



# ExtremeLocation Essentials v25.4.0 User Guide

Real-Time Location and Analytics

9039379-00 Rev AA  
July 2025



Copyright © 2025 Extreme Networks, Inc. All rights reserved.

## Legal Notice

Extreme Networks, Inc. reserves the right to make changes in specifications and other information contained in this document and its website without prior notice. The reader should in all cases consult representatives of Extreme Networks to determine whether any such changes have been made.

The hardware, firmware, software or any specifications described or referred to in this document are subject to change without notice.

## Trademarks

Extreme Networks and the Extreme Networks logo are trademarks or registered trademarks of Extreme Networks, Inc. in the United States and/or other countries.

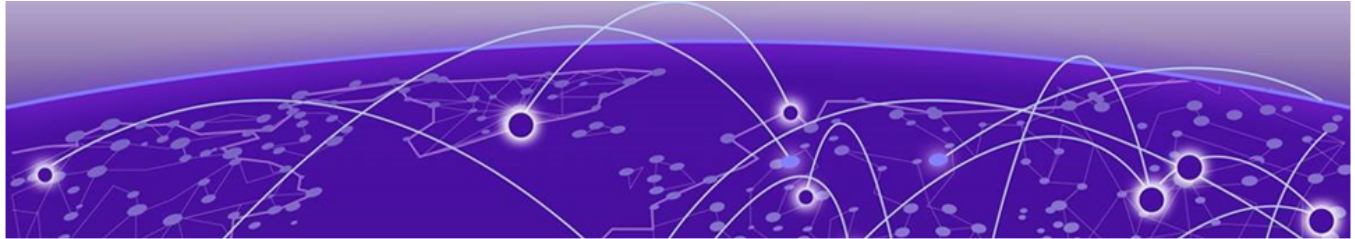
All other names (including any product names) mentioned in this document are the property of their respective owners and may be trademarks or registered trademarks of their respective companies/owners.

For additional information on Extreme Networks trademarks, see: <https://www.extremenetworks.com/about-extreme-networks/company/legal/trademarks>

## Open Source Declarations

Some software files have been licensed under certain open source or third-party licenses.

End-user license agreements and open source declarations can be found at: <https://www.extremenetworks.com/support/policies/open-source-declaration/>

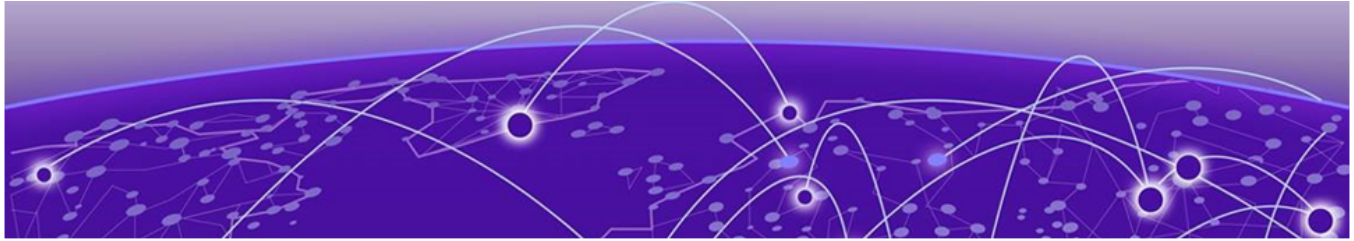


# Table of Contents

---

|                                                        |           |
|--------------------------------------------------------|-----------|
| Abstract.....                                          | v         |
| Preface.....                                           | vi        |
| Conventions.....                                       | vi        |
| Text Conventions.....                                  | vi        |
| Send Feedback.....                                     | viii      |
| Help and Support.....                                  | viii      |
| Subscribe to Product Announcements.....                | ix        |
| Documentation and Training.....                        | ix        |
| Open Source Declarations.....                          | ix        |
| Training.....                                          | ix        |
| <b>Introduction to ExtremeLocation Essentials.....</b> | <b>10</b> |
| Architecture.....                                      | 12        |
| Presence.....                                          | 12        |
| Zone Tracking.....                                     | 13        |
| Locating Rogue Devices.....                            | 13        |
| Device Classification.....                             | 13        |
| Crowding Event Notification and Analysis.....          | 13        |
| Scheduling Reports.....                                | 14        |
| Asset Management.....                                  | 14        |
| Assets.....                                            | 14        |
| Alarms.....                                            | 16        |
| <b>Dashboard.....</b>                                  | <b>17</b> |
| Load the Dashboard.....                                | 18        |
| Create an Event.....                                   | 20        |
| Download Dashboard.....                                | 22        |
| Create a Dashboard.....                                | 24        |
| Manage Your Dashboards.....                            | 27        |
| Delete the Dashboard.....                              | 29        |
| Dashboard Widgets.....                                 | 30        |
| Site Analytics Widgets.....                            | 31        |
| Category Analytics Widgets.....                        | 51        |
| Scheduled Reports.....                                 | 63        |
| List Scheduled Reports.....                            | 63        |
| Create a Scheduled Report.....                         | 65        |
| Edit a Scheduled Report.....                           | 69        |
| Delete a Scheduled Report.....                         | 73        |
| <b>Sites.....</b>                                      | <b>77</b> |
| Sites - Main Screen.....                               | 77        |
| Sites - Main Screen - Grid View.....                   | 82        |
| Common Tools.....                                      | 84        |

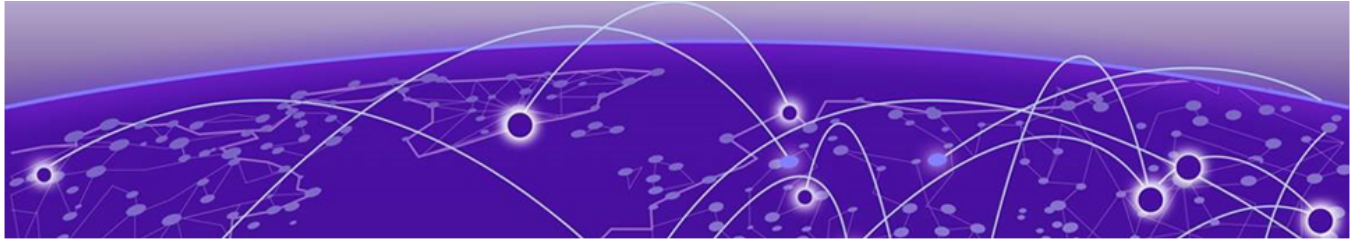
|                                             |            |
|---------------------------------------------|------------|
| Device View.....                            | 85         |
| Heatmap View.....                           | 93         |
| Crowding View.....                          | 96         |
| AP View.....                                | 100        |
| Region View.....                            | 102        |
| Flow.....                                   | 105        |
| <b>Categories.....</b>                      | <b>109</b> |
| Engagement Category.....                    | 110        |
| Add an Engagement Category.....             | 111        |
| Asset Category.....                         | 113        |
| Add an Asset Category.....                  | 115        |
| <b>Access Points.....</b>                   | <b>119</b> |
| Access Point Status.....                    | 119        |
| <b>Beacons.....</b>                         | <b>122</b> |
| Add Third-Party Beacons.....                | 122        |
| <b>Asset Management.....</b>                | <b>126</b> |
| Assets.....                                 | 126        |
| Alarms.....                                 | 128        |
| Add an Asset.....                           | 128        |
| Remove an Asset.....                        | 130        |
| View Asset Alarms.....                      | 131        |
| Alarms.....                                 | 131        |
| <b>Devices.....</b>                         | <b>133</b> |
| Wireless Devices - Live Data.....           | 134        |
| Wireless Devices - Historical Data.....     | 136        |
| BSS Devices - Live Data.....                | 139        |
| BSS Devices - Site Historical Data.....     | 141        |
| <b>Settings.....</b>                        | <b>143</b> |
| System Settings.....                        | 143        |
| Device Classification Settings.....         | 144        |
| Threshold Configuration and Management..... | 148        |
| Third Party Configuration.....              | 151        |
| Alarms Configuration.....                   | 153        |
| BLE Webhook Configurations.....             | 155        |



# Abstract

---

The ExtremeLocation Essentials User Guide for version 25.4.0 provides a comprehensive overview of ExtremeLocation Essentials, a cloud-based location and analytics solution by Extreme Networks. This guide details the main features, including real-time and historical location analysis, visitor tracking, engagement time monitoring, site-specific intelligence, and asset tracking. Version 25.4.0 adds support for AP4020. This guide covers the steps to access ExtremeLocation Essentials with the ExtremeCloud IQ dashboard, providing insights on configuring and managing the system. Key functionalities such as presence detection, zone tracking, device classification, crowding event notifications, and scheduling reports are highlighted. The document also outlines how to create and manage dashboards, onboard third-party beacons, and configure asset tracking with BLE beacons or Wi-Fi radios. The guide emphasizes the scalable nature of the solution, supporting thousands of sites and access points, and offers practical advice for deploying and managing the system efficiently across various enterprise environments.



# Preface

---

Read the following topics to learn about:

- The meanings of text formats used in this document.
- Where you can find additional information and help.
- How to reach us with questions and comments.

## Conventions

---

To help you better understand the information presented in this guide, the following topics describe the formatting conventions used for notes, text, and other elements.

### Text Conventions

Unless otherwise noted, information in this document applies to all supported environments for the products in question. Exceptions, like command keywords associated with a specific software version, are identified in the text.

When a feature, function, or operation pertains to a specific hardware product, the product name is used. When features, functions, and operations are the same across an entire product family, such as Extreme Networks switches or routers, the product is referred to as *the switch* or *the router*.

**Table 1: Notes and warnings**

| Icon                                                                                | Notice type | Alerts you to...                               |
|-------------------------------------------------------------------------------------|-------------|------------------------------------------------|
|  | Tip         | Helpful tips and notices for using the product |
|  | Note        | Useful information or instructions             |
|  | Important   | Important features or instructions             |

**Table 1: Notes and warnings (continued)**

| Icon                                                                              | Notice type | Alerts you to...                                        |
|-----------------------------------------------------------------------------------|-------------|---------------------------------------------------------|
|  | Caution     | Risk of personal injury, system damage, or loss of data |
|  | Warning     | Risk of severe personal injury                          |

**Table 2: Text**

| Convention                             | Description                                                                                                                                                                                                     |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| screen displays                        | This typeface indicates command syntax, or represents information as it is displayed on the screen.                                                                                                             |
| The words <i>enter</i> and <i>type</i> | When you see the word <i>enter</i> in this guide, you must type something, and then press the Return or Enter key. Do not press the Return or Enter key when an instruction simply says <i>type</i> .           |
| <b>Key</b> names                       | Key names are written in boldface, for example <b>Ctrl</b> or <b>Esc</b> . If you must press two or more keys simultaneously, the key names are linked with a plus sign (+). Example: Press <b>Ctrl+Alt+Del</b> |
| <i>Words in italicized type</i>        | Italics emphasize a point or denote new terms at the place where they are defined in the text. Italics are also used when referring to publication titles.                                                      |
| <b>NEW!</b>                            | New information. In a PDF, this is searchable text.                                                                                                                                                             |

**Table 3: Command syntax**

| Convention                         | Description                                                                                                                              |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <b>bold text</b>                   | Bold text indicates command names, keywords, and command options.                                                                        |
| <i>italic text</i>                 | Italic text indicates variable content.                                                                                                  |
| [ ]                                | Syntax components displayed within square brackets are optional.<br>Default responses to system prompts are enclosed in square brackets. |
| { <b>x</b>   <b>y</b>   <b>z</b> } | A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one of the options.            |
| <b>x</b>   <b>y</b>                | A vertical bar separates mutually exclusive elements.                                                                                    |
| < >                                | Nonprinting characters, such as passwords, are enclosed in angle brackets.                                                               |

**Table 3: Command syntax (continued)**

| Convention | Description                                                                                                                                                                              |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ...        | Repeat the previous element, for example, <i>member[member...]</i> .                                                                                                                     |
| \          | In command examples, the backslash indicates a “soft” line break. When a backslash separates two lines of a command input, enter the entire command at the prompt without the backslash. |

---

## Send Feedback

The User Enablement team at Extreme Networks has made every effort to ensure that this document is accurate, complete, and easy to use. We strive to improve our documentation to help you in your work, so we want to hear from you. We welcome all feedback, but we especially want to know about:

- Content errors, or confusing or conflicting information.
- Improvements that would help you find relevant information.
- Broken links or usability issues.

To send feedback, email us at [Product-Documentation@extremenetworks.com](mailto:Product-Documentation@extremenetworks.com).

Provide as much detail as possible including the publication title, topic heading, and page number (if applicable), along with your comments and suggestions for improvement.

---

## Help and Support

If you require assistance, contact Extreme Networks using one of the following methods:

### Extreme Portal

Search the GTAC (Global Technical Assistance Center) knowledge base; manage support cases and service contracts; download software; and obtain product licensing, training, and certifications.

### The Hub

A forum for Extreme Networks customers to connect with one another, answer questions, and share ideas and feedback. This community is monitored by Extreme Networks employees, but is not intended to replace specific guidance from GTAC.

### Call GTAC

For immediate support: (800) 998 2408 (toll-free in U.S. and Canada) or 1 (408) 579 2800. For the support phone number in your country, visit [www.extremenetworks.com/support/contact](http://www.extremenetworks.com/support/contact).

Before contacting Extreme Networks for technical support, have the following information ready:

- Your Extreme Networks service contract number, or serial numbers for all involved Extreme Networks products
- A description of the failure
- A description of any actions already taken to resolve the problem
- A description of your network environment (such as layout, cable type, other relevant environmental information)
- Network load at the time of trouble (if known)
- The device history (for example, if you have returned the device before, or if this is a recurring problem)
- Any related RMA (Return Material Authorization) numbers

## Subscribe to Product Announcements

You can subscribe to email notifications for product and software release announcements, Field Notices, and Vulnerability Notices.

1. Go to [The Hub](#).
2. In the list of categories, expand the **Product Announcements** list.
3. Select a product for which you would like to receive notifications.
4. Select **Subscribe**.
5. To select additional products, return to the **Product Announcements** list and repeat steps 3 and 4.

You can modify your product selections or unsubscribe at any time.

## Documentation and Training

---

Find Extreme Networks product information at the following locations:

[Current Product Documentation](#)

[Release Notes](#)

[Hardware and Software Compatibility](#) for Extreme Networks products

[Extreme Optics Compatibility](#)

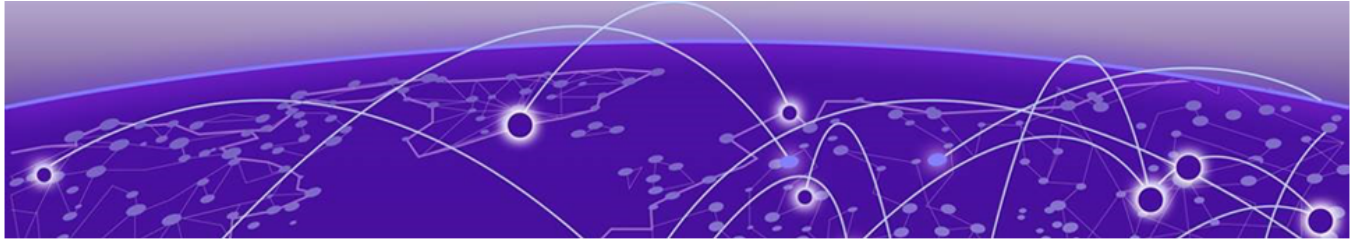
[Other Resources](#) such as articles, white papers, and case studies

## Open Source Declarations

Some software files have been licensed under certain open source licenses. Information is available on the [Open Source Declaration](#) page.

## Training

Extreme Networks offers product training courses, both online and in person, as well as specialized certifications. For details, visit the [Extreme Networks Training](#) page.



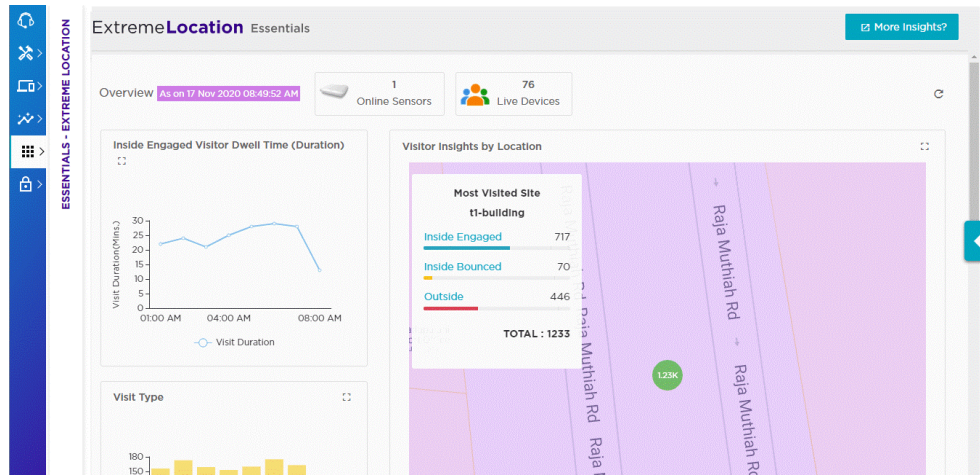
# Introduction to ExtremeLocation Essentials

---

- [Architecture](#) on page 12
- [Presence](#) on page 12
- [Zone Tracking](#) on page 13
- [Locating Rogue Devices](#) on page 13
- [Device Classification](#) on page 13
- [Crowding Event Notification and Analysis](#) on page 13
- [Scheduling Reports](#) on page 14
- [Asset Management](#) on page 14

ExtremeLocation Essentials is accessible from Extreme Networks' cloud-based network management solution, called ExtremeCloud™ IQ. ExtremeCloud IQ and Virtual IQ (or VIQ, which is virtual ExtremeCloud IQ) share client data storage functionality. For example, if a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials. Also, if Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials. More information about ExtremeCloud IQ and VIQ Management is available at ExtremeCloud IQ.

To get started, go to the ExtremeCloud IQ Dashboard and select the Essentials  > icon from the list. Then select ExtremeLocation Essentials. The ExtremeLocation Essentials Overview launches in ExtremeCloud IQ.



**Figure 1: ExtremeLocation Essentials Overview View in ExtremeCloud IQ**



#### Note

Select the **More Insights** button at the top right corner of the Overview to launch ExtremeLocation Essentials and open the ExtremeLocation Essentials Dashboard.

ExtremeLocation Essentials provides enterprises powerful location services which can scale to thousands of branch sites and 100,000 access points.

ExtremeLocation Essentials offers a range of accurate and granular location accuracy to address your deployment scenarios and includes:

- real-time and historical location analysis
- new and repeat visitor tracking
- engagement time monitoring
- site or zone specific intelligence
- assets and employee tracking

This product:

- Supports thousands of sites and a large number of access points.
- Is quick to deploy and easy to manage.
- Provides enterprise quality location and analytics.
- Provides unlimited customizable dashboards for data analysis and site monitoring.
- Lets you drill down to floor level at a site to monitor assets, visitors and staff.
- Provides reports to help you proactively plan or troubleshoot issues.

