



Cisco Kinetic for Cities Dashboard Guide, Release 4.2

First Published: 2015-07-16

Last Modified: 2020-05-27

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Preface

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Introduction to the Cisco Kinetic for Cities Dashboard Guide

Cisco Kinetic for Cities brings network-based control and automation to city infrastructure features, such as, street lights, traffic lights, parking sensors, and video cameras. A Web-based graphical user interface provides easy access to CKC in real time.

This document, the Cisco Kinetic for Cities Dashboard Guide, describes how a user can interact with the Cisco Kinetic for Cities user interface (UI) to perform the following tasks:

- Define and manage policies that automate the behavior of Cisco Kinetic for Cities Platform.
- Monitor infrastructure-generated data in real time, responding to specific incidents as necessary using system-provided workflows.
- Generate custom reports that describe system usage and trends for specific locations and time periods.

How To Use This Guide

Read this document before you begin using the Cisco Kinetic for Cities web UI . You may also refer back to this document as necessary to perform day-to-day tasks in the UI.

The current CKC help document is available only in English language. However, CKC supports internationalization. If you wish to get the Help doc translated to your language, please raise a separate request for the same. Additional charges will be applicable for the same.

[1](#)

¹ All future references to CKC in the document refers to Cisco Kinetic for Cities.

Audience

This Guide is for Operator users who interact with the Cisco Kinetic for Cities Dashboard web GUI to manage or monitor platform . An Administrator user can also perform any task that this Guide describes.

Document Conventions

This document uses the following conventions:

Convention	Description
^ or Ctrl	Both the ^ symbol and Ctrl represent the Control (Ctrl) key on a keyboard. For example, the key combination ^D or Ctrl-D means that you hold down the Control key while you press the D key. (Keys are indicated in capital letters but are not case sensitive.)
bold font	Commands and keywords and user-entered text appear in bold font .
<i>Italic font</i>	Document titles, new or emphasized terms, and arguments for which you supply values are in <i>italic font</i> .
Courier font	Terminal sessions and information the system displays appear in <code>courier font</code> .
Bold Courier font	Bold Courier font indicates text that the user must enter.
[x]	Elements in square brackets are optional.
...	An ellipsis (three consecutive nonbolded periods without spaces) after a syntax element indicates that the element can be repeated.
	A vertical line, called a pipe, indicates a choice within a set of keywords or arguments.
[x y]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
{x y}	Required alternative keywords are grouped in braces and separated by vertical bars.
[x {y z}]	Nested set of square brackets or braces indicate optional or required choices within optional or required elements. Braces and a vertical bar within square brackets indicate a required choice within an optional element.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
<>	Nonprinting characters such as passwords are in angle brackets.
[]	Default responses to system prompts are in square brackets.
!, #	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.

Reader Alert Conventions

This document may use the following conventions for reader alerts:


Note

Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the manual.


Tip

Means *the following information will help you solve a problem*.


Caution

Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.


Timesaver

Means *the described action saves time*. You can save time by performing the action described in the paragraph.


Warning

IMPORTANT SAFETY INSTRUCTIONS

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device. Statement 1071

SAVE THESE INSTRUCTIONS

Related Documentation

Not Applicable

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 Marketplace](#).
- 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 web-based tool that acts as a gateway to the Cisco bug tracking system that maintains a comprehensive list of defects and vulnerabilities in Cisco products and software. BST provides you with detailed defect information about your products and software.



CHAPTER 1

Getting Started

- [What is Cisco Kinetic for Cities Platform?, on page 1](#)
- [Accessing the System, on page 2](#)
- [Understanding the User Interface, on page 33](#)

What is Cisco Kinetic for Cities Platform?

The Cisco Kinetic for Cities is an open, extensible city data platform that integrates solutions, applications, and devices to help communities enrich constituent engagement, gather and share data more efficiently, and generate new revenue and job opportunities.

The Cisco Kinetic for Cities Platform is an application-enabled platform that helps improve service delivery to communities and their constituents. The platform aggregates and organizes data from city infrastructure sensors and other data sources in a consistent, easy-to-use format and optimizes services delivery to engage residents and improve overall quality of life.

CKC brings network-based control and automation to city infrastructure features, such as street lights, traffic lights, parking sensors, and video cameras.

Although platform features can be controlled manually from the user interface, their operation is most often automated by means of policies. For example, an operator might define a policy which automatically increases street lighting to enhance safety when occupancy increases or dims lights to save energy when occupancy drops beneath a specific threshold.

Underpinning this automation is a continuous flow of data from infrastructure features. Parking sensors send notifications of occupancy or vacancy. Lights notify of their operational status and energy consumption. Environmental sensors monitor temperature and ambient light. Cameras stream video of traffic conditions.

The dashboard makes real-time data from smart infrastructure accessible at a glance:

- Color-coded icons on a map of the city show parking usage, availability and violations, traffic density and lighting status.
- System messages that can be browsed, filtered, and searched provide information about individual sensors, such as, parking spaces, lights, and more.
- User-configurable reports show trends in infrastructure use, energy consumption, and more.

The system also interacts with mobile companion applications that the public can use to find, reserve, and pay for parking spaces from mobile phones and other devices. These companion applications interact with payment gateways to collect parking fees and issue receipts on the mobile device itself. A special companion

application for Enforcement Officers notifies the officer of parking violations, allows the officer to generate a parking ticket, and also captures photographic evidence of the violation.

The platform provides benefits to a wide variety of users:

- **Private citizens** enjoy the benefits of managed city infrastructure: increased safety, energy savings, real-time traffic information with streaming video, and more convenient parking.
- **Operators** use the dashboard to create and modify policies.
- **Enforcement Officers** can manage parking more efficiently. Enforcement Officers can also use the dashboard to perform a subset of the tasks available to Operators.
- **Administrators** configure the dashboard for use. They may also configure managed devices and the wireless network that platform infrastructure uses. A detailed discussion of Administrator responsibilities is outside the scope of this Guide.
- **Municipalities** use platform to provide safer, more reliable infrastructure while enjoying energy savings, real-time monitoring of infrastructure status, modernized workflow for managing incidents, such as, traffic accidents, more consistent enforcement of parking policy, and more flexible parking policy that can enhance revenue opportunities at peak-usage times while offering discounted rates at less-occupied times.

Accessing the System

You must provide a valid user name and password to access the CKC dashboard. Successful login provides access to a base set of features that are available to all logged-in users. An Administrator can make additional features available to an individual account by assigning additional roles to the account. Each role provides access to specific features of the dashboard.

- **Default**

All accounts have this role, which enables the account to log in or log out, change its own password and access the Dashboard application.

- **Enforcement Officer**

Uses policies and notifications, as well as performs all tasks that Default role allows.

- **Operator**

Defines and modifies policies, performs all tasks that the Enforcement Officer role allows.

- **Administrator**

Create/delete accounts, assign roles, create and assign locations, as well as perform all tasks that the Operator role allows.

Log in to the Dashboard

To use the dashboard, you must first log in with your valid username and password.

Before you begin

You will need the following to log into the dashboard

- **Supported Web browser:**

Google Chrome (version 42.0 and above)

Mozilla Firefox (latest version)



Note Video Wall module is supported only on Chrome browser.

- **Username and Password**

Once your account is created by the admin, you will receive an email. This email contains the link to set the password alongwith the password rules.



Note The set password remains valid for a period of 90 days.

If you try to login to the dashboard after 90 days, you will get redirected to Change Password page. For details, see [Change Your Password, on page 7](#)

New user has to accept the Terms and Conditions before signing into the application.

Figure 1: Terms and Conditions

Terms & Conditions

Use of this software and service is governed by the current Cisco SaaS Terms of Service found at the following link:

<https://www.cisco.com/c/en/us/about/legal/cloud-and-software/cloud-terms.html>

Cisco will use customer data in accordance with the Cisco SaaS Terms of Service and Cisco's Privacy Statement found at the following link:

<https://www.cisco.com/c/en/us/about/legal/privacy-full.html>

BY CLICKING 'ACCEPT' OR USING THE CLOUD SERVICE, YOU AGREE TO THE CISCO SAAS TERMS OF SERVICE AND YOU REPRESENT THAT YOU HAVE THE AUTHORITY TO BIND YOUR COMPANY.

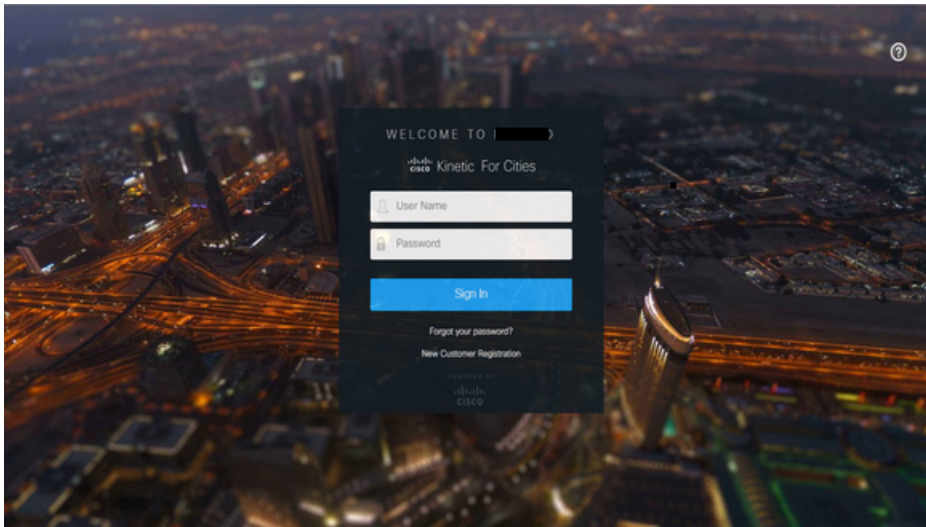
Decline

Accept

Step 1

In a web browser, open the Cisco Kinetic for Cities dashboard using the URL provided by administrator.

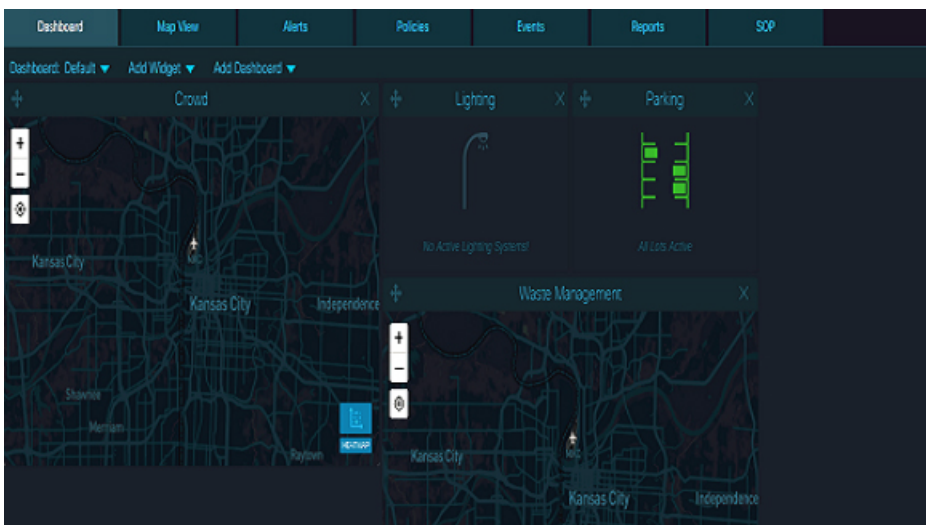
A login page like the one in the following figure appears.

Figure 2: Login Page

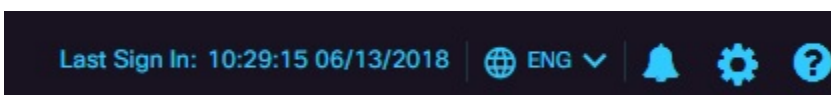
Step 2 Enter your username and password.

Click **Sign In**.

The Dashboard page appears.

Figure 3: Dashboard Home Page

Second login onwards, you would see the Last Sign In date and time details on the dashboard banner as shown below :

Figure 4: Last Sign In Details

Session Timeout : If a logged in user does not perform any activity for a period of 20 min, then the user automatically gets logged out. The session expiry time can be changed for any role by an administrator.

What to do next

Also see [Understanding the User Interface, on page 33](#).

Forgot your password?



Note **Account Lock** Three consecutive invalid attempts of login to the application results in account getting locked for 15 min. A locked account automatically gets unlocked after 15 min.

If the account does not get unlocked after 15 min, please contact TAC.

In case you have forgotten your password, you can create a new one.

- Perform the following steps in order to generate a new password

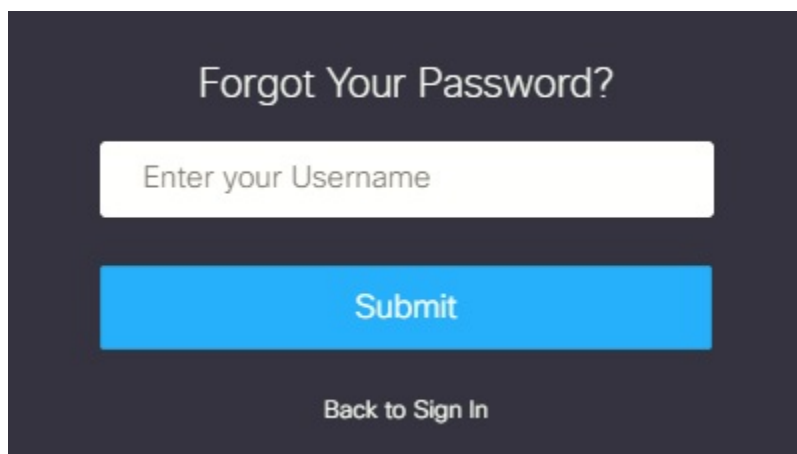
Step 1

Click on **Forgot your password?** link present on login screen.
Forgot Your Password? window gets displayed.

Figure 5: Forgot password link on log-in screen



Figure 6: Forgot Password Screen

The image shows a dark-themed web interface for a password reset. At the top, the text "Forgot Your Password?" is displayed in a light gray font. Below this is a white rectangular input field with the placeholder text "Enter your Username". Underneath the input field is a prominent blue button with the word "Submit" in white. At the bottom of the screen, there is a link that says "Back to Sign In" in a light gray font.

Step 2

Enter your *User Name* and Click on **Submit**

Log-in screen gets displayed with a message informing user that a reset link has been sent to the registered email.

Figure 7: Reset Link Message

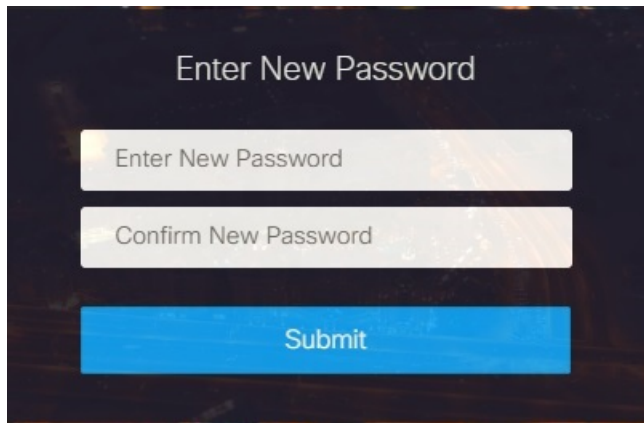
The image shows a login screen with a dark background. At the top, the Cisco logo is followed by the text "Kinetic For Cities". Below this are two white input fields: the first is labeled "User Name" with a person icon, and the second is labeled "Password" with a lock icon. A green success message banner is overlaid on the screen, stating "Success Reset Password link will be sent to your registered email, Please Check." with a close button (X) on the right. Below the input fields is a blue "Sign In" button. At the bottom, there is a link that says "Forgot your password?" in a light gray font.

Step 3

Click on the link received in the email.

You would be redirected to the **Enter New Password** screen.

Figure 8: Create new password



Step 4 Enter New password, repeat the password in next field and Click **Submit**
Password successfully changed message is displayed .

Note Password used in recent history cannot be used.

Change Your Password

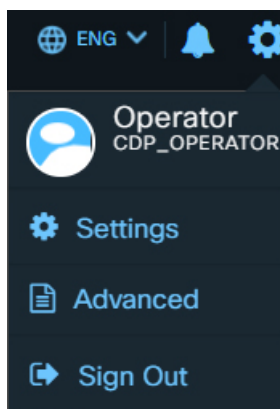
You can change your password from the dashboard any time.

Before you begin

Log into the dashboard; see [Log in to the Dashboard, on page 2](#)

Step 1 Click  on the dashboard banner and then choose the **Settings** menu item.

Figure 9: Accessing User Settings



The **User Details** panel displays a **Change Password** button.


Figure 10: User Details Panel



The screenshot shows the 'Settings' menu on the left with 'User Details' selected. On the right, the 'User Details' form is displayed with fields for Name, Phone Number, and Email ID. A 'Change Password' button is located below the Email ID field.

- Step 2** Click on **Change Password** button.
The **Change Password** controls appear.

Figure 11: Change Password controls

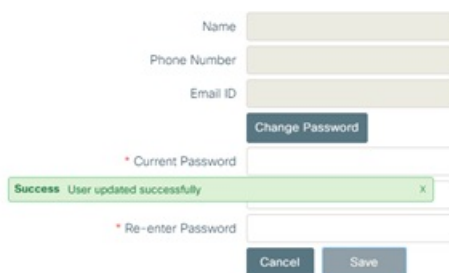


This screenshot is identical to Figure 10, showing the 'User Details' panel with the 'Change Password' button highlighted.

- Step 3** Specify the new password.
- Type your current password in the **Current Password** field
 - Type your new password in the **New Password** field.
 - Type your new password in the **Re-enter Password** field.
 - Click **Save**.

The **Settings** panel disappears and a notification confirming successful change of your password overlays the screen.

Figure 12: Notification of successful password change



The screenshot shows the 'Change Password' form with fields for Name, Phone Number, Email ID, Current Password, New Password, and Re-enter Password. A green success notification bar is displayed over the form, stating 'Success: User updated successfully'. The 'Save' button is highlighted.

Log Out of the Dashboard

To end your session, click **Sign Out**.


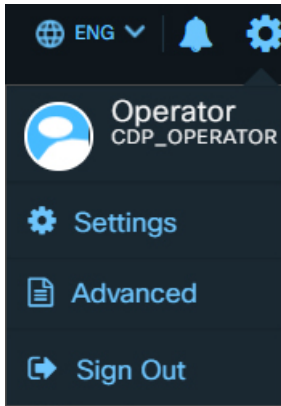
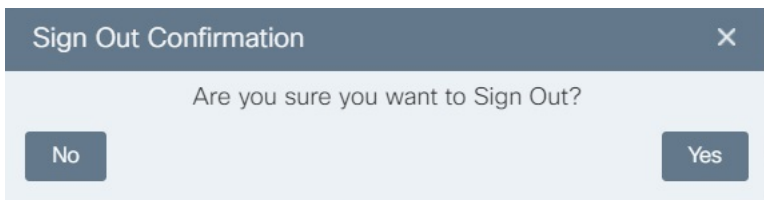
- Step 1** Click  at the upper-right corner of the dashboard.
The **Sign Out** menu item appears.

Figure 13: Sign Out



- Step 2** Click the **Sign Out** menu item.
A confirmation box appears as shown below

Figure 14: Sign Out Confirmation



- Step 3** To end your session, click Yes.
The session ends and the log-in screen reappears.

Customizing Dashboard Page

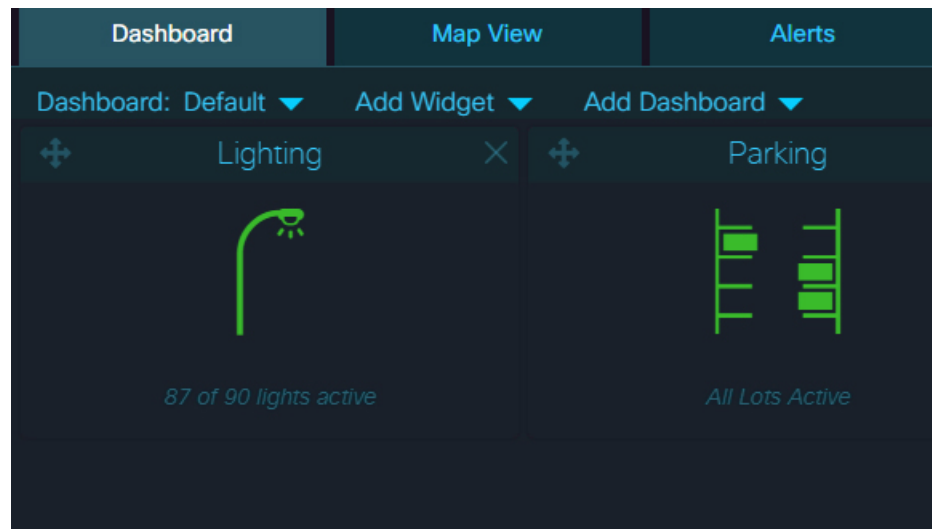
Cisco Kinetic for Cities allows you to create views that provide quick access to the custom dashboard page you need. You can select different modules from widget to create your custom dashboard page. The customize dashboard displays data for various modules selected in Widget in the interactive board form.

Creating Custom Dashboard Page

You can create and add a new custom dashboard by completing the below steps:

1. Click **Add Dashboard** on top menu of the dashboard tab.

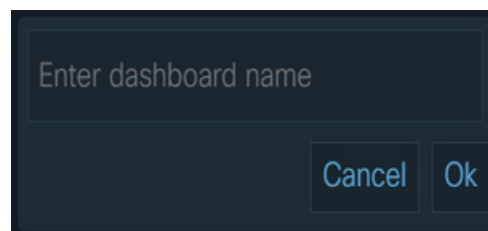
Figure 15: Adding Dashboard Name



2. Enter the name of your dashboard.

Click **Ok**.

Figure 16: Dashboard Name



3. The new dashboard view will be created and added to the Dashboard on the upper left corner of the dashboard page.

Adding a Module

You can add a new module to the dashboard by completing the below steps:

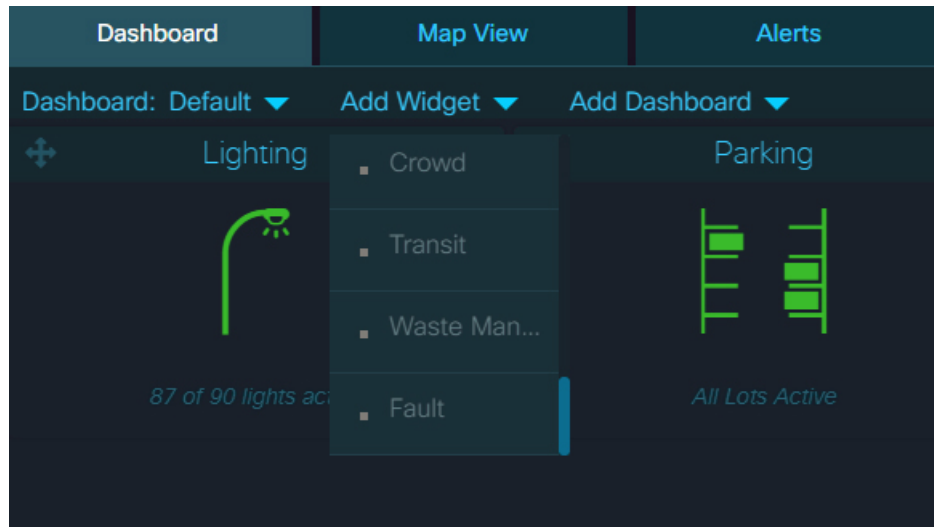
1. Select a module from **Add Widget** to create a customize view for your dashboard.



Note

The modules currently supported are Lighting, Parking, Traffic, Waste Management, Transit, Environment, Crowd, Network Devices, Camera, Safety and Security, Fault, and Infrastructure.

Figure 17: Adding Widget



- The selected module will be added to the dashboard page.

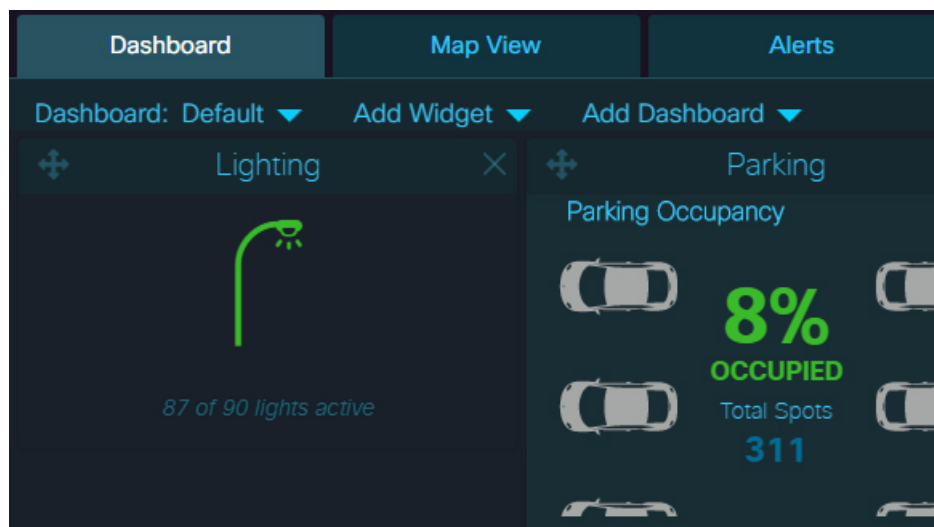
Thus, user can come to the dashboard page and view the statistics of all the selected modules at a glance.

Viewing a Custom Dashboard

You can view a custom dashboard by clicking **Dashboard** on the upper left of the dashboard page. All the customized Dashboard widgets added by other users can be seen here.

- Click on the dashboard to select the dashboard view that you want to appear on the dashboard page. In the below example, Default view for dashboard is selected.

Figure 18: Viewing Customize Dashboard

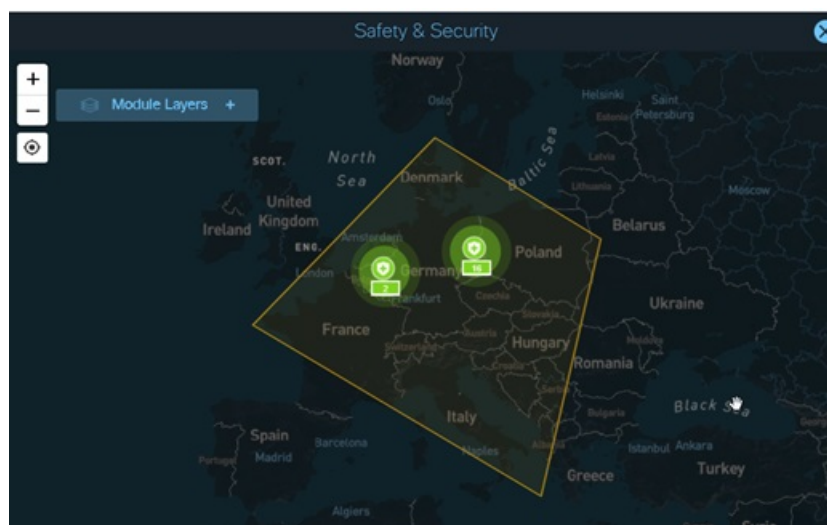



- To move the widget across the screen, drag  located on top left corner of the module widget and drop at the desired location.

3. To view the detailed view of the widget, click  located on top right corner of the widget.

The detailed view of the widget appears. Click on **Module Layers** to expand the menu and see the list of parameters available.

Figure 19: Detailed Widget View Details



4. Click the  to exit the detailed widget view and come back to the Dashboard page.



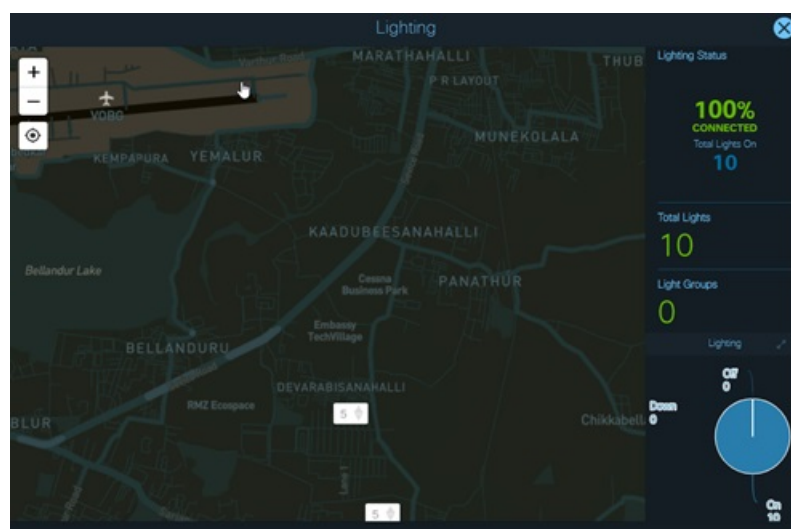
Note

There are few domains such as "Lighting, Crowd, and Environment which display additional information on the detailed widget view.

Lighting Widget

The detailed view of the Lighting Widget displays a graphical report on the right hand side panel. The report shows the statistics for the percentage of light sensors which are "On", "Off" or not working, that is, "Down".

Figure 20: Detailed View of the Lighting Widget



Crowd Widget

The detailed widget view of the Crowd domain displays daily, weekly, monthly reports on the right hand side panel.

Crowd Count Day Report : The report displays the average crowd count for a day. The same is calculated by considering an average of data received every four hours. The data collected at every 4, 8, 12, 16, 20, and 24 hours is aggregated and divided by 4 respectively.

For e.g. Average Value at 4 hrs = [(sum of values received at 1st,2nd,3rd,4th hour)/4] .

Average Value at 8 hrs = [(sum of values received at 5th,6th,7th,8th hour)/ 4.

Average value at 12 hrs = [(sum of values received at 9th,10th,11th,12th hour)/4] and so on.

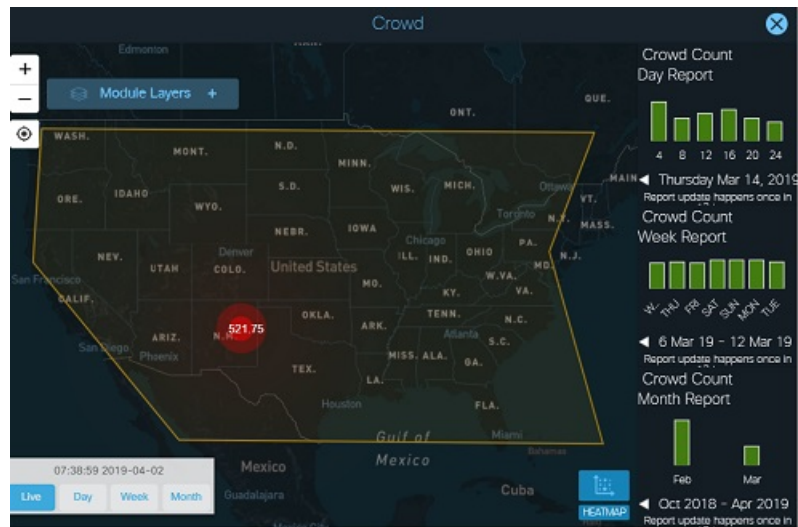
Crowd Count Week Report: The report shows the average crowd count for all days of the selected week.

Crowd Count Month Report : The report shows month wise average crowd count for a time period of six months.

Similar Daily, Weekly, and Monthly reports can be generated for Crowd Direction, Vehicle Count, Vehicle Direction, Bicycle Count, WiFi, Dwell Time, Device Path Analysis and Trace Analysis.

Live, daily, weekly, and monthly data can also be viewed on the map view.

Figure 21: Detailed Widget View for Crowd Domain

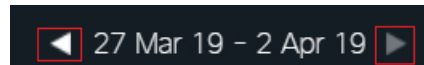


By default, the reports are displayed for the current day, week, and month.

Perform following steps in order to view the data for any specific time period.

1. Select the time period for report generation using the left navigation, right navigation arrow buttons. Left arrow button and Right arrow buttons, decrease and increase the date respectively.

Figure 22: Date Selection Controls

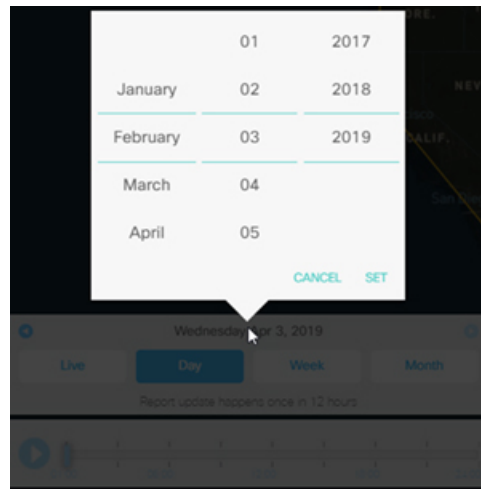


Once a time period is selected, the report gets generated.

2. The controls present on the bottom left of the page can be used to view live, daily, weekly, and monthly data on the map view.

Use the arrow navigation buttons to set the time period. Day selection can also be done using the date-picker control, clicking on the displayed day opens the date-picker.

Figure 23: Day Selection



If any data is present for the selected time frame, the same gets displayed on the map view.

Environment Widget

The detailed view of the Environment Widget displays info similar to Crowd Widget.

Figure 24: Humidity Daily Report

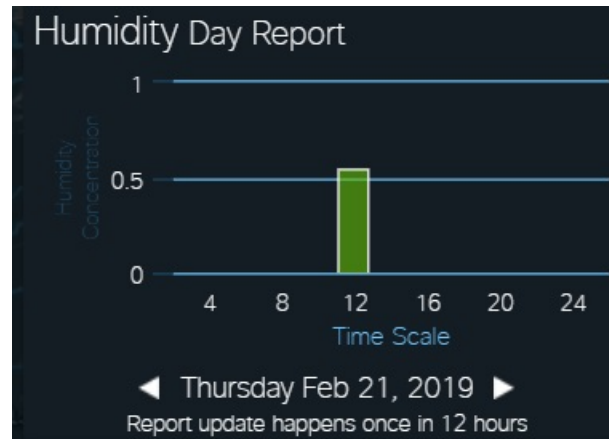


Figure 25: Humidity Weekly Report

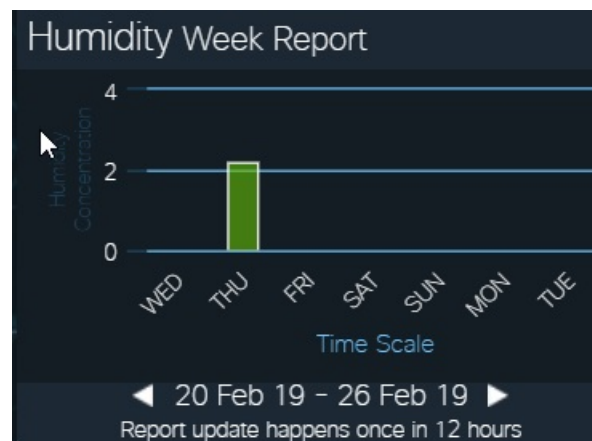
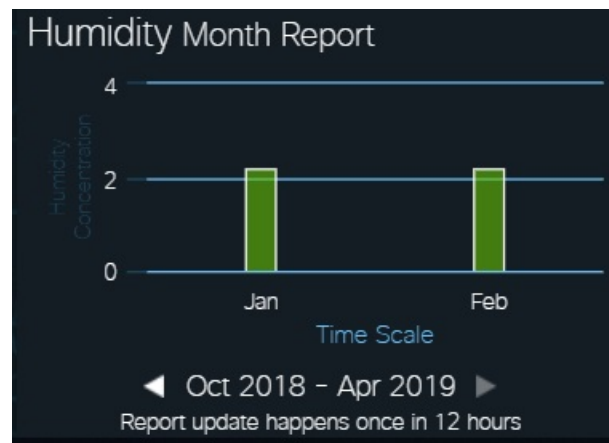


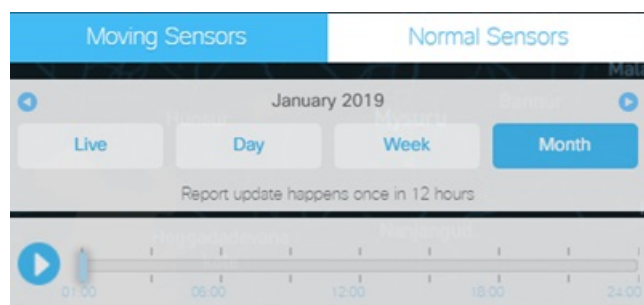
Figure 26: Humidity Monthly Report



The map view of this widget also displays data specific to Moving Sensors and Normal Sensors.

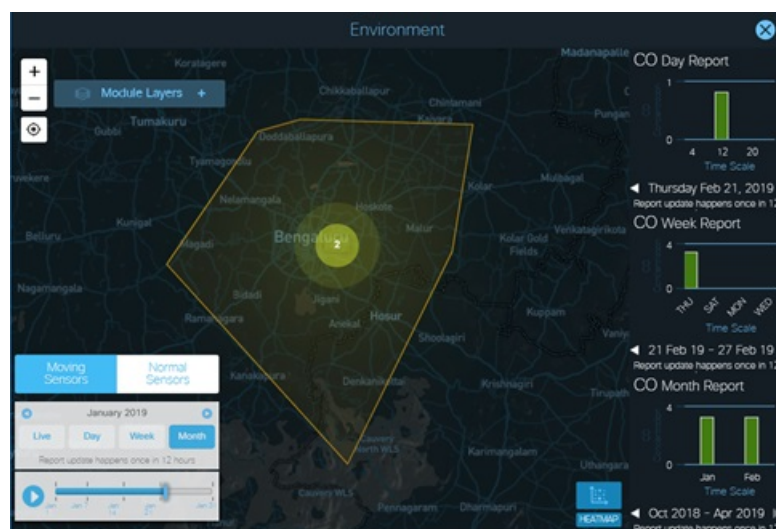
A play button is present on the bottom left corner, clicking on which displays data for various time stamps.

Figure 27: Controls Box on the Map View



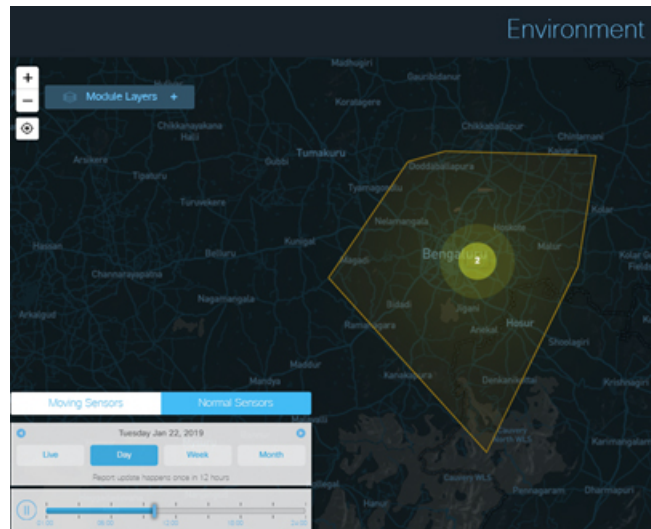
Moving Sensors : Some specific Environment sensor providers also support moving sensors. Select the *Moving Sensors* tab and click on play button. As the progress bar moves, the map view shows the change in data with the movement of the sensors across various regions.

Figure 28: Moving Sensors Data on Map View



Normal Sensors: Select the *Normal Sensors* tab and click on play button. As the progress bar moves, the map view shows the values at different time stamps for the fixed sensors.

Figure 29: Normal Sensors Data on the Map View



Viewing User Details

As an operator, you can view the Name, Phone number, Email id associated with your Username and the various Locations and Roles assigned to you.

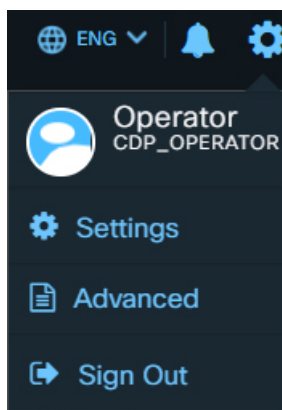
Before you begin

Log into the dashboard; see [Log in to the Dashboard, on page 2](#)

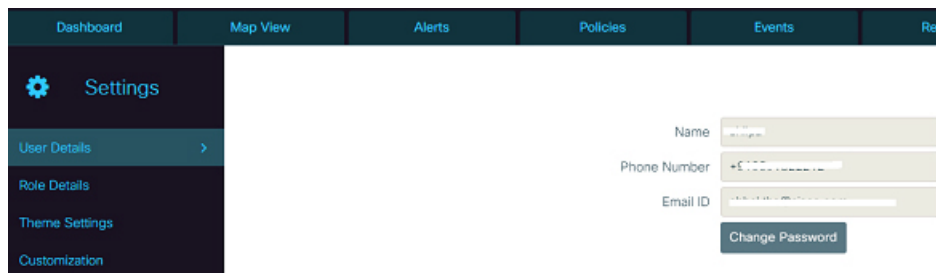
Step 1 Click  on the dashboard banner.

Click **Settings**

Figure 30: Settings Menu



The **User Details** panel appears by default. This page displays the Name, Phone number and Email id present in the system against your User name.

Figure 31: User Details panel

- Step 2** To view the roles and locations assigned to you, click **Role Details** on the left navigation bar of the dashboard. The right hand side panel displays the Roles and Locations assigned to you.


Figure 32: Roles and Locations Details

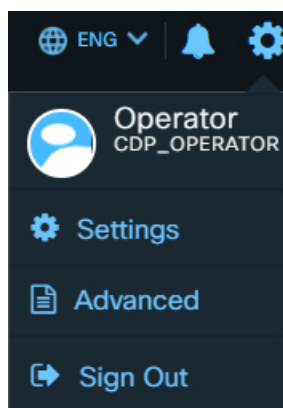
Changing Your Dashboard Theme

You can change the displayed theme using the Theme Settings section of the dashboard.

Before you begin

Log into the dashboard; see [Log in to the Dashboard, on page 2](#)

- Step 1** Click on  in the upper-right corner of the dashboard banner .



Click **Settings**

The **User Details** panel appears by default [Change Your Password, on page 7](#)

Step 2 To apply a theme, click **Theme Settings** in the left navigation bar of the dashboard.

The **Theme Setting** panel appears on the screen.

The panel displays the list of themes available to apply on dashboard. It also displays the existing applied theme on dashboard with name **Current Theme**.

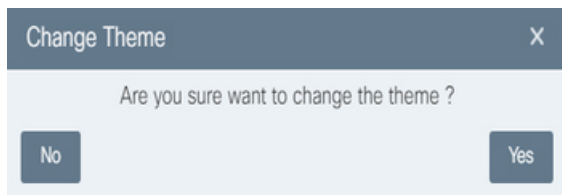
Figure 33: Theme Settings panel



Step 3 Select a **Theme** that you want to apply for your dashboard.

The **Change Theme** dialog box appears.

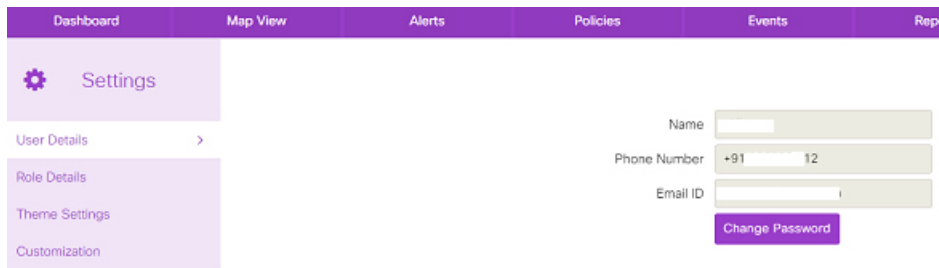
Figure 34: Change Theme



Step 4 Click **Yes**.

The selected theme appears on the dashboard screen. The applied settings are stored locally in web browser's cache and are reset to default values on clearing cache.

Figure 35: View Selected Theme

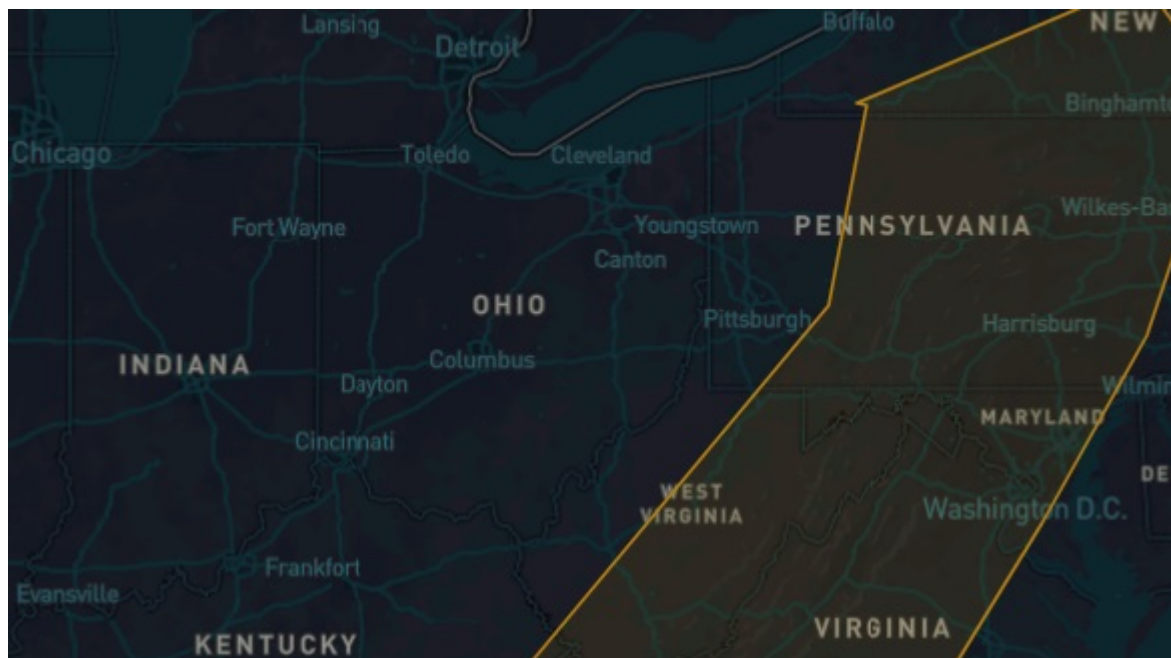


Customizing Map Type, Region, and Updating Config File

Users can customize their own map type, default region, update and download Configuration file using the Customization section of the dashboard. There are two Map types available : 'Mapbox' and 'Esri'.

A Mapbox map type appears as shown below :

Figure 36: View Selected Mapbox Map Type



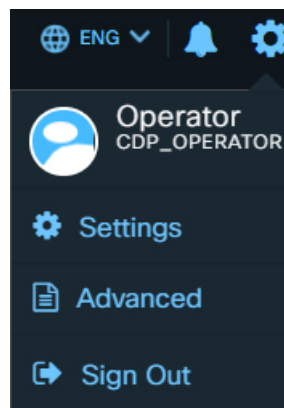
An Esri map type appears as shown below:

Figure 37: View Selected Esri Map type



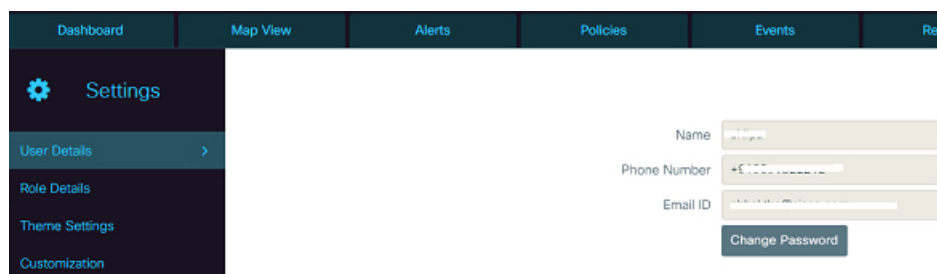
Before you begin

Log into the dashboard; see [Log in to the Dashboard, on page 2](#)



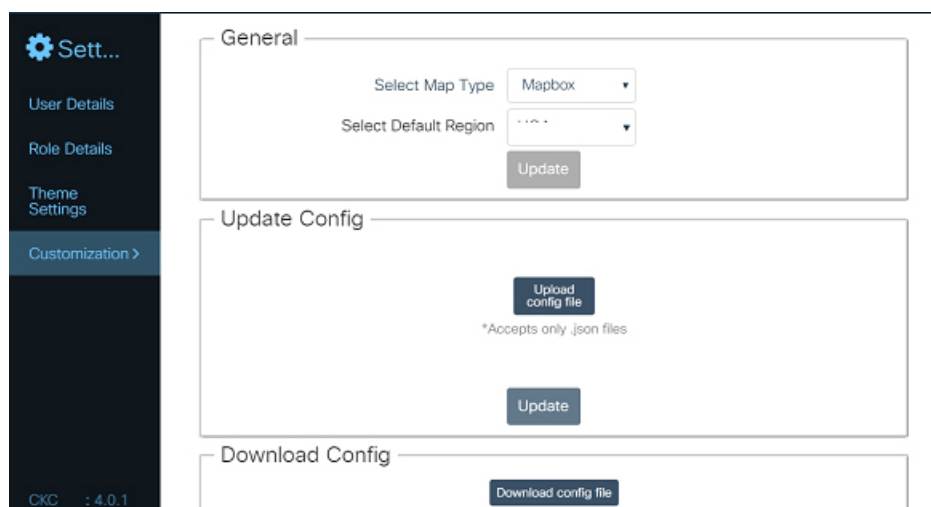
- Step 1** Tap on **Settings** menu item.
The **User Details** panel appears by default.

