May 2020

Introduction to Cisco Spaces

Cisco Digital Network Architecture (DNA) Spaces is a powerful location services platform that leverages existing wireless and/or IoT (BLE) infrastructure to provide actionable insights and drive business outcomes through spaces built-in applications.

Insights from Cisco Spaces include:

- Location Analytics that provides the capability to slice and dice location data by time or location and get a deeper visibility into behaviour of people that are connected to your network.

- Right Now Reports provide real time count of the number of visitors (identified by devices connected to WiFi) within your physical space and how it compares to the historical average. Based on the authentication method in use, Right Now reports can detect multiple devices belonging to a person and count them as one visitor.

- Business Insights gives the capability to measure how frequently people visit your physical location and how much time do they spend at your business locations. This data is benchmarked monthly across all 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 behaviour. It is easy to create an Event using the tool and measure the impact of this event based on specific timeline such as Before, After and During the impact on time spent and frequency.

Cisco Spaces applications include customer experience management apps such as Captive Portals, Location Personas, and Engagemens that allows you to connect with your customers in real time when they are at your physical location. Additional applications also include an Asset Tracking app, a service manager to manage and configure IoT Services (Bluetooth Low Energy (BLE)) as well as an open API framework in case you would like to extract this data and correlate it or integrate 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 enables you to connect and engage with visitors at your physical business locations. It covers various verticals of business such as work spaces, retail, manufacturing, hospitality, healthcare, education, financial services, and so on. The asset tracking application in Cisco Spaces provides solutions for monitoring and managing assets in your premises. Cisco Spaces offers a variety of toolkits, apps and APIs to turn these insights into actions.

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

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

In addition to the above services, the scope of Cisco Spaces apps have been extended to meet the business requirements that arise due to the global pandemic, COVID 19. Extensions have been built on existing applications and newer applications have been added to meet specific requirements for COVID 19. Extensions to apps such as Impact Analytics, Location analytics, Behaviour Metrics, and Right Now, allows you to analyse the impact of COVID 19 at your business locations as well as take appropriate actions. For example you can now create a rule based on device density at your location such that you will be automatically notified if the number of people at your location exceeds a specific count or density (people/area). The Location Analytics app now has the capability to share executive summary reports with your colleagues in the organization. Additionally, COVID-19 based trend analysis for individual/group locations can now be done using the Behaviour Metrics app, and you can compare specific business locations with that of the overall organisation as well as specific industry vertical.

Cisco Spaces has added a new Proximity Reporting App that provides a quick way to review the location history as well as device proximity history of any impacted device. One needs to just enter the user ID or MAC address, and a report for the device location in the building for the last 14 days along with the proximity of other devices is generated. This report can be exported or shared using the share feature. Similarly the Detect and Locate app now has the capability to cluster devices into specific counts to check and report on areas that may be violating social distancing guidelines.

The following are the major features of this release:

- New navigation option to switch between apps.

- New feature **Density Rule** in the **Right Now** app to track the density of visitors in your locations.

- Provision to view Release Notes from the dashboard.

- Support for Telenor SMS Gateway in Cisco Spaces dashboard.

- Provision to change the password even after password expiry date.

- Support to customize the bandwidth limit in Captive Portal Rule.

- Removed the **Filter by App Status** option in all rules.

- Removed **Manual Upload** and **Auto Sync** options for Cisco CMX.

- Changed the listing criteria for rules, to list the last modified live rules on top.

- Enabled Radius Authentication Support for Enterprise Captive Portals.(runtime)

New Features - May 2020

Cisco Spaces Dashboard

The following new features are added to the Cisco Spaces dashboard:

Switch Menu for Apps

An app launcher (Grid) icon now appears at the top-right of the dashboard using which you can easily navigate from one app to another app. Previously, to navigate from one app to another app, you had to return to the Cisco Spaces home page. When you click the app launcher icon, it lists all the Cisco Spaces apps activated for the user.

Density Rule

As s response to one of the COVID-19 use case, a new feature "Density Rule" is introduced in the **Right Now** app to enable customers to track the number of people in a physical location or maximum capacity allowed in a given size of space and get alerted/notified when the set limits are exceeding. This option is available only for the **Act** license.

The **Density Rule** option allows you to create rules that triggers notifications to the business users based on the count of unique devices in the business location. You can configure to send notifications through SMS, e-mail, webex or using Trigger API.

A new three-line menu icon is added at the top-left of the **Right Now** window, that has the following menu items:

- **Right Now on WiFi**- Displays the Right Now report.

- **Density Rules**- Displays the window to create the Density Rule.

Release Notes Link

You can now access the Release Notes forCisco Spaces from the dashboard itself. When you click the Help icon for **Cisco Spaces Support** at the top-right of the dashboard, the following two options will be available:

- **Latest Release Note**: Link to the latest monthly release note for Cisco Spaces.

