The bridge to possible

Internet of Things on the Next Generation Catalyst Wi-Fi 6E Access Points

Jose Correa, Technical Marketing Engineer
Ali Samioglu, Leader, Systems Engineering

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BRKEWN-1538

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4. Enter messages/questions in the Webex space

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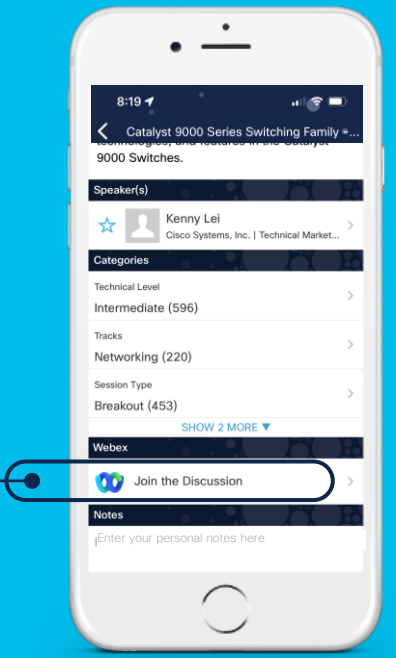


Agenda

- Internet of Things Overview
- Integrated IoT Radio
- Built-in Environmental Sensors
- Application Hosting on Catalyst Wi-Fi 6E Access Points
- Wipelot Eagle Eye

Jose Correa
Technical Marketing Engineer

- 3 Years at Cisco
- Working on Access Points, Wireless Sensors, and IoT technology for Catalyst Wireless
- Loves eating new food and watching Netflix

Catalyst 6E Access Points
Enabling New Experiences

Cisco CleanAir® Pro

Dedicated tri-band radio for intelligent packet capture and spectrum analysis for rapid troubleshooting

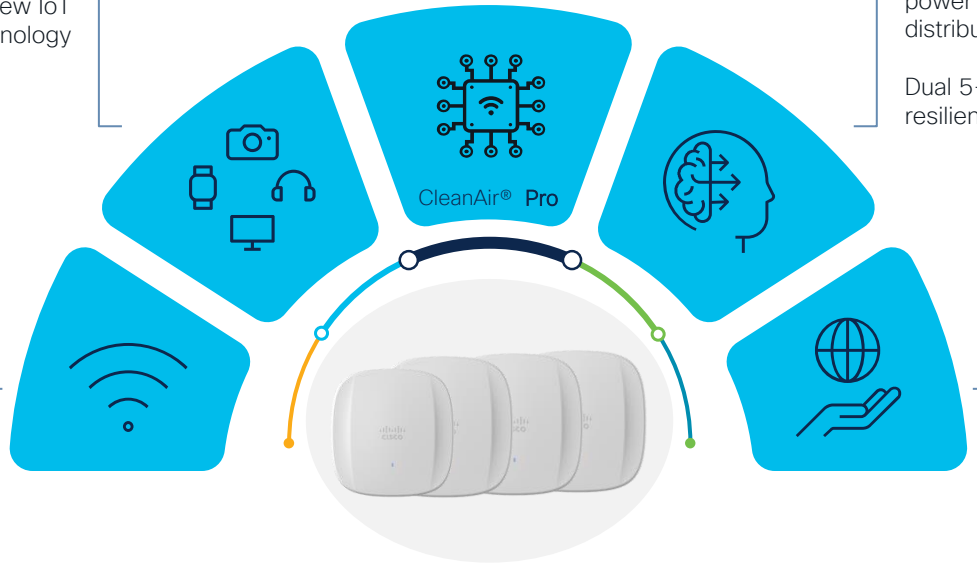
Multilingual IoT radios

Third-generation IoT 802.15.4 radio USB with up to 9W for new IoT technology

Smart, resilient infrastructure

AP power optimizations for power savings and distribution

Dual 5-Gbps uplink ports for resiliency (9136)



Unmatched Wi-Fi experience

Up to 16-stream tri-band concurrent

XOR and Flexible Radio Assignment (FRA) for changing needs

WPA3 security

Environmental sensors

Air quality sensor for HVAC integration
Temperature, humidity sensors

Industry's Best And Broadest Wi-fi 6E And Wi-Fi 6 Portfolio

6E

9162

9164

9166

9136

6

9105I/W

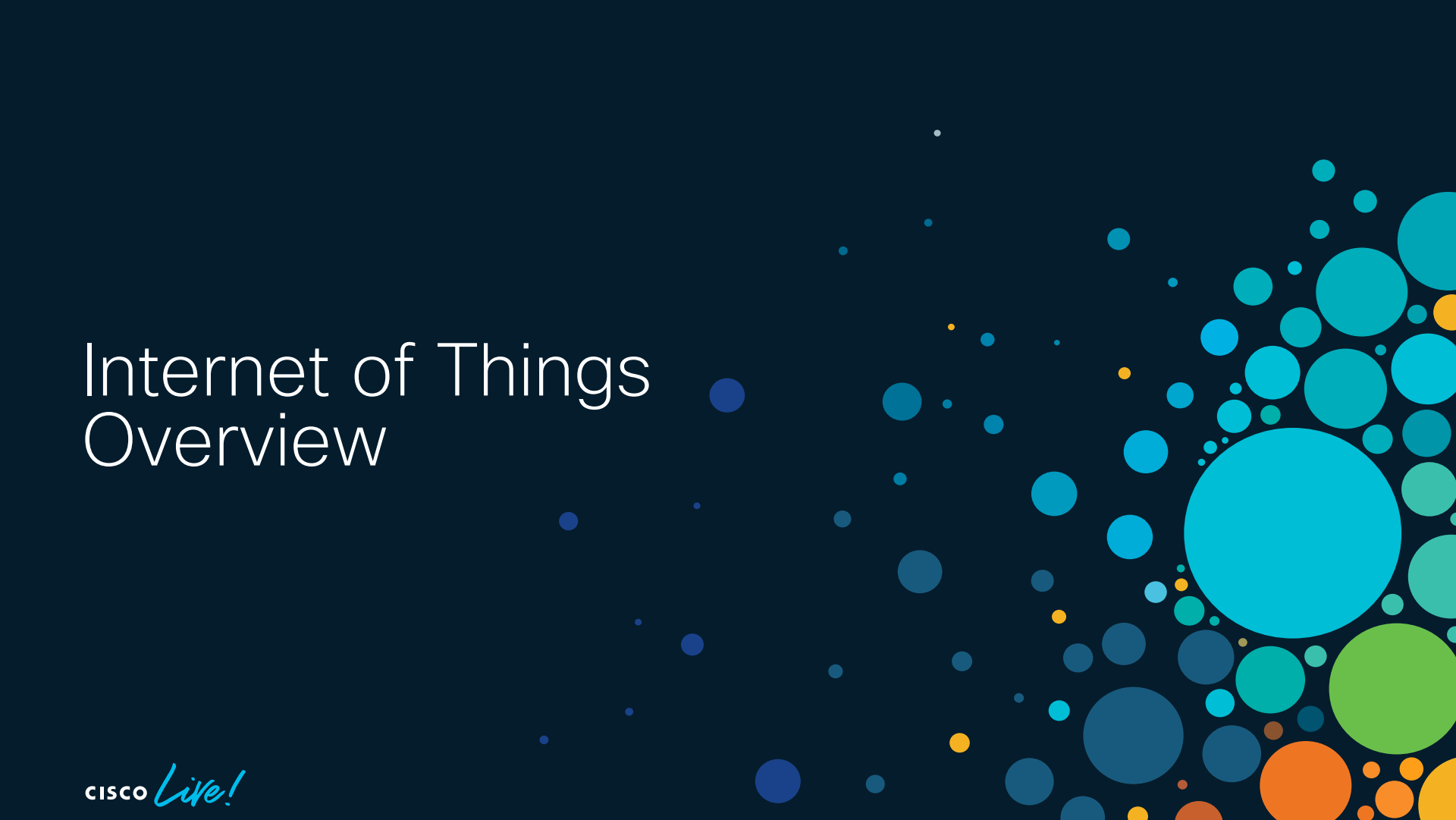
9115

9120

9130

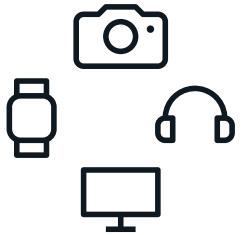
9124

Internet of Things Overview



What is IoT?

"The **Internet of things** (**IoT**) describes physical objects (or groups of such objects) with sensors, processing ability, software and other technologies that connect and exchange data with other devices and systems over the Internet or other communications networks."
-Wikipedia



Ecosystem

Relationships between different objects to exchange data

Growing Number of IoT Devices

The Beginning

The path to IoT began with basic forms of long distance communication. In 1832, Baron Shillings in Russia invented the first electromagnetic telegraph.

Concept of IoT is born

While working at Procter & Gamble, Kevin Ashton coined the term “Internet of Things” during a presentation on RFID.

IoT grows from Tech

As more Tech Giants realize the benefits of IoT, we have seen a large increase in IoT devices each year. In 2017, we recorded 8.4 billion IoT devices.

Present

In 2023, the market for the Internet of Things is expected to grow 18 percent to **14.4 billio**n active connections.

First IoT Device

John Romkey creates the first smart toaster that could be controlled from the internet. He showcased his invention at the INTEROP conference.

Using Sensors

Thermostats and home lighting start using sensors to accurately sense the surrounding environment. This allowed people to control home lighting, garage doors, and thermostats all from their phone.

IoT grows in Enterprise

The market grew to **12.3 billion** connected IoT devices and roughly **$160 billion** in IoT enterprise spending.

Benefits of IoT Solutions

Implementing IoT solutions helps businesses have better use and monitoring of resources and assets

Automation through IoT solutions saves time by reducing the amount of human effort in workflows

The cost and power consumption of IoT devices has dropped considerably

Example Verticals

Manufacturing

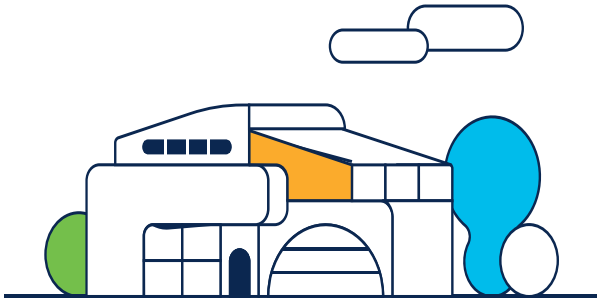
Healthcare

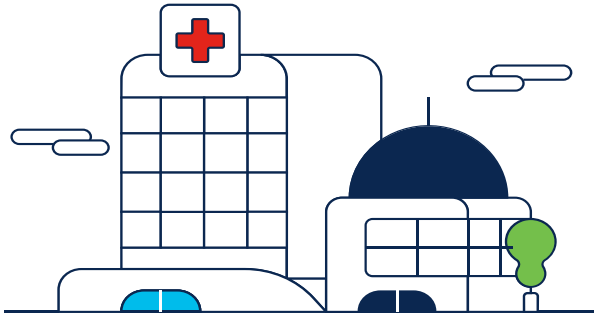
Retail

Education

Smart Workplaces

Hospitality





Wi-Fi 6E Access Points Integrated IoT Radio

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Integrated IoT Radio Placement

IoT Radio currently supports:
BLE Technology

Catalyst 9136I

Catalyst 9164I/9166I

Catalyst 9162I

Catalyst 9100 Series Access Points have a built-in IoT radio which integrates with Cisco Spaces

AP Product	IOS-XE Release
Catalyst 9136I	17.8.1
Catalyst 9164I/9166I	17.9.1
Catalyst 9162I	17.9.2/17.10.1

Configure as a BLE Gateway → Enable Catalyst 9100 Access Points as a Base or Advanced AP Gateway

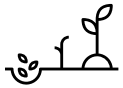
Enable Scan and/or Transmit Mode → Scan for information from nearby BLE devices and stream that data to Cisco Spaces and/or transmit BLE signals from Catalyst 9100 Access Points

BLE Device Configuration → Configure the BLE devices from Cisco Spaces and remove the need for multiple Gateways

Integrated IoT radio use cases

Asset Tracking

- Deploy BLE sensors to track real time location of high value devices at an increased accuracy
- Leverage one simple platform to understand how assets are being used and where processes could be more efficient



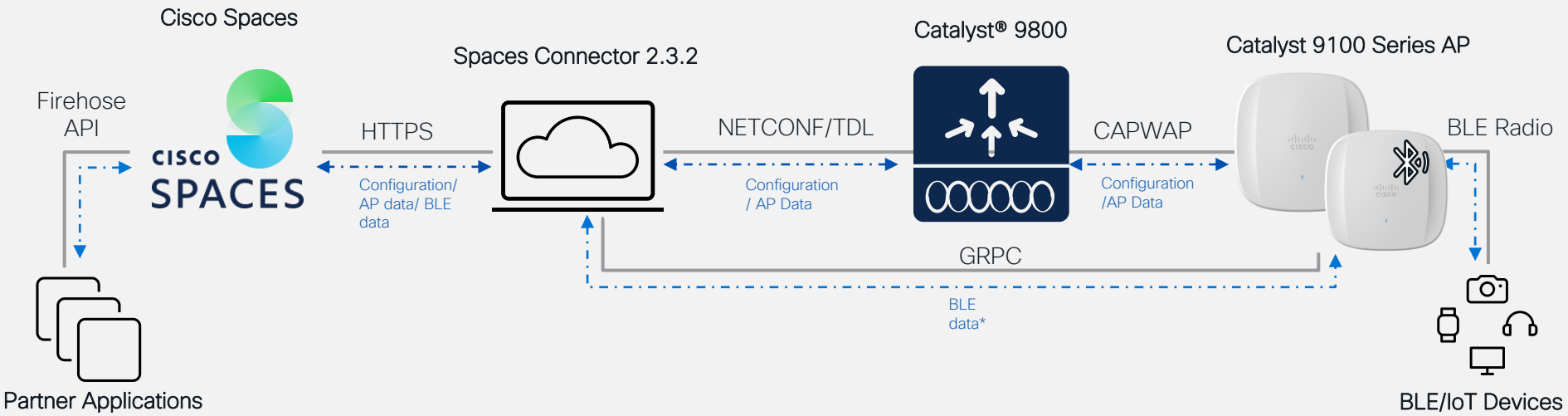
Environmental Monitoring

- Real-time data from IoT devices that measure a variety of environmental factors like humidity, CO2 levels, air quality, temperature, etc.
- Create alerts and reports from data recorded from the sensors

Workspace Optimization

- Gain insight on workspaces from BLE devices to enhance visitor and employee experience for venues and workplaces
- Transform workspaces to increase efficiency and utilization

Topology of the Catalyst 9100 Series AP IoT radio with Cisco Spaces



(*) BLE Floor Beacon data is sent to the Cisco Spaces Connector, then sends to the data to DNAS Cloud via the HTTPs tunnel where is shown in the Dashboard

Supports all AP modes: Local, FlexConnect, Fabric, monitor, sniffer

Deploying IoT Services on Cisco Spaces

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Day 1: Enabling IoT Services on Spaces Dashboard

Part 1 – Enable Streaming on Spaces Connector and Wireless Controller

Section goals: Enable IoT Services through the Cisco Spaces Dashboard which sets up both the Spaces Connector, Wireless Controller, and Access Point for IoT capability.