Figure 38: User Setting Panel



- Step 2** To customize a map type and region, click **Customization** present on the left side menu of the dashboard. The Customization panel opens up as shown below:

Figure 39: General Customization Panel



- Step 3** In the **General** section, select the Map Type and Default Region from the drop-down and then click **Update**. The selected map type will be displayed for selected Default region in Map View. These settings are stored locally in web browser's cache and are reset to default values on clearing browser's cache.
- Step 4** To update config file, go to the **Update Config** section and then browse the .json file that you want to upload. This .json file should contain various parameters for setting max, min, threshold values. In order to see the default config file, you can download the file as mentioned in the step below:
- Step 5** Go to **Download Config** section, click **Download config file**. config.json file containing the existing configuration of the dashboard instance gets downloaded.

Configuring the Modules


You can configure your module using Advanced section of the dashboard. You can change the configuration setting of modules such as threshold values, max and min values of parameters on the Advanced menu. Based

on the units, values and cluster type configured in this section, the module items get displayed on the Map View.

Before you begin

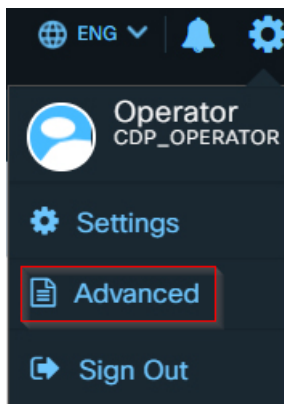
Log into the dashboard; see [Log in to the Dashboard, on page 2](#)

Step 1

Click on  at the upper-right corner of the dashboard banner.

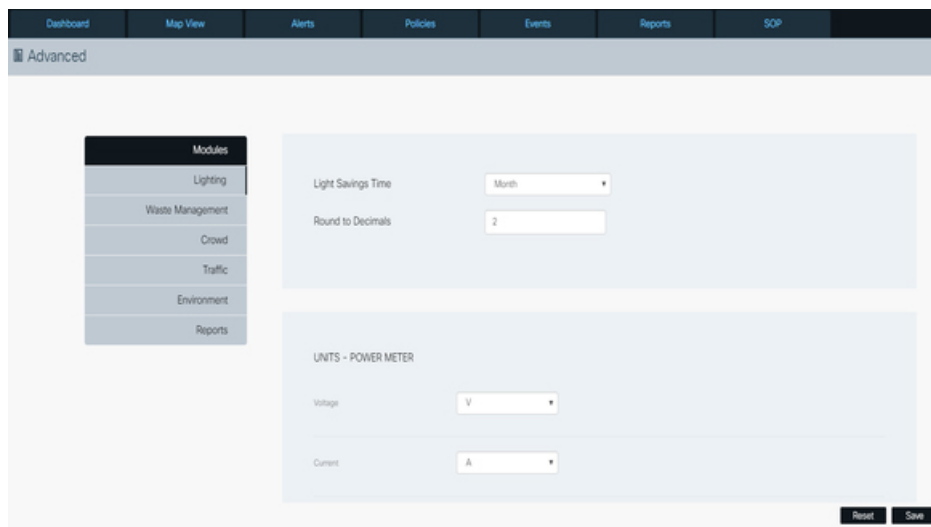
Click **Advanced**

Figure 40: Advanced Menu



The **Advanced** panel opens up Lighting module by default.

Figure 41: Lighting Module Panel



- Select the Light Saving Time in Day, Week, and Month from drop-down.
- Select round to decimals or type the number of decimal places you want to display.
- Select the different units for Power meter as shown below:

- Select unit in **V** and **Add Custom Units** from the **Voltage** drop-down.
- Select unit in **A** and **Add Custom Units** from the **Current** drop-down.
- Select unit in **Kwh**, **Joule**, **Gram Calorie**, and **Add Custom Units** from the **Active Energy** drop-down.
- Select unit in **Kwh**, **Joule**, **Gram Calorie** and **Add Custom Units** from the **Reactive Energy** drop-down.
- Click **Save** to save the configuration for Lighting module or else **Reset** to reset the configuration for Lighting.

The configuration will be updated successfully and notification confirming updated configuration successfully overlays the screen.

Figure 42: Light Module Configuration

Light Savings Time Month ▼

Round to Decimals 2

Success Updated configuration Successfully X

Step 2

To add a custom unit in Power meter, select the **Add Custom Units** from the drop-down. Specify the Unit, Label, and Expression fields and then click **Add units**. The below example shows a new custom unit added for Voltage power meter.

Figure 43: Add Custom Units

UNITS - POWER METER

Voltage + Add Custom Units ▼

Units

Label

The new custom unit will be displayed as **Volt** unit from the **Voltage** drop-down.

Figure 44: Display Custom Units

Voltage

Current

Active Energy

Reactive Energy

Dropdown menu for Active Energy:

- Kwh (selected)
- Joule
- Gram Calorie
- + Add Custom Units

Step 3

To change the configuration setting for **Waste Management** module, click **Waste Management** on the left side of the dashboard

The **Waste Management** panel appears on the right side of the dashboard.

Figure 45: Waste Management Module Panel

Show Waste Spaces ☐ No

WASTE THRESHOLDS

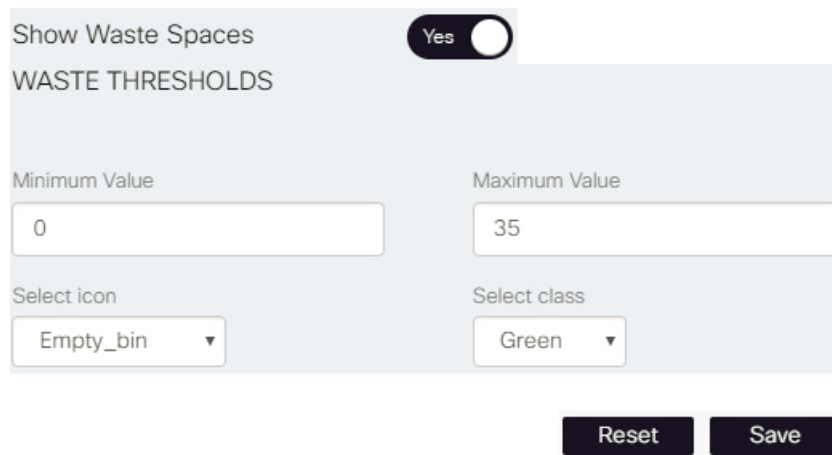
Minimum Value Maximum Value

Step 4

Toggle **Show Waste Space** to *yes* and then specify the field values in the Waste Thresholds section.

- Select **Empty_bin**, or **Halffilled_bin**, or **Fullfilled_bin** from the Icon drop-down and then accordingly choose the color from the class drop-down. for example, you can choose green color from class to indicate the bin is empty, orange color for half-filled bin, and red for full-filled bin.
- Select or type the Minimum Value, Maximum Value, and Round to Decimals to measure the state of waste bin icon.

Figure 46: Waste Management - Configuration



Show Waste Spaces Yes

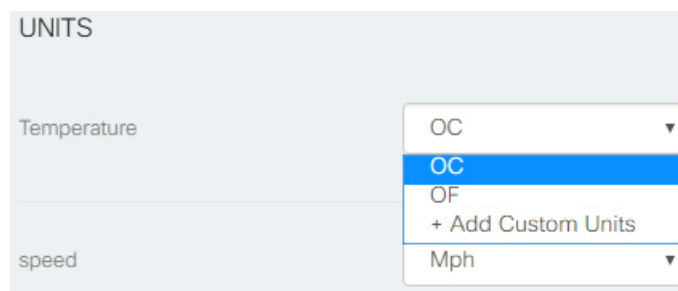
WASTE THRESHOLDS

Minimum Value
 Maximum Value

Select icon
 Select class

- Select the Units from the **Temperature** drop-down to measure the temperature of waste bin.

Figure 47: Waste Management - Units



UNITS

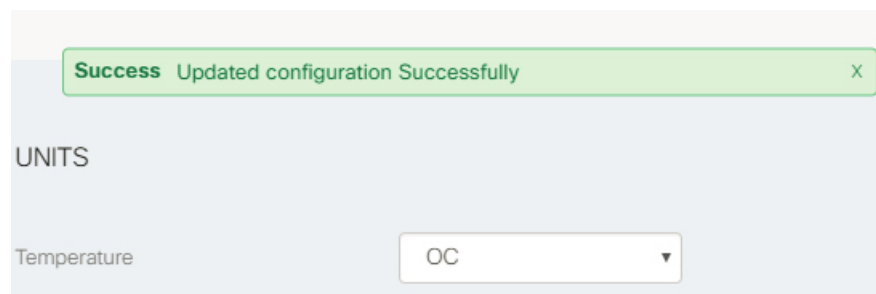
Temperature

speed

- Click **Save** to save the configuration for Waste Management module or **Reset** to change the configuration for Waste Management.

The configuration will be updated successfully and a notification confirming configuration updated overlays the screen. Once these values are successfully configured, these values get reflected in the map view under Map Legend.

Figure 48: Waste Management Configuration



Success Updated configuration Successfully X

UNITS

Temperature

Step 5

To configure the Crowd module, click **Crowd** on the left side of the dashboard. The Crowd panel appears on the right side of the dashboard allowing you to set configuration items for Crowd Items and Crowd Cluster Type Items.

Figure 49: Crowd Module Panel

The screenshot shows the 'CROWD ITEMS' configuration panel. It includes a 'Select Crowd Item' dropdown menu set to 'Crowd Count'. Below it is a 'Description' text field containing 'Live people count'. The panel is divided into three columns for 'Label', 'Report Label', and 'Round to Decimals'. The 'Label' field contains 'CROWD COUNT', 'Report Label' contains 'Crowd Count', and 'Round to Decimals' is an empty field. Below these are 'Warning Threshold' (150) and 'Normal Threshold' (100) fields. To the right is a 'Show Legend' toggle switch set to 'Yes'. At the bottom left is a 'Show this item' toggle switch set to 'Yes', and at the bottom right is a 'Select units' dropdown menu set to 'No Units'.

Step 6

To configure the crowd items for Crowd module:

- Select Crowd Item from the drop-down such as Crowd Count, Vehicle Count, Vehicle Direction, Bicycle Count, Crowd WiFi, etc
- Specify the Description field based on the Crowd Item. for example, description for crowd count is live people count
- Specify Label, Report Label, Round to Decimals, Warning Threshold, and Normal Threshold fields for Crowd Item.
- Toggle the Show Legend and Show this item to Yes to display legend for Crowd Item.
- Select units from drop-down to measure the crowd count.

Step 7

To configure the Crowd Cluster Type Items, select the Crowd Cluster Type from drop-down. The cluster type would determine the item type that you want to see on the Map View.

For example, you can select the **Average value**, **Total value**, or **Sensor count** from the Crowd Cluster Type drop-down. Selecting **Average Value** will display the average value of all the displayed parameter, say Vehicle count, Crowd Count or Device count, Total value will display the total count of the vehicle or crowd whereas sensor count will display the count of sensors.

Figure 50: Crowd Cluster Type Items - Crowd Module

The screenshot shows the 'CROWD CLUSTER TYPE ITEMS' configuration panel. It features a 'Select Crowd Cluster Type' dropdown menu with a list of options: 'Average Value', 'Average Value', 'Total Value', and 'Sensor Count'. The 'Average Value' option is currently selected and highlighted in blue.

The configuration will be updated successfully and a notification confirming configuration updated overlays the screen.

Step 8

To configure the traffic module, select the following Units from drop-down and then click **Save**:

- a) **Inflow**: refers to number of vehicle inflow, you can select the following units from Inflow drop-down such as Number of Vehicles since last minutes, Number of Vehicle since last hours, or Add Custom Units.
- b) **Outflow** : refers to number of vehicle outflow, you can select the following units from Outflow drop-down such as Number of Vehicles since last minutes, Number of Vehicles since last hours, or Add Custom Units.
- c) **Average Speed**: refers to average speed of vehicle, you can select the following units from drop-down to measure average speed such as Mph, Kph, Mps, or Add Custom Units.
- d) **Vehicle Density**: refers to density of vehicle, you can select the following units from drop-down to measure vehicle density such as Vehicles/M2, Vehicles/Mile2, Vehicle/Km2 or Add Custom Units.
- e) **Congestion**: refers to vehicle congestion, you can select Add Custom Units from Congestion drop-down.

Figure 51: Traffic Module Configuration

Step 9

To configure the Environment module, click the Environment module from the left panel of the dashboard. The Environment module panel appears on the right side of the dashboard allowing you to set configuration for Environment Items and Environment Cluster Type Items.

Figure 52: Environment Module Panel

Step 10

To configure the Environment module, toggle the **Show Dynamic Environment Legend** to *yes* and then configure the Environment items:

- Select the parameter from the Environment Item drop-down list such as CO, NO, CO2,NO2, SO2, O3, etc.
- Enter the field description for selected environment item.
- Enter the value in Warning Threshold, Normal Threshold and Round to Decimals fields.
- Enter the Short Name and Long Name for selected environment item.
- Toggle the Show Legend, Show Short Name, Show this Item to yes and then select the Component Type and units from respective drop-down.

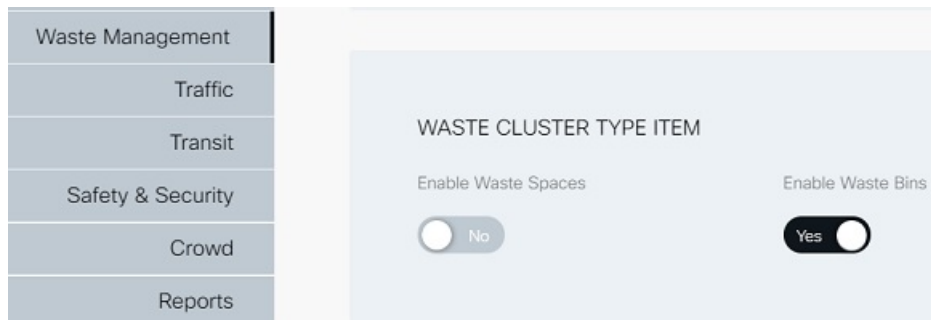
To configure Environment Cluster Type Items, select the Environment Cluster Type Items from drop-down and then click **Save**. For example, you can select the **Average Value**, **Total Value**, or **Sensor Count** from the Environment Cluster Type Items drop-down.

The configuration will be updated successfully and a notification confirming configuration updated overlays the screen. Please note the Start and End values added in this section over write the Warning and Normal Threshold values added above.

Step 11

The sensors can be viewed individually or in clusters on the map view. This can be controlled by enabling/disabling cluster view in the Advanced Settings. Various modules such as Crowd, SnS, Transit, Waste Management, Parking, Lighting, Environment, Fault, and Network Devices provide a toggle button to turn on/off the clustering of items on the map view. The clustering of items is done based on their geographic location.

Figure 53: Enabling/Disabling Cluster



For e.g. In Waste Management, enabling the waste bins cluster will display an assembled view of the bins on the map view and the count of the bins present in the cluster whereas disabling the cluster view will display a dispersed view of the bins on the map view as shown below:

Figure 54: Map View with Cluster Enabled

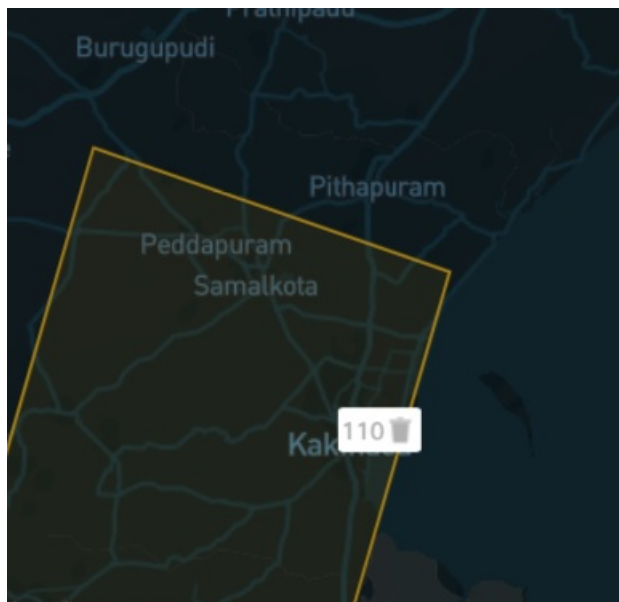
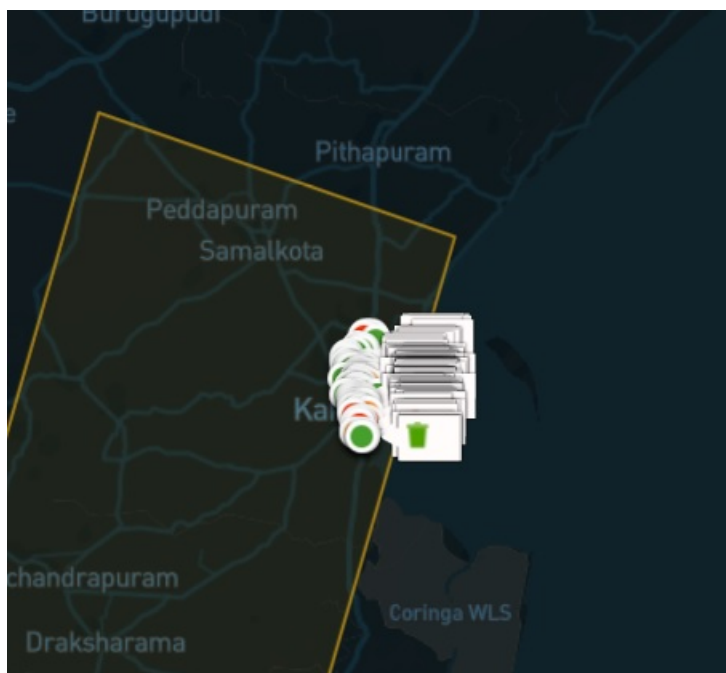


Figure 55: Map View with Cluster Disabled



Note All the Advanced settings changes are stored in the database and applicable for any other operator with the same set of permissions over the same region.

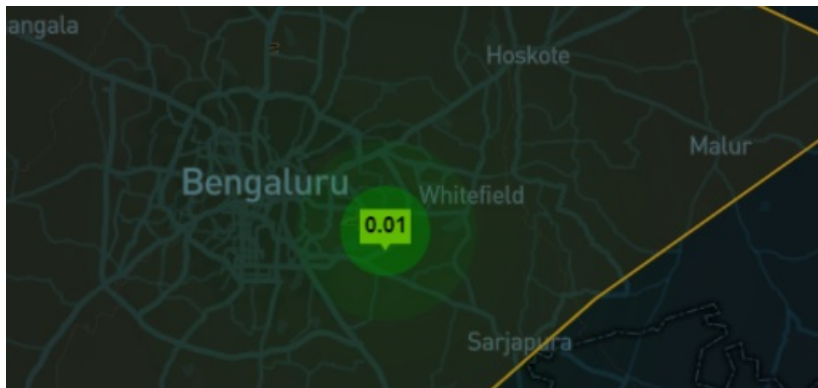
Step 12

The user can change the color of the sensor data text on the map view. In the current version, Crowd, and Environment domains support this feature. The user needs to enter the preferred color in hex code and then save the advanced settings page.

Figure 56: Black Colour Hexcode for Sensor Data

The screenshot shows a configuration interface for the CKC Dashboard. On the left, a sidebar contains navigation tabs: 'Environment' (selected), 'Transit', 'Traffic', and 'Reports'. The main content area is divided into two sections. The top section, titled 'ENVIRONMENT CLUSTER TYPE', contains a label 'Select Environment Cluster Type Item' and a dropdown menu currently showing 'Average value'. The bottom section, titled 'Sensor Text Color', contains a text input field with the value '#000000'.

Figure 57: Sensor Data Text in Black on the Map View



Understanding the User Interface

The CKC Dashboard Web GUI application is also referred to as Dashboard. The application has many navigation tabs such as Dashboard, Map View, Alerts, Policies, Events, Reports, Video Wall.

Upon successful log in, the application displays the Dashboard of your region, which summarizes the overall status of frequently viewed infrastructure features and provides quick access to the latest notifications. The following figure shows the home page of the Dashboard.

Figure 58: Home Page of the Dashboard



• Zoom In / Zoom Out

Change the level of detail that appears in the Map View.

- For more detail, click **Zoom In**. For example, zooming in on a parking lot displays individual parking spots in that lot.
- For less detail, click **Zoom Out**. For example, if you can see individual parking spots, click Zoom Out one or more times to see the icon that represents the parking lot.

Figure 59: Zoomed In Map view

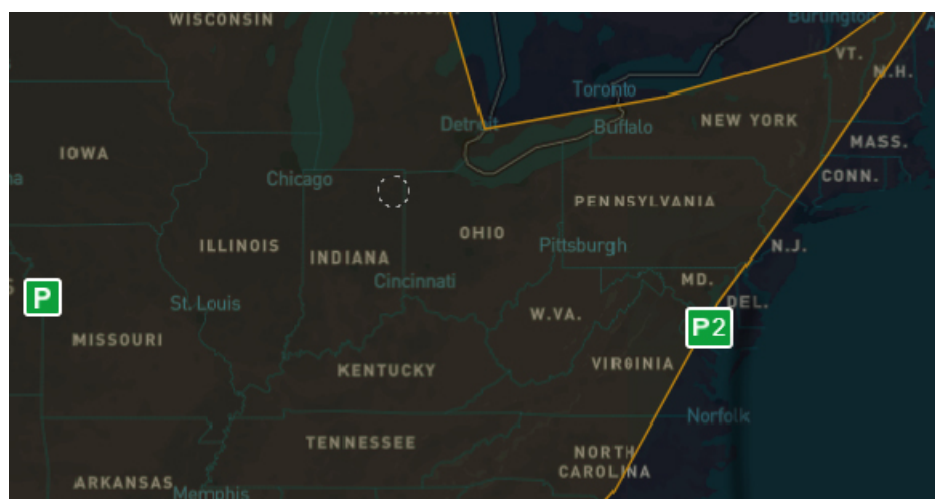
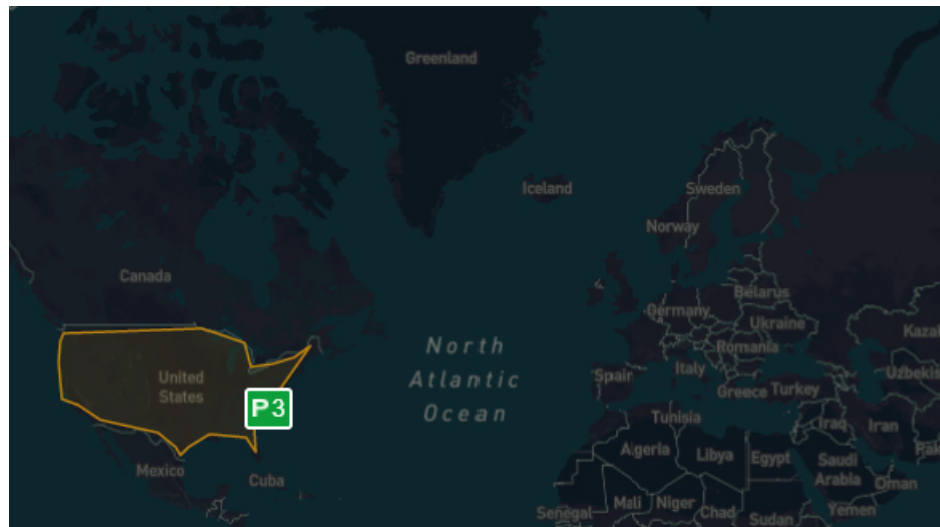


Figure 60: Zoomed Out Map View



- **Region Selector** drop down

Displays the name of the region that appears in the Map View. To view a different region, type the first few letters of its name in the Region Selector, choose a region from the list that appears, and then hit the Enter key.

Named regions facilitate management of smart infrastructure. A region is a geographical area that has specific boundaries. An administrator can create multiple regions within a city and can assign Operators to each region. If you are an operator, the Region Selector displays only regions to which you are assigned.

- **Dashboard Tabs**

The following tabs allows you to apply policies, view the status or values and reports of the different infrastructure modules that you select. The tabs are displayed according to your assigned role:

- **Dashboard:** Displays the summarized overall status of frequently viewed infrastructure features and provides quick access to the latest notifications, profile settings, and region selector.
- **Map View:** Displays information of the selected infrastructure modules for a selected region. For more information, see [Using the Region Map, on page 39](#).
- **Alerts:** Displays the alert information for different modules. For more information, see [Alerts: System-Actionable Incidents, on page 132](#)
- **Policies:** Depending on Read, Write permissions configured for the assigned role, the user can use this tab to create and apply a certain set of rules that control smart infrastructure. For more information, see [Policies Page, on page 83](#).
- **Events:** Allows the user to create cross domain action when any set condition is met. For more information, see [Events , on page 113](#).
- **Reports:** Provides options for generating and viewing reports from the data that the smart infrastructure collects. For more information, see [Reports, on page 141](#).
- **SOP:** Provides options for defining work flow for an incident, create an instance and task. For more information, see [Workflows, on page 159](#)

- **Video Wall:** Provides live feeds from cameras placed at various locations. For more information, see [Video Wall, on page 181](#)

Figure 61: Dashboard Navigation Tabs

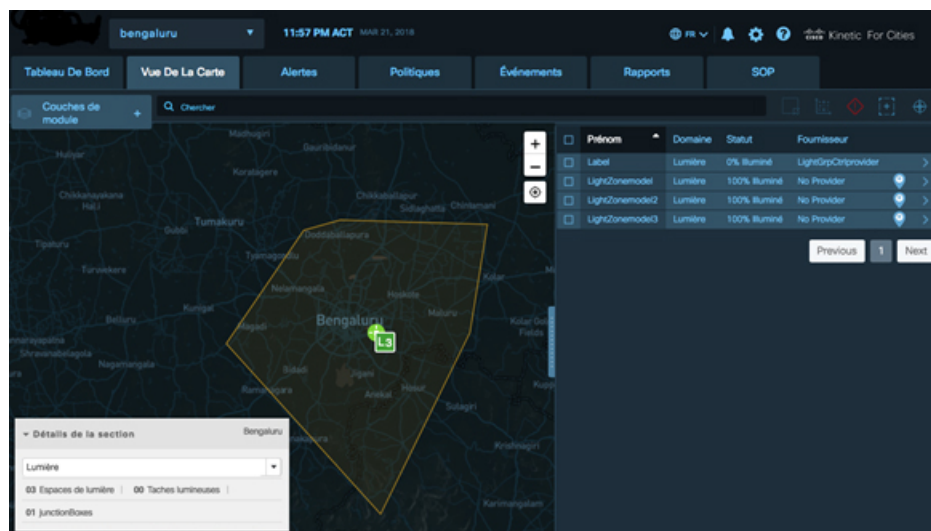


• Notifications

Real-time informational notices, alerts, and other activity feeds from individual sensors, such as, parking spots, lights, and so on. When unread notifications are present, the Notifications icon bears a numeral that indicates the number of unread notifications. Notifications can be browsed or searched. Informational notifications cannot be acted upon within the system, but for alerts, such as, parking violations are actionable within the system. For more information, see [System Messages: Notifications, Alerts and Alarms, on page 131](#)

- **Internationalization/Localization** You can change the language in which you want to view the dashboard using the option. You can switch between English and French languages in the current version. The applied localization changes are stored locally in web browser's cache and reset to default values on clearing browser's cache.

• Figure 62: Localization Support

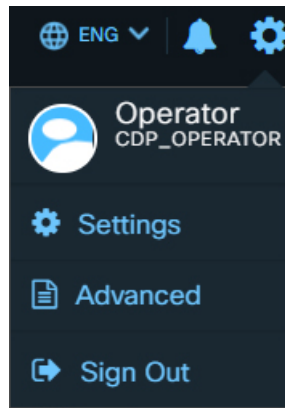


Settings

Displays the **Name and Role of the logged-in user**, and provides **Settings**, **Advanced** and **Sign Out** options. To open the **User Menu**, click that appears at the upper right corner of the dashboard.

- **Sign Out:** Ends your dashboard session.
- **Settings:** Provides access to user details, role details, including the ability to change your own login password, theme setting and customize map type and upload configuration file.

Figure 63: User menu



- **Advanced**

Enables logged in user to customize various modules such as Lighting, Traffic, Crowd, Environment by specifying the max, min, threshold values.

- **Module Layers**



Note All the Modules that the dashboard supports may not be available to you. Only the modules or domains that an administrator has configured for operator role of the tenant will be available.

Cisco Kinetic for Cities dashboard supports the following modules or domains:

- **Parking**

Parking lots and individual parking spots, occupancy metrics, violations and violation metrics, parking fares, parking policy features.

- **Lighting**

Locations and status of streetlights, energy-consumption metrics, lighting policy features.

- **Environment**

Live weather conditions (temperature, clouds, wind, humidity), air quality, and the daily, weekly, monthly reports can be generated.

- **Urban Mobility**

Live vehicle, crowd and devices count, and the daily, weekly, monthly reports, Color-coded streets that indicate traffic flow can be viewed.

- **Waste Management**

Waste bins, waste spaces, waste type and waste bin summary status such as provider name, temperature, last collected and last updated details can be viewed.

- **Safety and Security**

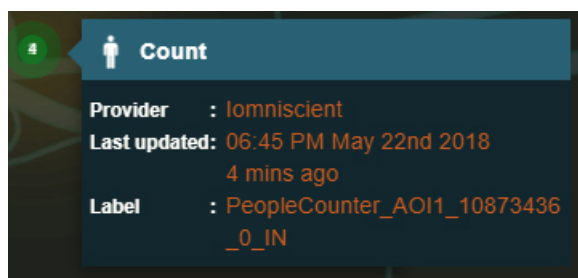
Camera health, citizen alert, person identified, fire and smoke detection, Live video feeds can be seen.

- **Network Devices**

The user can view the status of the routers on the Map View. The alerts related to the devices can be seen and action can be taken on the same.

The following figure shows the dashboard view of the Crowd module. You can also see dashboard view for other crowd parameters such as crowd direction, vehicle count, vehicle direction, WiFi (WiFi device count), dwell time, device path analysis, and trace analysis.

Figure 64: Crowd Count display on Map View





CHAPTER 2

Using the Region Map

- [Displaying the Region Map, on page 39](#)
- [Enabling or Disabling Module Output in Map View, on page 39](#)
- [Getting Details from Map View, on page 43](#)

Displaying the Region Map

Any user can view the region map, which is also known as Map View. When you log in to the Cisco Kinetic for Cities Dashboard, it displays the Dashboard page by default. To navigate to the region map, take the following steps.

Before you begin

Log in to the Cisco Kinetic for Cities Dashboard Web GUI.

-
- Step 1** Choose **Map View** in the Cisco Kinetic for Cities Dashboard banner. The **Map View** page displays the region map. For more information, see [Understanding the User Interface, on page 33](#).
- Step 2** Enable output from available modules as necessary. See [Enabling or Disabling Module Output in Map View, on page 39](#).
- Step 3** Zoom to vary the level of detail displayed. See [Getting Details from Map View, on page 43](#).
-

Enabling or Disabling Module Output in Map View

Selecting a module causes its sensors and data to become available in Map View. Deselecting a module removes its sensors and data from Map View.



Note

Deselecting a module does not deactivate it. Smart infrastructure always reports data to the system and it always enforces active policies, regardless of whether you choose to view output from a particular module.

Before you begin

You must be logged in to the Cisco Kinetic for Cities Dashboard Web GUI.

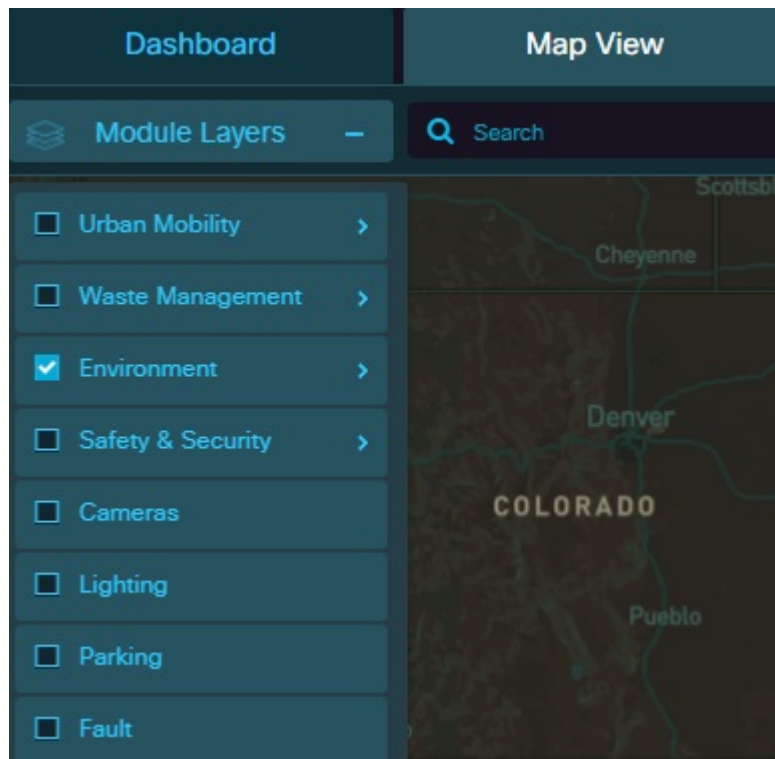
Step 1 Click **Map View** tab located in the top navigation bar of the CKC dashboard.

The **Map View** page appears.

Step 2 Click **Module Layers** at the upper- left corner of **Map View**.

The module selector displays installed modules that your role permits you to access.

Figure 65: Module Selector



Step 3 Select modules to be viewed and deselect modules to hide.

- **To select a module**, select check box corresponding to the module. Selecting a module makes it available in the **Map View**.

- **To deselect a module**, clear the check box corresponding to the module you want to deselect. Deselecting a module makes it unavailable in **Map View**.

For example, selecting the **Parking** module makes parking lots, parking spaces, parking violations and parking notifications/alarms visible in **Map View**. When the **Parking** module is not selected, these items do not appear in **Map View**.

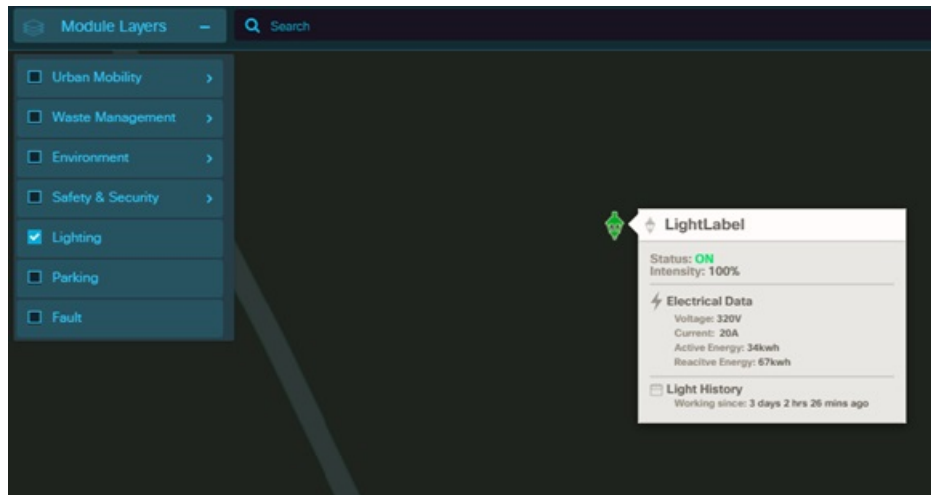
Step 4 To hide the **Module Selector**, click on expanded **Module Layers** to collapse it.

Step 5 Select any module by selecting the check box and keep zooming in.


For example, selecting the **Lighting** module and zooming in displays Light sensors and hovering over it, shows the summary details such as current status of the sensor, the intensity of the sensor, the electrical data being consumed by

the sensor such as Voltage, Current passing through, Active Energy and Reactive energy, the time duration for which the light sensor has been active.


Figure 66: Lighting node showing power consumption



Step 6

To visualize the data density on the map view in color-coded format, you can use the Heat Map  feature.

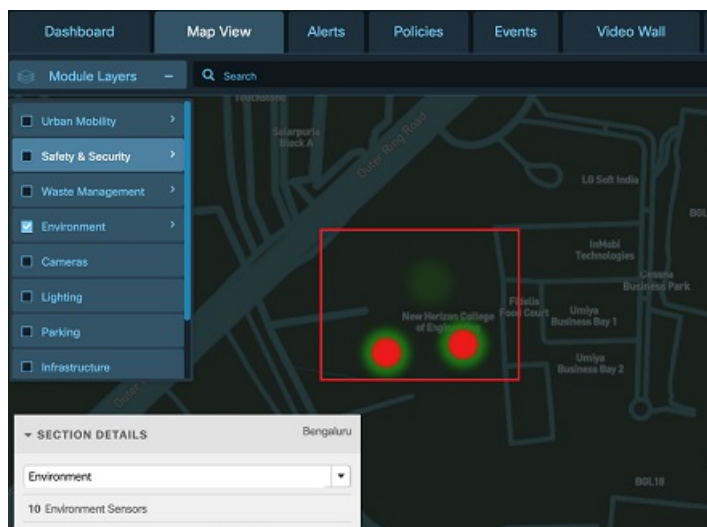
The color of the heat map can help in identifying the area with the maximum concentration. E.g. Select Environment->

Ozone, click . If the area appears green, the area has low value/concentration of ozone, if the colour of the area appears red, it indicates that the aggregate value of the ozone concentration is high. This could be due to the presence of large number of sensors, or a single sensor with a high value of ozone concentration.


In the figure below, there are 10 sensors on the map view. These are indicated by three heat map icons.

There are 8 sensors with value 2.2 each (located at same latitude/longitude), 1 sensor depicted in light green has value 2.2, and 1 sensor indicated in red colour has a high value of 1000.

Figure 67: Heat Map for a Region




Step 7

To select multiple sensors at one go, select the module and then click the **Selection Tool**  button at the upper right corner of the dashboard. Now click and drag the cursor to form a rectangle. The selected sensors fall under the rectangle.

For example, select the Waste Management module and then click the Selection tool which highlights the selected region.

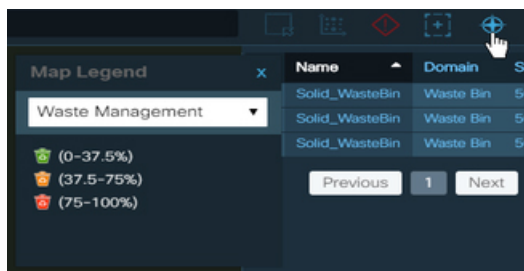
Step 8

To view Map Legends for a module, select the module and then click the **Map Legend**  at the upper right corner of the dashboard.

The legends button is available for following modules: Safety and Security, Waste Management, Parking, Lighting and Fault.

For example, selecting the Waste Management module and then clicking the Map Legend will display the color code for various fill levels of the Waste Bin.

Figure 68: Map Legend for Waste Management

**Step 9**

To highlight the entire region on the map view, click **Select Region**  button in the upper right corner of the map view.

For example, while viewing the region map for Spain region, if you click on **Select Region** button, the entire region appears highlighted on Map View.

Figure 69: Selected Region



Step 10

Select Parking module and click on Parking View  button to see all Parking Violations on map view.

What to do next

Use **Map View** to view information of the selected modules.

Getting Details from Map View

You can retrieve additional details from items in Map View by selecting them, by zooming to control the level of detail that Map View displays, and by browsing alerts and notifications that appear under the Notifications icon.

Selecting Items for Summary Information

Map View displays summary information about the current selection automatically.

- Single-click an icon to select it.

Selecting an item highlights it and displays additional information about the selection. For example, selecting a Light icon displays a banner that summarizes the Light status and provider information.

- To deselect a highlighted item, click it again. The summary banner updates as necessary to display information about the changed selection. When no items are selected, the banner disappears.
- Double-click an individual item to display details.

For example, if you double-click a parking lot, the individual parking spaces appear. Similarly, if you double-click a lighting group, the individual lighting sensors appear.

Zooming to Control the Level of Detail

You can use the Zoom In and Zoom Out controls to change the level of detail that Map View displays. Please refer [Understanding the User Interface, on page 33](#)

Cameras display on Map View

Selecting the domain as 'Cameras', displays all the cameras that are present in the region, these could be Video Wall cameras streaming live feeds, Safety cameras placed to monitor objects.

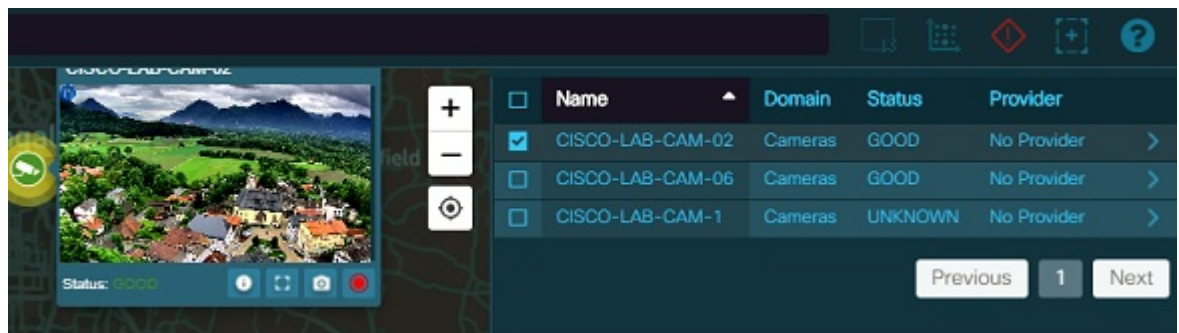
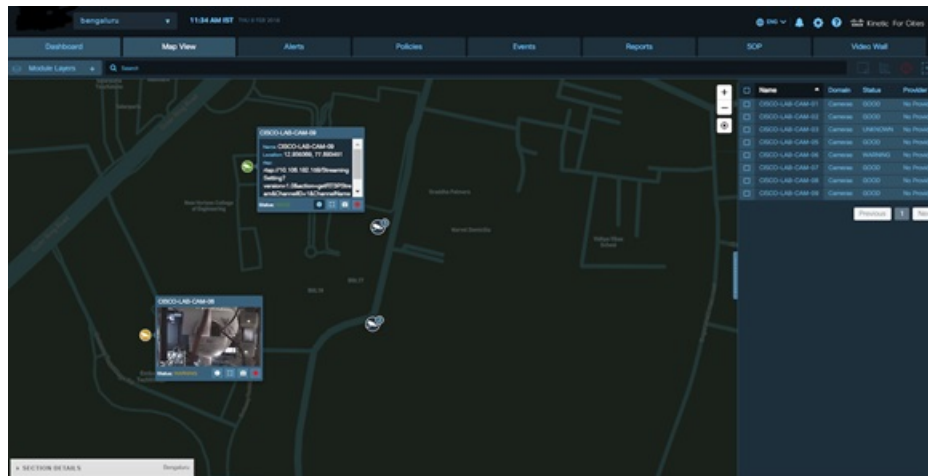
Below figure displays Map view with different cameras where green, orange and blue indicate the condition of camera as "good, warning and unknown" respectively. The right side of the split view screen lists out cameras' status and provider details.

Hovering on any icon shows a high level overview of the camera details with several options.

Clicking on cross button on top right corner closes the window.

For more details on actions that can be performed on displayed feeds, see section on video wall [Using Video Wall Section, on page 181](#)

Figure 70: Cameras on Map View



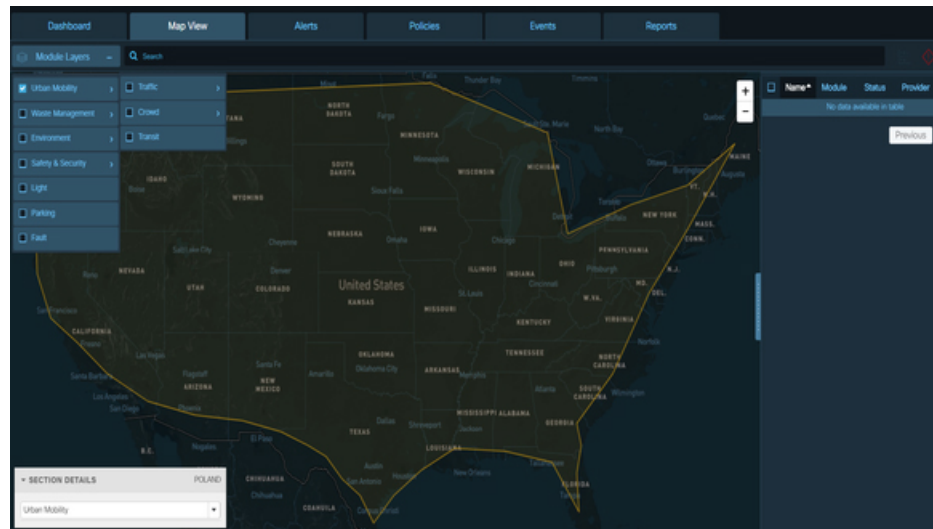
Getting Urban Mobility Information from Map View

Urban Mobility displays map view for the following modules:

- Traffic
- Crowd
- Transit

To view Map View for **Urban Mobility**, click **Map View**> **Module Layers**>**Urban Mobility**

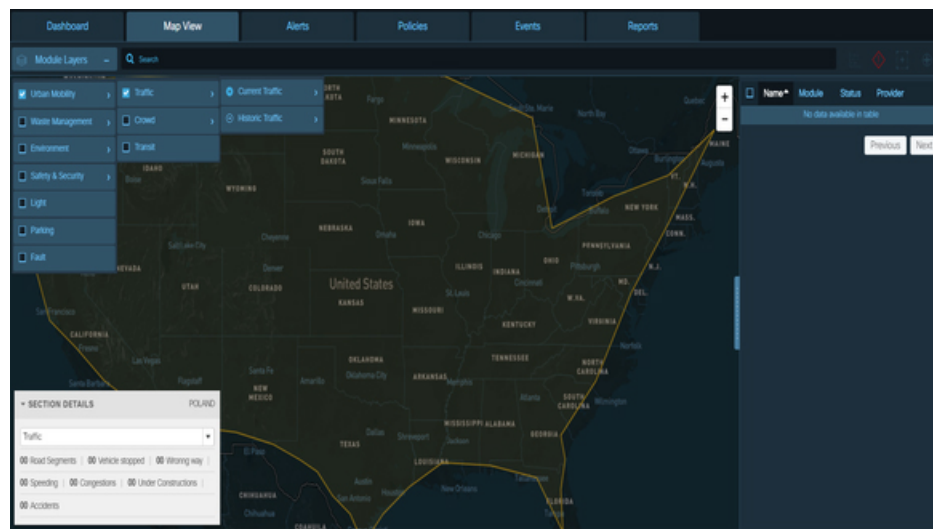
Figure 71: Urban Mobility - Map View



Getting Traffic Information from Map View

The **Traffic Map View** displays the traffic network of the geographical area. When the **Traffic** Module is selected, by default the **Current Traffic** radio button is enabled. However, you can also view traffic map based on traffic historic data. For information on Traffic Parameter, see [Configuring Traffic Settings in the Traffic Details Panel](#), on page 50

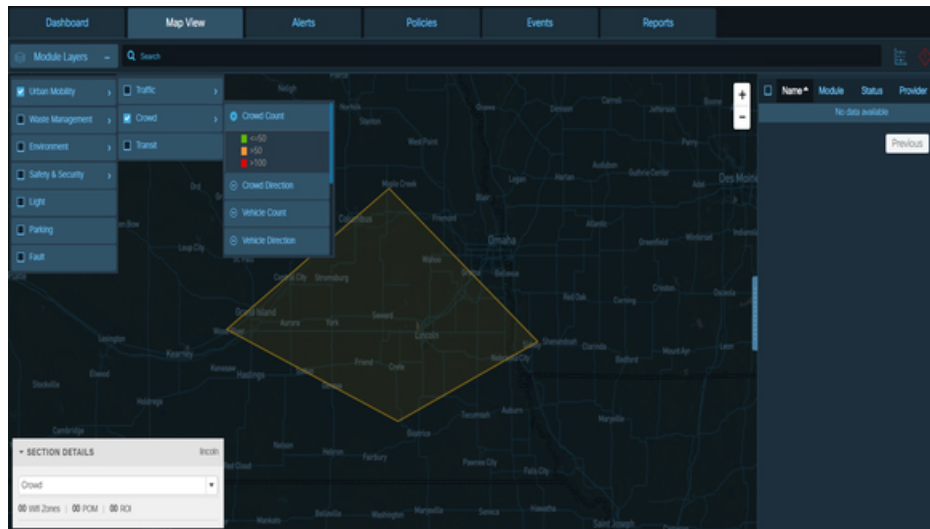
Figure 72: Traffic Map View



Getting Crowd Information from Map View

When the **Crowd** module is enabled, Map View displays the crowd parameters, and the corresponding overlays that indicate the people, direction, vehicle, or device count as per the selected parameter. By default, the Crowd Count parameter is selected, which displays the people count at a given location. For information on Crowd Parameters, [Viewing Crowd Parameter Details](#), on page 57

Figure 73: Crowd Map View



Getting Transit Information from Map View

When the **Transit** module is enabled, Map View displays the transit routes and indicates the details of the vehicles on the route such as vehicle status, vehicle speed, vehicle registration number, route name, current stop, route schedule, etc. For information on Transit Parameter, see [Viewing Transit Parameter Details, on page 59](#)

Displaying the Traffic Details Panel

When the **Traffic** module is enabled, any user can view the **Traffic Details** panel in **Map View**.

Before you begin

Log in to the Cisco Kinetic for Cities .

