



Release Notes for Cisco Spaces

First Published: 2022-07-06

Last Modified: 2024-03-28

Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
<http://www.cisco.com>
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

All printed copies and duplicate soft copies of this document are considered uncontrolled. See the current online version for the latest version.

Cisco has more than 200 offices worldwide. Addresses and phone numbers are listed on the Cisco website at www.cisco.com/go/offices.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: <https://www.cisco.com/c/en/us/about/legal/trademarks.html>. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1721R)

© 2019–2024 Cisco Systems, Inc. All rights reserved.



CONTENTS

Full Cisco Trademarks with Software License ?

CHAPTER 1

Overview 1

- Overview of Cisco Spaces 1
- Cisco Spaces License Packages 3
- Cisco Spaces - Product Capabilities 3

PART I

2024 7

CHAPTER 2

February 9

- What's New in this Release 9
- What's Changed in this Release 9
- Issues 10
 - Open Issues 10
 - Resolved Issues 11

CHAPTER 3

January 13

- What's New in this Release 13
- What's Changed in this Release 14
- Issues 15
 - Open Issues 15
 - Resolved Issues 15

PART II

2023 17

CHAPTER 4

December 2023 19

What's New in this Release 19

What's Changed in this Release 20

Issues 20

 Open Issues 20

 Resolved Issues 21

CHAPTER 5 **November 2023 23**

 What's New in this Release 23

 What's Changed in this Release 24

 Issues 25

 Open Issues 25

 Resolved Issues 25

CHAPTER 6 **October 2023 27**

 What's New in this Release 27

 What's Changed in this Release 27

 Issues 28

 Open Issues 29

 Resolved Issues 29

CHAPTER 7 **September 2023 31**

 What's New in this Release 31

 What's Changed in this Release 32

 Issues 32

CHAPTER 8 **August 2023 33**

 What's New in this Release 33

 What's Changed in this Release 33

 Issues 35

 Open Issues 35

 Resolved Issues 35

CHAPTER 9 **July 2023 37**

	What's New in this Release	37
	What's Changed in this Release	37
	Issues	38
	Open Issues	38
	Resolved Issues	39
<hr/>		
CHAPTER 10	June 2023	41
	What's New in this Release	41
	What's Changed in this Release	41
	Issues	41
	Open Issues	41
	Resolved Issues	42
<hr/>		
CHAPTER 11	May 2023	43
	What's New in this Release	43
	What's Changed in this Release	44
	Issues	44
	Open Issues	44
	Resolved Issues	44
<hr/>		
CHAPTER 12	April 2023	45
	What's New in this Release	45
	What's Changed in this Release	45
	Issues	45
	Open Issues	46
	Resolved Issues	46
<hr/>		
CHAPTER 13	March 2023	47
	What's New in this Release	47
	What's Changed in this Release	47
	Issues	49
	Open Issues	49
	Resolved Issues	49

CHAPTER 14	February 2023	51
	What's New in this Release	51
	What's Changed in this Release	51
	Issues	52
	Open Issues	52
	Resolved Issues	52

CHAPTER 15	January 2023	55
	What's New in this Release	55
	What's Changed in this Release	55
	Issues	55
	Open Issues	56
	Resolved Issues	56

PART III **2022** **57**

CHAPTER 16	December 2022	59
	What's New in this Release	59
	What's Changed in this Release	59
	Issues	60
	Open Issues	60
	Resolved Issues	60

CHAPTER 17	November 2022	63
	What's New in this Release	63
	What's Changed in this Release	63
	Issues	64
	Resolved Issues	64

CHAPTER 18	October 2022	65
	What's New in this Release	65
	What's Changed in this Release	65
	Issues	66

Open Issues	66
Resolved Issues	66

CHAPTER 19	September 2022	69
	What's New in this Release	69
	What's Changed in this Release	70
	Issues	70
	Resolved Issues	71

CHAPTER 20	August 2022	73
	What's New in this Release	73
	What's Changed in this Release	73
	Issues	74

CHAPTER 21	July 2022	75
	What's New in this Release	75
	What's Changed in this Release	75
	Issues	76

CHAPTER 22	June 2022	77
	What's New in this Release	77
	What's Changed in this Release	77
	Issues	78
	Cisco Bug Search Tool	79
	Open Issues	79
	Resolved Issues	79

CHAPTER 23	May 2022	81
	What's New in this Release	81
	What's Changed in this Release	81
	Issues	82
	Cisco Bug Search Tool	82
	Open Issues	82

Resolved Issues 82

CHAPTER 24

April 2022 85

What's New in this Release 85

What's Changed in this Release 85

Issues 86

Cisco Bug Search Tool 86

Open Issues 86

Resolved Issues 87

CHAPTER 25

March 2022 89

What's New in this Release 89

What's Changed in this Release 89

Issues 89

Cisco Bug Search Tool 90

Open Issues 90

Resolved Issues 90

CHAPTER 26

February 2022 91

What's New in this Release 91

What's Changed in this Release 91

Issues 91

Cisco Bug Search Tool 92

Open Issues 92

Resolved Issues 92

CHAPTER 27

January 2022 93

What's New in this Release 93

What's Changed in this Release 93

Issues 93

Cisco Bug Search Tool 94

Open Issues 94

Resolved Issues 94

PART IV	2021 and Earlier Releases	95
CHAPTER 28	2021 and Earlier Releases	97
	2021 and Earlier Releases	97
APPENDIX A	Support Information	99
	Related Documentation	99
	Communications, Services, and Additional Information	100
	Cisco Bug Search Tool	100
	Documentation Feedback	100



CHAPTER 1

Overview



Note For Cisco Spaces Release Notes from 2021 and earlier, see [Release Notes Archive for Cisco Spaces](#).

- [Overview of Cisco Spaces, on page 1](#)
- [Cisco Spaces License Packages, on page 3](#)
- [Cisco Spaces - Product Capabilities, on page 3](#)

Overview of Cisco Spaces

Cisco Spaces is a powerful location services platform that leverages the existing wireless as well as Internet of Things (IoT) and Bluetooth Low Energy (BLE) infrastructure to provide actionable insights and drive business outcomes through built-in applications in Cisco Spaces.

These insights include:

- **Location Analytics:** Provides the capability to slice and dice location data by time or location and get a deeper visibility into the behavior of users who are connected to your network.
- **Right Now:** Provides a real-time count of the number of visitors (identified by the devices connected to Wi-Fi) within your physical space, and how this number compares with the historical average. Based on the authentication method that is in use, **Right Now** reports can detect multiple devices belonging to a single user and count them as belonging to one visitor. The **Right Now** app also provides reports based on the cameras deployed in customer locations, and whether these cameras are connected to the Cisco Spaces Cloud.
- **Business Insights:** Provides the capability to measure how frequently people visit your physical locations, and how much time they spend at these locations. This data is benchmarked monthly across all the locations. It also provides the capability to compare and benchmark the performance of your locations historically, by group or by industry.
- **Impact Analysis:** Provides the capability to measure the impact of at-location events, campaigns, and layout changes on the behavior of users who are connected to your network. It is easy to create an **Event** using the Cisco Spaces application and measure its impact based on the following:
 - The time spent by a user at a given location
 - The frequency during specific timelines, such as **Before**, **After**, and **During** the occurrence of an event

The Cisco Spaces application includes customer experience management apps such as **Captive Portals**, **Location Personas**, and **Engagements** that allow you to connect with your customers in real time when they are at your physical location. Additional applications include an **Asset Tracking** app, a service manager to manage and configure IoT services (BLE), if any, as well as an open API framework for extracting this data and correlating or integrating it into other enterprise systems.

Cisco Spaces provides a single dashboard interface to avail these multiple services through various location-based technologies and intelligence. Cisco Spaces also enables you to connect and engage with visitors at your physical business locations. It can be used in various industries, such as retail, manufacturing, hospitality, healthcare, education, financial services, and so on. The asset-tracking application in Cisco Spaces provides solutions for monitoring and managing the assets in your premises. Cisco Spaces offers variety of toolkits, apps, and APIs to turn these insights into actions.

Through its partner program, Cisco Spaces offers businesses access to various partner applications across verticals.

Cisco Spaces is compatible across Cisco Catalyst, Cisco AireOS, and Cisco Meraki infrastructure.

In addition to the services specified, the scope of the Cisco Spaces apps is extended to meet the business requirements that have risen due to the COVID-19 pandemic. Extensions are built in existing applications, and newer applications are added to meet specific requirements that have risen because of COVID-19.

Extensions to apps, such as **Impact Analytics**, **Location Analytics**, **Behavior Metrics**, and **Right Now**, allow you to analyze the impact of COVID-19 on your business locations and enable you to take appropriate actions. For example, you can now create a rule based on the device density at your location, and be automatically notified if the number of people at your location exceeds a specific count or density (people per area). The **Location Analytics** app also allows you to share executive summary reports with your colleagues within your organization. Additionally, COVID-19-based trend analysis for individual or group locations can now be done using the **Behavior Metrics** app. This enables the comparison of specific business locations with that of the overall organization as well as with your specific industry.

The **Proximity Reporting** app in Cisco Spaces provides a quick way to review the location history as well as device proximity history of an impacted device. Based on the user ID or MAC address, a report for a device location in a building for the last 14 days is generated along with the proximity of other devices. You can export the report and also share the same using the **Share** functionality. For more information about the **Proximity Reporting** app, see the [Cisco Spaces Proximity Reporting App Configuration Guide](#).

Similarly, the **Detect and Locate** app allows you to cluster devices into specific counts to check and report on areas that might be violating social distancing guidelines. For more information about the **Detect and Locate** app, see the [Cisco Spaces Detect and Locate Configuration Guide](#).

Cisco Spaces: **IoT Services** is a platform service within Cisco Spaces that enables you to claim, manage, and monitor IoT devices using Cisco's wireless infrastructure. IoT Services is designed to enable the management of IoT devices across vendors, form factors, and technology protocols. BLE is the first technology available for management using IoT Services. For more information about IoT Services, see the [Cisco Spaces IoT Services Configuration Guide](#).

Cisco Spaces enables you to integrate third-party apps - **Partner Apps** to Cisco Spaces. The third-party apps are listed as partnership apps in the Cisco Spaces dashboard.

For additional information about Cisco Spaces, including setup and configuration, see the [Cisco Spaces Configuration Guide](#).

Cisco Spaces License Packages

Cisco Spaces is available in three different license packages, namely, **See (Base)**, **Act (Advance)**, and **Extend**. The features available for your account depends on the type of Cisco Spaces license package you own.

For information about features included in the Cisco Spaces See, Extend, and Act licenses, see the [Cisco Spaces Data Sheet](#).

Cisco Smart Licensing

Cisco Smart Licensing is a flexible licensing model that provides you with an easier, faster, and more consistent way to purchase and manage software across the Cisco portfolio and across your organization. And it's secure – you control what users can access. With Smart Licensing you get:

- **Easy Activation:** Smart Licensing establishes a pool of software licenses that can be used across the entire organization—no more PAKs (Product Activation Keys).
- **Unified Management:** My Cisco Entitlements (MCE) provides a complete view into all of your Cisco products and services in an easy-to-use portal, so you always know what you have and what you are using.
- **License Flexibility:** Your software is not node-locked to your hardware, so you can easily use and transfer licenses as needed.



Note To use Smart Licensing, you must first set up a Smart Account on [Cisco Software Central](#).

For more information about Cisco Licensing, see [Cisco Software Licensing Guide](#).

Cisco Spaces - Product Capabilities

Cisco Spaces unified location cloud takes input from multiple sensors and processes, filters and cleanses the data, provides toolkits to act on this data and also makes this data accessible to partners - Independent Software vendors, enterprise software as well as solution partners for delivering business outcomes.