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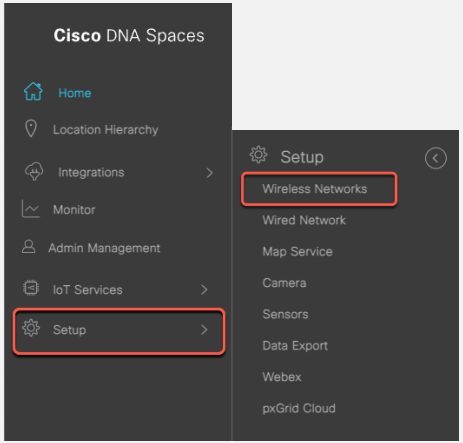
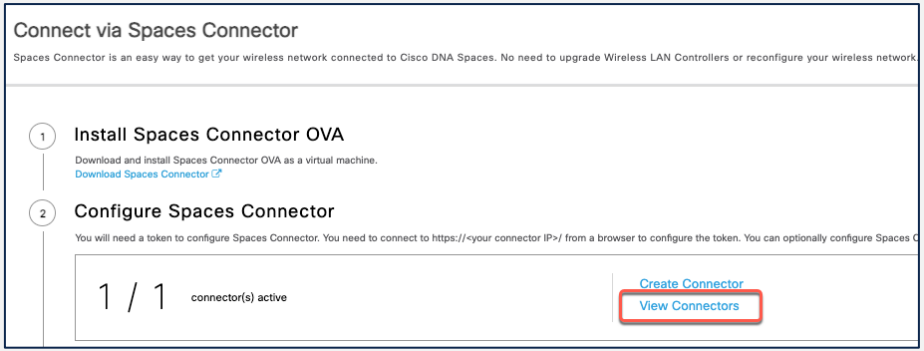
Step 1: Enable Streaming on Spaces Connector

1. Log in DNA Spaces Dashboard -> Navigate to Setup -> Wireless Networks



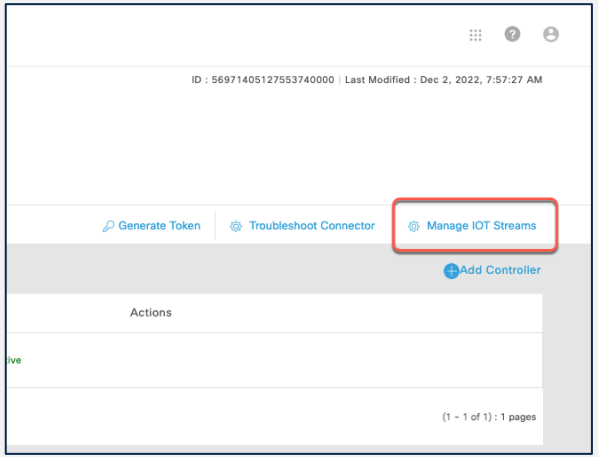
2. Under the connector that was created, click on View Connectors



Step 1: Enable Streaming on Spaces Connector (Continued)

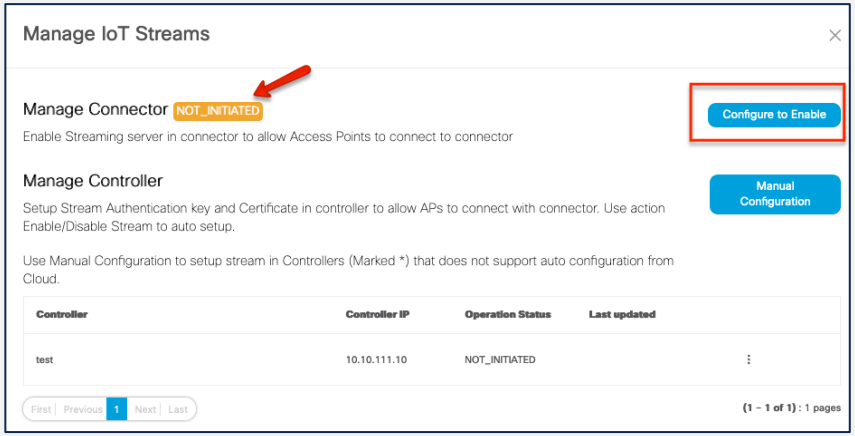
3 Select the Connector

4 Select Manage IOT Streams



Step 1: Enable Streaming on Spaces Connector (Continued)

5 If the connector's streaming server is not initiated yet, click the Configure to Enable button

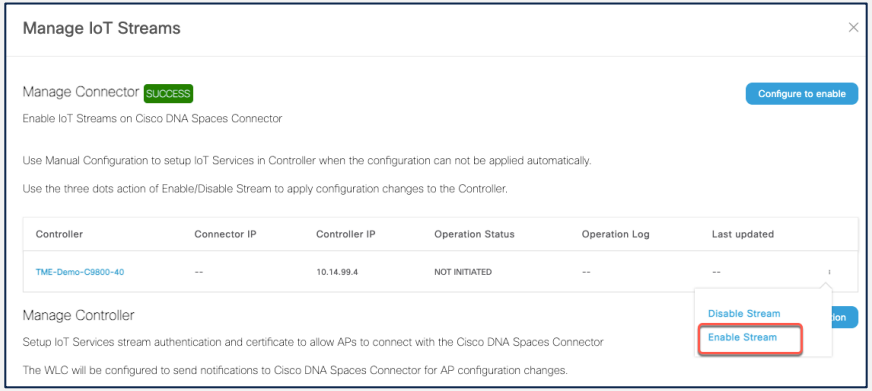


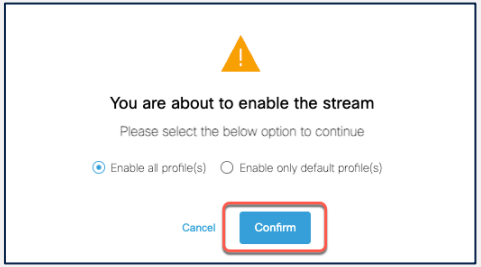
6 There will be a configuration successful message and see the Manage Connector as a Success.

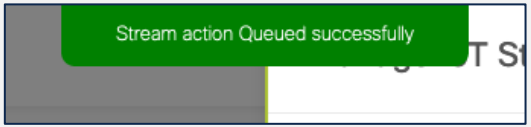
Step 2: Enable Streaming on the Wireless Controller

1. Select the three dots options button under the Controller section and select Enable Stream

2. Select either default AP group or all AP groups. There is a success message after confirming your selection.

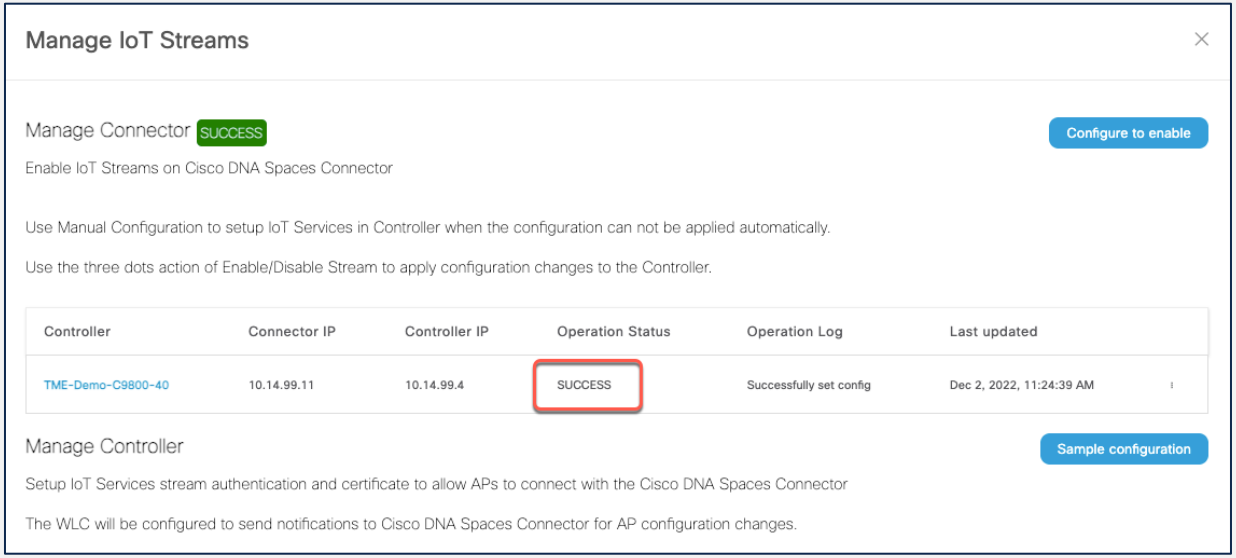






Step 2: Enable Streaming on the Wireless Controller (Continued)

3 The Manage Controller Part is showing Operation Status as Success which means that the Stream Authentication key and Certificate in controller to allow APs to connect with connector is properly configured.



Day 1: Enabling IoT Services on Spaces Dashboard

Part 2 – Deploy BLE Gateway and IOx Application on Access Points

Section goals: Deploy the BLE Gateway on Access Points to scan/transmit BLE device data and deploying the IOx application on Access Points to configure BLE devices.

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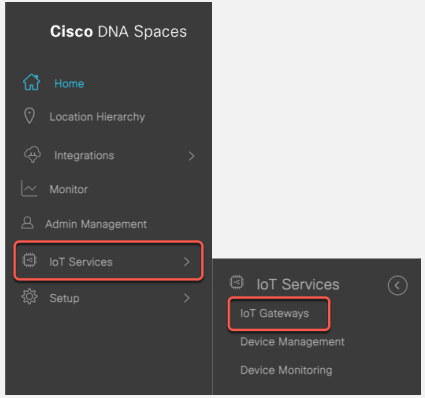
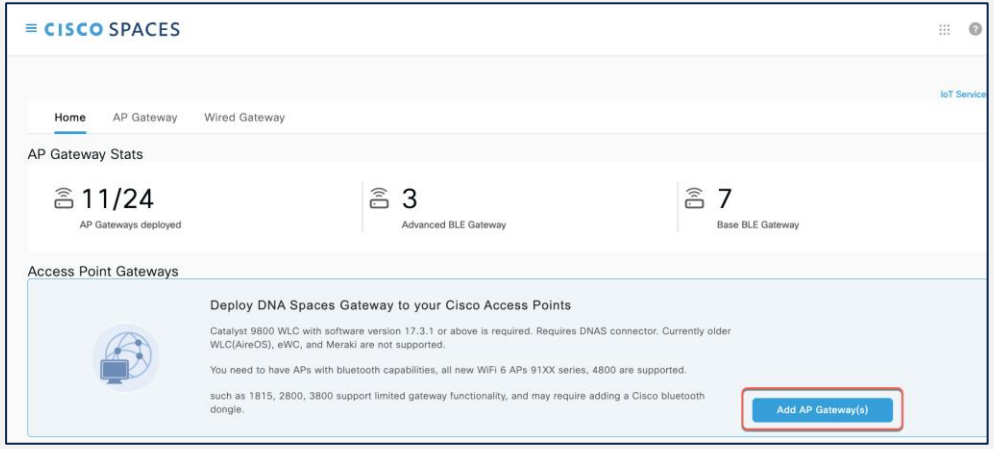
Step 1: Deploying BLE Gateway on Access Point

1 Select Hamburger Menu -> IoT Services -> IoT gateways

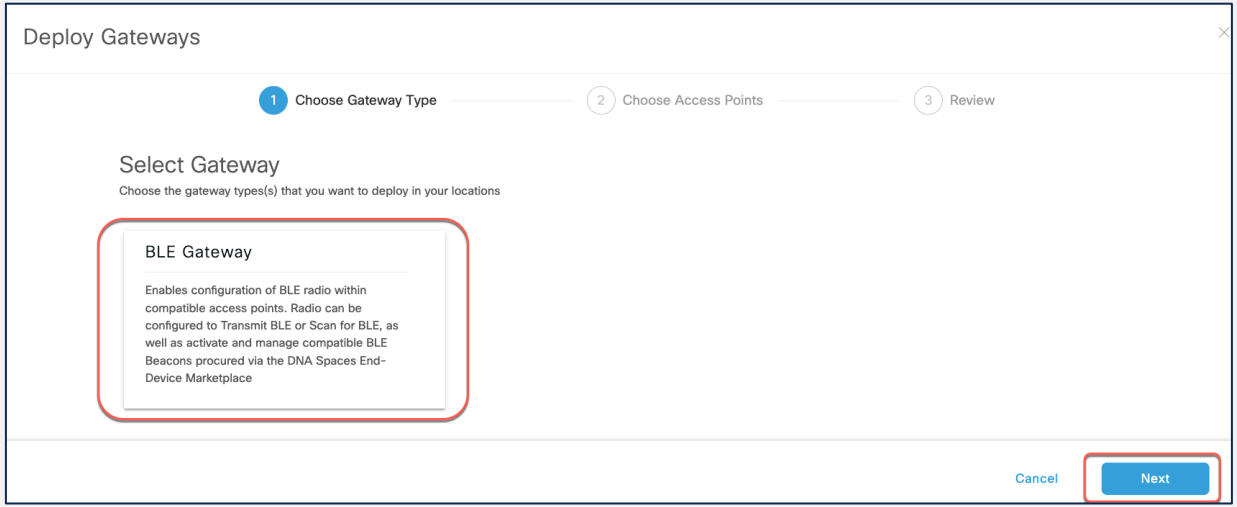


2 Select Add AP Gateway(s)



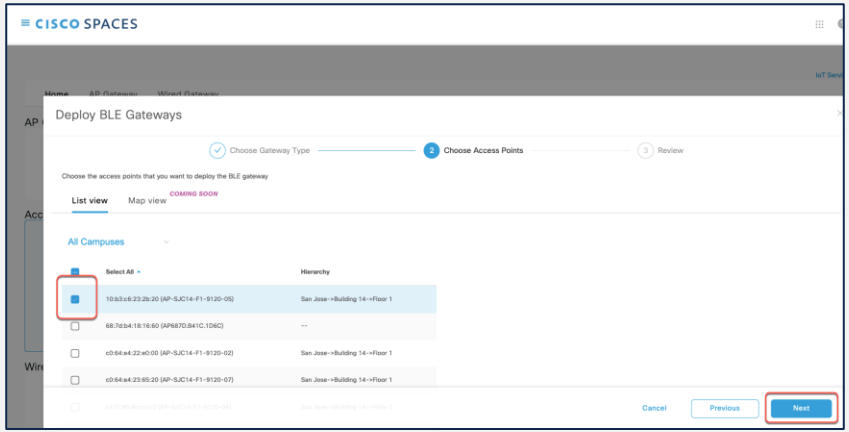
Step 1: Deploying BLE Gateway on Access Point (Continued)

3 Select BLE Gateway and hit Next



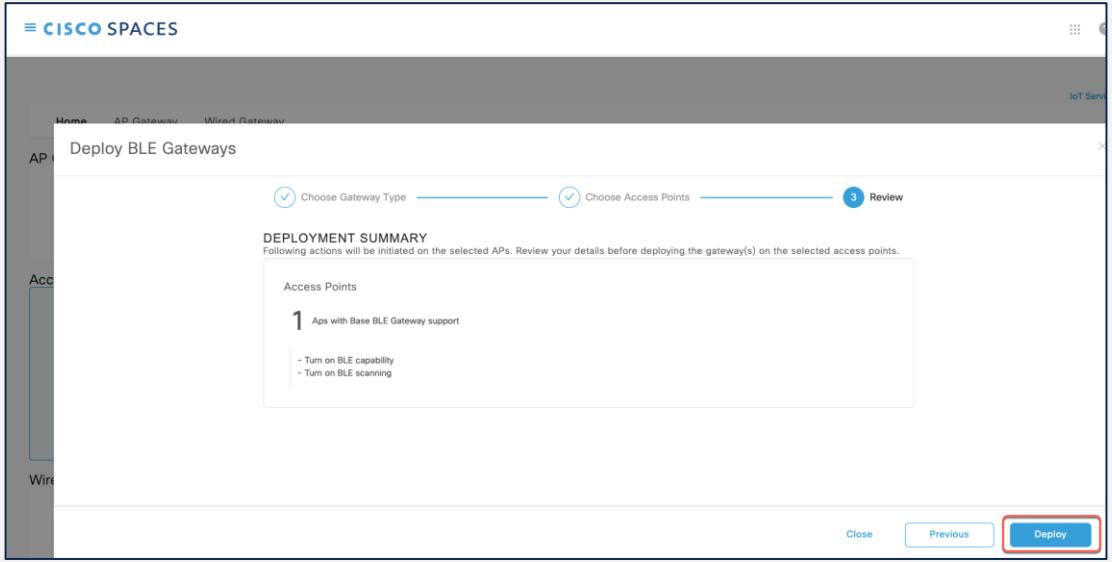
Step 1: Deploying BLE Gateway on Access Point (Continued)

