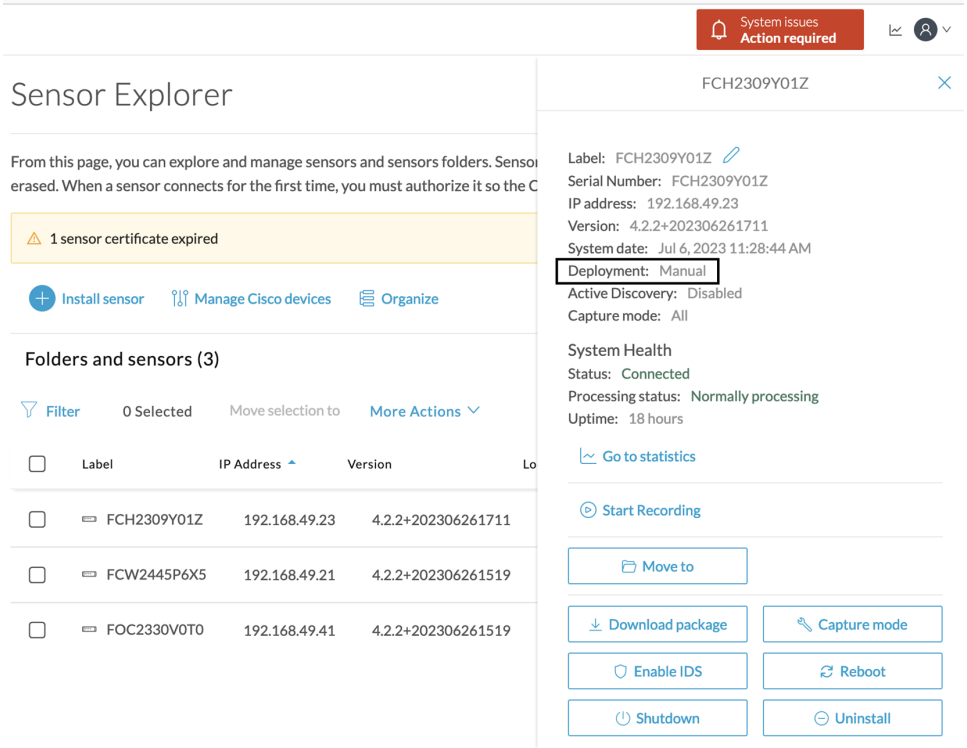
Step 4 Click **Renew certificate**.



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.