-
- Step 1** Click **Map View > Module Layers>Urban Mobility** on the Map View. The **Map View** page displays the region map. For more information, see [Understanding the User Interface, on page 33](#).
- Step 2** If the **Traffic Details** panel does not appear in **Map View**, enable the **Traffic** module. See [Enabling or Disabling Module Output in Map View, on page 39](#).
- Step 3** Click the + button on the **Traffic Details** panel to expand and view the zoomed in details.
- You can now configure the display of traffic details and zoom as necessary to view those details. For more information, see [Configuring the Traffic Details Panel, on page 49](#).
-

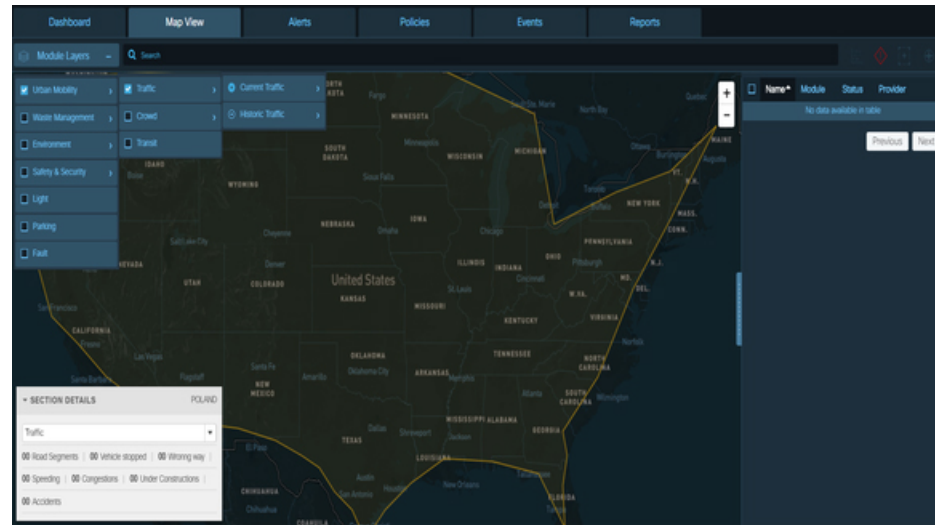
Getting Traffic Information from Map View

When the **Traffic** module is enabled, a variety of traffic information is available on Map View, such as traffic flow, traffic incidents, route analysis and drive times.

Traffic Details Panel

The **Traffic Details** panel appears in Map View when the **Traffic** module is enabled. You can use the **Traffic Details** panel to control the kinds of traffic-related information that **Map View** displays. The **Traffic Details** panel specifies whether **Map View** displays current or historical Traffic and Incident data. All other traffic sensors provide current data in real time.

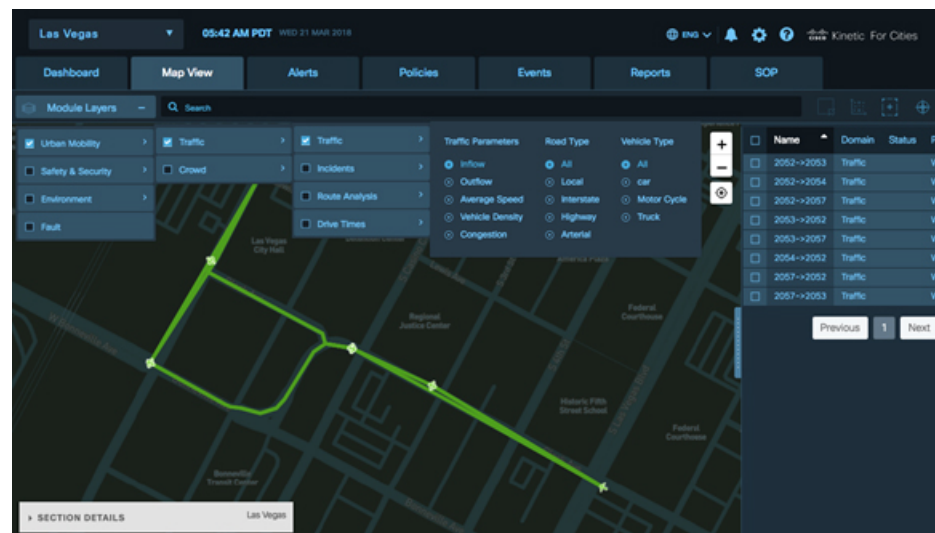
Figure 74: Traffic Details panel



Traffic-Flow Visualization

The **Traffic** section of the **Traffic Details** panel controls the **Map View** display of traffic-flow visualizations like the examples in the following figure.

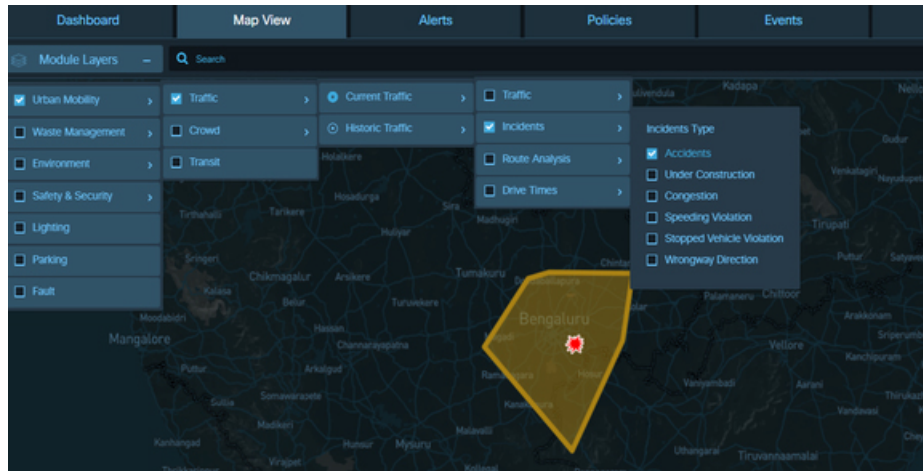
Figure 75: Visualization of traffic flow in Map View



Traffic Incident Visualization

The **Incidents** section of the **Traffic Details** panel controls the **Map View** display of icons that represent traffic incidents such as accidents, road construction, traffic congestion, speeding violation, stopped vehicle violation, wrong way direction.

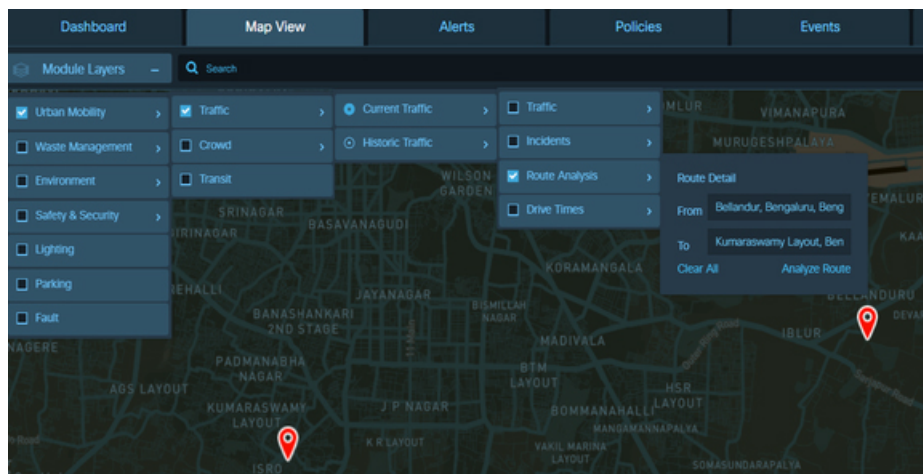
Figure 76: Visualization of traffic incidents in Map View



Route Analysis Visualization

The **Route Analysis** displays the traffic-flow visualizations for the route between a specific departure point and destination.

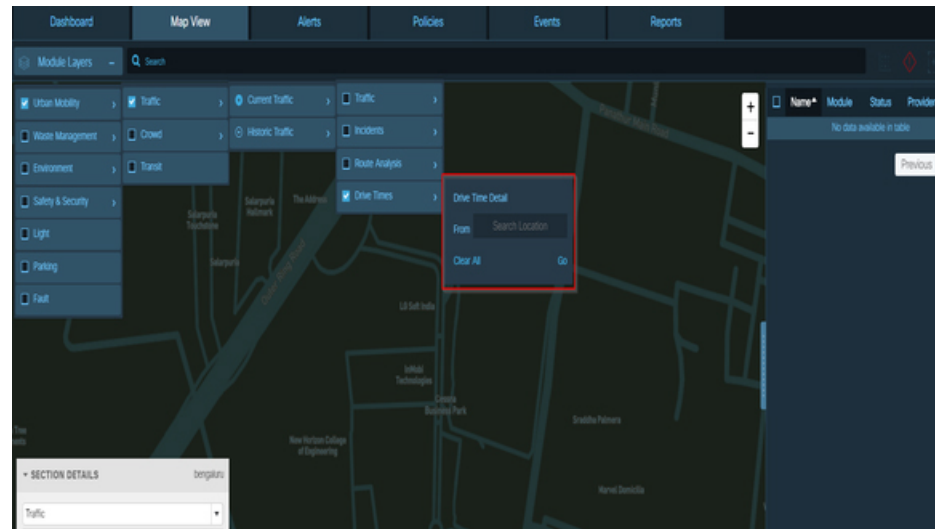
Figure 77: Visualization of route analysis in Map View



Drive Times Visualization

The **Drive Times** displays visualizations of driving times from a specific departure location to other areas of the region map.

Figure 78: Visualization of drive times in Map View



Configuring the Traffic Details Panel

Expanding the **Traffic Details** panel provides access to controls that you can use to configure the display of current or historical traffic-related data in **Map View**.

Before you begin

Enable the **Traffic Details** panel; see [Displaying the Traffic Details Panel, on page 46](#)

Step 1

To expand the **Traffic Details** panel, click the **Urban Mobility > Traffic**. The following controls appear:

Traffic: Enables or disables the display of traffic data that is selected according to user-configurable parameters such as kinds of traffic flow, kinds of roads and kinds of vehicles.

Incidents: Enables or disables the display of incident data that is selected according to user-configurable parameters such as accidents, construction zones, traffic congestion, speeding violation, stopped vehicle violation, and wrongway direction .

Route Analysis: Enables or disables the display of color-coded traffic-flow information on the route between a specific starting location and a specific destination.

Drive Times: Enables or disables the display of a color-coded "heat map" showing the distance that can be traveled from a user-specified starting location within various periods of time.

Step 2

Enable or disable any of the **Traffic**, **Incidents**, **Route Analysis** or **Drive Time** panels according to your informational needs.

The **Map View** updates in real time to reflect your current choices. When you enable a panel, it selects data according to the user settings associated with the panel; if the panel has not been used previously, it uses default settings. For more information see the following:

Configuring Traffic Settings in the Traffic Details Panel

You can change **Traffic** settings in the **Traffic Details** panel to specify criteria that traffic data must meet in order to be displayed in **Map View**. Such criteria include kinds of traffic flow, kinds of roads and kinds of vehicles that generate the raw data to display.

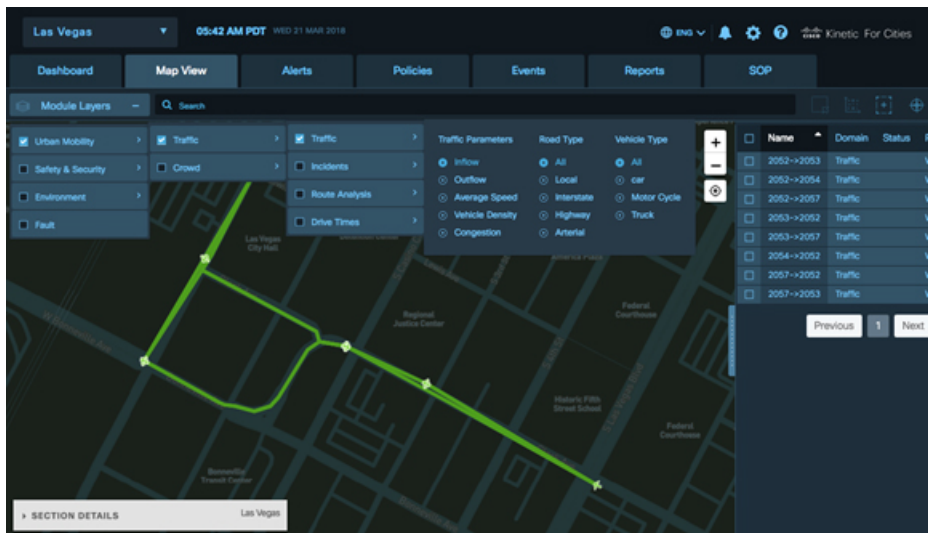
Before you begin

Log in to the Cisco Kinetic for Cities in the Operator role.

Step 1 Click **Map View>Urban Mobility>Current Traffic>Traffic**.
The Traffic panel appears.

For more information, see [Enabling or Disabling Module Output in Map View](#), on page 39

Figure 79: Traffic Panel

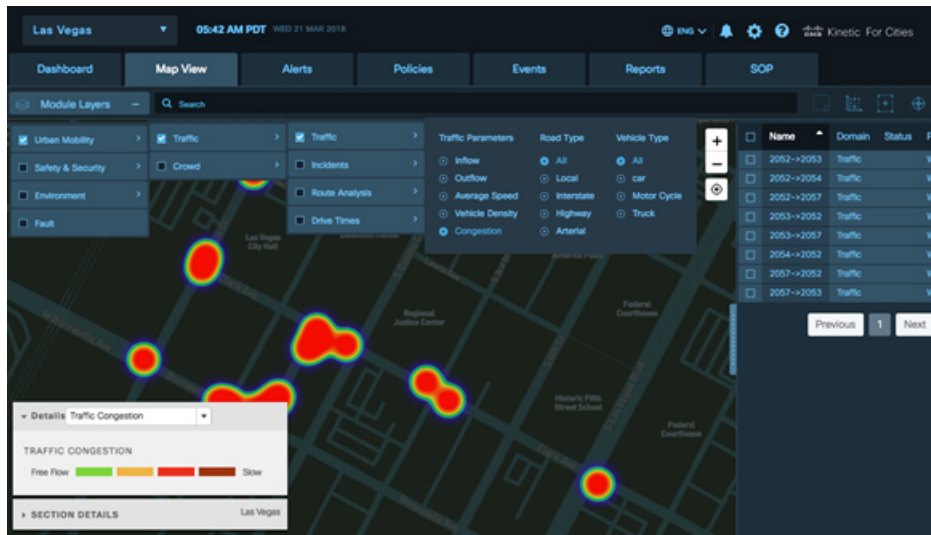


Step 2 To view **Traffic** map view, select radio buttons to specify the kinds of traffic data to display. You can choose only one button at a time from each of the following categories.

• Traffic Parameters	Inflow, Outflow, Average Speed, Vehicle Density, Congestion
Classification of Road:	All, Interstate, Arterial, Highway, Local
Vehicle Classes	All, Car, Motor Cycle, Truck.

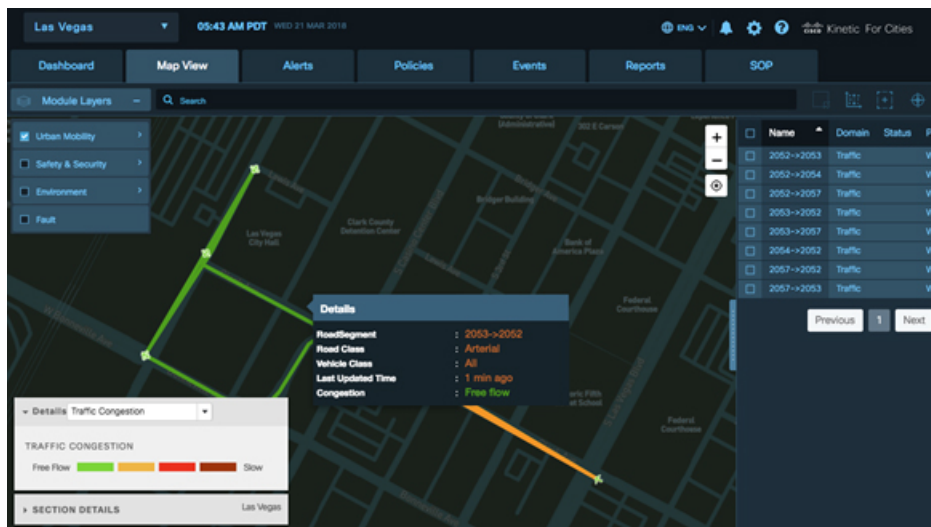
The Traffic Segment map view appears based on the selected traffic parameter, which displays Road Segment, Vehicle Stopped, Wrong Way, Congestion, Under Constructions, and Accidents. Below image displays Traffic Congestion at various locations.

Figure 80: Traffic Congestion View



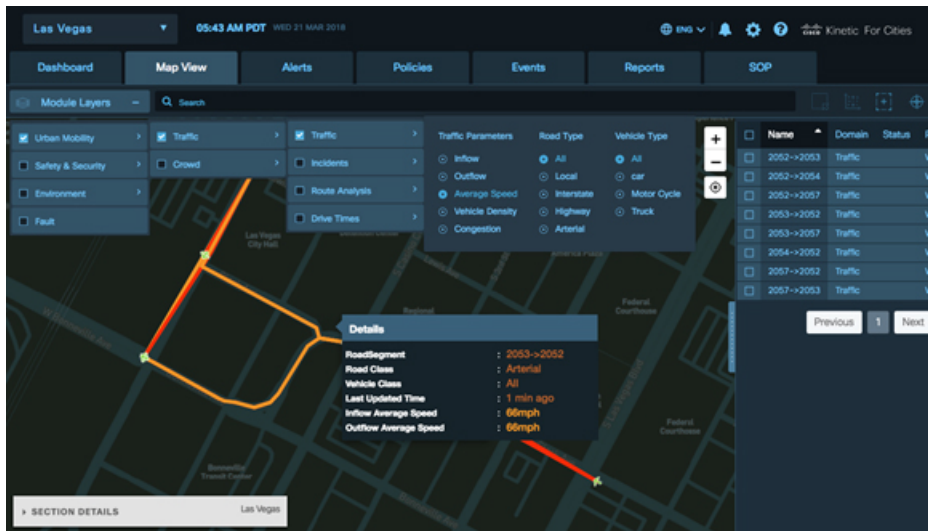
Green color legend indicates Free flow traffic whereas Orange, Red and Brown indicate slow, slower and slowest traffic respectively. Hovering the mouse over any section of the Traffic segment displays details about Road Segment, class, Vehicle class, Last Updated Time and Congestion type.

Figure 81: Traffic Congestion - Legend



Step 3 Select the Traffic Parameter as "Average Speed" and hover the mouse over any segment. This displays the average speed of vehicles.

Figure 82: Average Speed of Vehicles

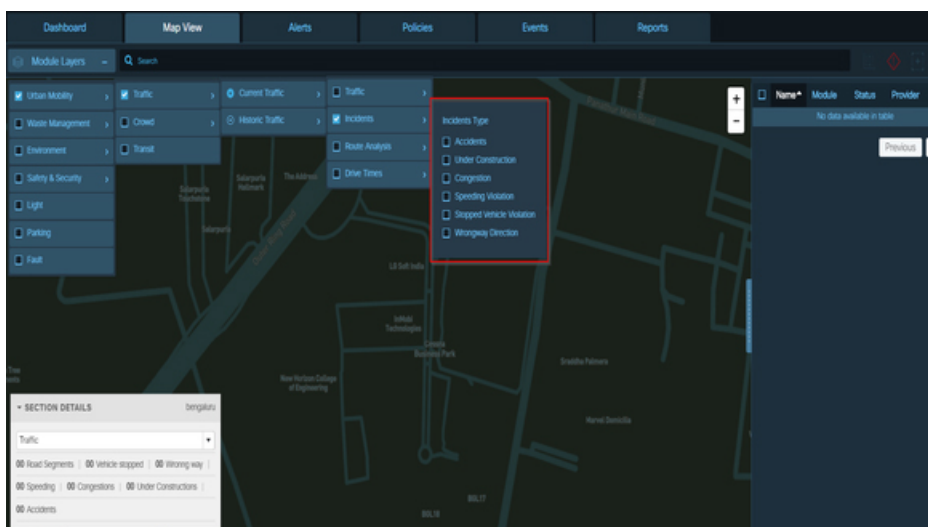


Configuring Incidents Setting in the Traffic Details Panel

You can view **Incidents** parameter in the **Incidents Type** to specify the kinds of traffic incidents that Map View displays, such as traffic accidents, under construction zones, areas of traffic congestion, speeding violation, stopped vehicle violation, and wrong way direction.

- Step 1** To view traffic map based on Incident Type, click **Map View > Urban Mobility > Traffic > Current Traffic > Incidents > Incidents Types**. The **Incidents Type** appears.

Figure 83: Traffic Map View - Incidents



- Step 2** Select check boxes to specify the kinds of incidents to display.

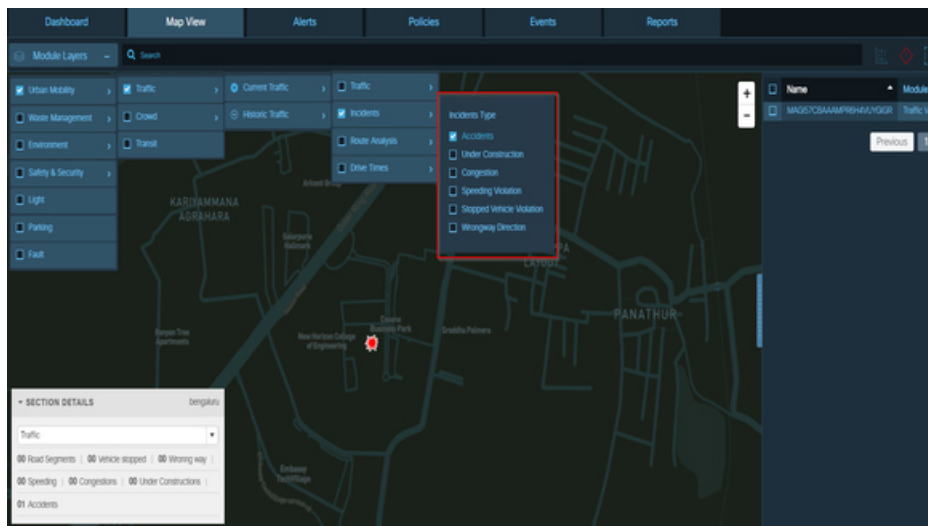
You can select as many of the following categories as you prefer.

• Accidents	Traffic accidents
Under Construction	Construction zones
Congestion	Traffic traveling below the posted speed limit for reasons other than an accident or a construction zone.
Speed Violation	Speed violation, such as vehicle exceeding the speed limit in traffic.
Stopped Vehicle Violation	Non-moving violation of vehicle in traffic.
Wrongway Direction	Moving of vehicle in a wrong direction traffic.

To reset the parameters panel to its default state, click **Clear All**

The selection state of the check box changes to reflect your choices. When an item is selected, a checkmark appears in its check box.

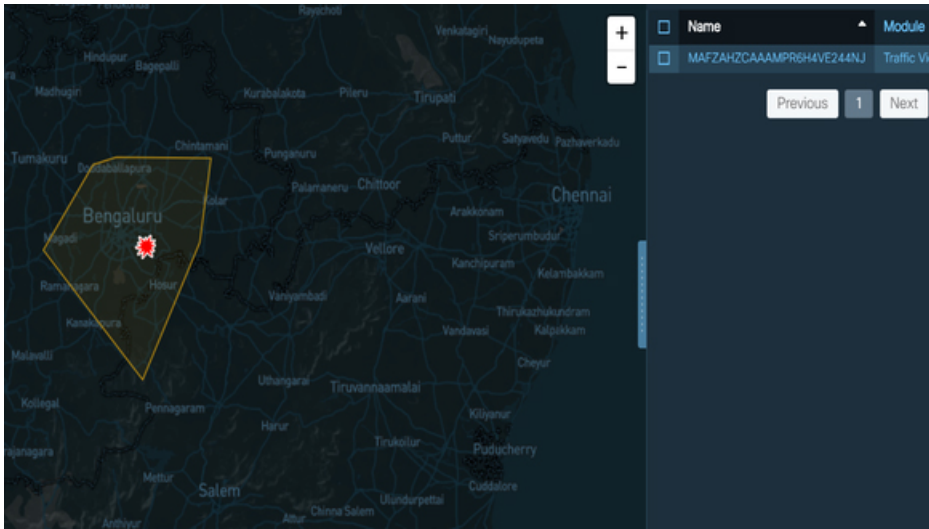
Figure 84: Traffic View - Accident Incidents Type




Step 3

The below figure shows the **Accidents** check box is selected from the Incident Type. The Map View displays the traffic accident view.

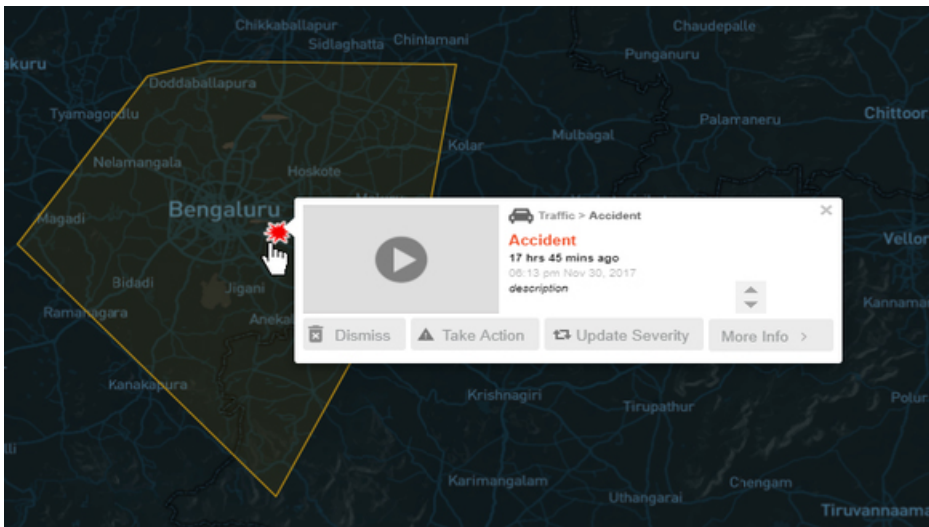
Figure 85: Traffic View - Accident



Hovering your mouse  opens the Traffic Accident box, which displays accident information such as date and time of accident occurrence.

Additionally, you can also dismiss incident, take action on accident, select and update severity, and get more information about the accident.

Figure 86: Accident Details



Configuring Route Analysis Settings in the Traffic Details Panel

You can change **Route Analysis** settings in the **Traffic Details** panel to specify the route for which **Map View** displays traffic-flow data.

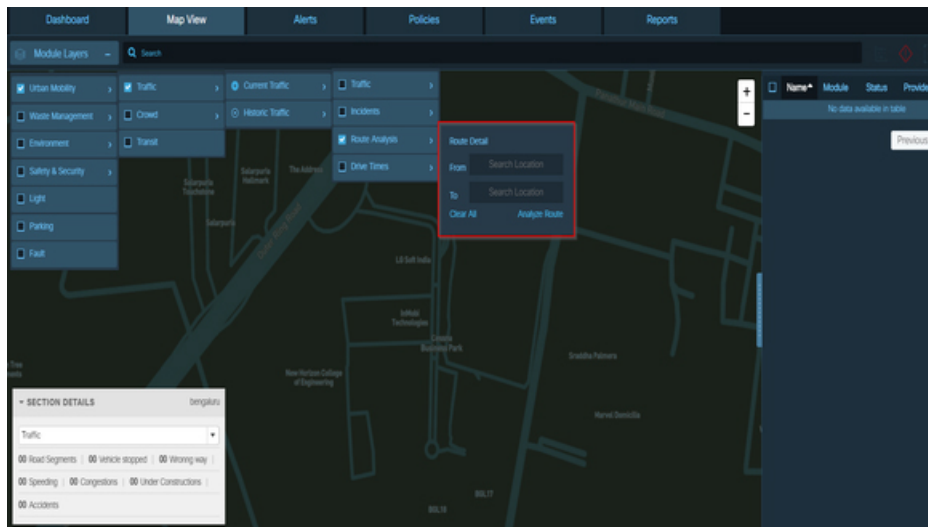
Before you begin

Open the **Traffic Details** panel; see [Displaying the Traffic Details Panel, on page 46](#)

Step 1 To view **Traffic Map** based on Route Analysis, click **Map View > Urban Mobility > Current Traffic > Route Analysis**. The **Route Analysis** opens the **Route Detail** box, that prompts you to provide source and destination location.

The **Route Analysis** displays traffic map view for the quickest or shortest route between the source location and destination location. It also displays the current traffic between your source and destination location.

Figure 87: Traffic View - Route Analysis



Step 2 Select the **Route Analysis** check box.

A parameters panel as highlighted in the above figure appears.

Step 3 Enter the starting point of the route in the **From** field.

- Begin typing an address or partial address in the **From** field.
As you type, potential matches appear in a pop-up list.
- When you see the location that matches your intended starting point, choose it from the list.

Note It is important to choose a match from the list instead of typing the entire location yourself. The **Route Analysis** feature recognizes only the items that appear in this list.

Step 4 Enter the end of the route in the **To** field.

- Begin typing an address or partial address in the **To** field.
As you type, potential matches appear in a pop-up list.
- When you see the location that matches your intended starting point, choose it from the list.

Note It is important to choose a match from the list instead of typing the entire location yourself. The **Route Analysis** feature recognizes only the items that appear in this list.

Step 5 Click **Go**

Map View displays a color-coded rendition of the shortest route between the specified locations. The colors indicate traffic congestion on the specified route.

Configuring Drive Time Settings in the Traffic Details Panel

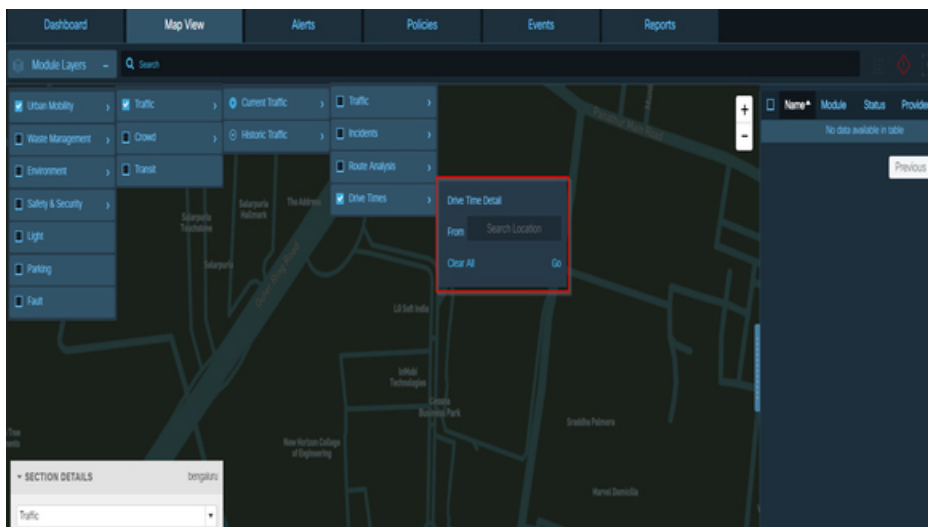
You can change **Drive Times** settings in the **Traffic Details** panel to specify the starting location for estimated drive times in **Map View**.

Before you begin

Open the **Traffic Details** panel; see [Displaying the Traffic Details Panel, on page 46](#)

Step 1 To view **Traffic Map** based on Drive Time, click **Map View > Urban Mobility > Current Traffic > Drive Time**. The **Drive Time Detail** control appears.

Figure 88: Drive Time



Step 2 A parameters panel like the one in the following figure appears. The **Drive Time** opens the **Drive Times** box that prompts you to provide source location for which you want to view drive time.

The **Drive Time** displays details for drive time map view for search location.

Step 3 Enter in the **From** field the starting point to use for estimating drive times.

- a) Begin typing an address or partial address in the **From** field. As you type, potential matches appear in a pop-up list.
- b) When you see the location that matches your intended starting point, choose it from the list. The **From** field reflects your choice.

Note It is important to choose a match from the list instead of typing the entire location yourself. The **Drive Time** feature recognizes only the items that appear in this list.

Step 4 Click **Go**

Map View displays a color-coded overlay that indicates drive times from the specified location to other areas of the map. The colors indicate the estimated amount of time required to drive from the specified starting location to any point within an area shaded with a particular color.

Getting the Crowd Information from Map View

When the **Crowd** module is enabled, **Map View** displays the crowd parameters, and the corresponding overlays indicating the people, vehicle, or device count as per the selected parameter. By default, the Crowd Count parameter is selected, which displays the people count at a given location.

Viewing Crowd Parameter Details

To get the crowd information from Map View, perform the following steps:

Before you begin

Log in to the Cisco Kinetic for Cities as an operator.

- Step 1** Enable the module as Urban Mobility > Crowd .
All the crowd parameters for a selected region is displayed. By default, the Crowd Count parameter is selected.
For more information, see [Enabling or Disabling Module Output in Map View, on page 39](#)
- Step 2** To view the details of crowd parameters, click any of the following crowd parameters tab:
- **Crowd Count:** The number of people at a given location.
 - **Wifi:** The number of devices that are connected to a WiFi at a given location.
 - **Crowd Direction:** The count of the people and the direction in which they are moving at a given location. Hovering your mouse pointer over the overlay displays the following information:
 - **Towards North:** The number of people who are moving towards north.
 - **Towards South:** The number of people who are moving towards south.
 - **Towards East:** The number of people who are moving towards east.
 - **Towards West:** The number of people who are moving towards west.
 - **Last Updated:** The date and time when the information was updated.
 - **Provider:** Sensor details.
 - **Label:** The name of the sensor.The pop-up dialog box disappears when you move away from the overlay.
 - **Vehicle Direction:** Displays the count of the vehicle and the direction in which they are moving at a given location. Hovering your mouse pointer over the overlay displays the following information:
 - **Towards North:** The number of vehicles that are moving towards north.
 - **Towards South:** The number of vehicles that are moving towards south.
 - **Towards East:** The number of vehicles that are moving towards east.

- **Towards West:** The number of vehicles that are moving towards west.
- **Last Updated:** The date and time when the information was updated.
- **Provider:** Name of the sensor provider
- **Label:** Sensor name

The pop-up dialog box disappears when you move away from the overlay.

- **Vehicle Count:** The number of vehicles at a given location.
- **Bicycle Count:** The number of bicycles at a given location.
- **Dwell Time:** The average time spent at a given location by the crowd.

This is calculated by considering the average of Wi-Fi devices present in the region of interest in a 10 min window.

Formula used : (Last seen time of a device - First seen time of a device) / Total number of devices

- **Device Path Analysis:** The Travel time between two nodes where devices are located.

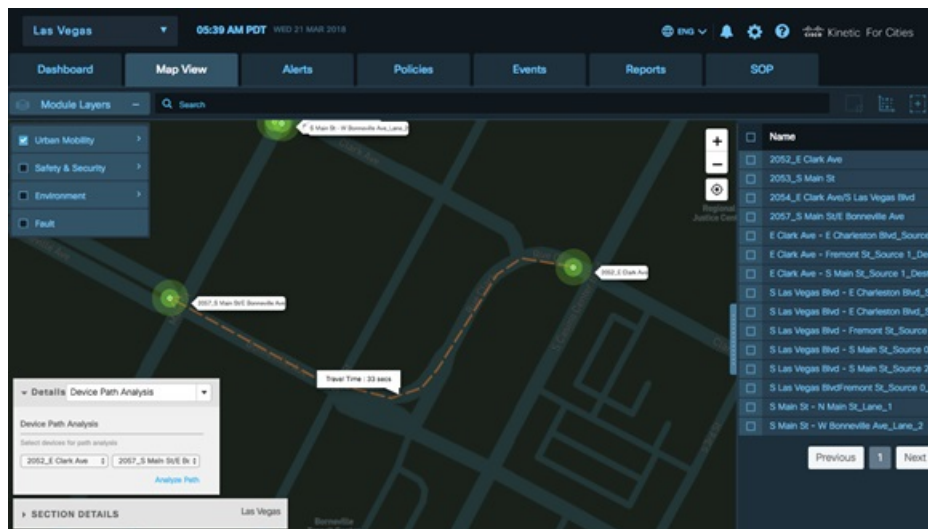
User can select the start and end point nodes in the section detail box and click on **Analyze Path** link. The path between the two selected nodes gets highlighted and the travel time gets displayed.

- **Trace Analysis:** The tracking and tracing of one specific vehicle in transit.

Note Hovering your mouse pointer over the Crowd Count, WiFi, Dwell Time, Vehicle Count, and Bicycle Count displays the additional information, such as, Sensor Provider, Last Updated, and Sensor name information.

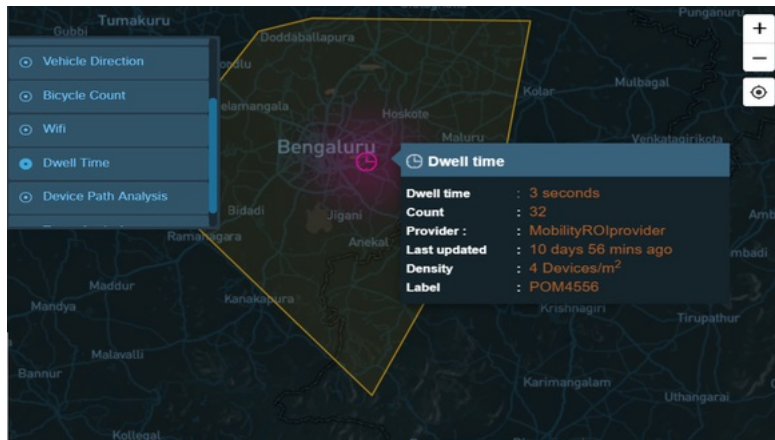
The following figure shows the map view of Device Path Analysis.

Figure 89: Device Path Analysis - Map View



The following figure shows the map view for Crowd Dwell Time.

Figure 90: Dwell Time - Map View



Getting the Transit Information from Map View

When the **Transit** modules are enabled, the **Map View** displays the transit parameters. It displays the transit status of the vehicle carrying the good from one source to another destination.

Viewing Transit Parameter Details

To view the current state of any vehicle carrying passengers on a route, you can view its Transit details. To get the transit information from Map View, perform the following steps:

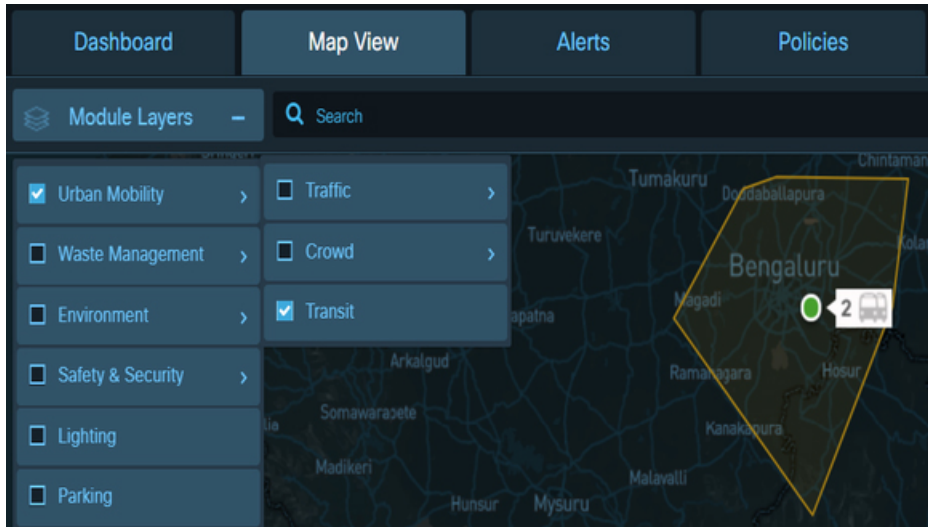
Before you begin


Log in to the Cisco Kinetic for Cities in the Operator role.

Step 1 Enable the Transit module by clicking **Map View > Module Layers > Urban Mobility > Transit**. All the transit parameters for a selected region is displayed.

For more information, see [Enabling or Disabling Module Output in Map View](#), on page 39

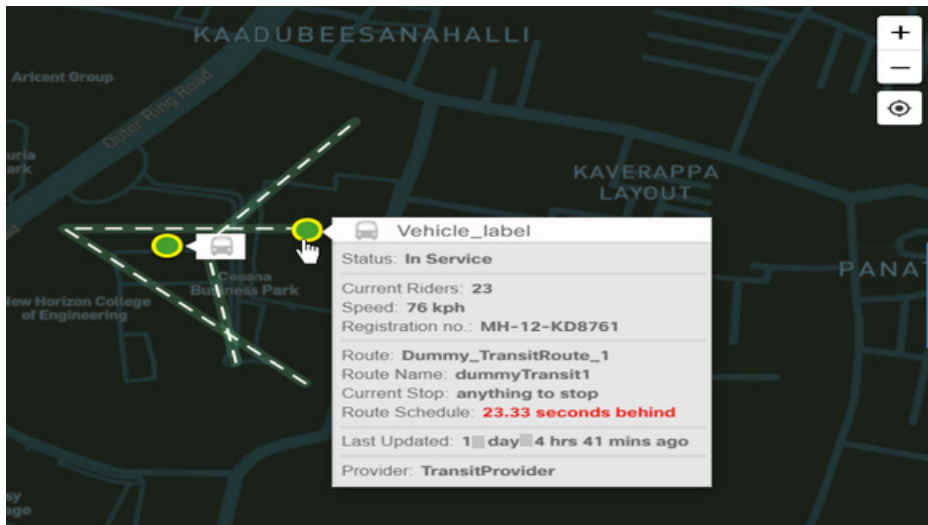
Figure 91: Transit Module



Step 2 Click on the green icon  on the map view.

You can also click on Zoom In or Zoom out to view the detailed transit parameters.

Figure 92: Transit Routes



Hovering your mouse pointer over any vehicle icon displays the summary for vehicle's transit status.

- **Status:** The vehicle transit status i.e. in service
- **Current Riders:** The number of current riders in the vehicle.
- **Speed:** The speed of vehicle.
- **Registration No:** The registration number for vehicle.
- **Route:** The route being followed by the vehicle.

- **Route Name:** The name of the route being followed by the vehicle.
- **Current Stop:** The stop where the vehicle is currently located.
- **Route Schedule:** It shows the time duration by which the vehicle is running behind or ahead of its schedule.
- **Last Updated:** The date and time when the information was updated.
- **Provider:** Sensor provider name.

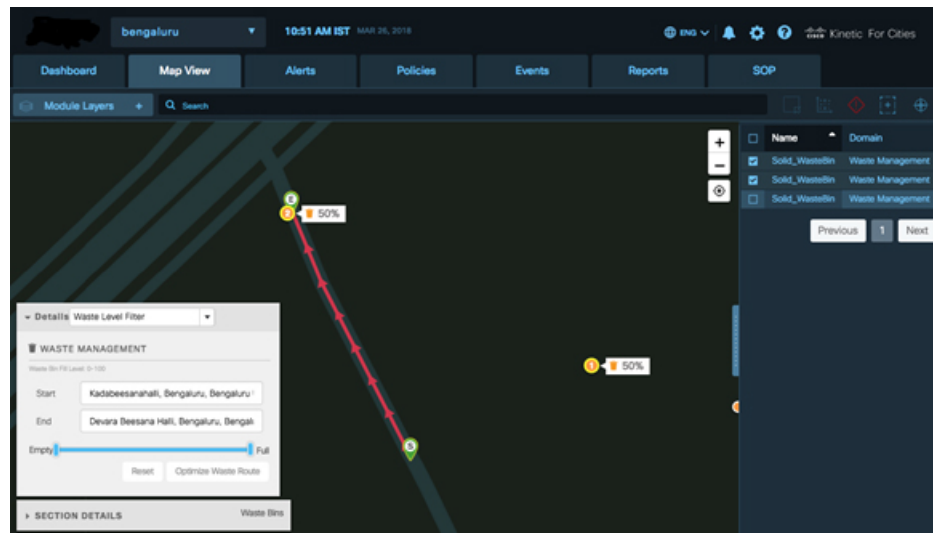
Note The pop-up dialog box disappears when you move away from the overlay.

Getting Waste Management Information from Map View

When the Waste Management module is enabled, all the waste bins, garbage trucks and garbage collection trips in the current region are visible on the Map View. The right pane of the dashboard provides detailed summary of the waste type, module or domain name, status and provider.

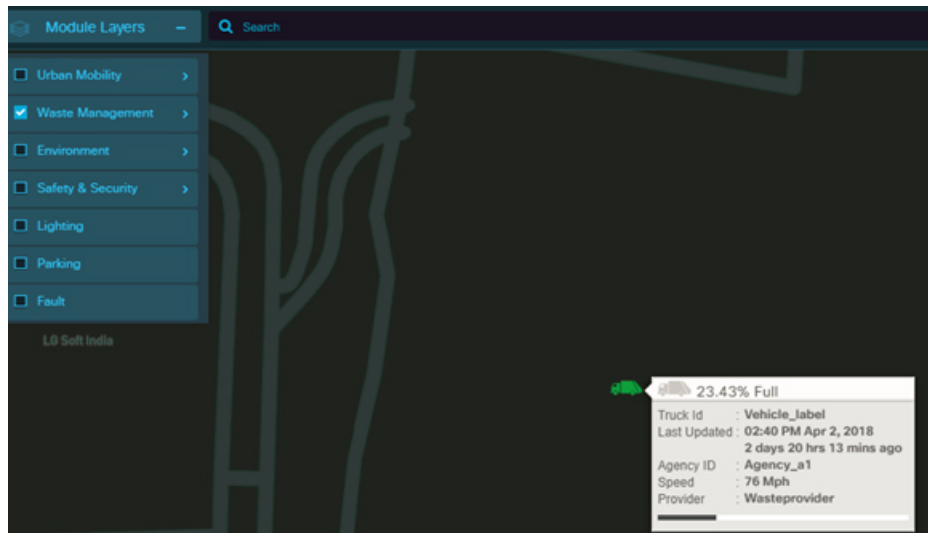
The section detail at the bottom left corner provides you status for waste spaces, waste bins, and region. This can be viewed by clicking the waste map icon or waste bin icon on the map view area. You can view the optimized route between the waste bins by selecting the bins first on the map view and then clicking on Optimize Waste Route button. Also, the section detail shows the status for waste space and waste bin based on the waste name selected in the right pane of dashboard.

Figure 93: Optimized route between the Waste bins



Map View also shows Waste or garbage trucks status as shown below: Truck Id, Last Updated date along with time stamp, Agency ID, Speed of the truck, Provider details can be seen. The number of trips made by trucks in order to collect garbage is indicated by garbage collection trips.

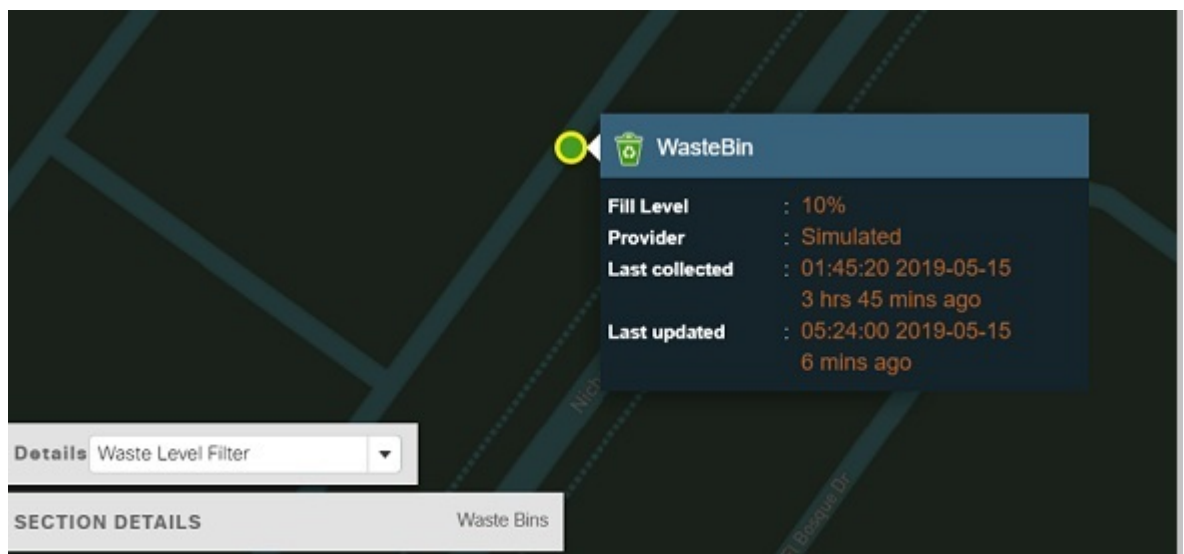
Figure 94: Waste Trucks Summary



Map View uses color coding to indicate the fullness and availability of a waste bin, or waste space:

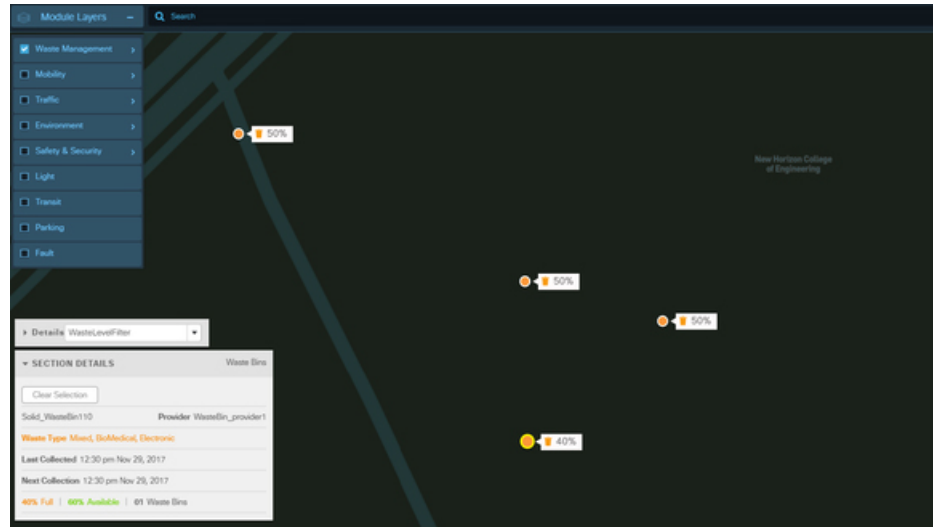
- Green: waste bin and waste space available (0 - 21 per cent occupied)
- Orange: waste bin and waste space full (22-70 per cent occupied)
- Red: waste bin and waste space completely full(over 70 per cent occupied)

Figure 95: Waste Bin information from Map View



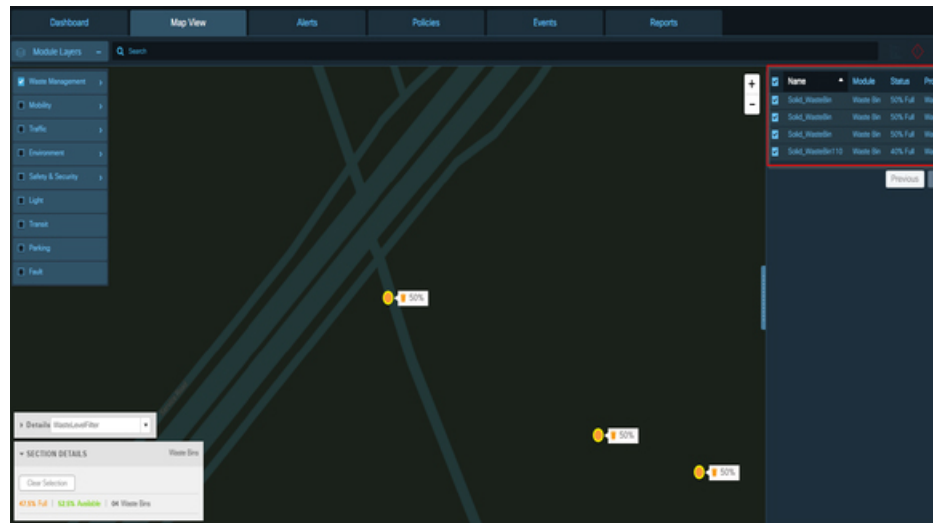
Double-click a waste space icon to display individual waste bin in map view. The **Section Details** displays details for individual waste bin such as waste provider, waste type, last collected, next collection, bin full .