4 Select the Access Points you want to deploy as a BLE Gateway



Step 1: Deploying BLE Gateway on Access Point (Continued)

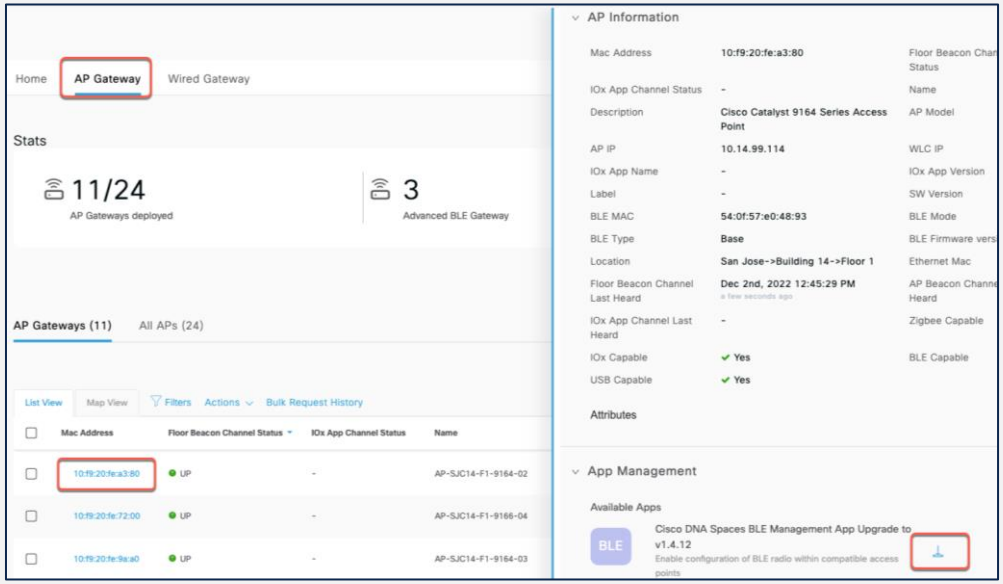
5 Review the deployment summary and select Deploy



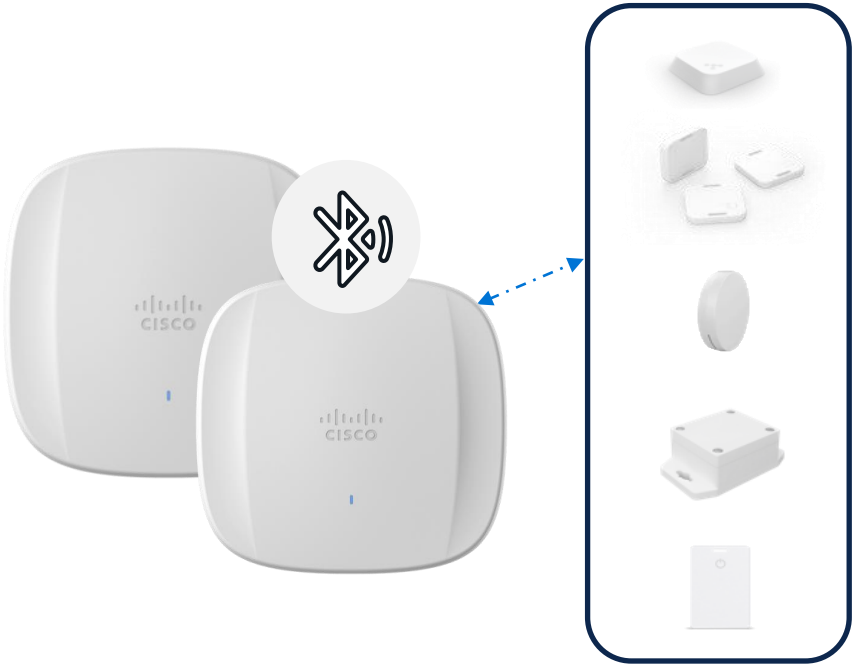
Step 2: Advanced BLE Gateway on Access Point

1 Select AP Gateway and select the Access Point

2 Click the download button to install the IOx application



IoT Device Telemetry using IoT Services Integration with Cisco Spaces



BLE Devices

IoT BLE Device Sensor Telemetry

Sensor Information

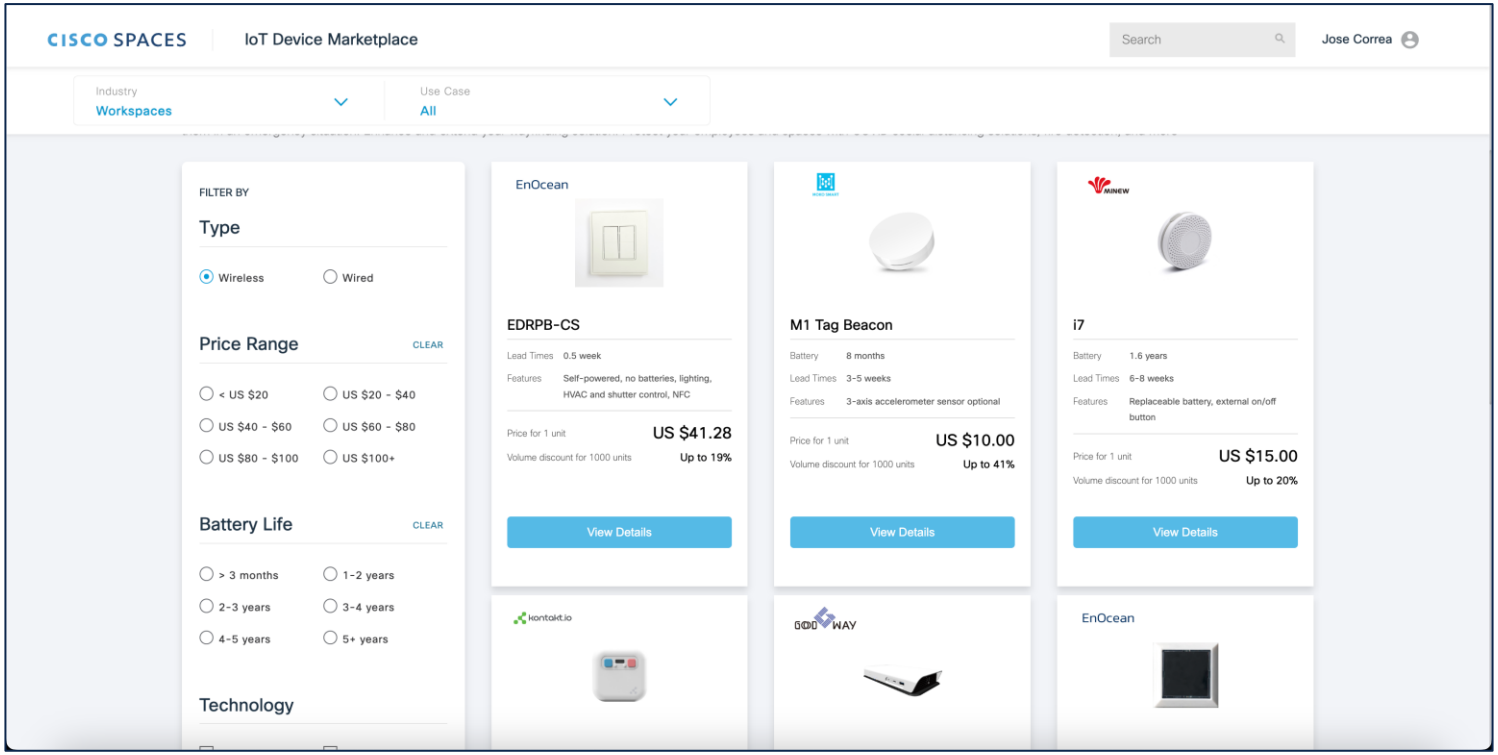
Battery	Temperature	Device Clock
88 %	25 °C	Apr 12th, 2022 07:33:33 PM
Updated at: Apr 12th, 2022 08:03:38 PM 2 minutes ago	Updated at: Apr 12th, 2022 08:03:38 PM 2 minutes ago	32 minutes ago Updated at: Apr 12th, 2022 08:03:38 PM 2 minutes ago

Movement	Double Tap	Acceleration
18+ hrs	18+ hrs	Coordinates (X, Y, Z) (-4, 3, 63) Sensitivity 16
Updated at: Apr 12th, 2022 08:03:38 PM 2 minutes ago	Updated at: Apr 12th, 2022 08:03:38 PM 2 minutes ago	Updated at: Apr 12th, 2022 08:03:38 PM 2 minutes ago

IoT Device Marketplace

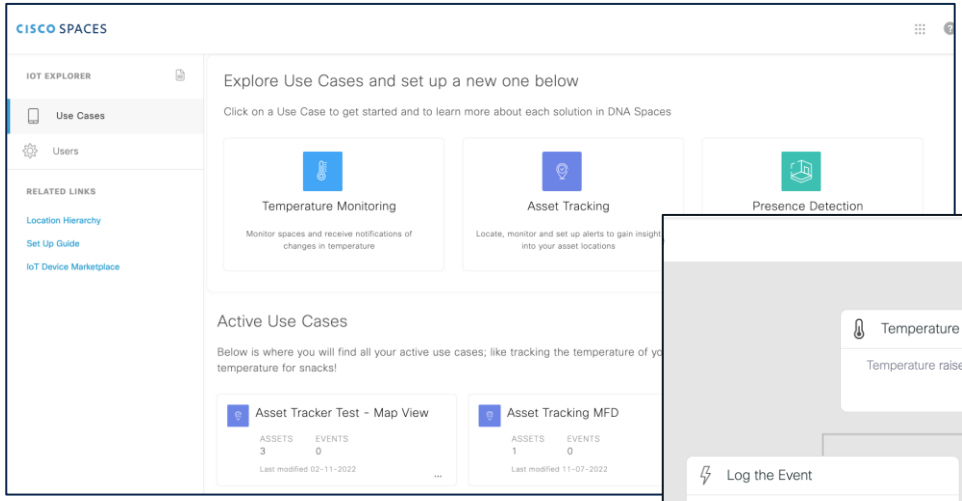
Ecosystem of third-party IoT devices – wired and wireless

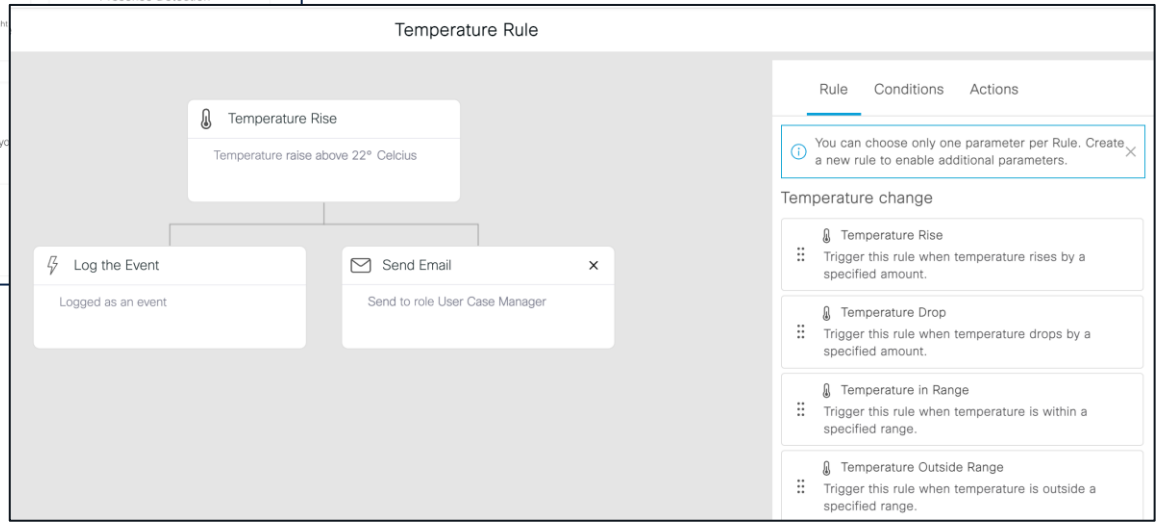
Login into the IoT Device Marketplace with valid Cisco Spaces Account or LinkedIn Account



IoT Explorer

Monitor, manage, and optimize assets, Internet of Things (IoT) sensors, alerting system, and operational workflows





Demo

CISCO SPACES

IoT Services Help

Home | Devices | Groups | Policies | Settings

Floor Beacons | AP Beacons | Wired Sensors | Cameras | Smart PDUs

All Campuses

Claimed Beacons	All Profiles	IBeacon	Eddystone UID	Eddystone URL	Other Profiles
0	42	2639	11	11	63

Profile Type *equals* Kontakt | Save as New

Filters | Actions | Advance Configuration

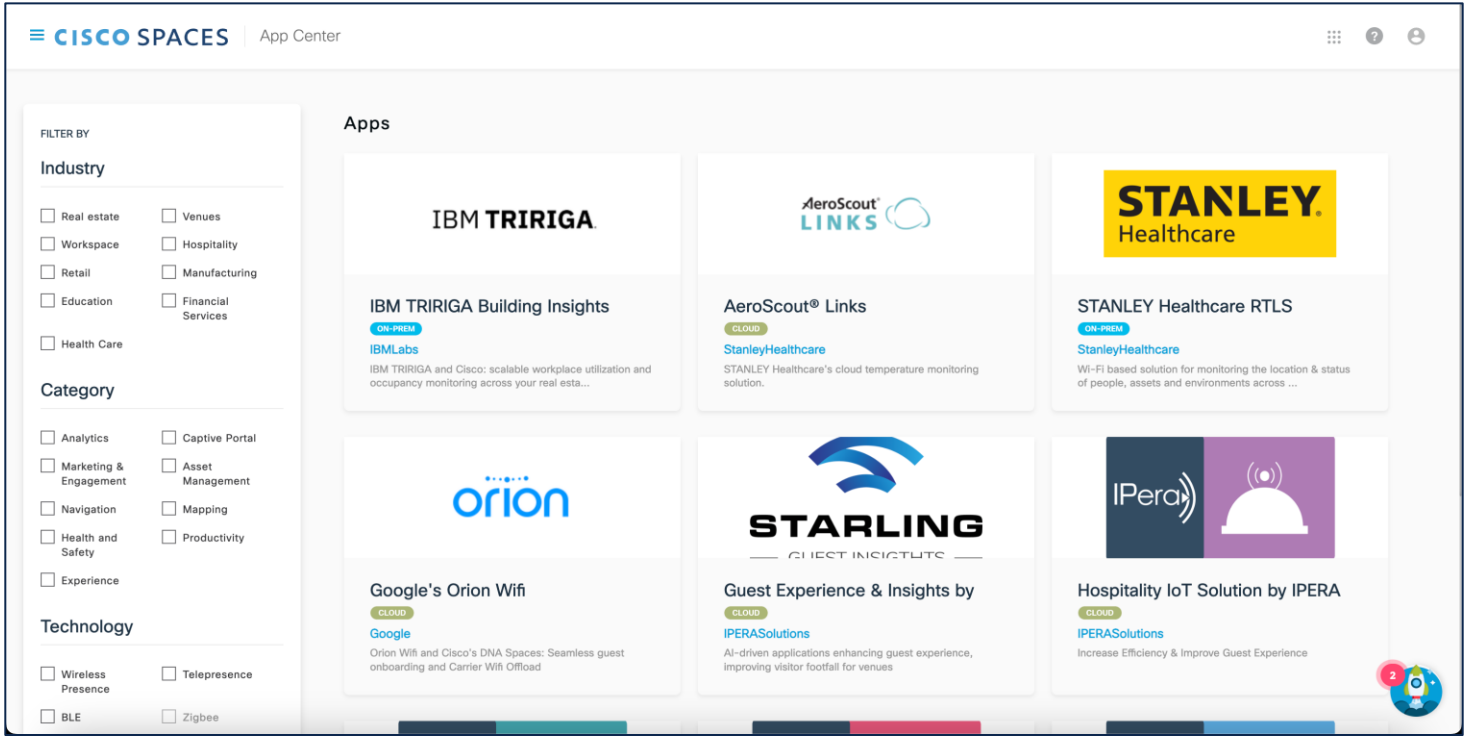
As of: Jan 20, 2023 2:27 PM | Refresh | Export