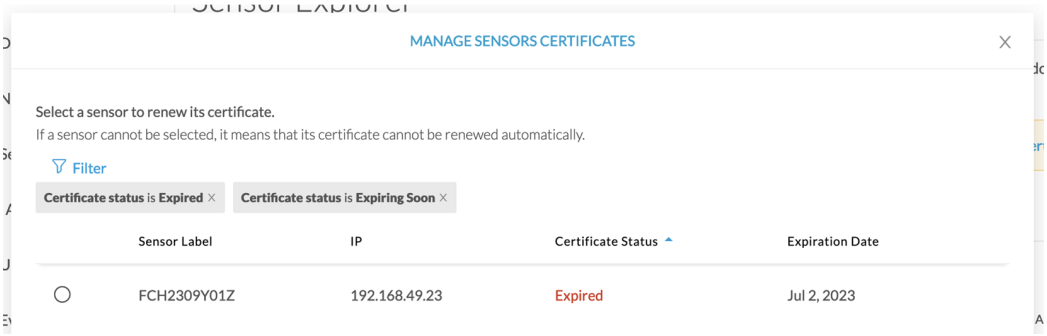


Procedure

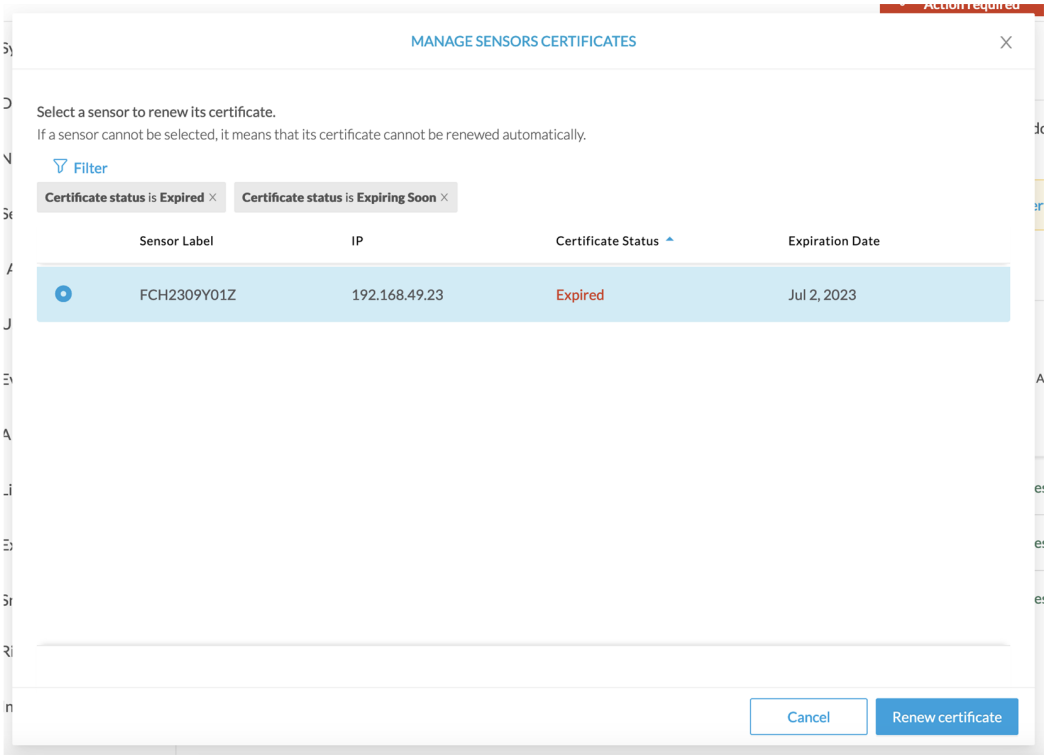
Step 1 In Cisco Cyber Vision, navigate to Admin > Sensors > Sensor Explorer.

Step 2 Click **Manage Certificates**.

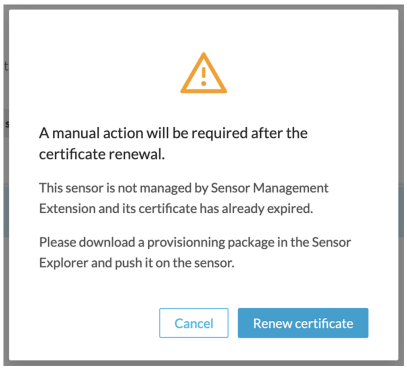
The Manage sensors certificates window appears.



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

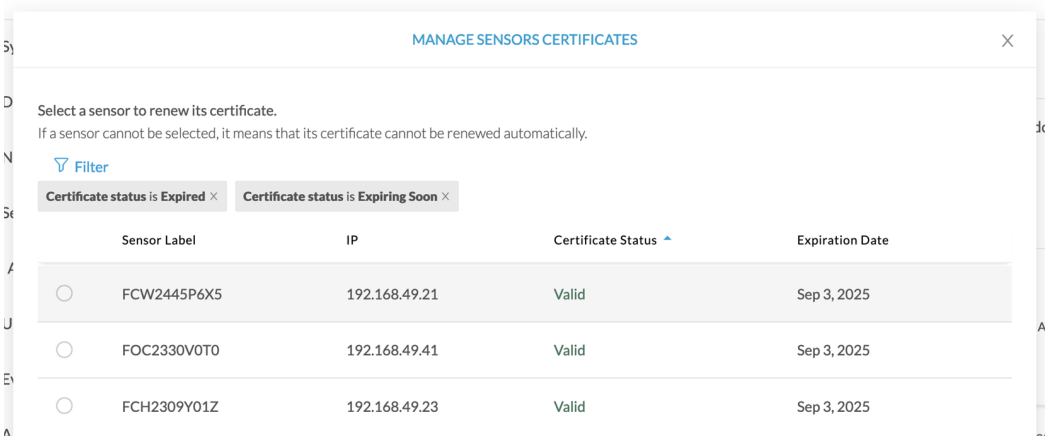


A message is displayed.