Figure 96: Waste space and Waste Bin in Map View



To see waste bin/waste space full /availability status, click one or more waste bins, or waste spaces to select them. The pane on the right side of the dashboard provides waste space name, waste bin name, waste space status, and waste provider. The **Section Details** figure at the bottom left corner of dashboard page shows waste bin status for full and available. Green indicates the waste bin is "available" and orange indicates the bin is "full".

Figure 97: Waste Management Section Details



To remove individual items from the selection, click them one at a time; as the selection changes, the waste bin status updates in real time. To clear the entire selection, click the Clear Selection button that appears whenever you select items in Map View.

To view the details of the Waste Bin Parameters, click any of the Waste Bin icon:

1. **Fill Level:** The filled percentage level of the waste bin.
2. **Temperature:** The temperature of the waste bin.

3. **Battery percentage:** The percentage of battery remaining for waste bin
4. **Provider:** The waste bin provider name.
5. **Last collected:** The last time and data the waste was collected from bin.
6. **Last updated:** The date and time when the information was updated.

Getting Environment Information from Map View

When the **Environment** module is enabled, **Map View** displays the environment parameters, legend of the selected parameter, and an overlay indicating the value of the selected parameter.

Viewing Environment Parameter Details

To get the environment information from Map View, perform the following steps:

Before you begin

Log in to the Cisco Kinetic for Cities as an Operator.

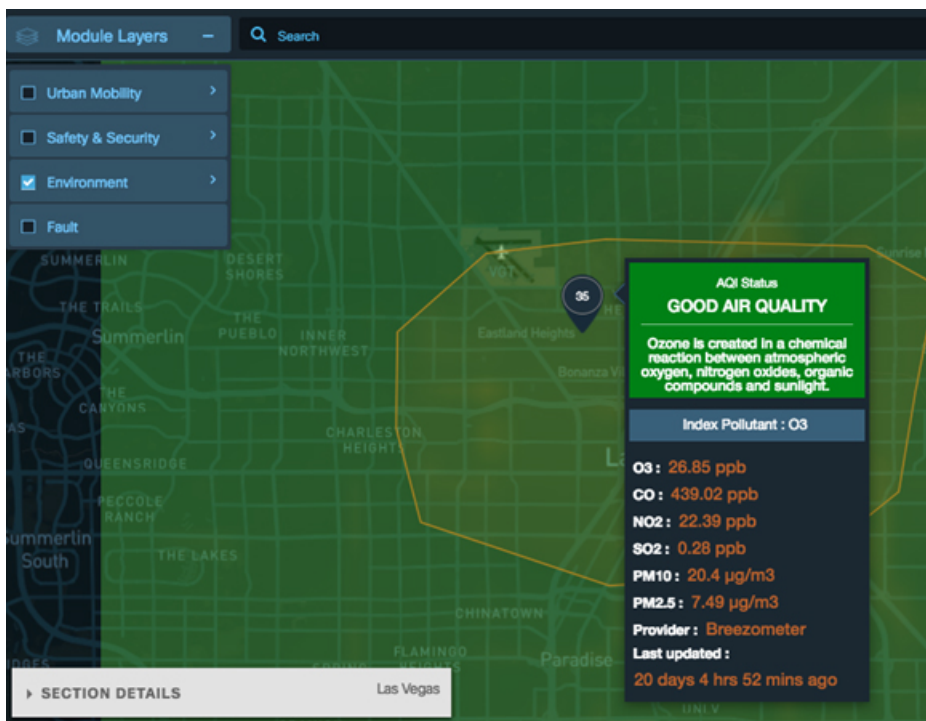
Step 1

Enable the Environment module.

All the environment parameters for a selected region are displayed.

For more information, see [Enabling or Disabling Module Output in Map View, on page 39](#)

Figure 98: Environment Map View



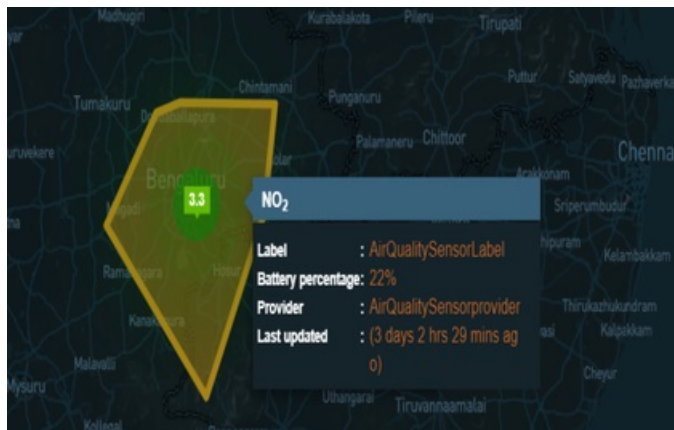
Step 2 To view the values of the environment parameters, click any of the following environment parameters tab:

- **NO₂** : The measurement of Nitrogen-di-oxide (**ppb**) in the air at a given location.
- **PM_{2.5}** : The measurement of PM_{2.5} particulate matter (**Mg/M³**) in the air at a given location.
- **SO₂** : The measurement of Sulphur-di-oxide (**ppb**) in the air at a given location.
- **O₃** : The measurement of ozone (**ppb**) in the air at a given location.
- **Air Quality Index**: The measurement of air quality index at a given location.
- **Temperature**: The temperature (**C**) of a location.
- **Humidity**: The humidity level(**%**) of a location.
- **Noise**: The noise level (**DB**) of a location.
- **Noise (LAeq)**: The noise level (**DbA**) of a location.
- **Harmonica Index**: The harmonica index of a location.
- **Pressure**: The pressure level (**Pa**) of a location.
- **Lux**: The Lux of a location.

A legend indicating the upper and lower value ranges and an overlay with the current value for each environmental sensor at a given location is displayed. Hovering your mouse pointer over the overlay displays additional information, such as, Battery Percentage, Last Updated, Provider and Label information. The pop-up dialog box disappears when you move away from the overlay.

The following figure shows the measurement of NO₂ for selected region.

Figure 99: Environmental Parameters - NO₂ Map View

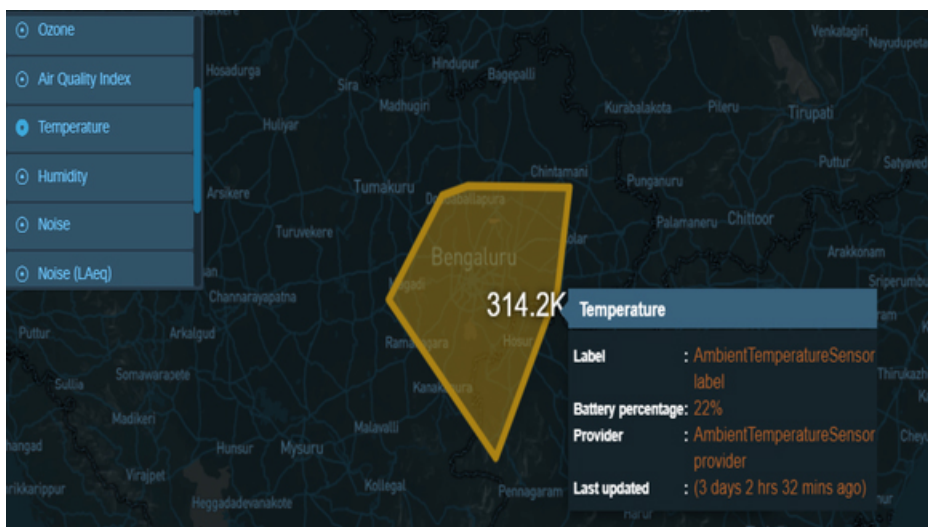


The following figure shows the measurement of SO₂ for selected region.

Figure 100: Environment Parameters - SO₂ Map View

The following figure shows the measurement of temperature for selected region.

Figure 101: Environment Parameters - Temperature Map View



Getting the Safety and Security Information from Map View

When the **Safety and Security** modules are enabled, **Map View** displays the safety and security parameters, and the corresponding overlays indicating the camera health, citizen alert, person identified, fire and smoke, fire, garbage, gunshot, influencer, intrusion, loitering, overstay, panic, queue, smoke detection, etc. as per the selected parameter.

Viewing Safety and Security Parameter Details

To view the safety and security information from Map View, perform the following steps:

Before you begin

Log in to the Cisco Kinetic for Cities as an operator.

Step 1 Enable the Safety and Security Module by clicking **Map View > Module Layers > Safety and Security**. All the Safety and Security parameters for a selected region are displayed.

For more information, see [Enabling or Disabling Module Output in Map View, on page 39](#)

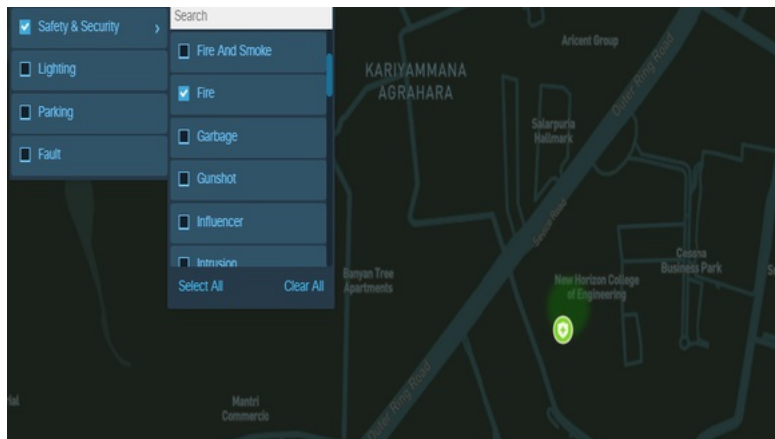
Step 2 To view the details of Safety and Security parameters, select any of the following Safety and Security parameters check box:

- **Camera Health:** Displays the current state of the camera health at a given location.
- **Citizen Alert:** Displays the safety and security consideration to alert the citizen at a given location.
- **Person Identified:** Displays the identified person for violation of safety and security at a given location.
- **Fire and Smoke:** Displays the fire and smoke at a given location.
- **Fire:** Displays the fire situation at a given location.
- **Garbage:** Displays the safety and security consideration for waste management at a given location.

The other Safety and Security Parameters are available to view in map view are Gunshot, Influencer, Intrusion, Loitering, Overstay, Panic, Queue, Seismic, Sentiment, Slip and Fall, Smoke Detection, Theft, Train Platform Intrusion, Weather, Environment, Suspicious Object, Graffiti, Maintenance, Vehicle Identified, Smoke, App, Crime, and Camera.

The following figure shows the map view of Fire.

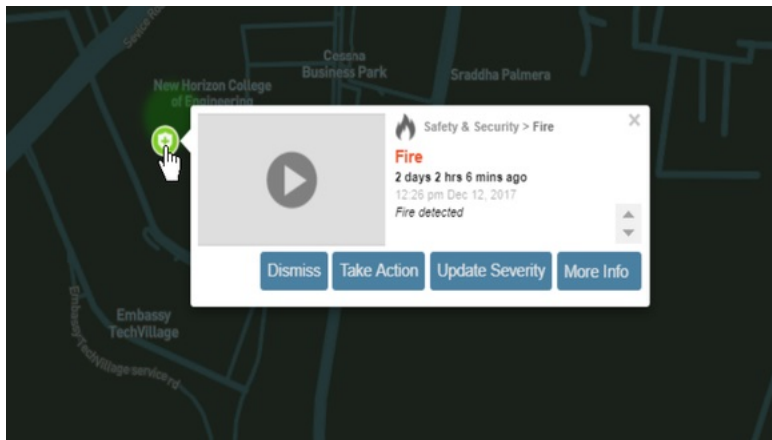
Figure 102: Safety and Security - Fire



Hovering your mouse pointer over the green icon displays Safety & Security Fire pop-up dialog box from where you can dismiss incident, take action, update severity, and get more information about alert. For details on alerts, refer [Alerts: System-Actionable Incidents, on page 132](#)

You can click the **x** to close the Safety and Security Fire pop-up dialog box.

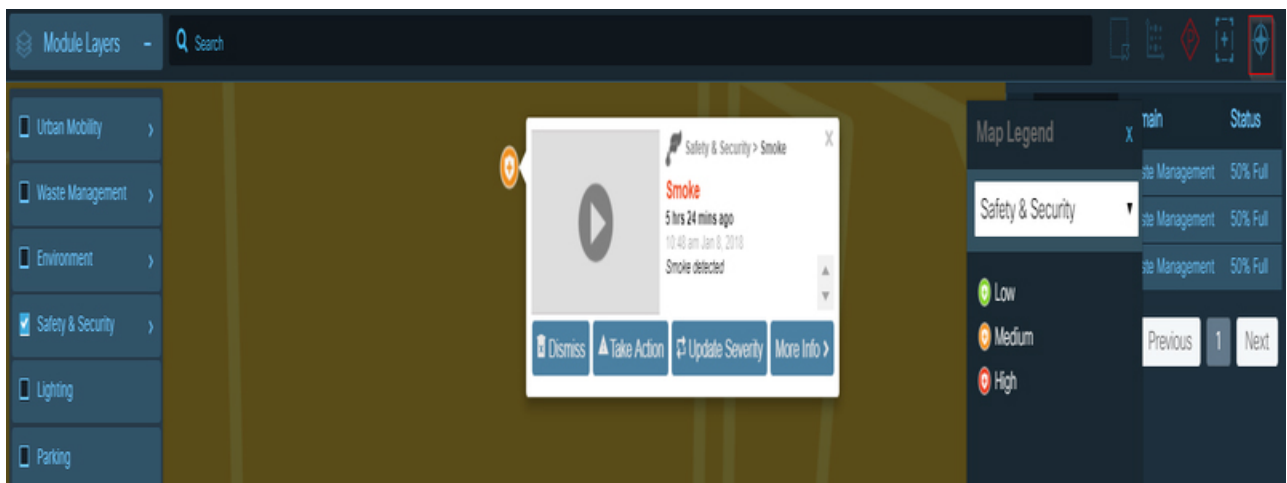
Figure 103: Safety and Security Fire - Map View



The following figure shows the color coding map legend for Safety & Security.

- The map legend color - coding of Safety & Security is **green**, if the alert is of low severity.
- The map legend color - coding of Safety & Security is **Orange**, if the alert is of medium severity.
- The map legend color - coding of Safety & Security is **Red**, if the alert is of high severity.

Figure 104: Map Legend - Safety & Security



Getting Parking Information from Map View

When the Parking module is enabled, all the parking lots in the current region are visible in Map View. If you zoom to a sufficient level of detail, Map View also shows "No Parking" zones, fire zones, loading zones, standby zones and individual parking spaces. To see a summary of all of the icons that represent these items, click the Legend tab at the right edge of the page and choose the Parking item from the pull-down menu in the Legend tab.

Map View also shows real time alerts for parking violations, such as expired parking.

Map View uses color coding to indicate the occupancy of a parking lot, parking sensor or parking space:

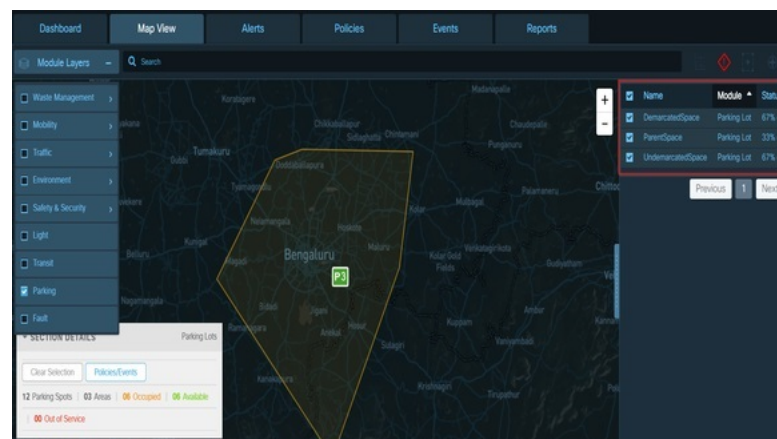
- Green: low occupancy (0 - 21 per cent occupied)
- Orange: medium occupancy (22-70 per cent occupied)
- Red: high occupancy (over 70 per cent occupied)

Figure 105: Parking lot occupancy Legend



Double-click a parking lot icon to display individual parking spaces. Individual parking spaces indicate occupancy slightly differently than parking lots. Green still means the space is "unoccupied," but orange means "occupied," and red indicates a parking violation. For example, the following figure shows a total of three parking spaces: one is occupied (orange), two are available (green) and none are in violation (red) of current parking policy.

Figure 106: Parking section details on the Map View



To see occupancy/availability statistics, click one or more parking lots, parking sensors or parking spaces to select them. The pane on the right side of the dashboard provides parking space name, parking lot name, and parking space status. The **Section Details** figure at the bottom left corner of dashboard page shows parking details based on selected space on the right pane of the dashboard. For example, The below Section Details figure show parking occupancy for twelve parking spots in three parking areas. Six of the twelve parking spot

selected are highlighted in orange color to indicate that they are in use, and other six spaces are highlighted in green color to indicate that they are available.

To remove individual items from the selection, click them one at a time; as the selection changes, the occupancy statistics update in real time. To clear the entire selection, click the Clear Selection button that appears whenever you select items in Map View.

To search for a specific region or parking zone, type the first few letters of its name into the Region Selection Box in the upper left corner of Map View. A list of potential matches appears as you type. Click an item in the list to display it in Map View.

To determine the policies applied to multiple parking spaces or parking lots, select the items in **Map View**, then click the **Policies/Events** button that appears at the lower-right corner of Map View. Policies that apply to the selected items appear in the **Apply Policy** tab of the **Policies/Events** dialog box.

Getting Lighting Information from Map View



You can use **Map View** to obtain the status of lighting groups or individual lighting sensors.

To view information about lighting from **Map View** perform the following steps:

1. Enable the **Lights** Module.

For more information, see [Enabling or Disabling Module Output in Map View, on page 39](#).

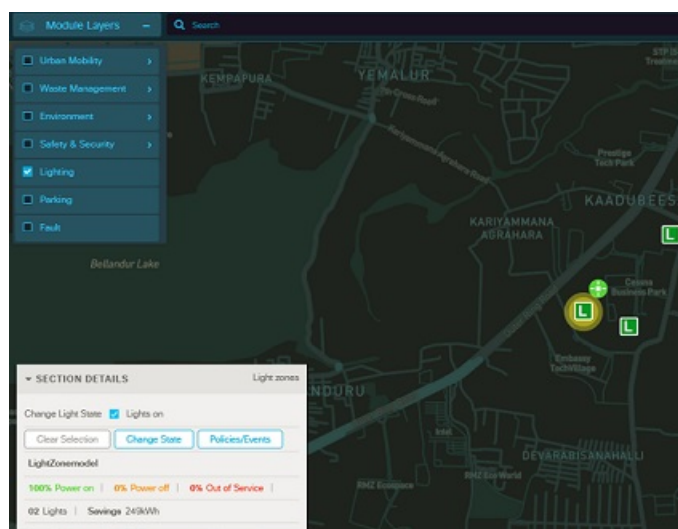
2. Zoom as appropriate to reveal a light group or an individual lighting sensor.

A lightbulb icon  represents an individual lighting sensor. A lighting group icon  represents a set of lighting sensors that you can manage as a group.

For more information, see [Getting Details from Map View, on page 43](#).

3. Retrieve information about a light group or lighting sensor:
 - Double-click a light group to view individual lighting sensors within that group.

Figure 107: Lighting sensors



- Single-click a light group or a light bulb to select it; shift-click to select multiple items. A banner displays details about the selection, such as the total number of lights in the selection, the number of lights that are powered on, the number of lights that are powered off, and the number of lights that are out of service.

Getting the Fault Information from Map View

When the **Fault** modules are enabled, **Map View** displays the fault color-coded legend icon, and the corresponding overlays that indicate the provider, affected sensor, affected entity. Additionally, you can also dismiss incident, take action, and update severity and view more information about fault.

Viewing Fault Parameter Details

To get the fault information from Map View, perform the following steps:

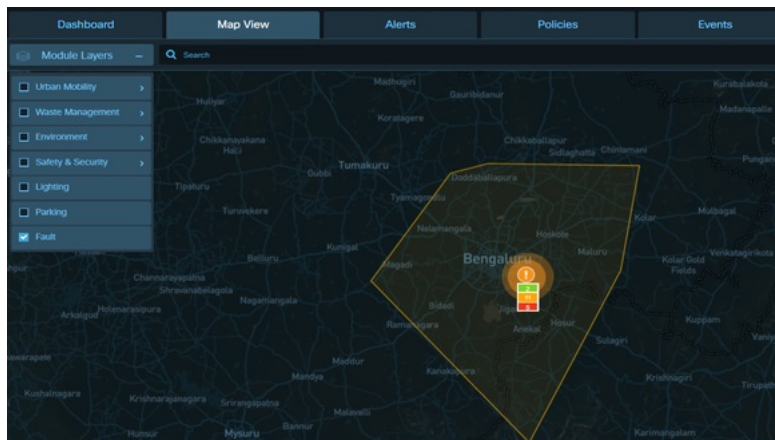
Before you begin

Log in to the Cisco Kinetic for Cities dashboard as an operator.

- Step 1** Enable the Fault module by clicking **Map View** > **Module Layers** > **Fault**.
The Map View shows all the fault parameters for the selected region.

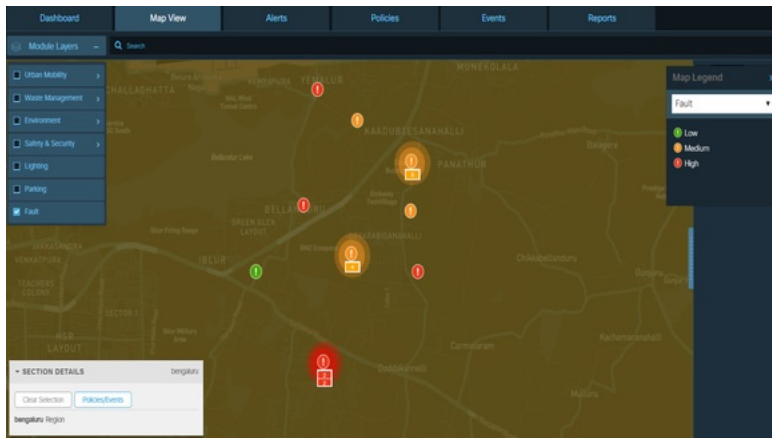
For more information, see [Enabling or Disabling Module Output in Map View, on page 39](#)

Figure 108: Fault - Map View



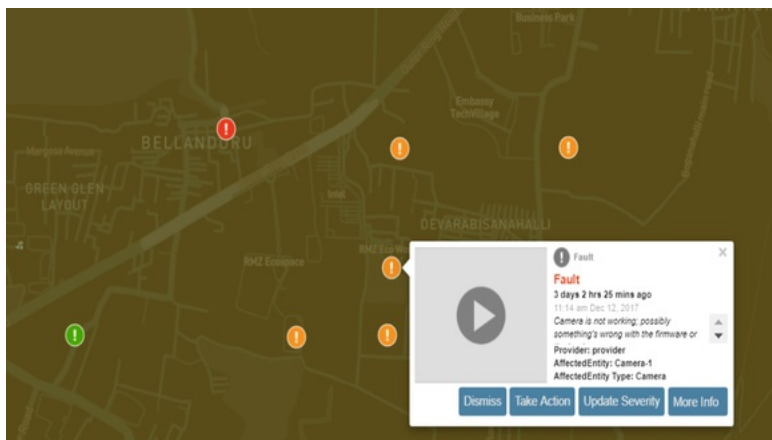
- Step 2** To view the details of fault parameters, click anywhere on the color-coded fault icon.
The Map View displays the fault color-coded map icons for the selected region. It also shows the count of the faults.

- **Green Color -Coded Map:** Indicates that the fault is low for a given location.
- **Orange Color-Coded Map:** Indicates that the fault is medium for a given location.
- **Red Color-Coded Map:** Indicates that the fault is high for a given location.

Figure 109: Fault Parameter - Map Legend

Clicking over the color-coded icon opens a pop-up box. The box displays the fault details for selected region such as date, time, description, provider, affected entity, and number of days and hours since the fault occurred.

You can also perform the following actions on the faults: dismiss, take action, update severity and get more information.

Figure 110: Fault - Pop up box

Step 3 Click the **X** to close the Fault pop-up box.

Step 4 Go to the Section Details box, located on bottom-left corner of the Map View.

The box shows the details of the faults. For the faults, where Policies/Events can be applied, the **Policies/Events** appear enabled.

For Network Device Faults, the section box displays the details such as the name of the device, count of faults present in the selected device, the severity of these faults whether high, medium, or low, and Last updated time of the device.

Getting Network Devices Information from Map view

The performance of the network devices can get affected due to various reasons. These reasons can be device not working, or has some fault in it and so on. The current version of the Cisco Kinetic for Cities platform supports a new domain called Network Devices.

If the device has status as Down, Unheard, or has any fault associated with it, then you can take necessary corrective action. Thus, helping you to manage the network better.

To get the information of the network devices from the Map View, perform the following steps:

Before you begin

You should have

- Access over the region for which you want to view the network devices.
- Access over the Network Devices domain.

Step 1 Enable the **Network Devices** module by clicking **Map View > Module Layers > Network Devices**.

1. Network devices appear on the map view as per the selected region.
2. Right-hand side shows the list view of all the available network devices.

Step 2 Select a check box in the list view to select one or multiple devices or click on a network device on the Map view. The selected network device appears highlighted on the Map view.

Step 3 Hover over the color-coded icon to view the details of the network devices. The color code indicates the status as follows:

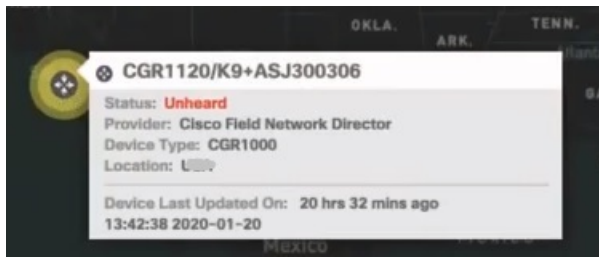
- Green: Indicates that the device is up and running.
- Grey: Indicates that the device is down.
- Red Cross: Indicates that the device has a fault alert associated with it.

Click on the Map Legend icon to view the status corresponding to a color code.

On hovering over, a pop-up box displays the details of the device such as

- a. Name of the Device on the top
- b. Status of the device
- c. Name of the Provider
- d. Device type
- e. MeshEndpointCount (visible only if data exists for the device)
- f. Location of the device
- g. Last Updated Time

Figure 111: Network Devices on the Map View



Note Types of Device Status supported in the current version

- a. Up - When the device is in working order.
- b. Down - When the device is out of working order.
- c. Unheard - When the status of the device cannot be determined.
- d. Device Fault - When the device has some fault associated with it such as Line Power Failure, Tunnel Down, Port Down, Registration Failure, Device Down.

The current version supports routers devices only. As of now, only one provider (Cisco Field Network Director) per customer is supported.



CHAPTER 3

Using the List View

- [Displaying the List View, on page 75](#)
- [Getting Lighting Information in List View, on page 76](#)
- [Using List View to Control Lighting, on page 77](#)

Displaying the List View

User can view a List of data that the Region Map displays graphically. The same can be viewed by performing the following steps.

Before you begin

Log in to the Cisco Kinetic for Cities .

-
- Step 1** Choose **Map View** in the banner.
The **Map View** page displays the region map. For more information, see [Understanding the User Interface, on page 33](#).
- Step 2** Enable output from available modules as necessary. See [Enabling or Disabling Module Output in Map View, on page 39](#).
- Step 3** Select the Module in the upper -left corner of the Map View.
- By default, the List view for selected module is displayed in the upper right corner of the dashboard page. The List View displays a list of infrastructure items in enabled modules. You can now browse, search, sort and select items in the list to control them directly or to apply policies to the selected items.

Figure 112: List view of Parking and Waste Management

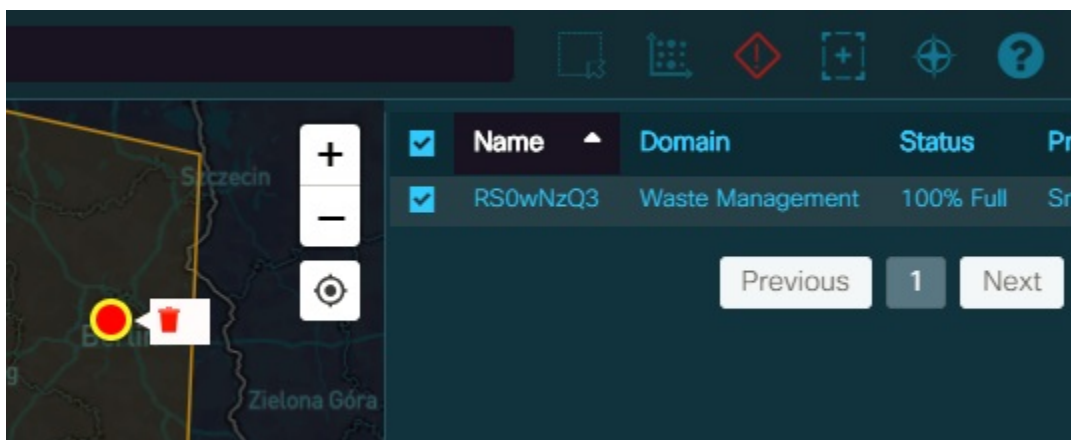
<input type="checkbox"/>	Name	Domain	Status	Provider	
<input type="checkbox"/>	DemarcatedSpace	Parking	67% Occupied	DummyData	
<input type="checkbox"/>	ParentSpace	Parking	33% Occupied	DummyData	
<input type="checkbox"/>	Solid_WasteBin	Waste Management	50% Full	WasteBin_provider1	
<input type="checkbox"/>	Solid_WasteBin	Waste Management	50% Full	WasteBin_provider	
<input type="checkbox"/>	Solid_WasteBin	Waste Management	50% Full	WasteBin_provider	
<input type="checkbox"/>	UndemarcatedSpace	Parking	67% Occupied	DummyData	

Previous 1 Next

Step 4 Select the check box corresponding to module name to view the map view and status details.

The following figure shows the map view for a module selected in List View.

Figure 113: Map View - Selected Domain



Step 5 You can also search for the module data listed in List View using the Search box located on Map View. Enter Sensor Name, Domain name, Status or Provider name as the search query. The matching records are listed in the List View. You can select this record to view the selected sensors on the Map View.

Getting Lighting Information in List View

You can use list views to find lighting sensors easily. You can select sensors within the list and then control the selected sensors directly or apply a policy to them. To list all lighting sensors and then use the list view to configure individual sensors, perform the following steps:

1. Enable the Lights module.

For more information, see [Enabling or Disabling Module Output in Map View, on page 39](#).

2. Drag the split bar present on the right side of the map view towards left.

All of the light sensors appear in list view. Complete details of the sensors such as Name, Domain, Status and Provide Name can be seen.

Figure 114: List View of Light Sensors

<input type="checkbox"/>	Name	Domain	Status	Provider
<input type="checkbox"/>	Ohmpqpeeisb63jreun2dd3pcbh4y57yc	Lighting	OFF	Sensitylight
<input type="checkbox"/>	Oxfktjskcdyketbum47aqljryszghwd	Lighting	OFF	Sensitylight
<input type="checkbox"/>	Pole 1A N01232399	Lighting	OFF	Sensitylight
<input type="checkbox"/>	Pole 1B N01233e10	Lighting	OFF	Sensitylight
<input type="checkbox"/>	Pole 2A N01233c09	Lighting	Out Of Service	Sensitylight
<input type="checkbox"/>	Pole 2B N01233bcb	Lighting	OFF	Sensitylight

3. Select one or more light sensors and then set their state or apply a policy to them.

For more information, see [Using List View to Control Lighting, on page 77](#).

Similarly, selections can be made from List View for other domains to view the summary details and to apply Policies to the sensors.

Using List View to Control Lighting

You can select light sensors in List View and then control the light intensity of the selected sensors or light groups directly or apply a policy to them. To use List View to control individual light sensors or light groups, perform the following steps:

1. Enable the Lights module and open List view.

For more information, see [Getting Lighting Information in List View, on page 76](#).

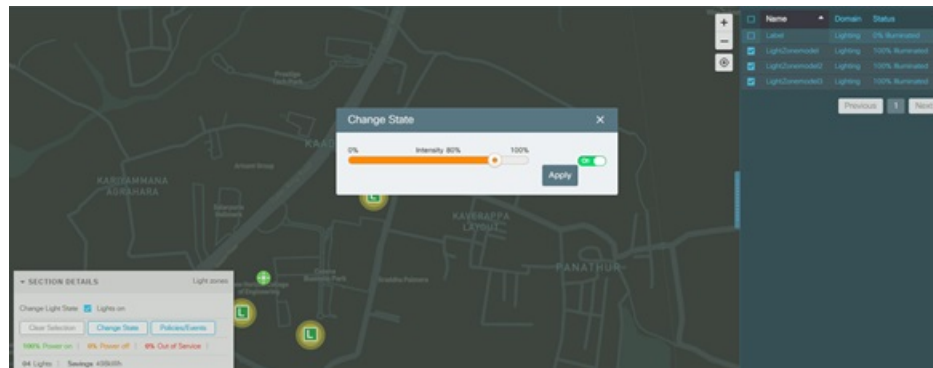
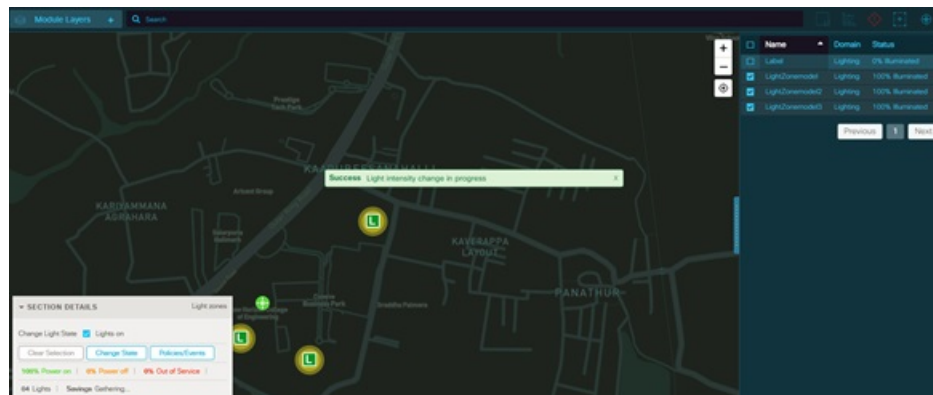
2. Select one or more light sensors or light groups by selecting the corresponding check boxes.

The summary banner provides **Change State**, **Policies/Events** and **Clear Selection** buttons.

- **To change the current selection**, select individual check boxes or clear them as necessary.
- **To clear the current selection entirely**, click the **Clear Selection** button. Set a new selection before going to the next step.

3. Control selected lights directly or apply a policy to them.

To control the selected lights directly, click the **Change State** button. This displays a pop up window to drag the slider and change light intensity. You can also toggle the button between On and Off states. To apply a policy to the selected lights, click the **Policies/Events** button. For more information, see [Policies and Events, on page 83](#).

Figure 115: Lighting Control**Figure 116: Change in Light Intensity**



CHAPTER 4

Alerts

- [Viewing the System Alerts, on page 79](#)

Viewing the System Alerts

Alerts are system messages which get generated when incidents like specified threshold values reached, accident, traffic congestion occurs. For details, see section [Alerts: System-Actionable Incidents, on page 132](#). Users can view the alerts from Notification tray see [Notifications: Informational Messages, on page 131](#), on Alerts page see [Instances, on page 167](#) and on the Map View of the dashboard at any time.

Along with Live alerts, the page displays the list of alerts which have occurred : a day before, or in the past two days, or in the past three days. This allows the user to take or retake action on historical alerts as well.

The following search criteria can be used to view the alerts:

- **Alerts Timespan:** The alerts can be filtered as per the day of occurrence : real-time, last 24 hours, last 2 days, or last 3 days
- **Alert Threshold:** You can use *Alert Threshold* to filter the alerts based on severity. L1, L2, L3, L4, L5 indicates Highest to Least Severity respectively.
- **Display Alert:** You can use *Display Alert* filter to view incident specific alerts. For example, accident, app, camera health, citizen alert, and crime.
- **Sort By:** This filter is used to sort the alerts based on ascending or descending order of date of alert creation.
- **Module:** The alerts can be filtered as per associated domain . For example, Environment, Fault, Mobility, Parking, Safety and Security, and Traffic

Before you begin

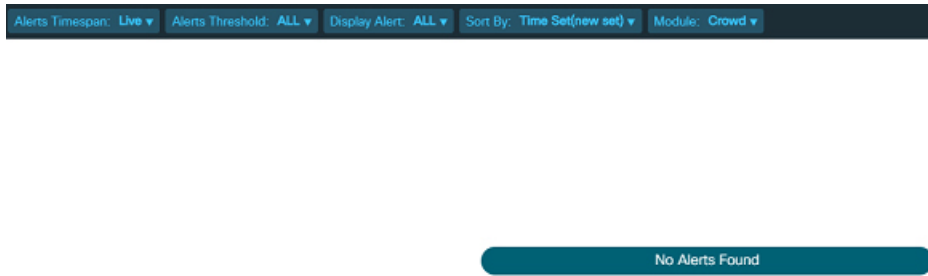
Log into the dashboard; see [Log in to the Dashboard, on page 2](#)

Step 1

To view alerts, click the **Alert** tab.

The **Alert** panel appears by default

Figure 117: Alert Panel



Step 2 Select the module name from the Module drop-down for which you want to view alerts and then select the following search criteria:

- Select the Alert Timespan from drop-down
- Select the Alerts Threshold from drop-down
- Select the Display Alert from drop-down
- Select the Sort By from drop-down
- Select the Module from the drop-down.

The Alert panel appears displaying Severity Level, Alert Timespan, Alerts/Incident details for the selected module on the dashboard. You can view **Dismiss**, **Take Action**, **Update Severity**, and **More Info** in the right side of the dashboard to perform the following operations:

- **Dismiss:** You can use Dismiss to cancel an incident associated with alert.
- **Take Action:** You can use Take Action to select a Standard Operating Procedure to deal with alert.
Retake Action : Once an action has been taken on an alert either manually or automatically, **Take Action** changes to **Retake Action**. Clicking on **Retake Action** executes the same action once again without any manual intervention.
- **Update Severity:** You can use Update Severity to modify the severity of incident associated with alert.
- **More Info:** You can expand More Info to view additional incident information associated with alert.

Figure 118: Alerts View Showing the list of Live Alerts

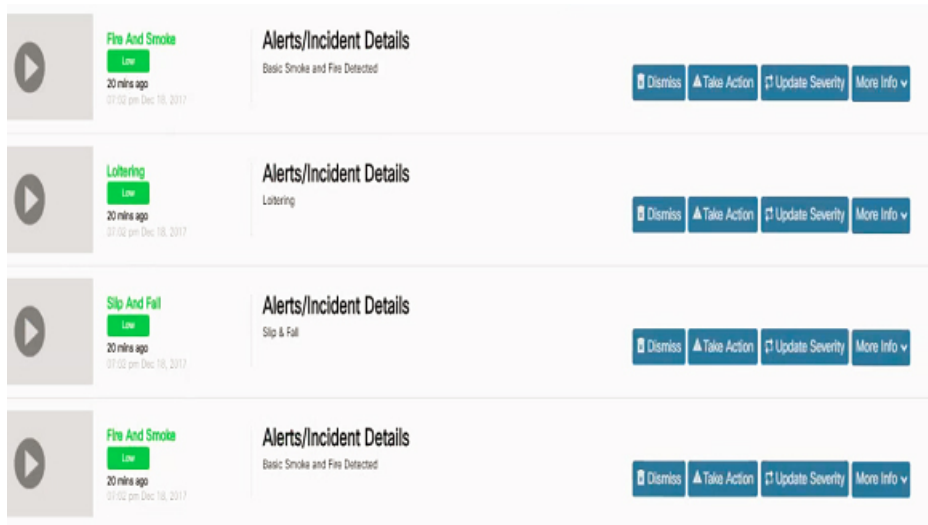


Figure 119: Historical Alerts upto 3 Days Old

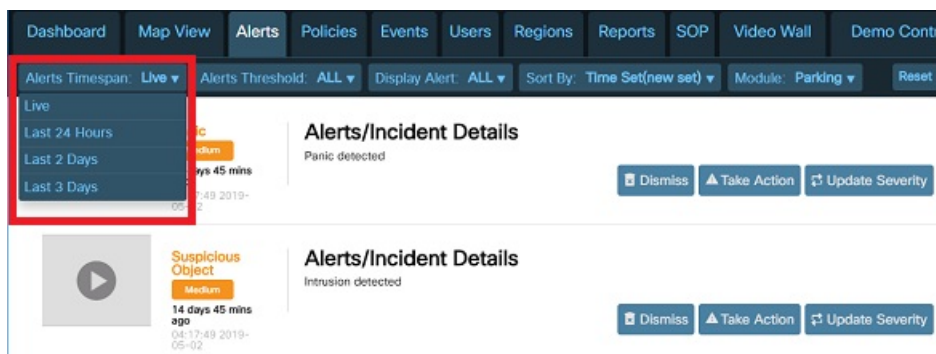
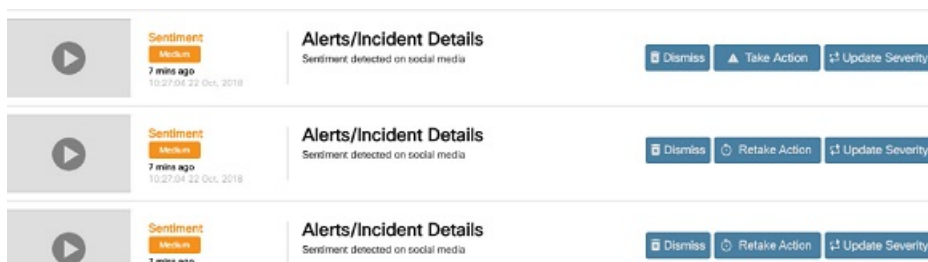
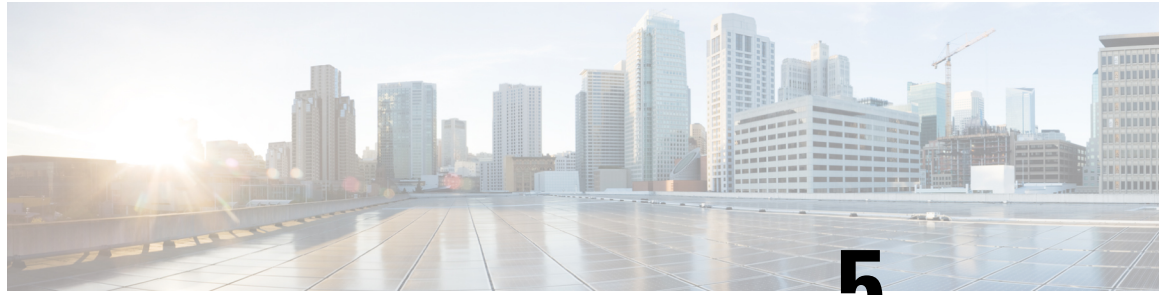


Figure 120: Retake Action on Alerts



Step 3 Click **Reset** located on top right corner of the page.
The page resets to a default view.



CHAPTER 5

Policies and Events

- [Policies, on page 83](#)
- [Policies Page, on page 83](#)
- [Events , on page 113](#)
- [Applying Policies and Events, on page 126](#)

Policies

A **Policy** is a set of rules that control the behaviour of infrastructure items.

A policy or a set of policies can be applied over a sensor or a region from the map view.

Two type of policies are supported by CKC: "**Default Policies**" and "**Custom Policies**"

Default Policies : These policies are provided by the system by default. For details, refer [Default Policies, on page 83](#)

Custom Policies: These policies are uploaded/created by the user. For details, refer [Custom Policies, on page 108](#)

Policies Page

The Policies page provides tools for creating and managing **Default** policies and **Custom** policies.

Default Policies

Default Policies are the policies which are provided by the system by default. These policies can be currently created and applied to "Lighting", "Parking" domains.

Viewing Default Policies Page

To view the Default policy page, click the **Policies** tab on the dashboard.

The default policies page appears.

Figure 121: Default Policies Page

Default Policies		Custom Policies
<input type="checkbox"/> Policy Name	Domain	Policy Type
<input type="checkbox"/> Farepolicy	Parking	Fare Policy
<input type="checkbox"/> Lightpolicy	Lighting	Light Intensity Policy
<input type="checkbox"/> Newlightingpolicy	Lighting	Light Intensity Policy
<input type="checkbox"/> Newlightpolicy	Lighting	Light Intensity Policy
<input type="checkbox"/> Newlightpolicy1	Lighting	Light Intensity Policy
<input type="checkbox"/> Standingzonepolicy	Parking	Standing Zone

Information on the Default Policies Page

Each entry on the Default Policies page provides the following information about a policy:

Figure 122: Default Policies Page

Policies

Q Search

Create

Default Policies

Custom Policies

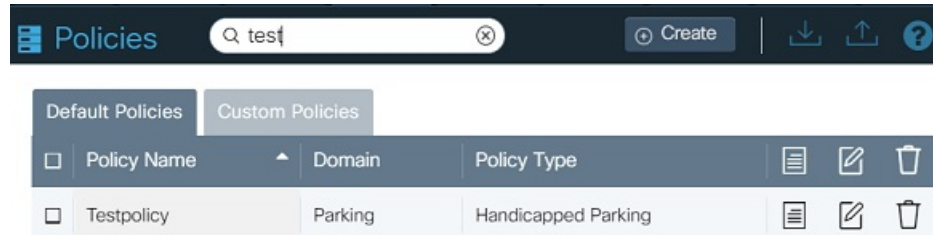
<input type="checkbox"/>	Policy Name	Domain	Policy Type	<div><div></div><div></div><div></div></div>
<input type="checkbox"/>	Tes_01	Parking	No Parking Policy	<div><div></div><div></div><div></div></div>
<input type="checkbox"/>	Testpolicy	Parking	Handicapped Parking	<div><div></div><div></div><div></div></div>

- **Policy Name:** The name that identifies the policy on the dashboard. It is recommended that you name policies as descriptively as possible, to enable the other users to easily understand the functionality of the policy.
- **Domain:** The module that provides the policy functionality, such as **Parking** or **Light** module. Current Dashboard version supports these two domains.
- **Policy Type:** The type/kind of the policy. Lighting Policy types are Light Daylight Harvesting, Light Intensity, Light Proximity Based Policy. For details on Lighting Policy types see [Types of default Lighting policies, on page 102](#). Parking Policy types are Fare, Standing Zone, No Parking, Reserved Parking, Handicapped Parking, Loading Zone Policy. For details on Parking policy types see [Parking Policy, on page 90](#)

Searching for Policies

To search for a policy, type any part of the policy name in the **Search** box. Complete match and partial match records appear immediately. Search terms are not case-sensitive. To clear the search terms and view all policies, click the X button at the right of the Search box or use Backspace key.

Figure 123: Searching for a Policy

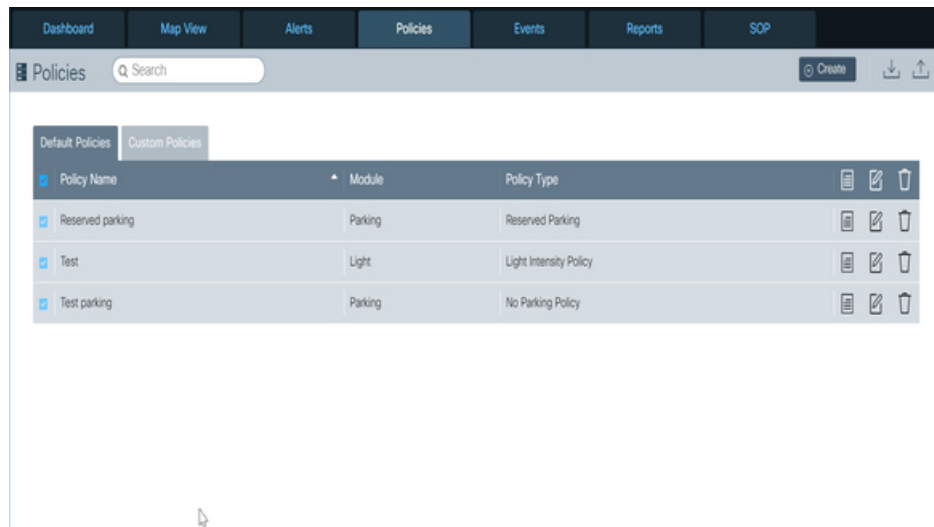


Selecting and Deselecting Policies

You can select policies for purposes of exporting them to a file; subsequently, you can use this file to import the policies into another dashboard.

