Procedure with the CLI

After the Initial configuration, proceed to the steps described in this section.

Configure the sensor application

Note In this section, "CCVSensor" is used as the appid.

1. Connect to the device through SSH or a console.
2. Configure the application payload by typing the following commands:

   Cisco IE3300 10G/IE3400:

```
enable
configure terminal
app-hosting appid CCVSensor
app-vnic AppGigabitEthernet trunk
vlan 507 guest-interface 0
guest-ipaddress 192.168.69.208 netmask 255.255.255.0
vlan 2508 guest-interface 1
guest-ipaddress 169.254.1.2 netmask 255.255.255.0
app-default-gateway 192.168.69.1 guest-interface 0
app-resource profile custom
persist-disk 2048
cpu 1400
memory 2048
vcpu 2
end
```

```
IE340CCV#enable
IE340CCV#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
IE340CCV(config)#app-hosting appid CCVSensor
IE340CCV(config-app-hosting)#app-vnic AppGigabitEthernet trunk
IE340CCV(config-config-app-hosting-trunk)#vlan 507 guest-interface 0
IE340CCV(config-config-app-hosting-vlan-access-ip)#guest-ipaddress 192.168.69.208 netmask 255.255.255.0
IE340CCV(config-config-app-hosting-vlan-access-ip)#vlan 2508 guest-interface 1
IE340CCV(config-config-app-hosting-vlan-access-ip)#guest-ipaddress 169.254.1.2 netmask 255.255.255.0
IE340CCV(config-config-app-hosting-vlan-access-ip)#app-default-gateway 192.168.69.1 guest-interface 0
IE340CCV(config-app-hosting)#app-resource profile custom
IE340CCV(config-app-resource-profile-custom)#persist-disk 2048
IE340CCV(config-app-resource-profile-custom)#cpu 1400
IE340CCV(config-app-resource-profile-custom)#memory 2048
IE340CCV(config-app-resource-profile-custom)#vcpu 2
IE340CCV(config-app-resource-profile-custom)#end
IE340CCV#
```

Cisco IE9300:

```
enable
configure terminal
app-hosting appid CCVSensor
 app-vnic AppGigabitEthernet trunk
  vlan 507 guest-interface 0
   guest-ipaddress 192.168.69.90 netmask 255.255.255.0
  vlan 2508 guest-interface 1
   guest-ipaddress 169.254.1.2 netmask 255.255.255.252
 app-default-gateway 192.168.69.190 guest-interface 0
 app-resource docker
  run-opts 1 --rm
 app-resource profile custom
  cpu 1000
  memory 862
  persist-disk 4000
end
```

```
IE9300_1#
IE9300_1#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
IE9300_1(config)#app-hosting appid CCVSensor
IE9300_1(config-app-hosting)#app-vnic AppGigabitEthernet trunk
IE9300_1(config-config-app-hosting-trunk)#vlan 507 guest-interface 0
IE9300_1(config-config-app-hosting-vlan-access-ip)#guest-ipaddress 192.168.69.90 netmask 255.255.255.0
IE9300_1(config-config-app-hosting-vlan-access-ip)#vlan 2508 guest-interface 1
IE9300_1(config-config-app-hosting-vlan-access-ip)#guest-ipaddress 169.254.1.2 netmask 255.255.255.252
IE9300_1(config-config-app-hosting-vlan-access-ip)#app-default-gateway 192.168.69.190 guest-interface 0
IE9300_1(config-app-hosting)#app-resource docker
IE9300_1(config-app-hosting-docker)#run-opts 1 "--rm"
IE9300_1(config-app-hosting-docker)#app-resource profile custom
IE9300_1(config-app-resource-profile-custom)#cpu 1000
IE9300_1(config-app-resource-profile-custom)#memory 862
IE9300_1(config-app-resource-profile-custom)#persist-disk 4000
IE9300_1(config-app-resource-profile-custom)#end
IE9300_1#
```