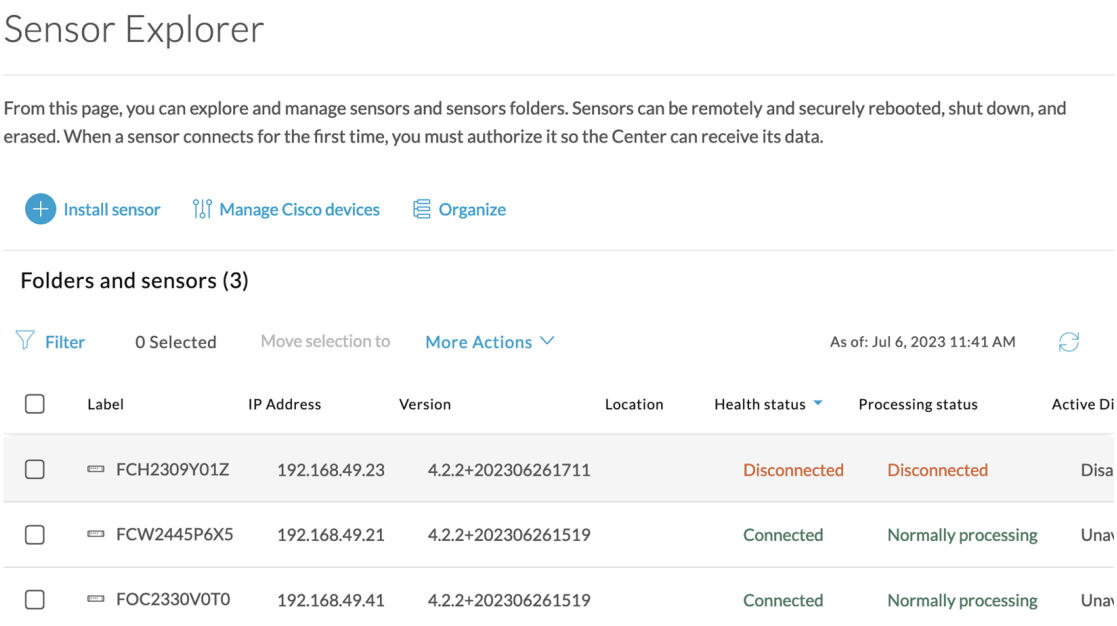
Step 4 Click **Renew certificate** again.

The sensor certificate status appears as valid.



Step 5 Close the Manage sensors certificates window.

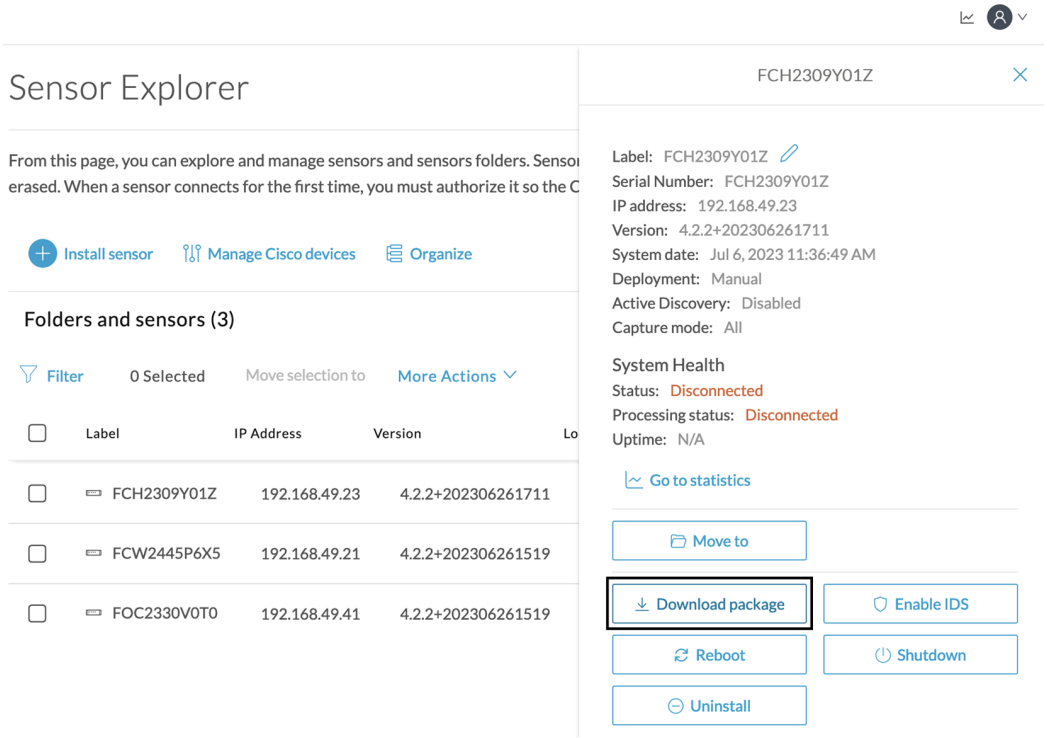
The sensor's health and processing status appear as Disconnected.