- **To select an individual policy**, select the check box located prior to the policy name.
- **To deselect an individual policy**, uncheck the check box located prior to the policy name.
- **To select all policies**, select the check box that appears prior to the **Policy Name** column.

Figure 124: Selecting All Policies



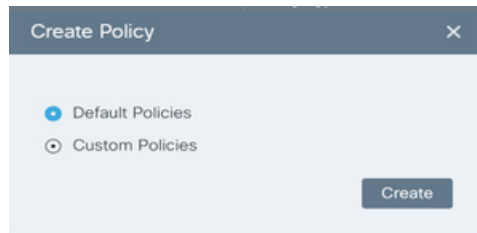
- **To deselect all policies**, uncheck the check box that appears prior to the **Policy Name** column.

Creating a Default Policy

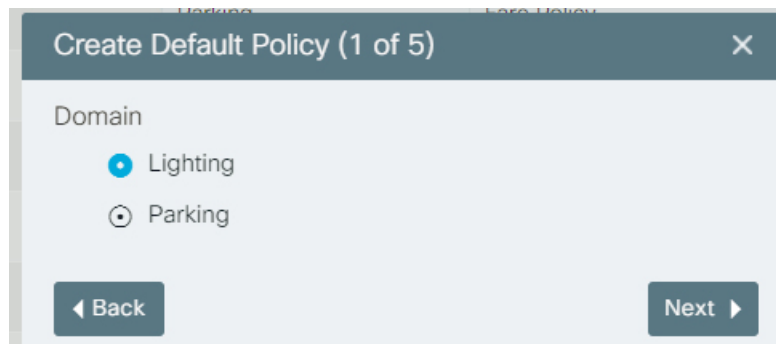
To create a default policy, click the **Create** button and respond to prompts of the policy-creation wizard. Details vary according to the type of policy that is being created, but the overall policy-creation workflow is as follows:

1. Click the **Create** button on the Policies page.

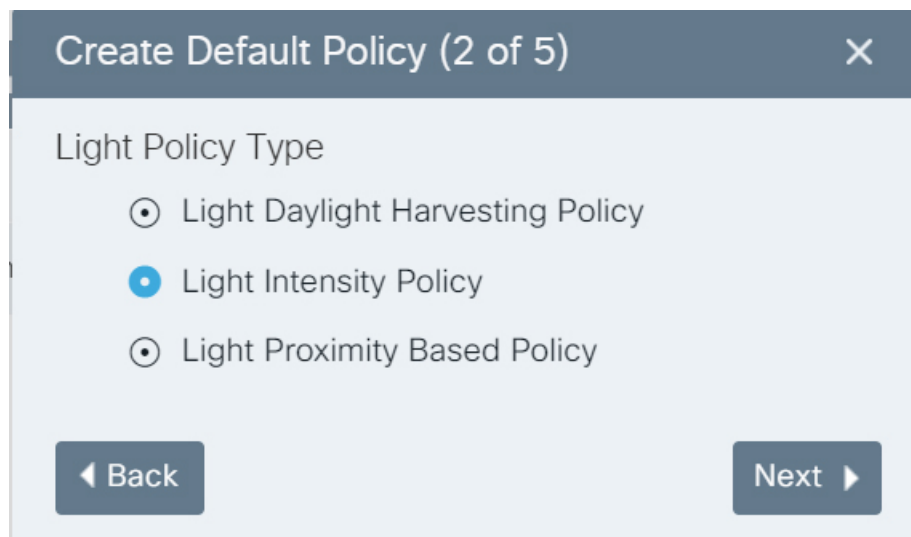
The Create Policy dialog box appears.

Figure 125: Select PolicyA dialog box titled "Create Policy" with a close button (X) in the top right corner. It contains two radio buttons: "Default Policies" (selected) and "Custom Policies". A "Create" button is located at the bottom right.

2. Select the **Default Policies** radio button and then click the **Create** button.
3. Specify whether the default policy governs one of the module **Light** or **Parking** and then click the **Next** button.

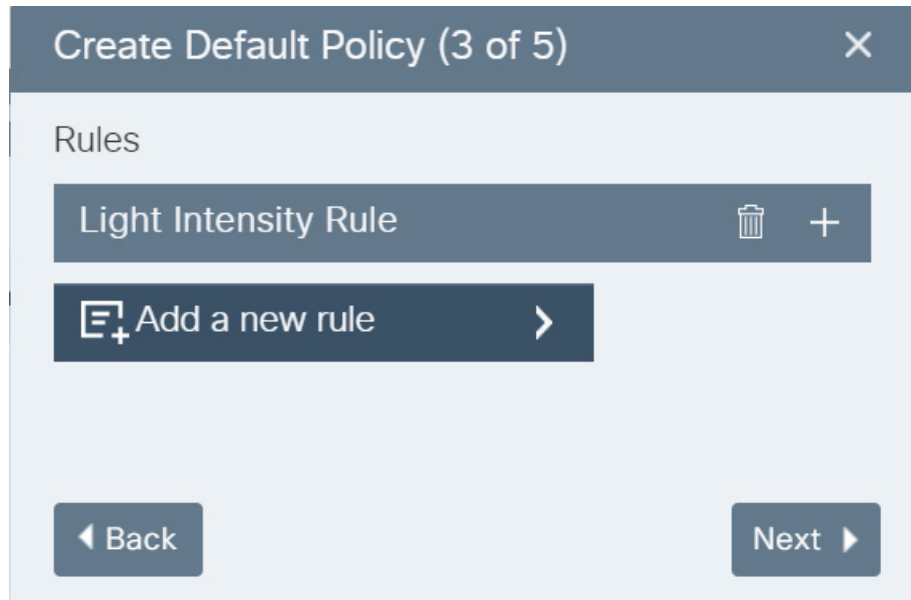
Figure 126: Create Default Policy ModuleA dialog box titled "Create Default Policy (1 of 5)" with a close button (X) in the top right corner. It contains a "Domain" section with two radio buttons: "Lighting" (selected) and "Parking". At the bottom, there are "Back" and "Next" buttons.

4. Select the **Lighting Policy Type** radio button and then click the **Next** button.

Figure 127: Default PolicyA dialog box titled "Create Default Policy (2 of 5)" with a close button (X) in the top right corner. It contains a "Light Policy Type" section with three radio buttons: "Light Daylight Harvesting Policy", "Light Intensity Policy" (selected), and "Light Proximity Based Policy". At the bottom, there are "Back" and "Next" buttons.

5. Add rules defining the enforcement actions that the policy provides.

For example: The rules for lighting could specify conditions that turn streetlights on or off, as well as other conditions that change light intensity.

Figure 128: Set Default Policy Rules

Create Default Policy (3 of 5) X

Rules

Light Intensity Rule [trash icon] +

+ Add a new rule >

◀ Back Next ▶

6. Review the rule set before finalizing the policy and then click Next.

Figure 129: Review Default Policy Rules

Create Default Policy (4 of 5) X

Light Intensity Rule

Set light intensity to 0 at Every day 12:00 AM

◀ Back Next ▶

7. Specify a unique name for the policy to easily identify that on the dashboard.
The policy is now ready for use in dashboard.

Figure 130: Save Default Policy
**Note**

Creating a policy does not apply it. The policy should be applied to the sensors using the Map view. For details on applying policy, please see [Applying a Default Parking Policy, on page 96](#)

Viewing Policy Summary



To view a summary of the rules that a particular policy provides, click the document icon  corresponding to the policy name. A Summary dialog box like the one in the following figure appears.

Figure 131: Policy Summary

Editing a Default Policy

To edit a default policy on the Policy page, click the Edit icon  and respond to prompts of the Edit Policy wizard. The details vary according to the type of policy that is being edited, but the overall edit-policy workflow is as follows:

1. Click the Edit icon on the policies page
2. The Edit Policy dialog box appears and then click + to edit the rules set for the selected policy name

Figure 132: Edit Default Policy

3. Make changes to the value, date, and time rule set for selected policy and then click Next

Figure 133: Edit Rules



4. Review the rule set before saving the policy and then click Save

Figure 134: Save Change Rules

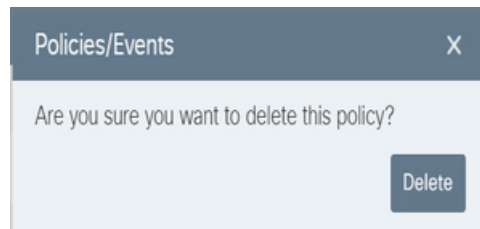


5. Click **Save** to save the edited policy.

Deleting a Policy

1. Click the trash icon that appears at the far-right end. A confirmation dialog box appears.
2. Click **Delete**


Figure 135: Delete Policy Confirmation



3. The selected policy will be deleted successfully and a confirmation message will be seen.

Importing Default Policy

You can import a default policy file saved in your system as follows:

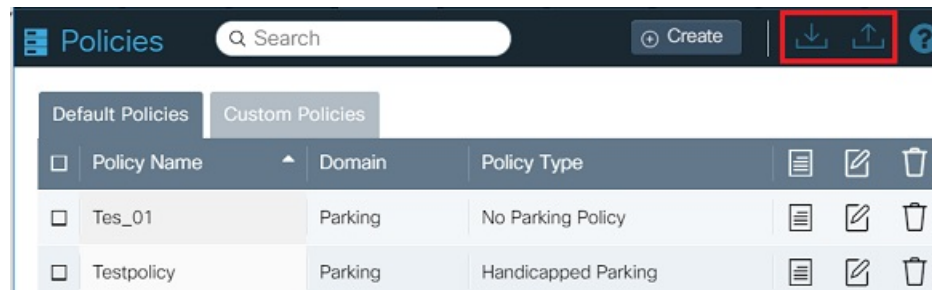
1. Click the **Import** button  at the upper-right corner of the page.
A standard file-navigation dialog box appears.
2. Select the `.json` file to import and then click the **Open** button.


A notification indicating success or failure of the import operation appears. If successful, the imported policies are available immediately. You may need to use sorting or navigation controls to find the new policies in the **Policies** list.

Exporting Default Policy

You can export one or more policies as a JSON file that you can use to install the policies in another instance of the dashboard.

Figure 136: Policies Export



1. Click check boxes in the leftmost column of the page to select the policies to export:
 - To select a policy**, select the check box corresponding to policy.
 - To deselect a policy**, uncheck the check box.
 - To select all policies or to deselect all policies**, use the checkbox at the very top of the column in similar fashion.
2. Click **Export**  at the upper-right corner of dashboard page
Your Web browser downloads the selected policies to the location specified in the browser setting.
3. Optionally, use your local desktop tools to change the default name of the exported file to a more descriptive name.
4. The dashboard assigns `policies_downloaded.json` as the default name for a file that contains one or more exported policies. It is recommended that you rename each export file as descriptively as possible, to enable other users of the system to understand the policy functionality that the file provides. Do not change or remove the `.json` filename extension.

Parking Policy

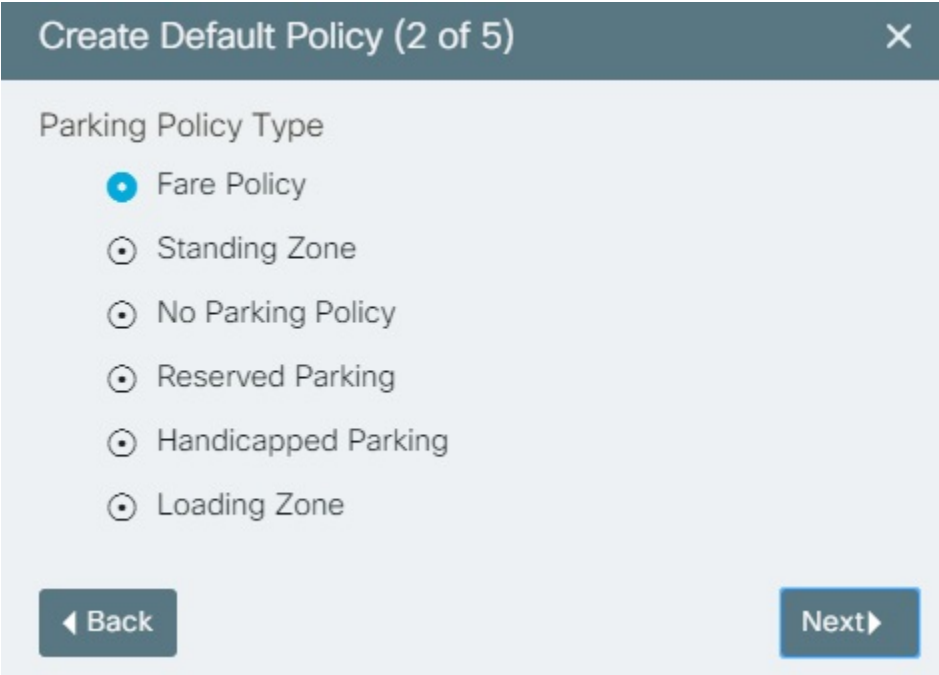
An Operator can create, modify, delete and apply a variety of parking policies to parking lots and individual spaces. The system provides built-in options as well as the ability to create customized policies.

- **Creating** a policy defines the rules that the policy enforces, such as the conditions under which the policy allows or forbids parking, and the price of parking.
- **Applying** a policy specifies the locations at which the system enforces that particular policy. Locations could include all parking spaces, or some subset, such as all spaces in a region, or even individual spaces. For example, individual spaces might be designated as handicapped parking or as no parking.

The Policies page provides access to tools that an Operator can use to manage any policy type, including parking policies.

There are multiple types of default parking policies which can be created and applied.

Figure 137: Parking Policy types



The screenshot shows a modal window titled "Create Default Policy (2 of 5)" with a close button (X) in the top right corner. Below the title bar, the text "Parking Policy Type" is displayed. Underneath, there is a list of six radio button options: "Fare Policy" (which is selected), "Standing Zone", "No Parking Policy", "Reserved Parking", "Handicapped Parking", and "Loading Zone". At the bottom of the modal, there are two buttons: "Back" on the left and "Next" on the right.

Special-Use Parking Policies

An Operator can assign specialized privileges to specific parking spots. For example, handicapped parking may be allowed extra time, occupancy of a loading zones or standing zones may be restricted to a specific amount of time, individual spots can be marked as no-parking or reserved parking, and so on.

Parking Price Plans

The system provides several preset pricing plans for parking. Operators can also define custom pricing plans.

The following preset pricing plans are available under Parking Fare Policy type:

- Time-based fares: Parking fares vary according to timestamp. For example, early morning rates and late night rates could be low, and rates for peak-usage times could be high. Parking might be free of charge on weekends and charged by the hour during weekdays. Operators can specify the time period during which a specific rate applies.
- Time-based availability: Parking facilities are available only at specified times. For example, parking allowed only between 6-9 PM. Operators can specify the parking areas and time periods during which parking is allowed or forbidden.
- Maximum duration availability: Users cannot park longer than a specified maximum amount of time. For example, the user might be allowed to park for a maximum of one hour.

An operator can also define a custom pricing policy. One example of custom pricing might be an event-based policy that increases the parking price automatically when occupancy reaches 80 per cent.

Creating a Default Parking Policy

There are multiple types of default parking policy types which the system provides. Below are the steps to create a default parking policy.

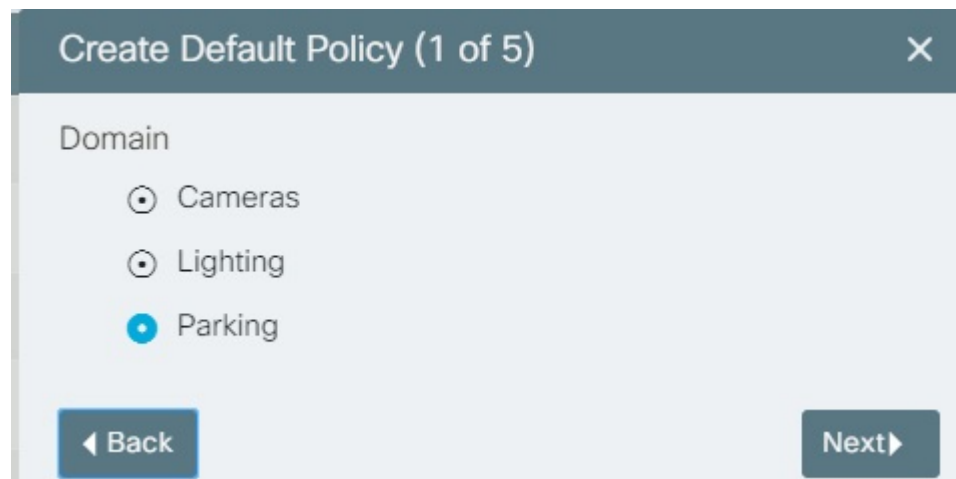
1. Choose **Policies** from the top navigation menu at the top of the Web GUI.

The **Policies** page opens. For more information, see [Understanding the User Interface, on page 33](#).

2. Click the **Create** button on the **Policies** page.

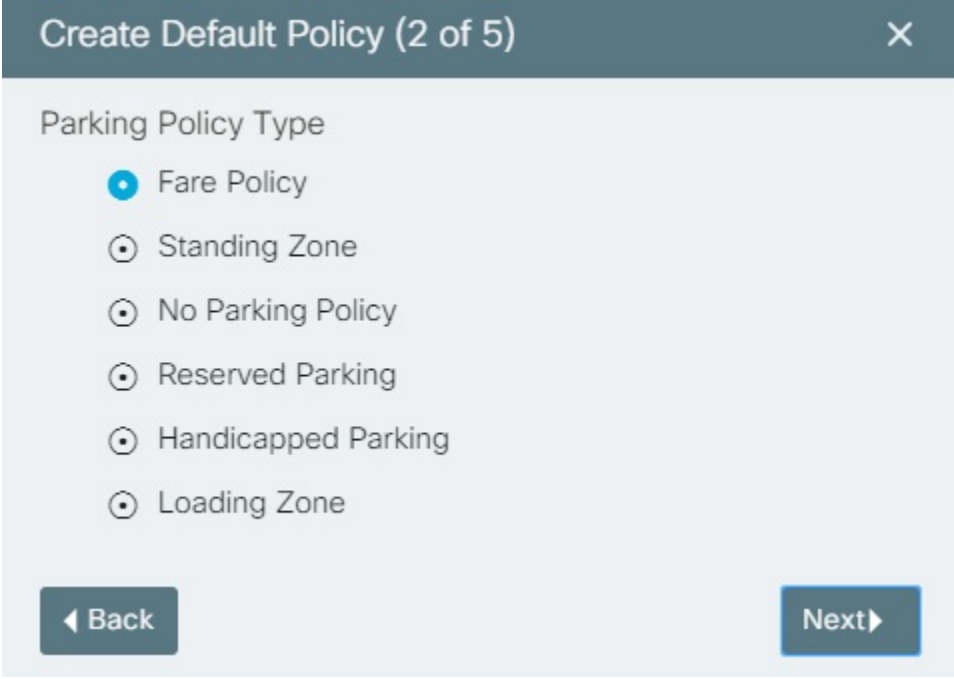
The **Create Policy** dialog box presents default policies domain choices for the domains which are accessible to the logged in operator.

Figure 138: Specifying the type of domain that the policy governs




3. Select **Parking** and then click the **Next** button.

The **Parking Policy Type** dialog displays various types of policies.

Figure 139: Specifying the Parking Policy Type**Note**

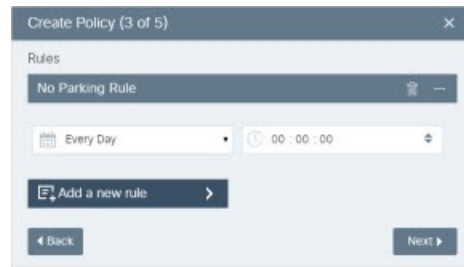
The choices that appear in the **Parking Policy Type** dialog box are predefined by the Administrator according to a plan that the City has approved.

4. Select **No Parking** option and then click the **Next** button.

Figure 140: Default configuration of Rules dialog box

5. To define the time and days at which this No Parking rule applies, click the + sign in the **No Parking Rule** button.

Controls for setting the date and time appear. In the next step, you'll use these controls to define the times at which this particular policy does not allow parking.

Figure 141: Adding a No Parking rule

6. Specify the day of the week and time of day at which to begin enforcing this rule.
By default, the No Parking rule is in effect every day, starting at midnight (00:00 AM) on the date you apply the rule. If this is sufficient, skip all of the sub-steps in this numbered step and go to the next numbered step. If you want to specify different dates and times, follow the substeps in this step to set multiple rules that govern the enforcement of the No Parking policy. For more information, see "Combining Rules to Create Complex Behaviors."
 - a. Use the pull-down menu to choose a day of the week.
 - b. Use the pull-down menu marked with the clock icon (to the right of the menu) to set the time of day at which to begin enforcing this rule. This pull-down menu uses a 24-hour clock; for example, 6:00 PM is represented as 18:00.
7. Create additional rules as necessary to specify the No Parking policy completely:
 - a. Click the **Add a new rule** button
A list of available rule types appears.
 - b. Click the **No Parking** item in the list of rule types.
The new rule appears in the dialog box.
 - c. Click the + icon that appears in the rule you just added.
Controls for configuring the rule appear. These controls vary according to the type of rule you added. For example, a fare rule presents controls for specifying an hourly rate as well as the dates and times at which to apply that rate.
 - d. To add another rule, repeat steps a) through c); otherwise, go to the next step.
8. After adding all the rules to the policy, click the **Next** button.
The summary page (4 of 5) summarizes the current ruleset.

Figure 142: Summary of rules

9. Click the **Next** button.
The **Policy Name** field appears.
10. In the **Policy Name** field, type the name that is to identify this policy in the CKCWeb GUI.

**Important**

You cannot change the name of the policy after saving it. Descriptive names like "No parking Friday 6pm" are preferable to less-descriptive ones like "Friday night parking policy."

11. Click **Save**.

Creating a Multi-Rule Parking Policy

A policy can contain multiple rules; for example it might contain multiple fare rules that change the price of parking according to the time of day or day of week, and it might have "no parking" rules that forbid parking entirely at certain times or on certain days. All rules within a single policy must operate on the same module; for a single policy cannot provide both parking and traffic rules. However you can create separate policies of different types that operate on the same locations at the same time. For example, you might create a parking policy that forbids parking in a particular location at 9pm on Fridays and you could also create a lighting policy that turns on the streetlights in that location at that time.

To create a multi-rule policy, simply continue adding rules to its Rules dialog before finalizing your policy, as follows:

1. Complete steps 1-7 in [Creating a Default Parking Policy, on page 92](#).
2. Click the **Add a new rule** button.
3. Choose **Fare Rule** or **No Parking Rule**.
4. Configure controls that define the terms of the parking rule.
5. Repeat steps 2-4 of this procedure as necessary to add and configure additional rules.
6. When you are finished adding rules to the policy, click **Continue**.

The policy summary appears.

- If you are satisfied with the rules that the policy provides, click **Continue** and then go to the next step in this procedure.
- If you want to modify the policy's ruleset, click **Back**, make changes, and then return to this step.

7. Supply a name for the policy in the Policy Name Field and then click the Save button.

**Important**

You cannot change the name of the policy after saving it. Descriptive names like "No parking Friday 6pm" are preferable to less-descriptive ones like "Friday night parking policy."

Combining Rules to Create Complex Behaviors

You can combine rules to create sophisticated policy-enforcement behaviors. For example, you can add multiple Parking Rules to allow parking at some times, no parking at others, and changes of fare during the times parking is allowed:

- To specify a range of time, set the start time for the rule to a specific day of the week and time of day. This enforcement period remains in effect until another rule overrides it.

For example, if you specify no parking beginning Thursday at 10 am it would remain in effect until, for example, another policy specifies that parking is \$2/hour beginning at 9 am on Fridays. That rule remains in effect until another policy takes effect, even if the day of week changes at midnight. Continuing the example, if these two rules were the only ones that governed this particular parking space, the effective policy would be "no parking Thursday 10 am until \$2 parking Friday at 9am. Parking would remain allowed at \$2/hr until the following Thursday at 10 am.

- To specify "no parking, always" you could create a rule that is "No Parking - every day - 00:00:00" and it would stay in effect indefinitely. Another way to achieve the same result would be to choose a specific date and time at which the No Parking rule becomes effective, such as Monday at 00:00:00. As long as no other rule supersedes this one, this rule would remain in effect indefinitely.
- To configure no parking in the mornings, and parking allowed in the evenings, you could create the following rules:

No Parking - Every day - 00:00:00

Fare rule - Every day - 18:00:00

Similarly, you can add different kinds of rules to a single policy. For example, you might have a default fare-based parking policy that is overridden by event-based or time-based policies that change the parking rate or disallow parking entirely.

Applying a Default Parking Policy

You can apply a previously created parking policy as the default policy for selected locations in Map View.

You can apply the policy to any valid selection. For example, you can select multiple parking lots, or individual spaces in a single lot, or individual spaces on the street, but a single selection cannot encompass all of these items. To apply the policy to selections of different types, you'll need to complete this procedure once for each type of selection. For example, you can follow this procedure once to apply a policy to multiple parking lots. If you then want to apply the policy to individual spaces in on-street parking, you'll need to follow this procedure again to apply the policy to that selection. Similarly, you could follow this procedure to apply a default policy to individual spaces within a single parking lot.

To apply a default parking policy to a selection in Map View, take the following steps.

Before you begin

- The **Parking** module is enabled in **Map View**. For more information, see "Modules" in [Understanding the User Interface, on page 33](#).
- The policy to apply is available on the **Policies** page. For more information, see [Applying Parking Policy to Locations, on page 98](#).

Step 1 In Map View, select parking lots or parking spaces for which you intend to set a new default policy.

For more information, see [Getting Details from Map View, on page 43](#).

Step 2

Click the **Policies/Events** button.

The **Policies/Events** dialog box displays the current selection, along with any policies that may be in effect for that selection now. The **Policies/Events** dialog box also provides controls that enable you to choose a parking space policy to set as a default policy or a date-based policy.

Figure 143: Apply Policies Window

Device	Policy Name
2bd5fe5...92971d37	Farepolicy040800

Select Parking Lot Policy ▼ Default Policy ▼

Step 3

Choose a parking policy from the **Select Parking Space Policy** pull-down menu.

The current value of the menu reflects your choice.

Step 4

Choose **Default Parking Policy** from the pull-down menu next to the **Select Parking Space Policy** menu.

The current value of the menu reflects your choice.

Step 5

After reviewing your choices to ensure that they are correct, click the **Apply** button.

The **Policies/Events** dialog box displays the new default policy for the selected spaces.

If a default parking policy was already in effect for any parking spaces in the selection when you clicked the Apply button, a dialog box like the one in the following figure prompts you to confirm your intention to overwrite that default policy. Click **Yes** to proceed to replace the current default policy with the new one; click **No** to return to the **Policies/Events** dialog box. When you are satisfied with your choices and you click **Yes** in the overwrite confirmation dialog box, go to the next step.

Figure 144: Overwrite default confirmation dialog

Policies/Events

Some of the selected Parking Spot already have default policies configured, do you want to overwrite?

Yes No

Step 6 Close the **Policies/Events** dialog box by clicking the X in its upper-right corner.

Applying Parking Policy to Locations

The operator can apply a policy to specific parking lots or parking spaces.

In addition to these location-based criteria, an Operator can define time-based criteria that apply a parking policy. For example, the operator can specify a time period during which the policy is applied, such as indefinitely, for a year, for a week, and so on. Time-based criteria can specify policy according to times of day, days of the week, holidays, and so on. Another aspect of time-based criteria include defining maximum occupancy durations, such as two-hour parking.

Using List Views to Apply Parking Policy

The Operator can view the parking spots in a region in a list view that enables filtering, sorting, and selection of individual parking spots for the purpose of applying policies. You can use these list views to find parking and lighting sensors easily. You can also configure sensors from within the list. For example, to list all parking sensors and then use the list view to configure individual sensors, perform the following steps:

Enable the Parking Module.

For more information, see [Enabling or Disabling Module Output in Map View, on page 39](#).

All of the parking sensors appear in list view.

Select one or more parking sensors by selecting the check box.

The summary banner provides a **Policies/Events** button and a **Clear Selection** button.

Figure 145: List View of parking sensors

<input type="checkbox"/>	Name	Domain	Status	Provider
<input type="checkbox"/>	Spot_TU_Berlin.M003.001.001.FS.001	Parking	Occupied	Cleverciti
<input type="checkbox"/>	Spot_TU_Berlin.M003.001.001.FS.002	Parking	Occupied	Cleverciti
<input type="checkbox"/>	Spot_TU_Berlin.M003.001.001.FS.003	Parking	Occupied	Cleverciti
<input type="checkbox"/>	Spot_TU_Berlin.M003.001.001.FS.004	Parking	Occupied	Cleverciti
<input type="checkbox"/>	Spot_TU_Berlin.M003.001.001.FS.005	Parking	Occupied	Cleverciti
<input type="checkbox"/>	Spot_TU_Berlin.M003.001.001.FS.006	Parking	Occupied	Cleverciti
<input type="checkbox"/>	Spot_TU_Berlin.M003.001.001.FS.008	Parking	Occupied	Cleverciti
<input type="checkbox"/>	Spot_TU_Berlin.M003.001.001.FS.009	Parking	Occupied	Cleverciti

Click the **Policies/Events** button.

The **Policies/Events** dialog box displays the current selection, along with any policies that may be in effect for that selection now. The **Policies/Events** dialog box also provides controls that enable you to choose a parking space policy to set as a default policy or a date-based policy.

Figure 146: Existing Policies View

Apply Policy		Apply Event	
Device		Policy Name	
2bd5fe5...92971d37		Farepolicy044813	

Configure the parking policy to apply to the selection.

For more information, see [Parking Policy, on page 90](#)

To save your changes, click the Apply button.

The selected infrastructure items reflect the new settings immediately.

Figure 147: Applied Policies

Policy Name		Domain	Po
Farepolicy040800		Parking	De

Success Policy applied successfully

Applying a Date-Based Parking Policy

You can apply a previously created parking policy as a date-based policy for selected locations in Map View.

You can apply the policy to any valid selection. For example, you can select multiple parking lots, or individual spaces in a single lot, or individual spaces on the street, but a single selection cannot encompass all of these items. To apply the policy to selections of different types, you'll need to complete this procedure once for each type of selection. For example, you can follow this procedure once to apply a policy to multiple parking lots. If you then want to apply the policy to individual spaces in on-street parking, you'll need to follow this procedure again to apply the policy to that selection. Similarly, you could follow this procedure to apply a default policy to individual spaces within a single parking lot.

To apply a date-based parking policy to a selection in Map View, take the following steps.

Before you begin

- The **Parking** module is enabled in **Map View**. For more information, see "Modules" in [Understanding the User Interface, on page 33](#).
- The policy to apply is available on the **Policies** page. For more information, see [Policies Page, on page 83](#).

Step 1 In Map View, select parking lots or parking spaces for which you intend to set a new date-based policy.

For more information, see [Getting Details from Map View, on page 43](#).

Step 2 Click the **Policies/Events** button.

The **Policies/Events** dialog box displays the current selection, along with any policies that may be in effect for that selection now. The **Policies/Events** dialog box also provides controls that enable you to choose a parking space policy to set as a default policy or a date-based policy.

Figure 148: Policies/Events dialog box



Step 3 Choose a parking policy from the **Select Parking Space Policy** pull-down menu.

The current value of the menu reflects your choice.

Step 4 Choose **Date-Based Policy** from the pull-down menu next to the **Select Parking Space Policy** menu.

Controls for choosing the start and end dates of the policy enforcement period appear.

Figure 149: From/To controls

From: 00 : 00 : 00

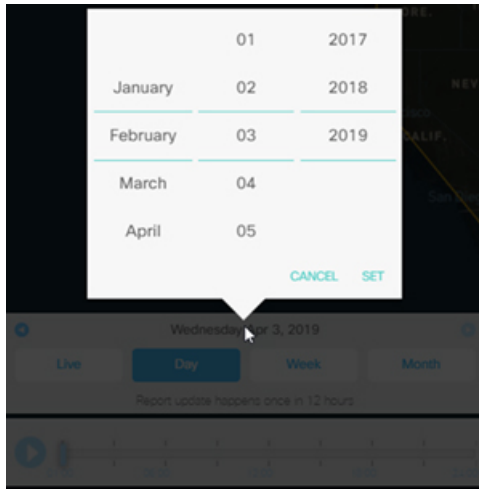
To: 00 : 00 : 00

Step 5 Use the **From** controls to specify the date and time at which the policy-enforcement period begins:

- Click the calendar icon in the **From** control.

A date-picker control like the one in the following figure appears.

Figure 150: Date-setter control

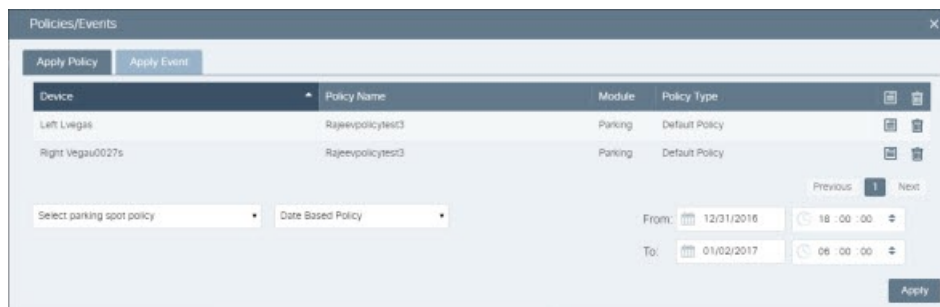


- b. Scroll the month, day, and year columns in order to set the desired date.
- c. To set the time of day at which the enforcement period begins, select a column (hours, minutes, or seconds) in the clock control and type to enter its value. Alternatively, you can select a column and use the up-down arrows to set time .

Step 6 Use the **To** controls to set the date and time at which the enforcement period ends.

When you have finished configuring the **From** and **To** controls, they display the dates and times at which the enforcement period for this date-based policy starts and ends. For example, the following figure depicts a date-based policy that begins at 6:00 pm on December 31, 2015 and ends at 6:00 AM on January 2, 2016. Note that the policy has not yet been applied: it does not appear in the list of parking lots and spaces that appear in the Policy/Events dialog box.

Figure 151: Setting policy dates for New Year's holiday period



Step 7 Click **Apply**.

The **Policies/Events** dialog box displays the new date-based policy for the selected spaces. Sorting results on the Policy Name or Policy Type fields may make it easier to verify that your new policy has been applied to the entire selection as you intended.

Step 8 Close the **Policies/Events** dialog box by clicking the X in its upper-right corner.

Lighting Policy

An Operator can create, modify, delete and apply a variety of lighting policies to lighting groups and individual light sensors. The system provides built-in options as well as the ability to create customized policies.

- **Creating** a policy defines the rules that the policy enforces, such as the conditions under which the light intensity of the sensors can be changed, thus controlling the lighting of various locations.
- **Applying** a policy specifies the locations at which the system enforces that particular policy. Locations could include lighting group, or individual lighting sensors. For example, light intensity within a specific radius can be controlled when an object is detected. The policies can be applied similar to Parking policy application. For more details, refer [Using List Views to Apply Parking Policy, on page 98](#)

The Policies page provides access to tools that an Operator can use to manage any policy type, including lighting policies. You can create time-based and event-based lighting policies very similarly to the workflows used to create similar kinds of parking policies. For more information, see the workflows for creating parking policies, and apply them to lighting groups and lighting sensors in the Lights module.

Types of default Lighting policies

Default or built-in lighting policies are of three types

- **Light Daylight Harvesting Policy** : This policy provides a default option of changing light sensor's intensity during daylight. You can multiply the existing intensity by a multiplier depending on the ambient light illuminance.
- **Light Intensity Policy** : The Light Intensity can be changed to a specific value at specific time of the day.
- **Light Proximity Based Policy** : The Light intensity changes within a certain radius when an object is detected. You can specify the intensity to which the light should be set once an object is detected at specific time of the day.

Creating Light Daylight Harvesting Policy

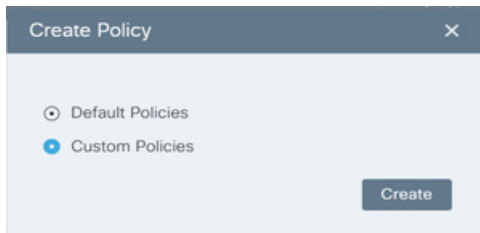
To create a default lighting policy under *Light Daylight Harvesting Policy* type, perform the following steps

Before you begin

Before attempting this procedure, verify the following:

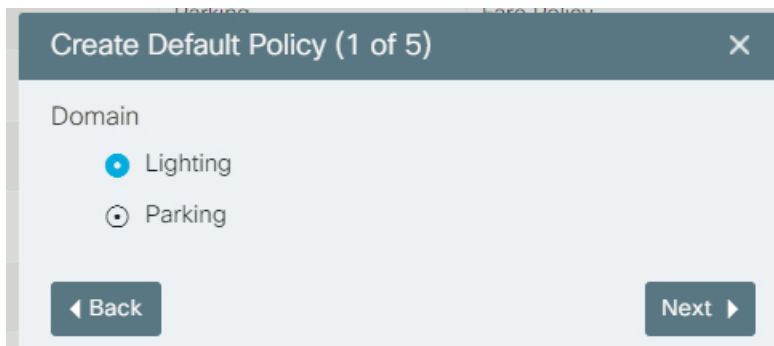
- You are logged into the CKC dashboard as an **Operator**
- The **Lighting** module is enabled in **Map View**. For more information, see "Modules" in [Enabling or Disabling Module Output in Map View, on page 39](#).

-
- Step 1** Click **Policies** from the top navigation menu.
The **Policies** page appears. For more information, see [Policies Page, on page 83](#)
 - Step 2** Click **Create** on top right of the Policies page
Create Policy window appears.
 - Step 3** Select **Default Policies** option.

Figure 152: Create Policy window

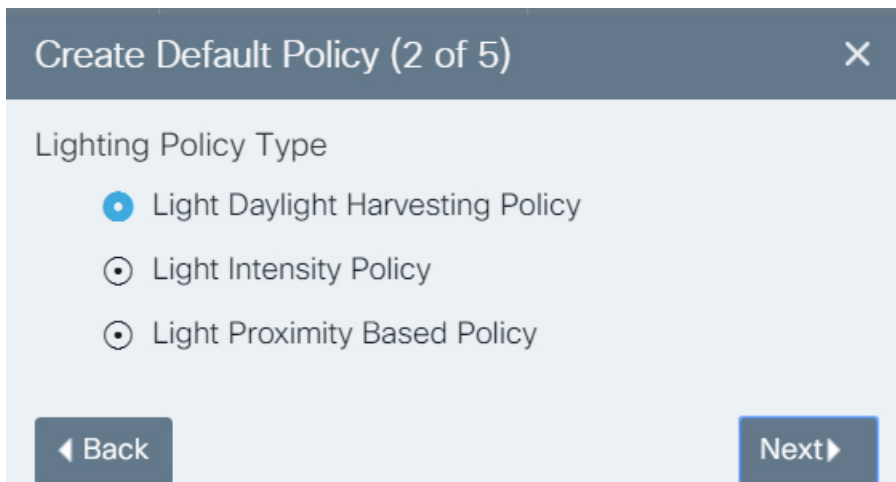
Step 4 Click **Create**
Create Default Policy window appears.

Step 5 Select **Lighting** domain.

Figure 153: Default Lighting Policy

Step 6 Select **Next**
Default Lighting Policy types appear.

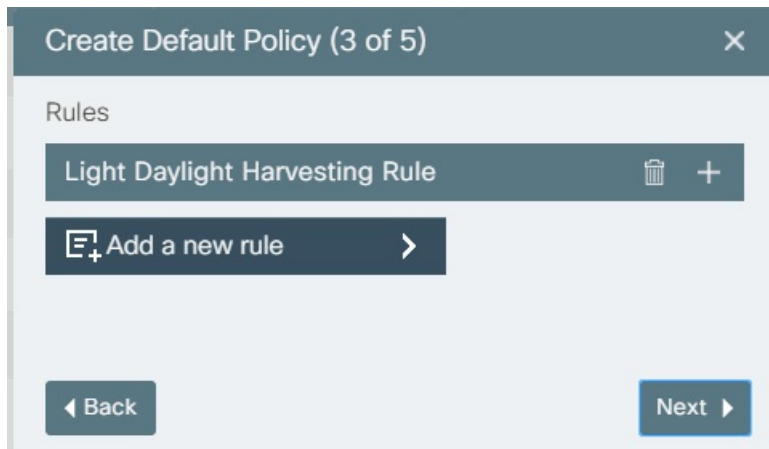
Step 7 Select **Light Daylight Harvesting Policy** as lighting policy type.

Figure 154: Light Daylight Harvesting Policy

Step 8 Click **Next**
Rules window appears

Step 9 Click +

Figure 155: Light Daylight Harvesting Rule



Create Default Policy (3 of 5) X

Rules

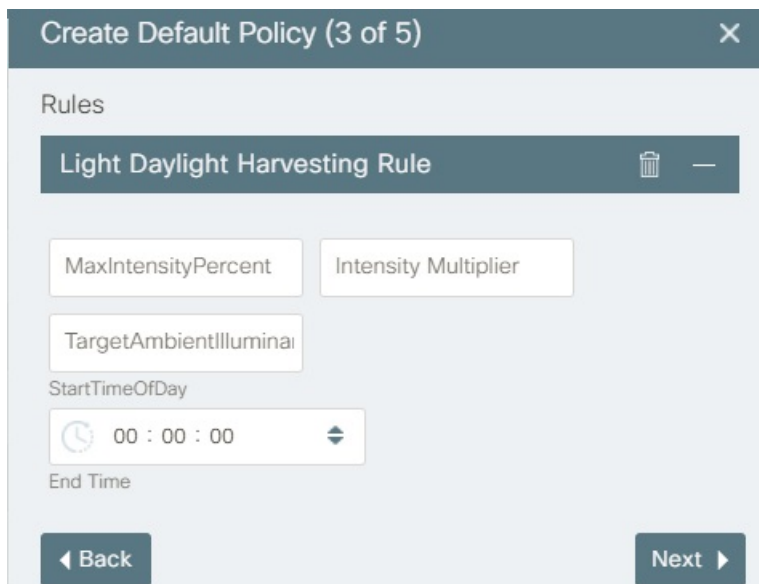
Light Daylight Harvesting Rule [trash icon] +

+ Add a new rule >

◀ Back Next ▶

Step 10 Enter the values for Max Intensity Percent, Intensity Multiplier, Target Ambient Illumination, Start Time and End Time.

Figure 156: Applying Light Daylight Harvesting Rule



Create Default Policy (3 of 5) X

Rules

Light Daylight Harvesting Rule [trash icon] —

MaxIntensityPercent Intensity Multiplier

TargetAmbientIllumina

StartTimeOfDay

00 : 00 : 00

End Time

◀ Back Next ▶

Step 11 Click Next

Figure 157: Rule Summary




Figure 157 shows a dialog box titled "Create Default Policy (4 of 5)". The main heading is "Light Daylight Harvesting Rule". The text describes the rule: "When Ambient Light Illuminance reached 20, light intensity will be multiplied by 2 with maximum intensity value as 40% from 12:00 am to 12:00 am." At the bottom, there are two buttons: "Back" and "Next".

Step 12 Click **Next**

Step 13 Enter *Policy Name*

Figure 158: Saving Policy



Figure 158 shows a dialog box titled "Create Default Policy (5 of 5)". The main heading is "Policy Name". Below the heading is a text input field. At the bottom, there are two buttons: "Back" and "Save".

Step 14 Click **Save**
Success message gets displayed.

Figure 159: Confirmation Message



Figure 159 shows a confirmation message dialog box. The message is "Success Policy created successfully" with a green background and a close button (X). The dialog box is overlaid on a table with the following content:

Parking	Fare Policy
Parking	Handicapped Parking
Parking	Handicapped Parking

Creating Light Intensity Policy

To create a default lighting policy under *Light Intensity Policy* type, perform the following steps

Figure 160: Creating Light Intensity Policy



Figure 161: Setting the rule for Light Intensity

**Before you begin**

- You are logged into the CKC dashboard as an operator
- The **Lighting** module is enabled in the **Map View**

-
- | | |
|----------------|---|
| Step 1 | Select Policies on the top navigation menu |
| Step 2 | Click Create |
| Step 3 | Select <i>Default Policies</i> |
| Step 4 | Click Create |
| Step 5 | Select <i>Lighting</i> domain |
| Step 6 | Select <i>Lighting Intensity Policy</i> |
| Step 7 | Click + |
| Step 8 | Drag the slider to change light intensity value |
| Step 9 | Enter the days and time value |
| Step 10 | Click Next |
| Step 11 | Check the rule summary and click Next |
| Step 12 | Enter <i>Policy Name</i> and click Save . |
-

Creating Light Proximity Based Policy

To create a default lighting policy under *Light Proximity Based policy*, perform the following steps:

Figure 162: Light Proximity Based Policy

Create Default Policy (2 of 5)

Lighting Policy Type

- ☐ Light Daylight Harvesting Policy
- ☐ Light Intensity Policy
- ☒ Light Proximity Based Policy

[Back](#) [Next](#)

Figure 163: Setting Proximity rule

Create Default Policy (3 of 5)

Default Intensity Level

0 30 100

Triggered Intensity Level

0 40 100

TriggerEffectDuration

StartTimeOfDay

00 : 00 : 00

End Time

[Back](#) [Next](#)

Before you begin

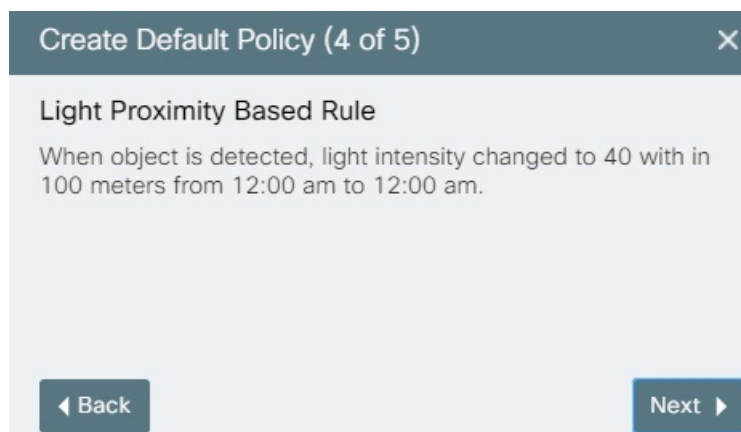
Before attempting this procedure, verify the following:

- You are logged into the dashboard as an Operator
- The **Lighting** module is enabled in the Map View. For more information, see "Modules" in [Enabling or Disabling Module Output in Map View, on page 39](#)

-
- Step 1** Click **Policies** on the top navigation menu of the dashboard.
 - Step 2** Click **Create** on top right corner of the Policies page.
 - Step 3** Select *Default Policies* in the Create policy window.
 - Step 4** Click **Create**.
 - Step 5** Select **Lighting** domain.

- Step 6** Select policy type as *Light Proximity Based Policy*
- Step 7** Click +
- Step 8** Drag the slider to set the Default Intensity Level and Triggered Intensity level.
- Step 9** Enter the Trigger effect duration, Start, End time and radius
- Step 10** Click **Next**
- Step 11** Check the rule summary and click **Next**
- Step 12** Enter policy name and click Save.

Figure 164: Summary of Light Based Proximity Policy



Custom Policies

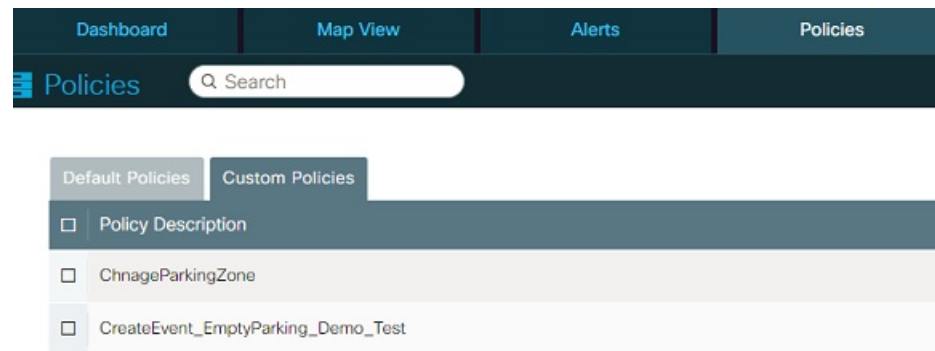
A Custom Policy is a set of rules defined by the user to be applied when a specific incident occurs. These policies give user the flexibility to move beyond provided default rules, create their own rules and apply them. You can use the sample template provided in the application and add your own parameters to create a customized policy.

Viewing Custom Policies Page

To view the custom policies page, click the **Policies** tab on the dashboard. The default policies page appears by default.

Click the **Custom Policies** tab. The Custom Policies page appears.

Figure 165: Custom Policies Page



Information on the Custom Policies Page

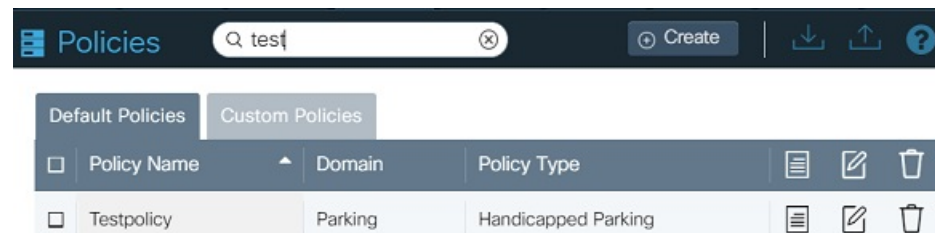
Each entry on the Custom Policies page provides the following information about a policy :

- **Policy Description:** The label tag that you define in the xml file while creating a custom policy is the policy description.
- **Policy Type:** The type of policy. In the current release, this value is always set to Custom Policy.