Cisco Catalyst 9300:

```
enable
configure terminal
app-hosting appid CCVSensor
app-vnic AppGigabitEthernet trunk
vlan 507 guest-interface 0
guest-ipaddress 192.168.69.210 netmask 255.255.255.0
vlan 2508 guest-interface 1
guest-ipaddress 169.254.1.2 netmask 255.255.255.0
app-default-gateway 192.168.69.1 guest-interface 0
app-resource profile custom
persist-disk 8192
cpu 7400
memory 2048
```

```
vcpu 2
end
```

```
CAT9KCCV#
CAT9KCCV#enable
CAT9KCCV#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
CAT9KCCV(config)#app-hosting appid CCVSensor
CAT9KCCV(config-app-hosting)#app-vnic AppGigabitEthernet trunk
CAT9KCCV(config-config-app-hosting-trunk)#vlan 507 guest-interface 0
CAT9KCCV(config-config-app-hosting-vlan-access-ip)#guest-ipaddress 192.168.69.210 netmask 255.255.255.0
CAT9KCCV(config-config-app-hosting-vlan-access-ip)#vlan 2508 guest-interface 1
CAT9KCCV(config-config-app-hosting-vlan-access-ip)#guest-ipaddress 169.254.1.2 netmask 255.255.255.0
CAT9KCCV(config-config-app-hosting-vlan-access-ip)#app-default-gateway 192.168.69.1 guest-interface 0
CAT9KCCV(config-app-hosting)#app-resource profile custom
CAT9KCCV(config-app-resource-profile-custom)#persist-disk 8192
CAT9KCCV(config-app-resource-profile-custom)#cpu 7400
CAT9KCCV(config-app-resource-profile-custom)#memory 2048
CAT9KCCV(config-app-resource-profile-custom)#vcpu 2
CAT9KCCV(config-app-resource-profile-custom)#end
CAT9KCCV#
```

For the app-resource profile's custom values, refer to the result of the show app-hosting resource command.

In this example, all maximum values are used for:

- the CPU (CPU available units, here 1400 for the Cisco IE3300 10G/IE3400, 1000 for the Cisco IE9300, and 7400 for the Cisco Catalyst 9300)
- the VCPU (here 2), the memory (Memory available, here 2048)
- the disk (only 2048 MB and 8192 MB respectively are used to let space for application updates)

Install the sensor application

The sensor package is to be retrieved on cisco.com. The file has the following name structure:

- CiscoCyberVision-IOx-aarch64-<VERSION>.tar (Cisco IE3300 10G/IE3400/IE9300).
- CiscoCyberVision-IOx-x86-64-<VERSION>.tar (Cisco Catalyst 9300).

1. Copy the package to a USB key or in the flash memory.
2. Type the following commands on the CLI:

   ```
   enable
   app-hosting install appid CCVSensor package usbflash0:<FILENAME>.tar
   ```

   Cisco IE3300 10G/IE3400/IE9300:

   ```
   IE340CCV#app-hosting install appid CCVSensor package usbflash0:CiscoCyberVision-IOx-aarch64-3.1.0-RC4.tar
   Installing package 'usbflash0:CiscoCyberVision-IOx-aarch64-3.1.0-RC4.tar' for 'CCVSensor'. Use 'show app-hosting list' f
   or progress.

   IE340CCV#
   ```

   Cisco Catalyst 9300:

   ```
   CAT9KCCV#
   CAT9KCCV#enable
   CAT9KCCV#app-hosting install appid CCVSensor package usbflash0:CiscoCyberVision-IOx-x86-64-3.1.0-RC4.tar
   Installing package 'usbflash0:CiscoCyberVision-IOx-x86-64-3.1.0-RC4.tar' for 'CCVSensor'. Use 'show app-hosting list' fo
   r progress.

   CAT9KCCV#
   ```

Note Adjust "usbflash0:" in accordance with the sensor package's localization (USB port or flash memory).

Note Replace "CiscoCyberVision-IOx-aarch64-<VERSION>.tar" with the right filename.

