Release Notes for Cisco Sensor Connect for IoT Services, Release 1.2

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Cisco Sensor Connect for IoT Services

The Cisco Sensor Connect for IoT Services solution enables delivery of advanced BLE capabilities over Cisco Catalyst Wireless infrastructure. The key component of this solution is the IoT Orchestrator which is a Cisco IOx application that can be deployed on any existing Cisco Catalyst 9800 Wireless Controller platforms running software version Cisco IOS-XE 17.15.3 and later. With the Cisco Sensor Connect for IoT Services solution, you have capabilities to securely onboard and control BLE devices and consume data telemetry using the Message Queuing Telemetry Transport (MQTT).

Release history

Table 1. New and changed information

Date	Description
August 5, 2025	Release 1.2.0 updates

Supported licenses

- Cisco Spaces Smart Operations
- Cisco Spaces ACT
- Cisco Spaces Unlimited
- Cisco Wireless Advantage

System configuration

The section lists the supported Cisco APs and Catalyst 9800 Controllers.

Supported Access Points

Table 2. New and changed information

AP Model	VIDs	Scan mode	Transmission mode	Dual mode (scan and transmit mode)	BLE device connection without pairing	BLE device connection with pairing	Maximum concurrent BLE device connection limit
Cisco Catalyst 9105AXI or 9105AXIT	VID 02 or lower	Yes	Yes	Yes	Yes	No	8
	VID 03 or higher	Yes	Yes	Yes	Yes	Yes	8
Cisco Catalyst 9105AXW or 9105AXWIT	VID 01 or lower	Yes	Yes	Yes	Yes	No	8
	VID 02 or higher	Yes	Yes	Yes	Yes	Yes	8
Cisco Catalyst 9115AX	–	Yes	Yes	No	No	No	–

AP Model	VIDs	Scan mode	Transmission mode	Dual mode (scan and transmit mode)	BLE device connection without pairing	BLE device connection with pairing	Maximum concurrent BLE device connection limit
Cisco Catalyst 9120AX	VID 06 or lower	Yes	Yes	Yes	Yes	No	8
	VID 07 or higher	Yes	Yes	Yes	Yes	Yes	8
Cisco Catalyst 9130AX	VID 02 or lower	Yes	Yes	Yes	Yes	No	8
	VID 03 or higher	Yes	Yes	Yes	Yes	Yes	8
Cisco Catalyst 9124AX	–	Yes	Yes	Yes	Yes	Yes	8
Cisco Catalyst 9136 (I)	–	Yes	Yes	Yes	Yes	Yes	8
Cisco Catalyst 9162 (I)	–	Yes	Yes	Yes	Yes	Yes	8
Cisco Catalyst 9164 (I)	–	Yes	Yes	Yes	Yes	Yes	8
Cisco Catalyst 9166 (I)	–	Yes	Yes	Yes	Yes	Yes	8
Cisco Wireless 9172 (I) [From Cisco IOS XE 17.15.3]	–	Yes	Yes	Yes	Yes	Yes	8
Cisco Wireless 9172 (H) [From Cisco IOS XE 17.17.1]	–	Yes	Yes	Yes	Yes	Yes	8
Cisco Wireless 9176 (I/D1)	–	Yes	Yes	Yes	Yes	Yes	8
Cisco Wireless 9178 (I)	–	Yes	Yes	Yes	Yes	Yes	8
Cisco	–	Yes	Yes	Yes	Yes	Yes	8

AP Model	VIDs	Scan mode	Transmission mode	Dual mode (scan and transmit mode)	BLE device connection without pairing	BLE device connection with pairing	Maximum concurrent BLE device connection limit
Wireless IW9167 Heavy Duty Series Access Points [From Cisco IOS XE 17.15.3]							
Cisco Wireless 9179F	–	Yes	Yes	Yes	Yes	Yes	8

Note:

- While Cisco Catalyst 9115 AP is supported with Sensor Connect for IoT Services feature for scanning and advertising, however, Cisco does not recommend using this AP model for delivering high density, latency-sensitive, or mission critical BLE use cases due to known hardware performance limitations.
- For information on the VIDs for the access points, see the **How to Identify Affected Products** section in the *Field Notice*.

Supported controller platforms

- Cisco Catalyst 9800-L Wireless Controller
- Cisco Catalyst 9800-40 Wireless Controller
- Cisco Catalyst 9800-80 Wireless Controller
- Cisco Catalyst CW9800M Wireless Controller
- Cisco Catalyst CW9800H1 and CW9800H2 Wireless Controllers

Software features

New software features in release 1.2.0

Table 3. New features in release 1.2.0

Feature	Description
Support for all BLE frames	All Cisco Access Points support scanning and reporting for all types of BLE frames (general discoverable and non-general discoverable advertisements). This feature is enabled by default.
Allow-list filtering	A configurable allow-list for BLE advertisement filtering is done at the access point level. Allow-list filter accepts any advertisement whose MAC address matches a filter. A filter entry can be of any length, up to a full MAC address length. A maximum of 64 filters per AP or AP profile is supported. Random private MAC addresses are still being filtered by default. This feature requires 17.15.3 APSP or a later image on the Access Point side. If this feature is enabled in an unsupported Access Point image (for example, 17.15.3 or earlier), the action sets the Access Point in an Out-of-Sync state as the allow-list filter feature is available only from the 17.15.3 APSP and later releases.
Scanning mode disabled by default	Scanning mode is disabled by default in this release. This feature permits the allow-list to be properly set and configured before enabling scanning, preventing possible BLE advertisement floods. When upgrading from a previous version with scanning enabled, configuration remains as is; however, we recommend that you keep scanning on any APs disabled where it is not needed and apply filters where relevant to reduce any noise coming from unwanted advertisements. A banner with this recommendation is displayed after the upgrade.
Configurable default profiles	With this release, you can configure and customize the default transmit and configuration profiles.
Higher scale for CW9800M, CW9800H1 and CW9800H2	Support for higher advertisement rates for onboarded and non-onboarded BLE devices is available with this release. For more information, see Table 1 in System Configuration.