Table 1: Additional Benefits

See - Business Insights	Extend - To Partner Services	Act - On Digitization Toolkits
<p>Behavior metrics</p> <p>How are people and assets behaving in my property?</p>	<p>Partner App Center</p> <p>Discover vertically focused, location-based services applications through the Cisco Spaces App Center</p>	<p>Captive portal</p> <p>Acquire and identify visitors and map to enterprise identity</p>

See - Business Insights	Extend - To Partner Services	Act - On Digitization Toolkits
<p>Location analytics</p> <p>What are behavior patterns in specific locations and time periods?</p>	<p>Partner Firehose API</p> <p>Deliver reliable, high quality location, environmental, and visitor data to partners, with strong enforcement of user privacy and data security</p>	<p>Location personas</p> <p>Profile and segment visitors based on behavior</p>
<p>Benchmarks</p> <p>Compare performance with industries and organizations</p>	<p>Partner App monitoring</p> <p>End-to-end monitoring of location data from the premise the partner app</p> <p>Monitoring and support for Partner Apps via the Monitoring and Support dashboard</p>	<p>Engagements</p> <p>Trigger notifications to visitors and employees via multiple channels (SMS, email, app push, API trigger, Webex Teams, etc.)</p>
<p>Location hierarchy</p> <p>Map business taxonomy to network infrastructure</p>	<p>Streaming data export</p> <p>Customizable streaming export optimized to support ingestion into Big Data, Analytics, and Enterprise Applications</p>	<p>Asset Locator</p> <p>Identify and monitor assets, detect anomalies</p>
<p>Detect and Locate (RSSI)</p> <p>Cloud based Detect and Locate and RSSI location compute</p> <p>On-premises Detect and Locate and RSSI location compute using Cisco CMX 10</p>	<p>Enterprise Integrations</p> <p>Integrate with enterprise software to correlate with location data</p>	<p>Detect and Locate (Advanced)</p> <ol style="list-style-type: none"> 1. Cloud based Detect and Locate and RSSI location compute with device location history 2. Cloud Based Detect and Locate with Hyperlocation support
<p>Right now (without density triggers)</p> <p>Monitor the number of people and devices in your spaces</p>	<p>Specialized RTLS app support</p> <p>Support for specialized partner RTLS applications using cloud and on- premise Firehose APIs</p>	<p>Right now (with density triggers)</p> <p>Monitor the number of people in your spaces and send notifications when density thresholds are reached or exceeded</p>
<p>Impact Analysis</p> <p>Measure the impact of events, campaigns, or layout changes on location behavior</p>	<p>Includes everything in Cisco Spaces See</p>	<p>Proximity reporting</p> <p>Summarize impact of a health incident across zones, floors, buildings, and potential interactions with other people</p>

See - Business Insights	Extend - To Partner Services	Act - On Digitization Toolkits
<p>Cisco Catalyst Center (formerly known as Cisco DNA Center) Integration</p> <p>Keep floor maps and hierarchy in sync between Cisco Spaces and Catalyst Center and send location data to Catalyst Center for IT use cases</p>		<p>Indoor IoT Services</p> <p>Deploy IoT devices and applications at scale and at significantly lower TCO. Deploy a broad spectrum of BLE tags, beacons, and other sensors to expand use cases</p>
<p>Camera Metrics</p> <p>Report counts of footfall and historical trends as a measure of real-time visitor count, with Meraki Video Cameras.</p>		<p>Hyperlocation / FastLocate</p> <p>Works with Cisco Spaces Connector</p>
<p>OpenRoaming</p> <p>Secure, seamless guest onboarding onto wired and Wi-Fi networks</p>		<p>Includes everything in Cisco Spaces Extend</p>



PART I

2024

- [February, on page 9](#)
- [January, on page 13](#)



CHAPTER 2

February

- [What's New in this Release, on page 9](#)
- [What's Changed in this Release, on page 9](#)
- [Issues, on page 10](#)

What's New in this Release

The following new release is introduced in Cisco Spaces:

Local Firehose Service Release 3.1.0.65

The new features introduced are:

- Local Firehose Service opens up local firehose channel (gRPC) in Cisco Spaces: Connector 3 and sends out location updates for Aeroscout Location/BLE tags.
- Use the Cisco Spaces Partner app to consume location Received Signal Strength Indicator (RSSI) and Internet of Things (IoT) Bluetooth Low Energy (BLE) RSSI measurements over gRPC (Remote Procedure Call) channel.
- The Stanley Aeroscout Location Engine is successfully integrated with Cisco Spaces: Connector 3.x. Refer to the *Securitas Document KB1100* article for more information.



Note For more information, see [Cisco Spaces: Connector 3 Configuration Guide](#).

What's Changed in this Release

The following enhancements are made in Cisco Spaces:

Right Now App

The wired visitor count in the **Right Now** app is enhanced to automatically reset the visitor count to zero daily at 3 a.m., ensuring synchronization with the Location Hierarchy timezone settings.

Cisco Spaces: Location Services Release 3.1.0.127

The docker release focuses on the **AP AnyLocate** feature enhancements:

- The AP air pressure data issue in the Cisco Catalyst 9800 Series Wireless Controllers Cisco IOS XE 17.13.1 release is resolved. This enhancement improves the autoclustering of APs when placing them using the **AP AnyLocate** feature.
- Currently, the issue is addressed in Cisco IOS XE 17.12.3 release.
- Addressed the issue regarding unreliable AP FTM ranging measurement for 6-GHz radio with **AFC Standard Power mode** configuration enabled in the following Catalyst 9800 controller releases:
 - Cisco IOS XE Dublin 17.12.1
 - Cisco IOS XE Dublin 17.12.2
 - Cisco IOS XE 17.13.1



-
- Note**
- [CSCwh98522](#) tracks the Catalyst 9800 controller issue.
 - This issue does not impact upgrade from Catalyst 9800 controller Cisco IOS XE Dublin 17.12.1 or 17.12.2 to Cisco IOS XE Dublin 17.12.3.
-

Cisco Spaces: Connector 3 Service Manager Release 3.1.2.45

The following enhancements are made in **Service Manager**:

- New **connectorctl dockersubnet** command to support docker network change. For more information, see [Cisco Spaces: Connector3 Command Reference Guide](#).
- Added NTP service monitoring and auto recovery services to check if the service is down.
- Enhanced keepalive event notifications and handlers for High Availability
- Enhanced privacy settings to exclude blank values for **MAC Username Salt**
- Addressed the Audit log permission issue during password reset.
- Enhancement is made in the AMI connector instance for Amazon Web Service (AWS) to share public IP address along with services.

Issues

Issues describe unexpected behavior in the Cisco Spaces application.

Open Issues

This section lists the open issues in this release of Cisco Spaces.

Table 2: Cisco Spaces Open Issues

Issue Identifier	Issue Description
CSCwi1258	Failed to delete Building from Map Services

Resolved Issues

This section lists the issues that have been resolved in this release of Cisco Spaces.

Table 3: Cisco Spaces Resolved Issues

Issue Identifier	Issue Description
CSCwj13626	Occupancy Report - In some case list page is not loading when user edits the locations in the report
CSCwj13870	User getting 'Invalid OTP' error when entering correct OTP
CSCwi92266	No response from RADIUS server. AAA timeout is being received at controller end



CHAPTER 3

January

- [What's New in this Release, on page 13](#)
- [What's Changed in this Release, on page 14](#)
- [Issues, on page 15](#)

What's New in this Release

The following feature is introduced in Cisco Spaces:

Cisco Spaces: Connector Release 3 Update

Cisco Spaces now offers the capability to migrate Hotspot service configurations. When you migrate, Hotspot is enabled as a service in Cisco Spaces: Connector 3.x if not enabled explicitly.

In the **Add Controller** window, check the **Migrate hotspot configurations from the selected connector** check box to migrate all the required configuration from 2.x to 3.x connectors.



Note

- The **Migrate hotspot configurations from the selected connector** check box is displayed only if you:
 - Choose the **Choose controllers from another connector** option to add a controller with connector configurations
 - Select a connector with hotspot configurations enabled from the **Choose Connector** drop-down list
- When migrating from Cisco Spaces: Connector 2.x to Cisco Spaces: Connector 3.x:
 - Migrate the controller configurations to point to the new Cisco Spaces: Connector 3.x instance instead of the previous Cisco Spaces: Connector 2.x instance.
 - Cisco Spaces automatically enables and configures the same working connector 2.x hotspot configurations to the new 3.x connector.
 - Cisco Spaces won't automatically disable the hotspot/openroaming configuration on the current working 2.x connector.

What's Changed in this Release

There are no enhancements in this release of Cisco Spaces.

Issues

Issues describe unexpected behavior in the Cisco Spaces application.

Open Issues

This section lists the open issues in this release of Cisco Spaces.

Table 4: Cisco Spaces Open Issues

Issue Identifier	Issue Description
CSCwi11258	Failed to delete Building from Map Services

Resolved Issues

There are no resolved issues in this release of Cisco Spaces.



PART II

2023

- [December 2023, on page 19](#)
- [November 2023, on page 23](#)
- [October 2023, on page 27](#)
- [September 2023, on page 31](#)
- [August 2023, on page 33](#)
- [July 2023, on page 37](#)
- [June 2023, on page 41](#)
- [May 2023, on page 43](#)
- [April 2023, on page 45](#)
- [March 2023, on page 47](#)
- [February 2023, on page 51](#)
- [January 2023, on page 55](#)



CHAPTER 4

December 2023

- [What's New in this Release, on page 19](#)
- [What's Changed in this Release, on page 20](#)
- [Issues, on page 20](#)

What's New in this Release

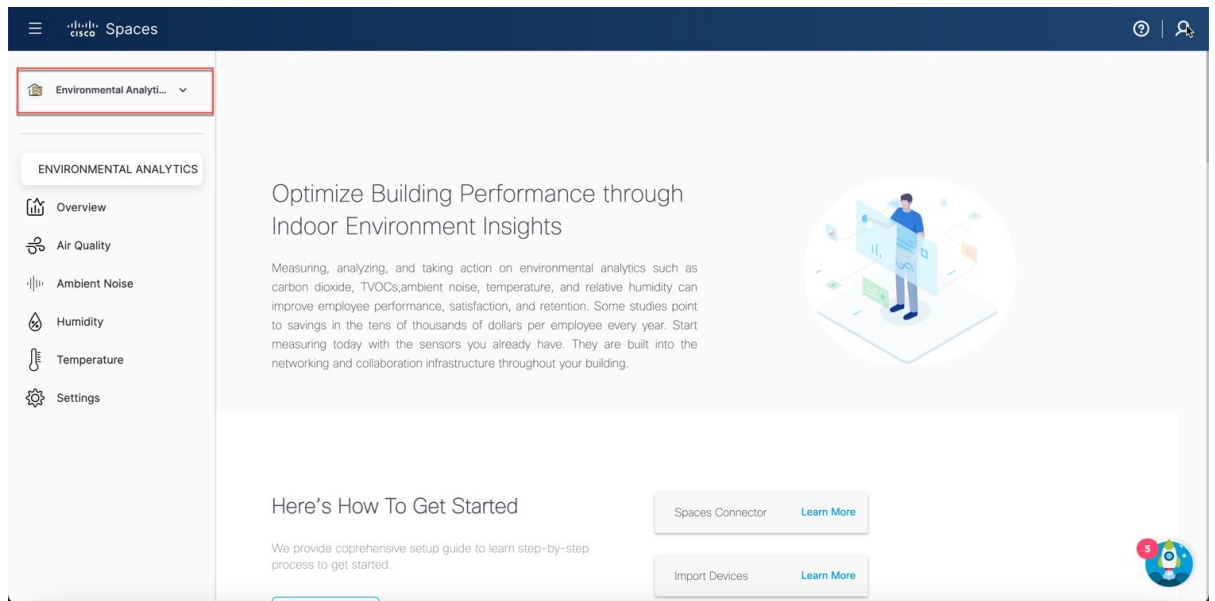
The following feature is introduced in Cisco Spaces:

Cisco Spaces: Environmental Analytics App

The Cisco Spaces Environmental Analytics app enables you to optimize the performance of buildings by leveraging indoor environment insights and metrics. These insights are derived from sensors integrated into the networking and collaboration infrastructure throughout your buildings within your network.

Use the Environmental Analytics app to measure and evaluate critical environmental metrics such as carbon dioxide levels, total volatile organic compounds (TVOCs), ambient noise, temperature, and relative humidity. Leverage this valuable data to take necessary corrective actions to ensure optimal indoor conditions and enhance the overall environmental quality within your facilities.

For more information, see the [Cisco Spaces: Environmental Analytics App Configuration Guide](#).