Mac Address	Mac Address Type	Label	Location	Last Heard	Group Name	Profile Type	Battery	Unique Id	Firmware	Adv. TxPower (dBm)
fc:3d:d2:43:47:0f	-	-	San Jose->Building 14->Floor 1	Jan 20th, 2023 02:27:30 PM a few seconds ago	-	Kontakt	100%	VuCmly	2.0	-
f0:97:41:75:94:3f	-	-	San Jose->Building 14->Floor 1	Jan 20th, 2023 02:27:30 PM a few seconds ago	-	Kontakt	77%	uuVf3U	2.0	-
e3:73:94:43:93:66	-	-	San Jose->Building 14->Floor 1	Jan 20th, 2023 02:27:27 PM a few seconds ago	-	Kontakt	100%	VuaPMi	2.0	-
e2:a3:8d:c2:84:a8	-	-	San Jose->Building 14->Floor 1	Jan 20th, 2023 02:27:27 PM	-	Kontakt	100%	10UK2LT	1.1	-

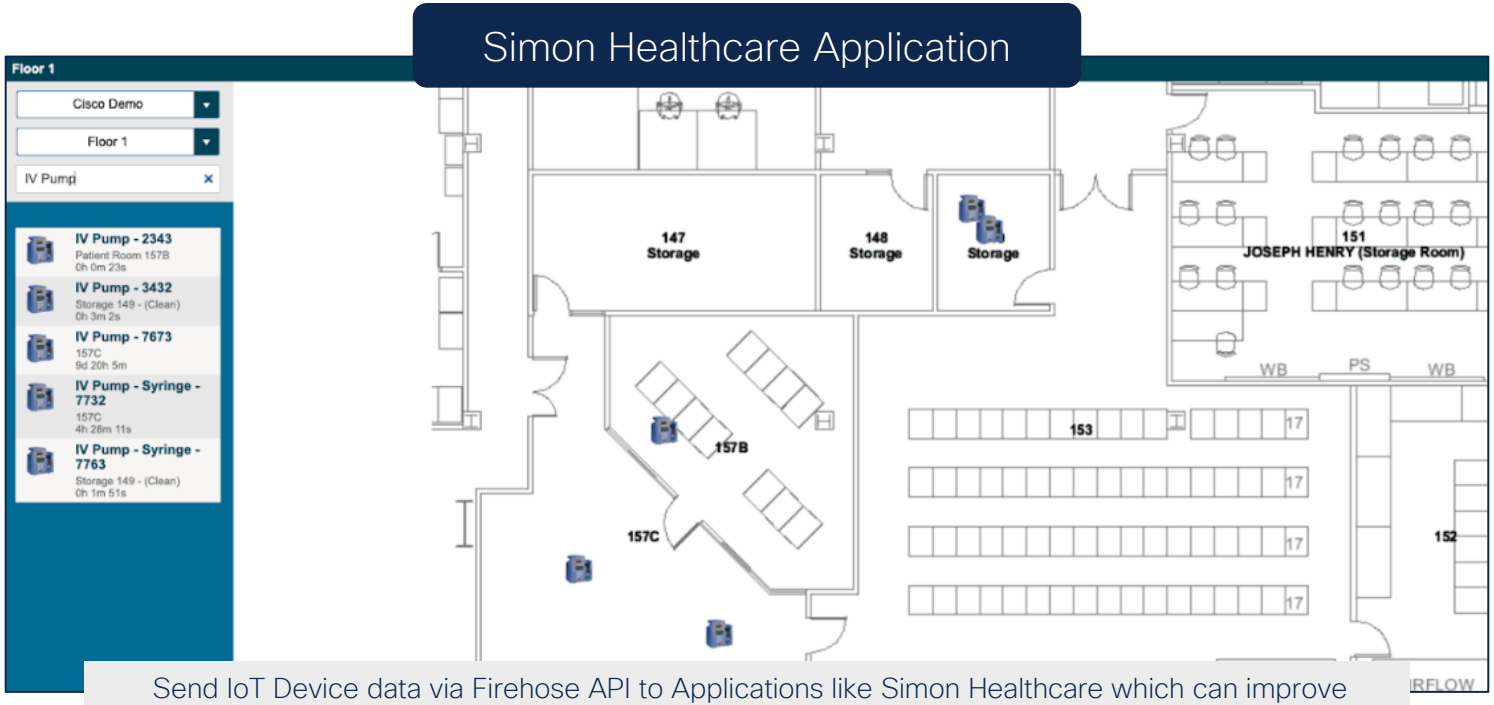
Or develop your own application!

Partner App Center

Integrated marketplace of application partners focused on business outcomes

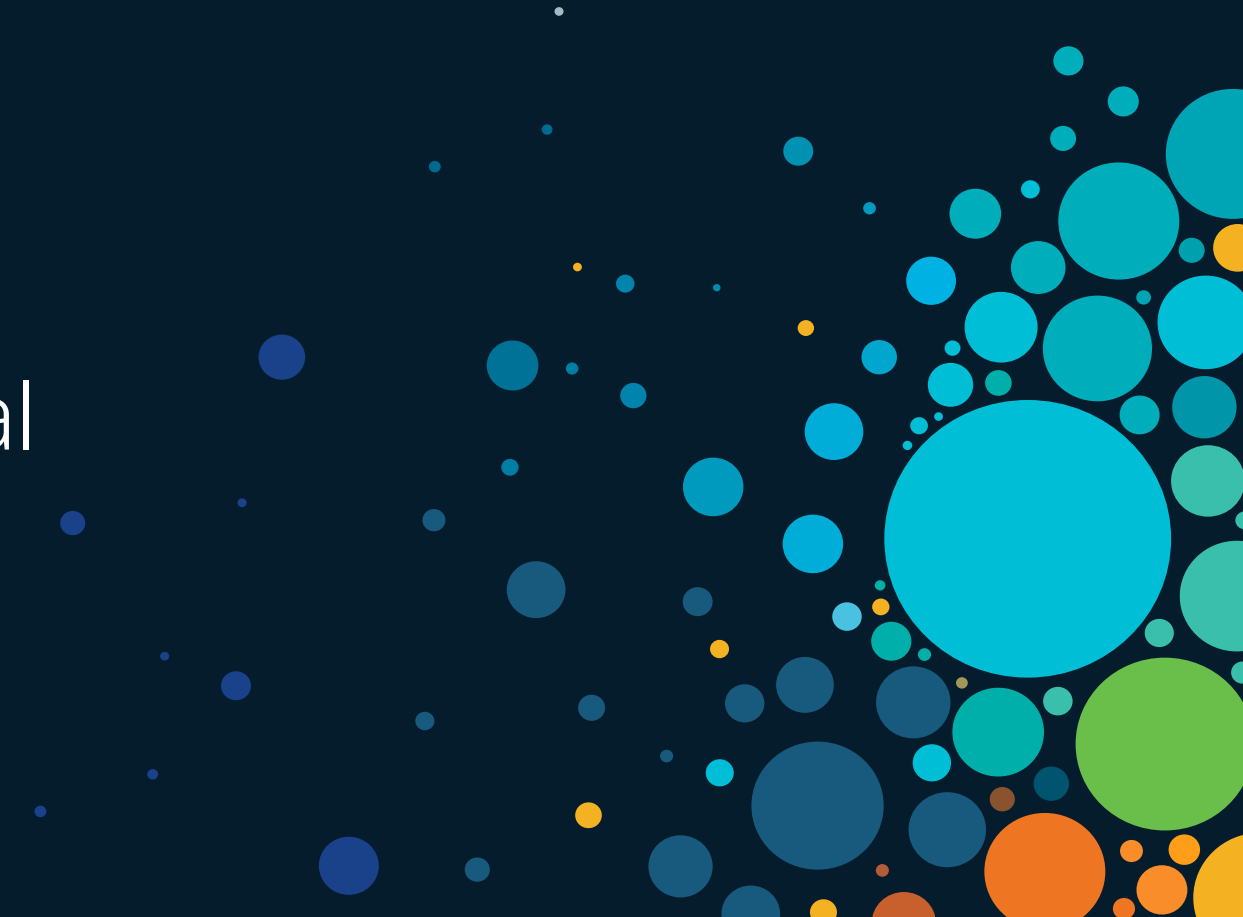


Example Partner Application



Send IoT Device data via Firehose API to Applications like Simon Healthcare which can improve operational efficiency, patient care, and experience with real-time IV pump PAR level management

Built-in Environmental Sensors



Built-in Environmental Sensor Placement

Catalyst 9136I

Catalyst 9166I

Environmental Sensors with Cisco Spaces

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Catalyst 9136I and 9166I have three built-in environmental sensors with full Cisco Spaces integration

AP Product	IOS-XE Release
Catalyst 9136I	17.8.1
Catalyst 9166I	17.9.1

Air quality

The built-in Gas Sensor Module will enable the reading of Total Volatile Organic Compound (TVOC) concentration and Indoor Air Quality (IAQ) rating.

Humidity

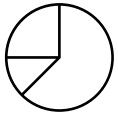
The built-in module is a fully calibrated sensor with the ability to measure the relative humidity in the air.

Temperature

The built-in module can also capture the temperature to provide a reading of the environment remotely.

Note: The temperature generated by the AP will be considered during temperature and IAQ readings.

Environmental sensor use cases



Real Time Data

- Stream environmental data in real-time within monitoring systems
- Remove the need to run new cables or create an overlay of dedicated sensors

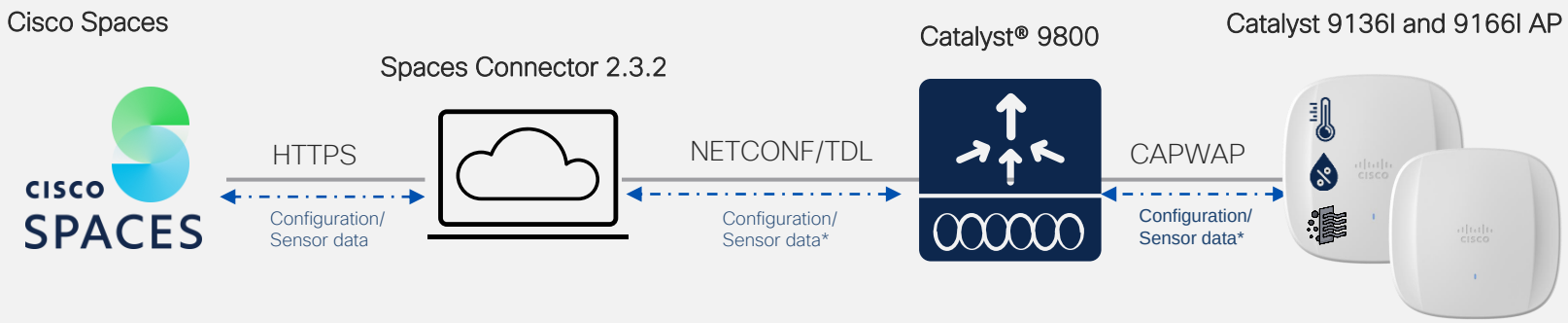
Environmental Visibility

- Give customers an additional avenue to get actionable data
- Augment the customers network by giving the additional environmental data

Application Integration

- Leverage information in applications like Cisco Smart Workspaces
- Integrate with HVAC systems and other BMS to feed critical inputs
- Integrate with other applications by using the Firehose API

Topology of the Catalyst 9136I and 9166I environmental sensors with Cisco Spaces



(*) Sensor data is sent to C9800 via CAPWAP, Spaces Connector subscribes to the Yang models and get the data via telemetry, then sends to the data to DNAS Cloud via the HTTPs tunnel where is shown in the Dashboard

Supports all AP modes: Local, FlexConnect, Fabric, monitor, sniffer

Catalyst 9136I and 9166I has three built-in environmental sensors with full Cisco Spaces integration

AP Environmental Sensor Telemetry

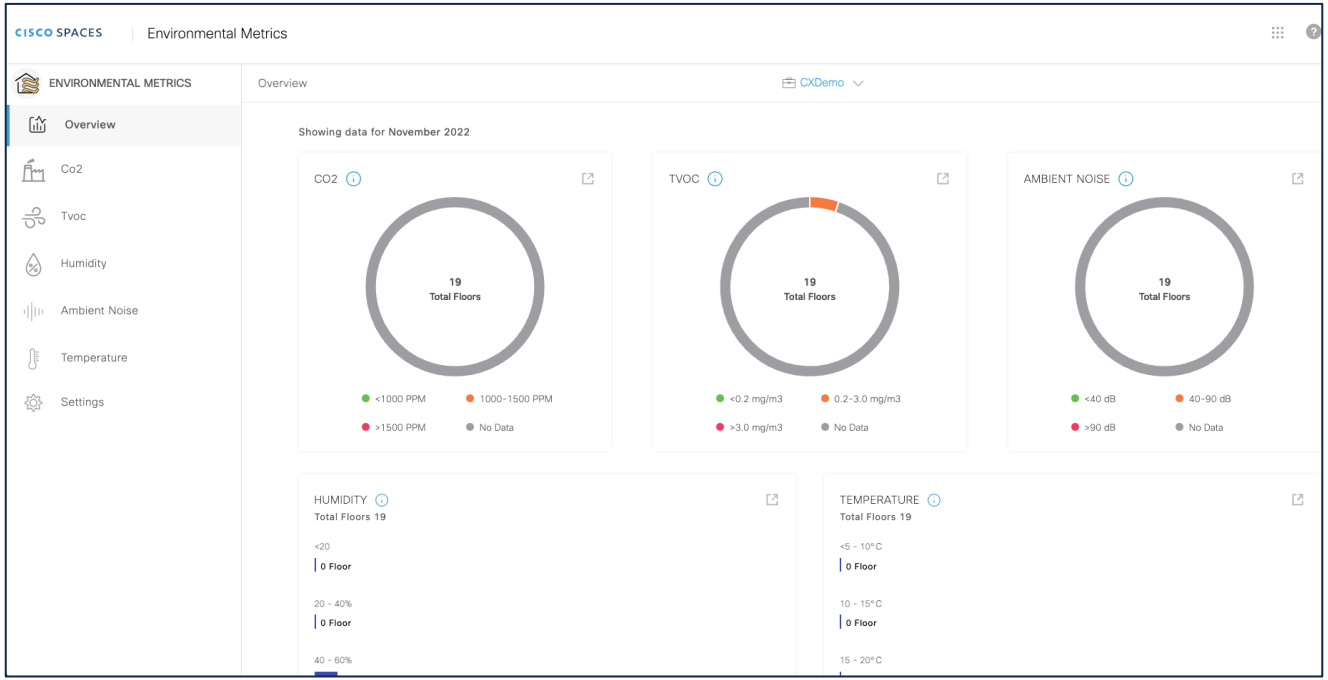
Approximate measurement of TVOC in PPB

Total Volatile Organic Compounds	Calculated Indoor Air Quality
657 PPB	3.26
Updated at: Apr 12th, 2022 08:50:53 PM a few seconds ago	Updated at: Apr 12th, 2022 08:50:53 PM a few seconds ago

Humidity	Temperature
28.6 %	22.8 °C
Updated at: Apr 12th, 2022 08:50:52 PM a few seconds ago	Updated at: Apr 12th, 2022 08:50:52 PM a few seconds ago

Environmental Metrics

Trends and Insights from Environmental Data from your Network Devices in your buildings