Some of its main features are:

- [Presence](#)
- [Zone Tracking](#)
- [Device Classification](#)
- [Crowding Event Notification and Analytics](#)

- [Scheduling Reports](#)
- [Asset Tracking](#)

## Architecture

---

ExtremeLocation Essentials supports multi-site, multi-AP deployments providing support to thousands of sites and one hundred thousand access points. Hosted on the cloud, it provides a resilient, always available service to meet your location and analytics needs. Cloud enabled APs must be manually configured to connect to ExtremeLocation Essentials service when deployed for the first time.

The following access points are supported in ExtremeLocation Essentials:

- AP302W
- AP305C/CX
- AP305C-1
- AP410C/CX
- AP410C-1
- AP460C
- AP460S6C
- AP460S12C
- AP510C/CX
- AP650
- AP3000
- AP3000X
- AP4000
- AP4000-1
- AP4020
- AP5010
- AP5020
- AP5050D
- AP5050U

## Presence

---

The Presence feature enables you to react quickly to a visitor or customer to your site or venue. Use this feature to provide a customized welcome message to customers, as soon as they arrive, to enhance their site visit experience. Enhance the quality of engagement with visitors by pushing coupons, offers, advertisements, and other real-time notifications to visitors devices.

The Presence feature provides a large amount of visit data and trends that you can use to proactively enhance customer experience and tweak your service offerings to increase your profits.

## Zone Tracking

---

The Zone Tracking feature enables you to detect devices, visitors, and staff within a zone. A zone is an area covered by an AP or a sensor. Use this feature to locate and track assets, view which zones are popular or unpopular, and track how much time a visitor or staff member spends in the zone. Both live and historical data can be collected.

The Zone Tracking feature provides a large amount of visitor data that can identify trends. Use this information to proactively enhance customer experience and tweak product placements to increase visitor engagement.

**Note**

A best practice is to use dedicated sensors for zone tracking in a high capacity or high density deployment.

The Zone Tracking feature requires you to upload a floor map of the area of interest and then create zones on the floor map that meet your requirements.

## Locating Rogue Devices

---

ExtremeLocation Essentials can integrate with Extreme AirDefense® Essentials to locate rogue devices on an ExtremeLocation Essentials floor map.

A rogue AP is defined as an unsanctioned Basic Service Set (BSS) that is attached to your sanctioned wired infrastructure. The Rogue AP alarms and associated Rogue Client alarms are listed in the Extreme AirDefense Essentials Alarms table. From there you can easily locate the devices on the ExtremeLocation Essentials floor map. Use these two Essential applications together to detect and locate possible threats.

## Device Classification

---

ExtremeLocation Essentials can auto classify devices as *Visitor*, *Staff* or *Asset* based on user defined rules. Separating devices as *Staff*, *Assets*, and *Visitors* enhances accurate visitor analysis. It also improves asset tracking and monitoring of staff activity.

## Crowding Event Notification and Analysis

---

ExtremeLocation Essentials supports display of crowding events in real-time. A crowding event occurs when the ration of number of visitors to the number of staff in a category or a zone exceeds the minimum threshold value configured for that category or configured globally.

Real-time crowding events can either be configured globally or by category. This in turn generates real-time event notification and analytics. A configuration for the number of visitors per staff ratio (threshold) in a category will override the global configuration. However, events remain active based on a global timeout setting.

Active events for a category are viewed in the floor plan by zone so that you can identify which categories need immediate staff attention.

A detail widget can be configured in the dashboard to view the historical data over time to help you determine where more staff should be deployed.

## Scheduling Reports

---

ExtremeLocation Essentials supports export of the dashboard as reports. Reports can be exported as PDF files.

The ExtremeLocation Essentials report scheduling interface enables you to create periodic reports that are emailed automatically. Schedules can be set daily, weekly, or monthly.

## Asset Management

---

### Assets

For ExtremeLocation Essentials, an asset is a physical device or item that you want to track. It could be a device that is critical in nature, or a device that is mobile and expensive to replace if lost.

**Note**

If client data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

ExtremeLocation Essentials enables you to track such critical or costly assets within your sites using BLE beacons or by using the device Wi-Fi radio. Using the *Asset Tracking and Management* feature, you can locate a tracked asset within your site. This reduces the time that you spend searching for and locating it. This feature also has the ability to raise alarms if your tracked asset moves out of its designated area or enters a prohibited area. It can also raise an alarm if the asset that you track is not seen within your site for a configured period of time, and notifies you of possible theft of that tracked asset.

When using a BLE beacon to track an asset, you must onboard the BLE beacon, map the beacon to the asset entry, and then physically attach that BLE beacon to the asset that needs to be tracked. ExtremeLocation Essentials then maps the tracked BLE beacon, indicating the asset on the floor map of the site.

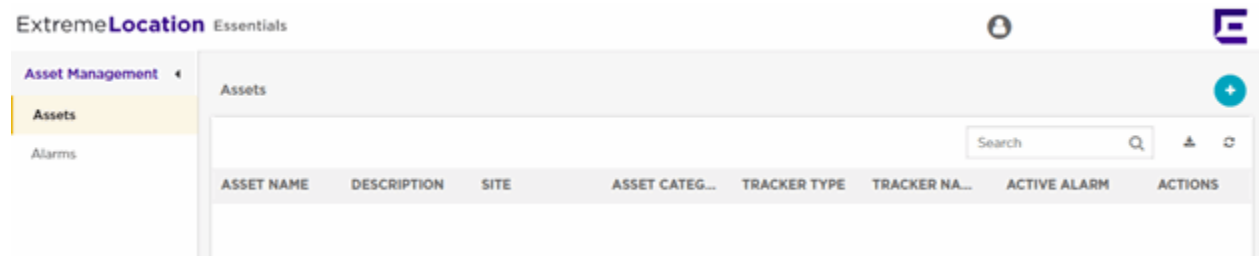
If your asset has built-in Wi-Fi radio, you can configure ExtremeLocation Essentials to track the MAC address of the asset radio. ExtremeLocation Essentials can map the tracked asset on the floor map of the site.



#### Note

Asset entities are not considered in Historical View or analytics. Because Assets remain in the customer location, the Dwell Time widgets do not apply to Assets.

Assets are managed from the **Asset Management** screen. Use the  icon to launch the **Asset Management** screen.



The **Assets** screen displays the following information on each asset tracked for this ExtremeLocation Essentials account.

| Field           | Description                                                                                                                                                                                                                                                                           |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Asset Name      | Displays the name of the asset being tracked.                                                                                                                                                                                                                                         |
| Description     | Displays additional information about the asset being tracked.                                                                                                                                                                                                                        |
| Site            | Displays the name of the site where this asset is deployed or used.                                                                                                                                                                                                                   |
| Asset Category  | Displays the name of the category assigned to this asset being tracked. Asset categories are used to combine similar assets as a group for ease of tracking and management.                                                                                                           |
| Tracker Type    | This field indicates the method used to track this asset. Assets can be tracked by: <ul style="list-style-type: none"> <li>• Wi-Fi - This method uses the asset Wi-Fi radio to track it.</li> <li>• BLE - This method uses a BLE beacon attached to the asset to track it.</li> </ul> |
| Tracker Name ID | This field displays the unique ID assigned to the asset tracking device. For an asset with a Wi-Fi radio, the radio MAC address is displayed. For an attached BLE beacon, the beacon serial number is used.                                                                           |

| Field        | Description                                                                                                                                                                                                                                                                                                                                           |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Active Alarm | This field displays <i>true</i> if the asset has an active alarm. If the asset has not raised any alarms in the immediate past, this field displays <i>false</i> . At the expiry of the time specified in the <b>Asset Alarm Timeout</b> setting is exceeded, the alarm is automatically cleared from the <b>Asset Management &gt; Alarms</b> screen. |
| Actions      | Use the icons in this column to perform specific actions on the selected asset. You can edit the asset information or remove it.                                                                                                                                                                                                                      |

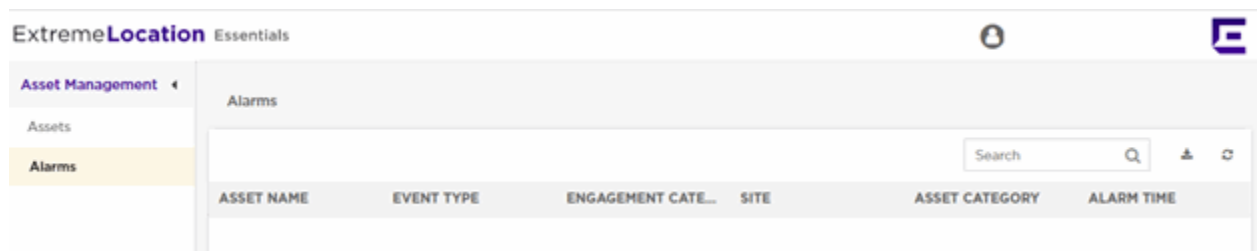
Periodically use the  icon to refresh this screen manually.

Use the  icon to download the assets listed in this screen as a .csv file.

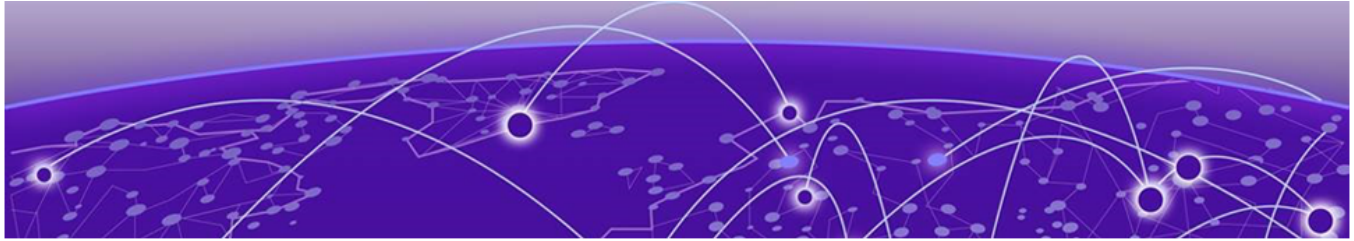
## Alarms

The **Alarms** screen displays a list of all alarms raised by the tracked device monitored by ExtremeLocation Essentials. Use this screen to take appropriate actions to safeguard your assets.

Select the **Alarms** item from the menu on the left. The **Alarms** screen displays.



For more information on the **Alarms** screen and its contents, see the topic [Alarms Configuration](#) on page 153.



# Dashboard

---

[Load the Dashboard](#) on page 18  
[Create a Dashboard](#) on page 24  
[Manage Your Dashboards](#) on page 27  
[Delete the Dashboard](#) on page 29  
[Dashboard Widgets](#) on page 30  
[Scheduled Reports](#) on page 63

Use the fully customizable ExtremeLocation Essentials Dashboard to display data for the sites you manage through your ExtremeLocation Essentials account. ExtremeLocation Essentials provides a large number of widgets for you to use within your dashboards and to view the data that interests you for managing your sites. You can create any number of custom Dashboards to meet your requirements.

You can filter the data displayed on your dashboard by location or site group and further on the time duration of interest. These options, namely location and time, can be applied independent of each other. You can filter the data displayed on the dashboard based on the location or time or both.



## Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



## Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

This topic discusses the following:

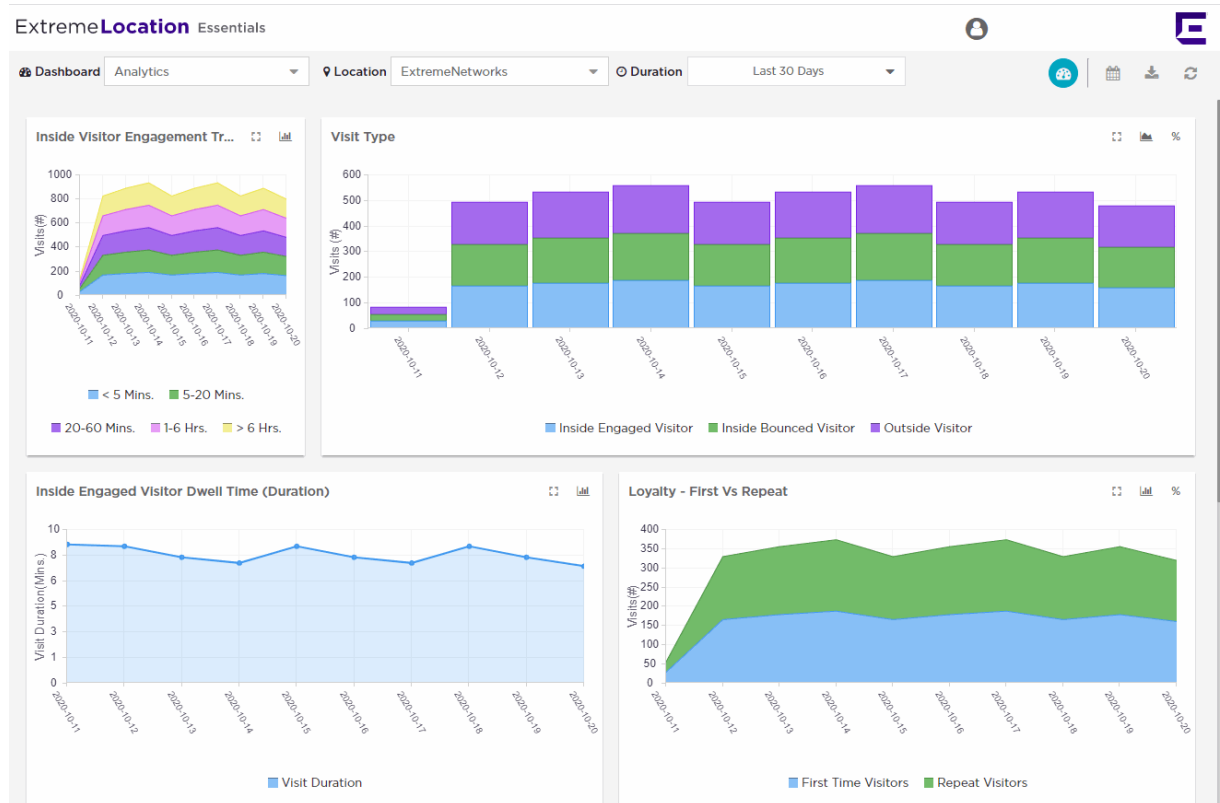
- Load Dashboard - Describes the process to load a dashboard.
- Create Dashboard - Describes the process of creating a dashboard and adding widgets to it.
- Manage Dashboard - Describes the process of modifying your dashboard by adding to or removing widgets from it.
- Delete Dashboard - Describes the process of deleting an existing dashboard.

- Dashboard Widgets - Provides a brief description of all widgets that can be used in a dashboard.
- Scheduled Report - Describes the process of creating reports that run periodically.

## Load the Dashboard

To display the ExtremeLocation Essentials dashboard:

1. Select the  icon from the main menu to view the **Dashboards** screen. The dashboard marked as default automatically loads.



**Figure 2: The Dashboard Screen**

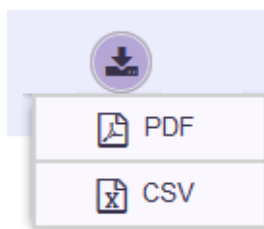
2. To select a different dashboard, use the **Dashboard** drop-down list. The selected dashboard opens and displays the configured data.
3. To manually refresh the data on the screen, select the  button from the  |  |  |  |  tool bar.



### Note

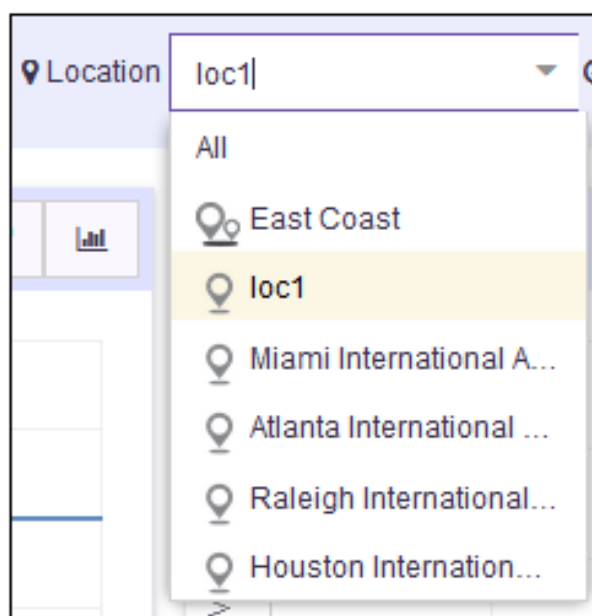
The dashboard is refreshed automatically every 30 seconds.

4. Select the  button from  |  |  |  |  tool bar. The button expands to display a drop-down list.



**Figure 3: Dashboard Download Options**

5. Select the **PDF** button to save the current state of the dashboard as a *Portable Document Format* (PDF) file. Select the **CSV** button to save the current state of the dashboard as a *Comma Separated Value* (CSV) file.
6. Use the **Location** drop-down list to select a site and to display the data for the selected site when multiple sites are available under this ExtremeLocation account.



**Figure 4: Location Drop-Down List**

The dashboard refreshes to display data for the selected site or group of sites.

7. Use the **Duration** drop-down list to select a time duration to display the data for. The drop-down provides a set of pre-configured durations for filtering data. The available pre-configured durations are:
  - Today - Displays the data for the current date. Excludes data for all other dates.
  - Yesterday - Displays the data for the day before the current date. Excludes data for all other dates including data for the current date.
  - Last 7 Days - Displays the data for the last 7 days prior to the current date. Includes data for the current date. Excludes data for all other dates.
  - Last 30 Days - Displays the data for the last 30 days prior to the current date. Includes data for the current date. Excludes data for all other dates.
  - Last 90 Days - Displays the data for the last 90 days prior to the current date. Includes data for the current date. Excludes data for all other dates.

- Custom Range - Displays the data for a user selected date range. On selecting this option, the following dialog displays.

The dialog shows two side-by-side calendars for the year 2021. On the left, the date 7 is highlighted in yellow. On the right, the date 7 is also highlighted in yellow. Below the calendars are two buttons: 'Cancel' and 'Apply'.

Select the start date and end date for the custom range from the displayed calendar and select **Apply**.

- Event - Displays the data for user-created "Event" such as a sale or a conference. An Event is a date range that is identified with a unique name.

The dialog has a list of options on the left: Today, Yesterday, Last 7 Days, Last 30 Days, Last 90 Days, Custom Range, and Event. On the right, there is an 'Event:' label followed by a dropdown menu and a blue '+' button. Below these are 'Cancel' and 'Apply' buttons.

Use the drop-down to select the event of interest and select **Apply**.