Searching for Policies

To search for a policy, type any part of the policy name in the **Search** box. Complete match and partial match records appear immediately. Search terms are not case-sensitive. To clear the search terms and view all policies, click the X button at the right of the Search box or use Backspace key.

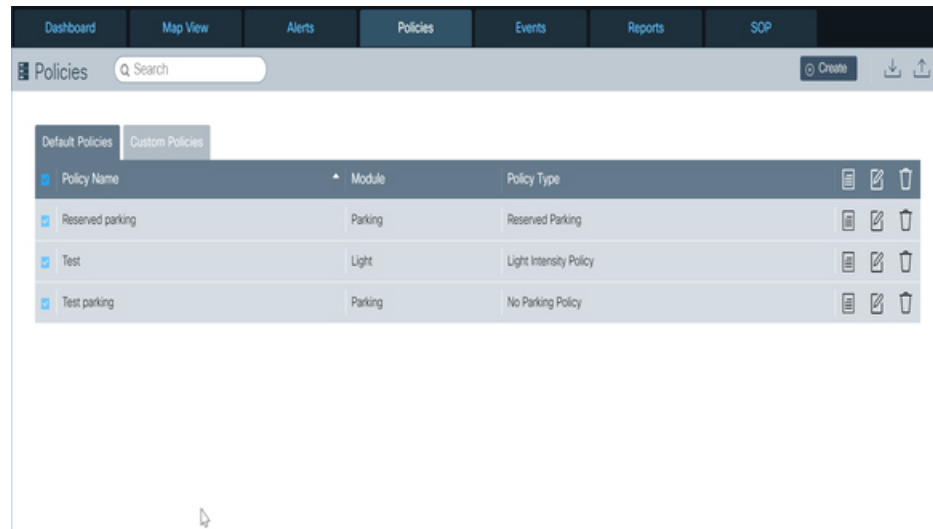
Figure 166: Searching for a Policy



Selecting and Deselecting Policies

You can select policies for purposes of exporting them to a file; subsequently, you can use this file to import the policies into another dashboard.

- **To select an individual policy,** select the check box located prior to the policy name.
- **To deselect an individual policy,** uncheck the check box located prior to the policy name.
- **To select all policies,** select the check box that appears prior to the **Policy Name** column.

Figure 167: Selecting All Policies

- To deselect all policies, uncheck the check box that appears prior to the **Policy Name** column.

Creating a Custom Policy

To create a custom policy, click the **Create** button and respond to prompts that the policy-creation wizard supplies. Details vary according to the type of policy being created, but the overall policy-creation workflow is as follows:

1. Click **Create** on the Policies page. The Create Policy dialog box appears.

Figure 168: Select Policy

2. Select **Custom Policies** radio button
3. Click the **Create** button. The Create Policy dialog box appears with Upload, Cancel and Save options
4. Click **Upload Policy** to upload the policy from your local machine. The format for the xml file can be seen by clicking on any of the available sample template. Make sure the policy you upload should only be in xml, txt files, or you can also click to select the policy file under the **Sample Templates** section to create a custom policy.



- The Custom Policy will be available to view on the left side of the Create Policy dialog box. Click the **Save** button.

Figure 169: Save Custom Policy




- The new custom policy will be created successfully and will appear in the list of Custom Policy page.

Figure 170: Success Message on Custom Policy Creation

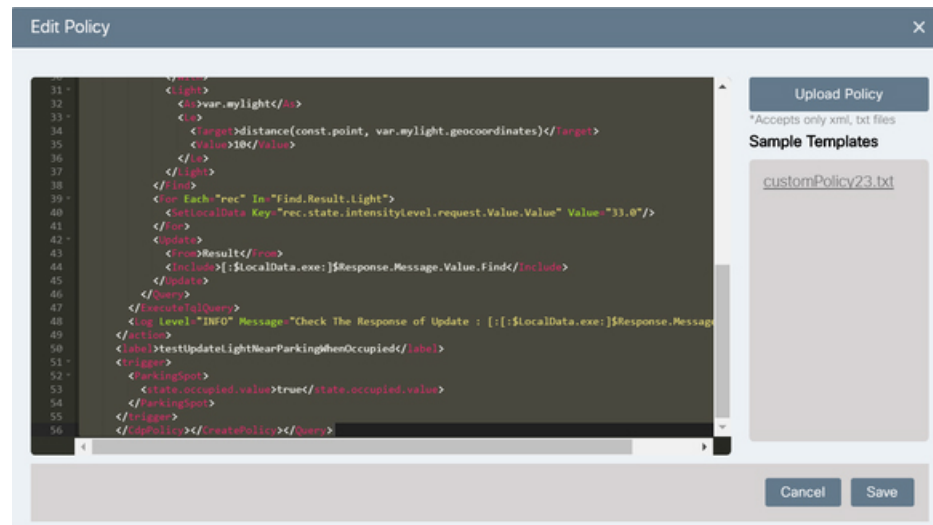
	Parking	Fare Policy
	Parking	Handicapped Parking
<div> Success Policy created successfully X </div>		
	Parking	Handicapped Parking

Editing a Custom Policy

To edit a policy from the Policy page, click the Edit icon  and respond to prompts that the edit policy wizard supplies. Details vary according to the type of policy being edited, but the overall edit-policy workflow is as follows:

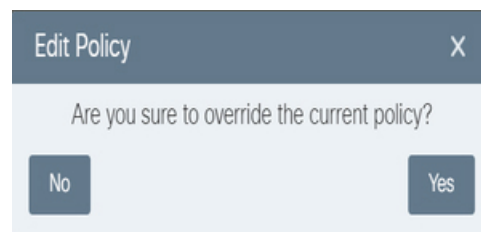
1. Click the Edit icon on the policies page
2. The Edit Policy dialog box appears and then click the **Upload Policy** button to browse the new policy or click to select the new template available under the **Sample Template** section to override the rule set for the current policy and then click Save.

Figure 171: Edit Custom Policy




3. On clicking new template under the Sample Templates section, an Edit Policy dialog box appears that asks for your confirmation to override the current policy. Clicking **Yes** will override the rule set for the selected policy.

Figure 172: Edit Policy Confirmation



4. Review the rule set before saving the policy and then click **Save**.

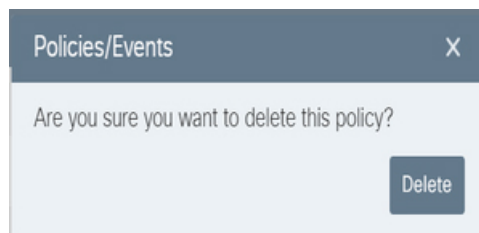
The selected policy will be edited successfully and confirming Success message Policy edit done successfully.

A green success message box with the text "Success Policy edit done successfully." and a close button (X) on the right.

Deleting a Policy

1. Click the trash icon that appears at the far-right end. A confirmation dialog box appears.
2. Click **Delete**

Figure 173: Delete Policy Confirmation



3. The selected policy will be deleted successfully and a confirmation message will be seen.

Events

An Event is a set of a trigger and an action. This set can be a cross domain combination. For example, Change the light intensity when parking spot is occupied.

Events are applied over sensor(s) or region(s) on the map view.

Events page provides tools for creating and managing events. To view the **Events** page, choose **Events** from the top navigation menu (*see [Understanding the User Interface, on page 33.](#)*)

Figure 174: Events page

<input type="checkbox"/>	Event Name	Event
<input type="checkbox"/>	24april_event	Change In Parking Occupancy St
<input type="checkbox"/>	Env_thresholdreached	Change In Threshold
<input type="checkbox"/>	Event197	Detection Of Event
<input type="checkbox"/>	Event_24april	Change In Parking Utilization
<input type="checkbox"/>	Over_crwd_10	ROI Over Crowding Trigger With
<input type="checkbox"/>	Parkingfull	Change In Parking Utilization
<input type="checkbox"/>	Over_crwd_100	ROI Over Crowding Trigger With

Information on the Events Page

Each entry on the Events page provides the following information :

- **Event Name:** The name that identifies the event in the dashboard web GUI. It is recommended that you name events as descriptively as possible.
- **Event :** The Domain-Trigger that would lead to the action.
- **Action:** The change in behavior that the system should display once trigger condition is reached.

Following is the list of default Event triggers and actions available:

Module	Triggers Available	Actions Available	Usage
Parking Lot	Unutilised Parking	Send notification	When Parking Lot is not fully utilised, send a notification to the operator.
	Change in Parking Utilization	Scale fare	Raise price when parking utilization is high; lower it when utilization is low.
	Change in Parking Occupancy Status	Change the intensity of the light	Change light intensity to desired level when Parking Lot's status changes to fully occupied or to fully vacant.
	Unavailability of Parking	Send notification	When the Parking Lot does not have any Parking available, send a notification to the operator.
Parking Spot	Change in Parking occupancy status	Change the intensity of the light	When the Parking spot occupancy changes to fully vacant or to fully occupied, change the intensity level of the light within a defined radius.
Traffic	Change of Congestion	Set Parking Zone In Radius	Set parking zone within specific radius when congestion level changes.
		Scale Parking Fare	Change parking rates with change in congestion state.
	Occurrence of Accident	Flash Light	Flash lights within the specified radius when an accident occurs.

Module	Triggers Available	Actions Available	Usage
Environment	Change in Ambient Temperature	Change Light intensity for the Ambient temperature.	Change the intensity of light within specified radius when ambient temperature crosses the mentioned threshold value.
	Change in Severity Threshold	Notify Threshold reached	Send a notification to operator when threshold value is reached.
	Change in Ambient Light	Change Light Intensity for Ambient	Change the intensity of ambient light to specified value within specified radius when ambient light crosses the mentioned threshold value.
	Change in Threshold	Notify Threshold reached	Send a notification to operator when threshold value is crossed for any of the Environment state attribute.

Module	Triggers Available	Actions Available	Usage
Region	Change In Parking Utilization	Scale Fare	When Parking Utilization value is less/greater/equal to a threshold value, then scale the Parking Fare by a certain percentage.
	Change in Ambient Temperature	Change Light Intensity For Ambient Temperature	When ambient temperature falls within a specific range, then set the light intensity to a given value within the mentioned radius.
	Change in Parking Occupancy Status	Change the intensity of the light	When Parking Spot is occupied/vacant in the specified location, set the lights intensity to a given value within the mentioned radius.
	Occurrence of Accident	Flash Light	When accident is detected on any road segment in the specified location, flash lights within provided radius from the event location.
	Change of Congestion	Set Parking Zone in radius	When high/medium/low congestion is detected on any road segment of the specified location, Parking Zone will be set within provided radius.
		Scale Parking Fare	When high/medium/low congestion is detected on any road segment of the specified location, Parking Fare will be scaled by a specific within provided radius.
	Overcrowd Threshold	Lighting Over Crowded Area	

Module	Triggers Available	Actions Available	Usage
			When count of Car/Truck/Motorcycle/Vehicle Overall/ Pedestrian/ Wheelchair/ Bicycle/ Pedestrian Overall/ Personal Device Overall/ Unknown Overall on the specified location crosses the threshold value, then set the light intensity to the provided levels over the crowded area.
	Change in Ambient Light	Change Light intensity for the ambient light	When ambience light illuminance falls within a specified threshold, then set light intensity to provided level within specified radius.
	Unutilised Parking	Send Notification	When any Parking Zone in the specified location is vacant, send notification to the operator.
	ROI Over Crowding Trigger With Location	Create Event For Mobility ROI	A congestion or overcrowding event with a specified severity (L1/L2/L3/L4/L5) is created when the count of specified vehicle/ pedestrian/device reaches the threshold value.
	Unavailability of Parking	Send Notification	When any Parking Zone in the specified location is fully occupied, send notification to the operator.
	Detection of Event	Flash Light	

Module	Triggers Available	Actions Available	Usage
			When any event such as camera health check/Citizen alert/Face recognition/Fire and Smoke/ Fire/ Garbage/ Graffiti/ Gunshot/ Influencer/ Intrusion/ Keyword/ Vehicle Identified/ Loitering/ Suspicious Object/ Overcrowding/ Overstay/ Panic/ Queue/ Seismic/ Sentiment/ Slip and Fall/ Smoke/ Speeding/ Theft/ Train Platform Intrusion/ Weather/ Wrong Way is detected in the specified location, then flash the lights within provided radius from the event location.
		Lighting Nearby Area	When any event such as camera health check/Citizen alert/Face recognition/Fire and Smoke/ Fire/ Garbage/ Graffiti/ Gunshot/ Influencer/ Intrusion/ Keyword/Vehicle Identified/ Loitering/ Suspicious Object/ Overcrowding/ Overstay/ Panic/ Queue/ Seismic/Sentiment/Slip and Fall/ Smoke/ Speeding/ Theft/ Train Platform Intrusion/ Weather/ Wrong Way is detected in any area of the specified location, then set the lights within provided radius are set to a specific intensity level.
		Set Parking Status	

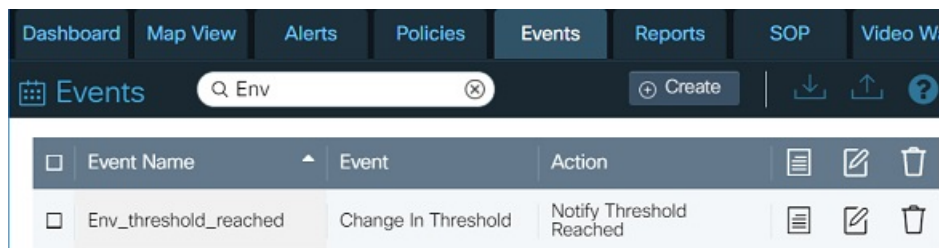
Module	Triggers Available	Actions Available	Usage
			When any event such as camera health check/Citizen alert/Face recognition/Fire and Smoke/ Fire/ Garbage/ Graffiti/ Gunshot/ Influencer/ Intrusion/ Keyword/Vehicle Identified/ Loitering Suspicious Object/ Overcrowding/ Overstay/ Panic/ Queue/ Seismic/Sentiment/Slip and Fall/ Smoke/ Speeding/ Theft/ Train Platform Intrusion/ Weather/ Wrong Way is detected in any area of the specified location, set a parking zone within specified radius

Searching for Events

When there are numerous Events in the system, it may be more convenient to search for an event than to browse for it. The events can be searched by name, trigger condition, action.

To search for an event, type out the name or trigger condition or action into the **Search** box at the upper-left corner of the events page; matches and partial matches appear immediately. Search terms are not case-sensitive; for example, typing "in" as your search term can find the events which have 'in' in their Event names, trigger or in action. To clear the search terms and view all events, click the X button at the right of the search box.

Figure 175: Event Search



Selecting and Deselecting Events

You can select events for purposes of exporting them to a file; subsequently, you can use this file to import the events into another CKC instance.

- **To select an individual event**, select the check box located prior to the Event name.

- **To deselect an individual event**, uncheck the check box located prior to the Event name.
- **To select all events**, select the check box that appears prior to the **Event Name** column.

Figure 176: Selection of all the Events

<input checked="" type="checkbox"/>	Event Name	Event	Action
<input checked="" type="checkbox"/>	12ev	Change In Parking Occupancy Status	Change the intensity of the light
<input checked="" type="checkbox"/>	2030_sev1	Change In Severity Threshold	Notify Threshold Reached
<input checked="" type="checkbox"/>	30-20thres	Change In Severity Threshold	Notify Threshold Reached

- **To deselect all events**, uncheck the check box that appears prior to the **Event Name** column.

Viewing Summary of Event Rules


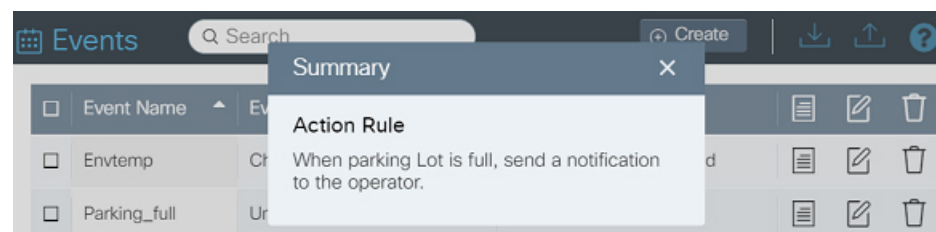
To view a summary of the event action that a particular event provides, click the document icon  that appears at the far-right end of the event name on the Events page. A summary dialog box like the one in the following figure appears.

Figure 177: Event rules summary



Creating an Event

To create a new event, click **Create** and respond to prompts that the event-creation wizard supplies. Details vary according to the type of event being created, but the overall event-creation workflow is as follows:

1. Click **Events** on the dashboard GUI.

The **Events** page opens. For more information, see [Understanding the User Interface, on page 33](#).

2. Click  on the **Events** page.

Figure 178: Create Event

Create Event (1 of 4) X

Domain - Trigger

Select Domain ▼ Select Trigger ▼

Select Domain

- Parking Lot
- Parking Spot
- Traffic
- Environment
- Region

Next ►

3. Specify the domain **Parking, Region, Traffic, Environment**
4. Add action that the event should generate.

Figure 179: Selecting Event Trigger Condition

Create Event (1 of 4) X

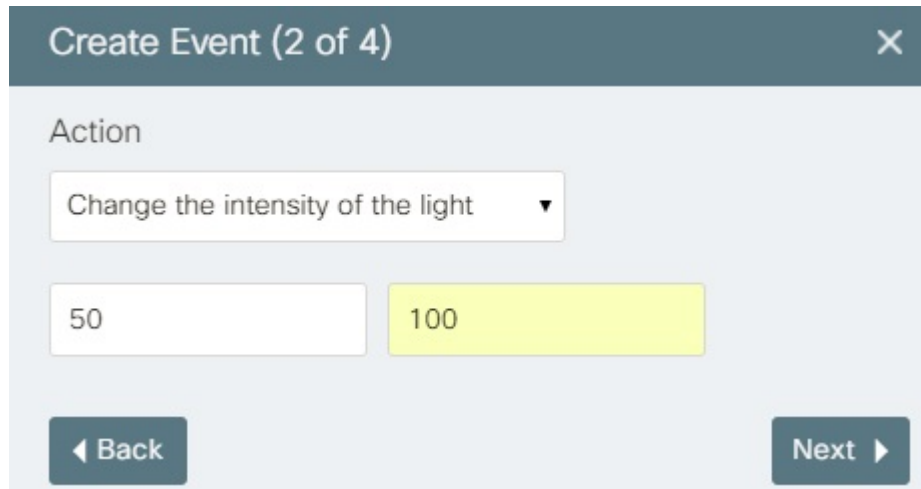
Domain - Trigger

Parking Spot ▼ Change In Parking Occupancy ▼

Occupied ▼

Next ►

5. *Figure 180: Selecting Event Action*



Create Event (2 of 4) [X]

Action

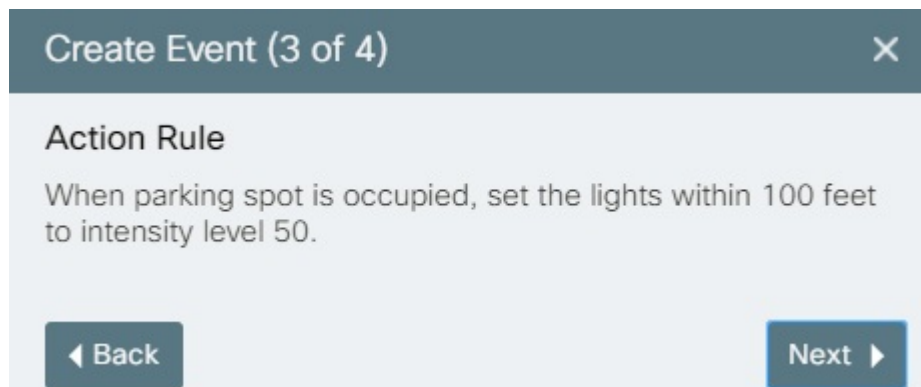
Change the intensity of the light ▼

50 100

◀ Back Next ▶

Review the rule set before finalizing the event.

Figure 181: Review of Action Rule



Create Event (3 of 4) [X]

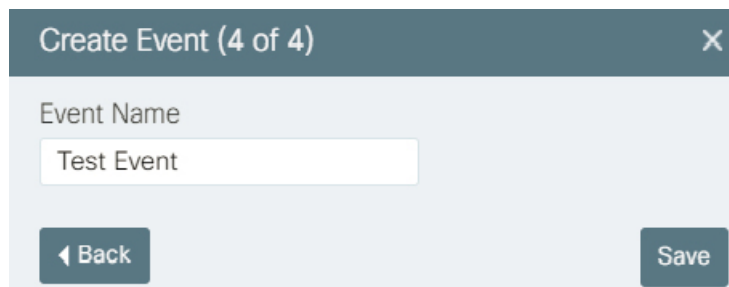
Action Rule

When parking spot is occupied, set the lights within 100 feet to intensity level 50.

◀ Back Next ▶

6. Save the event with a unique name that identifies it in the CKC Web GUI.

Figure 182: Providing an Event name



Create Event (4 of 4) [X]

Event Name

Test Event

◀ Back Save

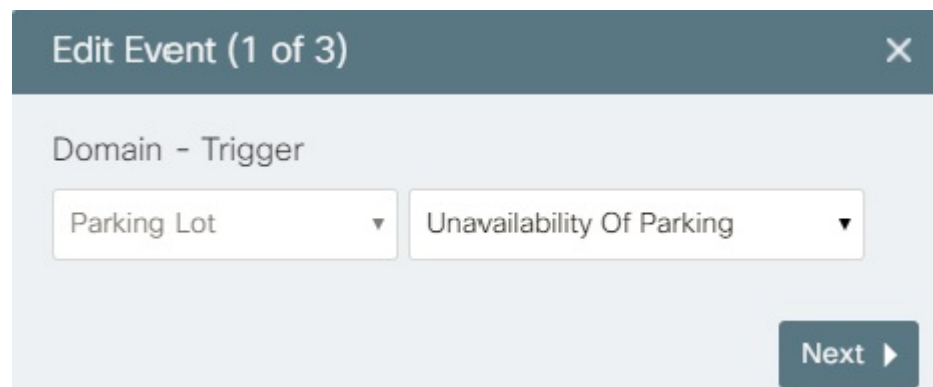
Editing an Event

To edit an existing event, click the pencil icon that appears next to the event name on the **Events** page, and respond to prompts that the event-editing wizard supplies. Overall workflow for editing an event is as follows:

1. Select **Events** from the top navigation menu of the CKC Web GUI. The **Events** page opens. For more information, see [Understanding the User Interface, on page 33](#).
2. Click the pencil icon that appears corresponding to the event that you want to edit.

The **Edit Event** wizard displays the **Domain - Trigger** dialog box.

Figure 183: Domain - Trigger dialog box



The controls in this dialog box reflect the current values of the event you chose to edit:

- The leftmost drop-down menu identifies the **Domain (Parking Spot, Parking Lot, Region, Traffic or Environment)** that the event governs.
 - Other controls in the dialog box describe the trigger condition and value that activate this event.
3. To change the trigger that results in action, choose a new value from the leftmost pull-down menu in the **Edit Event** dialog box.

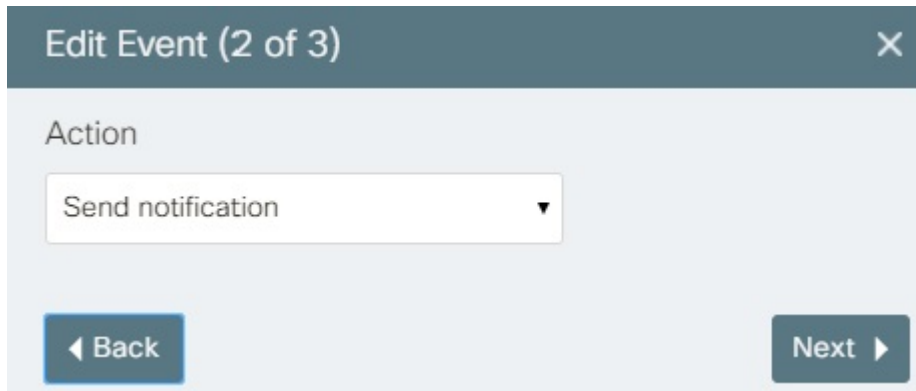


Note

Please note the existing domain cannot be changed while editing an event.

4. Change the values of other trigger controls in the dialog box and then click **Next** .
The **Action** dialog box appears.

Figure 184: Action dialog box




5. Select the action that should be taken when trigger condition is met and then click the **Next** button.
The **Summary** page describes your new event. Review the summary to determine whether the trigger and action are appropriate.
6. Save your changes using **Save**
The event gets edited successfully.

Deleting an Event

To delete an event from the Events page, click the corresponding trash can icon on the Events page. To proceed, click Delete. The event gets deleted successfully.

Importing an Event

You can import a previously exported event file as follows:

1. Click **Import**  present at the upper-right corner of the page.
A standard file-navigation dialog box appears.
2. Select the `.json` file to import and then click the **Open** button.
A notification indicating success or failure of the import operation appears. If successful, the imported events are available immediately. You may need to use sorting or navigation controls to find the new events in the **Events** list.

Exporting an Event

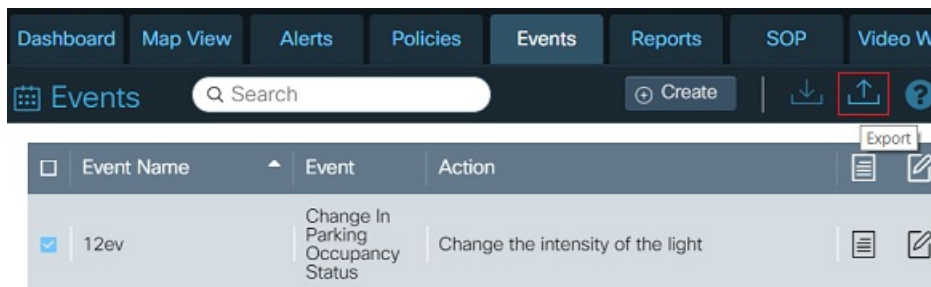
You can export one or more events as a JSON file which can be used to install the events in another instance of the dashboard.

1. Click check boxes in the leftmost column of the page to select the events to export:
To select an event, select checkbox corresponding to an event.
To deselect an event, clear the checkbox.

To select all events or to deselect all the events, use the checkbox at the top of the column in similar fashion.

- Click the **Export** button at the upper-right corner of dashboard page.

Figure 185: Exporting an Event File



Your Web browser downloads the selected events to the location specified in the browser setting.

- Optionally, use your local desktop tools to change the default name of the exported file to a more descriptive name.
- The dashboard assigns `events_downloaded.json` as the default name for a file that contains one or more exported events. It is recommended that you rename each export file as descriptively as possible, to enable other users of the system to understand the event functionality that the file provides. Do not change or remove the `.json` filename extension.

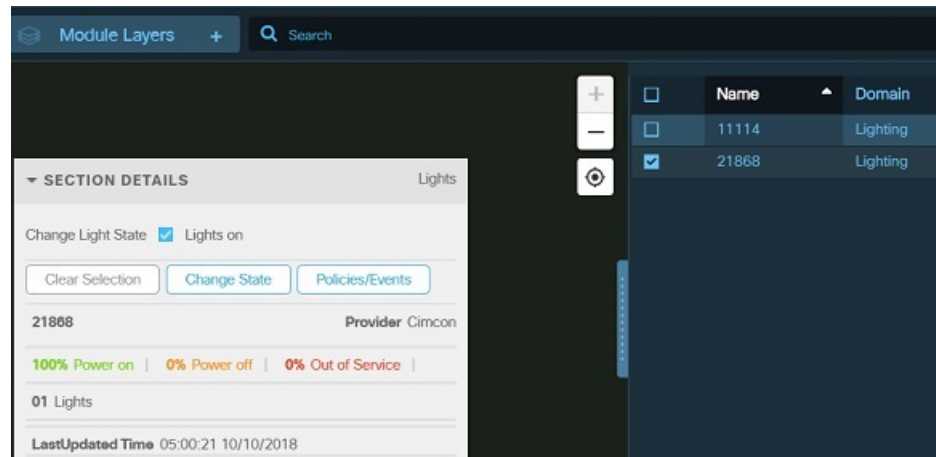
Applying Policies and Events

Custom Policies get applied at the time of creation to the region of interest, whereas Default Policies and Events have to be applied manually to the selected Sensors on the Map View.

Default Policies created by the user can be applied to the sensors using MapView. Perform following steps for applying a Default policy on selected sensor(s) on MapView.

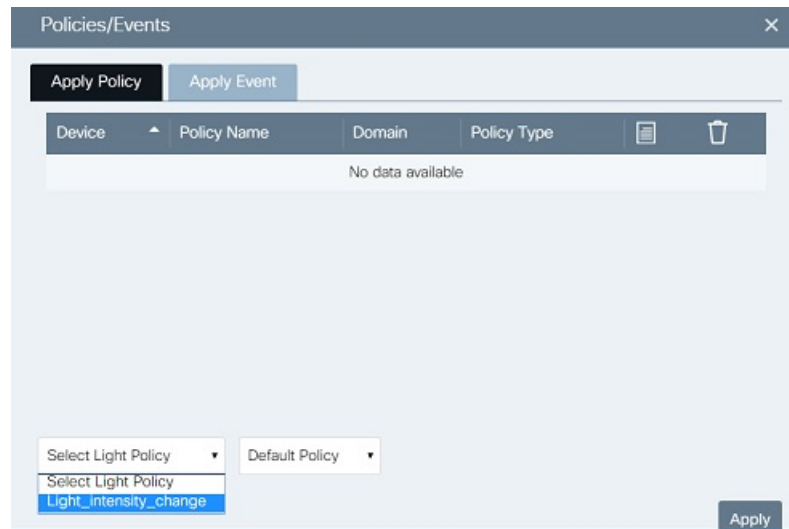
- Go to Map View and select the sensor(s) on which the policy has to be applied. For eg : If you need to apply a Lighting policy to a Light Sensor, then select the sensor from the list view.

Figure 186: Light Sensors on Map View



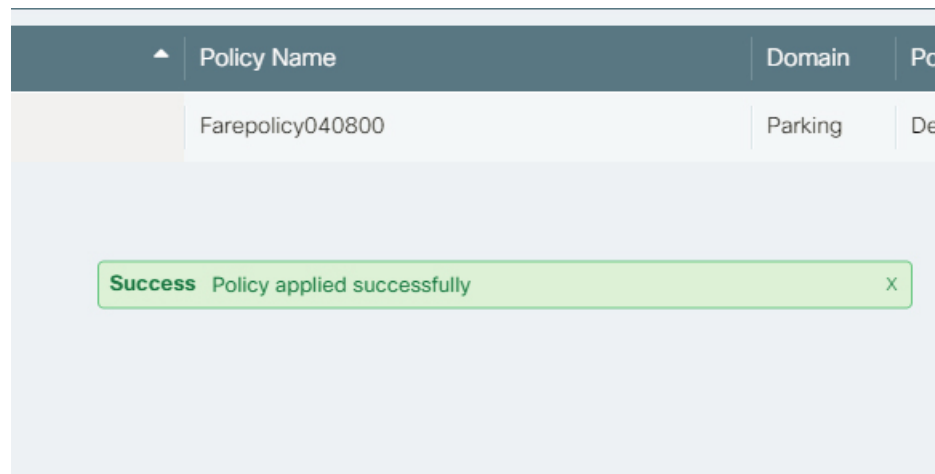
- Click on **Policies/Events** button present in SECTION DETAILS box. Policies/Events Window gets displayed.

Figure 187: Policies/Events Window



- Select the Default Policy to be applied and Click on **Apply** button. Success message gets displayed once the policy is applied successfully.

Figure 188: Successful policy Application

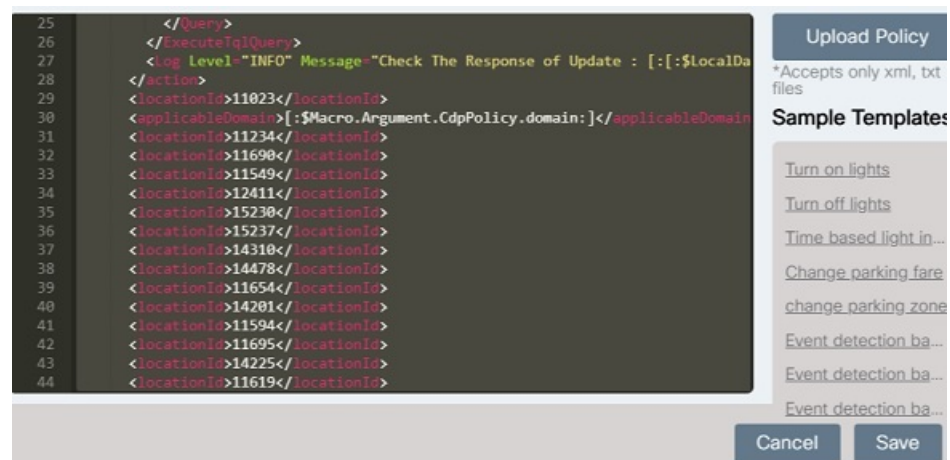
**Note**

Please note *only* the Default Light Policies created by the user would be available for application to the selected Light sensors.

Similarly, *only* the Default Parking Policies created by the user would be available for application to the selected Parking Sensors.

Custom Policies are applied to the selected region at the time of *Policy creation*. In order to apply the created policies, user needs to specify the Location Ids in the Policy xml file as shown in the figure.

Figure 189: Location Ids for Custom Policy Application



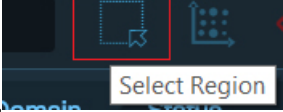
Events which are created on the Custom Policy page such as "Event detection based parking status", "Event detection based lighting", "Event detection based flashing", "Create event when parking empty" get **applied to the region at the time of creation**, hence these do not appear while applying to the sensors.

On the other hand, Events which are created on Events page have to be applied to the Sensors using the Map View page. Perform following steps to apply the created Events.

Step 1 Go to the Map View page and select the Sensor/Region where the Event needs to be applied.

The Domains whose sensors can be selected for "Events" application are 'Traffic', 'Parking' and 'Environment'.

You need to select a Region on Map View using the 'Select Region' tool (present on top right corner of the Map View

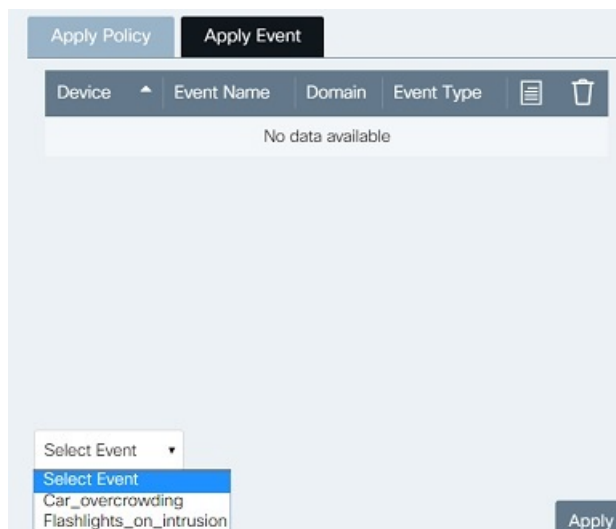
page, ) for applying the Events where trigger is applicable over a region, such as Flash lights in case of intrusion.

Step 2 Click on **Policies/Events** button present in the SECTION DETAILS box.

Step 3 Go to the 'Apply Event' tab.

Step 4 Select the Event which needs to be applied to the selected Sensor/ Region.

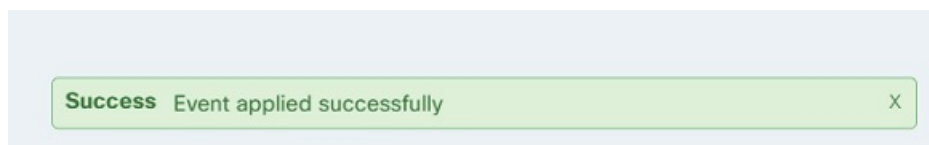
Figure 190: Created Events List



Step 5 Click on 'Apply'.

Step 6 The Event gets applied and a success message is displayed.

Figure 191: Event Application Success





CHAPTER 6


System Messages: Notifications, Alerts and Alarms

In a smart city, there will be many cases which may require human intervention to take appropriate actions. Such cases are called Incidents. CKC Incidents generate Notification, Alert and Alarm messages that are visible within the CKC UI and the Enforcement Officer Mobile App. This Guide refers to all such messages as "system messages."

- [Notifications: Informational Messages, on page 131](#)
- [Alerts: System-Actionable Incidents, on page 132](#)
- [Alarms: External Incidents, on page 136](#)
- [Viewing Unread System Messages, on page 137](#)
- [Filtering System Messages, on page 139](#)

Notifications: Informational Messages

A **Notification** is an informational message generated for the user. For example, whenever a vehicle enters or leaves a parking place, the sensor in that location generates a notification. You can ignore notifications without any consequence. The primary purpose of a notification is to generate raw data for reporting purposes.

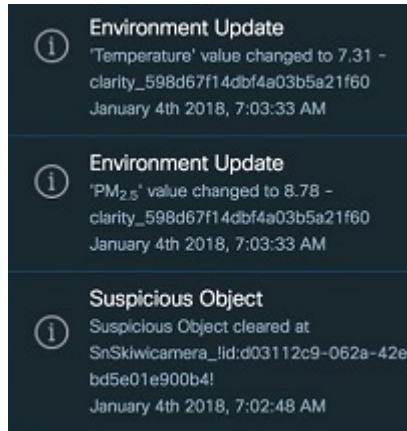
Informational messages are prepended by . These messages do not persist. No action can be taken by the user on these messages.

Following occurrences generate an Info or Informational message:


- Environment : Any change in values
- Parking : Messages on Parking areas becoming full, empty, updates in Parking spaces, spots, areas, Parked Vehicle event (occupied/vacant) , Parking violations cleared
- Traffic : Incident cleared
- Light : Light intensity level changes or reliability changes
- Safety and Security: Any update such as Suspicious object cleared, other changes in severity.
- Urban Mobility : Normal overcrowding, Any update in Crowd status, Speeding Violation cleared, Wrong way violation cleared.
- Fault : Any Device broken (Parking spot/light spot)

Each new notification is visible under the Notifications icon immediately upon generation. The bell icon in the CKC UI banner displays the number of unread notifications. Clicking the bell displays the most recent notifications and resets the counter.

Figure 192: Notifications



Alerts: System-Actionable Incidents

An **Alert** identifies an incident that is actionable within the CKC infrastructure. An alert can be acted upon by the Operator using the available workflows in the system. Alerts persist in the system for three days and appear on "Alerts" tab as well. Alert messages are prepended with  icon.

Process of Alerts generation

The following sequence of steps explains the process of Alerts generation in CKC:

1. Threshold values are configured or Policies are created by the user.
2. Incidents like Environment Threshold value reached or SnS Fire/Smoke occur or Policy Violation occurs.
3. Alert is generated by southbound provider on occurrence of incident as mentioned above.
4. Alert reaches CKC and Dashboard gets notified through Web Socket.
5. Dashboard displays the Alert in Notification Tray/ Alerts Page/ Map View. For details on viewing system alerts, refer [Viewing the System Alerts, on page 79](#).
6. Action on Alert is taken by the user through configured SOP. For details, refer [Standard Operating Procedure \(SOP\), on page 159](#)

Following incidents of different domains can generate an alert on the Dashboard:

- **Environment:** Threshold Values reached.
- **Parking:** No Parking Zone Violations, Parking Fare Expended Violation, Parking Potential Expiry, Limit Exceeded Violation, Poorly Parked Violation, Potential Fare Expiry, Parking Full, Parking Empty.
- **Transit:** People Capacity Overflow, Unknown Stop, Unknown Route Followed, Stop Missed.
- **Traffic:** Accident, Vehicle Stopped, Congestion.

- **Safety and Security:** Camera Health, Citizen Alert, Person Identified, Suspicious Object detected, Fire and Smoke, Fire, Garbage, Graffiti, Crime, Influencer, Intrusion, Keyword, Vehicle Identified, Loitering, Slip and Fall, Overstay, Panic, Queue, Sentiment, Smoke, Weather, Seismic, Theft, Vandalization, and License Plate Recognition.
- **Urban Mobility:** Overcrowding violations, Speeding, Wrong way occurrences.
- **Fault:** Defective Parts, Device Broken, Ballast broken, Device Not Reachable, False Triggers, Abnormal lamp condition, Day Burning, Controller Broken, Settings Rejected, Faulty Installation, Flickering Occurrence, Gateway Broken, Gateway Not Reachable, Incorrect Placement, Level Too Low, Photocell Fault, Underground Cable Fault, Use of adhesive, EM Fault, Network Issue, and Low Battery.
- **Waste Management:** Waste Bin Collection Missed, Waste Bin Overheated, Waste Bin Overturned, Ridership Path Changed, Container Overflow.
- **Network Devices:** Line Power Failure, Port Down, Registration Failure, Tunnel Down, Device Down.

Provider Down Alert or Provider Connectivity Lost

This alert is raised when connectivity with any of the providers is lost. The provider can be of any domain including Network Devices.

The alert displays the name of the provider whose device is down, the domain to which the device belongs, and the time stamp at which the alert got generated.

- The occurred alert appears as a notification in the notification tray, on the map view and on the **Alerts** tab.

Figure 193: Provider Down Alert appearing on Notification Tray

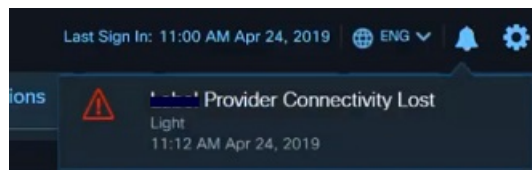


Figure 194: Provider Down Alert on MapView

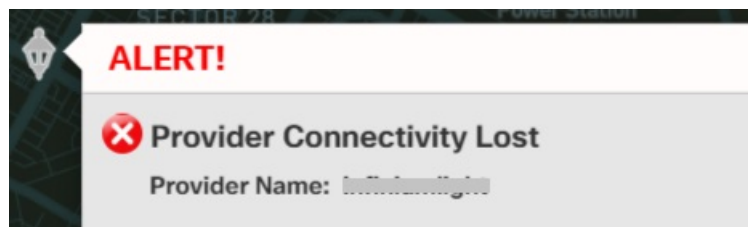
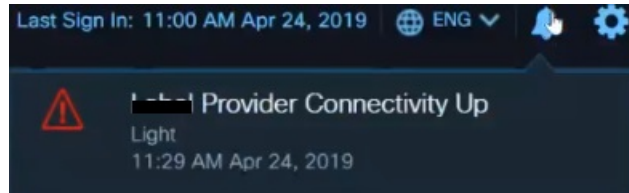


Figure 195: Provider Down Alert appearing on Alerts Tab



- Once the connectivity is restored, another alert is generated informing the user of current state.

Figure 196: Provider Connectivity Restored Message



Network Devices Alerts

- Whenever any Network Device fault event occurs, an alert gets generated in the Network Devices and Fault Domain.
- The alert can be viewed in the Notification Tray, on the Map view and on the Alerts tab.
- These alerts are visible only to the users having access to the Network Devices domain, and to the location where the device is located.

Figure 197: Multiple Alerts for a Single Device on the Map View

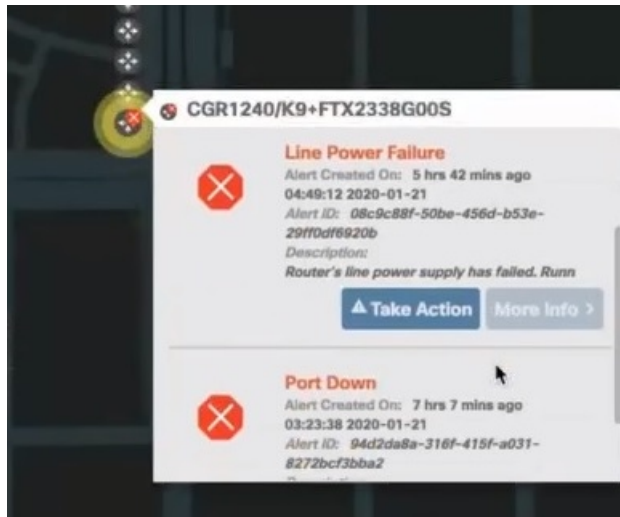
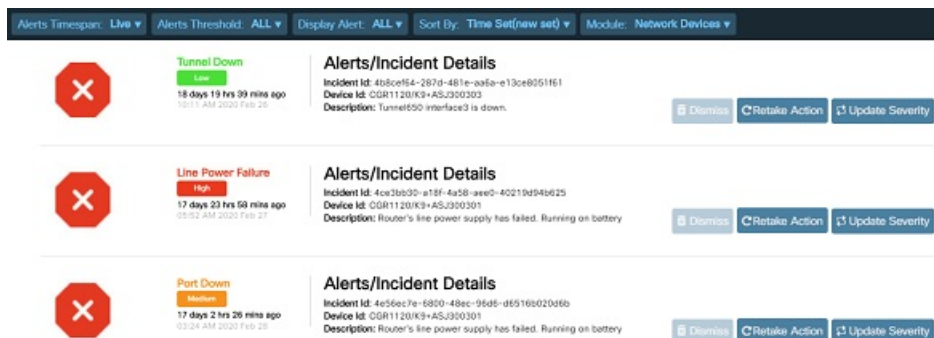


Figure 198: Network Devices Alerts on the Alerts Page

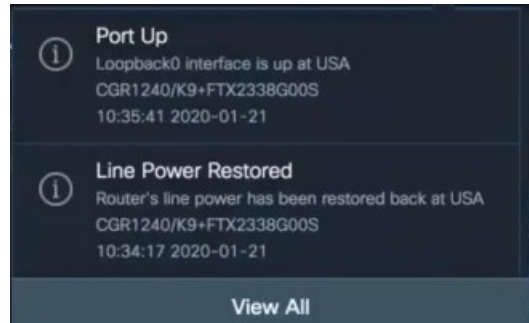




Note Network Devices alert life cycle is managed by Cisco Field Network Director (FND) and it does not support **Dismiss** feature. Hence, the end user cannot dismiss any Network Device alert. The alert remains active until addressed by FND.

Once the alerts are handled, the notification window shows informational messages about the current state.

Figure 199: Notification Window



SOP supported Alerts

The current version of CKC allows the user to take action on all of the above mentioned alerts.

Figure 200: A Safety and Security Alert



Figure 201: Alerts Tray



The Alert panel appears displaying Severity Level, Alert Timespan, Alerts details for the selected module on the dashboard. You can view **Dismiss**, **Take Action**, **Update Severity**, and **More Info** in the right side of the dashboard to perform the following operations:

- **Dismiss:** You can use Dismiss to cancel an incident associated with alert.
- **Take Action:** You can use Take Action to select a Standard Operating Procedure to deal with alert. For more details, refer [Creating an Instance, on page 167](#)
- **Update Severity:** You can use Update Severity to modify the severity of incident associated with alert.
- **More Info:** You can expand More Info to view additional incident information associated with alert.

Alarms: External Incidents

An **Alarm** identifies a significant incident that cannot be resolved within the CKC infrastructure. These notifications inform the Operator that some defined threshold values have been reached. For eg : Waste Bin battery percentage dropped, Fill level reached, Waste bin's temperature reached threshold value, Environment overcrowding threshold reached.



These messages are prepended with icon.

Figure 202: Alarm

Viewing Unread System Messages

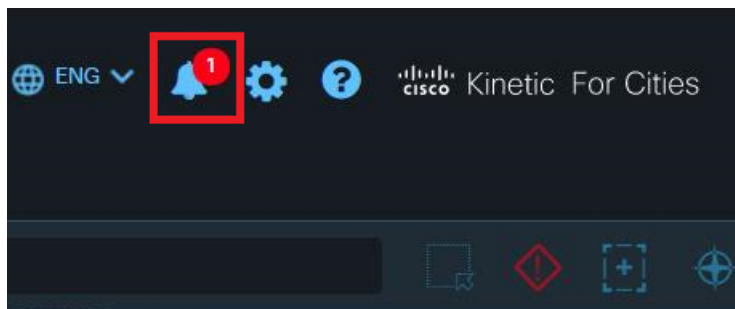
Any logged-in user can view system messages in the CKC Web GUI.

Before you begin

Log into the Cisco Kinetic for Cities as an operator.

Step 1

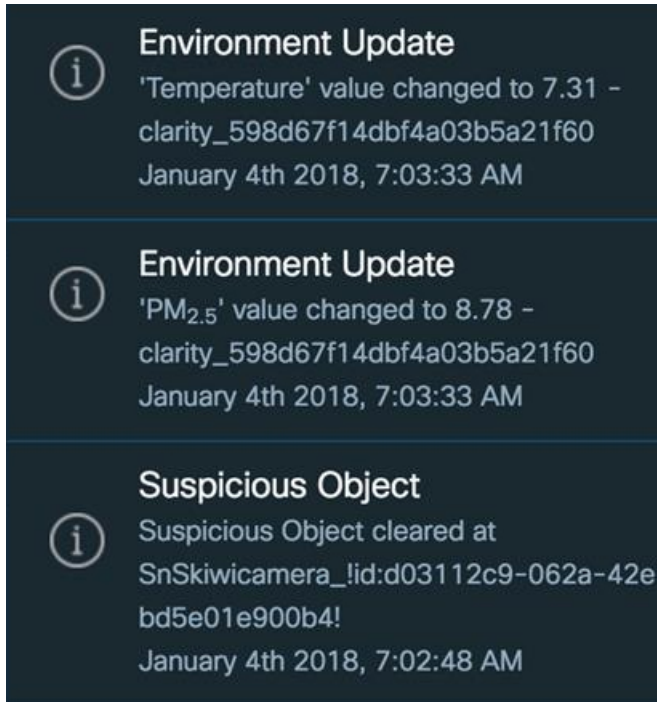
Find the Notifications (bell) icon in the upper-right corner of the banner at the top of the CKC Web GUI. If a number is superimposed on the Notifications icon, unread messages (unread Notification or unread Alerts or unread Alarms) are available.

