June 2020

Introduction to Cisco Spaces

Cisco 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, allow 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 app **Proximity Reporting** is available now in Cisco Spaces dashboard to generate proximity reports.

- New app **Camera Metrics** to view the data captured using Meraki Camera.

- New feature **Right Now on Camera** to view the Right Now report for Meraki Camera.

- New activity **Occupancy** is added to **Density Rules** to trigger notifications based on the occupancy limit.

- Provided COVID 19 portal templates in the **Captive Portals** app.

- In **Location Analytics**, floor and zone level location filtering support is added for ACT and Extend licenses.

- **Trigger API** and **Action Tags** support for the Enterprise Captive Portals.(Runtime)

New Features - June 2020

Cisco Spaces Dashboard

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

Proximity Reporting App

A new app, **Proximity Reporting** is now available in the Cisco Spaces dashboard home page to generate Proximity Reports. Currently, the app is in Beta.

The **Proximity Reporting** app helps the workplace administrators to create a safe environment for employees who are returning to work during the COVID-19 pandemic. The wireless devices of the reporting users (people to be monitored) must be associated with the wireless networks and mapped to physical locations. The Proximity Reporting app enables you to trace the movement of a person tested positive for COVID-19.

Some of the key capabilities of the Proximity Reporting app are as follows:

- It helps you understand the locations where an affected person was during a particular period (usually 14-28 days).

- Provides a list of other people who were in the same location as a affected person.

- Provides a timeline that shows when an affected person entered and exited a location.

The report will be having the following sections:

- **Location Summary**: Provides a summary of locations that a reporting person has traversed in a particular period.

- **Proximity Report**:

  - **Proximity Summary**: Provides a summarized report of the impact a reporting person has on other users in the location.

  - **Proximity Tracing**: Provides a detailed history of other users who have been in contact with a reporting person.

- **Daily Journey Report**: Visually traces the day-by-day journey of a reporting user across various locations(Campus, Building, Floor), along with the time spent by the reporting user on each location.

Camera Metrics

A new app **Camera Metrics** is now available in the Cisco SpacesCisco Spaces dashboard. This app enables you to view a Metrics report based on the data captured using Meraki Camera.The report will be shown for a particular month.

The report currently will be having the following details:

- **Monthly Footfall**: Displays the total footfall count for the entire month.

- **Daily Footfall**: Displays the total footfall count for each day of the selected month.

- **Footfall Distribution: By hour of day**: Displays the average footfall for each hour of the day on the selected month.

- **Presence Index : By hour of day**:Displays the average number of the people present for each hour of the day for the selected month.

- **Peak Presence : By hour of day**: This graph will be available only for network locations. Displays the cumulative number of the peak presence of people for each hour of the day for the selected month. Also, it displays the average number of the people present for each hour of the day on the selected month.

✎

Note   All the charts are based on the entry and exit of visitors through tripwire
line drawn for the cameras.

Right Now Report on Camera

The Right Now app now shows the Right Now report for the Meraki Cameras installed on your locations. A
new option **Right Now on camera** is now available in the **three-line** menu that appears at the top-left of the
Right Now window.

The report will be having the following details:

✎

Note   The **# of the people present: Key Cameras Zones** chart will be based on the people on camera's vicinity,
and all the remaining charts will be based on entry and exit of people through tripwire line drawn for
the cameras.

- **# of people present**: The total number of people currently present at the selected location and its child
locations..

- **#of people present: Key Locations**: The total number of people currently present at each of the child
location. If the total number of locations are more than or equal to 15, it will display the count for top
and bottom three locations. In such cases, you can pin upto three locations to view the current presence
count for the locations of your choice. This graph will appear only for the root location.

- **# of the people present: Key Cameras**: The total number of people currently present for each Camera
in the filtered location. If the total number of Cameras are more than Six, it will display the count for top
and bottom three Cameras. In such cases, you can pin upto three cameras to view the current presence
count for the cameras of your choice This graph will appear only for network level locations.