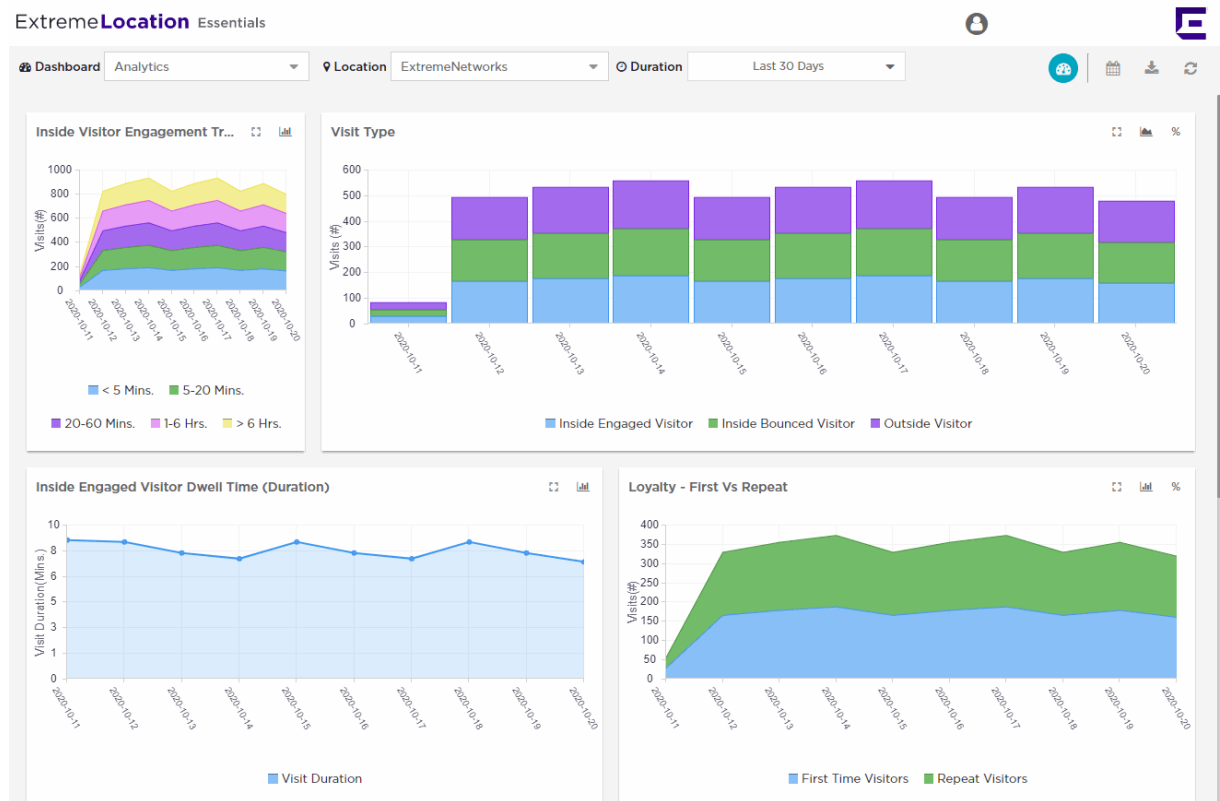
See [Create an Event](#) on page 20 to know about creating an event.

- Periodically select the  button from  |    tool bar to manually refresh the data displayed on the current dashboard.

## Create an Event

Events are date ranges that you create to easily filter data of interest during a particular duration. For example, you could create an event for filtering data during the Christmas sale period or you could create an event for a convention being held at your venue.

- Select the  icon from the main menu to view the **Dashboards** screen.  
The dashboard marked as default automatically loads.



**Figure 5: The Dashboard Screen**

2. Use the **Duration** drop-down list to select a time duration to filter the data. From the drop-down list, select *Event*.

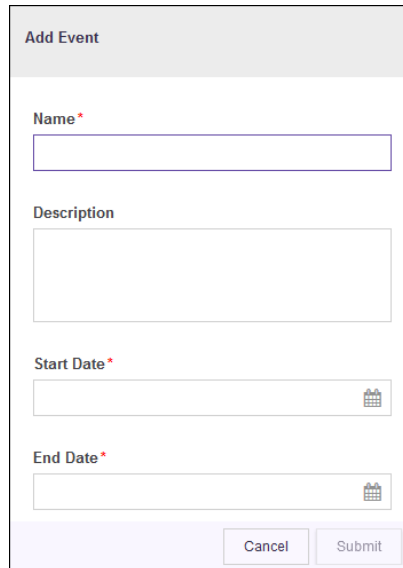
The **Event** dialog appears.

The Event dialog box contains the following elements:

- Left Panel (Time Ranges):** A list of time ranges: Today, Yesterday, Last 7 Days, Last 30 Days, Last 90 Days, Custom Range, and Event.
- Right Panel (Event Selection):** An 'Event:' label followed by a drop-down list and a blue circular button with a white plus sign (+).
- Buttons:** 'Cancel' and 'Apply' buttons at the bottom right.

**Figure 6: Event Dialog**

3. Select the  button to the right of the **Event** drop-down list. The following dialog appears.

A screenshot of a web form titled "Add Event". The form has a light gray header bar with the title. Below the header, there are four input fields: "Name\*" (a single-line text box), "Description" (a multi-line text area), "Start Date\*" (a date picker with a calendar icon), and "End Date\*" (a date picker with a calendar icon). At the bottom of the form, there are two buttons: "Cancel" and "Submit".

Add Event

Name\*

Description

Start Date\*

End Date\*

Cancel Submit

### Name

Provide a name for the Event. This value is used when selecting this event for filtering data. This is a mandatory field.

### Description

Provide a brief description about the event.

### Start Date

Use the calendar control next to this field to select a start date for this event. This is a mandatory field.

### End Date

Use the calendar control next to this field to select the end date for this event. This is a mandatory field.

4. Select **Submit** to save this new event.

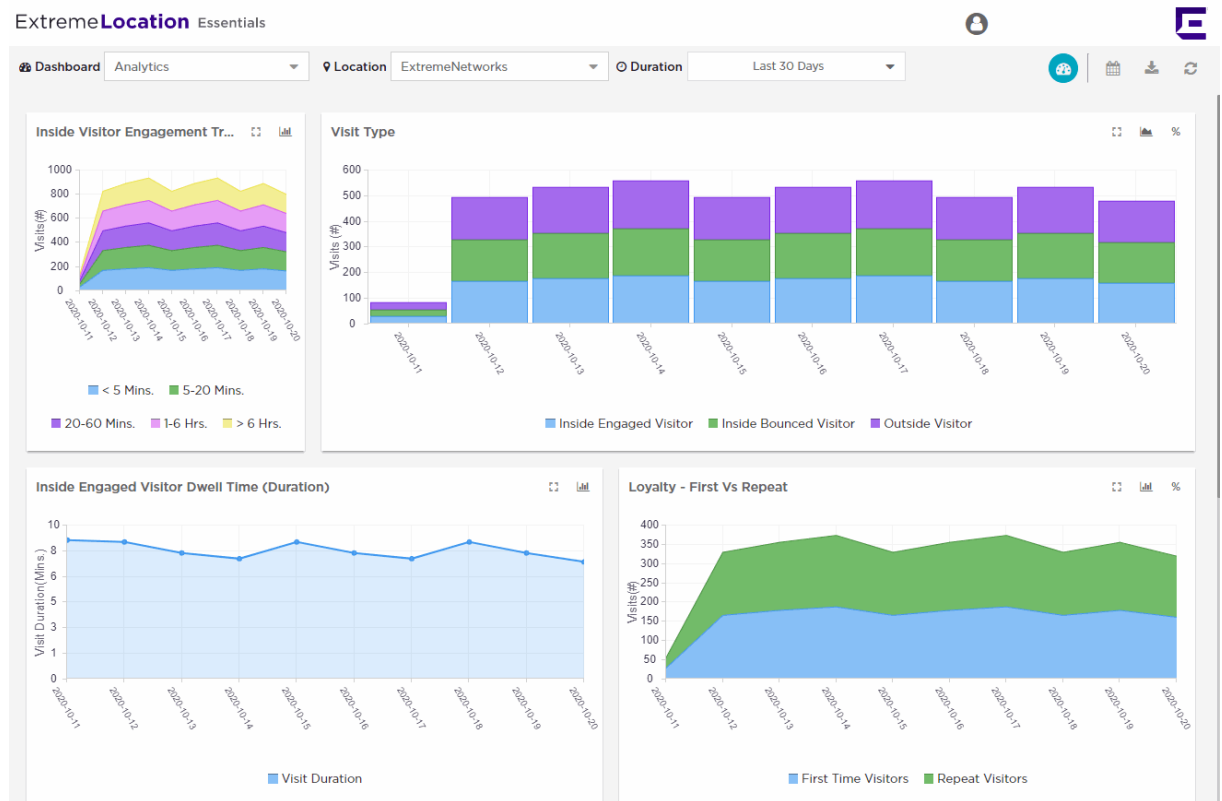
At any time, select **Cancel** to exit without creating a new event.

## Download Dashboard

You can download any of your ExtremeLocation dashboards in PDF or CSV format.

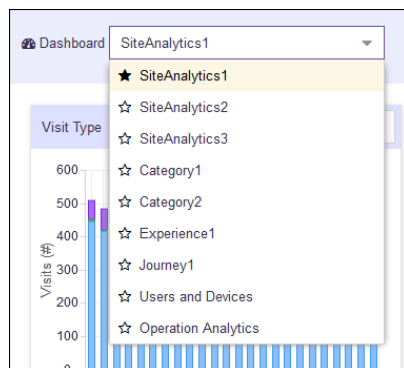
To do so:

1. Select the  icon from the main menu to view the **Dashboards** screen.  
The dashboard marked as default automatically loads.



**Figure 7: The Dashboard Screen**

2. Select the **Dashboard** drop-down list to expand and display the list of available dashboards for this account.
3. From the list of available dashboards, select a dashboard.

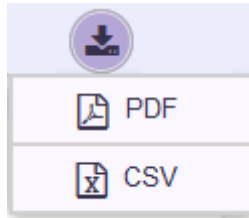


**Figure 8: Dashboard List**

The selected dashboard displays immediately.

4. Select the  button from  tool bar.

The menu expands to display the following options:



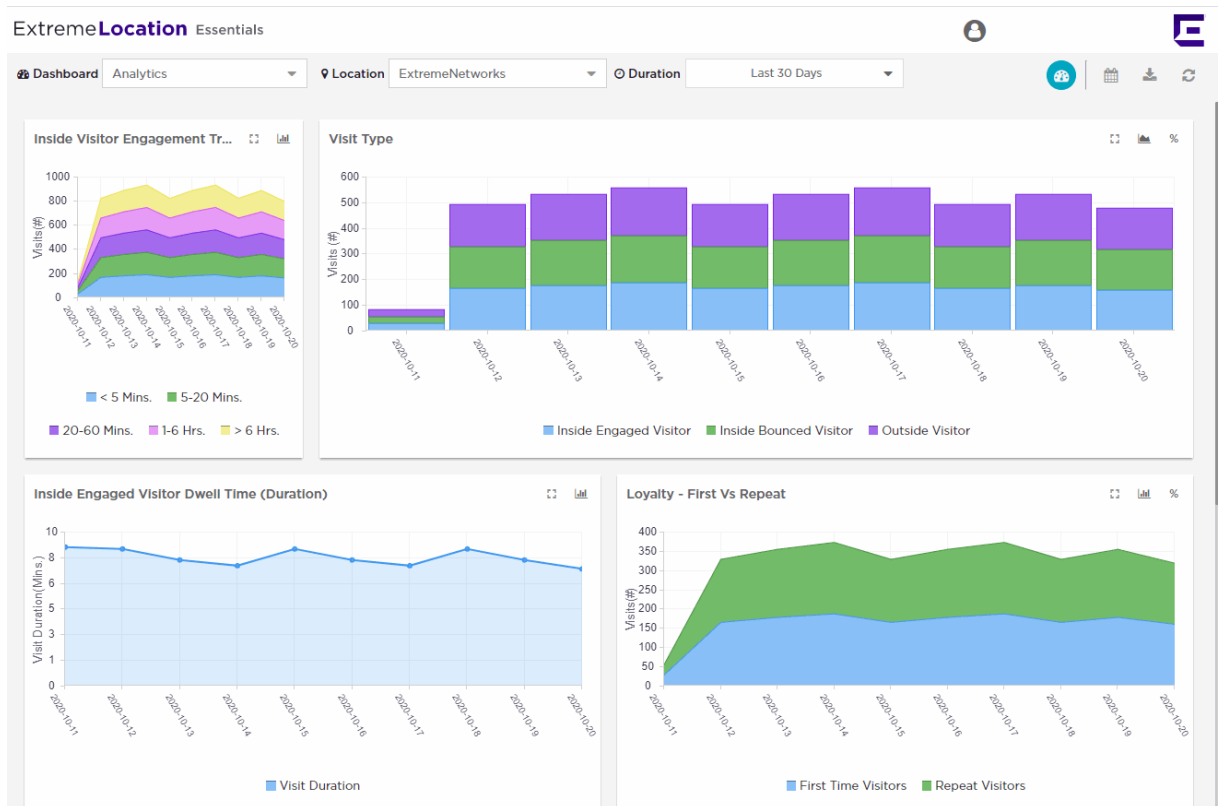
**Figure 9: Dashboard Download Options**

5. Select one of the available options to download your dashboard to your local machine in the selected format.

## Create a Dashboard

To create a new ExtremeLocation Essentials dashboard:

1. Select the  icon from the main menu to view the **Dashboards** screen. The dashboard marked as favorite automatically loads.



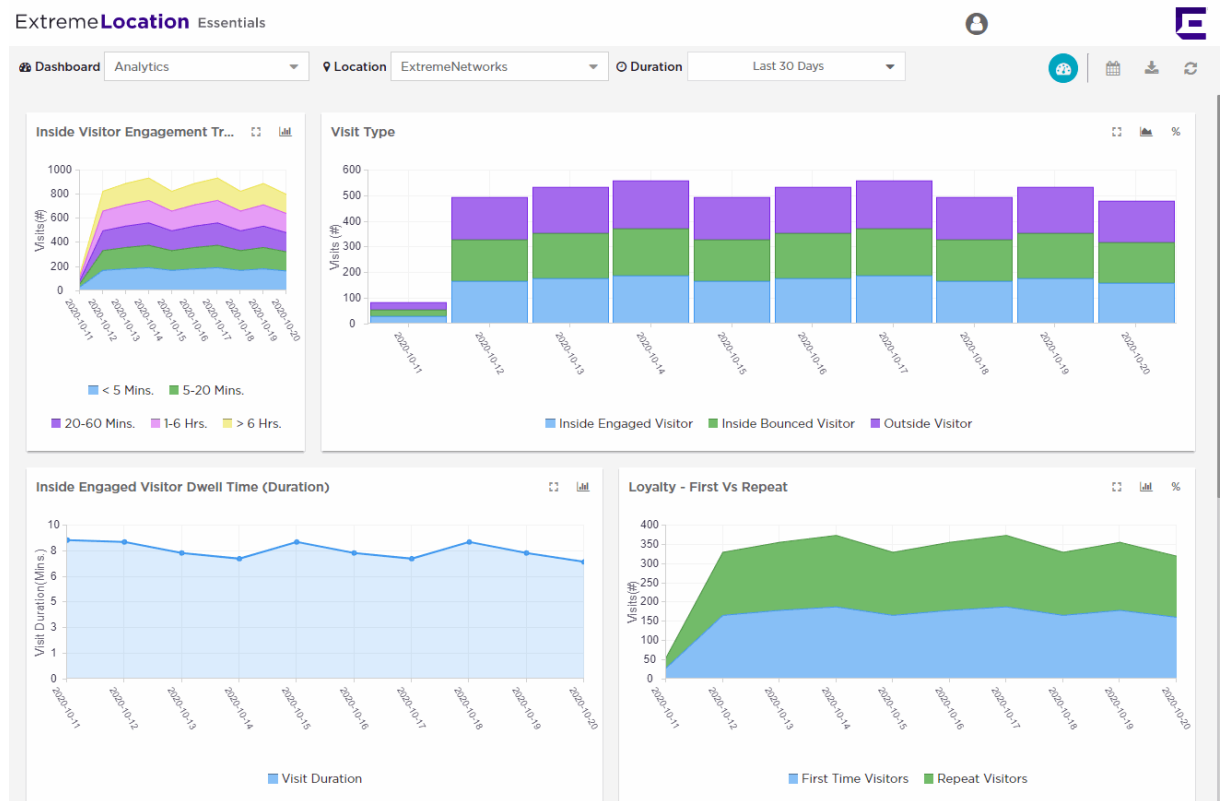
**Figure 10: The Dashboard Screen**

2. If dashboards are available for this account, select the  button from



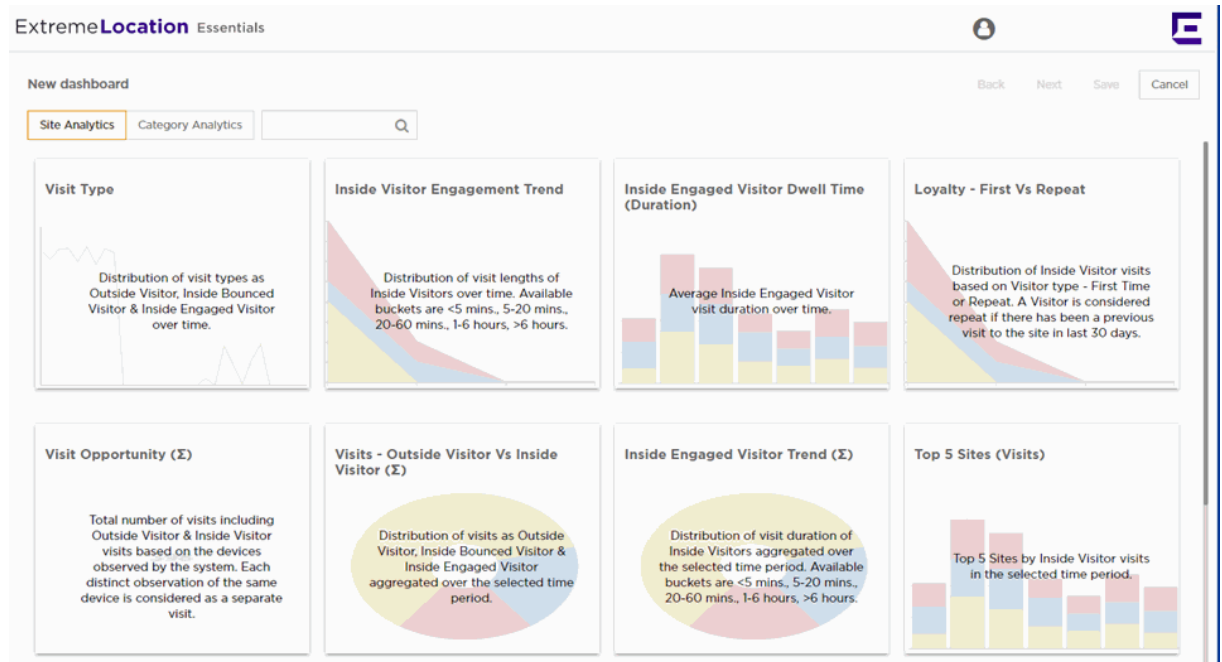
tool bar.