Release image

Download the IoT Orchestrator (**Spaces Orchestrator Software**) image that will be posted in the following page:

https://software.cisco.com/download/home/286323456/type

For further help, reach out to Cisco TAC.

Known issues

- CSCwq56528: After you downgrade Cisco Sensor Connect for IoT Services on the Catalyst 9800 controller from 1.2.0 release to 1.1.0 release, the IoT UI fails to become accessible post downgrade. Though the CLI on the controller indicates that the IoT application is in running state, the UI does not load, and relevant ports remain non-operational. The workaround is to install the application from Day 0 state.

- CSCwq58181: Attempting to create a new filter profile after onboarding 64+ BLE devices, each with a unique MAC prefix (such as a unique first octet), results in an error. The error message indicates that not all required MAC prefixes are included in the filter.

  Workarounds:

  - The maximum supported BLE MAC prefixes or full MAC is 64 per filter of AP. Hence, a workaround is to undo the onboarding of the devices so that this limit is respected.
  - Apply the required filtering first and onboard the devices based on the applied prefixes.

- CSCwq50607: Core files are generated on Cisco Catalyst 9105 AP, which you can see using the **show flash cores** command. The issue is seen only when a connect operation is performed, and only on the following Cisco 9105 APs:

  - Cisco Catalyst 9105AXI or 9105AXIT with VID 02 or lower
  - Cisco Catalyst 9105AXW or 9105AXWI with VID 01 or lower

  If the AP is still not scanning any BLE devices, rebooting the AP should bring it out of crash loop. We recommend that you do not to use the abovementioned Cisco 9105 APs for connect operations. For information about the VIDs for the access points, see the How to Identify Affected Products section in the following field notice: https://www.cisco.com/c/en/us/support/docs/field-notices/724/fn72424.html

Open issues for Cisco Sensor Connect for IoT Services 1.2.0

Table 4. Open issues in release 1.2.0

Bug ID	Headline
CSCwq03579	Malformed scan packets on Silabs NCP
CSCwq18337	BLE firmware not updated when Access Point image is downgraded

Resolved issues for Cisco Sensor Connect for IoT Services 1.2.0

Table 5. Resolved issues in release 1.2.0

Bug ID	Headline
CSCwq09682	Error while sending Tx/scan config policy for more than 500 APs
CSCwq34186	Sensor Connect for IoT Services displays error message when sending config to disconnected access points
CSCwq22200	Sensor Connect for IoT Services dashboard charts show inconsistent data for the AP count
CSCwq15637	AP Inventory Tx/scan profile resets to default profile after IoT Orchestrator is restarted or upgraded
CSCwo73359	Unable to change admin password in Sensor Connect for IoT Services
CSCwp60839	Sensor Connect for IoT Services REST API interface may indefinitely block with mobility enabled

Resolved issues for C9800 Controller and APs impacting Cisco Sensor Connect for IoT Services

The following table lists some known resolved issues that impact C9800 Controller and Access Points which could be seen when you run the Cisco Sensor Connect for IoT Services solution. Therefore, we recommend that you review the table and use software releases with known fixes.

Table 6. Resolved issues for C9800 Controller and APs impacting Cisco Sensor Connect for IoT Services

Bug ID	Headline
CSCwi77016	IoT Services page on C9800 is stuck while trying to stop IoT Orchestrator
CSCwo04177	IoT Radio disabled may bring the AP to disconnected state on the Sensor Connect for IoT Services UI
CSCwn69536	Oper table App Image name is not updated when upgrade fails, and rollback is successful
CSCwo66956	C9800-L wireless controller might stop working if more than 6 VirtualPortGroup interfaces are configured
CSCwn56097	Increasing ulimit for Sensor Connect for IoT Services
CSCwn91253	Config table not updated with C9800 controller reload or upgrade
CSCwh56683	Support for seamless switch between Sensor Connect for IoT Services and Cisco Spaces connector
CSCwo00821	Sensor Connect for IoT Services is unable to start after an upgrade or a reload
CSCwo08759	AP GRPC status might show down after uplink to wireless controller flaps
CSCwn19509	ERR_DEVICE_ALREADY_CONNECTED is replied before successful connection to AP
CSCwq11290	17.15.4[SST] - Observing memory leaks on BLE Transport

Related content

- *Cisco Sensor Connect for IoT Services Quick Start Guide*
- *Cisco Sensor Connect for IoT Services Configuration Guide*
- *Cisco Sensor Connect for IoT Services Programmability Guide*
- *Cisco Sensor Connect for IoT Services Online Help*

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