Figure 203: Unread Notifications Count

Step 2

Hover the mouse over the Notifications icon. The most recent unread messages appear beneath the bell icon, in menu-like fashion.

Figure 204: Expanded Notifications Tray

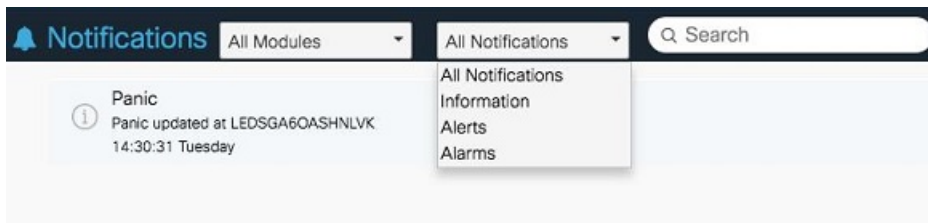


Once the notifications are viewed, the counter on the bell icon resets.

Step 3

To display the details of a specific unread message, click on it.
The **Notifications** window displays the message.

Figure 205: Notification Window



Note Apart from appearing in the Notification Tray, an Alert would also appear on the Alerts page. An SnS alert would also appear on Map View page, enabling user to take action on that Alert. However, a notification/informational message and an alarm do not appear on any other tab other than on notification tray.

What to do next

View, filter and sort all available messages. See [Filtering System Messages, on page 139](#)

Filtering System Messages

All system messages (notifications, alerts, and alarms) can be viewed on the Notifications page. This page provides options to search and filter the messages.

Before you begin

Log in to the Dashboard.


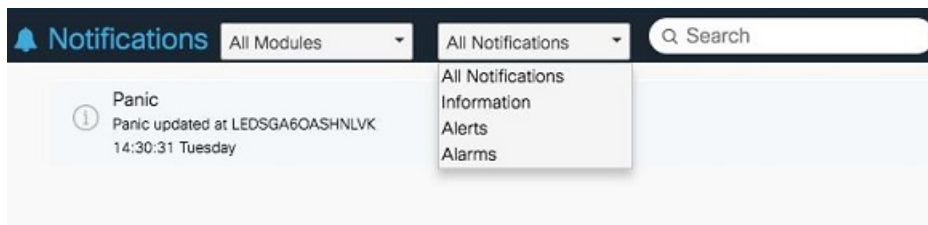
- Step 1** When unread notifications exist, hover the mouse pointer over the Notifications icon . A list of the most recent notifications appears.
- Step 2** Click on any one of the messages or Click on **View All**. The Notifications page appears.

Figure 206: Notifications Page



- Step 3** Filter the displayed system messages based on Module name or based on the type of notification.
- All Notifications:** shows all system messages
 - Information:** shows informational notifications only. Does not show Alerts or Alarms.
 - Alerts:** shows Alerts only. Does not show informational notifications or Alarms.
 - Alarms** shows Alarms only. Does not show informational notifications or Alerts.
- Step 4** You can also search for any specific notification by typing out the Notification name in the Search box.



CHAPTER 7

Reports

CKC enables the customers to discover, compare and correlate data across various domain. You can generate detailed Traffic, Parking, Lighting, Environment, Mobility, Waste Management and SnS reports as per your requirement. Trend reports are generated using the stored historic data. An hourly, daily, monthly or yearly average of data is calculated and displayed accordingly on the report view.

- [Types of Reports, on page 141](#)
- [Configuring Reports, on page 143](#)
- [Viewing Reports, on page 145](#)
- [Setting the Report Filters, on page 147](#)
- [Reports Average Calculation, on page 149](#)
- [Parking Reports, on page 150](#)
- [Light/Lighting Reports, on page 151](#)
- [Environment Reports, on page 152](#)
- [Crowd/Mobility Reports, on page 153](#)
- [Waste Management Reports, on page 154](#)
- [Traffic Reports, on page 155](#)
- [Safety and Security Reports, on page 156](#)
- [Network Reports, on page 157](#)

Types of Reports

Following types of reports can be generated on dashboard for each of the domain:

Domain	Report Name
Lighting	Light Intensity Trend
	Light Energy Consumption Trend
	Light Energy Savings Trend

Domain	Report Name
Parking	Parking Occupancy Trend
	Parking Session Trend
	Parking Revenue Trend
	Parking Turnover Trend
	Parking Violation Trend
	Parking Average Revenue Trend
Traffic	Traffic Density
	Average Traffic Speed Trend
	Average Traffic Incident Trend
Safety and Security	Overcrowding Report
	Intrusion Event Report
	Object Detection Report
	Direction Violation Report
Crowd	Average Dwell Time Trend
	Average Vehicle Count Trend
	Average Pedestrian Count Trend
	Total Vehicle Count Trend
	Total Pedestrian Count Trend
Waste Management	Fill Level Trend
	Temperature Trend
	Waste Bins Grouped by Fill Level
	Comparison of Bin Fill Level vs Temperature

Domain	Report Name
Environment	Carbon Dioxide Concentrations Trend
	Nitrogen Dioxide Concentrations Trend
	Sulphur Dioxide Concentrations Trend
	AQI Report
	Ozone Concentrations Trend
	Noise Levels Trend
	Temperature Trend
	Humidity Trend
	Harmonica Index Report
	Pressure Trend
	Light Intensity/Lux Trend
	Carbon Monoxide Concentrations Trend
	Particulate Matter 2.5 Concentrations Trend
	Particulate Matter 10 Concentrations Trend
	UVA Report
	UVB Report
	UVIS Report

Configuring Reports

The overall procedure for configuring reports on your dashboard is as follows:

Before you begin

Log in to the CKC Web GUI in the Operator role.


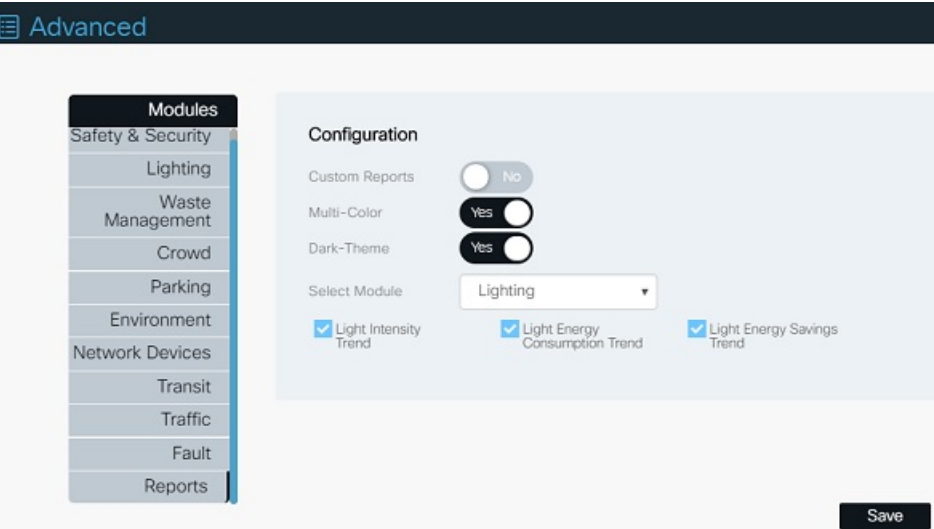
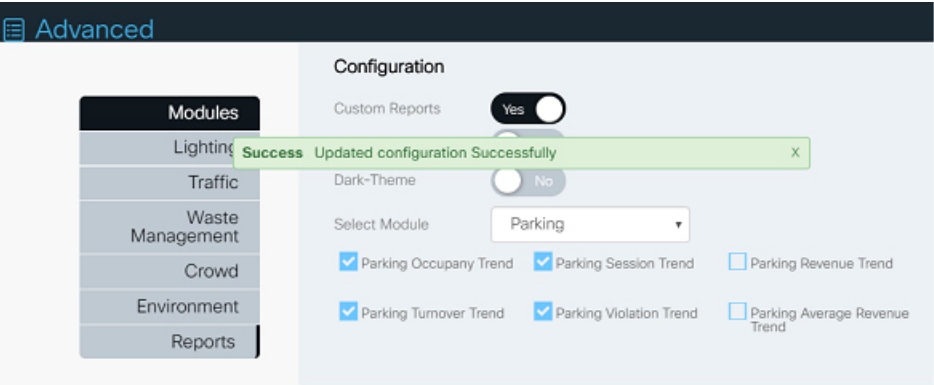
-
- Step 1** Select  from the top right menu of the CKC Dashboard.
- Step 2** Go to Advanced settings → Reports section as shown below.
The field Custom Reports is not supported in current version.

Figure 207: Reports Configuration Settings



- Step 3** Select the Module and the corresponding Report(s) that you want to configure.
- Step 4** Toggle the MultiColor and Dark-Theme buttons to *Yes* if you want to view reports in colorful codes with a dark background theme.
The colours of the report graphs would appear in multiple colours. These colours are configured from the backend as of now.
- Step 5** Click on **Save**
The page reloads and displays success message as shown below:

Figure 208: Reports Configuration Update



What to do next

For more information, see the appropriate report detail topic.

Viewing Reports

Before you begin

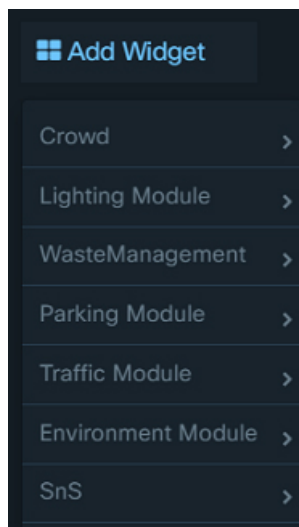
In order to view the configured reports, login to the Dashboard as an operator and perform following steps:

Step 1 Go to **Reports**.

Step 2 Click on **Add Widget** present on top left corner.
A list of all reports configured in the **Advanced** tab gets displayed.

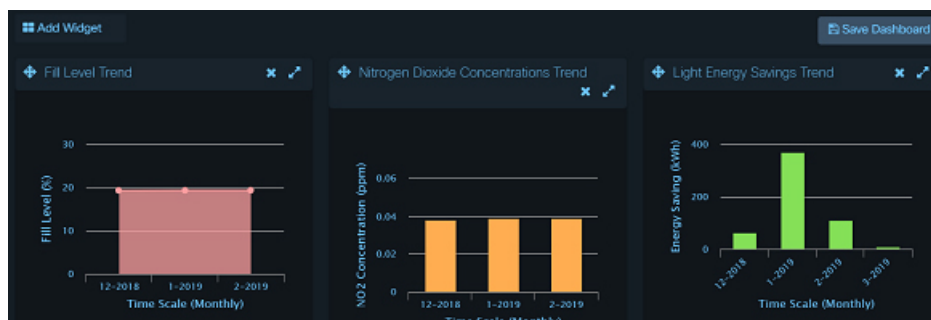
Note These configuration changes are stored in database and are accessible to other operators who have same access permissions.

Figure 209: Available Reports




Step 3 Select all the reports that you want to see. A widget for each would get added to the screen.


Figure 210: Added Reports Widget



Step 4 Click **Save Dashboard** located at top right corner of reports screen. This saves the added widgets.

Step 5 **Note** The saved widgets view is specific to logged in user. Hence, every user can customise their own view.

The saved widgets position can be realigned by using the Drag Widget button  located on top left corner of each widget.

Step 6 A widget can be removed from the view by clicking on Remove Widget button  located on top right corner of the widget.

Step 7 Each widget can be maximised to view Detailed Report screen. This can be done using the Maximise Widget button  located on top right corner of the widget.

Step 8 Reports can also be downloaded using the red colored hamburger button located on reports detailed view.

Figure 211: Reports Download

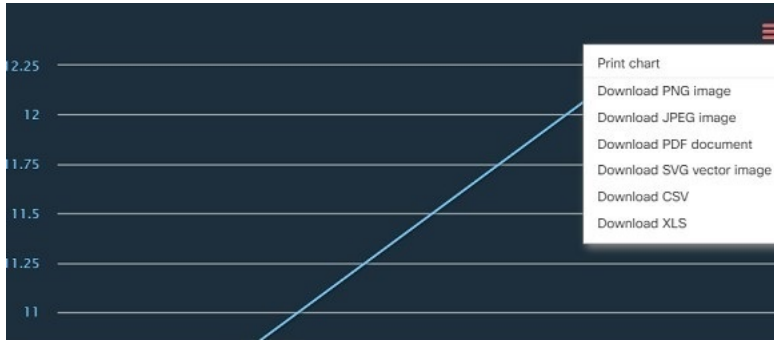
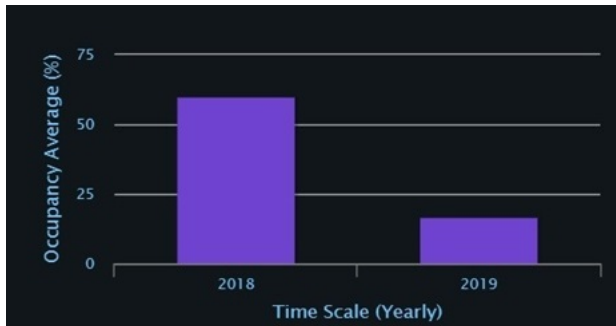
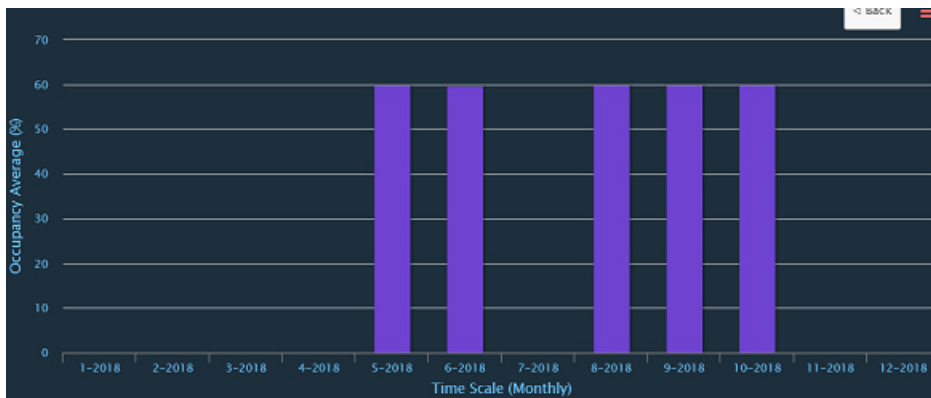


Figure 212: Yearly Report for Parking Occupancy Trend



Step 9 Click on an Yearly graph to further drill down the report to display monthly data.

Figure 213: Monthly Report



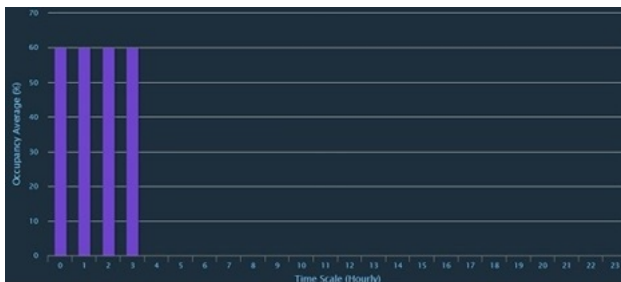
Step 10 Click on the Month's graph to view each day's record for that month.

Figure 214: Daily Report



Step 11 Click on a Day's record graph to view the hourly records for that day.

Figure 215: Hourly Report



Step 12 Click **Back** button being displayed on the graph to move back from Hourly to Daily to Monthly to Yearly level.

Setting the Report Filters

Every detailed view of the report provides various filters such as "City", "Report Type", "From Date" and "To Date" to view drilled down data.

Figure 216: Setting of Report Filters

City	Report Type	From Date	To Date	
All	Month	2018-02-28	2018-08-08	UPDATE

1. Select "All" or a "specific City" for which you want to view the report.
2. Select the "Report Type" for which the report should be generated such as 'Year','Month','Day' or 'Hour'.
3. Select the "From Date" and "To Date" to define the Reporting Period for which reports needs to be generated.



Note When the report is accessed for the first time, default values of "From" and "To" dates are considered, which is the time period between existing data.

4. Click **UPDATE**. This would generate an updated report.



Note

Parking and Waste Management domains reports have an additional filter "Sensors" which allows the user to view reports for the selected sensor of that domain in the selected city.

Figure 217: Filtering out reports based on Sensors

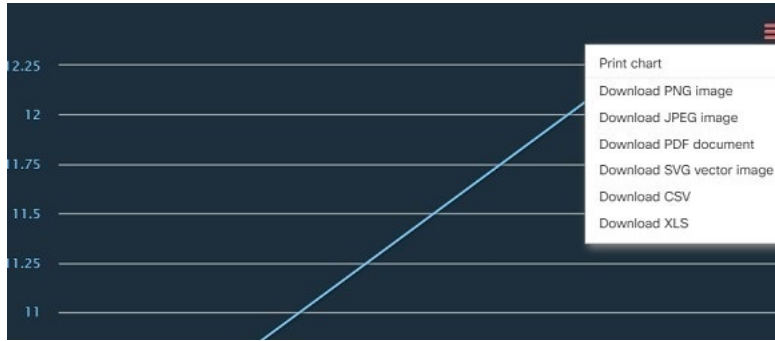
The screenshot shows a filter bar with the following elements:

- City:** A dropdown menu with 'All' selected.
- Sensors:** A dropdown menu with 'All' selected.
- Report Type:** A dropdown menu with 'Month' selected.
- From Date:** A date input field showing '2017-10-13'.
- To Date:** A date input field showing '2018-08-06'.
- UPDATE:** A blue button to apply the filters.

Downloading Reports

Reports can also be downloaded or printed using the red colored hamburger button located on reports detailed view.

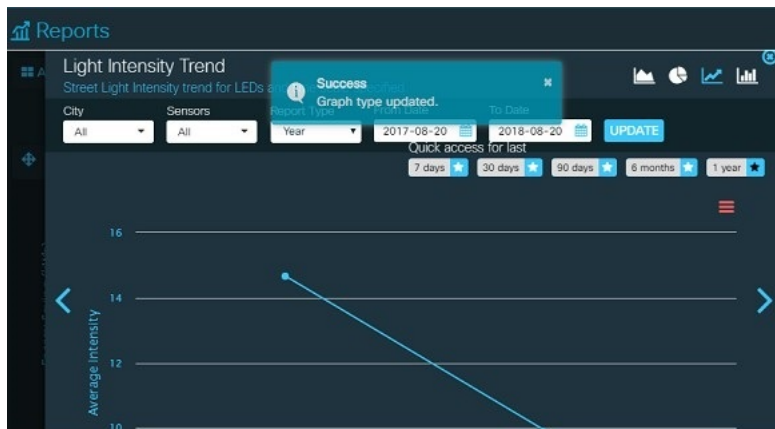
Figure 218: Reports Download



Graph Types

Reports can be viewed in various Graph types such as Area Chart, Pie Chart, Line Chart and Bar Chart using the buttons present on top right of the detailed report view.

Figure 219: Updation of Report Graph Type



Quick Access Links

Reports for last 7 days, 30 days, 90 days, 6 months and 1 year can be viewed in a single click using the Quick access links present on top right corner. Selecting any of the links here automatically resets the "Report Type", "From Date" and "To Date" fields in the reports filters section. Here "To Date" is always the current date and "From Date" gets reset accordingly.

Default view of the reports

Selecting the button present against each option of the Quick access link makes the same as the default view of the reports.

Figure 220: Reports Default View



Reports Average Calculation

The average values for hourly, daily, monthly, and yearly reports is calculated as follows

Hourly Average Reports The hourly average is the sum of the values observed in an hour divided by the total number of records observed in an hour.

Daily Average Reports The daily average is the sum of values observed in 24 hours divided by the total number of records observed in 24 hours.

Monthly Average Reports The monthly average is the sum of values for a month divided by the total number of records observed in a month.

Yearly Average Reports The yearly average report value is the sum of the values observed in 365 days divided by the total number of records observed in an year.



Note total number of records for *Parking reports* refers to the total number of parking spaces in the aggregation condition in an hour/day/month/year.

total number of records for rest of the reports refers to the count of readings received.

sum of values is the aggregate of values received in each reading.

Safety and Security Reports, Parking Violation Trend Report These hourly reports show the total number of incidents that have occurred in an hour. The monthly and yearly average values are calculated by extrapolating the hourly data.

Parking Reports

Parking reports help to study the pattern of Parking occupancy, vacancy, violations and generated revenue trends for various parking lots. These reports data are filtered based on the user provided time period.

The time scale can be for an Yearly, Monthly, Daily or Hourly period. For details on drilling down the report, please refer [Viewing Reports, on page 145](#)

You can generate following types of Parking Reports :

Parking Occupancy Trend Report: The report displays the average parking occupancy rate for locations within specified time period. Here occupancy rate refers to total occupied spaces divided by total number of parking spaces. You need to select the City and Sensors/Parking Lots for which Parking Data needs to be viewed.

Parking Session Trend Report: The report displays the average number of parking sessions for locations within specified time period. One session is the time for which a vehicle remains parked at a location.

Parking Revenue Trend Report: The report displays the total parking revenue generated for the locations over a specified time period.

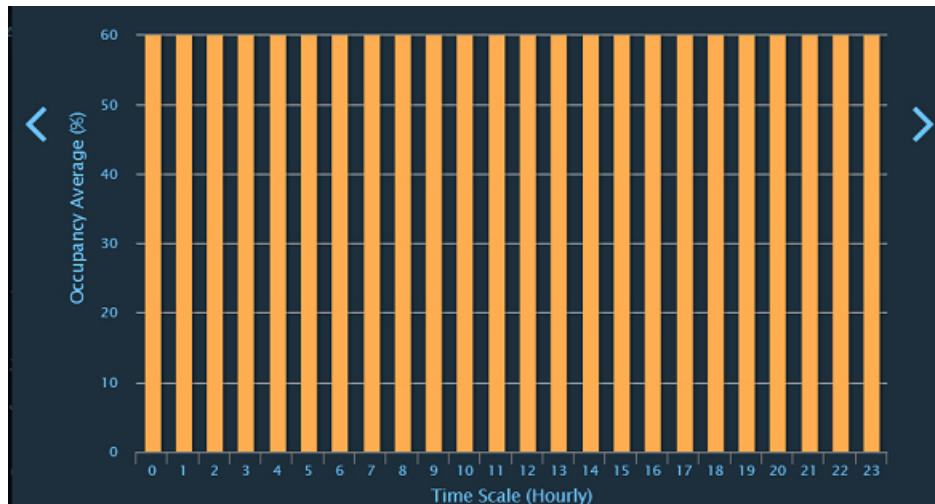
Parking Turnover Trend Report: The report displays the number of times parking changes hands, that is the ratio of newly parked vehicles to the total number of vehicles, for locations within specified time period.

Parking Violation Report: The report displays the total number of times vehicles have been parked in a no parking zone or during non parking hours and so on, thereby leading to parking violations for selected Parking Lots in the specified time period.

Parking Average Revenue Report The report displays the average parking revenue generated in selected locations within specified time period.

Following figure shows the Average Parking Occupancy Percentage every hour for 21th Oct 2018 for the selected sensor and city.

Figure 221: Parking Occupancy Report



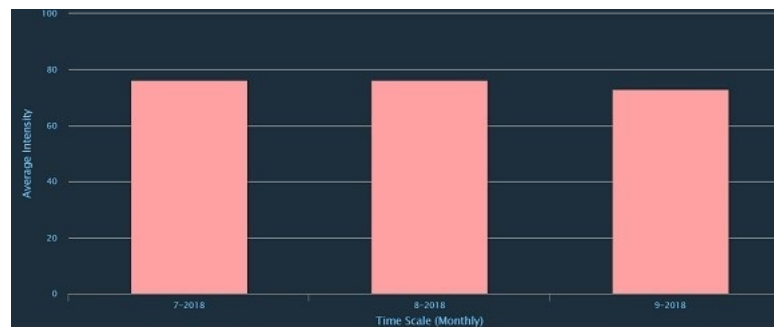
Light/Lighting Reports

Following Light module reports can be generated as needed for the location and date of your choice. The Report gets generated for all the light sensors installed at the selected city.

For more information on how to generate and filter the reports, see [Setting the Report Filters, on page 147](#).

- **Light Intensity Trend Report:** shows the average light intensity trend of street light LEDs for the location and date that you specify. The intensity can be viewed at the granular level of month, day and hour as well.

Figure 222: Monthly Light Intensity Trend Report

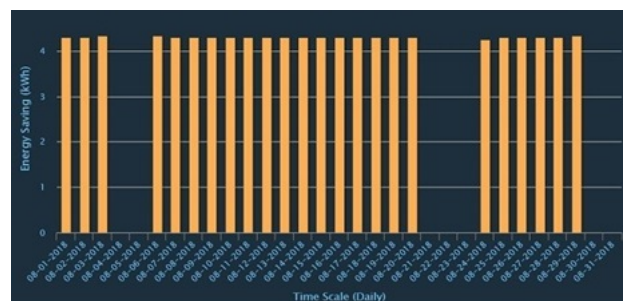


- **Light Energy Consumption Report:** shows the average street light energy consumed in kilowatt hour (kWh) by all the installed sensors in one specific city or in all cities in the selected time period.
- **Light Energy Savings Trend Report:** shows the Street light energy saved in kilowatt hour (kWh) for the location and dates that you specify. The energy savings is calculated by comparing the energy consumed by old LED lamp with the energy consumed by smart LED lamp.

Formula used, Savings = oldLampsData - smartLedLampData.

LampsData is calculated by considering the number of days for which the light sensor is ON, daily consumption of energy by LED, number of sensors and the average light intensity level of the LED.

Figure 223: Daily Light Energy Savings Report for August 2018 for the Selected Cities



**Note**

For any of the reports, High Value of data in Y-axis is automatically converted to Kilo (K), Mega (M), Giga(G) by the report engine.

Following is the conversion factor : $K=10^3$, $M = 10^6$, $G= 10^9$

For example : If Y-axis contains a value of 12000, it will be displayed as 12K, if it is 12000000 it will be displayed as 12M and so on.

Environment Reports

Generate the following environment reports as needed for the location and date of your choice:

For more information on how to generate and filter the reports, see [Setting the Report Filters, on page 147](#).

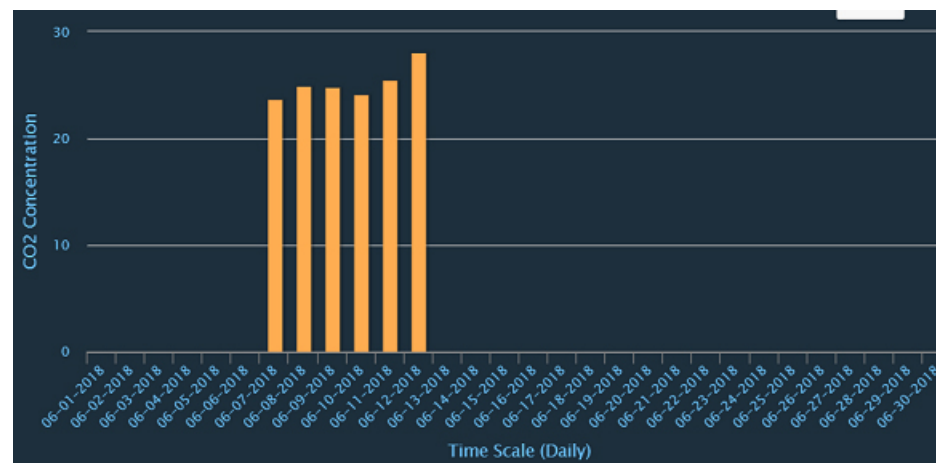
- **Carbon Dioxide (CO₂) Concentrations Trend** : Shows the average Carbon dioxide concentration value in ppb in the selected location(s) on a Yearly, Monthly, Daily or Hourly basis.
- **Carbon Monoxide (CO) Concentrations Trend** : Shows the average Carbon monoxide values in ppb in the selected location(s) on a Yearly, Monthly, Daily or Hourly basis.
- **Nitrogen Dioxide (NO₂) Concentrations Trend**: Shows the average Nitrogen dioxide values in ppb in the selected location(s) on a Yearly, Monthly, Daily or Hourly basis.
- **Particulate Matter 2.5 Concentrations Trend**: Shows the average PM_{2.5} values in the selected location(s) on a Yearly, Monthly, Daily or Hourly basis
- **Particulate Matter 10 Concentrations Trend**: Shows the average PM₁₀ values in the selected location(s) on a Yearly, Monthly, Daily or Hourly basis
- **Sulphur Dioxide Concentrations Trend (SO₂)**: Shows the average Sulfur dioxide values in ppb in the selected location(s) on a Yearly, Monthly, Daily or Hourly basis
- **Ozone (O₃) Concentrations Trend**: Shows the average Ozone values in ppb in the selected location(s) on a Yearly, Monthly, Daily or Hourly basis.
- **AQI Report**: Shows the average Air Quality Index value in the selected location(s) on a Yearly, Monthly, Daily or Hourly basis.
- **Temperature Trend**: Shows the average temperature recorded in degree Celsius in the selected location(s) on a Yearly, Monthly, Daily or Hourly basis.
- **Noise Levels Trend**: Shows the average noise levels in decibels (dB) in the selected location(s) on a Yearly, Monthly, Daily or Hourly basis
- **Humidity Trend**: Shows the average humidity levels in percentage (%) in the selected city(ies) on a Yearly, Monthly, Daily or Hourly basis.
- **Harmonica Index Report**: Indicates the environment noise levels through average Harmonica index in the selected location(s) on a Yearly, Monthly, Daily or Hourly basis
- **Pressure Trend**: Shows the average air pressure in kilopascals (kPa) in the selected location(s) on a Yearly, Monthly, Daily or Hourly basis.

- **Lux Trend:** Shows the average Light Intensity of illumination in the selected location(s) on a Yearly, Monthly, Daily or Hourly basis
- **UVA Report:** Shows the average Ultra Violet A value present in the environment of the selected location(s) on a Yearly, Monthly, Daily or Hourly basis
- **UVB Report:** Shows the average Ultra Violet B value present in the environment of the selected location(s) on a Yearly, Monthly, Daily or Hourly basis
- **UVIS Report:** Shows the average Ultra Violet-Vis value present in the environment of the selected location(s) on a Yearly, Monthly, Daily or Hourly basis

Hovering the mouse pointer over one of the bars in any of the above reports displays details about the reporting period that the bar represents.

The following figure shows the CO₂ concentration every month for the Year 2019.

Figure 224: Environment Report - Daily CO₂ Concentration Report for the month of June 2018



Crowd/Mobility Reports

Generate the following Crowd/Mobility reports as needed for the City and date of your choice:

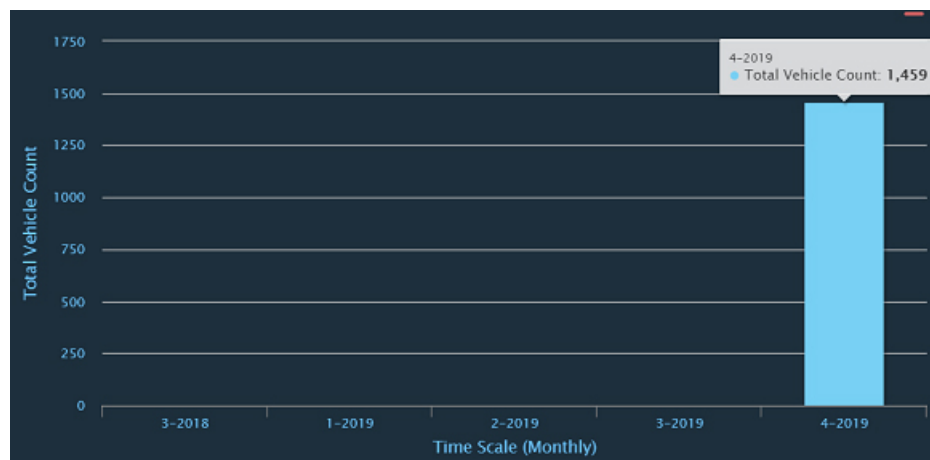
For more information on how to generate and filter the reports, see [Setting the Report Filters, on page 147](#).

- **Average Pedestrian Count Trend:** Shows the average people count at the selected location on an yearly, monthly, daily or hourly basis. The displayed report can be further drilled down as mentioned in [Setting the Report Filters, on page 147](#) section.
- **Average Vehicle Count Trend:** Shows the average count of vehicles at the selected location on an yearly, monthly, daily or hourly basis.
- **Average Dwell Time Trend:** Shows the average people dwell time in minutes, that is the average time for which people have stayed at the selected location, on an yearly, monthly, daily or hourly basis.
- **Total Pedestrian Count Trend:** Shows the total pedestrians count at multiple point of interest for the selected time period in the selected city.

- **Total Vehicle Count Trend:** Shows the total vehicles count at multiple point of interest. The count of vehicles is sampled every minute and aggregated every hour for any given day, month or year.

Hovering the mouse pointer over one of the bars in any of the above reports displays the numeric value of the Y-axis..

Figure 225: Crowd Report - Total Vehicle Count Trend Monthly Report

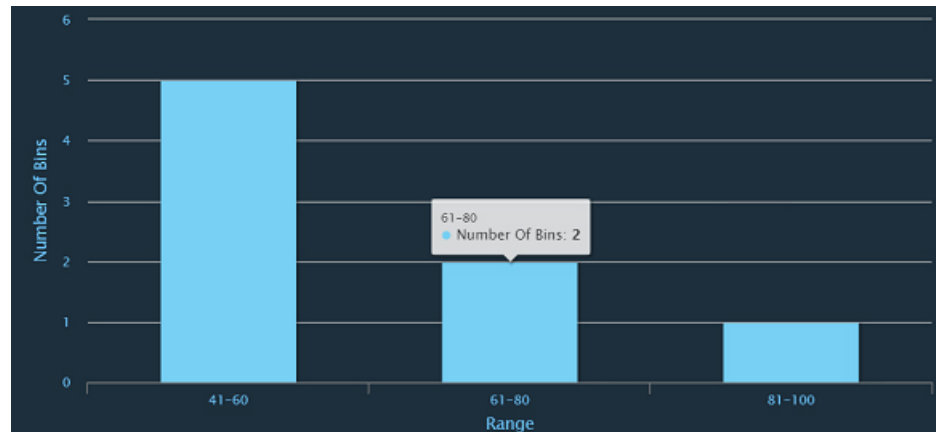


Waste Management Reports

Waste Management reports show the trend of Waste Bins fill level, temperature and other correlated trends over a selected time period . The reports can be granularised to monthly, daily and hourly period. Following type of Waste Management reports can be generated :

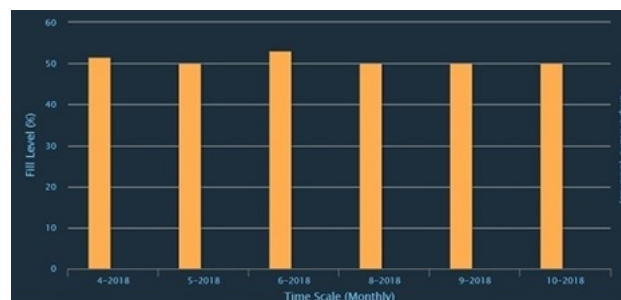
- **Fill Level Trend Report :** This report provides the percentage fill level of specific or all bins over a selected time period present in the selected location(s).
- **Waste Bin Temperature Trend Report:** This report shows the temperature trend of all or selected Sensors/Waste Bins over selected time period.
- **Waste Bins Grouped by Fill Level Report:** This report shows the number of waste bins grouped together based on the range of Fill level. The X-axis displays the range of Fill level and Y-axis displays the number of bins. The report can be generated for all cities or for a selected city over a time scale.

Figure 226: WasteBins Grouped By Fill level



- **Comparison of Bin Level Fill and Bin Temperature** : This report displays the Bin Fill level along with the Temperature for a selected Time period for all or selected sensors/ bins. The left Y-axis displays Fill level and right Y-axis displays temperature. The X-axis displays time scale.

Figure 227: Bin Fill level vs Bin Temp.

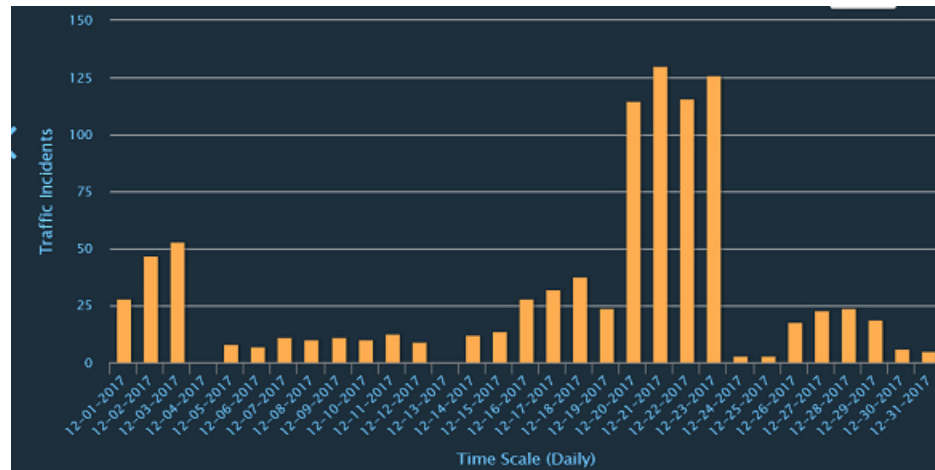


Traffic Reports

Traffic Reports provide information on Traffic density, Average Traffic speed and Average Traffic Incident trend per route segment in all or selected cities on a yearly, monthly, daily or hourly basis.

The various types of Traffic reports which can be generated are as follows :

- **Average Traffic Speed Trend** : This report helps in capturing the trend of the average speed of the traffic for a route segment over Hourly, Daily, Monthly or Yearly time period.
- **Average Traffic Incident Trend Report** This report helps in knowing the average count of the Traffic incidents that have occurred per route/road segment. The report can be generated for an Hourly, Daily, Monthly and Yearly period.

Figure 228: Average Traffic Incident Daily Report

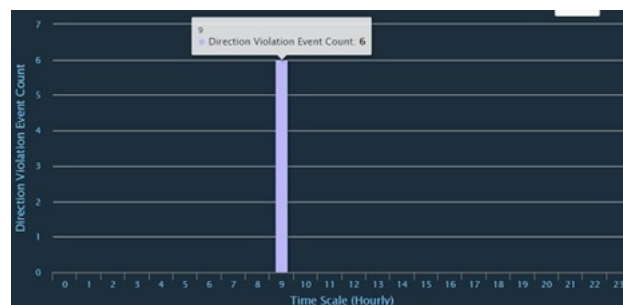
- **Traffic Density** : The report shows the Traffic Density, the average count of vehicles per route/road segment, for the selected City(ies) on an Hourly, Daily, Monthly or Yearly period.

Safety and Security Reports

Safety and Security reports help in analysing the trend of overcrowding, intrusion, suspicious object detection and direction violation incidents over a time period. This time period can be Yearly, Monthly, Daily or Hourly.

Following types of reports can be generated for Safety and Security domain :

- **Overcrowding Report**: The report displays the total number of overcrowding incidents that have occurred hourly, daily, monthly or yearly in the selected city.
- **Intrusion Events Report**: The report displays the total number of intrusion events that have occurred hourly, daily, monthly or yearly in the selected city.
- **Object Detection Report**: The report shows total number of suspicious objects detection events that has been observed over a time scale in the selected city.
- **Direction Violation Report**: The report shows total number of direction violation/ Wrong Direction events that have occurred over a Time scale in the selected city.

Figure 229: Direction Violation Events Hourly Report

Network Reports

The network module reports currently support the Faults Trend Report. This report provides the count of all the fault events associated with the network devices. The report considers all the faults which have occurred in a device, irrespective of the status of the device.

The report can be filtered on the basis of City, Provider, Device, and Time period. The reports can be generated on a yearly, monthly, daily, or hourly frequency.

Figure 230: Yearly Faults Trend Report





CHAPTER 8

Standard Operating Procedure (SOP)

Standard Operating Procedure, or SOP, is a set of step-by-step instructions compiled by City Council, to help workers, operators, and agencies carry out complex routine operations without any ambiguity. SOPs aim to achieve efficiency, quality output and uniformity of performance, while reducing miscommunication and failure to comply with industry regulations.

You can use multiple unlimited SOPs to be created and mapped to different types of incidents so that the mapping are persistent. Dashboard provides control over alerts that happen within the region of focus. It allows operators to trigger appropriate SOPs as per type of the incidents enabling operator to be efficient in handling the incidents.

Every Workflow can be assigned to an Incident type. Whenever a system alert is raised for the selected Incident type, Operator can submit a Workflow against this Alert. This creates an Instance. An instance assigned to logged in operator's group appears in the Tasks tab.

- [Workflows, on page 159](#)
- [Instances, on page 167](#)
- [Tasks, on page 171](#)
- [Logs, on page 175](#)
- [Errors, on page 179](#)

Workflows

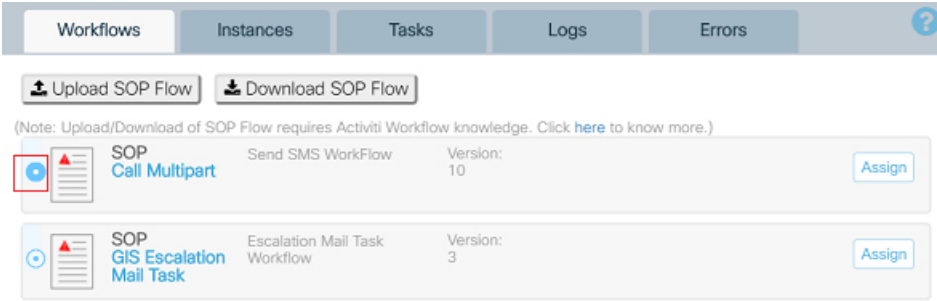
SOP supports workflow tasks that can have multiple level of approvals; multiple departments to contact, and automated escalation path of communication.

Viewing a Workflow Page

To view a workflow page, click the **SOP** tab on the dashboard.

The Workflows page appears by default. The current version supports following workflows: send email , send sms, send notification, safety threat, call multipart, parking violation, and emergency notification.

Figure 231: Workflows Page



Information on the Workflows Page

Each entry on the Workflow page provides the following information about a workflow:

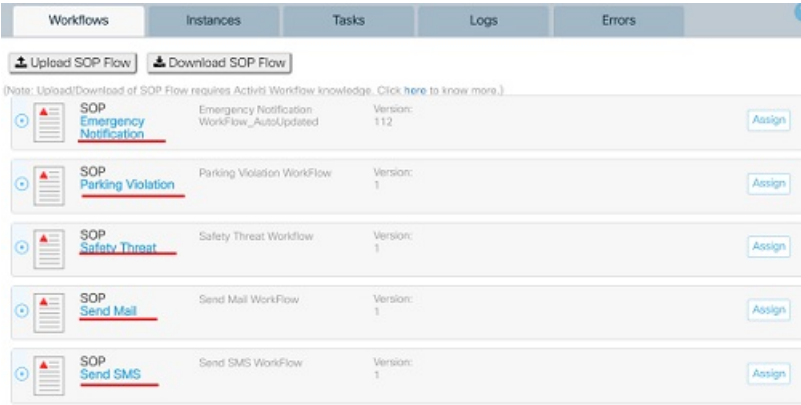
- **SOP:** The name of the SOP workflow.
- **Description:** Description of the workflow.
- **Version:** The version of the deployed workflow.
- **Assign:** This button allows the workflow to be mapped against one or more incident types.

Viewing SOP Sequence

Follow the below steps to view the SOP Workflow description:

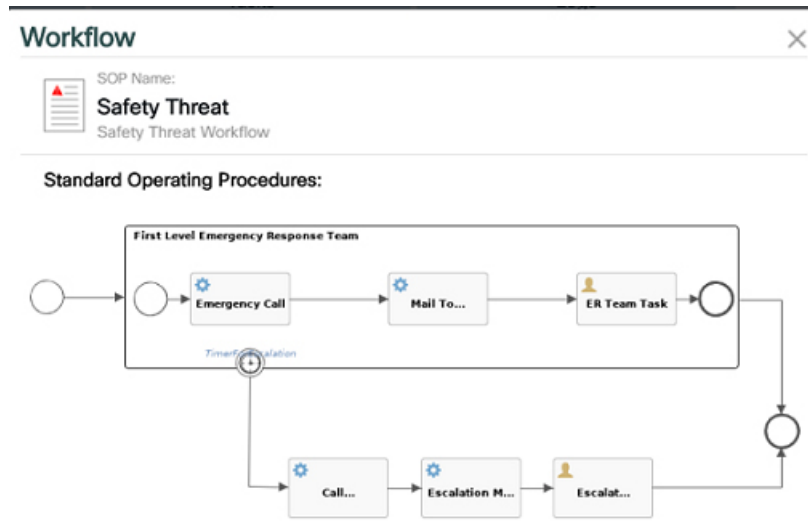
1. In the Workflows page, click the link below the SOP.

Figure 232: Workflow Link



2. The Workflow dialog box appears. You can view the SOP Name, description and diagrammatic representation of the flow/process that would be followed in case of the occurrence of assigned incident alert i.e. Call, email etc

Figure 233: Workflow Description



Editing SOP Flow

You can edit the process flows by modifying existing steps or by introducing new steps in the workflow.

This can be achieved by downloading the existing flow as an xml file, making the required changes and uploading the changed xml file.

In order to edit the flows of an existing workflow, perform the following steps:

1. Click on the radio button to select the workflow whose process flow needs to be edited.

Figure 234: Workflow Selection

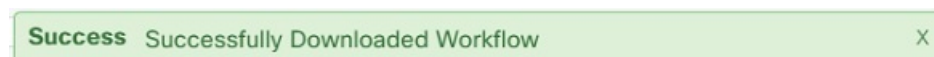


2. Click **Download SOP Flow**.

The workflow xml file gets downloaded and a success message is seen.

Following message appears on successful download:

Figure 235: Successful File Download



- Open the downloaded file and make the required changes.



Note In order to edit the workflow, activiti explorer has to be used. Click on the 'here' link to see the detailed steps.

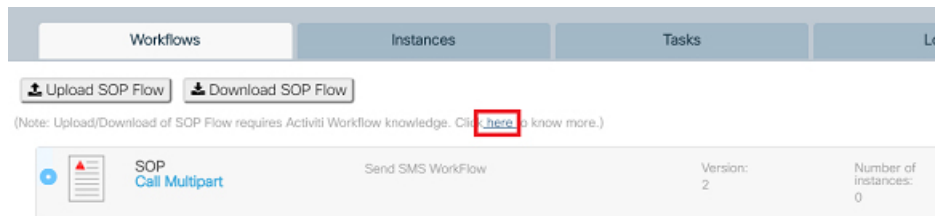
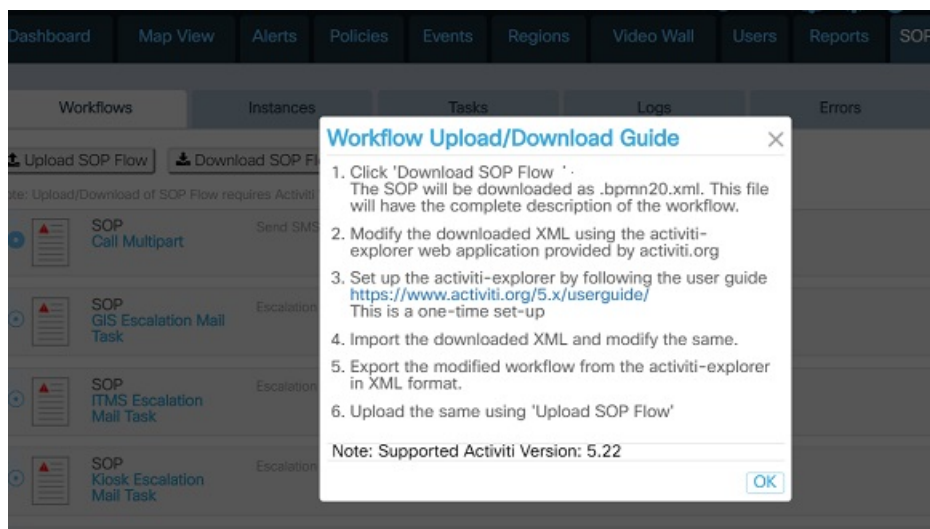


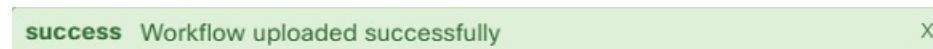
Figure 236: Workflow User Guide



- Save the file.
- Go back to Workflows page, select the Workflow to be edited.
- Click **Upload SOP Flow**.
File selection window opens.
- Select the xml file which has been edited and saved.
- Click open.

Following message gets displayed on successful file upload.

Figure 237: Successful Workflow Upload





Note The format of the file should be .bpmn20.xml.
To edit the SOP, activiti version 5.22 should be used.

Assigning Incident Types

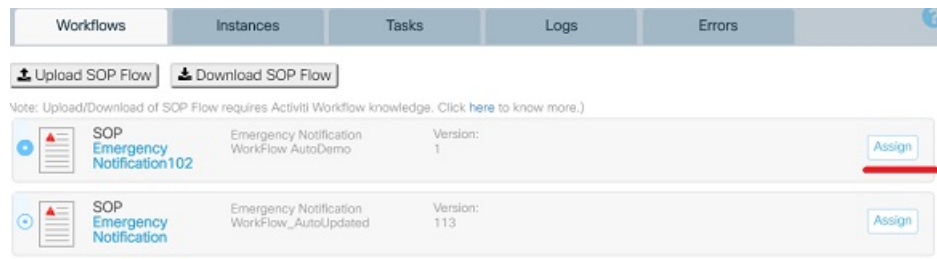
By assigning an Incident type to a workflow, user is able to configure the fields required by the workflow, for eg, emergency email ids, phone numbers, roles and so on

Follow the below steps to assign incidents to the workflow:

1. In the Workflow page, click **Assign**

The Assign incidents dialog box appears.