The dashboard marked as default automatically loads.



**Figure 11: The Dashboard Screen**

3. Select **Create Dashboard** from the drop-down list.  
The following **New Dashboard** screen displays.

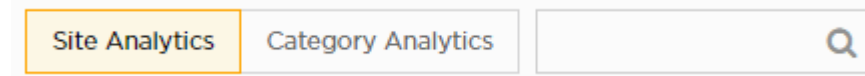


**Figure 12: New Dashboard Screen**

4. Select one of the available widget categories.

Widgets on the **New Dashboard** screen are classified into:

- **Site Analytics** - Use the widgets in this category to display site analytics data.
- **Category Analytics** - Use the widgets in this category to display category/zonal analytics data.



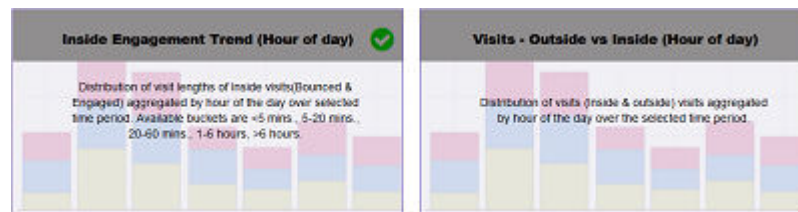
**Figure 13: Widget Categories**

Use the **Search** text box to drill down to the widgets of interest.

For more information on the above widgets, see [Dashboard Widgets](#) on page 30.

5. Click the widget to select it. You can select multiple widgets to add to the dashboard at a time.

A green check mark appears on the top right of the selected widget.



**Figure 14: A Selected and an Unselected Widget**

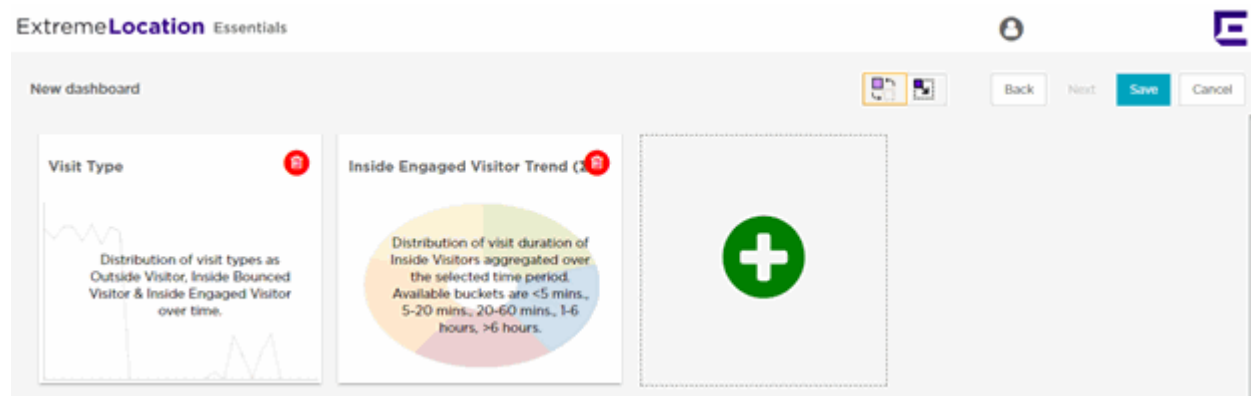


#### Note

Each ExtremeLocation Essentials dashboard can contain a maximum of 12 widgets and these widgets can be from different widget categories.

6. Select **Next** located to the top right, above the **New Dashboard** screen.

The following screen displays:



**Figure 15: New Dashboard screen - Widget Placement and Sizing**

To remove a widget already placed on the dashboard, use the  icon located to the top right of each widget. Selecting this icon immediately removes the widget from the dashboard.

7. Use the  buttons to rearrange or re-size the selected widgets on the new dashboard.

To rearrange the widgets, select the  icon. This is the default selection. Select a widget and drag it to the desired location on the dashboard. The other widgets on the dashboard are automatically rearranged to accommodate the moved or re-sized widget. To re-size a widget, select the  icon. A small triangle appears in the bottom right of each widget. Click and drag this triangle to re-size the widget.

8. Select **Save** to save the final dashboard layout.

At any time use **Back** to navigate to the previous screen. Similarly, use **Cancel** to exit without creating the dashboard.

A small window appears.



|                |                                            |      |
|----------------|--------------------------------------------|------|
| Dashboard name | <input type="text" value="New dashboard"/> | Save |
|----------------|--------------------------------------------|------|

**Figure 16: Name the New Dashboard**

9. Provide a name for this dashboard and select **Save**.

The dashboard is saved and displays the configured data.

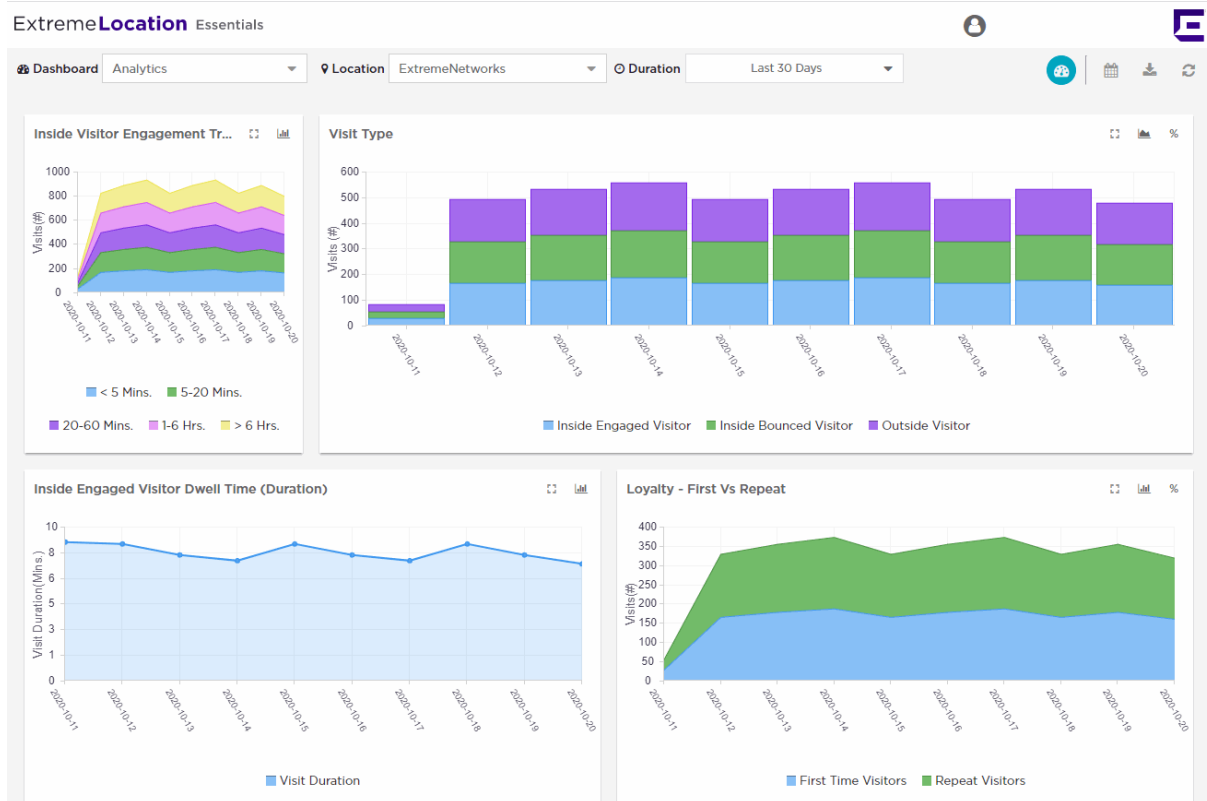
## Manage Your Dashboards

Use the tools provided in the **Dashboard** screen to edit any dashboard in your ExtremeLocation Essentials account.

To edit an existing dashboard:

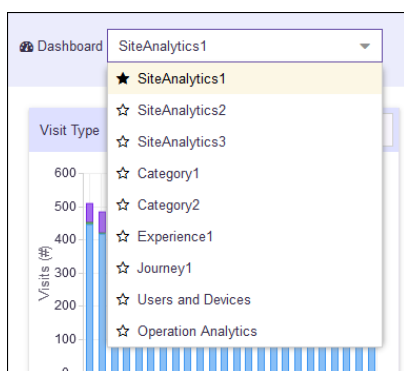
1. Select the  icon from the main menu to view the **Dashboards** screen.

The dashboard marked as default automatically loads.



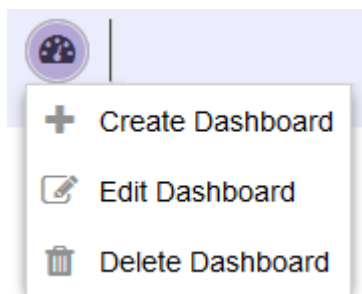
**Figure 17: The Dashboard Screen**

2. Select the **Dashboard** drop-down list to expand and display the list of available dashboards for this account.
3. From the list of available dashboards, select a dashboard.



**Figure 18: Dashboard List**

4. Select the  button from  tool bar. The button expands to display a drop-down list.



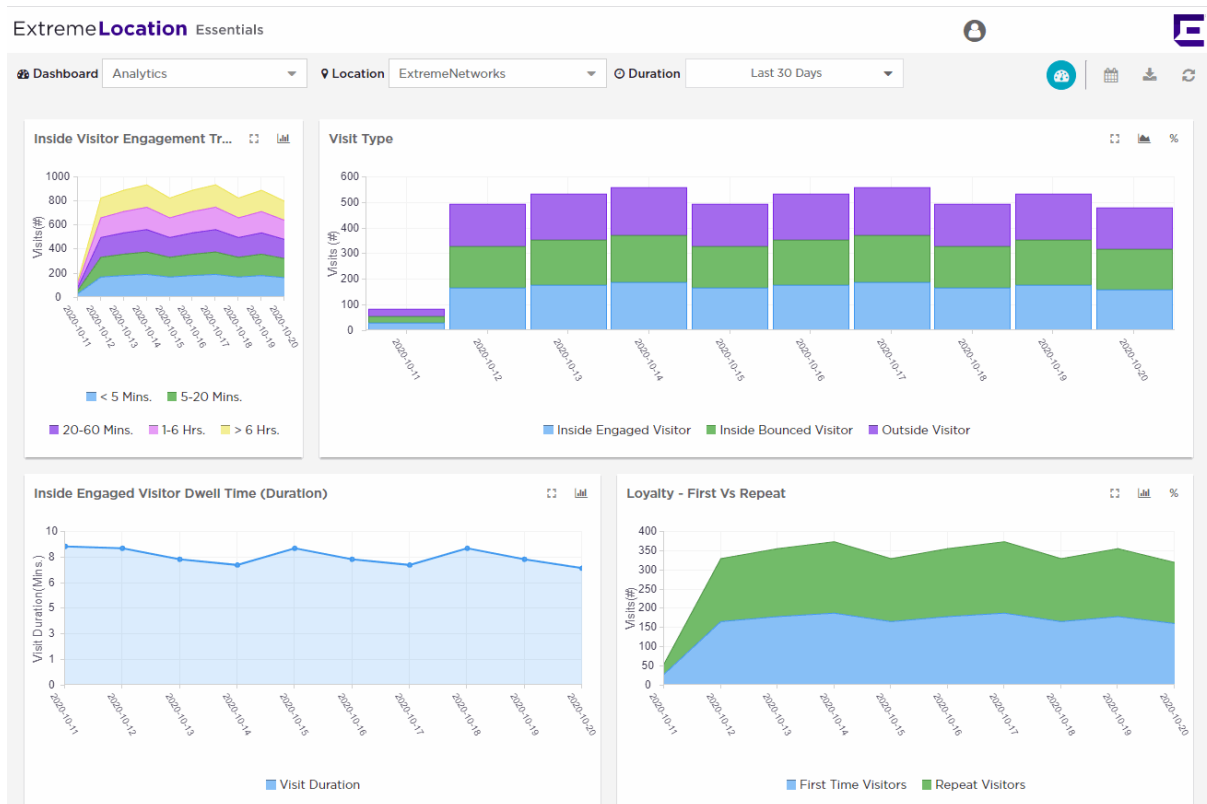
**Figure 19: Manage Dashboard Options**

5. Select **Edit Dashboard** from the drop-down list.  
The selected dashboard is loaded in the edit mode. Use the options to edit your dashboard.
6. After editing the dashboard, select **Save** to the top right of the dashboard to save the changes made to this dashboard.

## Delete the Dashboard

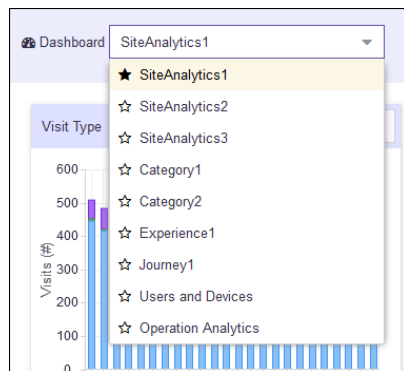
To delete an existing dashboard:

1. Select the  icon from the main menu to view the **Dashboards** screen.  
The dashboard marked as default automatically loads.



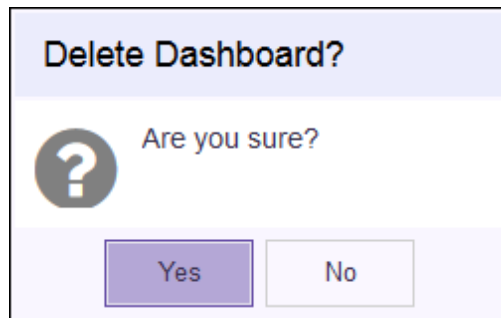
**Figure 20: The Dashboard Screen**

2. Select the **Dashboard** drop-down list to expand and display the list of available dashboards for this account.
3. From the list of available dashboards, select a dashboard.



**Figure 21: Dashboard List**

4. Periodically select the  button from  |    tool bar to manually refresh the data displayed on the current dashboard.
5. Select **Delete Dashboard** from the drop-down list.  
A confirmation dialog appears.



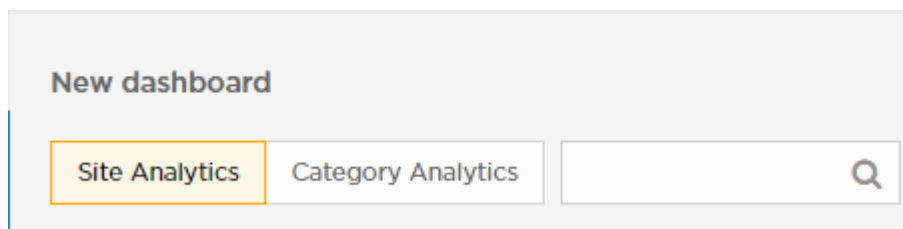
**Figure 22: Delete Confirmation Dialog**

6. Select **Yes** to delete the dashboard. Select **No** to exit this screen without deleting the selected dashboard.  
If **Yes** is selected, the dashboard is immediately deleted.

## Dashboard Widgets

Widgets are used to display the data of interest from a site's location data on the dashboard. Widgets on the **New Dashboard** screen are classified into:

- [Site Analytics](#) - These widgets display site analytics data.
- [Category Analytics](#) - These widgets display category analytics data.



**Figure 23: The Widget Categories**

The available widget labels are determined by the Industry Vertical that you have configured in ExtremeCloud IQ. For example, Dwell Time statistics used in a Retail vertical are referred to as Occupancy Time statistics for the Healthcare vertical. For more information on Device Classifications, see [Device Classification Settings](#) on page 144.

Use the **Search** text box to drill down to the widgets of interest.

## Site Analytics Widgets

The Site Analytics widgets provide you with tools to get a deep insight into the activities related to your sites. With these widgets, you can view statistics and trends with respect to visits, sites, and visitors.

Site analytics widgets can be broadly classified into those that provide statistics, trends, comparisons, and information.



### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

### Visit Type

This widget displays the device visit types distribution classified as *Outside*, *Inside Bounced*, or *Inside Engaged* on a bar chart over time

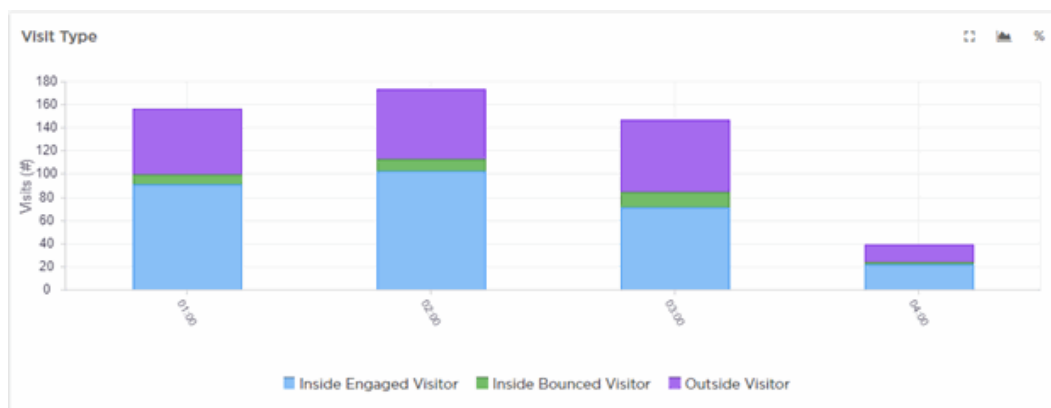


### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.



You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.

Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

Use the  icon to change the widget's graph type to *Area Chart*. The icon now changes to the alternate graph type available for this widget.

Use the  icon to change the type of data displayed in the widget. When selected, the displayed data changes from numeric to percentage. The icon changes to .

*Inside Visitor Engagement Trend*

This widget displays the distribution of devices classified as *Inside* a site further classified as **Bounced** or **Engaged** visitors.

**Note**

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

Data is displayed for each of these visit types for these time ranges:

- <5 minutes (devices in site less than 5 minutes)
- 5-20 minutes
- 20-60 minutes
- 1-6 hours
- >6 hours



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.

Use the  icon to change the widget's graph type to *Bar Chart*. The icon now changes to the alternate graph type available for this widget.

### Inside Engaged Visitor Duration

This widget displays the average engagement duration for *Inside Engaged Visitors*. Engagement duration is the time the user is engaged (stays) inside the site.



#### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

This graph is displayed for the duration set in the **Duration** field.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

Use the  icon to change the widget's graph type to *Bar Chart*. The icon now changes to the alternate graph type available for this widget.