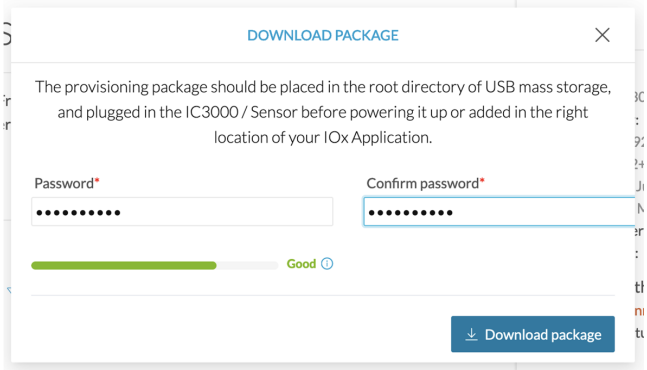
Step 6 Click the sensor in the list.

Its right side panel opens.

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



Step 8 Type the Local Manager's password or set it if not already done. Make sure to keep this piece of information stored as it will be asked to access IOx Local Manager and for further troubleshooting and configuration purposes.



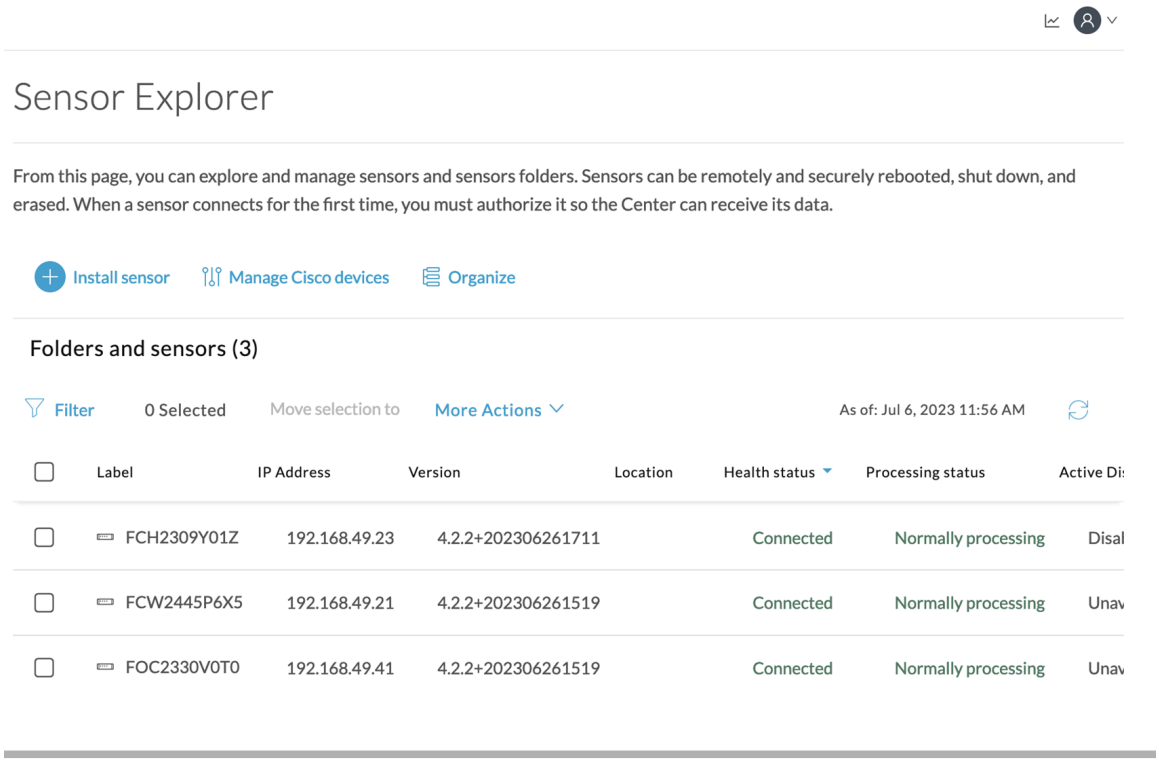
Step 9 Click **Download package**.