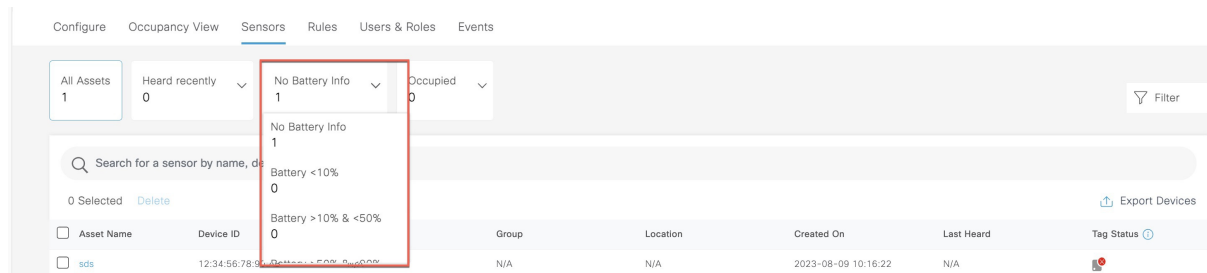


What's Changed in this Release

The following enhancements are made in Cisco Spaces:

Cisco Spaces: IoT Explorer App

- **Event Export Functionality:** The **Event Export** feature is enhanced to allow the export of a complete set of events. Before this enhancement, the event export was limited to 1,000 events.
- **Battery Information Filter Option:** In the **Assests** and **Sensors** tab, the **Battery Information** filter option is enhanced to include more filtering options based on battery percentage range.



Issues

Issues describe unexpected behavior in the Cisco Spaces application.

Open Issues

This section lists the open issues in this release of Cisco Spaces.

Table 5: Cisco Spaces Open Issues

Issue Identifier	Issue Description
CSCwi11258	Failed to delete Building from Map Services

Resolved Issues

There are no resolved issues in this release of Cisco Spaces.



CHAPTER 5

November 2023

- [What's New in this Release, on page 23](#)
- [What's Changed in this Release, on page 24](#)
- [Issues, on page 25](#)

What's New in this Release

The following features are introduced in the Cisco Spaces dashboard:

Cisco Spaces: Space Manager App

Room Occupancy Reports is a new feature that is introduced in the Cisco Spaces: Space Manager App. You can now generate an occupancy report with the data including the number of people present in the room that is aggregated in a window of every 15 minutes. This feature provides the flexibility to download and categorize the people count data based on their preferred reporting time intervals, such as 15, 30, or 60 minutes.

Admin Management

Role-based Access Control (RBAC) support for Cisco Spaces - Partner Dashboard is now introduced in Cisco Spaces. In **Admin Management**, under the **Roles** tab, a new app option **Partner Dashboard** is added with the permission options: **Read/Write** and **Read Only**. Use this role to provide Cisco Spaces - Partner Dashboard access to the tenants directly from the Cisco Spaces dashboard.




Note Before this release, RBAC for Cisco Spaces - Partner Dashboard was only supported through the **User Management** section in the Cisco Spaces - Partner Dashboard.

Create New Role ✕

<input type="checkbox"/> Engagements	Read only ▾
<input type="checkbox"/> Location Personas	Read only ▾
<input type="checkbox"/> OpenRoaming	Read only ▾
<input type="checkbox"/> IoT Explorer	Read only ▾
<input type="checkbox"/> Space Manager	Read only ▾
<input type="checkbox"/> Space Experience	Read only ▾
<input type="checkbox"/> Partner Dashboard	Read only ▾

Restrict this role to specific locations

Create
Cancel

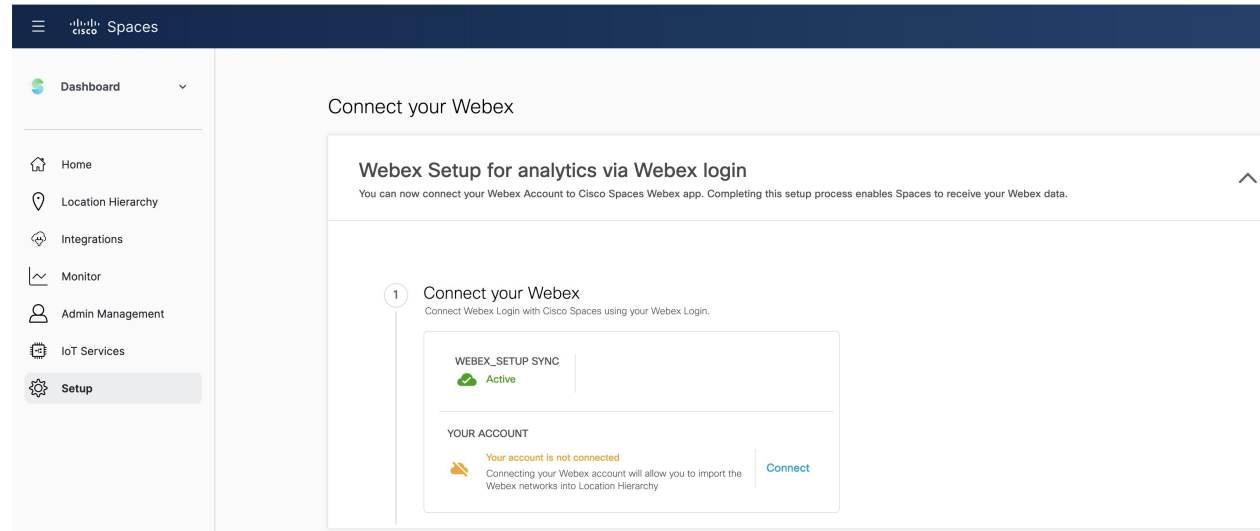


What's Changed in this Release

The following enhancements are made in the Cisco Spaces dashboard:

Cisco Webex Synchronization Status

In **Setup > Webex**, enhancement is made to display the **WEBEX_SETUP SYNC** status for all logged in users. The Cisco Webex synchronization status is displayed as **Active** for all active users in a specific tenant (account) if at least one user successfully connected their Cisco Spaces account with the Cisco Webex account while importing the Cisco Webex networks into **Location Hierarchy**.

Figure 1: Cisco Webex Synchronization Status

Cisco Spaces: IoT Explorer App

In the IoT Explorer app, support is added for processing and displaying random MAC Bluetooth Low Energy (BLE) devices with profiles associated to it in the **Temperature Monitoring** and **Asset Tracking** use cases.



Note Before this release, the IoT Explorer app did not support processing the random MAC BLE devices.

Issues

Issues describe unexpected behavior in the Cisco Spaces application.

Open Issues

This section lists the open issues in this release of Cisco Spaces.

Table 6: Cisco Spaces Open Issues

Issue Identifier	Issue Description
CSCwi11258	Failed to delete Building from Map Services

Resolved Issues

This section lists the issues that have been resolved in this release of Cisco Spaces.

Table 7: Cisco Spaces Resolved Issues

Issue Identifier	Issue Description
CSCwi40989	User data details are not sent as part of device association events
CSCwi24984	AppCenter_During AppActivation, Next button isn't visible when location hierarchies are more to select
CSCwi45279	Digital signage - The Richmap is not loaded in Webex device once the token has expired.



CHAPTER 6

October 2023

- [What's New in this Release, on page 27](#)
- [What's Changed in this Release, on page 27](#)
- [Issues, on page 28](#)

What's New in this Release

There are no new features in this release of Cisco Spaces.

What's Changed in this Release

The following enhancements are made in the Cisco Spaces.

Cisco Spaces Dashboard

User Account Country Information Update: During the login process, a pop-up window is displayed for Cisco Spaces users who were on board before April 2022 to update their country information. You can either provide the required information or click **Skip & Continue** to skip and proceed to the Cisco Spaces dashboard. Once you provide the information, the pop-up window is not prompted again during subsequent logins.

Authentication Support for Camera Message Queuing Telemetry Transport (MQTT) Brokers: Cisco Spaces cloud is updated to support password-based authentication for receiving MQTT updates from Cisco Meraki cameras. The background network synchronization process will automatically update the authentication details to the Cisco Meraki dashboard.

Cisco Spaces: IoT Explorer App

The IoT Explorer app is enhanced to include stabilization fixes in the following areas:

- **Device List:** All use cases are now enhanced to show devices that do not have a **Last Heard** status during the Location Hierarchy import process.
- **Asset Location History:** The Asset Tracking use case is now enhanced to track assets at the zone level. You can view this change in the **Asset Details** window.
- **Rule Events:** In the Asset Tracking use case, assets that are tracked under the **Asset not heard** rule are assigned an end timestamp of **N/A** until they are heard. If you delete this rule, the events under this rule still retain the end timestamp of **N/A**. With this enhancement, these events are now removed from the events list.

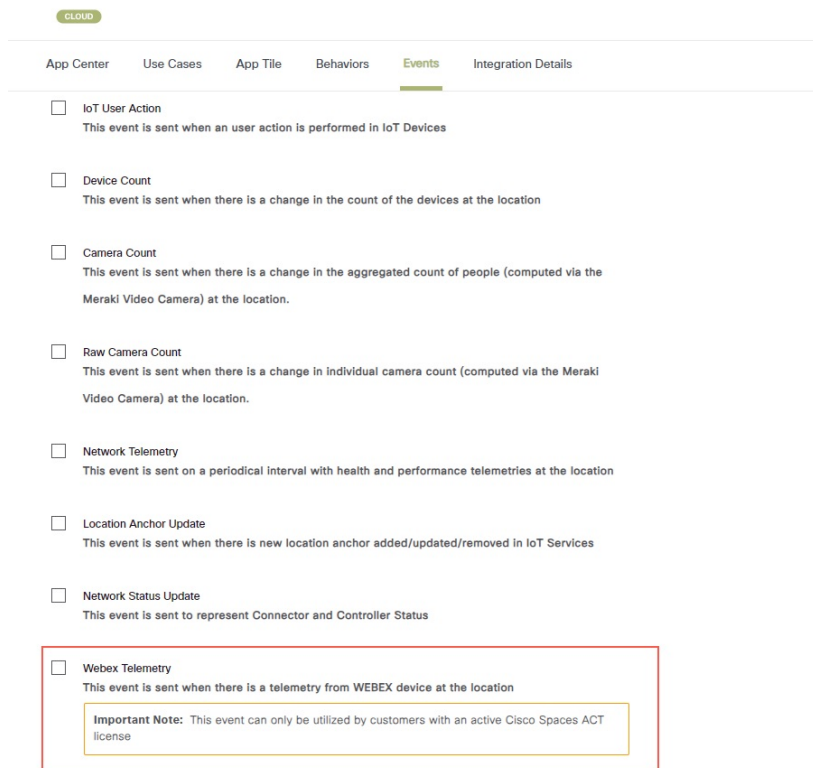


Note As part of the stabilization process, minor fixes are implemented throughout the Cisco IoT Explorer application.

Cisco Spaces Partner Dashboard

The **Webex Telemetry** event type is available under the **Events** tab. The **Webex Telemetry** event is an enhanced version of the **Telepresence** event type. Partners can use this event type during app creation and is triggered when there is a telemetry update from a Cisco Webex device at a particular location.

Figure 2: Events Tab



Note The **Webex Telemetry** event type is available only for an active Cisco Spaces ACT license.

The **Telepresence** event type under the **Events** tab is getting deprecated and is not available for new Partner App users.

Issues

Issues describe unexpected behavior in the Cisco Spaces application.

Open Issues

There are no open issues in this release of Cisco Spaces.

Resolved Issues

This section lists the issues that have been resolved in this release of Cisco Spaces.

Table 8: Cisco Spaces Resolved Issues

Issue Identifier	Issue Description
CSCwh84725	Unable to view floor map on Cisco Detect and Locate



CHAPTER 7

September 2023


- [What's New in this Release, on page 31](#)
- [What's Changed in this Release, on page 32](#)
- [Issues, on page 32](#)

What's New in this Release

Cisco Spaces

The following features are introduced in the Cisco Spaces:

Cisco Meraki Network: Create Zone Location Support

In Location Hierarchy 2.0 (Beta UI), you can now create polygon zones for the floor locations under the Cisco Meraki network. To create polygon zones on the floor map, use the **Polygon tool** () that is available in the floor map view under the **Map** tab. The new polygon zones created are displayed under both Location Hierarchy and Location Hierarchy 2.0.

For more information, see [Create a Zone for a Floor Location](#).

Before this release, the polygon zone creation was supported only for **Cisco CMX** locations.

Cisco Spaces: IoT Explorer App

In the IoT Explorer app, support is added for processing and displaying the associated random MAC Wi-Fi devices in the **Asset Tracking Use Case**.

Cisco Spaces: Connector Services Manager

The following features are introduced in the Cisco Spaces: Connector Services Manager:

- **High Availability:** Enhancements with respect to handling failover optimization during high CPU/memory usage of Docker containers. For more information, see [High Availability](#).
- **Technical Support:** Log download options for troubleshooting from Cisco Spaces: Connector local GUI.
- **Commands:** New commands are introduced for proxy certificate validation.