*Loyalty - First vs Repeat*

This widget displays the distribution of total visits classified into first time visits and repeat visits. A visitor is considered a repeat visitor if earlier seen in the site in the last thirty (30) days.

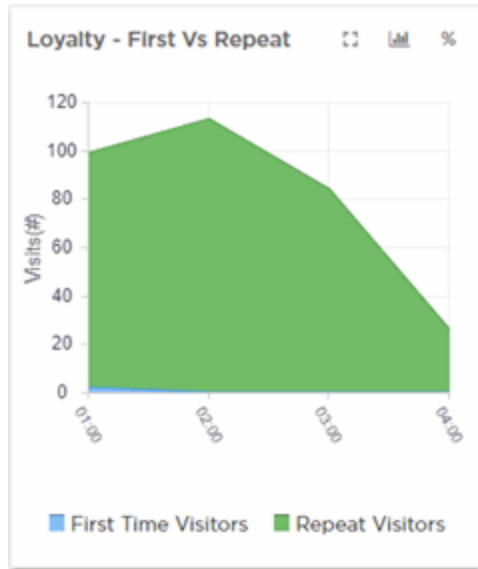
**Note**

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

This graph is displayed for the duration set in the **Duration** field.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.

Use the  icon to change the widget's graph type to *Bar Chart*. The icon now changes to the alternate graph type available for this widget.

Use the  icon to change the type of data displayed in the widget. When selected, the displayed data changes from numeric to percentage. The icon changes to .

### Visit Opportunity

This widget displays the total number of *Outside* and *Inside* visits identified by ExtremeLocation Essentials based on the devices identified by it. Each observation of the same device is counted as a separate visit.



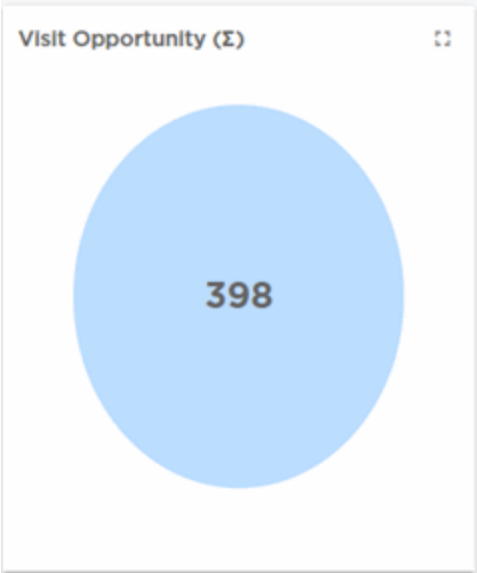
#### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



#### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

Visits - Outside Visitor vs Inside Visitor - (Î£)

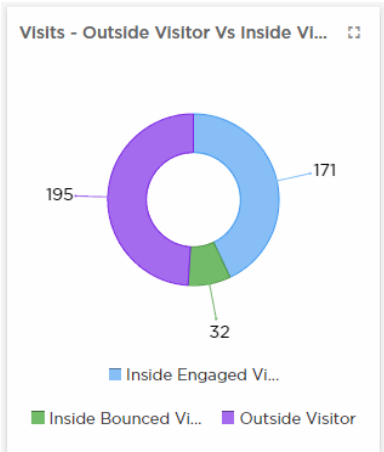
This widget displays the aggregated distribution of visits classified as *Outside*, *Inside Bounced*, and *Inside Engaged* aggregated over a selected time period.



**Note**  
If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



**Note**  
If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.

Hover on any of the widget's data points to view specific information on the selected data point. When hovering on a part of the Pie chart, the section of the chart under the mouse pointer is exploded out.

### *Inside Engaged Visitor Trend - (IE)*

This widget displays the aggregated distribution of *Inside Visitors* on visit duration.



#### **Note**

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



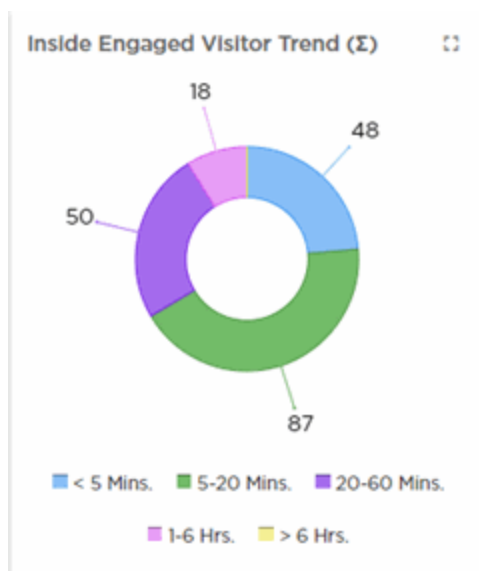
#### **Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

Data is displayed for these time ranges:

- <5 minutes (devices in site less than five (5) minutes)
- 5-20 minutes
- 20-60 minutes
- 1-6 hours
- >6 hours

This graph is displayed for the duration set in the **Duration** field..



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.

Hover on any of the widget's data points to view specific information on the selected data point. When hovering on a part of the Pie chart, the section of the chart under the mouse pointer is exploded out.

### Top 5 Sites (Visit)

This widget displays the top five (5) sites sorted by the total number of inside visits observed across all the sites managed by this ExtremeLocation Essentials account. This is a good metric for venue owners to identify top-performing venues that get more footfalls compared to other sites.



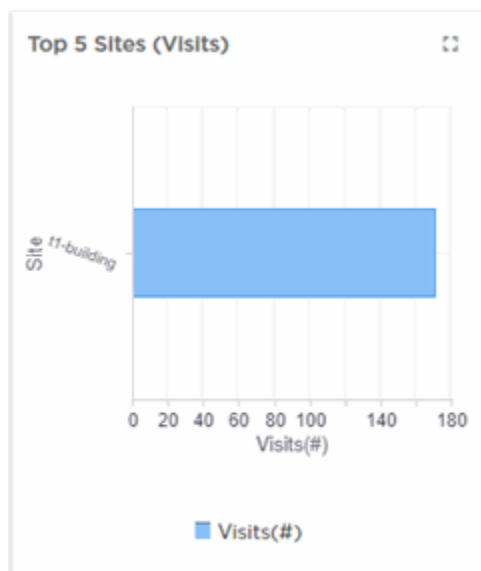
#### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



#### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

#### *Bottom 5 Sites (Visits)*

This widget displays the bottom five (5) sites sorted by the total number of inside visits observed across all the sites managed by this ExtremeLocation Essentials account. This is a good metric for venue owners to identify poorly performing venues which have low footfalls compared to other sites.



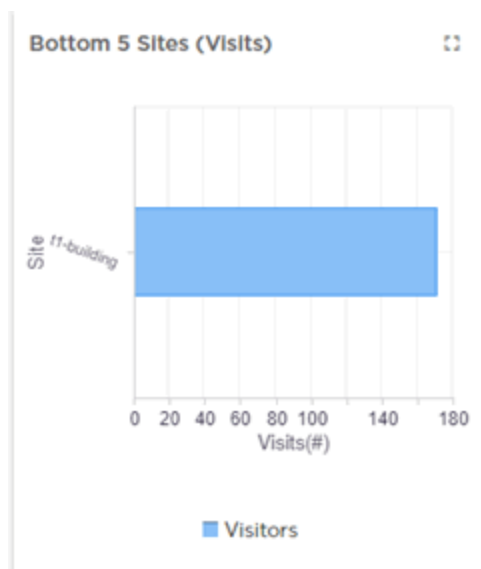
#### **Note**

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



#### **Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

#### Top 5 Sites (Visit Duration)

This widget displays the top five (5) sites sorted by time the visitor is engaged (spends) in the site. This is a good metric for venue owners to identify poorly performing venues which have low footfalls compared to other sites managed by this ExtremeLocation Essentials account.



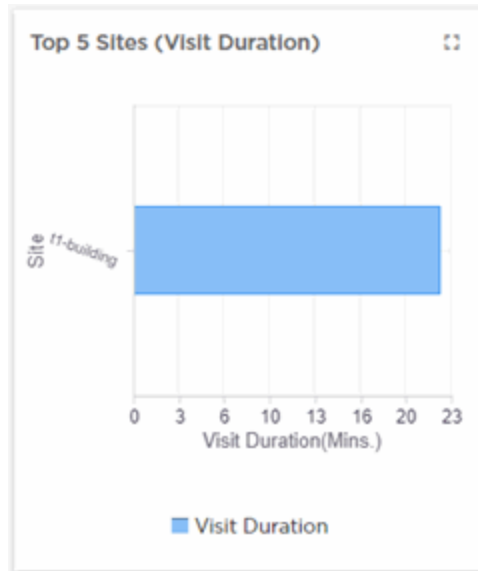
#### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



#### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

#### *Bottom 5 Sites (Visit Duration)*

This widget displays the bottom five (5) sites sorted by time the visitor is engaged (spends) in the site. This is a good metric for venue owners to identify poorly performing venues which have low footfalls compared to other sites managed by this ExtremeLocation Essentials account.



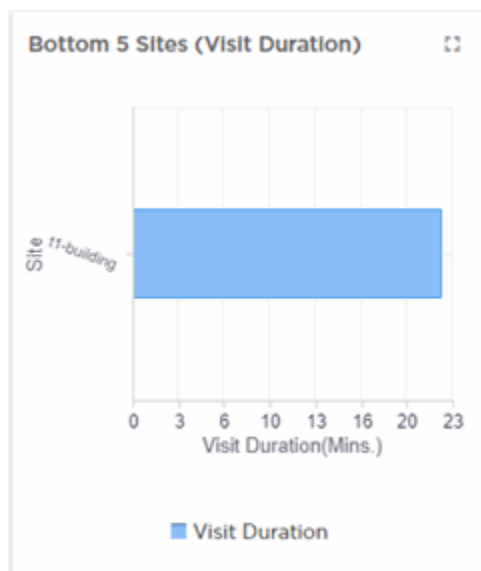
#### **Note**

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



#### **Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

#### Visits - Outside Visitor vs Inside Visitor (Day of Week)

This widget displays a chart of the total of all visits to all the sites managed by this ExtremeLocation Essentials account. This data is classified into *Outside*, *Inside Bounced*, and *Inside Engaged* visits. This data is then displayed for each day of the week.



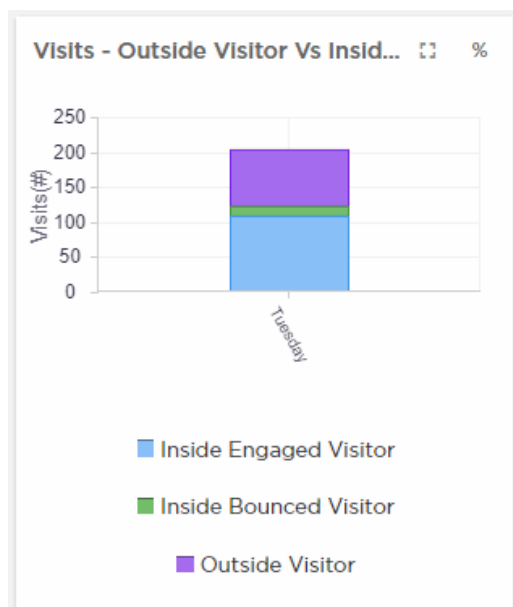
#### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



#### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.

Use the  icon to change the type of data displayed in the widget. When selected, the displayed data changes from numeric to percentage. The icon changes to .

#### Visits - Outside Visitor vs Inside Visitor (Hour of Day)

This widget displays a chart of the total of all visits to all the sites managed by this ExtremeLocation Essentials account. This data is classified into *Outside Visitor*, *Inside Bounced Visitor*, and *Inside Engaged Visitor* visits. This data is then displayed for each hour of the day.



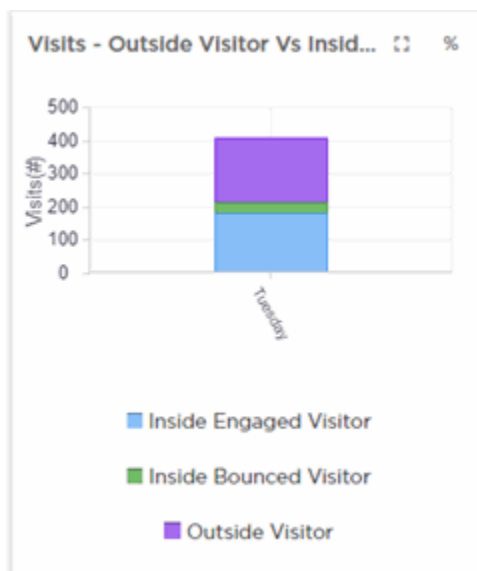
#### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



#### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.

Use the  icon to change the type of data displayed in the widget. When selected, the displayed data changes from numeric to percentage. The icon changes to .

#### *Inside Engaged Visitor Trend (Day of Week)*

This widget displays a chart of the total of all visit lengths of all visitors classified as *Inside Visitor* consisting of *Inside Bounced Visitors* and *Inside Engaged Visitor* visitors for all sites. This data is then displayed for each day of the week classified by visit duration.



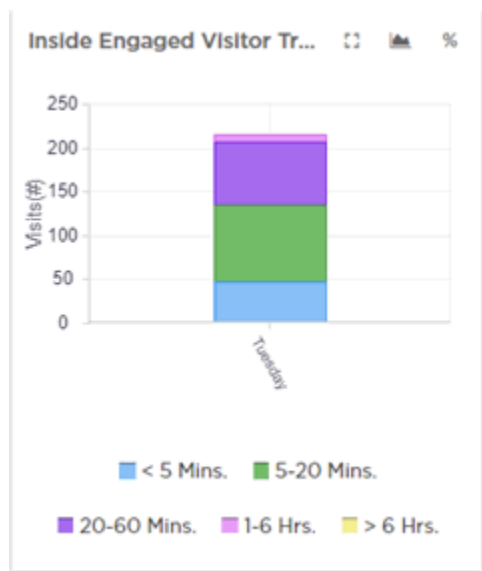
#### **Note**

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



#### **Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.



The data is classified into these distinct groupings by duration:

- < 5 Minutes
- 5 Minutes to 20 Minutes
- 20 Minutes to 60 Minutes
- 1 Hour to 6 Hours
- > 6 Hours

Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.

Use the  icon to change the widget's graph type to *Bar Chart*. The icon now changes to the alternate graph type available for this widget.

Use the  icon to change the type of data displayed in the widget. When selected, the displayed data changes from numeric to percentage. The icon changes to .

### *Inside Engagement Trend (Hour of Day)*

This widget displays a chart of the total of all visit lengths of all visitors classified as *Inside* consisting of *Inside Bounced* and *Inside Engaged* visitors for all sites. This data is then displayed for each hour of the day classified by visit duration.



#### **Note**

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.



The data is classified into these distinct groupings by duration:

- < 5 Minutes
- 5 Minutes to 20 Minutes
- 20 Minutes to 60 Minutes
- 1 Hour to 6 Hours
- > 6 Hours

Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.

Use the  icon to change the widget's graph type to *Area Chart*. The icon now changes to the alternate graph type available for this widget.

Use the  icon to change the type of data displayed in the widget. When selected, the displayed data changes from numeric to percentage. The icon changes to .

### Unique Visitors (Outside Visitor vs Inside Visitor)

This widget displays a chart of the total unique visits to the site further classified into *Inside Bounced Visitor*, *Inside Engaged Visitor*, and *Outside Visitor* visit types by time duration.



#### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



#### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.

Use the  icon to change the widget's graph type to *Bar Chart*. The icon now changes to the alternate graph type available for this widget.

### Unique - Inside Engaged Visitor vs Staff vs Assets

This widget displays a chart of the unique visits to the site by *Inside Engaged Visitor*, *Staff*, and *Assets* by time duration.



#### Note

The terminology for *Staff* changes based on the Industry Vertical you have configured on ExtremeCloud IQ. For example, the Enterprise vertical refers to staff as *Employee*, and the Higher Education vertical refers to staff as *Faculty*.



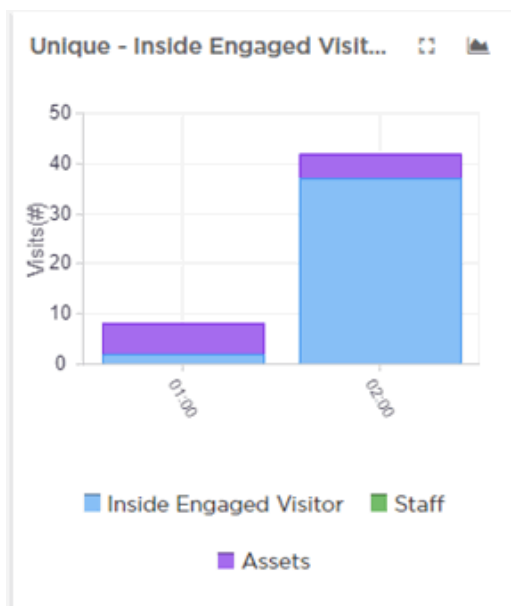
#### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



#### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.

Use the  icon to change the widget's graph type to *Area Chart*. The icon now changes to the alternate graph type available for this widget.

### Visits - Inside Engaged Visitor vs Staff vs Assets

This widget displays a chart of the total visits to a site classified by *Inside Engaged Visitor*, *Staff*, and *Assets* by time duration.



#### Note

The terminology for *Staff* changes based on the Industry Vertical you have configured on ExtremeCloud IQ. For example, the Enterprise vertical refers to staff as *Employee*, and the Higher Education vertical refers to staff as *Faculty*.



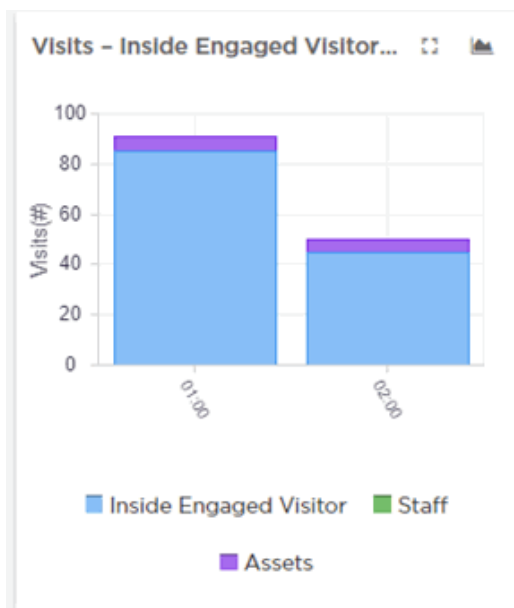
#### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



#### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.

Use the  icon to change the type of data displayed in the widget. When selected, the displayed data changes from numeric to percentage. The icon changes to .

### Visits - Inside Engaged Visitor vs Staff vs Assets - Totals

This widget displays a chart of all visits to a site classified by *Inside Engaged Visitor*, *Staff*, and *Assets*.



#### Note

The terminology for *Staff* changes based on the Industry Vertical you have configured on ExtremeCloud IQ. For example, the Enterprise vertical refers to staff as *Employee*, and the Higher Education vertical refers to staff as *Faculty*.