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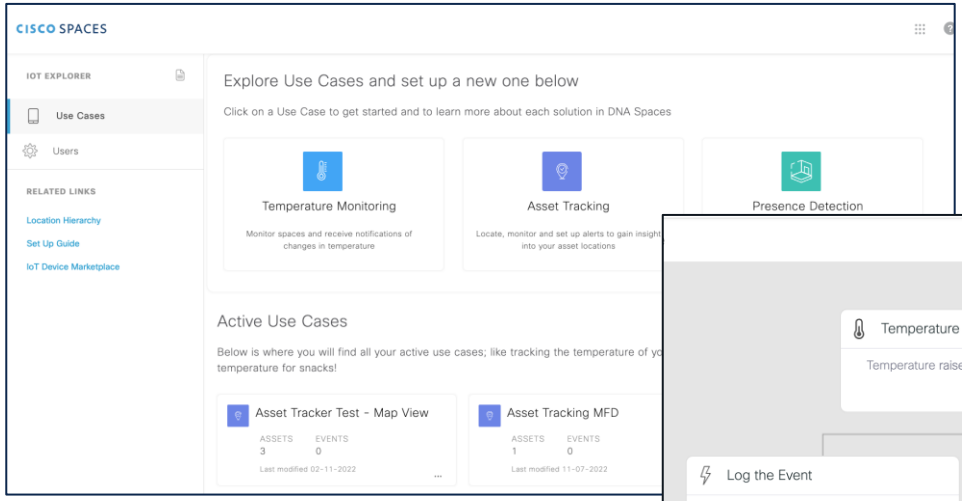
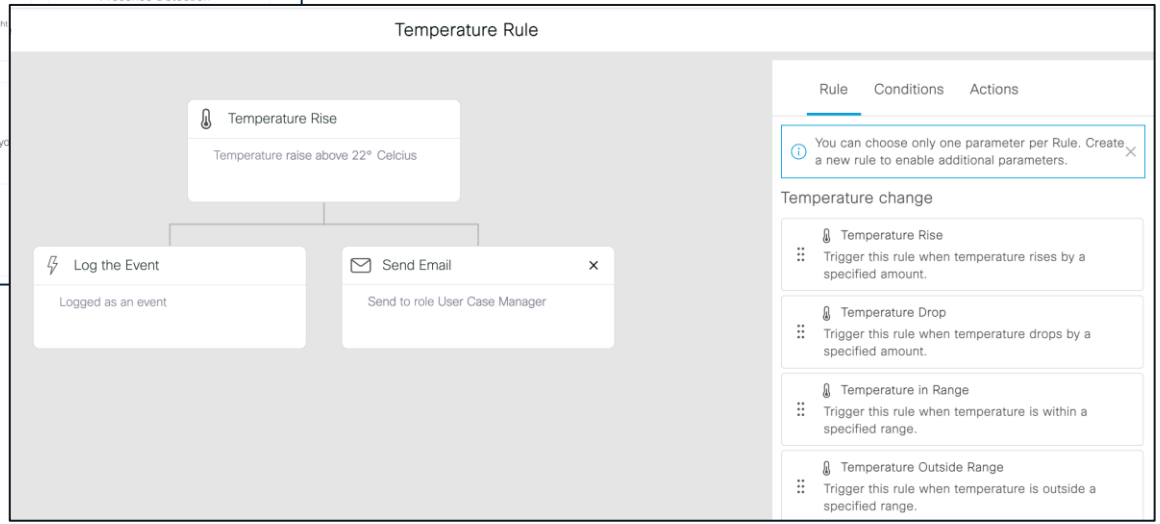
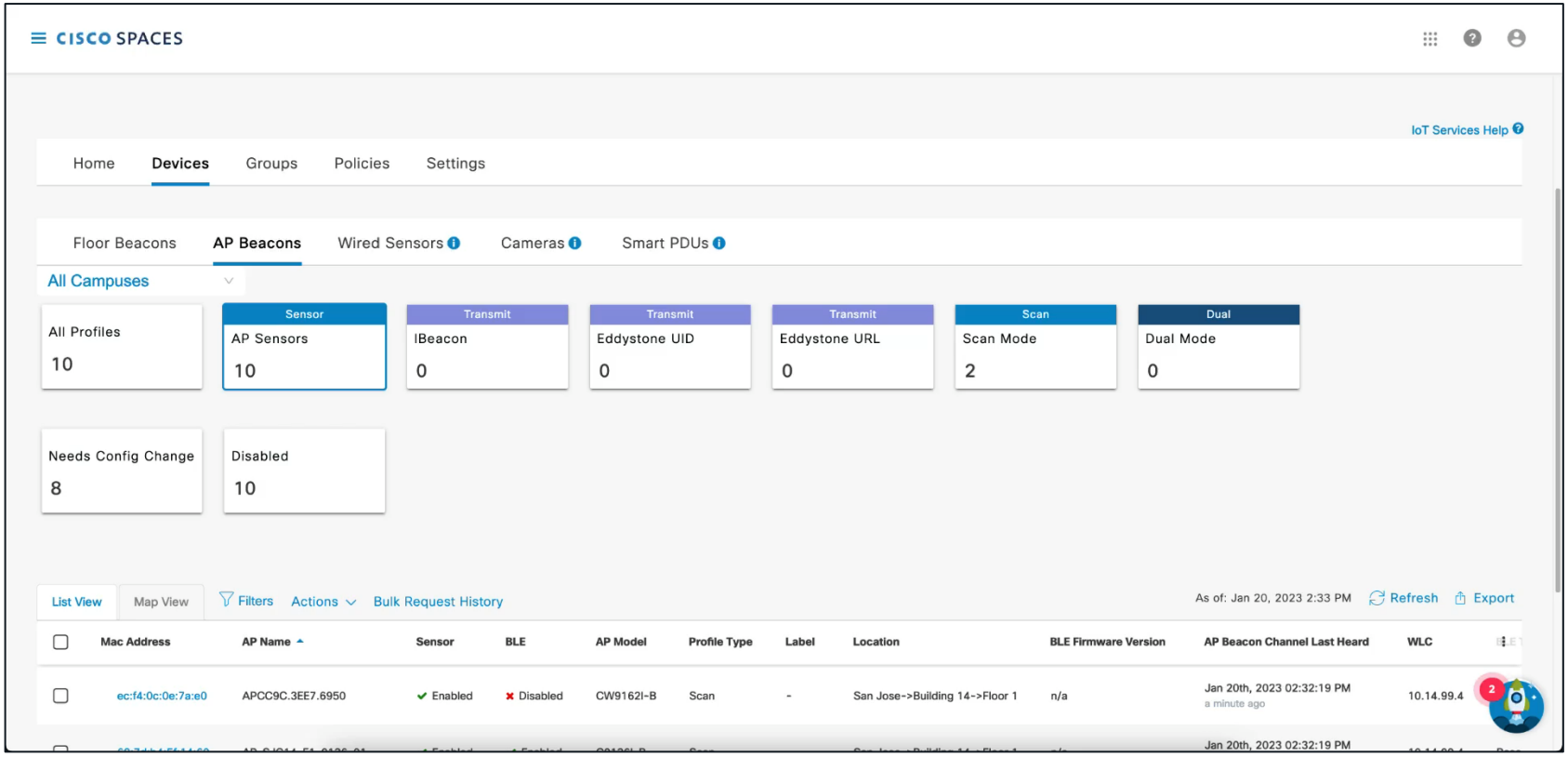




Demo



IoT enhanced hybrid work experience

Catalyst 9100 Series Access Points integrate with Cisco Spaces for back-to-office use cases

Cisco Spaces will support rich maps for an immersive experience

Network experience and BLE IoT integration to drive business outcomes

Catalyst® 9136I and 9166I have built-in environmental sensors that feed Cisco Spaces data

Environmental Sensors without Cisco Spaces

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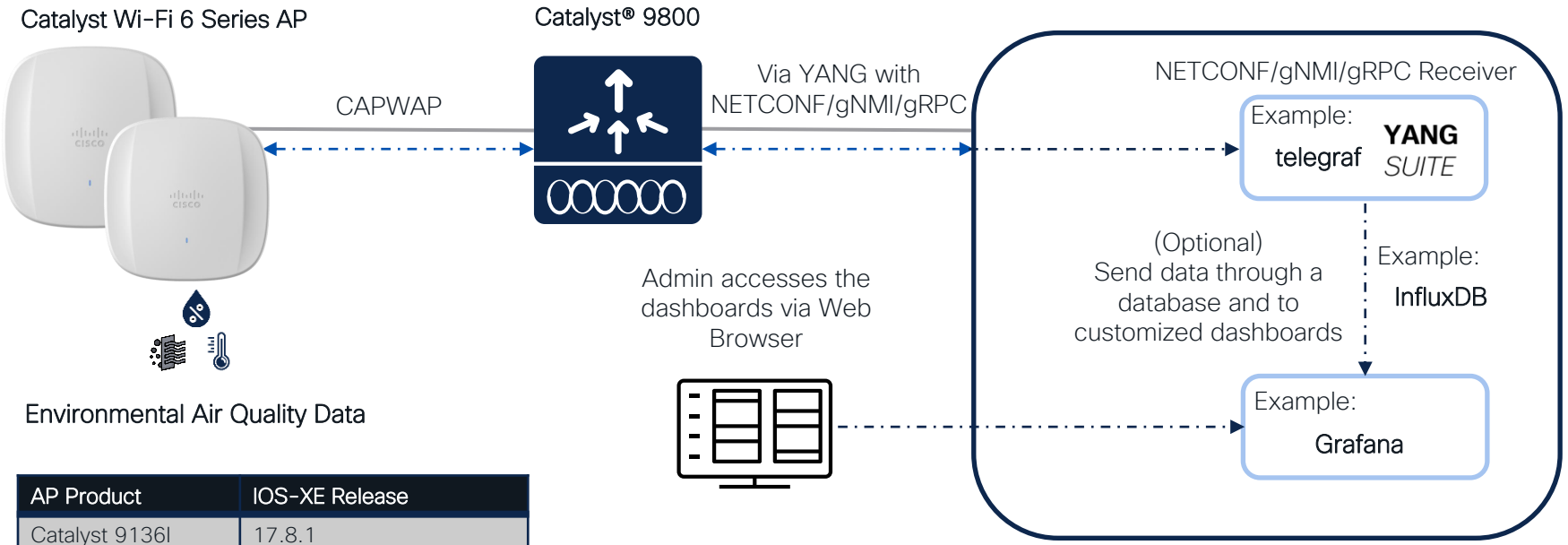
Topology of the Environmental Sensors on Catalyst Wi-Fi 6E Series Access Points using Model Driven Telemetry



AP Product	IOS-XE Release
Catalyst 9136I	17.8.1
Catalyst 9166I	17.9.1

Example Environmental Sensor Temperature Telemetry Output

```
{
    "ap-mac": "XX:XX:XX:XX:XX:XX",
    "event-type": "access-point-oper-data/ap-temp",
    "humidity": "28.743200",
    "temp": "39.496500"
}
```

Temperature

- Humidity
- Temperature

Example Environmental Sensor Air Quality Telemetry Output

```
{
    "ap-mac": "XX:XX:XX:XX:XX:XX",
    "event-type": "access-point-oper-data/ap-air-quality",
    "rmox_0": "1018991936.000000",
    …
    "rmox_12": "90387552.000000",
    "iaq": "3.051500",
    "etoh": "0.633100",
    "tvoc": "1.190300"
}
```


Air Quality

- IAQ (Calculated Air Quality)
- TVOC (Total Volatile Organic Compounds)
- ETOH (Estimated Ethanol)
- RMOx values (Mox Resistance values as raw data)

Environmental Sensor Data from the Catalyst 9136I and 9166I visualized in Grafana

Demo of Environmental Sensors with Grafana

Application Hosting on Catalyst Wi-Fi 6E Access Points

Application Hosting on Cisco Catalyst Access Points

Enterprise Wireless Internet-of-Things

AP as an IoT development platform

Simplified application management

Wi-Fi and IoT convergence

Ecosystem of IoT applications

Available on all Cisco® Catalyst® 9100 Access Points

Partner Solution Use Cases

Electronic Shelf Label
Retail Management

- LCD price tags that can be updated remotely.

Asset Tracking
Building Management

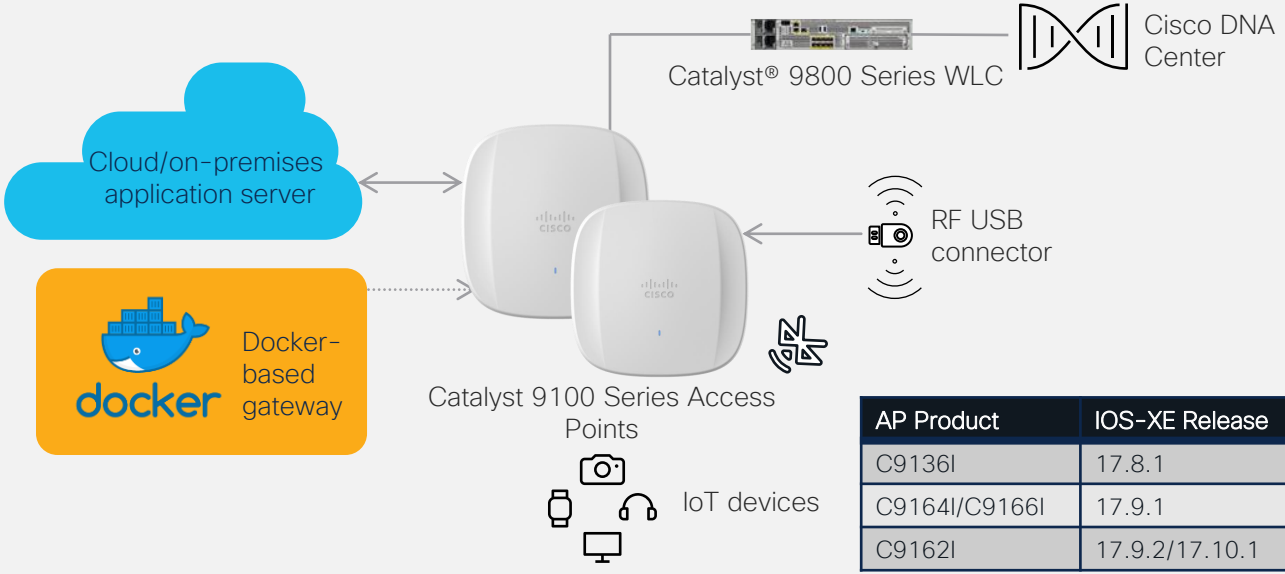
- Sensors that track, movement, temperature, humidity, location, and many more.

Patient Tracking
Medical Management

- Sensor that track location, human vitals and many more for efficient medical operations.