What's Changed in this Release

There are no enhancements in this release of Cisco Spaces.

Issues

Issues describe unexpected behavior in the Cisco Spaces application.

There are no Resolved Issues or Open Issues in this release.



CHAPTER 8

August 2023

- [What's New in this Release, on page 33](#)
- [What's Changed in this Release, on page 33](#)
- [Issues, on page 35](#)

What's New in this Release

The following feature is introduced in Cisco Spaces.

Access Point Auto Location

The Access Point Auto Location solution helps to effectively self-locate APs in a global coordinate by combining various ranging technologies and algorithms. The AP Auto Location solution automatically locates your APs on a digital map in Cisco Spaces. This solution delivers accurate, automated, up-to-date AP location leveraging Fine Timing Measurement (FTM) and Global Navigation Satellite System (GNSS) when available.

For more information, see the "Set Up Access Point Auto Location" section in the chapter "Setup" in the [Cisco Spaces Configuration Guide](#).

What's Changed in this Release

The following enhancements are made in the Cisco Spaces dashboard:

Cisco Spaces dashboard

The Cisco Spaces GUI is enhanced to embrace the Magnetic design implementation. Magnetic design follows a persistent header and collapsible left navigation pane.

The Cisco Spaces dashboard window is enhanced to include the **Dashboard** drop-down list (in the left navigation pane) which allows you to search and view the available apps associated with your Cisco Spaces license. Use the **Dashboard** drop-down list to choose and navigate to any selected app. To navigate back to the **Cisco Spaces Home** window, choose **Dashboard** option from the drop-down list.

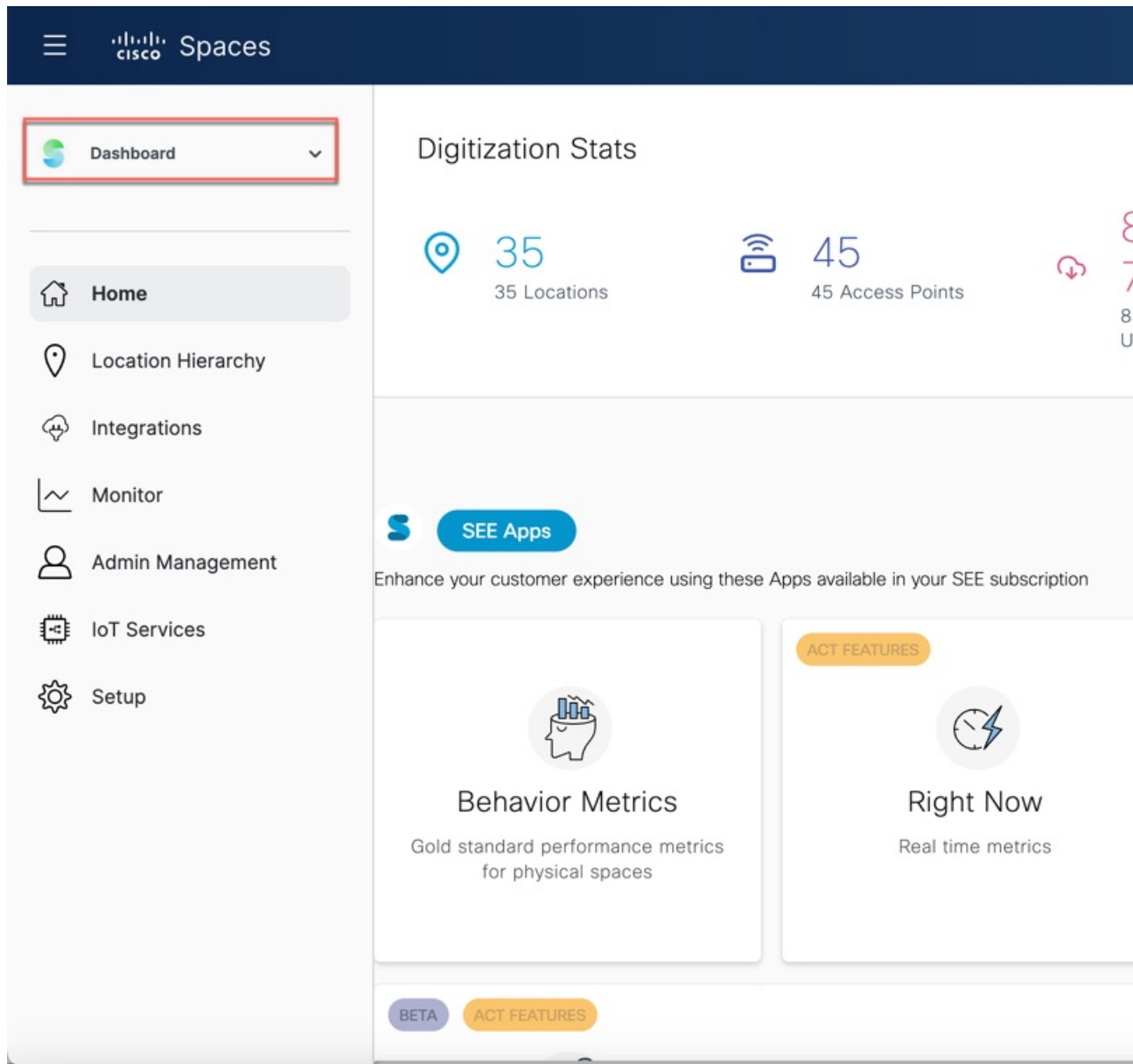


Table 9: Changes in the GUI before and after August 2023

Before	After
The option to search for apps was available on the top-right corner.	This app search option is available in the left navigation pane in the Dashboard drop-down list.
The information related to <i>License Units Consumed</i> (<i>Active APs</i>) count was displayed on the top-right corner.	The license information is available under My Account > License Information > License Units Consumed .

Cisco Spaces: IoT Explorer App

The **IoT Explorer** app is enhanced to filter only those devices that comply with the MAC Organisationally Unique Identifier (OUI) standards and the devices which continue to send updates after 24 hours from the initial appearance.

Partner Dashboard

The Cisco Spaces - Partner Dashboard GUI is enhanced to support the Magnetic design implementations. The GUI changes are implemented in the top header panel and the left navigation pane.

The **Pull Channels** options under the **Integration Details** tab are enhanced to support the `WEB_SOCKET` endpoint.

Issues

Issues describe unexpected behavior in the Cisco Spaces application. The Resolved Issues and Open Issues sections list the issues in this release.

Open Issues

This section lists the open issues in this release of Cisco Spaces.

Table 10: Cisco Spaces Open Issues

Issue Identifier	Issue Description
CSCwf47895	Search doesn't work using the IP address of the controllers under the Connector

Resolved Issues

This section lists the resolved issues in this release of Cisco Spaces.

Table 11: Cisco Spaces Resolved Issues

Issue Identifier	Issue Description
CSCwfl6696	Asset Tracking - Number of assets shown to import into use case is greater than the available assets
CSCwf28503	Slowness when navigating to building list by clicking on Campus Name
CSCwh02942	Map Service sending map events without inclusion region impacting D&L devices location to be off
CSCwd41670	Required support for large Map file synchronization between Catalyst Center and Cisco Spaces



CHAPTER 9

July 2023

- [What's New in this Release, on page 37](#)
- [What's Changed in this Release, on page 37](#)
- [Issues, on page 38](#)

What's New in this Release

Cisco Spaces Dashboard

The following features are introduced in the Cisco Spaces dashboard:

To support **Cisco Smart Workspaces**, two new apps are added under the **ACT** license:

- **Space Manager**: Use this app to configure various devices, sensors, and workspaces and to provide access to real-time occupancy data and environment telemetry (heat map, indoor air quality, temperature, humidity, and noise levels) rendered on rich maps for a specific building, floor, or meeting room. In the **Devices** section, you can view the configured devices and their telemetry details on rich maps. The **Workspace Management** section displays the configured meeting room or workspace and allows you to view, add, or remove devices and sensors to and from the selected workspace.
- **Space Experience**: Use the **Space Experience** app to do the following:
 - Create and manage signage for **Cisco Smart Workspaces**
 - Onboard new signage for a Cisco Webex device or a non-Webex device.
 - Configure the telemetry parameters and publish the signage.

The configuration updates are auto-notified to the corresponding signage devices.

What's Changed in this Release

The following enhancements are made in the Cisco Spaces dashboard:

Cisco Spaces License Package

The Cisco Spaces License package is enhanced to support the following three licenses, along with the existing licenses (**SEE**, **EXTEND**, and **ACT**).

- **SMART_OPERATIONS**: This license works in the same way as the existing **SEE** license with some additional entitlements. The **SMART_OPERATIONS** license includes all the access privileges under the **SEE** license along with access to the following apps:
 - Operational Insights
 - IoT Explorer
- **SMART_VENUES**: This license works in the same way as the existing **SEE** license with some additional entitlements. The **SMART_VENUES** license includes all the access privileges under the **SEE** license along with access to the following apps:
 - Captive Portal
 - Engagements
 - Profile Rules
- **SPACES UNLIMITED**: Cisco Spaces accounts with **UNLIMITED** license include all the entitlements similar to an existing **ACT** license.

For a **Cisco Smart License**-enabled account with **UNLIMITED** license package, the license count is based on the total square foot area of all the floor locations calculated based on the maps uploaded to the Cisco Spaces platform.



Note Cisco Spaces users can now choose any of these licenses for a location using the **Split License** feature.

Cisco Spaces Dashboard Tile Enhancements

To support the **Cisco Spaces License Package** enhancement, the following GUI changes are made in the Cisco Spaces apps:

- Asset Locator and IoT Explorer apps are available under the **SMART_OPERATIONS** license.
- Captive Portals, Engagements, Location Personas apps are available under the **SMART_VENUES** license.



Note The **UNLIMITED** and **ACT** licenses include access to all Cisco Spaces apps (including the apps available under **SMART_OPERATIONS** and **SMART_VENUES** license).

Issues

Issues describe unexpected behavior in the Cisco Spaces application. The Resolved Issues and Open Issues sections list the issues in this release.

Open Issues

This section lists the open issues in this release of Cisco Spaces.

Table 12: Cisco Spaces Open Issues

Issue Identifier	Issue Description
CSCwd41670	Required support for large Map file synchronization between Catalyst Center and Cisco Spaces
CSCwfl6696	Asset Tracking - Number of assets shown to import into use case is greater than the available assets

Resolved Issues

This section lists the resolved issues in this release of Cisco Spaces.

Table 13: Cisco Spaces Resolved Issues

Issue Identifier	Issue Description
CSCwh18418	Inconsistency between data collected via Cisco Spaces Firehose API and Cisco CMX API.
CSCwh20943	If the legacy CMX node is present in the hierarchy, imported locations are being added under CMX.



CHAPTER 10

June 2023

- [What's New in this Release, on page 41](#)
- [What's Changed in this Release, on page 41](#)
- [Issues, on page 41](#)

What's New in this Release

There are no new features in this release of Cisco Spaces.

What's Changed in this Release

Cisco Spaces Dashboard

The following enhancements are made in the Cisco Spaces dashboard:

Captive Portal Reports

In the **Captive Portal** app, for the **Device Onboarding** report, the **Promos & Offers Performance** section is enhanced to include the promo view count. This feature enables you to track the number of views for a specific promotion along with the number of clicks.

Locations and Maps

The Locations and Maps feature is now enabled for all Cisco Spaces accounts. Before this release, support was only available for **Cisco Smart Workspaces** accounts.

Issues

Issues describe unexpected behavior in the Cisco Spaces application. The Resolved Issues and Open Issues sections list the issues in this release.

Open Issues

This section lists the open issues in this release of Cisco Spaces.

Table 14: Cisco Spaces Open Issues

Issue Identifier	Issue Description
CSCwd41670	Required support for large Map file synchronization between Catalyst Center and Cisco Spaces

Resolved Issues

This section lists the resolved issues in this release of Cisco Spaces.

Table 15: Cisco Spaces Resolved Issues

Issue Identifier	Issue Description
CSCwf61446	Map synchronization process encountered an error when attempting to synchronize from Cisco CMX



CHAPTER 11

May 2023

- [What's New in this Release, on page 43](#)
- [What's Changed in this Release, on page 44](#)
- [Issues, on page 44](#)

What's New in this Release

Cisco Spaces Dashboard

The following features are introduced in the Cisco Spaces dashboard:

Locations and Maps

The Locations and Maps feature enables you to normalize and unify network hierarchies from various sources—Catalyst Center, Cisco Prime Infrastructure, and Cisco Meraki into a single business-orientated location hierarchy.