Figure 238: Assigning Incident




2. In this dialog box, select the check box to select the incidents to be assigned to the workflow.
An Incident in CKC refer to event(s) that is of significance that requires explicit notification to users.



Note The incidents type / Alerts supported in current version are listed in Alerts section. Please see [Alerts: System-Actionable Incidents, on page 132](#)

Figure 239: Assign Incidents Window

INCIDENT TYPE	TRIGGER TYPE
<input type="checkbox"/> Accident	<input checked="" type="radio"/> Automatic <input type="radio"/> Manual
<input checked="" type="checkbox"/> Container Over flow	<input checked="" type="radio"/> Automatic <input type="radio"/> Manual 
<input type="checkbox"/> Crime	<input checked="" type="radio"/> Automatic <input type="radio"/> Manual
<input type="checkbox"/> Vehicle Overstay	<input checked="" type="radio"/> Automatic <input type="radio"/> Manual
<input type="checkbox"/> Fault	<input checked="" type="radio"/> Automatic <input type="radio"/> Manual
<input type="checkbox"/> Fire	<input checked="" type="radio"/> Automatic <input type="radio"/> Manual
<input type="checkbox"/> Fire And Smoke	<input checked="" type="radio"/> Automatic <input type="radio"/> Manual
<input type="checkbox"/> Garbage	<input checked="" type="radio"/> Automatic <input type="radio"/> Manual
<input type="checkbox"/> Graffiti	<input checked="" type="radio"/> Automatic <input type="radio"/> Manual


Cancel Save

3. Select the *Trigger type* for the selected incident type as either Automatic or Manual.

**Note**

Selecting the "Automatic" trigger type results in automatic triggering of the workflow whenever the mapped alert is raised in the system.

If Automatic trigger is selected, the field becomes editable. This allows the user to configure emergency email ids, phone numbers, roles and so on. These configurable fields vary with the type of workflow selected.

4. Click  which appears when automatic trigger is selected.

Editable fields appear, where values can be provided.

5. Enter the values for all the applicable fields such as emails ids, phone numbers, roles and so on.

These are the roles, emails ids and phone numbers which get notified automatically when the mapped alert occurs in the system.

Figure 240: Configuration for Automatic Trigger of Safety Threat Workflow

Assign incidents [X]

☐ INCIDENT TYPE TRIGGER TYPE

To*

From*

EmergencyPhoneNumbers*

EscalationPhoneNumbers*

EscalationEmails*

Link*

[Cancel] [Save]

Figure 241: Configurable Fields for Send Mail Workflow

Assign incidents to Send Mail [X]

☐ INCIDENT TYPE TRIGGER TYPE

<input type="checkbox"/> Speeding	<input checked="" type="radio"/> Automatic	<input checked="" type="radio"/> Manual	
<input type="checkbox"/> Suspicious Object	<input checked="" type="radio"/> Automatic	<input checked="" type="radio"/> Manual	
<input type="checkbox"/> Theft	<input checked="" type="radio"/> Automatic	<input checked="" type="radio"/> Manual	
<input type="checkbox"/> ThresholdReached	<input checked="" type="radio"/> Automatic	<input checked="" type="radio"/> Manual	
<input type="checkbox"/> Train Platform Intrusion	<input checked="" type="radio"/> Automatic	<input checked="" type="radio"/> Manual	
<input checked="" type="checkbox"/> Vehicle Identified	<input checked="" type="radio"/> Automatic	<input checked="" type="radio"/> Manual	

To*

From*

[Cancel] [Save]

Figure 242: Configurable Fields for Send SMS Workflow

INCIDENT TYPE	TRIGGER TYPE
<input type="checkbox"/> No Parking	<input checked="" type="radio"/> Automatic <input checked="" type="radio"/> Manual
<input type="checkbox"/> Overcrowding	<input checked="" type="radio"/> Automatic <input checked="" type="radio"/> Manual
<input type="checkbox"/> Overstay	<input checked="" type="radio"/> Automatic <input checked="" type="radio"/> Manual
<input type="checkbox"/> Panic	<input checked="" type="radio"/> Automatic <input checked="" type="radio"/> Manual
<input checked="" type="checkbox"/> ParkingFull	<input checked="" type="radio"/> Automatic <input checked="" type="radio"/> Manual
PhoneNumbers* <input type="text"/>	
<input type="checkbox"/> Potential	<input checked="" type="radio"/> Automatic <input checked="" type="radio"/> Manual
<input type="checkbox"/> Person Identified	<input checked="" type="radio"/> Automatic <input checked="" type="radio"/> Manual

Cancel Save

Figure 243: Configurable Field for Emergency Notification

INCIDENT TYPE	TRIGGER TYPE
<input checked="" type="checkbox"/> Accident	<input checked="" type="radio"/> Automatic <input checked="" type="radio"/> Manual
<input type="checkbox"/> Container Over flow	<input checked="" type="radio"/> Automatic <input checked="" type="radio"/> Manual
<input type="checkbox"/> Crime	<input checked="" type="radio"/> Automatic <input checked="" type="radio"/> Manual
<input type="checkbox"/> Vehicle Overstay	<input checked="" type="radio"/> Automatic <input checked="" type="radio"/> Manual
<input type="checkbox"/> Fault	<input checked="" type="radio"/> Automatic <input checked="" type="radio"/> Manual
<input type="checkbox"/> Fire	<input checked="" type="radio"/> Automatic <input checked="" type="radio"/> Manual
<input type="checkbox"/> Fire And Smoke	<input checked="" type="radio"/> Automatic <input checked="" type="radio"/> Manual

Assign To Role* CDP_ADMIN

Cancel Save

- Click **Save** to assign incidents to selected workflow.

Upon clicking save, the incident will be successfully assigned to the selected workflow

Figure 244: Incident Types Assigned

Success Incident types assigned for selected workflow

Instances

Action on an alert can be taken only after creating an instance. An instance is created whenever a **workflow** is submitted for an Alert.

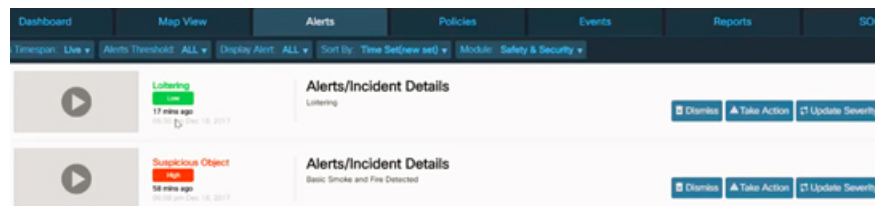
Creating an Instance

On clicking the **SOP** tab on the dashboard, the **Workflows** page appears by default on the dashboard. For information on Workflows and Tasks, see [Workflows, on page 159](#) and [Tasks, on page 171](#)

In order to create an instance, perform the following steps:

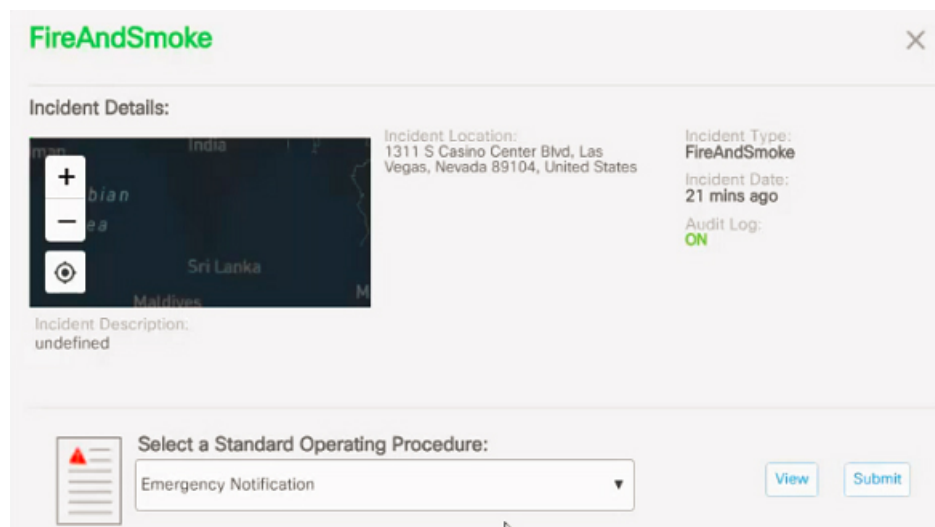
1. Go to Alerts page.
2. Click **Take Action**.

Figure 245: Alerts page



3. Select a Standard Operating Procedure from the available list of Workflows.

Figure 246: Mapping of Workflow with an Alert



4. Click **Submit**



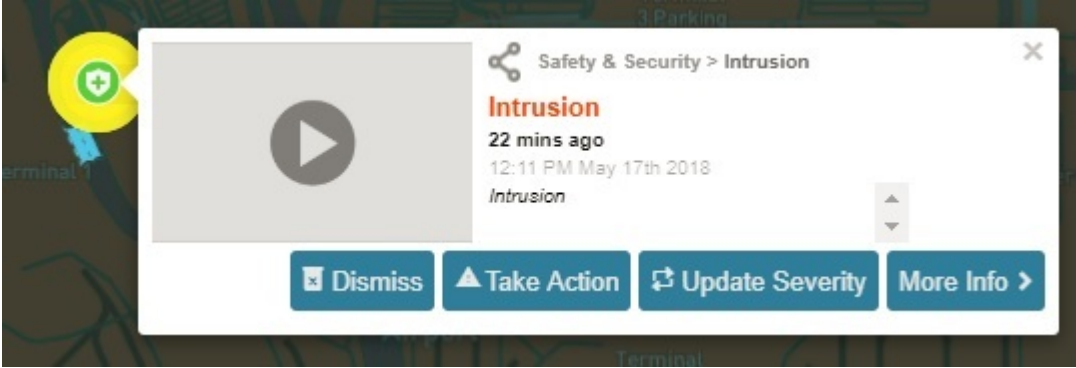
Note

For Emergency Notification Workflow, assign the SOP to any role after submitting the SOP.

This creates an Instance in the SOP section.

Instances can also be created from Map View page. The Map view page also displays system generated Alerts with the option of **Take Action** as shown below. The same sequence of steps as mentioned above can be followed to create an instance.

Figure 247: Alerts on Map View



Click the **Instances** tab. The Instances page displays all the created instances

Figure 248: Instances Page

Workflows

Instances

Tasks

Logs

Errors

Workflow

Instance

1312

Workflow:

Send Mail

Incident ID:

No Incident ID

Incident Name:

No Incident Name

Severity:

No Severity

Status:

Completed

Cancel

View

Instance

7394

Workflow:

Send Mail

Incident ID:

No Incident ID

Incident Name:

No Incident Name

Severity:

No Severity

Status:

Completed

Cancel

View

Instance

10019

Workflow:

Send Mail

Incident ID:

No Incident ID

Incident Name:

No Incident Name

Severity:

No Severity

Status:

Completed

Cancel

View

Instance

10039

Workflow:

-

Incident ID:

No Incident ID

Incident Name:

No Incident

Severity:

No Severity

Status:

In Progress



Cancel

View

Information on the Instances Page

Each entry on the Instance page provides the following information about an instance:

Figure 249: Instances Information

Workflows	Instances	Tasks	Logs	Errors			
	Instance 15097	Workflow: Send Mail Incident ID: 204	Incident Name: Fire Detected	Severity: L2	Status: Completed	Cancel	View
	Instance 274823	Workflow: Send Mail Incident ID: A1557384555235175766441013519	Incident Name: Intrusion	Severity: L5	Status: Completed	Cancel	View
	Instance 274704	Workflow: Send Mail Incident ID: A1557383529210296549927150053	Incident Name: Suspicious Object	Severity: L5	Status: Completed	Cancel	View





- **Instance:** Clicking on this displays the instance id and corresponding task id .
- **Workflow:** Workflow or SOP name for which the instance has been created.
- **Incident ID:** ID of the Incident for which the SOP has been assigned.
- **Incident Name:** Name of the Incident for which the SOP has been assigned.
- **Severity:** The severity level of the instance. It is same as the severity level of the mapped alert. This can range from L1 to L5. L1 is for highest severity and L5 is for lowest severity.
- **Status:** Workflow instance status such as In Progress, Completed.
- **View and Cancel links :** **Cancel** can be used to cancel any In Progress instance and **View** can be used to view the diagrammatic status details of the instance.

Viewing Current Status of the instance

Follow the below steps to view the Instances status:

1. On the **Instances** page, click *task id* present below the instance to view the instance status.
You can also click **View** to see the **Instance Status** details.

Figure 250: View Instance

Workflows	Instances	Tasks	Logs	Errors	
Workflow					
 Instance 1312	Workflow: Send Mail	Incident ID: No Incident ID	Incident Name: No Incident Name	Severity: No Severity	Status: Completed Cancel View
 Instance 7394	Workflow: Send Mail	Incident ID: No Incident ID	Incident Name: No Incident Name	Severity: No Severity	Status: Completed Cancel View
 Instance 10019	Workflow: Send Mail	Incident ID: No Incident ID	Incident Name: No Incident Name	Severity: No Severity	Status: Completed Cancel View
 Instance 10039	Workflow: -	Incident ID: No Incident ID	Incident Name: No Incident Name	Severity: No Severity	Status: In Progress Cancel View

2. The **Instance Status** screen appears. You can view the Task ID and Workflow instances status for SOP. The workflow sequence diagram appears only for In progress instances and not for completed instances. An Instance which is still in progress shows the current state of the Instance in red.

Figure 251: Completed Instance

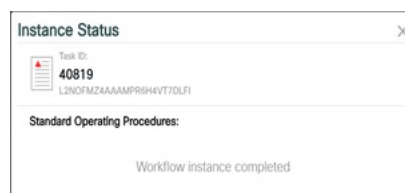
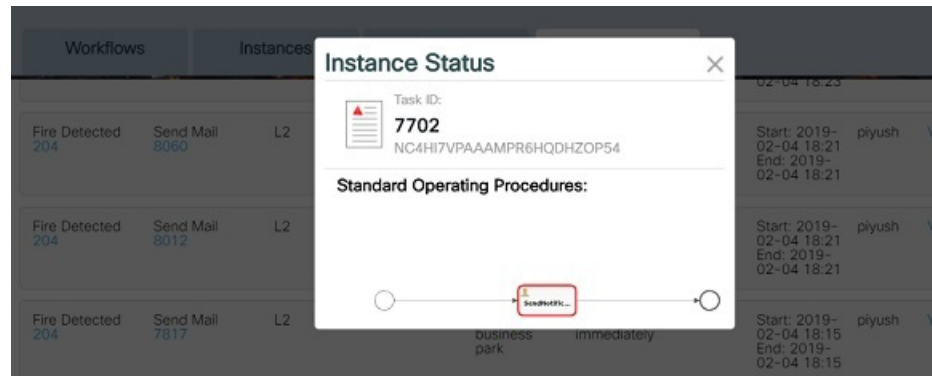


Figure 252: In Progress Instance



Canceling Instances

As an operator/admin, you can cancel only the instances which you have created.

Cancellation can only be done for an unfinished or an 'In Progress' instance.

An instance which has been completed cannot be cancelled and **Cancel** button corresponding to a completed instance appears disabled.

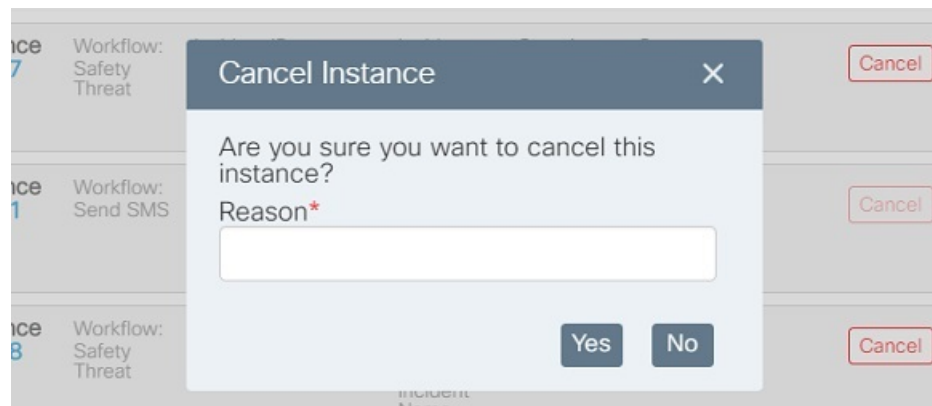
Perform the following steps to cancel an instance.

1. Go to Instances page.
2. Click on **Cancel** present on the right of the SOP which needs to be cancelled.

A confirmation message appears where the reason of cancellation needs to be entered.

3. Enter the reason for the cancellation of the instance.

Figure 253: Instance Cancellation Reason



4. Click **Yes**

The Instance gets canceled and a success message is displayed.







Figure 254: Instance Cancellation Confirmation

Success Instance Cancelled Successfully

Navigating Instances

You can navigate the Instances using the pagination links available at the bottom right of each page.

Figure 255: Pagination Links on Instances Page

Workflows	Instances	Tasks	Logs	Errors				
	Instance 275363	Workflow: Send Mail	Incident ID: A1557387164254168406582491015	Incident Name: SuspiciousObject	Severity: L5	Status: Completed	Cancel	View
	Instance 275316	Workflow: Send Mail	Incident ID: A1557387223226362040533166830	Incident Name: SuspiciousObject	Severity: L5	Status: Completed	Cancel	View
	Instance 274823	Workflow: Send Mail	Incident ID: A1557384555235175766441013519	Incident Name: Intrusion	Severity: L5	Status: Completed	Cancel	View
	Instance 274704	Workflow: Send Mail	Incident ID: A1557383529210296549927150053	Incident Name: SuspiciousObject	Severity: L5	Status: Completed	Cancel	View
	Instance 274685	Workflow: Send Mail	Incident ID: A1557383543966360261982110781	Incident Name: SuspiciousObject	Severity: L5	Status: Completed	Cancel	View
	Instance 274666	Workflow: Send Mail	Incident ID: A1557383574015173842914952074	Incident Name: Intrusion	Severity: L5	Status: Completed	Cancel	View
<div>Prev 1 2 3 4 ... 29 Next</div>								

Each page displays a maximum of 10 instances per page.

Tasks

Any instance assigned to the logged-in user or to the logged-in user's group(s) appears as a task in the Tasks tab.

A task will have Task id, Task information, Workflow name, Time Stamp, associated incident and available action details.

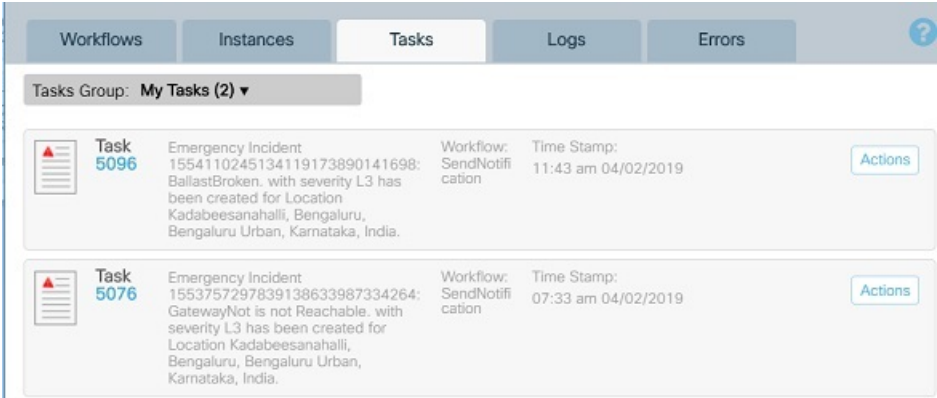
Viewing the Tasks Page

On clicking the **SOP** tab on the dashboard, the Workflows page appears by default on the dashboard. For information on Workflows and Instances, see [Workflows, on page 159](#) and [Instances, on page 167](#)

Click **Tasks**.

The Tasks page appears.

Figure 256: Tasks Page



Information on the Tasks Page

Each entry on the Task page provides the following information about a task:

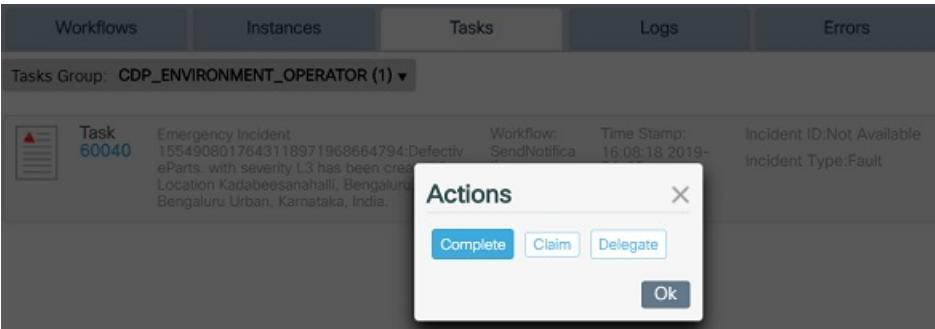
- **Task:** Task ID.
- **Description:** Task description.
- **Workflow:** Name of the Workflow associated with the task.
- **Time Stamp :** The time at which the task was created.
- **Incident Details :** The Incident ID and Incident Type for which the task has been assigned.
- **Actions:** There is a list of actions that you can perform on a task that is assigned to your group:

Complete- This action should be selected when the task has been completed.

Claim - This action should be selected when you are claiming the task given.

Delegate - The task is delegated to some other user. The list of user names gets displayed in the *Select user* drop down. The person who has been delegated the task can *Complete* the task.

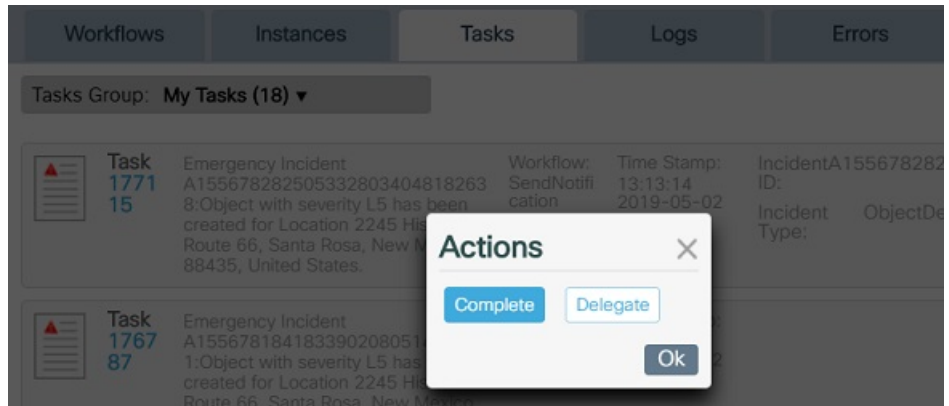
Figure 257: Actions for My Group Tasks





Note The tasks that are claimed by you or have been delegated to you, can either be completed by you, or delegated to somebody else.

Figure 258: Actions for "My Tasks"



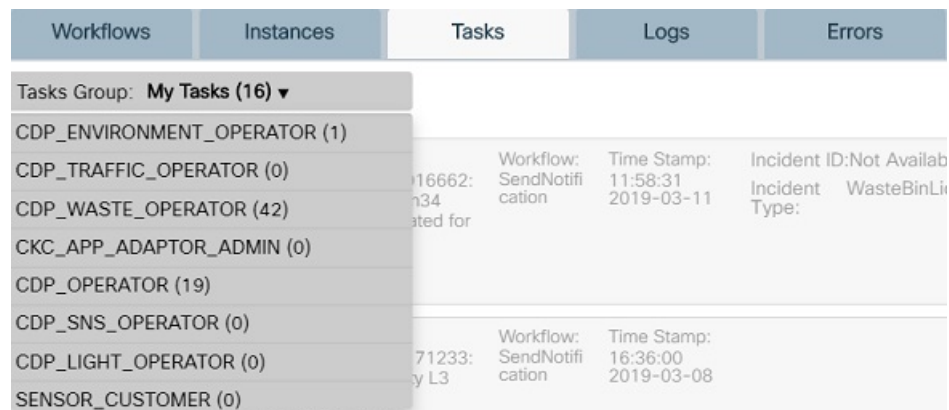
- **Tasks Group** filter: The displayed tasks can be filtered using the **Tasks Group** filter present on the top left corner of the page.

The filter displays the names of all the groups to which the logged-in user belongs. It also displays a filter as 'My Tasks'.

All the tasks assigned to the logged-in user or claimed by the logged-in user, appear under 'My Tasks' filter.

The tasks assigned to various groups can be filtered using the group name as a filter. The filter also displays the total count of tasks assigned to a group or to the logged-in user.

Figure 259: Tasks Group Filter

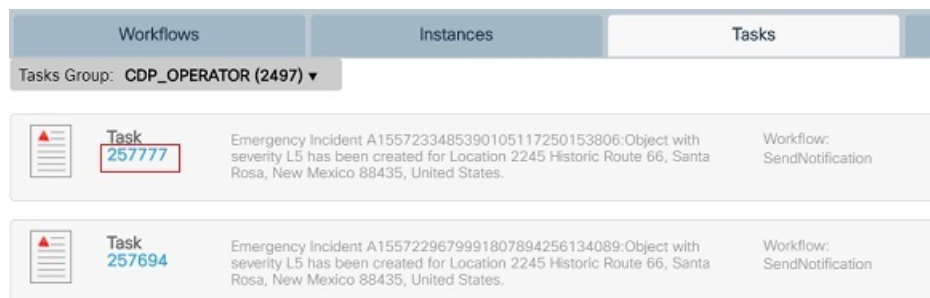


Taking Action on a Task

Follow the below steps to take action on a task :

1. On the Tasks page, click *Task Id* present below the Task or click on **Actions** present on right hand side of every row.

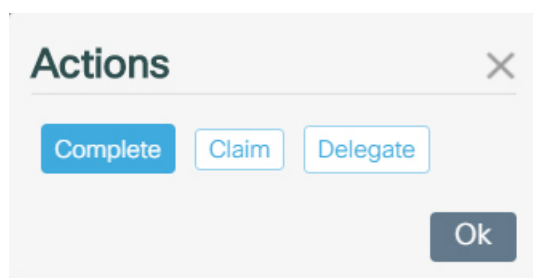
Figure 260: View Task



The **Actions** window appears. Here, you can view the actions that can be performed on the task such as Complete, Claim, and Delegate.

2. Click **Complete**, if the action on the task is already taken.

Figure 261: Actions Window



3. Click **Delegate** and then select user from the drop-down to assign task to some other user.

Figure 262: Delegate User

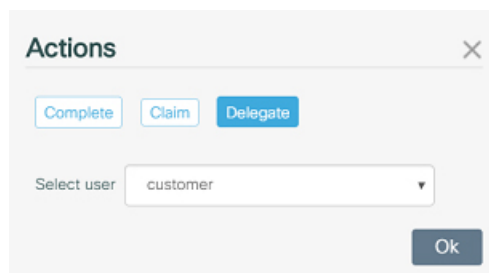
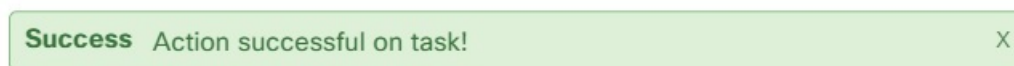


Figure 263: Action Completion message



4. Go to **Instances** tab, the status for this Instance appears as **In Progress**

If the task has been completed, click **Complete** and then go to **Instance** tab to check Instance's status, which now changes to **Complete**.



Note For all the tasks under "My Tasks" filter, only *Complete* or *Delegate* action can be taken.

Logs

Logs tab display the historical instances for all the SOPs. This allows the user to find out the current status of all the assigned workflows such as In Progress, Completed, Cancelled or Failed. In Progress and Cancelled SOP are highlighted separately. Their ids are displayed in *red* and *yellow* colours respectively.

The **Logs** tab display following details about the assigned SOP.

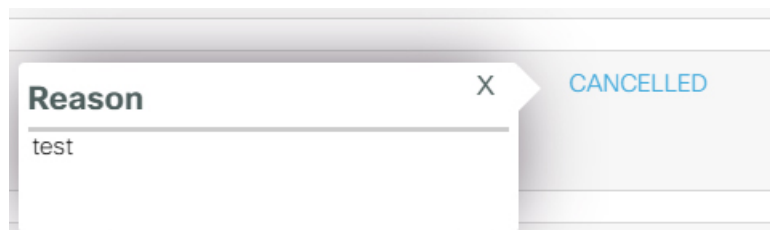
Figure 264: SOP Logs Tab

Workflows		Instances		Tasks		Logs		Errors	
Reset All filters									
Alert type ▼	SOP Name ▼	Severity ▼	Executed on ▼	Location	Description	Time Stamp	Status	Action By	Comments
ALL	ALL	ALL							
Limit Exceeded 15035167072 95183244925 994664A	Send Mail 50037	L5	2019-04-05T07:36:59.114Z	poland		Start: 01:06 pm Apr 5, 2019 End: 01:07 pm Apr 5, 2019	COMPLETED	anuradha	View Add More
Limit Exceeded 15943614042 70139375363 611177	Emergency Notification 45184	L5	2019-04-04T07:47:38.839Z	Halanahalli Thoppasandra, Bengaluru, Bengaluru Urban, Karnataka, India		Start: 01:17 pm Apr 4, 2019 End: 01:18 pm Apr 4, 2019	CANCELLED	newsensorsc ustomer	View Add More
Limit Exceeded 15943614042 70139375363 611177	Emergency Notification 45163	L5	2019-04-04T07:47:09.092Z	Halanahalli Thoppasandra, Bengaluru, Bengaluru Urban, Karnataka, India		Start: 01:17 pm Apr 4, 2019 End: Not Available	INPROGRESS	newsensorsc ustomer	View Add More

- **Alert type** : The name and id of the alert for which the SOP has been assigned.
- **SOP Name** : The name and id of the SOP assigned to the alert.
- **Severity** : The severity level of the alert.
- **Executed On** : The date on which the SOP execution was started.
- **Location** : The name of the location where the alert was raised.
- **Description** : The description of the alert.
- **Time Stamp** : The Start and End Time stamp of the executed SOP. For unfinished SOP, End time stamp does not get displayed.
- **Status** The current status of the SOP. An SOP whose workflow execution has been completed shows the status as COMPLETED.

An SOP whose instance has been cancelled shows the status as CANCELLED. The Cancelled status appears as a link, clicking on which displays the reason for SOP cancellation.

Figure 265: Reason for Cancellation



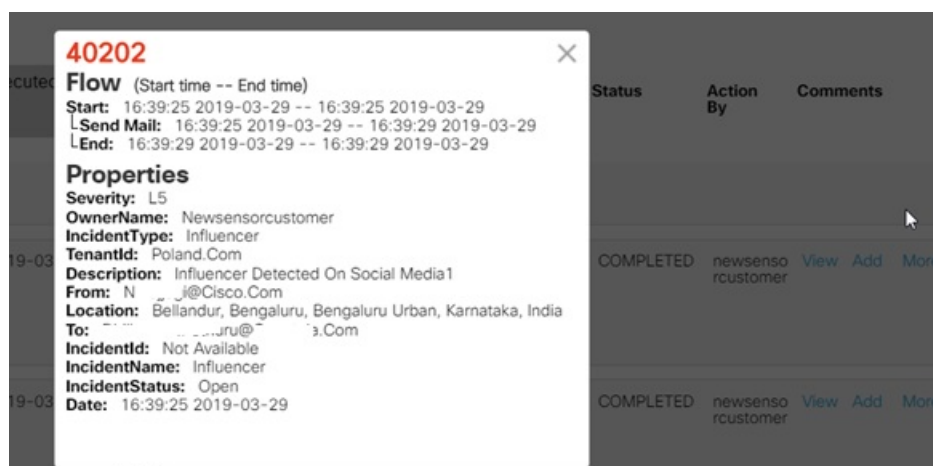
When a SOP execution is in progress or not yet started, the status appears as IN PROGRESS. If an error occurs while creating and Instance, the status of the SOP appears as FAILED, the details of the failed SOP can be seen in Errors tab.

- **Action By** : The username of the user who has taken action on the SOP.
- **Comments**: View any added comment or add any comment to the SOP.

There is an additional link *More*. Clicking on this link displays various details of workflow execution such as Start time, Workflow executed, End date (if the workflow has been completed) and Properties of the alert.

The property of the alert includes severity, name of the owner (user who has initiated the workflow execution), tenant where the alert has occurred, description of the alert, location where the alert has occurred and the executed workflow details.

Figure 266: Detailed Properties of the SOP



In order to add comment against any workflow, perform following steps:

1. Click **Add** present under the *Comments* column.
Add Comments window opens up.
2. Enter text for comments.

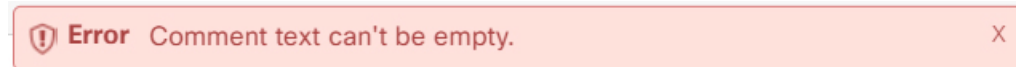


Note An empty comment window cannot be saved. The comments length should not exceed 1000 characters.

Figure 267: Validation for Count of Characters



Figure 268: Empty Comments Window Validation



3. Click on the **Add** button to save the comments.

Confirmation message gets displayed.

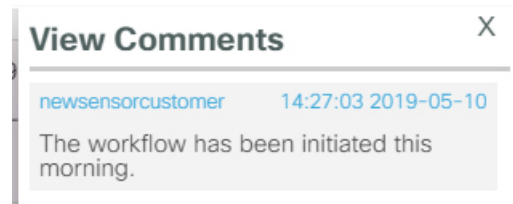
Figure 269: Successful Comments Addition



In order to view comments added to the workflow, click **View** present under the *Comments* column.

View Comments window opens up which displays all the comments added, name of the user who added the comment, and time stamp at which the comment was added.

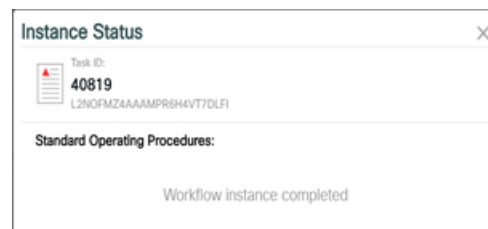
Figure 270: View Comments Window



Click on the Task Id which is displayed in the SOP Name column. This displays the current status of the Instance.

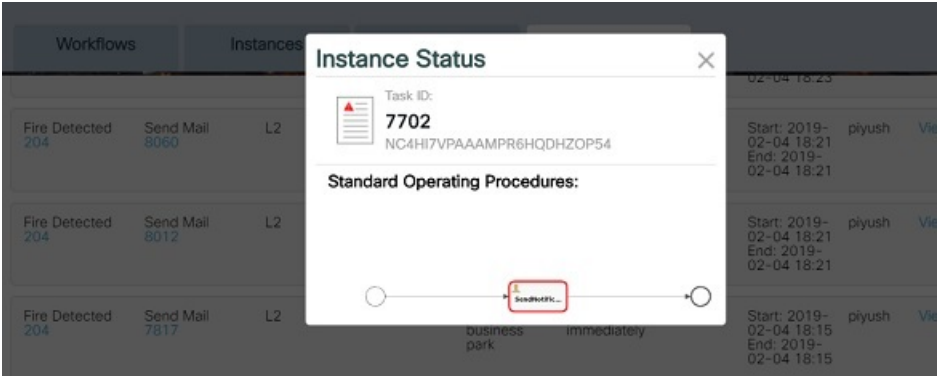
A completed Instance status appears as shown below.

Figure 271: A Completed Instance Status



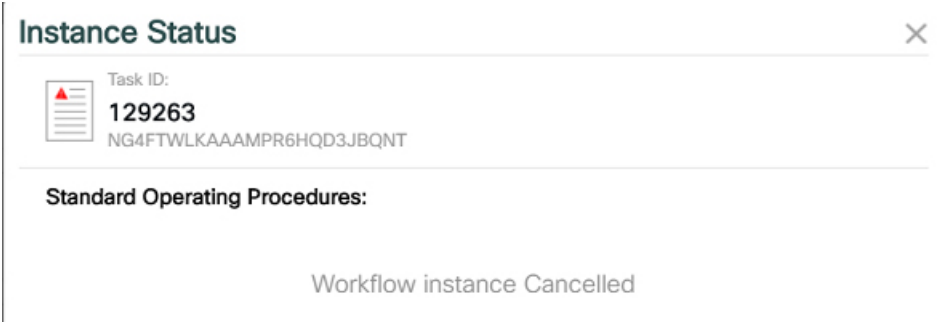
An incomplete instance status shows the stage at which the workflow is stuck in *red* as shown below:

Figure 272: Unfinished Instance Status



A Cancelled instance status appears as shown below:

Figure 273: Cancelled Instance Status



Filtering the Logs

The first few columns of the logs can be used to filter out the logs of your choice. Following filters can be applied to the Logs :

- Alert Type
- SOP Name
- Severity
- Executed On

The filtered view can be changed to default view using **Reset all filters** present on top left of the Logs view.

Figure 274: Logs Filter



Errors

You can use the Errors tab to view any error which occurs while creating an instance.

Figure 275: SOP Errors Page

Dashboard	Map View	Alerts	Policies	Events	Reports	SOP	Video Wall
Workflows	Instances	Tasks	Logs	Errors			
Reset All filters							
Alert type ALL	Severity ALL	Executed on	SOP Name	Location	Description	Time Stamp	Action By
Suspicious Object A15573910 690172506 062312131 65	L5	2019-05-09	ParkingViolation 00	2245 Historic Route 66, Santa Rosa, New Mexico 88435, United States	Unknown property used in expression: ... More	Start: 14:07:50 2019-05-09 End: 14:07:50 2019-05-09	customer
Suspicious Object A15573909 649092557 062312131	L5	2019-05-09	ParkingViolation 00	2245 Historic Route 66, Santa Rosa, New Mexico 88435, United States	Unknown property used in expression: ... More	Start: 14:06:07 2019-05-09 End: 14:06:07 2019-05-09	customer

Following details are displayed on this page :

- **Alert Type:** The type of the alert for which instance was created.
- **Severity:** The severity level of the raised alert. The value varies from L1 to L5.
- **Executed on:** The date on which the workflow execution was initiated.
- **SOP Name:** The name of the workflow mapped to the alert.
- **Location:** The location where the alert was raised.
- **Description:** The description of the error which occurred during workflow execution.
- **Time Stamp:** The Start timestamp when workflow execution was initiated and the End timestamp when execution stopped due to an error.
- **Action By:** The user who initiated the execution of the workflow.

You can filter the records as per the first three columns : Alert type, Severity, Execution Date.

Clicking on **Reset All filters** displays the default view of the page.



CHAPTER 9

Video Wall

You can view live video feeds for various locations using the Video Wall section. The video cameras placed at multiple locations stream live video feeds as per the layout defined by the user. You can view detailed information about each feed, capture screen shot, record specific clipping.

- [Using Video Wall Section, on page 181](#)

Using Video Wall Section

You can edit the layout of displayed feeds, record the clippings and take screen shots.

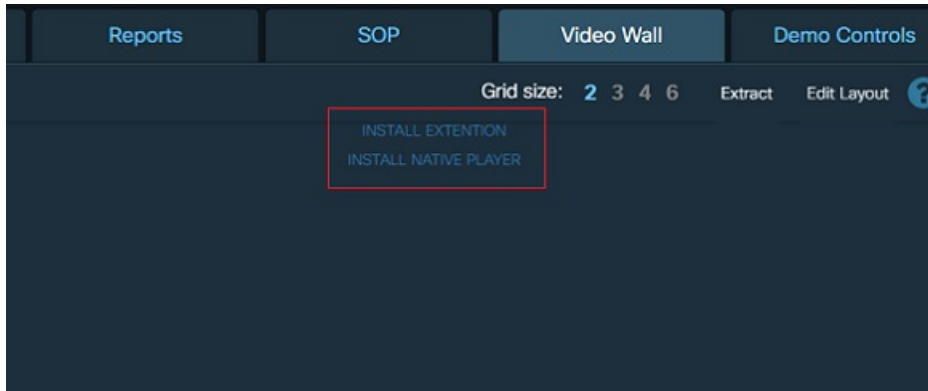
Before you begin

The system should have following configuration for the video feeds to load successfully:

- CPU : Intel Core i9-9900K CPU @ 3.60 GHz
- CORE: 16
- Memory: 32 GB
- GPU : NVIDIA GeForce GTX 1050 Ti
- Chrome Web Browser : latest version

-
- Step 1** Select **Video Wall** from the top navigation menu of the dashboard.
 - Step 2** Install Wizeye native player on your system using the installer link provided on the interface.
 - Step 3** Install Wizeye extension on your web browser using the installer link provided on the interface.
- Supported version of Wizeye native video player : 1.5.1
- Supported version of Wizeye media player : 1.5.1

Figure 276: Video Player Installer



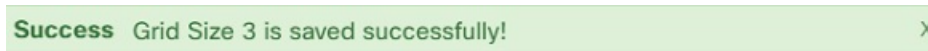
After successful installation, all the accessible video feeds get displayed.

Step 4 Click on any of the *Grid size* on top right of the page.

Grid size indicates the number of rows and columns that should be displayed on the current page. You can select a grid size of 2, 3, 4, and 6 in the current version.

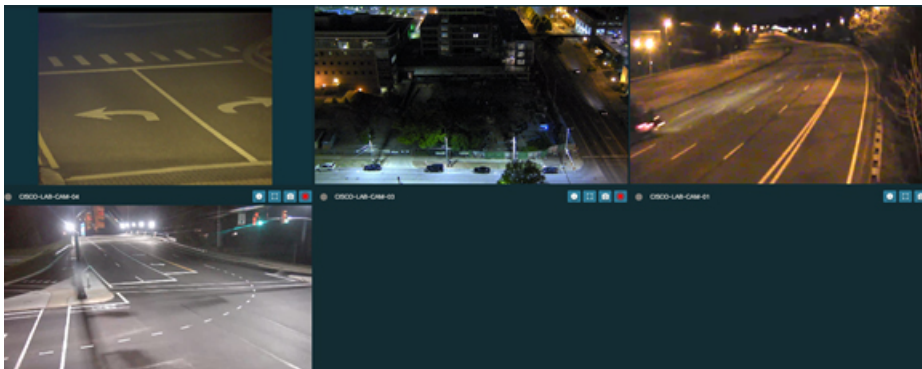
The grid size selected by you gets saved in the system as shown in the figure below and loads by default when you access the Video Wall section next time.

Figure 277: Saved Layout Success Message



Selecting size as '3' displays a 3X3 grid.

Figure 278: Video Wall page with Grid Size 3 and with 4 Cameras



Step 5 Click the displayed pagination on top left corner to navigate through all the displayed feeds.

Below figure displays a portion of the Video Wall top menu section

Figure 279: Video Wall Top Menu



In the figure above, 129 is the total number of cameras present for the current region and 52 is the number of cameras selected whose video feeds are being displayed on the video wall section currently.

The average time taken for the videos to load per grid size is as shown below:

Table 1: Average Loading Time

Grid Size	Average Time taken to Load (in minutes)
2 x 2	1
3 x 3	2
4 x 4	4
6 x 6	more than 5

You can also navigate through the pages automatically. For details refer [Guard Tour Rotation](#), on page 185

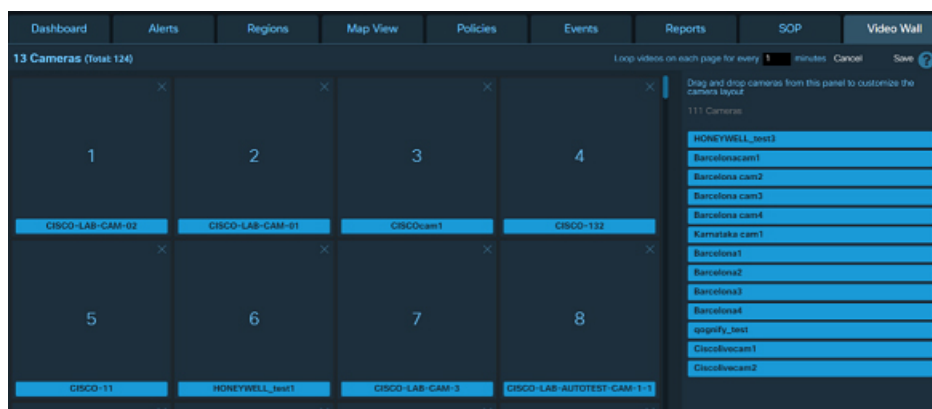
Step 6

Click **Edit Layout**

An interface gets displayed where

- (i) you can add and remove feeds display
- (ii) user can drag camera from the right side panel and drop into the left grid to arrange the order of displayed feeds.
- (iii) set the frequency for automatic rotation of video pages. For details refer [Guard tour rotation](#).

Figure 280: Customize Camera Layout



Step 7

Drag a camera from the right panel

DROP HERE gets displayed at all the available locations on the left panel.

Step 8

Release the selected camera at the desired location.

Positioning of feeds display can be re arranged by crossing out an existing camera position and then again dropping the same into a new location.

Step 9

Click **Save**


The existing layout gets saved.

Saving and Recording Individual Feed

Using the Extract feature, action can be taken on each individual feed. Each camera feed has few control buttons which enables the user to perform specific actions.

Perform following steps in order to control individual feed.

- Step 1** Click **Extract** present on top right of the page.
The entire Video Wall section is extracted to an adjacent tab of the browser.

- Step 2** Click  present on bottom right corner of the feed.
The details of the feed such as Name, Location and Video URL are displayed as shown here




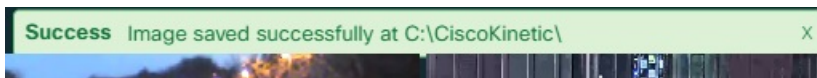
- Step 3** Click .
The detailed view of the feed opens up in an adjacent tab. This view allows the user to control the focus of the displayed feed.

Figure 281: Video Wall Camera Controls



- Step 4** Click on the Camera icon located on bottom right corner of the feed.
- A destination folder 'CiscoKinetic' should be created in c: drive of the system prior to taking the snapshot.
- A snapshot of the current feed is captured and gets stored in the created destination folder. A success message is displayed.

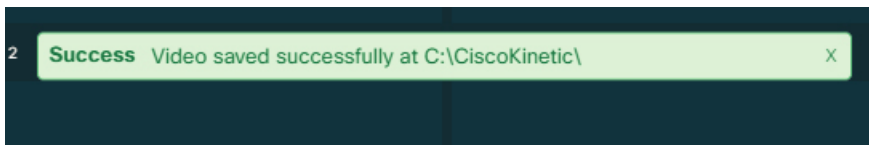
Figure 282: Successful message for saved image



- Step 5** Click on the Recording icon.
- A destination folder 'CiscoKinetic' should be created in c: drive of the system prior to recording the feed.
- Recording of the feed begins

- Step 6** Click on the Recording icon again
- Recording of the feed stops and gets saved in the destination folder. A success message gets displayed when the video file gets saved.

Figure 283: Saved Video Success message



Guard Tour Rotation

Guard tour rotation allows you to automatically navigate through the video wall pages. In order to enable the automatic rotation of feeds at your required frequency, perform following steps:

Before you begin

Login to the CKC dashboard and go to Video Wall module

-
- Step 1** Click on **Edit Layout** present on top right corner of the page.
Edit Layout interface gets displayed.
- Step 2** Drag and drop cameras to arrange the order of feeds. For details, refer the section [Using Video Wall Section, on page 181](#)
- Step 3** Enter the *minutes* in "Loop videosminutes" field. Images : 440849
Here *minutes* is the duration for which the video feeds on the current page are visible before moving to the next page automatically.
The current version supports a rotation frequency in the range of 0 to 99 minutes only.
Entering a value of 0 min will disable the Guard tour rotation feature.
- Step 4** Click **Save**
Confirmation message appears.
- A green horizontal bar with the text "Success Saved camera layout successfully!" on the left and a close button (X) on the right.
- User is redirected to Video Wall page.
The video feed pages rotate in a loop at the set frequency.
- Step 5** Click **PAUSE LOOP** in order to stop the automatic rotation of pages.
- Figure 284: Pause Loop*
- A dark blue UI element containing a "PAUSE LOOP" button with a pause icon, followed by "Grid size:" and four buttons labeled "2", "3", "4", and "6".
- Once the rotation is paused, **Pause** button changes to **Resume**
- Step 6** Click **RESUME LOOP** to resume the rotation of video pages.
-

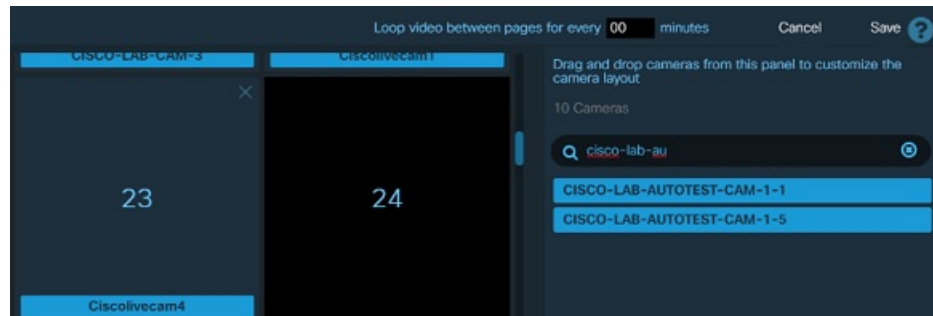
Searching Video Wall Cameras

User can search for any specific camera present in the video wall while editing camera layout.

This Search on cameras can be performed when

- the number of cameras is more than one.
- the layout on the left-hand side panel does not contain the camera already.
 - Enter the name of the camera to be searched in the search bar.
 - Cameras with matching name get displayed.

Figure 285: Camera Search





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