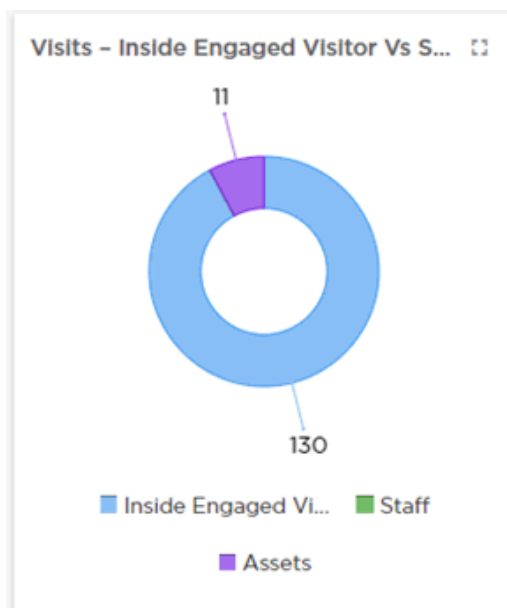
#### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



#### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.

Hover on any of the widget's data points to view specific information on the selected data point. When hovering on a part of the Pie chart, the section of the chart under the mouse pointer is exploded out.

## Category Analytics Widgets

Use the Category Analytics widgets to display detailed analytics of categories in your ExtremeLocation managed network. A Category is a logical region on a floor on which you can run analytics and user engagement activities. You can have multiple categories assigned to a floor and can share categories across multiple site and floors. These analytics are generated based on category values assigned to regions or access points on the floor plan for a given site. For example, when ExtremeLocation is deployed in a retail environment, you could setup your categories as *Electronics*, *Cosmetics*, *Baby Care*, etc.

**Note**

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

### Category Visits - Assets

This widget displays the distribution of category visits by tracked assets over time.

Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.

**Note**

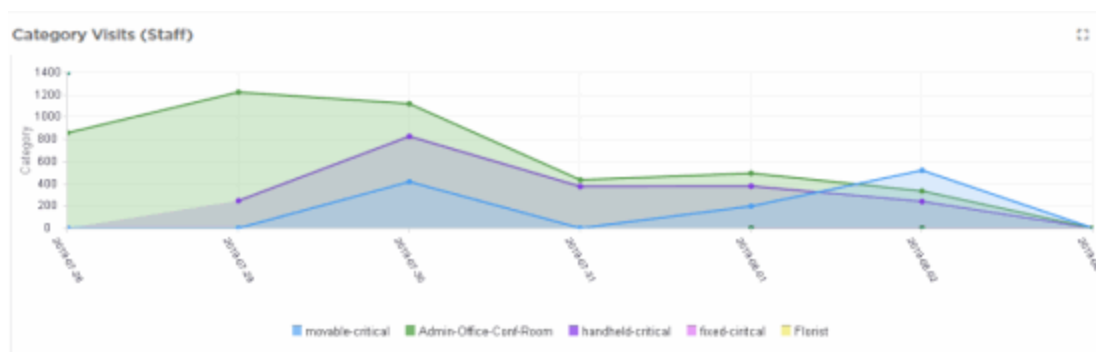
If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

### Category Visits - Staff

This widget displays the distribution of category visits by staff over time.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.



#### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

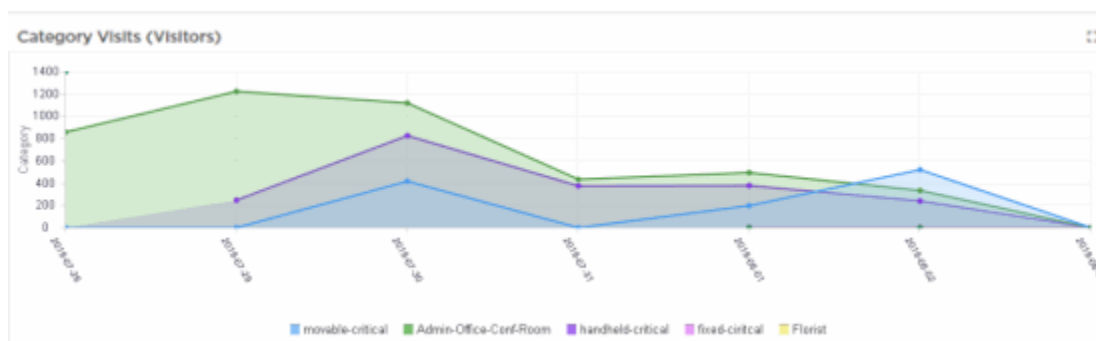


#### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

### Category Visits - Visitors

This widget displays the distribution of category visits by visitors over time. Select a category (legend) below the graph to show or hide the graph for the selected category. This graph is displayed for the duration set in the **Duration** field.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.

**Note**

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

### Top 5 Categories by Visits

This widget displays the top five (5) categories by number of visits to the category area.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

**Note**

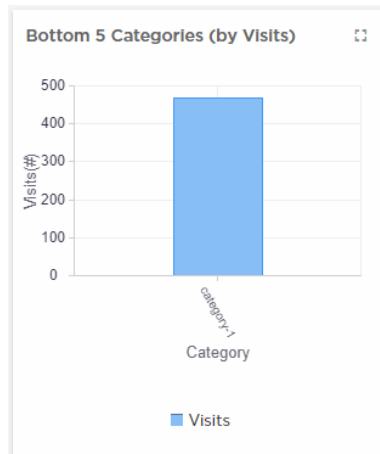
If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

### Bottom 5 Categories - By Visits

This widget displays the bottom five (5) categories by number of visits to the category's area.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

**Note**

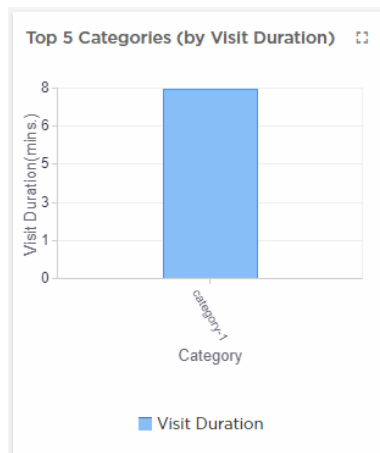
If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

### Top 5 Categories - By Visit Duration

This widget displays the top five (5) categories ordered by the length of average visit duration to the category.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.

**Note**

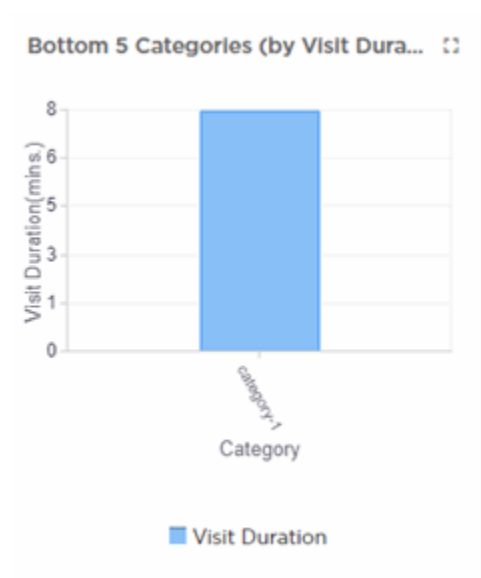
If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

### *Bottom 5 Categories By Visit Duration*

This widget displays the bottom five (5) categories by length of visits (in minutes) to the category area.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

**Note**

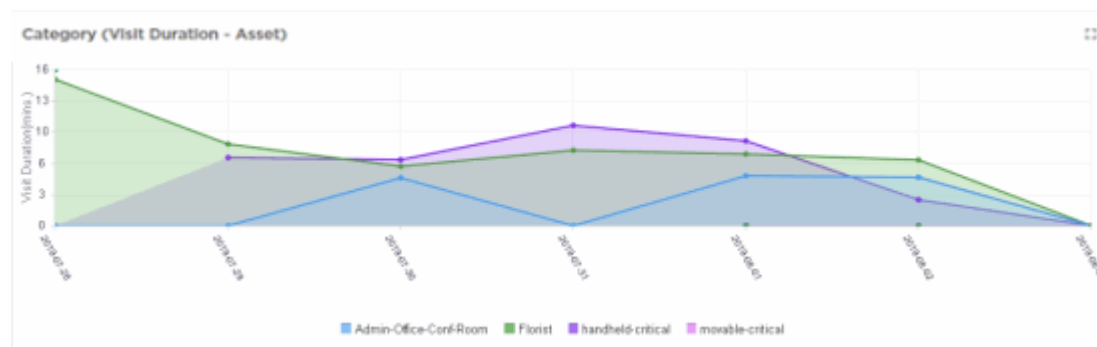
If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

*Category - Visit Duration By Assets*

This widget displays a graph of visit durations by assets over time.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.

**Note**

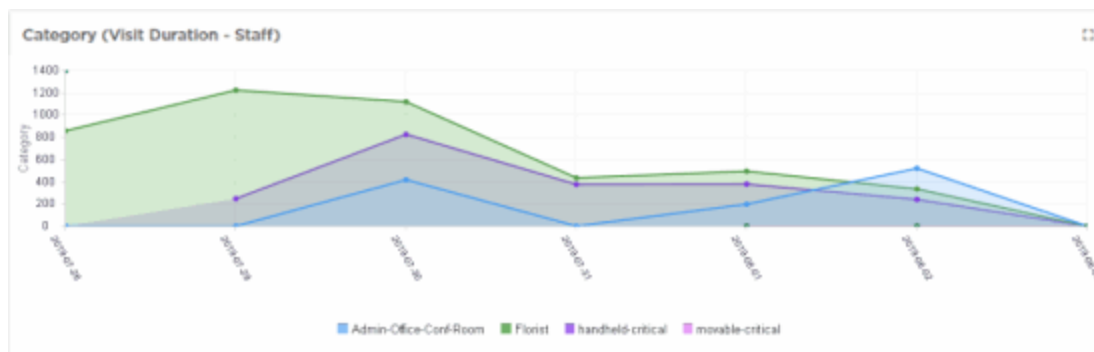
If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

*Category - Visit Duration By Staff*

This widget displays a graph of visit duration by staff over time.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.



#### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

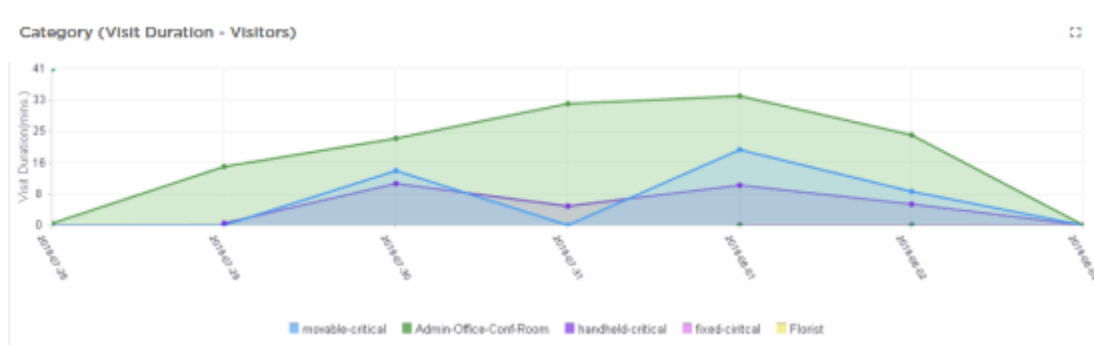


#### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

### Category - Visit Duration of Visitors

This widget displays the distribution of category visits by visitors and the time duration (in minutes) spent by these visitors in that category.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.

Hover on any of the widget's data points to view specific information on the selected data point. When hovering on a part of the Pie chart, the section of the chart under the mouse pointer is exploded out.



#### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

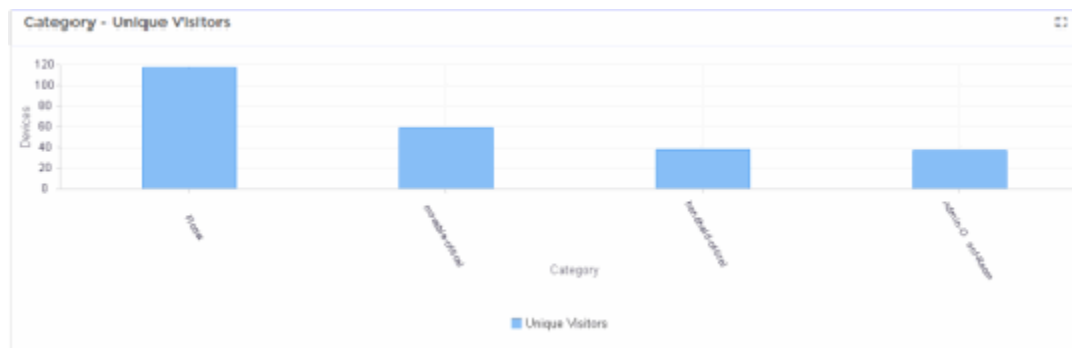


#### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

### Category - Unique Visitors

This widget displays the distribution of unique visitors to a category over time.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.



#### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



#### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

### Category - Unique Assets

This widget displays a graph of the number of unique assets in each category arranged in descending order over time.

Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

Hover on any of the widget's data points to view specific information on the selected data point. When hovering on a part of the Pie chart, the section of the chart under the mouse pointer is exploded out.



#### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

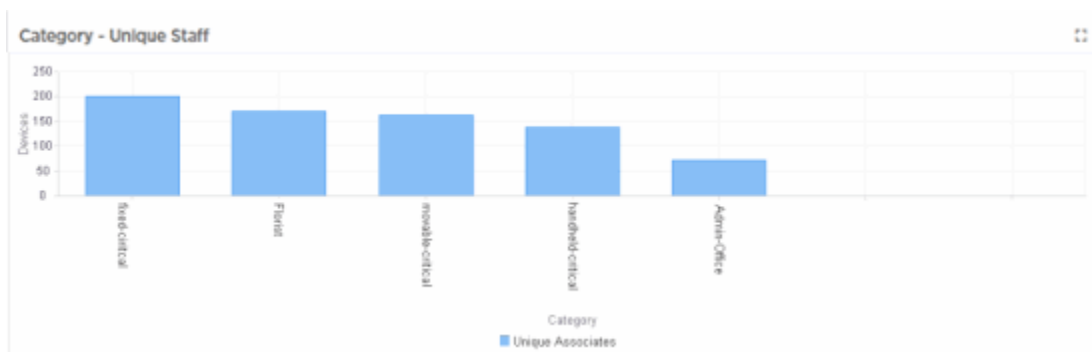


#### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

### Category - Unique Staff

This widget displays a graph of the number of unique staff in each category arranged in descending order over time.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.



#### Note

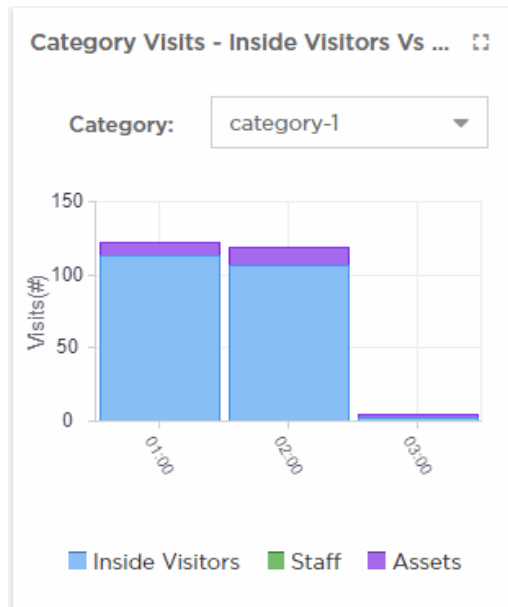
If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

### Category Visit Duration - Inside Visitor vs Staff vs Assets

This widget displays a graph of the distribution of visit durations for *Inside Visitors*, *Staff*, and *Assets*. Use the category drop-down to select a category to display the data for.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.

Use the **Category** drop-down list to change the category for which the data is displayed. By default, the last category selected in the previous session is selected.

**Note**

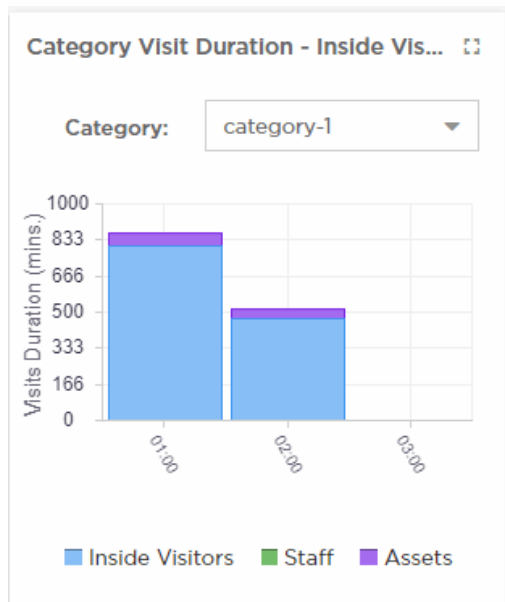
If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

### Category - Inside Visitors vs Staff vs Assets Over Time

This widget displays a summary of visitors to a user selected category. The visits are classified as *Inside Visitors*, *Staff*, and *Assets* and displayed for the duration set in the **Duration** field.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

Use the **Location** drop-down list to change the site for which the data is displayed. By default, the last site selected in the previous session is selected.

Hover on any of the widget's data points to view specific information on the selected data point. When hovering on a part of the Pie chart, the section of the chart under the mouse pointer is exploded out.

You can use the widget's labels to filter the data being displayed. Click on a label to include or exclude its data in the widget. When the data for the label is excluded, the label is displayed in a lighter color.



#### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

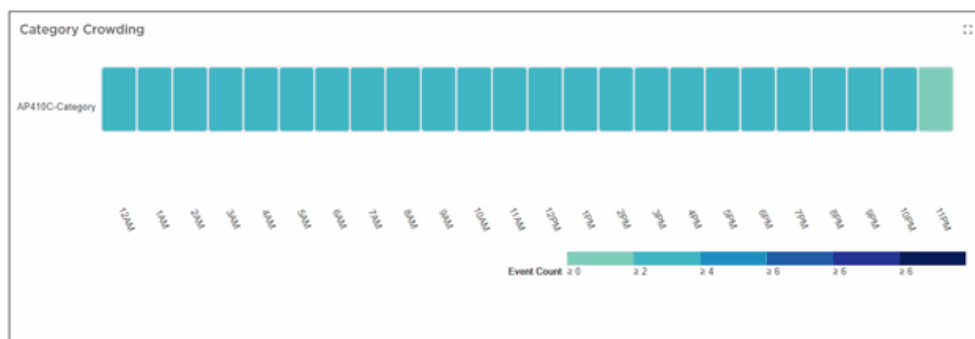


#### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

### Category Crowding

This widget displays a graph of the distribution of crowding events over time. It shows where crowding has occurred and which categories have had more events in comparison to other categories. Use the historical data to determine where more staff should be deployed.