You can create a business-centric hierarchy in Cisco Spaces by uploading a Microsoft Excel (.xlsx) file containing location details. Moreover, the import from a Microsoft Excel (.xlsx) file allows you to add or update location metadata information for multiple locations at once.



Note Currently, this feature is only enabled for **Cisco Smart Workspaces** users.

Rich Maps

Rich Maps transforms flat floor plans into dynamic, interactive, and highly intuitive 3D maps. The **Rich Maps** feature in Cisco Spaces helps to logically deconstruct the Computer-Aided design (CAD) files and extract data such as meeting room details, workplace desk information, amenities, and so on. You can attach them to the location hierarchy to discover additional use cases.

Cisco Spaces: Connector 3 - Support for High Availability-Pair

Cisco Spaces Connector 3, May 2023 release supports **Dual Interface** and **High Availability** features. The dual interface model enables you to control traffic going into Cisco Spaces: Connector. This model supports two interfaces—**Primary** and **Secondary**.

The **Primary** interface is the default interface for all egress traffic and all the input ports are blocked. The **Secondary** interface allows you to configure networks or IP address endpoints from which ingress is allowed.

With **High Availability** support, at any given time, only one Cisco Spaces: Connector is active and the **Secondary** instance is always on standby mode. A virtual IP address is shared between these two instances. Thus, any device connecting to the Cisco Spaces: Connector uses the same IP address regardless of which system is active.

What's Changed in this Release

Cisco Spaces Dashboard

The following enhancement is made in the Cisco Spaces dashboard:

Map Service

When you import or synchronize maps from various sources—Catalyst Center, Cisco Prime Infrastructure or Cisco Meraki, support is extended to normalize and unify network hierarchies into a single business-orientated hierarchy.

Issues

Issues describe unexpected behavior in the Cisco Spaces application. The Resolved Issues and Open Issues sections list the issues in this release.

Open Issues

This section lists the open issues in this release of Cisco Spaces.

Table 16: Cisco Spaces Open Issues

Issue Identifier	Issue Description
CSCwf16696	Asset Tracking - Number of assets shown to import into use case is greater than the available assets
CSCwd41670	Required support for large Map file synchronization between Catalyst Center and Cisco Spaces

Resolved Issues

This section lists the issues that have been resolved in this release of Cisco Spaces.

Table 17: Cisco Spaces Resolved Issues

Issue Identifier	Issue Description
CSCwf47913	IoT Explorer - Asset Entry rule is not triggered when a device exits and then enters the same location
CSCwe72447	Catalyst Center hierarchical change does not reflect in Cisco Spaces Location Hierarchy



CHAPTER 12

April 2023

- [What's New in this Release, on page 45](#)
- [What's Changed in this Release, on page 45](#)
- [Issues, on page 45](#)

What's New in this Release

There are no new features in this release of Cisco Spaces.

What's Changed in this Release

Performance Optimization

This release includes performance improvements to the Cisco Spaces application. The backend performance of the application is optimized to improve the data-processing pipeline and reduce system overheads.

Cisco Spaces Dashboard

The following enhancements are made in the Cisco Spaces dashboard:

IoT Explorer

The **IoT Explorer** app is now enhanced with the ability to report the X and Y coordinates from AP sensor devices.

Cisco Spaces: Connector 3

By default **Location Service** is enabled when a new **Cisco Spaces: Connector 3** instance is added.

Issues

Issues describe unexpected behavior in the Cisco Spaces application. The Open Issues and Resolved Issues sections list the issues in this release.

Open Issues

This section lists the open issues in this release of Cisco Spaces.

Table 18: Cisco Spaces Open Issues

Issue Identifier	Issue Description
CSCwfl6696	Asset Tracking - Number of assets shown to import into use case is greater than the available assets
CSCwd41670	Support for large Map file synchronization between the Catalyst Center and Cisco Spaces

Resolved Issues

This section lists the issues that have been resolved in this release of Cisco Spaces.

Table 19: Cisco Spaces Resolved Issues

Issue Identifier	Issue Description
CSCwe86258	Location Analytics - In Custom Reports, unable to change the SSID from the Edit window page
CSCwd00980	OpenRoaming - Under Network Configuration section, the no. of controllers deployed shows incorrect count
CSCwe89680	Meraki APs on floor map are not positioned correctly in Cisco Detect & Locate
CSCwe29576	Location Services is not automatically added to Cisco Spaces: Connector 3



CHAPTER 13

March 2023

- [What's New in this Release, on page 47](#)
- [What's Changed in this Release, on page 47](#)
- [Issues, on page 49](#)

What's New in this Release

New Software Releases

Cisco Spaces: Connector 3 Amazon Machine Images (AMI) version is published to Amazon Web Services (AWS) Marketplace. For more information, see the [Cisco Spaces: Connector3 Configuration Guide](#).

Cisco Spaces: Connector 3

By default, a location is added when a new **Cisco Spaces: Connector3** instance is added.

What's Changed in this Release

Cisco Spaces Dashboard

The following enhancements are made in the Cisco Spaces dashboard:

Location Analytics

The **Location Analytics** app GUI is revamped for an enhanced user experience. The revamp is centered around improving user experience and enhancing the value that users can generate from Location Analytics data.

This revamp does not impact the metrics computations or numbers.

The key benefits of this revamp include:

- Ability to compare two sets of locations, SSIDs, and time periods
- Ability to customize the report view by rearranging tiles and charts
- Ability to create custom reports using templates



Note The revamped custom reports do not have backward compatibility with the existing custom reports (the custom reports created prior to this release will not show up in the Cisco Spaces dashboard).

Global RBAC in Location Hierarchy 2.0

Location Hierarchy 2.0 is now enhanced to display only those locations that a Cisco Spaces user can access. Accessibility to these locations are defined when you create or edit roles, or invite or edit the Cisco Spaces user in **Admin Management**.



Note

- This Global Role-based Access Control (GRBAC) feature is supported in Location Hierarchy 1.0.
- The GRBAC feature is currently not supported for **Cisco Spaces: Detect and Locate** app users (**Cisco Spaces: Detect and Locate** > **User Management** > **App Users**).

Location Integration for Switches in Cisco Spaces Dashboard

In Cisco Spaces dashboard, when you add or edit a switch in **Wired Network**, click the **Add locations** option to choose a location and associate with the switch.

Test Connectivity

The **Test Connectivity** feature in Cisco Spaces is enhanced to support **Cisco Spaces: Connector3**. When you add a controller, use the **Test Connectivity** feature to verify the new controller's status.



Note The **Test Connectivity** feature is supported in **Cisco Spaces: Connector 2.x**.

Import Controller Features

The Cisco Spaces dashboard now supports the task of moving a controller or a Cisco switch to a different connector within the same account.

You can move a controller or a Cisco switch between:

- Cisco Spaces: Connector 2.x to Cisco Spaces: Connector 2.x
- Cisco Spaces: Connector 2.x to Cisco Spaces: Connector3
- Cisco Spaces: Connector3 to Cisco Spaces: Connector3
- Cisco Spaces: Connector3 to Cisco Spaces: Connector 2.x

Software Release Enhancements

Cisco Spaces: Connector3 Location Service Version 3.0.1.272 released.

Cisco Network Services Manager Version 3.0.4.13 released.

Issues

Issues describe unexpected behavior in the Cisco Spaces application. The Resolved Issues and Open Issues sections list the issues in this release.

Open Issues

This section lists the open issues in this release of Cisco Spaces.

Table 20: Cisco Spaces Open Issues

Issue Identifier	Issue Description
CSCwd41670	Support for large Map file synchronization between the Catalyst Center and Cisco Spaces
CSCwe86258	Location Analytics - In Custom Reports, unable to change the SSID from the edit window page

Resolved Issues

This section lists the issues that have been resolved in this release of Cisco Spaces.

Table 21: Cisco Spaces Resolved Issues

Issue Identifier	Issue Description
CSCwe84200	IoT Explorer - Asset name getting overridden by the MAC address of the device
CSCwe15039	Floor map image is not shown in the mapservice UI section
CSCwe45698	In firehose events, expected to send mapid information in zone-level updates



CHAPTER 14

February 2023

- [What's New in this Release, on page 51](#)
- [What's Changed in this Release, on page 51](#)
- [Issues, on page 52](#)

What's New in this Release

Cisco Spaces Dashboard

The following features are introduced in the Cisco Spaces dashboard:

OpenRoaming support for Cisco Spaces: Connector3

OpenRoaming support is enabled now for **Connector3**. From the Cisco Spaces dashboard, use **Connector3** to:

- Add or remove hotspot as a service
- Add or remove controller for hotspot
- Enable debug logs and upload them to cloud

Location Hierarchy

A new version of the **Cisco Webex** workspace mapping algorithm that automatically maps the workspaces to the meeting rooms is deployed.

What's Changed in this Release

Cisco Spaces Dashboard

The following enhancement is made in the Cisco Spaces dashboard:

As part of **Cisco Webex** integration, Cisco Spaces now supports integration with persistent web app for **Cisco Webex** navigators. When a customer activates the control hub integration with Cisco Spaces, the necessary configuration supporting this integration is updated in the **Cisco Webex** control hub.



Note Currently, this integration is only available for **Cisco Smart Workspaces** users.

Cisco Spaces Partner Dashboard

The following enhancement is made in the Cisco Spaces Partner dashboard:

Disallow app deletion if the app has activations: The Cisco Spaces Partner dashboard does not support the deletion of an app if the app has activations. You must first delete the activations for the respective app and then delete the app.

Issues

Issues describe unexpected behavior in the Cisco Spaces application. The Resolved Issues and Open Issues sections list the issues in this release.

The following information is provided for each issue:

- **Identifier:** Each issue is assigned a unique identifier (ID) with a pattern of CSC $xxNNNN$, where x is any letter (a-z) and N is any number (0-9). These IDs are frequently referenced in Cisco documentation, such as Security Advisories, Field Notices, and other Cisco support documents. Cisco Technical Assistance Center (TAC) engineers or other Cisco staff can also provide you with the ID for a specific issue.
- **Description:** A description of what is observed when the issue occurs.

Open Issues

This section lists the open issues in this release of Cisco Spaces.

Table 22: Cisco Spaces Open Issues

Issue Identifier	Issue Description
CSCwd41670	Support for large Map file synchronization between the Cisco Catalyst Center and Cisco Spaces
CSCwe45698	In firehose events, mapid information is required to be sent in zone level updates

Resolved Issues

This section lists the issues that have been resolved in this release of Cisco Spaces.

Table 23: Cisco Spaces Resolved Issues

Issue Identifier	Issue Description
CSCwe48569	IoT Explorer - On deleting BLE Tags from the Asset tracking use case, the tag got added again in the next update
CSCwe34833	SMS Apiserver not making bind with two SMPP gateway for same tenant

Issue Identifier	Issue Description
CSCwe14756	Partner app activation failed due to incorrect content type being passed to partner site
CSCwe37381	App configuration gets corrupted when a partner app with an app activation is deleted
CSCwd13553	In Cisco Partner dashboard, unable to navigate to the Home page once an app is open
CSCwe20037	Unable to see a client on Cisco Catalyst Center Floor in Network Hierarchy after Cisco Spaces Prod integration
CSCwe01529	Clients not shown on Cisco Catalyst Center due to subscription failure
CSCwe29685	App User with Read-Only Access in OpenRoaming App, page is not loading
CSCwd79229	Functional SJC Alpha Cisco Spaces Connector 3.0 'Test Connectivity' Fail while adding WLCs
CSCwe38494	Engagement rule is not matched as per frequency if configured as once in a day



CHAPTER 15

January 2023

- [What's New in this Release, on page 55](#)
- [What's Changed in this Release, on page 55](#)
- [Issues, on page 55](#)

What's New in this Release

Cisco Spaces Dashboard

The following feature is introduced in the Cisco Spaces dashboard:

Location Hierarchy: Auto-import support for Cisco Meraki networks tagged with Cisco Spaces

Cisco Meraki networks with **CiscoSpaces** tags are automatically imported into Cisco Spaces **Location Hierarchy** during the background synchronization process. The Meraki organization must be present in **Location Hierarchy** to support the auto import of these tagged networks.



Note **CiscoSpaces** should be the tag name added in Cisco Meraki network.

What's Changed in this Release

There are no enhancements in this release of Cisco Spaces.

Issues

Issues describe unexpected behavior in the Cisco Spaces application. The Resolved Issues and Open Issues sections list the issues in this release.