- **# of the people present: Key Cameras Zones**: The total number of people currently present for each
camera zones defined for the cameras in the filtered location. If the total number of Camera Zones are
more than Six, it will display the count for top and bottom three Camera Zones. In such cases, you can
pin upto three camera zones to view the current presence count for the camera zones of your choice.This
graph will appear only for network level locations.

- **Cumulative visits during the day**: Displays the total number of visits during each hour of the day on
which the Right Now report is viewed, in a cumulative manner. For example, the total number of visits
at 3 am will be total number of visits that occurred from 00 am to 3 am.

- **Presence: By Location**: The location selected for the report, and its child locations are displayed in the
Global Map, along with the count of vistors currently present at these locations in the **Map View** . You
can also know the present visitor count as a hierarchy using the **List View**

Enhancements - June 2020

Cisco Spaces Dashboard

The following changes are made to the Cisco Spaces dashboard

Density Rules

The following changes are made to the Density Rules:

- Density Rules is enhanced to trigger notifications based on the occupancy in a particular location. You can define the ocuppancy limit, and can configure to trigger notification when the occupancy meets certain percentage of the occupancy limit set.

  To support this feature, the following changes are made in **Density Rules**:

  - A new option **Occupancy** is available now in the drop-down list that appears after **When devices are connected to WIFI**. When you choose **Occupancy** and condition type, a **Percent** drop-down list appears where you can specify the percentage of occupancy limit based on which the notification is to be triggered.

  - In the **Location Information** window, a number list **Occupancy limit (Max Capacity)** is added to specify the occupancy limit in terms of number of people.

- Added the following smart link variables to all the notification types such as SMS, Email, and so on:

  - $buildingName: The building of the location for which the notification is triggered.

  - $floorName: The floor of the location for which the notification is triggered.

  - $zoneName: The zone for which the notification is triggered.

  - $deviceCount: The device count for the location for which the notification is triggered.

  - $locationPath: The location path (Parent Hierarchy) for the location for which the notification is triggered.

  - $TotalCapacity: The occupancy limit for the location for which the notification is triggered.

Covid 19 Enhancements for the Captive Portals app

To support the COVID 19 business requirements, the following enhancements are made in the **Captive Portals** app:

- In the **Captive Portals** window, **COVID-19** specific portal templates are now available.

- A banner **COVID-19 Templates** is added to the **Captive Portals** tile in the Cisco Spaces home page.

Location Analytics

The following changes are done to the Location Analytics report:

- The percentage chart displayed at the top-right of each graph will now appear as pie charts. Previously, bar charts were displayed.

- For ACT and EXTEND licenses, you can now view the report for floors and zones. The floors and zones will be enabled for selection in the **Location** drop-down list.

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 counts are displayed for newly created account in Digitization Stats.
CSCvs79627	Meraki camera - User is able to import non camera devices as well.
CSCvs97445	Incorrect "Users Count" is displayed in location hierarchy.
CSCvu46143	Proper error message should be displayed when trying to use the already accepted invitation.
CSCvt93539	In the Right Now -Visits by floor section, Floor names are not shown in tooltip text, when count of visits is low.

Fixed Bugs

Table 2: Fixed Bugs

CDETS ID Number	Description
CSCvu76687	Clicking on activated app tile in app activation sandbox redirects leads to "page not found" error.
CSCvt56362	Location Analytics -When more SSIDs are there, dwell time and dwell time breakdown are not loading.
CSCvt90496	Switch app option is not available for few of the apps.
CSCvu49171	URL smartlink is not working for webex notification.
CSCvu49183	Density rules based on sqft / sqmtr value should work for all location types.
CSCvu43730	Dashboard Login is failing when password contains foreign characters and few special characters.
CSCvt99974	In the Right Now -Visitor vs Employee chart section, Proportion of Employee count is shown less.
CSCvp57525	Location Analytics- Dwell time range % is overlapping in Dwell time break down chart when dwell time values are lesser.