Step 10 Import the provisioning package in the Local Manager. To do so, refer to Import the provisioning package (without USB).

Step 11 In the sensor's CLI, type the following command to enroll the sensor:

```
sbs-sensor-enroll-offline -fp /data/iox/appdata/cybervision-sensor-config.zip
```

Step 12 The sensor's health status switches to Connected and its processing status to Normally processing.

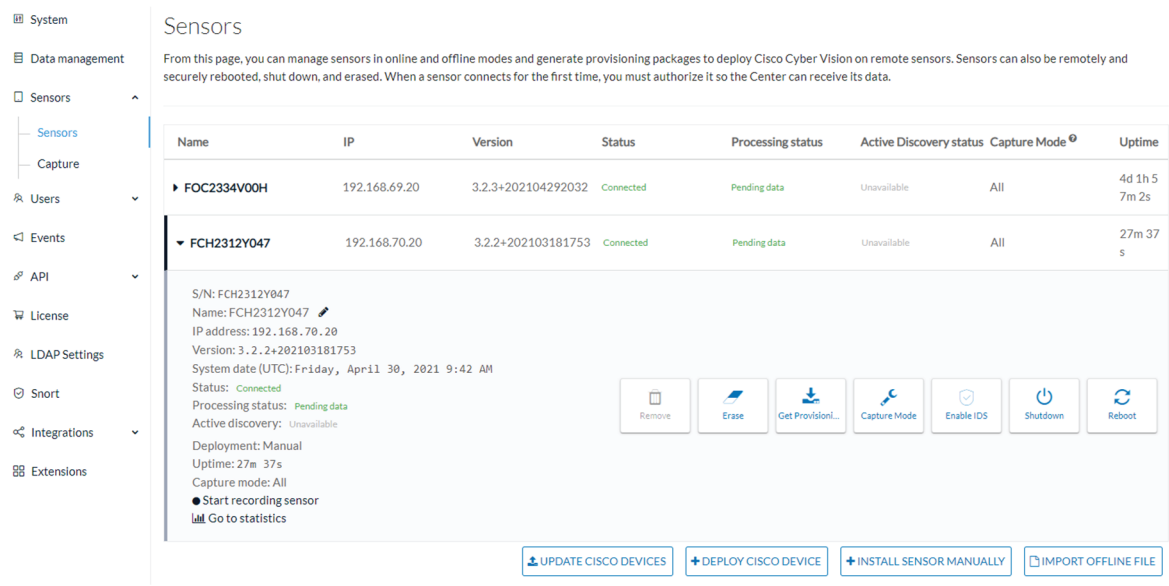


Upgrade procedures

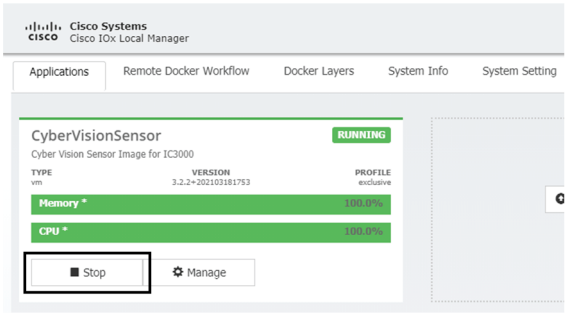
Upgrade through the Local Manager

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

In the Cisco Cyber Vision sensor administration page, the sensor is in 3.2.2. In the example below, we will upgrade the sensor to Cisco Cyber Vision version 3.2.3.