The following information is provided for each issue:

- **Identifier:** Each issue is assigned a unique identifier (ID) with a pattern of **CSCxxNNNNN**, where *x* is any letter (a-z) and *N* is any number (0-9). These IDs are frequently referenced in Cisco documentation,

such as Security Advisories, Field Notices, and other Cisco support documents. Cisco Technical Assistance Center (TAC) engineers or other Cisco staff can also provide you with the ID for a specific issue.

- Description: A description of what is observed when the issue occurs.

Open Issues

There are no open issues in this release of Cisco Spaces.

Resolved Issues

This section lists the issues that have been resolved in this release of Cisco Spaces.

Table 24: Cisco Spaces Resolved Issues

Issue Identifier	Issue Description
CSCwe14553	Shared report would be unviewable for Cisco Spaces users, who have not logged in to the dashboard



PART **III**

2022

- [December 2022, on page 59](#)
- [November 2022, on page 63](#)
- [October 2022, on page 65](#)
- [September 2022, on page 69](#)
- [August 2022, on page 73](#)
- [July 2022, on page 75](#)
- [June 2022, on page 77](#)
- [May 2022, on page 81](#)
- [April 2022, on page 85](#)
- [March 2022, on page 89](#)
- [February 2022, on page 91](#)
- [January 2022, on page 93](#)



CHAPTER 16

December 2022

- [What's New in this Release, on page 59](#)
- [What's Changed in this Release, on page 59](#)
- [Issues, on page 60](#)

What's New in this Release

There are no new features in this release of Cisco Spaces.

What's Changed in this Release

Cisco Spaces Dashboard

The following enhancements are made in the Cisco Spaces dashboard:

IoT Explorer

- **Import User Workflow:** The **IoT Explorer** app is now enhanced to import new or existing users to a specific use case. Use the **Import Users** option to either import users from other use cases or add multiple users at once by uploading a Microsoft Excel (.xlsx) file containing user details.

Choose **IoT Explorer > Use Case > Users/Roles > Import Users** to import users.

- **Occupancy History:** The **Occupancy History** tab displays user presence with the timeline for occupancy detected and not detected. You can view this in the timeline for the last 24 hours, 7 days, or 30 days. Choose **Presence Detection > Sensor > Asset Name > Occupancy History** to view the occupancy history details.



- Cisco Webex and Trigger API Support: In addition to SMS and email, support is added to send Sensor notifications using Cisco Webex and Trigger API. Choose **IoT Explorer > Use Case > Rules > Add Rule > Actions sections** to configure notifications.
- Location History: For the **Asset Tracking** use case, the location history of the device is recorded and depicted on the map with **X** and **Y** coordinates. You can view this in the timeline for the last 24 hours, 7 days, or 30 days.

My Account

- Cisco Spaces dashboard is enhanced to include the **Enable Support Access** option. A Cisco Spaces customer can use the **Enable Support Access** option to enable or disable access to their account to the Cisco Spaces support team. Enabling this option helps the Cisco Spaces support team to detect and debug issues under exceptional situations.
- This option is available in the **My Account > Preferences** section. When access is enabled, the Cisco Spaces support team gets access to the customer's Cisco Spaces account.



Note By default, the **Enable Support Access** option is enabled.

Location Hierarchy

Location Hierarchy 2.0 is now enhanced to show rich maps, if they are available for a particular floor. The option to upload rich maps is currently managed by the Cisco Spaces support team.

Click the **3D** toggle button to switch between 2D and 3D floor maps.

Issues

Issues describe unexpected behavior in the Cisco Spaces application. The Resolved Issues and Open Issues sections list the issues in this release.

The following information is provided for each issue:

- Identifier: Each issue is assigned a unique identifier (ID) with a pattern of CSCxxNNNNN, where *x* is any letter (a-z) and *N* is any number (0-9). These IDs are frequently referenced in Cisco documentation, such as Security Advisories, Field Notices, and other Cisco support documents. Cisco Technical Assistance Center (TAC) engineers or other Cisco staff can also provide you with the ID for a specific issue.
- Description: A description of what is observed when the issue occurs.

Open Issues

There are no open issues in this release of Cisco Spaces.

Resolved Issues

This section lists the bugs that have been resolved in this release of Cisco Spaces.

Table 25: Cisco Spaces Resolved Issues

Issue Identifier	Issue Description
CSCwd66507	Duplicate campuses shown in the Mapservice UI



CHAPTER 17

November 2022

- [What's New in this Release, on page 63](#)
- [What's Changed in this Release, on page 63](#)
- [Issues, on page 64](#)

What's New in this Release

Cisco Spaces Dashboard

The following feature is introduced in the Cisco Spaces dashboard:

The **Data Export** feature now supports new destinations. In addition to **SFTP**, you can create data exports for the following destinations:


- Amazon S3
- Microsoft Azure Blob Storage
- Google Cloud Storage
- Box

What's Changed in this Release

Cisco Spaces Dashboard

The following enhancements are made in the Cisco Spaces dashboard:

Spaces Connector 3.0 - Wired Support

Cisco Spaces: Connector 3.0 is now available under the **Menu** () > **Setup** > **Wired Network** section. You can create both 2.x and 3.0 connectors under the **Wired Network**.

Connector 3.0 capabilities such as service association, instance tracking, and metrics visualizations are available in the **Wired Network** section.

Cisco Spaces Dashboard GUI Enhancements

The following sections are enhanced in accordance with the Cisco Spaces branding changes:

- Login Section
- Home Page – Top Banner (Cisco Spaces Logo)

Location Hierarchy

The support for auto importing access points with model names starting with **CW** to **Location Hierarchy** (newly introduced by Cisco Meraki) is added. Prior to this release, support was only available for **MR** and **MX** access point models.

Cisco Spaces Partner Dashboard

The following enhancements are made in the Cisco Spaces Partner dashboard:

Singapore Region Support

Cisco Spaces Partner dashboard is enhanced to support Singapore region. Partners can now create and publish apps for the Singapore region.

Partner Dashboard GUI Enhancements

The following sections are enhanced in accordance with the Cisco Spaces branding changes:

- Login Section
- Home Page – Top Banner (Cisco Spaces Logo)

Issues

Issues describe unexpected behavior in the Cisco Spaces application. The Resolved Issues and Open Issues sections list the issues in this release.

The following information is provided for each issue:

- Identifier: Each issue is assigned a unique identifier (ID) with a pattern of CSCxxNNNNN, where *x* is any letter (a-z) and *N* is any number (0-9). These IDs are frequently referenced in Cisco documentation, such as Security Advisories, Field Notices, and other Cisco support documents. Cisco Technical Assistance Center (TAC) engineers or other Cisco staff can also provide you with the ID for a specific issue.
- Description: A description of what is observed when the issue occurs.

There are no open issues in this release of Cisco Spaces.

Resolved Issues

This section lists the issues that have been resolved in this release of Cisco Spaces.

Table 26: Cisco Spaces Resolved Issues

Issue Identifier	Issue Description
CSCwd09396	Page loading forever in Impact Analysis



CHAPTER 18

October 2022

- [What's New in this Release, on page 65](#)
- [What's Changed in this Release, on page 65](#)
- [Issues, on page 66](#)

What's New in this Release

Cisco Spaces Dashboard

The following new feature is introduced in the Cisco Spaces dashboard:

Cisco Spaces dashboard now supports **Split Licensing**.

The accounts that are registered with Smart Licensing include an option to upgrade or downgrade the license type at each location level. Use the **License Level Change** option available in the **Location Hierarchy** window.



Note To use **Split Licensing**, accounts must be registered with Smart Licensing.

What's Changed in this Release

Cisco Spaces Dashboard

The following enhancements are made in the Cisco Spaces dashboard.

Location-Based RBAC

Role-based Access Control (RBAC) is now enhanced to support specific locations. Use the **Restrict this role to specific locations** option to support specific locations while creating a role (**Admin Management > Roles > Create Role**) and inviting user flows (**Admin Management > Invite Admin**).

Profile

The **User Profile** feature is enhanced to include the **View Change Log** option. Click **View Change Log** to open the **Change Log** tab that displays the activity details of all the users in a particular account.

Firehose

The IoT Telemetry event in Firehose is enhanced to include the following three additional fields for Bluetooth Low Energy (BLE) devices:

- **Vendor:** The vendor ID when the device is claimed.
- **DeviceModel:** The model of the BLE device.
- **UniqueId:** The unique ID of the device.

These fields carry specific values after the beacons are claimed.

Issues

Issues describe unexpected behavior in the Cisco Spaces application. The Resolved Issues and Open Issues sections list the issues in this release.

The following information is provided for each issue:

- **Identifier:** Each issue is assigned a unique identifier (ID) with a pattern of CSCxxNNNN, where *x* is any letter (a-z) and *N* is any number (0-9). These IDs are frequently referenced in Cisco documentation, such as Security Advisories, Field Notices, and other Cisco support documents. Cisco Technical Assistance Center (TAC) engineers or other Cisco staff can also provide you with the ID for a specific issue.
- **Description:** A description of what is observed when the issue occurs.

Open Issues

This section lists the open issues in this release of Cisco Spaces.

Table 27: Cisco Spaces Open Issues

Issue Identifier	Issue Description
CSCwd09396	Page loading forever in Impact Analysis.

Resolved Issues

This section lists the issues that have been resolved in this release of Cisco Spaces.

Table 28: Cisco Spaces Resolved Issues

Issue Identifier	Issue Description
CSCwd33465	On clicking get app menu does not redirect to landing page on desktop/laptop
CSCwd42802	Access code session duration value does not pass to controller in radius response
CSCwd23458	HotspotClient - Hotspot failing to load when certificate has expired
CSCwd31231	Delete user preferences and device preferences functionality is not working

Issue Identifier	Issue Description
CSCwd19227	Meraki OpenRoaming - Certificate renewal process is picking invalid APIKey



CHAPTER 19

September 2022

- [What's New in this Release, on page 69](#)
- [What's Changed in this Release, on page 70](#)
- [Issues, on page 70](#)

What's New in this Release

Location Hierarchy

The following new features are introduced in **Location Hierarchy**.

Location Hierarchy now supports Meraki MT. The configurations required for receiving the data from the MT sensors are updated using Cisco Spaces and Meraki integration. The MT sensors are automatically imported to **Location Hierarchy**.

Location Hierarchy 2.0 is the enhanced beta release of **Location Hierarchy** with a revamped user interface and performance improvement along with the existing **Location Hierarchy** features.

The new features include:

- Interactive global map for updating geolocation
- Option to create and edit polygon zones and AP markers on floor maps
- Uncategorized AP groups



Note

In Cisco Spaces, click **Menu** (☰) and choose **Location Hierarchy > Beta UI** to enable Location Hierarchy 2.0. Use the **Beta UI** toggle button to switch between Location Hierarchy 2.0 and the Location Hierarchy GUI.

Cisco Spaces Dashboard

The following new feature is introduced in the Cisco Spaces dashboard:

Cisco pxGrid Cloud

The Cisco Spaces dashboard now supports Cisco pxGrid Cloud implementation. Cisco pxGrid Cloud allows you to share contextual information between Cisco Identity Services Engine (Cisco ISE) and other cloud-based solutions.

To configure Cisco pxGrid Cloud in the Cisco Spaces dashboard, you require a token from [Cisco DNA - Cloud](#). This token must be validated at pxGrid Cloud. After successful validation, the app is activated in the pxGrid Cloud, thereby allowing the services to be used in the Cisco Spaces dashboard.



Note Currently, only Cisco pxGrid Cloud GUI support is available in Cisco Spaces. Backend changes are expected to be included in the future.

Firehose

A new event called WEBEX Telemetry is added in Firehose. This event is initiated when telemetry data is received from the Cisco Webex devices from the location.



Note Currently, GUI support for enabling this event in Cisco Spaces **Partner Dashboard** is not available. Contact [Cisco Spaces support](#) to enable this new event from the backend.

What's Changed in this Release

Cisco Spaces Dashboard

The following enhancements are made in the Cisco Spaces dashboard:

- **Camera Zone Support for Meraki Networks:** In **Location Hierarchy**, for the newly added networks with camera zones in Meraki, zones are added to **Location Hierarchy** along with the networks.

For existing networks, the camera zones that are added, modified, or removed in Meraki are synchronized with the **Location Hierarchy** during the background synchronization process.



Note Currently, GUI support to display the camera zones in the Cisco Spaces dashboard is not available.