Catalyst 9100 Series Access Points support application hosting

for an enterprise wireless IoT experience



AP Product	IOS-XE Release	DNAC Release
C9136I	17.8.1	2.3.3
C9164I/C9166I	17.9.1	2.3.4
C9162I	17.9.2/17.10.1	2.3.5

Cisco DNA Center
for application management

Current Partners and Solutions

SES-imagotag

SOLUM

Wipelot

Infsoft

EnOcean

Leitwert

Deploying Application Hosting on DNA Center

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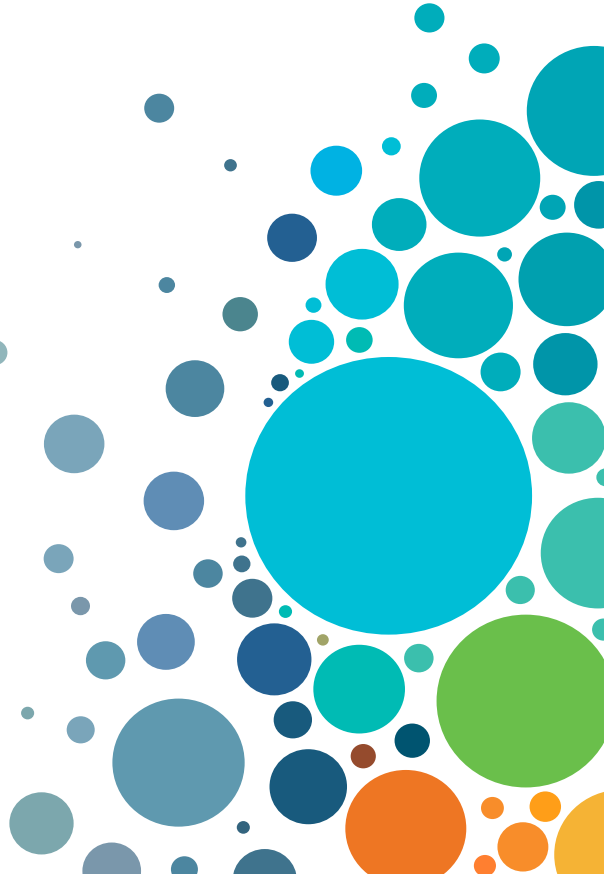
Day 1: Upload and Deploy IOx Application

Part 1 – Upload IOx Application

Section goals: Upload an IOx application into Cisco DNA Center's repository so it can be ready for deployment to the desired access point.



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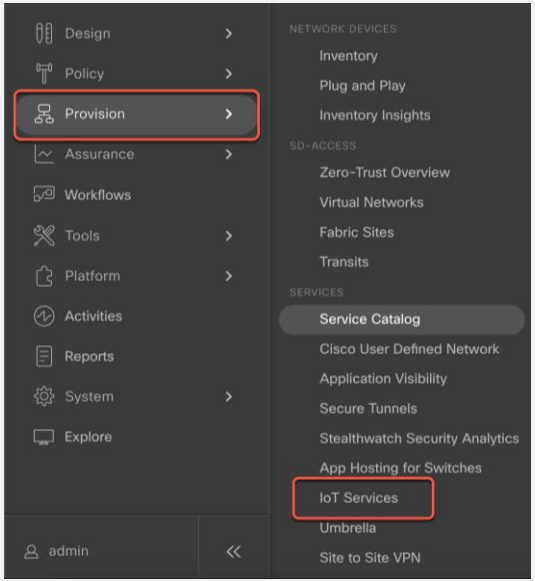
Step 1: Navigate to IoT Services

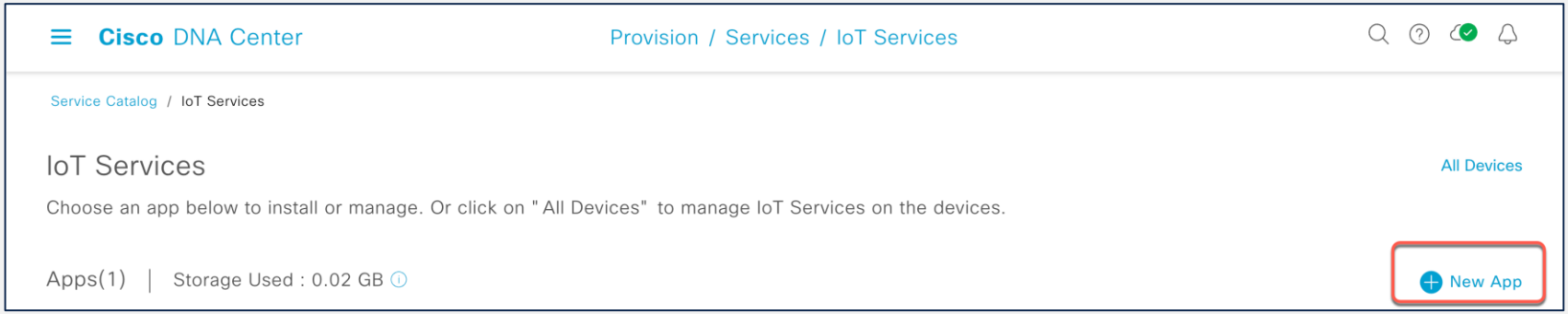
1 On DNA Center, open the menu, click on **Provision**, then **IoT Services to enter the App Hosting page.**



Cisco DNA Center's IoT Services page provides an intuitive graphical user interface for users to upload and manage a third-party application they would like to deploy onto their access points.

Step 2: Upload the IOx application to Cisco DNA Center

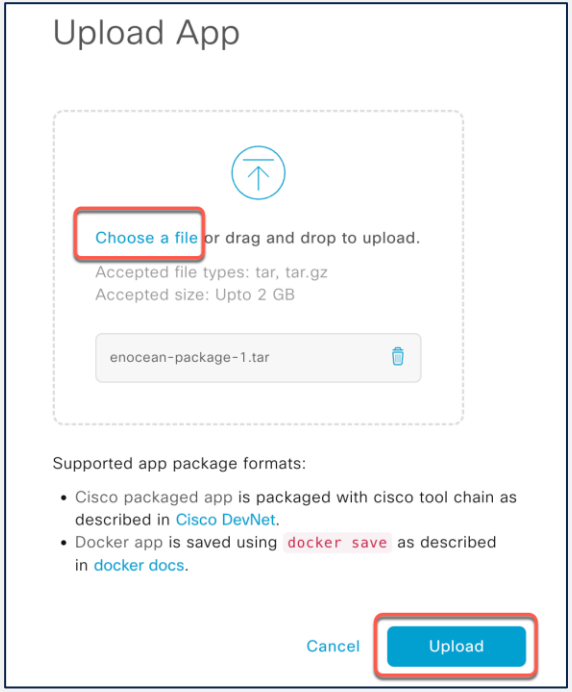
1 Click on **New App** on the right side of the screen.



Step 2: Upload the IOx application to Cisco DNA Center (Continued)

2 Upload the Application by choosing a file with either of the following application types:

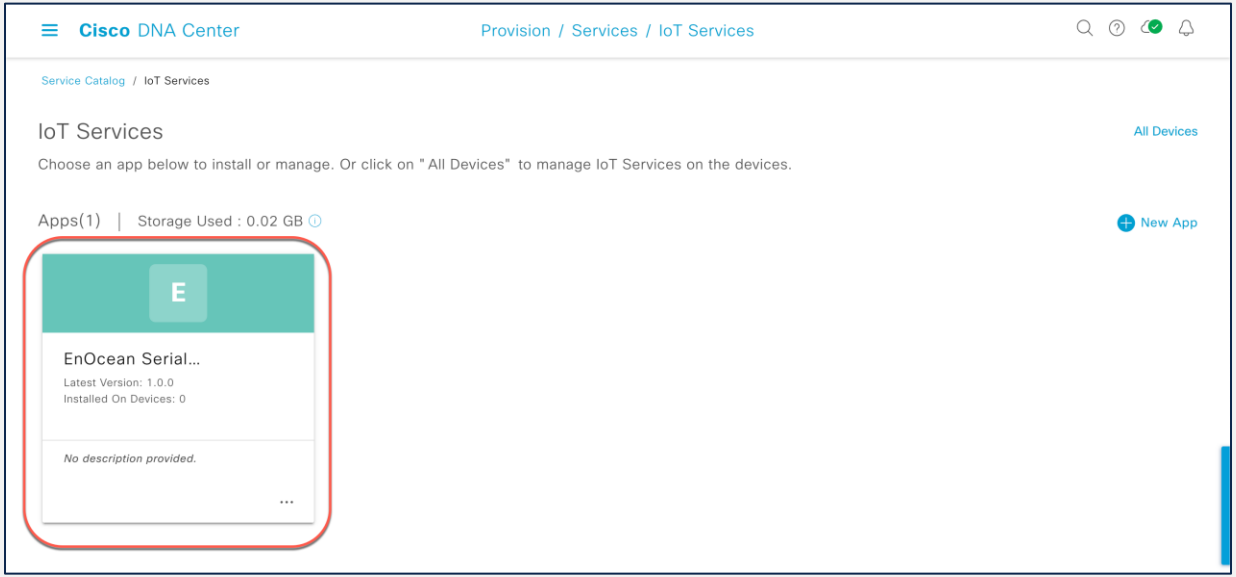
- Option 1 – Docker
  - Choose this option if the app you are uploading is a Docker app saved as a tar file using the Docker save command.
- Option 2 – Cisco Package
  - Choose this option if the app you are uploading has been packaged using the Cisco app packaging toolchain.
- For more information regarding both package types, visit: https://developer.cisco.com/docs/iox/



Step 2: Upload the IOx application to Cisco DNA Center (Continued)

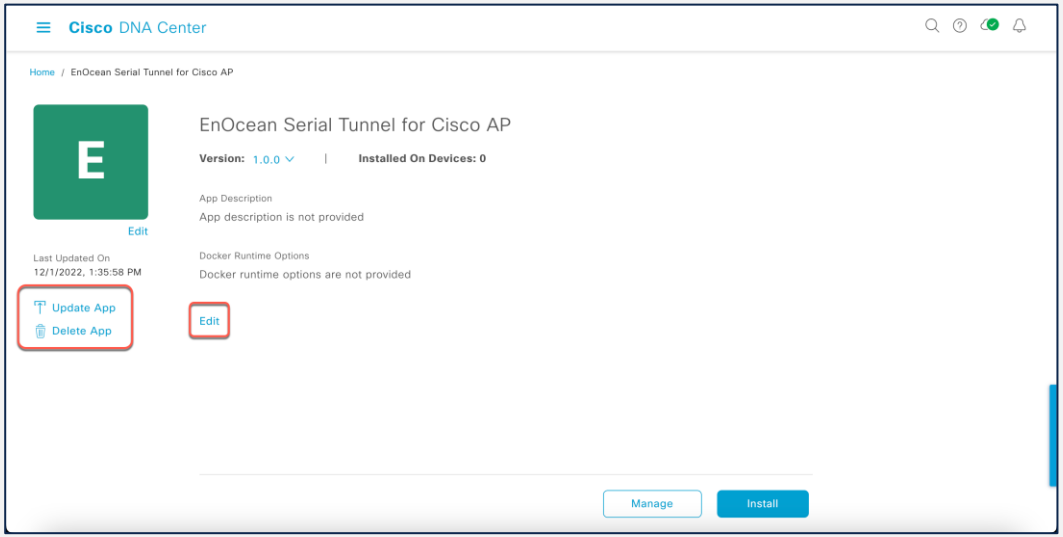
3 Ensure the application you've uploaded now appears within the App Hosting page.

4 Optional: If you would like to manage the application, click on the application to enter the application's management page.



Step 2: Upload the IOx Application to Cisco DNA Center (Continued)

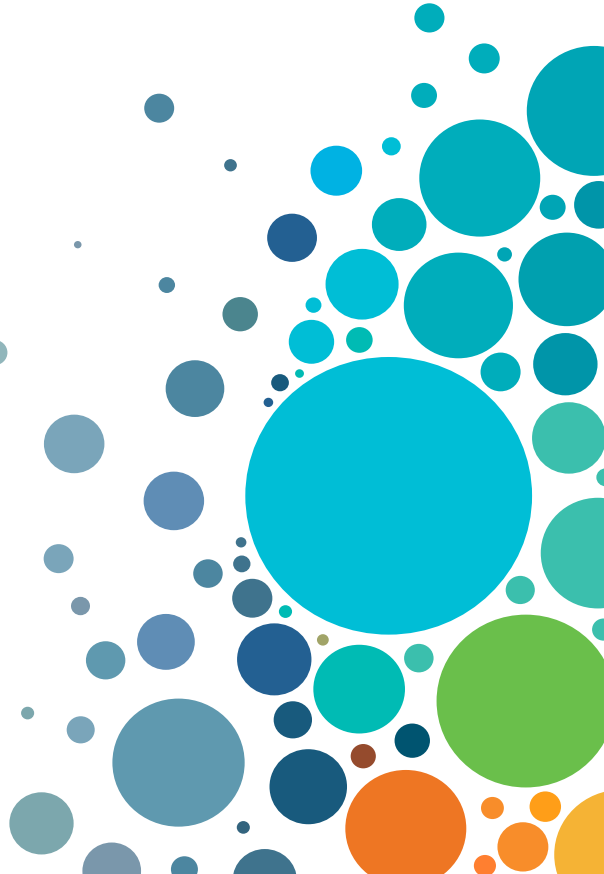
5 (1) To update the application, click on the **Update App** button; (2) To delete the application, click on the **Delete App** button; (3) To edit the application's description, click on the **Edit** button.



Day 1: Upload and Deploy IOx Application

Part 2 – Deploy IOx Application

Section goals: Deploy an IOx application to all devices within a network hierarchy created in the prior section.



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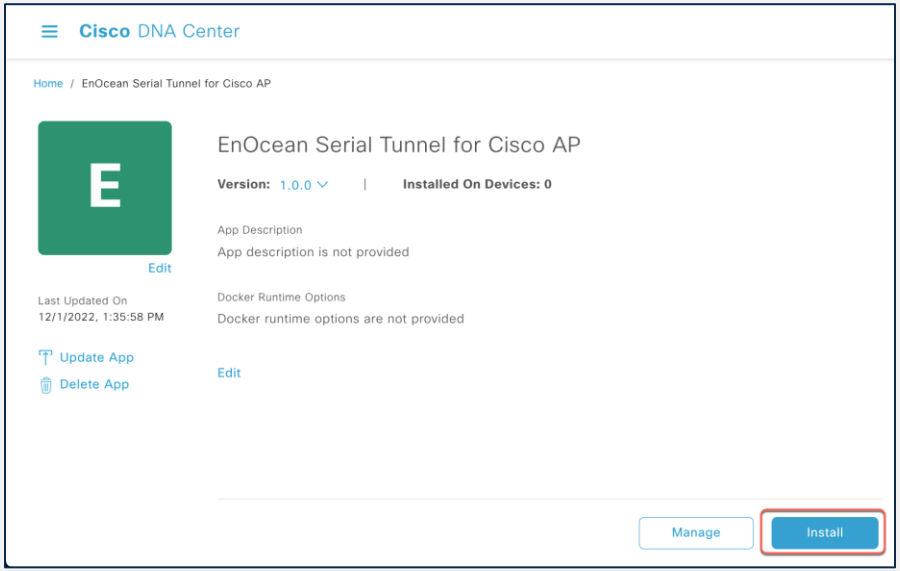
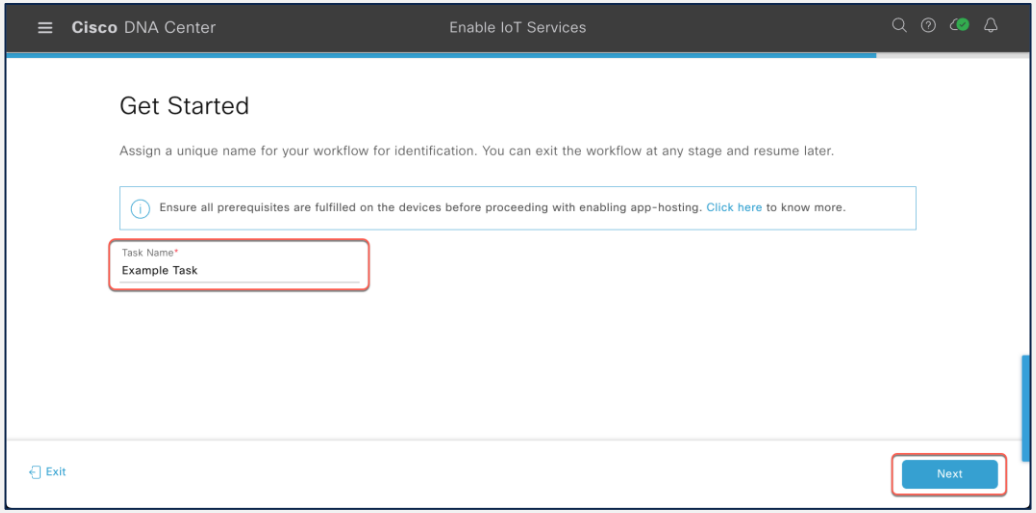
Step 1: Start the Workflow of installing an application on Access Points