3. Check that the application is in "DEPLOYED" state:

   ```
   show app-hosting list
   ```

   For example: Cisco IE3400

   ```
   IE340CCV#
   IE340CCV#show app-hosting list
   App id                                   State
   ---------------------------------------------------------
   CCVSensor                                DEPLOYED

   IE340CCV#
   ```

4. Activate the application using the following command:

   ```
   app-hosting activate appid CCVSensor
   ```

   For example: Cisco IE3400

   ```
   IE340CCV#app-hosting activate appid CCVSensor
   CCVSensor activated successfully
   Current state is: ACTIVATED

   IE340CCV#
   ```

5. Start the application using the following command:

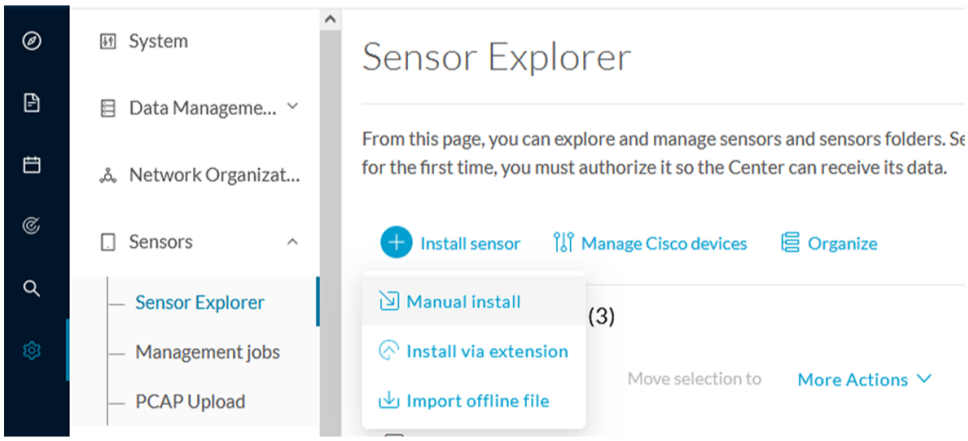
   ```
   app-hosting start appid CCVSensor
   ```

   For example: Cisco IE3400:

   ```
   IE340CCV#
   IE340CCV#app-hosting start appid CCVSensor
   CCVSensor started successfully
   Current state is: RUNNING
   IE340CCV#
   ```