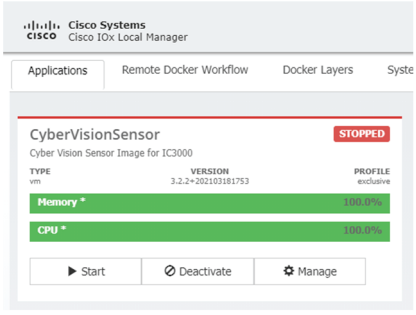


1. Access the Local Manager.
2. Stop the application.

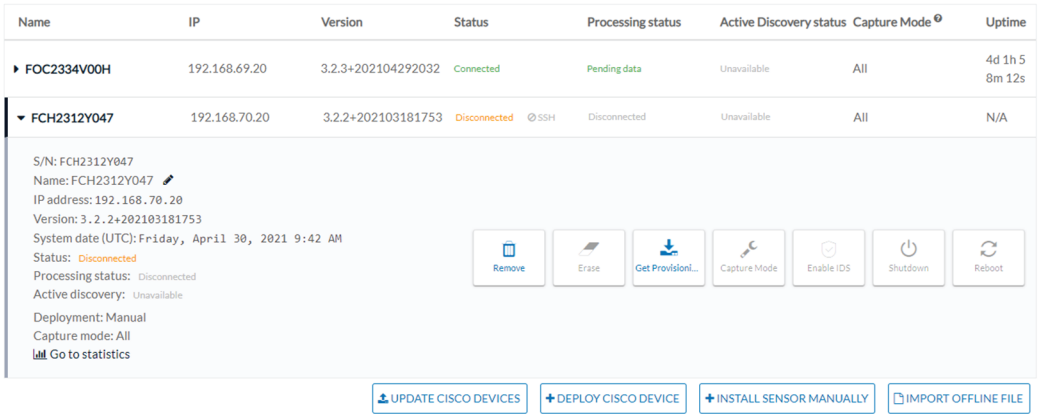


The operation takes a few moments.

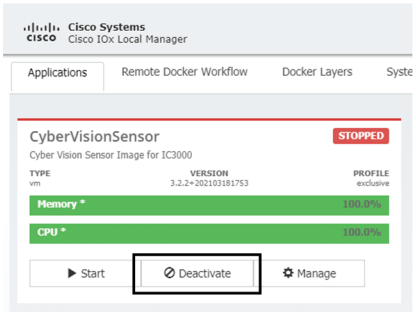
The application status switches to STOPPED.



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

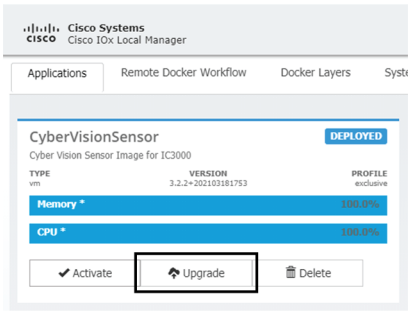


3. In the Local Manager, click the Deactivate button.

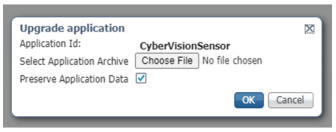


The application status moves to "DEPLOYED".

4. Click Upgrade.



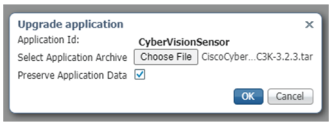
The pop up Upgrade application appears.



5. Select the option Preserve Application Data.

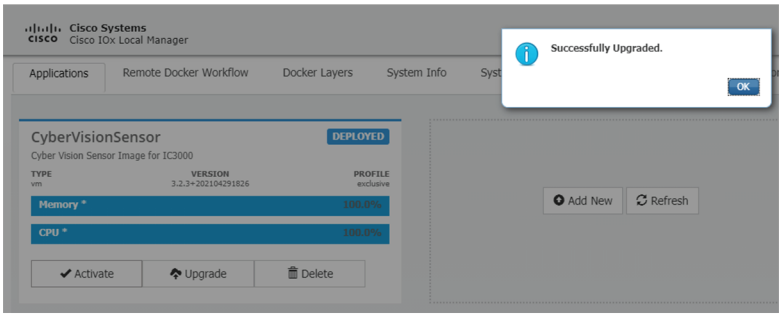
6. Select the new version of the application archive file.

   e.g. Cisco-Cyber-Vision-IOx-IC3K-3.2.3.tar



   The operation takes a few moments.

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



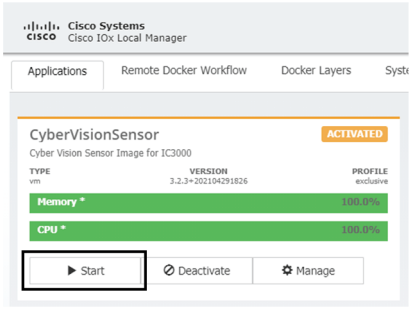
7. Check the number of the new version.
8. Click Activate.
9. Check configurations.