1 Within the application select the Install button



Step 1: Start the Workflow of installing an application on Access Points (Continued)

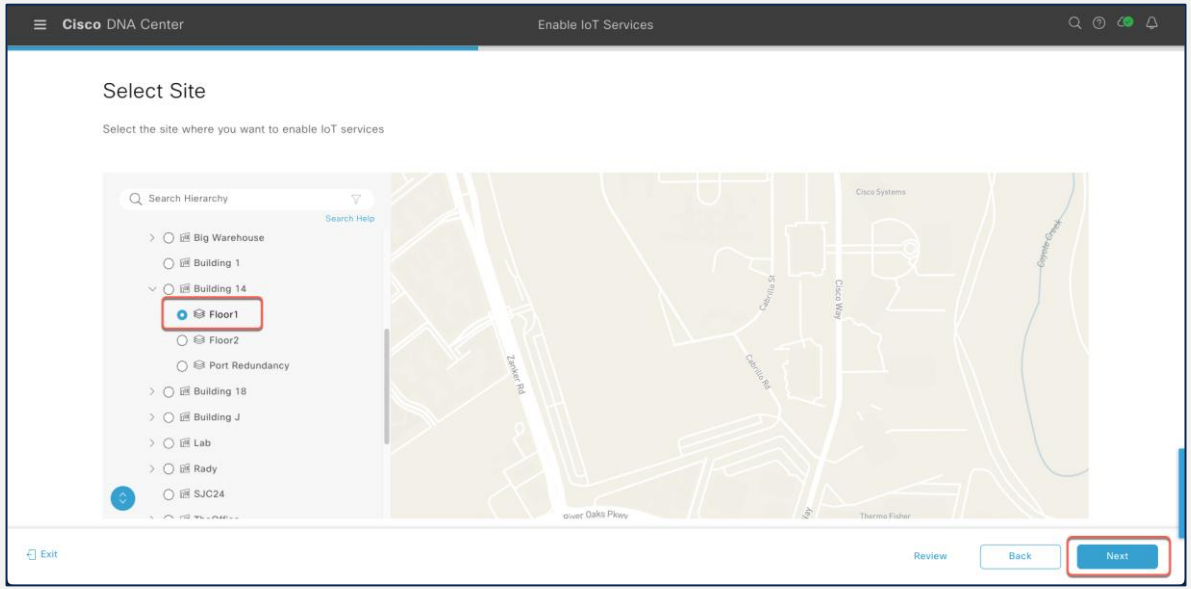
2 Give a Task Name for the workflow then hit **Next**



Cisco DNA Center's "Enable IoT Services Workflow" function allows you to easily deploy your application to either a location or specific access point.

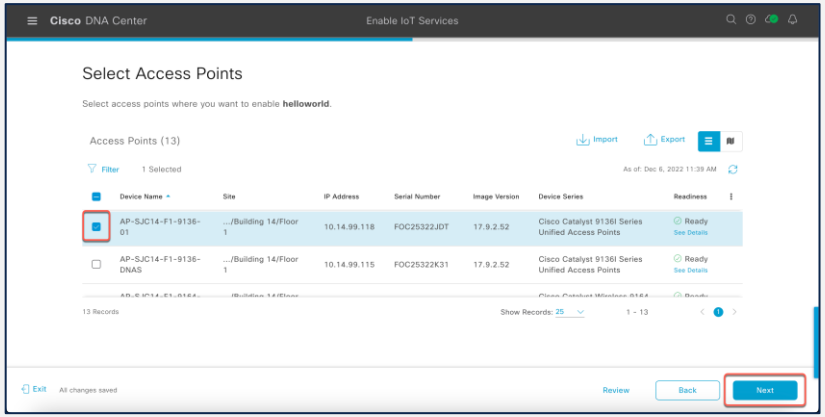
Step 2: Deploy application to access points on a floor

3 Select a floor within the network hierarchy to deploy the application, then hit **Next**

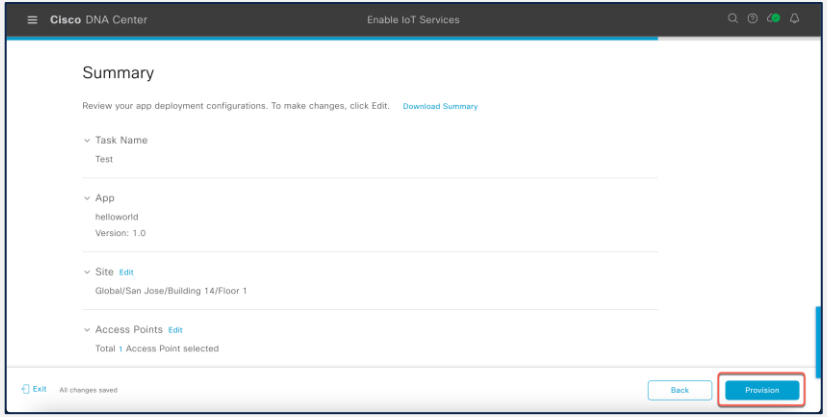


Step 2: Deploy application to access points on a floor (Continued)

3 Select the AP(s) on this floor where you would like to deploy the application, then click **Next**.



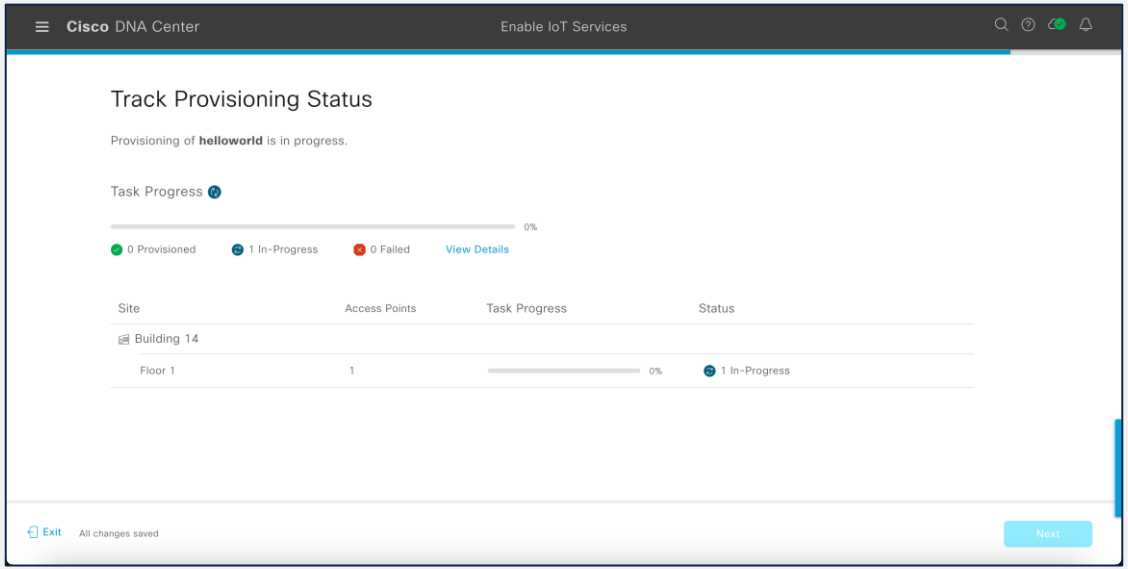
4 Review that the application is being deployed to the intended site and access point(s), then click **Provision**.



- Ensure the Readiness column says **Ready**
- By default, this page shows an AP list view; however, it can be toggled to a maps view via the map icon at the top right-side corner of the table.

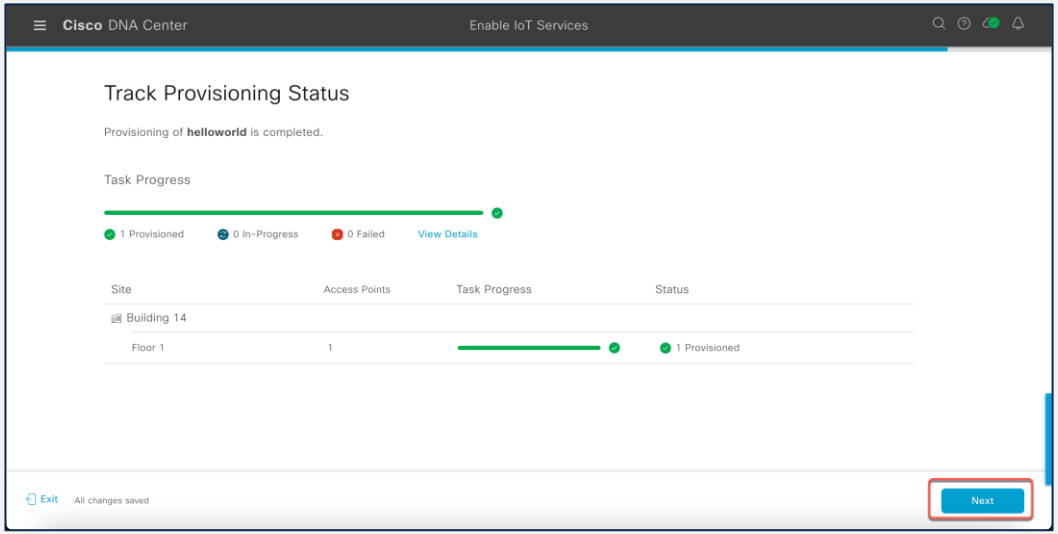
Step 2: Deploy application to access points on a floor (Continued)

5 Observe that the application deployment process will begin



Step 2: Deploy application to access points on a floor (Continued)

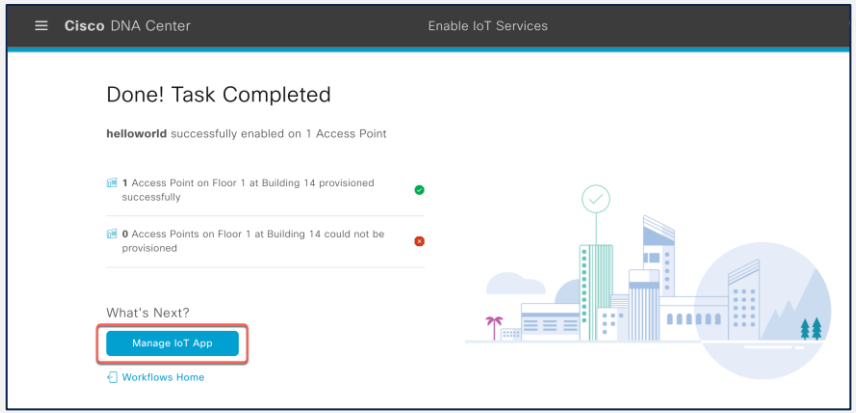
6 After completing the provisioning of your application deployment, hit **Next**.



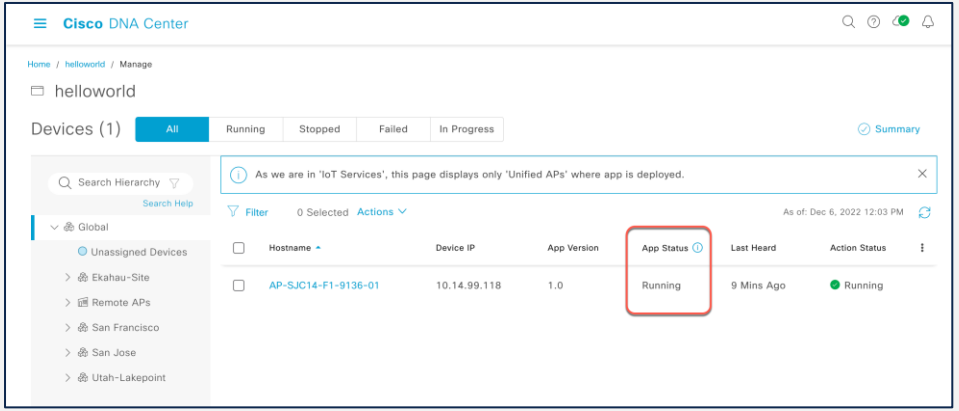
Warning: If you attempt to deploy an application with a dependency on a USB attachment, and the attachment is not detected, you will receive a Failed message.

Step 2: Deploy application to access points on a floor (Continued)

7 Click on the **Manage IoT Application** button to continue to the application's management page.



8 On this Application Management page, you're able to manage the status of the deployed applications.

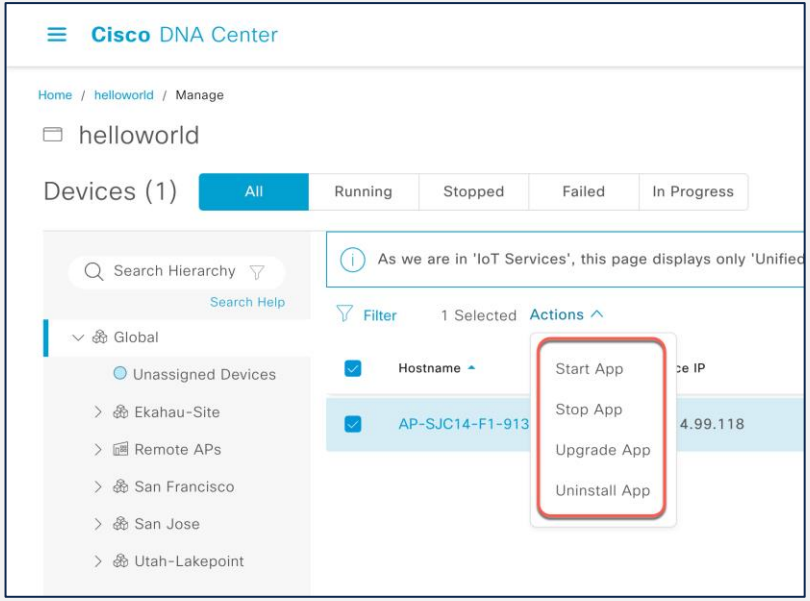


Observe beneath the **App Status** column that you can monitor the status of your application.

Step 2: Deploy application to access points on a floor (Continued)

9 In order to manage the application deployed to the access point, click on the **Actions** drop-down menu

1. **Start App** – If you stopped your app via the **Stop App** button, you could start it again via this button
2. **Stop App** – You can stop the loaded application from running. (Stopping an application does not delete or uninstall it.)
3. **Upgrade App** – If you've uploaded a newer version of your use through the initial IoT Services Workflow, you can click on the **Upgrade App** button to upgrade the application running on the AP to the new version
4. **Uninstall App** – Click this button to remove the application from your access point entirely



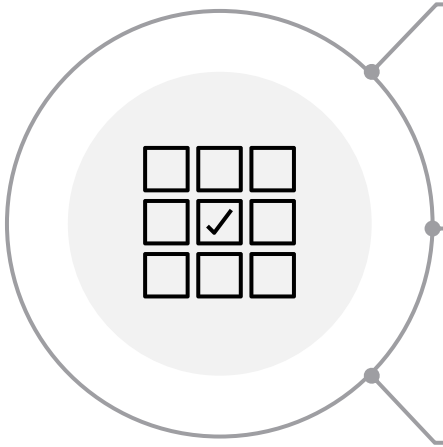
Electronic Shelf Labeling (ESL)

Current ESL Partners

SES-imagotag

SOLUM

ESL Use Cases



Remote price update

- Item prices are stores within a central server.
- With a touch of a button, all deployed ESLs can display a different price on the digital screen.