- **Release Notes History**: Link to the Release Notes home page in Cisco.com, where all the historical release notes for Cisco Spaces are listed.

Support for Telenor SMS Gateway

Cisco Spaces dashboard now supports Telenor SMS Gateway. In the **Captive Portals** app, under **Settings** > **SMS**, a new option **Telenor** is available for selection in the **SMS Gateway Type** drop-down list for **Add SMS Gateway**.

Enhancements - May 2020

Cisco Spaces Dashboard

The following changes are made to the Cisco Spaces dashboard

Support to Change Passsword after Expiry Date

Cisco Spaces now allows you to change your password even after your password is expired. After entering your credentials when you click the **Continue** button, a pop up window to change the password appears. Previously, if the password is expired, you had to reset the password using the **Forgot Password** option.

Custom Manual Bandwidth in Captive Portal Rule

Cisco Spaces now allows you to manually enter the bandwidth allowed for a Captive Portal Rule. This enhancement enables you to configure the exact bandwidth you want to set rather than the predefined values. You can specify the bandwidth in KBPS, MBPS, GBPS, or TBPS.

In the **Captive Portal Rule** window, under the **Show Captive Portal** area, when you check the **Bandwidth Limit** check box, a **Show Manual Configuration** link appears below the Bandwidth slide bar. When you click this link, the fields to manually enter the bandwidth appears. Now, the link name is changed to **Show Slider Configuration** using which you can return to the slide bar.

Removed the "Filter by App Status" Option

As the push notification is no more supported as a notification mechanism by Cisco Spaces , the **Filter by App Status** option in the Captive Portal Rule , Engagement Rule, and Location Personas Rule are removed.

Active (Live) Rules Sorted by Modified Date at Top of List

The Cisco DNA rules page listing is enhanced to show the Active (Live) rules at the top and Paused rules at the bottom sorted based on their modified date and time. This change is applicable to the Rules section under Captive Portal, Engagements, Location Personas and Right Now app.

Removed Manual Upload and Auto Sync Options for Cisco CMX

Cisco Spaces no more supports Cisco CMX version 10.5 or below. To support this enhancement, the **Connect your Wireless Network** window for **Setup** > **Wireless Networks** is modified. When you click **Add New**, and click **Cisco AireOS/Catalyst**, the **Via CMX On-Prem** option that used to appear is now removed, and is replaced with **Connect Via CMX Tethering**.

Based on this enhancement:

- Existing connections to Cisco Spaces using Cisco CMX 10. 5 or below will continue to function.

- Will not be able to establish new connections with Cisco Spaces using Cisco CMX 10.5 or below, and must use Cisco CMX 10.6 or later with Cisco CMX Tethering.

Cisco Spaces Runtime

The following changes are made to the Cisco Spaces runtime:

Radius Authentication for Enterprise Captive Portal

Cisco Spaces is enhanced to support radius authentication for Enterprise Captive Portals. This enhancement will allow you to use the following features of Captive Portal Rule for your enterprise captive portal:

- Seamlessly Provision Internet

- Deny Internet

- Extending Session Duration and Bandwidth

Caveats

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

The following information is provided for each caveat:

- Identifier: Each caveat is assigned a unique identifier (ID) with a pattern of CSC*xxNNNNN*, 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 caveat 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 Bugs

Table 1: Open Bugs

CDETS ID Number	Description
CSCvq83680	RBAC - Admin users who have access only to specific locations are not able to login to dashboard.
CSCvt29202	By default Visitor and Visits count are displayed for newly created account in Digitization Stats.

CDETS ID Number	Description
CSCvs79627	Meraki camera - User is able to import non camera devices as well.
CSCvs97445	Incorrect "Users Count" is displayed in location hierarchy.
CSCvu43730	Restricted characters are allowed when setting the password.
CSCvu46143	Proper error message should be displayed when trying to use the already accepted invitation.
CSCvp57525	Location Analytics- Dwell time range % is overlapping in Dwell time break down chart when dwell time values are lesser.
CSCvt93539	In the Right Now -Visits by floor section, Floor names are not shown in tooltip text, when count of visits is low.
CSCvt90496	Switch app option is not available for few of the apps.
CSCvu49183	Density rules based on sqft / sqmtr value should work for all location types.
CSCvu49171	URL smartlink is not working for webex notification.
CSCvt99974	In the Right Now -Visitor vs Employee chart section, Proportion of Employee count is shown less.

Fixed Bugs

Table 2: Fixed Bugs

CDETS ID Number	Description
CSCvu39949	Unable to edit roles for the EDM enabled accounts.
CSCvt97747	Firefox Browser - Cisco DNA spaces dashboard is displaying blank white screen.
CSCvu01155	Clicking location hierarchy menu from monitoring section redirects to home page.
CSCvt62394	User should not be able to save total area value without selecting total area unit value.