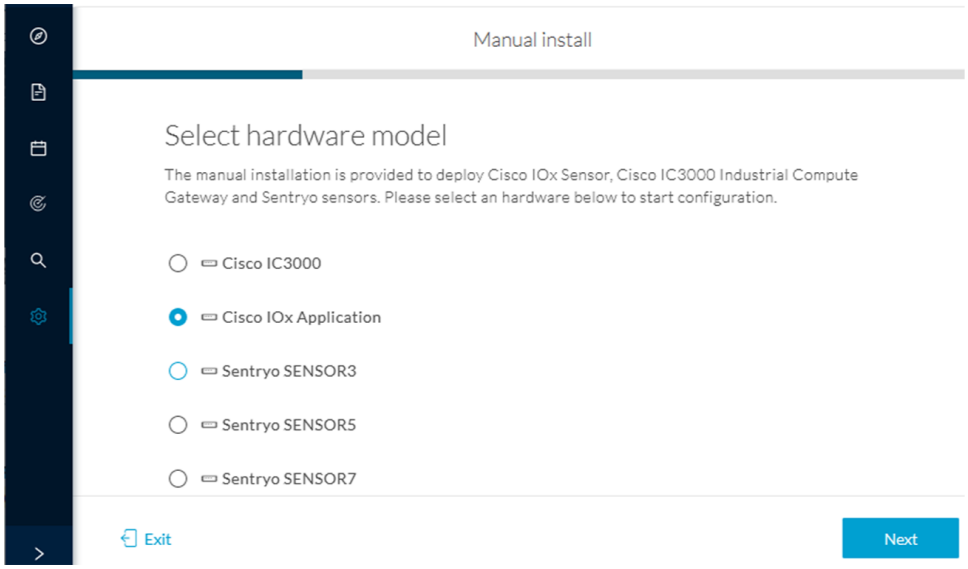
Generate the provisioning package

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

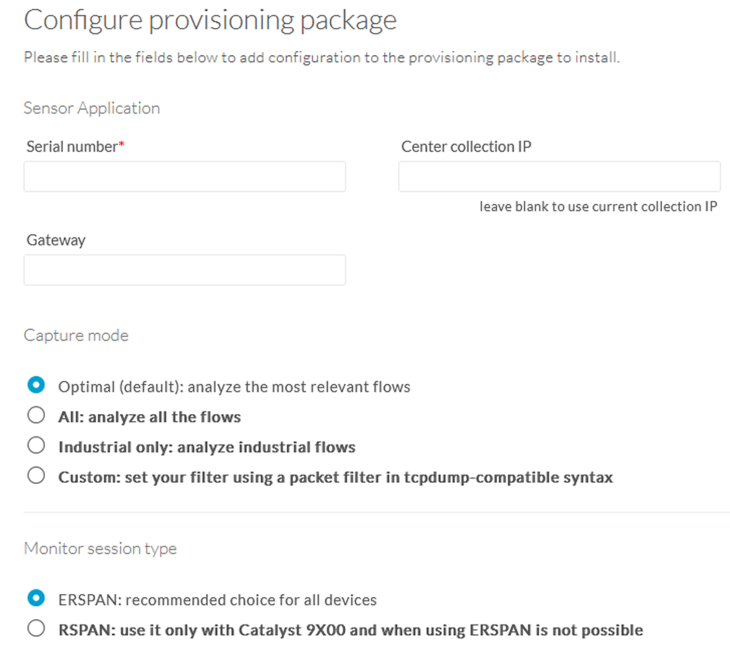


The manual install wizard appears.

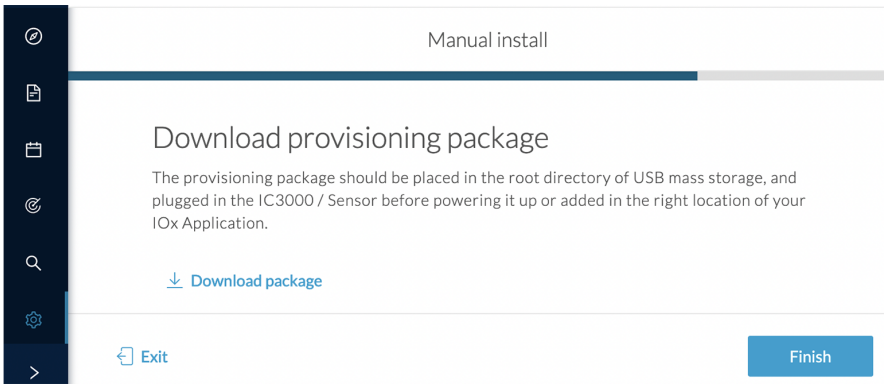
2. Select **Cisco IOx Application** and click **Next**.



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).



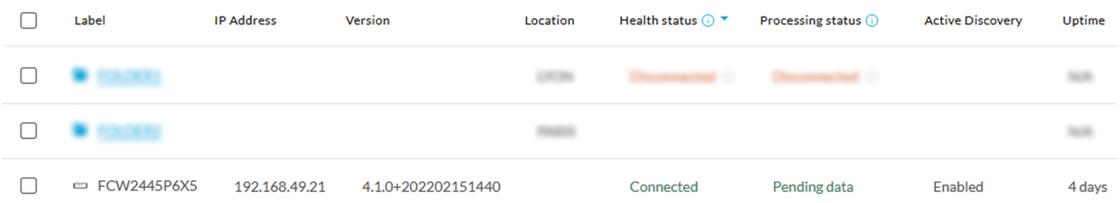
4. Click **Create sensor**.
5. Click the link to download the provisioning package.



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.



Copy the sensor application provisioning package

- Copy the provisioning package from the USB key to the application using the following command:

  ```
  app-hosting data appid CCVSensor copy usbflash0:sbs-sensor-config-<SERIAL-NUMBER>.zip
  sbs-sensor-config-<SERIAL-NUMBER>.zip
  ```

  For example: Cisco IE3400

  ```
  IE340CCV#
  IE340CCV#$ data appid CCVSensor copy usbflash0:sbs-sensor-config-FOC2334V01X.zip sbs-sensor-config-FOC2334V01X.zip
  Successfully copied file /usbflash0/sbs-sensor-config-FOC2334V01X.zip to CCVSensor as sbs-sensor-config-FOC2334V01X.zip
  IE340CCV#
  ```

Final step

In the sensor's CLI save the product's configuration by typing the following command:

```
write mem
```

Final step