- **IoT Explorer:** Cisco Spaces dashboard now supports the import of MT Sensor devices in the **Temperature Monitoring** section of the **IoT Explorer** app.

Issues

Issues describe unexpected behavior in the Cisco Spaces application. The Resolved Issues and Open Issues sections list the issues in this release.

The following information is provided for each issue:

- **Identifier:** Each issue is assigned a unique identifier (ID) with a pattern of `CSCxxNNNNN`, where `x` is any letter (a-z) and `N` is any number (0-9). These IDs are frequently referenced in Cisco documentation, such as Security Advisories, Field Notices, and other Cisco support documents. Cisco Technical Assistance Center (TAC) engineers or other Cisco staff can also provide you with the ID for a specific issue.
- **Description:** A description of what is observed when the issue occurs.

There are no open issues in this release of Cisco Spaces.

Resolved Issues

This section lists the issues that have been resolved in this release of Cisco Spaces.

Table 29: Cisco Spaces Resolved Issues

Issue Identifier	Issue Description
CSCwd19341	Dashboard view is not showing up in the Detect and Locate App
CSCwc46949	Custom widgets in location analytics keep loading when user selects multiple locations
CSCwc91835	On clicking report button from 503 error page is showing invalid email address
CSCwc93338	Meraki APs not positioned correctly in Detect and Locate
CSCwd02169	Floor map images are not rendered, and clients are not visible in Detect and Locate



CHAPTER 20

August 2022

- [What's New in this Release, on page 73](#)
- [What's Changed in this Release, on page 73](#)
- [Issues, on page 74](#)

What's New in this Release

Location Hierarchy

The following new features are introduced in **Location Hierarchy** to support the Cisco Smart workspaces use cases.

Location Hierarchy background synchronization now supports:

- Synchronization of the Meraki MT sensor devices in the Meraki networks or floor locations.
- Synchronization of Cisco Webex devices with meeting rooms and desks.

What's Changed in this Release

Cisco Spaces Partner Dashboard

The following enhancement is made in the Cisco Spaces Partner dashboard:

A new event called `NETWORK_STATUS_UPDATE` is added in the **Events** section. This event provides network information such as status, last heard, type, connector name, IP address and so on.

Cisco Spaces Dashboard

The following enhancement is made in the Cisco Spaces dashboard:

OpenRoaming SDK Profile

Cisco Spaces now supports configuration of OpenRoaming Wi-Fi profile using the **Menu** (☰) **Integrations** > **Cisco Spaces SDK** > **Configure Profile** window. You can create a customer specific profile for a particular tenant based on the values you provide in the **Configure Profile** window.

Prior to this enhancement, the profile used to be updated manually in the backend.

Data Export

Data export configuration now supports the following additional data export types:

- Captive portal - Customer Acquisition
- Right Now - People Count (Camera)



Note For Cisco Spaces dashboard SEE license customer accounts, data export types such as Captive portal, and Engagement and Location Personas are not available for export. For ACT license customer accounts, all data types are available for export.

Location Hierarchy

During the background synchronization process, the Meraki Scanning API Notification URL for configuration template networks are updated automatically.

Firehose API

A new field, **openRoamingUserId**, is added for the Wi-Fi events in the Firehose API. This field carries the identity of the OpenRoaming users who are onboarded by the SDK. In other cases, the value of this field is nil.

Map Service

Map Service API performance is enhanced to get the import history and status.

Issues

Issues describe unexpected behavior in the Cisco Spaces application. The Resolved Issues and Open Issues sections list the issues in this release.

The following information is provided for each issue:

- **Identifier:** Each issue is assigned a unique identifier (ID) with a pattern of CSCxxNNNNN, where *x* is any letter (a-z) and *N* is any number (0-9). These IDs are frequently referenced in Cisco documentation, such as Security Advisories, Field Notices, and other Cisco support documents. Cisco Technical Assistance Center (TAC) engineers or other Cisco staff can also provide you with the ID for a specific issue.
- **Description:** A description of what is observed when the issue occurs.



CHAPTER 21

July 2022

- [What's New in this Release, on page 75](#)
- [What's Changed in this Release, on page 75](#)
- [Issues, on page 76](#)

What's New in this Release

Cisco Spaces dashboard

The following feature is introduced in the Cisco Spaces dashboard:

Secure File Transfer Protocol (SFTP) data export configuration is now available in the Cisco Spaces dashboard.

In the Cisco Spaces dashboard, click the **Menu** icon () and choose **Setup > Data Export**. Use this option to configure the automatic export of raw data as CSV files to SFTP servers.

The following are the different types of data available for export:

- Visits
- Right Now - People Count (Wi-Fi)
- Engagement - Rule Activity
- Location Personas - Rule Activity
- Open Roaming - User Data

For more information about routing the SFTP connection over VPN, contact [Cisco Spaces support](#).

What's Changed in this Release

Map Service

The following enhancements are made in Map Service:

- **Support for Map Hierarchy Migration from Cisco Prime Infrastructure to Cisco Catalyst Center:** Cisco Spaces Location Hierarchy now supports import of migration data with nested sites from Cisco Prime Infrastructure to Cisco Catalyst Center.

- **Support for Cisco Catalyst Center Nested Site Hierarchy:** You can now import or synchronize new sites from Cisco Catalyst Center to Cisco Spaces on top of the existing site hierarchy.
- **Support for Planned Access Point (AP) Import:** You can now import planned APs into Map Service.

Issues

Issues describe unexpected behavior in the Cisco Spaces application. The Resolved Issues and Open Issues sections list the issues in this release.

The following information is provided for each issue:

- **Identifier:** Each issue is assigned a unique identifier (ID) with a pattern of CSCxxNNNN, where *x* is any letter (a-z) and *N* is any number (0-9). These IDs are frequently referenced in Cisco documentation, such as Security Advisories, Field Notices, and other Cisco support documents. Cisco Technical Assistance Center (TAC) engineers or other Cisco staff can also provide you with the ID for a specific issue.
- **Description:** A description of what is observed when the issue occurs.



CHAPTER 22

June 2022

- [What's New in this Release, on page 77](#)
- [What's Changed in this Release, on page 77](#)
- [Issues, on page 78](#)

What's New in this Release

Cisco Spaces dashboard

The following feature is introduced in the Cisco Spaces dashboard:

IoT Explorer Application

Internet of Things (IoT) Explorer application is the 3rd generation enhanced version of Operational Insights and Cisco Asset Locator applications. The **IoT Explorer** application is designed to bring in quick value to users exploring device driven IoT use cases in Cisco Spaces and to add value to IoT services at the ACT licensing level.

This application accomplishes the three use cases listed below:

- Asset Tracking
- Space Occupancy/Presence Detection
- Temperature Monitoring

Within each of these use cases, you can create rules/alerts, view data logs, view the real time location and status of the device or sensor. The **IoT Explorer** application UI is designed to set up the use case in a simplified way.

What's Changed in this Release

Cisco Spaces Dashboard

The following enhancement is made in the Cisco Spaces dashboard:

Cisco Spaces: Connector 3.0

Cisco Spaces: Connector 3.0 (referred to as Connector in all subsequent references in this document) is a fully redesigned version of the Connector with the capability to efficiently manage multiple services that connect to different network devices such as Cisco Wireless controller and switches for data. The Connector platform makes it easy to add/remove new services from the cloud. It enables enhanced troubleshooting with debugging, log upload, and restart functionalities from the cloud. Connector also provides detailed metrics for each service with CPU, Memory, Connectivity and Up/Down status.

Connector is the next generation connector of Cisco Spaces that provides an enhanced user experience, architecture to support multiple services, simplicity, modularity, seamless upgrade and High Availability. Connector supports an active-active High Availability setup. Unlike the earlier releases of Connector 2.x, you can specifically configure and monitor the High Availability pair. All services and device configurations are managed at the Connector level to make it easy to pair with High Availability.

The Connector and device status is also aggregated at the Connector level from each instance for easy monitoring. Connector provides full visibility to each instance of a High Availability pair. You can view how the services are running on each instance, their upgrade status and so on. You can also perform actions on a particular instance, such as restarting of services.

Right Now

The following enhancement is made in the Right Now app:

The **Right Now** app is enhanced to address issues with counts when there are any changes in the **Location Hierarchy**.

Prior to this enhancement, changes in **Location Hierarchy** such as adding new locations, removing existing locations or updating vital parameters such as **TimeZone** introduced stale or incorrect counts for Wi-Fi.



Note With this enhancement, the **Presence** chart count gets reset (removes all existing numbers until the current time) for the present day because the counts are invalid after the **Location Hierarchy** changes.

Map Service

The following enhancement is made in Map Service:

When you delete a zone location from the **Map Service** UI, the same is deleted from **Location Hierarchy** as well.

Issues

Issues describe unexpected behavior in the Cisco Spaces application. The Resolved Issues and Open Issues sections list the issues in this release.

The following information is provided for each issue:

- **Identifier:** Each issue is assigned a unique identifier (ID) with a pattern of CSCxxNNNN, where *x* is any letter (a-z) and *N* is any number (0-9). These IDs are frequently referenced in Cisco documentation, such as Security Advisories, Field Notices, and other Cisco support documents. Cisco Technical Assistance Center (TAC) engineers or other Cisco staff can also provide you with the ID for a specific issue.
- **Description:** A description of what is observed when the issue occurs.

Cisco Bug Search Tool

[Cisco Bug Search Tool](#) (BST) is a gateway to the Cisco bug-tracking system, which maintains a comprehensive list of defects and vulnerabilities in Cisco products and software. The BST provides you with detailed defect information about your products and software.

Open Issues

There are no open issues in this release of Cisco Spaces.

Resolved Issues

There are no resolved issues in this release of Cisco Spaces.



CHAPTER 23

May 2022

- [What's New in this Release, on page 81](#)
- [What's Changed in this Release, on page 81](#)
- [Issues, on page 82](#)

What's New in this Release

Cisco Spaces dashboard

The following features are introduced in the Cisco Spaces dashboard:

Cisco Webex Integration

Cisco Webex is now integrated with Cisco Spaces. This integration enables Cisco Webex devices in the **Webex Control Hub** account to perform a cloud-to-cloud integration between **Webex Control Hub** and Cisco Spaces.

This integration supports:

- Synchronization of Cisco Webex entities such as Cisco Webex workspaces, devices, workspace locations, and floor details from the **Webex Control Hub**. The synchronization process is scheduled in the backend every three hours after the token is configured in the Cisco Spaces dashboard. Choose **Setup > Webex** to configure the tokens.
- Cisco Webex devices to send device data such as temperature, air quality, occupancy, and so on, which is then used in **Cisco Smart Workspaces**



Note Currently, this integration is only intended for **Cisco Smart Workspaces** users.

What's Changed in this Release

Cisco Spaces dashboard

The following enhancements are made in the Cisco Spaces Dashboard:

Single Use Access Code in Cisco Spaces

Cisco Spaces is enhanced to support the creation of a single-use access code. Choose **Captive Portal > Access Code > Create Access Code** to create a new single-use access code. The generated access code is for one-time use only. You can choose either the **Numeric** or the **Alphanumeric** option while creating the access code.

The status of the new access code is shown as **Available** in the **View Access Codes** window. After the access code is used, the status changes to **Used**.

Captive Portal

The following enhancement is made in the Cisco Spaces Captive Portal:

Single Use Access Code Support in Captive Portal Runtime

The Cisco Spaces Captive Portal is enhanced to support single-use access codes. The generated access code is for one-time use only. If the access code is already used once, the following error message is displayed:
`invalid access code.`

Issues

Issues describe unexpected behavior in the Cisco Spaces application. The Resolved Issues and Open Issues sections list the issues in this release.

The following information is provided for each issue:

- Identifier: Each issue is assigned a unique identifier (ID) with a pattern of CSCCxxNNNN, where *x* is any letter (a-z) and *N* is any number (0-9). These IDs are frequently referenced in Cisco documentation, such as Security Advisories, Field Notices, and other Cisco support documents. Cisco Technical Assistance Center (TAC) engineers or other Cisco staff can also provide you with the ID for a specific issue.
- Description: A description of what is observed when the issue occurs.

Cisco Bug Search Tool

[Cisco Bug Search Tool](#) (BST) is a gateway to the Cisco bug-tracking system, which maintains a comprehensive list of defects and vulnerabilities in Cisco products and software. The BST provides you with detailed defect information about your products and software.

Open Issues

There are no open issues in this release of Cisco Spaces.

Resolved Issues

This section lists the issues that have been resolved in this release of Cisco Spaces.