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.



#### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



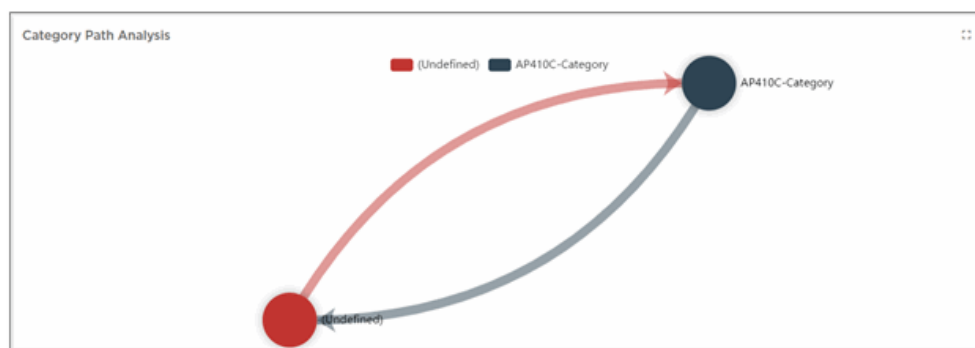
#### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

### Category Path Analysis

This widget displays a multi-dimensional view representing the movement of visitors from one category to another. The following data is displayed:

- comparison of visitor flow across categories
- absolute number of visitor movements across categories
- direction of visitor flow across categories



Use the  icon to expand the widget to fill the current view window. Use the same button to restore the widget to its previous size and location.

The colored arrows show the direction of flows and the number of devices that have moved in the direction of that flow.

Place your cursor on a color (representing the category) to view the flow of devices to and from that category. Place your cursor on the circle to display the number of devices that have entered and exited the selected category. When you place your cursor on a category, only those categories that have direct flows from the selected category are displayed.

**Note**

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

## Scheduled Reports

ExtremeLocation Essentials supports export of the current dashboard in PDF format. You can also create dashboards that displays data of interest and configure periodic data export which is mailed to specified email accounts. Dashboard reports can be scheduled to run daily, weekly, or monthly.

**Note**

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

## List Scheduled Reports

**Note**

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

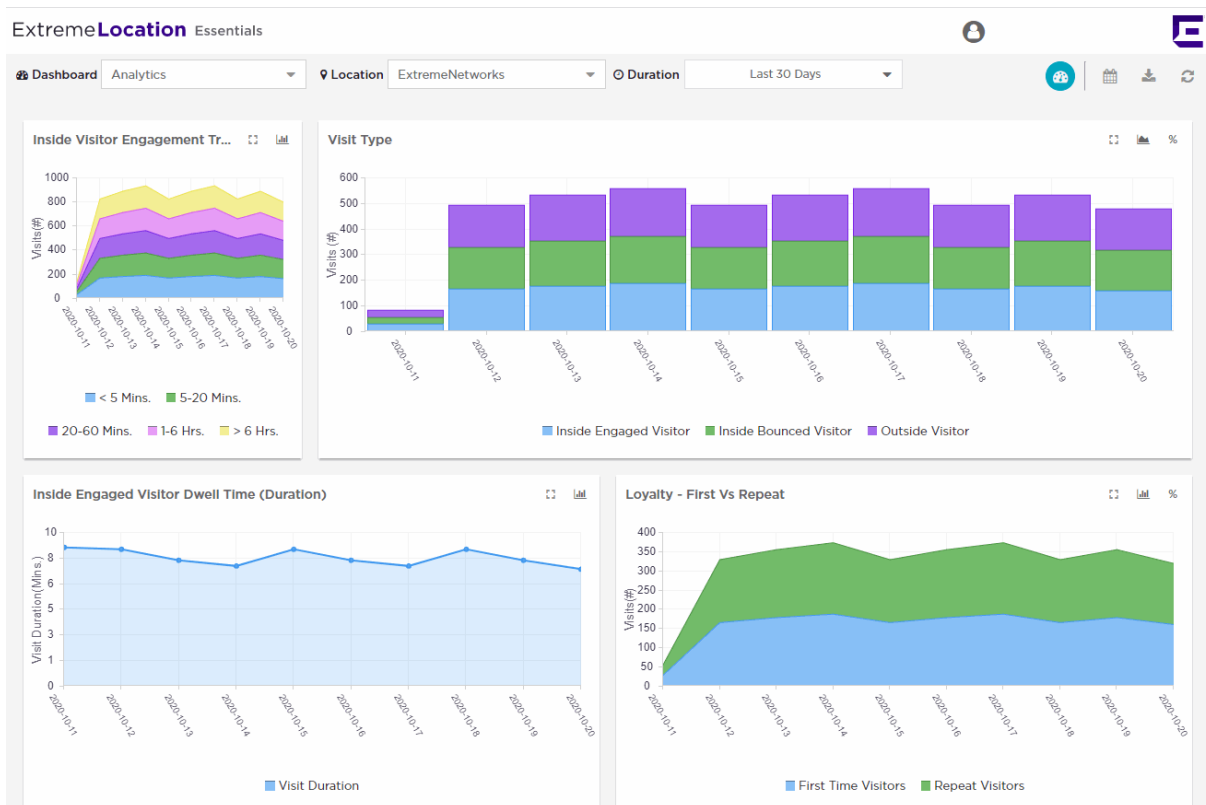


### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

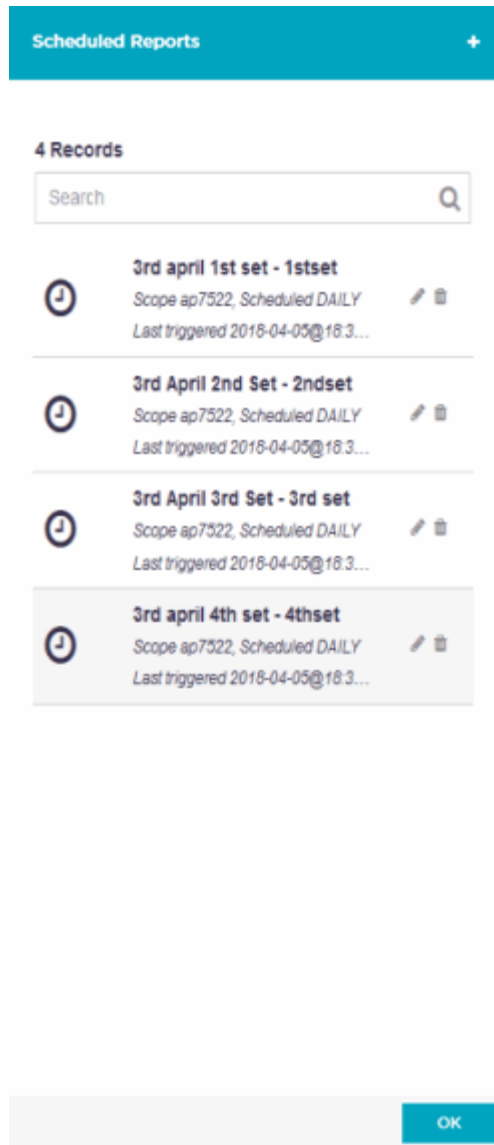
To list the reports scheduled for execution:

1. Select the  icon from the main menu to view the **Dashboards** screen.  
The dashboard marked as default automatically loads.



**Figure 24: The Dashboard Screen**

2. Select the  button from  tool bar.  
The **Scheduled Reports** screen displays.



**Figure 25: Scheduled Reports Options**

3. Place your cursor over a scheduled report to view details about that scheduled report.
4. Select **OK** to exit the **Scheduled Reports** screen.

## Create a Scheduled Report



### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

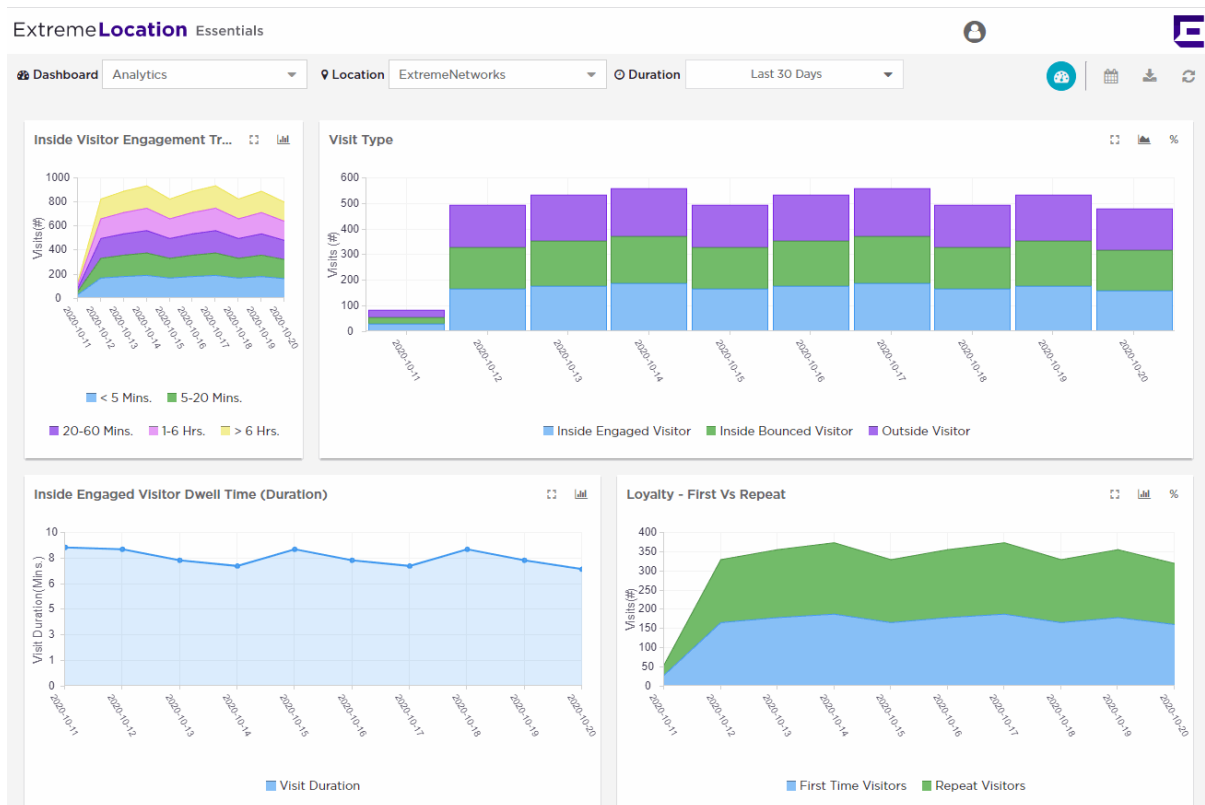


### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

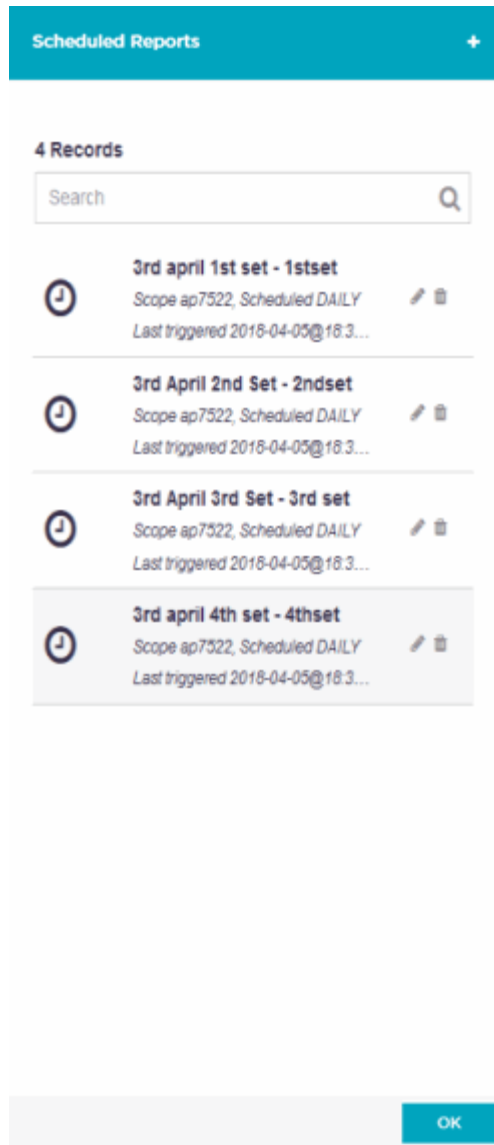
To create a scheduled report:

1. Select the  icon from the main menu to view the **Dashboards** screen.  
The dashboard marked as default automatically loads.



**Figure 26: The Dashboard Screen**

2. Select the  button from  tool bar.  
The **Scheduled Reports** screen displays.



**Figure 27: Scheduled Reports Options**

3. Select the  located to the top right of the **Scheduled Reports** screen. The **Create Schedule Report** window displays.

←

Create Schedule Report

Schedule Name \*

Enter Schedule Name

Dashboard \*

Analytics

Location \*

ExtremeNetworks

Recurrence Frequency

☒ Daily
 ☐ Weekly
 ☐ Monthly

Export Format



Email To \*

3 more email address can be added

Cancel

Create

**Figure 28: Create Schedule Report Window**

4. Provide the following information to create a new scheduled report:

| Field         | Description                                                                                                                                             |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Schedule Name | Provide a meaningful name for this scheduled report.                                                                                                    |
| Dashboard     | From the drop down list, select the dashboard to create this report from.                                                                               |
| Location      | From the drop down list, select the location for which this report is to be generated. To select all the locations, select All from the drop down list. |

| Field             | Description                                                                                                                                                                                                                                                             |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recurrence Format | Select the report generation frequency from one of: <ul style="list-style-type: none"> <li>• Daily - The report is generated once a day.</li> <li>• Weekly - The report is generated once a week.</li> <li>• Monthly - The report is generated once a month.</li> </ul> |
| Export Format     | Export to PDF is the only format currently supported for scheduled reports.                                                                                                                                                                                             |
| Email To          | Provide up to 3 distinct email addresses to send this scheduled report to when it is generated.                                                                                                                                                                         |

5. Select **Create** to create this scheduled report.

At any point, select **Cancel** to exit without creating a scheduled report.

6. Select the **OK** button to exit **Scheduled Reports** screen.

## Edit a Scheduled Report



### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

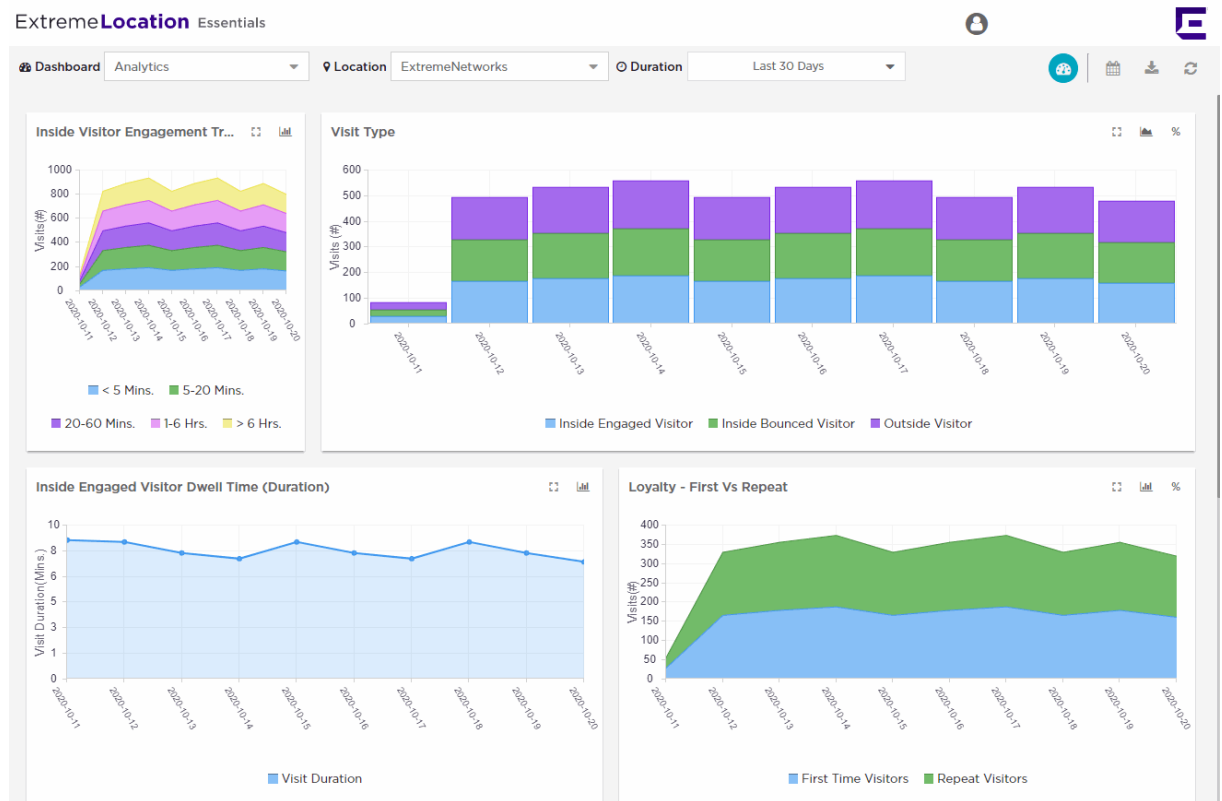


### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

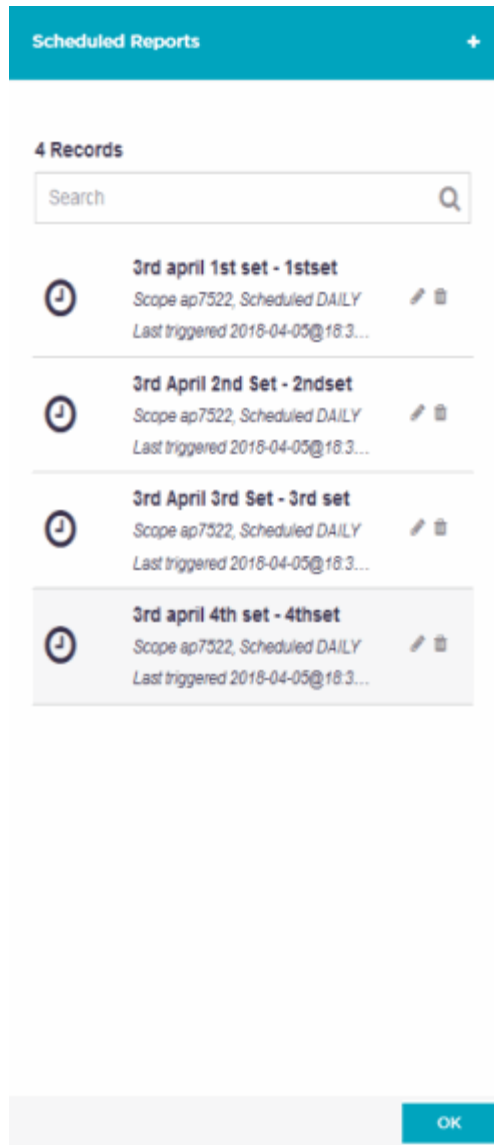
To edit a scheduled report:

1. Select the  icon from the main menu to view the **Dashboards** screen.  
The dashboard marked as default automatically loads.