   It can happen that network configurations are lost during the upgrade. If they are, refer to Configure the sensor virtual application **and do as explained.**

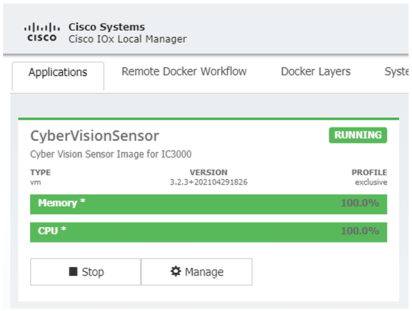
10. Click the Activate App button.

    The application status moves to ACTIVATED.

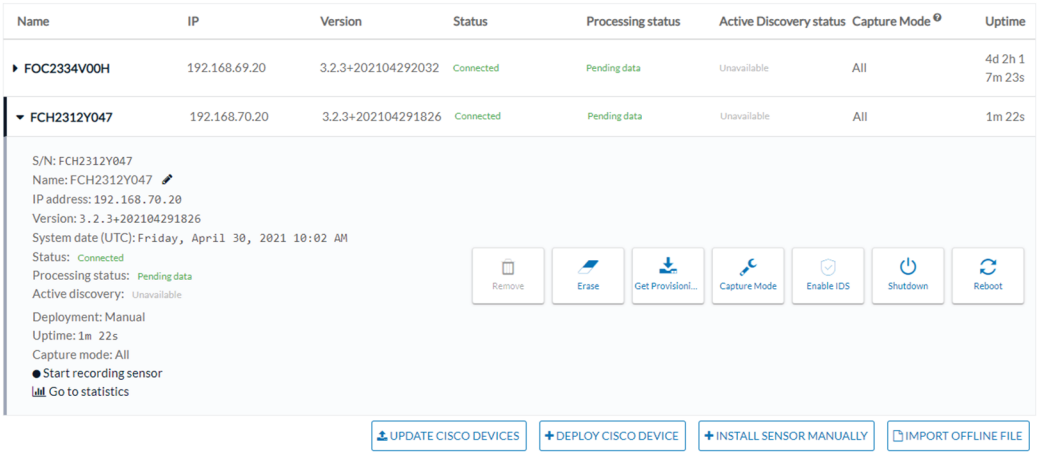
11. Click the Start button.



   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.



Upgrade with the combined update file

Version releases usually include updates for both the Cisco IC3000 sensors and the Center (i.e. combined updates). If operating conditions make it possible , you can update the Center and all its Cisco IC3000 online sensors at once from the user interface. You can proceed to a combined update without opening a shell prompt and using SSH.

Note Combined updates are applied to the Center and all its Cisco IC3000 online sensors. Make sure (by accessing the sensor administration page) that all your Cisco IC3000 sensors are connected and SSH is authorized between the Center and the sensors before proceeding to a combined update.

Important Rolling back to an older Cisco Cyber Vision version is not possible.

Requirements:

- A combined update, available on cisco.com.

To verify that the file you just downloaded is healthy, it is recommended to use the SHA512 checksum provided by Cisco.

To do so (Windows users):

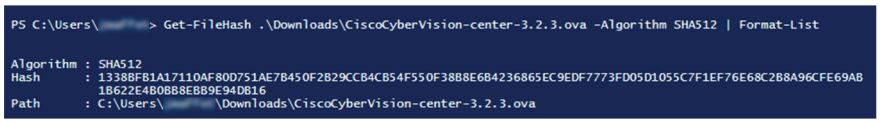
Procedure

Step 1 Access Cisco Cyber Vision download page.

Step 2 Download the file.

Step 3 Open a shell prompt such as Windows Powershell and use the following command to retrieve the file checksum:

Get-FileHash .\CiscoCyberVision-<TYPE>-<VERSION>.<EXT> -Algorithm SHA512 | Format-List



Step 4 In the download page, mouse over the file and copy the SHA512 checksum.

Step 5 Compare both checksums.

- If both checksums are identical it means the file is healthy.
- If the checksums do not match try to download the file again.
- If, after downloading the file again the checksums still don't match, please contact Cisco support.

To update the Center and all its Cisco IC3000 online sensors:

Step 6 Access the Cisco Cyber Vision's user interface.

Step 7 Access System administration > System and use the System update button.

Step 8 Select the update file CiscoCyberVision-update-combined-<VERSION>.dat

Step 9 Confirm the update.

As the Center and sensors updates proceed, you are redirected to a holding page. Once the update is finished the Center and the sensors need to reboot and you will be logged out from the user interface.

Step 10 Log in again to the user interface.

If some sensors were offline when the update occurred, the same procedure can be used as many times as necessary to update all sensors.