Table 30: Cisco Spaces Resolved Issues

Issue Identifier	Issue Description
CSCwb99689	Clients are not showing up in the Detect and Locate app due to null ancestor IDs in the map floor API response.



CHAPTER 24

April 2022

- [What's New in this Release, on page 85](#)
- [What's Changed in this Release, on page 85](#)
- [Issues, on page 86](#)

What's New in this Release

There are no new features in this release.

What's Changed in this Release

Cisco Spaces Dashboard

The following enhancements are made in the Cisco Spaces Dashboard:

Cisco Customer Identity Integration with Cisco Spaces

Cisco Spaces is now integrated with the Cisco Customer Identity (CCI) application for the login workflow. Cisco Spaces users are now redirected to the CCI application window for login authentication and then proceed to log in to the Cisco Spaces Dashboard.

The new workflow is applicable for the following users:

- Cisco domain users
- Customer domain non-SSO users

With the introduction of CCI integration, you can now use the **Switch Users** option to switch between different email addresses in the Cisco Spaces login window.



Note Customer domain SSO users can continue to use the existing login workflow.

Location Analytics

Location Analytics now shows the hierarchy path of the filtered location. The filtered location path is displayed in the widgets available in the home page and the **Custom Reports** section except for the **Path** widget.

Cisco Spaces Partner Dashboard

The following enhancement is made in the Cisco Spaces Partner Dashboard:

CCI Integration with Partner Dashboard

The Cisco Spaces Partner Dashboard is now integrated with the CCI application for login workflow. This feature is similar to Cisco Spaces the Cisco Spaces Dashboard.

The Cisco Spaces Partner Dashboard users can switch between different email addresses using the **Switch Users** option available in the Cisco Spaces Partner Dashboard login window.

Map Service

The following enhancements are made in the Cisco Spaces **Map Service**:

GPS Markers Warning Message

The GPS markers warning message that is displayed in the **Import History** section shows only the floor name if an imported location has invalid GPS markers. With this enhancement, the message shows the entire hierarchy in the **Import History** section for the floor with invalid GPS markers.

Cisco Catalyst Wireless 9164I Wi-Fi 6E Series Access Points (AP) Support

- The Cisco Catalyst Wireless 9164I Wi-Fi 6E Series AP support is added in the **Map Service**.
- You can now import the Cisco Catalyst Wireless 9164I Wi-Fi 6E Series APs into Cisco Spaces using the **Map Service**.

Issues

Issues describe unexpected behavior in the Cisco Spaces application. The Resolved Issues and Open Issues sections list the issues in this release.

The following information is provided for each issue:

- Identifier: Each caveat is assigned a unique identifier (ID) with a pattern of CSCxxNNNN, where *x* is any letter (a-z) and *N* is any number (0-9). These IDs are frequently referenced in Cisco documentation, such as Security Advisories, Field Notices, and other Cisco support documents. Cisco Technical Assistance Center (TAC) engineers or other Cisco staff can also provide you with the ID for a specific caveat.
- Description: A description of what is observed when the issue occurs.

This section contains the following topics:

Cisco Bug Search Tool

[Cisco Bug Search Tool](#) (BST) is a gateway to the Cisco bug-tracking system, which maintains a comprehensive list of defects and vulnerabilities in Cisco products and software. The BST provides you with detailed defect information about your products and software.

Open Issues

There are no open issues in this release of Cisco Spaces.

Resolved Issues

This section lists the issues that have been resolved in this release of Cisco Spaces.

Table 31: Cisco Spaces Resolved Issues

Issue Identifier	Issue Description
CSCwb33270	Internal failure error while doing Cisco Spaces sync manually.



CHAPTER 25

March 2022

- [What's New in this Release, on page 89](#)
- [What's Changed in this Release, on page 89](#)
- [Issues, on page 89](#)

What's New in this Release

Partner Dashboard

The following features have been introduced in the Cisco Spaces Partner Dashboard:

Trace Firehose

A new feature called **Trace Firehose** is introduced in the Cisco Spaces Partner Dashboard. This feature is available under **Your Apps > App Tile > More > Trace Firehose**. This feature provides the following two options to view the firehose data from the Cisco Spaces Partner Dashboard:

- **Download historical data:** Use this option to download hourly data for the last 24 hours. Choose a required time slot to download a text file with firehose events triggered within the selected time slot.
- **Download present data:** Use this option to view the live stream of firehose events in the Cisco Spaces Partner Dashboard UI for a period of five minutes.

What's Changed in this Release

Mapservice

The following enhancement is made in the Cisco Spaces **Mapservice**:

Import of planned Access Points into **Mapservice** and **Location Hierarchy** is not supported.

Issues

Issues describe unexpected behavior in the Cisco Spaces application. The Resolved Issues and Open Issues sections list the issues in this release.

The following information is provided for each issue:

- Identifier: Each issue is assigned a unique identifier (ID) with a pattern of CSCxxNNNNN, where *x* is any letter (a-z) and *N* is any number (0-9). These IDs are frequently referenced in Cisco documentation, such as Security Advisories, Field Notices, and other Cisco support documents. Cisco Technical Assistance Center (TAC) engineers or other Cisco staff can also provide you with the ID for a specific issue.
- Description: A description of what is observed when the issue occurs.

Cisco Bug Search Tool

[Cisco Bug Search Tool](#) (BST) is a gateway to the Cisco bug-tracking system, which maintains a comprehensive list of defects and vulnerabilities in Cisco products and software. The BST provides you with detailed defect information about your products and software.

Open Issues

This section lists the open issues in this release of Cisco Spaces. An issue that was open for a prior release and is still unresolved applies to all future releases until it is fixed.

Table 32: Cisco Spaces Open Issues

Issue Identifier	Issue Description
CSCwb30644	OpenRoaming stats are not shown when integrated with Meraki.

Resolved Issues

There are no resolved issues in this release of Cisco Spaces.



CHAPTER 26

February 2022

- [What's New in this Release, on page 91](#)
- [What's Changed in this Release, on page 91](#)
- [Issues, on page 91](#)

What's New in this Release

There are no new features in this release of Cisco Spaces.

What's Changed in this Release

Partner Dashboard

The following enhancement is made in the Cisco Spaces Partner Dashboard:

For the Multi-Tenant Cloud applications, under the **Integration Details** tab, the API keys for a **Live** app are now displayed as follows:

- You can only renew and copy the production API keys if the app is in **Live** state.
- To renew and copy the sandbox and pre-production API keys of an app in **Live** state, partner needs to create a new version of the app and copy and renew the keys in the **Draft** version of app.

Issues

Issues describe unexpected behavior in the Cisco Spaces application. The Resolved Issues and Open Issues sections list the issues in this release.

The following information is provided for each issue:

- Identifier: Each issue is assigned a unique identifier (ID) with a pattern of CSCxxNNNNN, where *x* is any letter (a-z) and *N* is any number (0-9). These IDs are frequently referenced in Cisco documentation, such as Security Advisories, Field Notices, and other Cisco support documents. Cisco Technical Assistance Center (TAC) engineers or other Cisco staff can also provide you with the ID for a specific issue.
- Description: A description of what is observed when the issue occurs.

Cisco Bug Search Tool

[Cisco Bug Search Tool](#) (BST) is a gateway to the Cisco bug-tracking system, which maintains a comprehensive list of defects and vulnerabilities in Cisco products and software. The BST provides you with detailed defect information about your products and software.

Open Issues

There are no open issues in this release of Cisco Spaces.

Resolved Issues

There are no resolved issues in this release of Cisco Spaces.



CHAPTER 27

January 2022

- [What's New in this Release, on page 93](#)
- [What's Changed in this Release, on page 93](#)
- [Issues, on page 93](#)

What's New in this Release

There are no new features in this release of Cisco Spaces.

What's Changed in this Release

Dashboard

The following enhancement is made in the Cisco Spaces Dashboard:

Behavior Metrics

The Behavior Metrics is enhanced to show **Sub Vertical** level benchmark metrics. This is applicable for category average metrics and accounts where a sub vertical is defined.

If a sub vertical is not defined, category average metrics are computed based on the vertical level benchmark.

Issues

Issues describe unexpected behavior in the Cisco Spaces application. The Resolved Issues and Open Issues sections list the issues in this release.

The following information is provided for each issue:

- **Identifier:** Each issue is assigned a unique identifier (ID) with a pattern of `CSCxxNNNNN`, where `x` is any letter (a-z) and `N` is any number (0-9). These IDs are frequently referenced in Cisco documentation, such as Security Advisories, Field Notices, and other Cisco support documents. Cisco Technical Assistance Center (TAC) engineers or other Cisco staff can also provide you with the ID for a specific issue.
- **Description:** A description of what is observed when the issue occurs.

Cisco Bug Search Tool

[Cisco Bug Search Tool](#) (BST) is a gateway to the Cisco bug-tracking system, which maintains a comprehensive list of defects and vulnerabilities in Cisco products and software. The BST provides you with detailed defect information about your products and software.

Open Issues

There are no open issues in this release of Cisco Spaces.

Resolved Issues

There are no resolved issues in this release of Cisco Spaces.



PART **IV**

2021 and Earlier Releases

- [2021 and Earlier Releases, on page 97](#)



CHAPTER 28

2021 and Earlier Releases

- [2021 and Earlier Releases](#), on page 97

2021 and Earlier Releases

For Cisco Spaces Release Notes from 2021 and earlier, see [Release Notes Archive for Cisco Spaces](#).



APPENDIX **A**

Support Information

- [Related Documentation](#), on page 99
- [Communications, Services, and Additional Information](#), on page 100

Related Documentation

- All user documentation for Cisco Spaces is available at <https://www.cisco.com/c/en/us/support/wireless/dna-spaces/series.html>.
 - [Cisco Spaces Data Sheet](#)
 - [Cisco Spaces Configuration Guide](#)
 - [Release Notes for Cisco Spaces: Connector](#)
 - [Guide to Migrating Location Services to Cisco Spaces](#)
 - [Cisco Spaces compatibility with other Cisco products](#)
 - [Cisco Wireless Solutions Software Compatibility Matrix](#)
- For information on Cisco Spaces feature compatibility depending on type of connection, see *Table 3 Feature compatibility depending on type of connection* in the [Cisco Spaces Data Sheet](#).
- For information on features included in the Cisco Spaces See, Extend, and Act licenses, see *Table 5 Features included in Cisco Spaces See, Extend, and Act* at:
<https://www.cisco.com/c/en/us/products/collateral/wireless/dna-spaces/datasheet-c78-741786.html#PlatformArchitectureandfeatures>
- For information on migrating Location Services to Cisco Spaces, see <https://www.cisco.com/c/en/us/solutions/collateral/enterprise-networks/dna-spaces/guide-c07-744932.html>.
- For information on the integration of Cisco Spaces with Catalyst Center, see the Chapter "Cisco Catalyst Center Integration" in the *Cisco Spaces Configuration Guide* at:
https://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Mobility/DNA-Spaces/cisco-dna-spaces-config/dnaspaces-configuration-guide/m_dnac.html
- For more information on Cisco Prime Infrastructure to Catalyst Center data migration, see [Cisco Digital Network Architecture Center Data Migration Guide](#) or [Migrate Data from Cisco Prime Infrastructure to Catalyst Center](#).

- All user documentation for Cisco Prime Infrastructure is available at:
<https://www.cisco.com/c/en/us/support/cloud-systems-management/prime-infrastructure/series.html>
- All user documentation for Catalyst Center is available at:
<https://www.cisco.com/c/en/us/support/cloud-systems-management/dna-center/series.html>
- For Cisco Spaces support information, see [Support](#) or contact Cisco Spaces [support team](#).

Communications, Services, and Additional Information

- To receive timely, relevant information from Cisco, sign up at [Cisco Profile Manager](#).
- To get the business impact you're looking for with the technologies that matter, visit [Cisco Services](#).
- To submit a service request, visit [Cisco Support](#).
- To discover and browse secure, validated enterprise-class apps, products, solutions, and services, visit [Cisco DevNet](#).
- To obtain general networking, training, and certification titles, visit [Cisco Press](#).
- To find warranty information for a specific product or product family, access [Cisco Warranty Finder](#).

Cisco Bug Search Tool

[Cisco Bug Search Tool](#) (BST) is a gateway to the Cisco bug-tracking system, which maintains a comprehensive list of defects and vulnerabilities in Cisco products and software. The BST provides you with detailed defect information about your products and software.

Documentation Feedback

To provide feedback about Cisco technical documentation, use the feedback form available in the right pane of every online document.