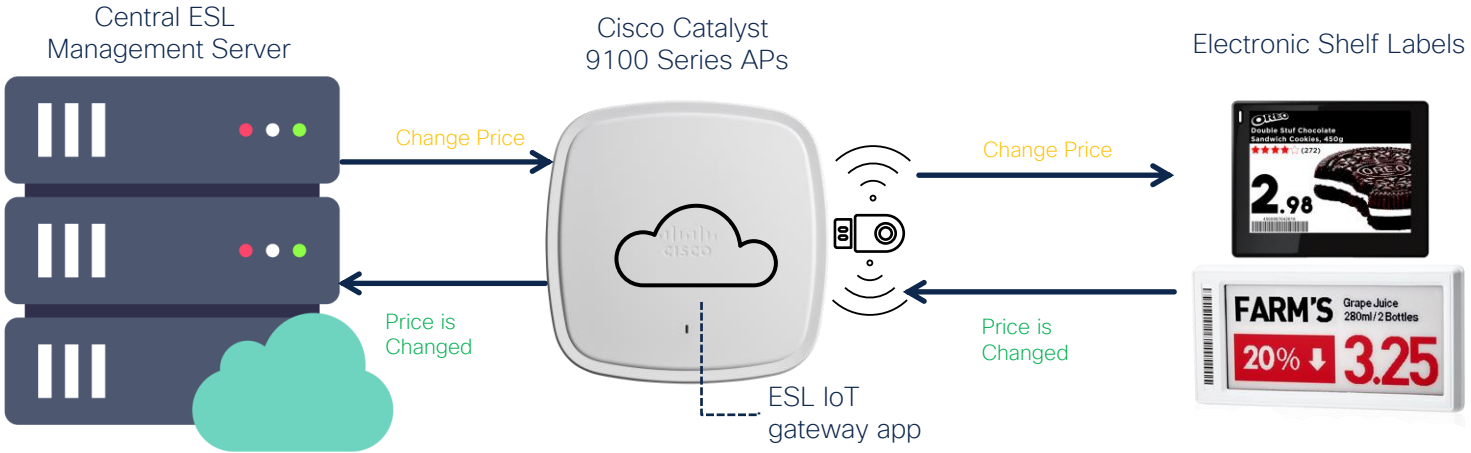
Item location discovery

- ESLs can send its location to the central server.
- Customers can query for location information through a mobile or web application.

Immediate Item availability check

- ESLs can keep track of store item inventory.
- Customers can query for item availability through a mobile or web application for accurate and immediate results.

Retail Store IoT ESL Experience



Update all Electronic Shelf labels from a single application server!

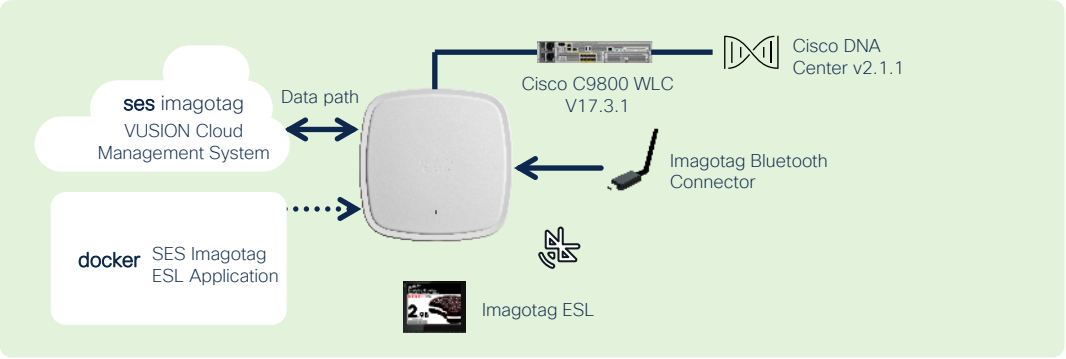
Understanding the SES-imagotag ESL solution

What is SES-imagotag ESL?

- An IOx application that leverages the USB port on an access point to communicate with electronic shelf labels (ESLs) through a USB Bluetooth dongle

Use case of SES-imagotag ESL

- Used in retail stores where they're deployed in place of regular price tags
- The advantage of these ESLs is that item prices can be updated remotely, and users can quickly locate any item through a mobile application



How is the SES-imagotag ESL solution accomplished?

- Accomplished by allowing the ESLs deployed throughout the store to communicate to the various SES-imagotag ESL applications loaded Cisco access points
- All the deployed SES-imagotag ESL applications are managed by a central ESL management system, allowing for an organized end-to-end solution

Management system options:

- On-premises solution – core services
- Cloud solution – VUSION Cloud

Wipelot Eagle Eye

Ali Samioglu
Leader of Systems Engineering, GVSE MEA

- 14 years at Cisco in multiple roles; including post-sales and pre-sales
- CCIE RS&DC #29893, Cisco Hall of Fame
- Leading the Eagle Eye project from the incubation to final product

and introducing...

Wipelot EagleEye

- Ultra Wideband location tracking
- Accuracy up to 20cm
- Enhanced personnel safety and asset accountability
- Workplace Safety
- Social Distancing
- Workplace planning

Wifi6 / Wifi6E

cisco Live!

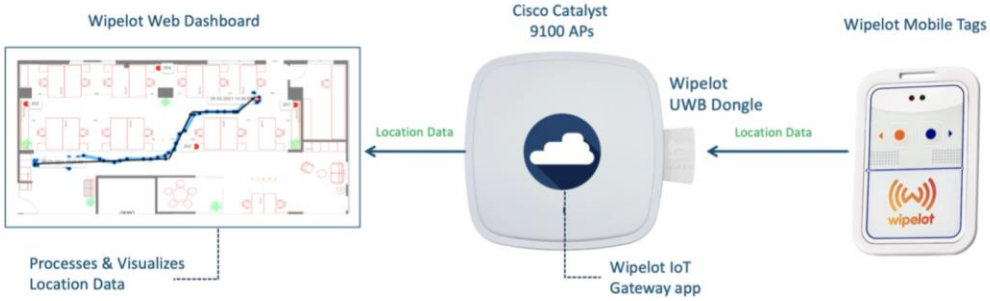
Leveraging UWB Technology

To leverage this UWB technology, this solution requires the following:

1. **Cisco DNA Center** – Used to manage the deployment and serviceability of Wipelot's RTLS IOx Application.
2. **Wiplot's RTLS IOx Application** – Deployed to the Catalyst 9100 Series AP through Cisco DNA Center to allow the AP to control the UWB dongle and communicate to the Wipelot Mobile Tag and send data to the Wipelot web dashboard.
3. **Wipelot's UWB Dongle** – Inserted into the Cisco Catalyst 9100 Series AP and emits UWB RF.
4. **Wipelot's Mobile Tag** – Attached to equipment or people and sends UWB location data to the Wipelot UWB dongle.
5. **Wipelot's Web Dashboard** – Web UI used to visualize the location of Wipelot's mobile tags.

Cisco Catalyst 9100 Series AP with a Wipelot UWB dongle

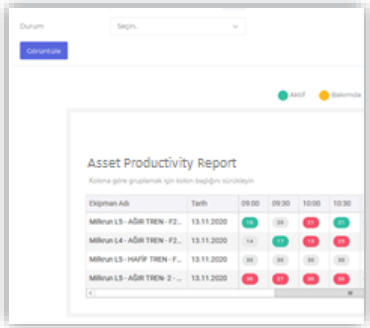
When Wiplot's RTLS IOx application has been deployed to the AP, the following topology can be referenced for how location data is sent from the mobile tags to the UWB dongle, then through the IOx application to the Wipelot web dashboard. Data structure is private and it is binary data with timing information of tags and anchors.



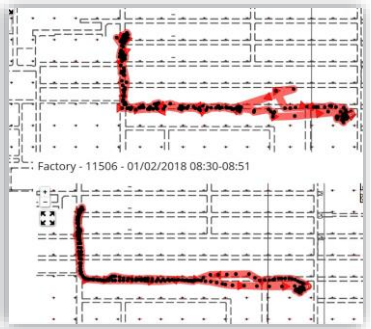
Metrics & use cases

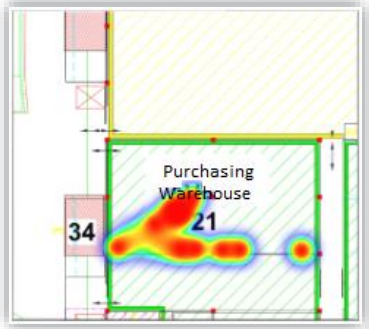
- Accurate location information provides detailed route analysis
- Detailed heatmap
- Distance measurement
- Region based idle work hour calculations

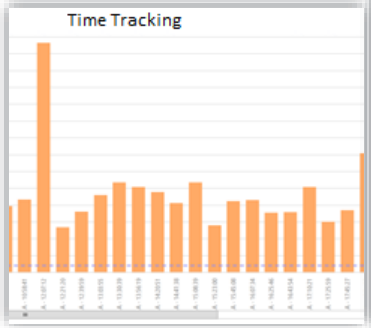
- Collision avoidance
- Lone worker safety
- Social distancing
- Environmental monitoring

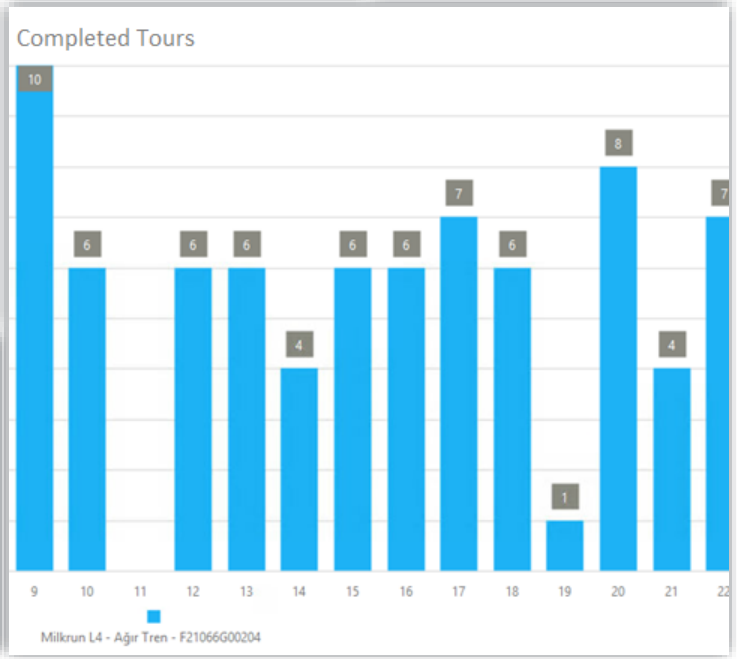


Field	Value
Cycle Quantity/hr	2/hr
Target Frequency	5 min btw cycles
Milkrun L4 - Ağır Tren - F21066...	A
Realized Total Cycle Quantity	85
Daily Non-Synchronised Cyle Q...	41
Daily Cylce Quantity	51.76 %
Target	0 %

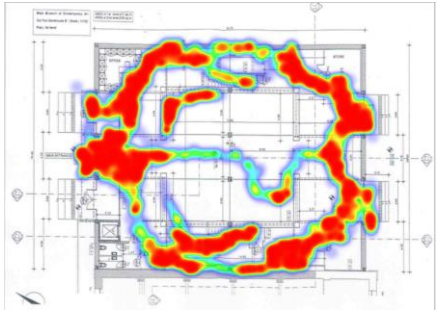








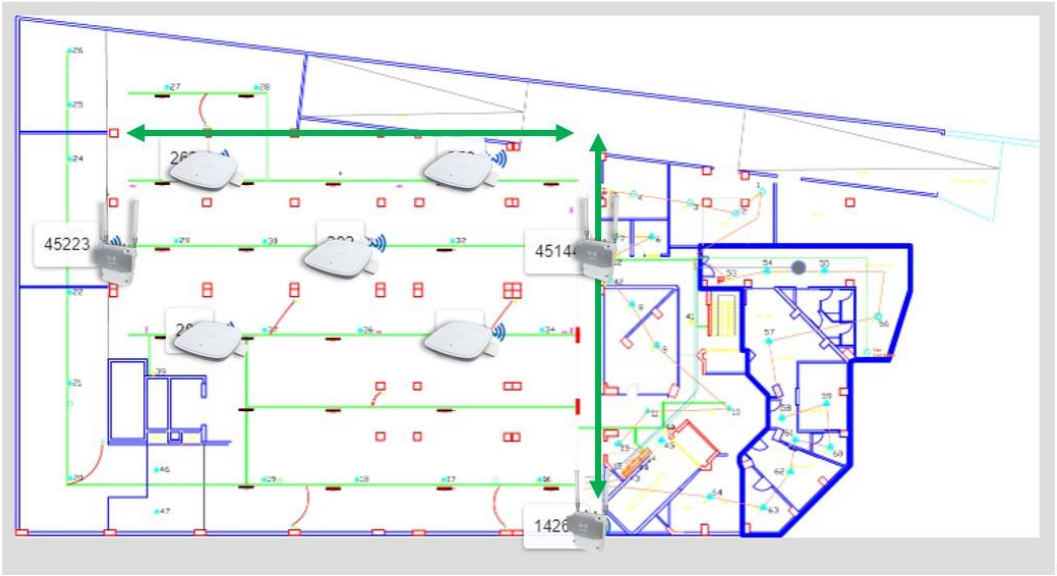
Greece CDA Pilot in Momus Contemporary Arts Museum



- Cisco Catalyst c9100 Wifi6 AP + Eagle Eye Dongles
- Real time location tracking with sub-meter accuracy
- Tags are provided to visitors
- Visitor's Dwell Time for each art
- Visitor footprint / heatmaps
- Museum Art Planning

Eagle Eye POV

Demonstration Site: Parking Lot
Size: 1100 Square meters
Green Arrows: Demonstration Area
Anchors: EagleEye Sense & EagleEye Motion
Environment: Metal
Number of Anchors: 8
Number of Tags: 270



- Parking Lot – 1100 m2
- Metal Constructions
- Hybrid Eagle Eye Deployment Cisco Catalyst C9100/ IOT IW6300
- CM Level Accuracy with 270 tags

Demo

What's next

Blogs / Cisco Live sessions/ Partner Events

EagleEye website: https://www.wipeloteagleeye.com

Reach out to Ali Samioglu or Jose Correa for any opp.

Email Us!
Ali Samioglu - asamiogl@cisco.com
Jose Correa – joseacor@cisco.com

Networking

Wireless Solutions

Learn from experts on wireless topics such as wireless security and location based services including Wi-Fi and BLE technologies, extending to IoT use cases. You will learn some key fundamentals on leveraging your Cisco Wi-Fi investment to deliver smarter workspaces.

START

Feb 5 | 16:00
LABEWN-1661
Cisco DNA Spaces lab for Hybrid Workspace

Feb 7 | 14:45
BRKMER-2514
10 Things You Don't Know About Meraki Wireless

Feb 7 | 17:00
BRKOPS-2416
Seven Habits for a Successful Cisco DNA Center Deployment

Feb 8 | 08:30
LTREWN-2020
Cat 9800 Powered DNA Spaces Wireless Solutions Lab

Feb 8 | 14:45
BRKOPS-2402
Automate the Deployment of a Wireless Network with the Help of Cisco DNA Center

Feb 8 | 16:30
BRKEWN-3004
Understanding Wireless Security and the Implications for Secure Wireless Network Design

Feb 8 | 17:00
BRKEWN-1538
Internet of Things on the Next Generation Catalyst Wi-Fi 6E Access Points

Feb 9 | 08:45
BRKMER-2399
Meraki Wireless from a Troubleshooter Perspective

Feb 9 | 12:00
BRKEWN-2042
Cisco Spaces: How to Turn your Wi-Fi Network into Location Based Intelligence

Feb 9 | 15:45
FINISH **BRKEWN-2658**
Implement Smart Workspaces and deliver Intelligent, Sustainable Buildings with Cisco Spaces

If you are unable to attend a live session, you can watch it On Demand after the event

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- Complete a minimum of 4 session surveys and the Overall Conference survey (open from Thursday) to receive your Cisco Live t-shirt.

- All surveys can be taken in the Cisco Events Mobile App or by logging in to the Session Catalog and clicking the "Attendee Dashboard" at https://www.ciscolive.com/emea/learn/sessions/session-catalog.html

Q&A

The bridge to possible

Thank you


cisco Live!
ALL IN