**Figure 29: The Dashboard Screen**

2. Select the  button from  |    tool bar.  
The **Scheduled Reports** screen displays.



**Figure 30: Scheduled Reports Options**

3. Select the  icon from the   toolbar that is available next to each scheduled report in the list.

The **Update Schedule Report** screen displays.

**Update Scheduled Report**

**Schedule Name \***

**Dashboard \***

3rd april 1st set

**Location \***

ap7522

**Reccurence Frequency**

☒ Daily
 ☐ Weekly
 ☐ Monthly

**Export Format**

**Email To \***

test.org.01@mailinator.com ✕

test.org.02@mailinator.com ✕

*0 more email address can be added*

Cancel

Create

**Figure 31: Update Scheduled Report Window**

4. Refer to the following while editing your scheduled report:

| Field             | Description                                                                                                                                                                                                                                                       |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Schedule Name     | This field cannot be modified.                                                                                                                                                                                                                                    |
| Dashboard         | From the drop down list, select the dashboard to change to for this scheduled report.                                                                                                                                                                             |
| Location          | From the drop down list, select the location for which this report is to be generated. To select all the locations, select All from the drop down list.                                                                                                           |
| Recurrence Format | Select the report generation frequency from one of: <ul style="list-style-type: none"> <li>Daily - The report is generated once a day.</li> <li>Weekly - The report is generated once a week.</li> <li>Monthly - The report is generated once a month.</li> </ul> |

| Field         | Description                                                                                     |
|---------------|-------------------------------------------------------------------------------------------------|
| Export Format | Export to PDF is only supported at present for scheduled reports.                               |
| Email To      | Provide up to 3 distinct email addresses to send this scheduled report to when it is generated. |

5. Select **Create** to save edits made to this scheduled report.  
At any point, select **Cancel** to exit without editing this scheduled report.
6. Select the **OK** button to exit **Scheduled Reports** screen.

## Delete a Scheduled Report



### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

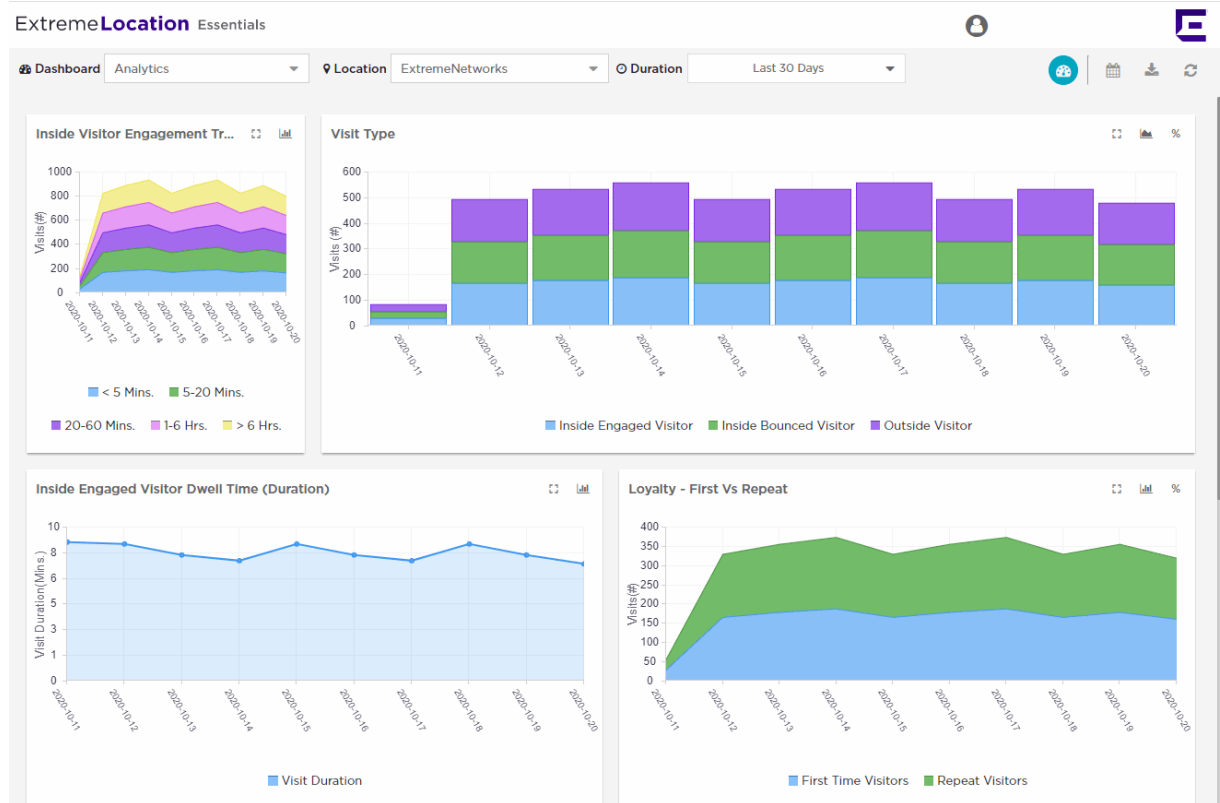


### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

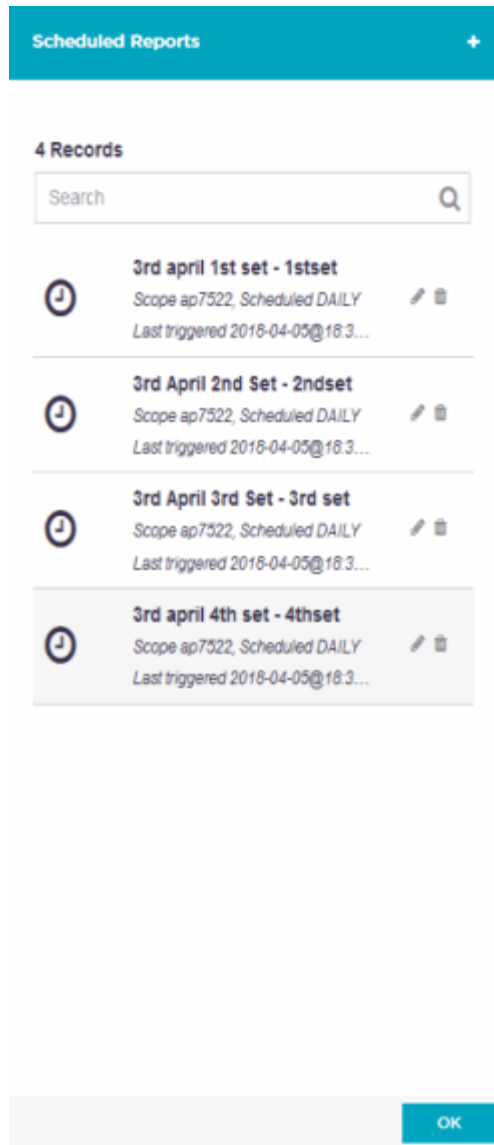
To delete a scheduled report:

1. Select the  icon from the main menu to view the **Dashboards** screen.  
The dashboard marked as default automatically loads.



**Figure 32: The Dashboard Screen**

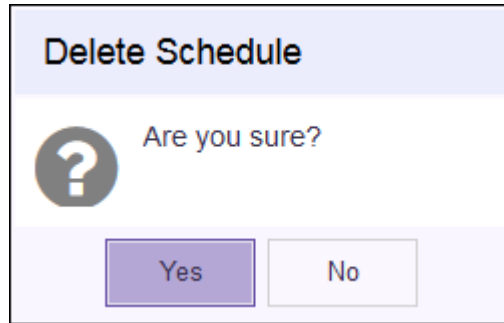
2. Select the  button from  |    tool bar.  
The **Scheduled Reports** screen displays.



**Figure 33: Scheduled Reports Options**

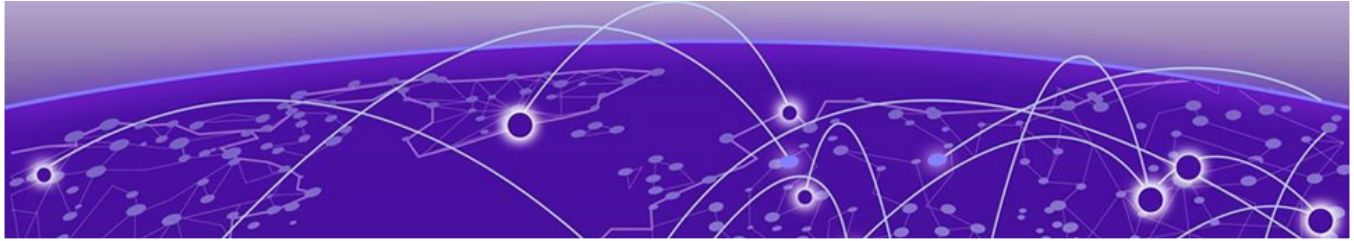
3. Select the  icon from the   toolbar that is available next to each scheduled report in the list.

The **Delete Schedule** window displays.



**Figure 34: Delete Schedule Window**

4. Select **Yes** to delete this scheduled report.  
Select **No** to exit without deleting this scheduled report.
5. Select the **OK** button to exit **Scheduled Reports** screen.



# Sites

---

[Sites - Main Screen](#) on page 77

[Common Tools](#) on page 84

[Device View](#) on page 85

[Heatmap View](#) on page 93

[Crowding View](#) on page 96

[AP View](#) on page 100

[Region View](#) on page 102

[Flow](#) on page 105

Sites are locations that are monitored using the ExtremeLocation Essentials system. A site is a physical area such as a store, a hotel, or a hospital. It can also be a venue such as a shopping mall or an airport for which you capture locationing data. A typical site is made up of one or more floors which are further divided into logical areas or categories. Categories (zones) are used to logically separate the floor into distinct areas that enable ease of locationing and visitor tracking.

Select the  icon from the main menu to view the **Sites** screen.

Use the ExtremeLocation Essentials **Sites** screen to perform account configuration activities such as creating and managing categories and other activities. The following activities can be performed:

- Create regions/zones for a site.
- View the heatmap for each floor on the site.
- View crowding events by region on a floor.

## Sites - Main Screen

---

The ExtremeLocation Essentials **Sites** screen displays a view of all the sites configured for this ExtremeLocation Essentials account.



### Note

If client data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

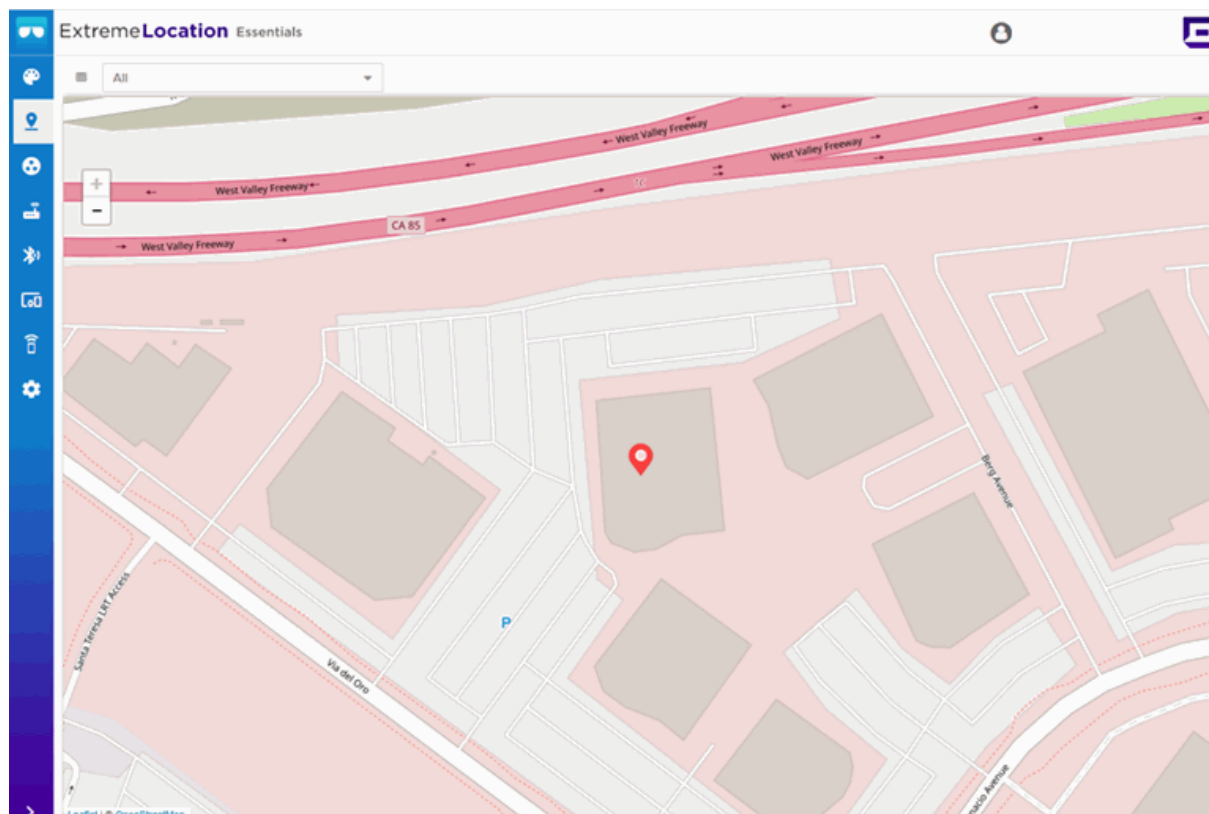
**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

To view the ExtremeLocation Essentials **Sites** screen:

1. Select **Sites** from the main menu by selecting the  icon.

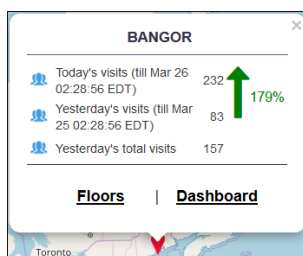
The **Sites** screen displays.



**Figure 35: Sites Screen**

A map of all configured sites for this ExtremeLocation Essentials account displays. Each configured site is marked with a colored marker. The color of the marker indicates if the site is seeing an increase or decrease in visits. A RED marker indicates a drop in the number of visits, and a GREEN marker indicates an increase in the number of visits.

The size of the icon indicates increase or decrease in total visits to the site when compared to the previous day. The icon size changes for every 20 percent (%) change in the number of visits to the site, when compared to the previous day. Select a site's marker to display a dialog with the latest statistics for the selected site.



**Figure 36: Site Information**

Use the **Floors** link to directly view the default floor map for this site. Similarly, use the **Dashboard** link to view the default dashboard for this site.

The **Site Information** dialog displays the following site trends:

#### Today's Visits

Displays the total number of visits to the site up to the time displayed in this field. This information is for the current day (today).

#### Yesterday's Visits

Displays the total number of visits to the site during the previous day up to the time displayed in this field. This time is the same time that displays for **Today's Visit** data.

#### Yesterday's Total Visits

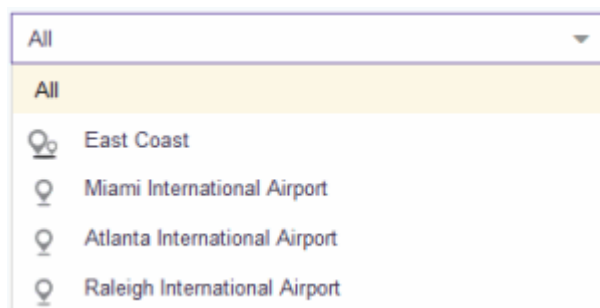
Displays the total number of visits to the site for the entire previous day.

#### Trend

The trend icon is an arrow displayed next to the data that provides a visual indication of the visit trends. A GREEN upward-pointing arrow indicates an increase in visits. A RED downward-pointing arrow indicates a decrease in visits.

The percentage (%) change in value is also displayed in the appropriate color.

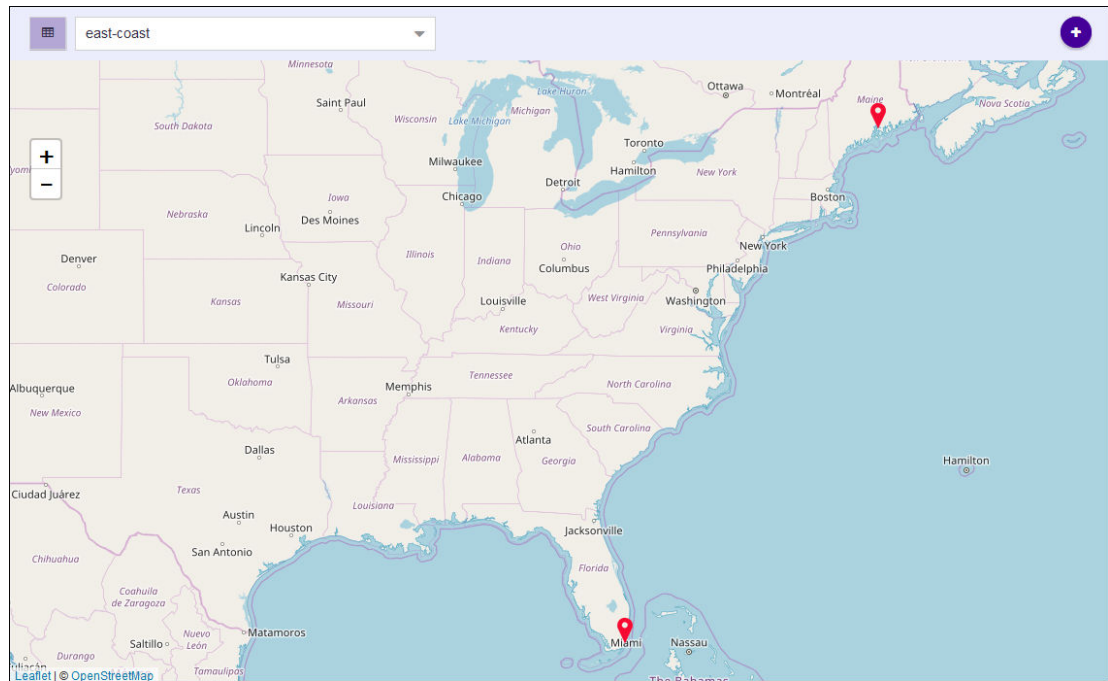
2. Select the drop-down list on the top left of the **Sites** screen to display a list of sites managed by this ExtremeLocation Essentials account. Select a *Site* or *Site Group* from the list.



**Figure 37: Sites and Site Groups**

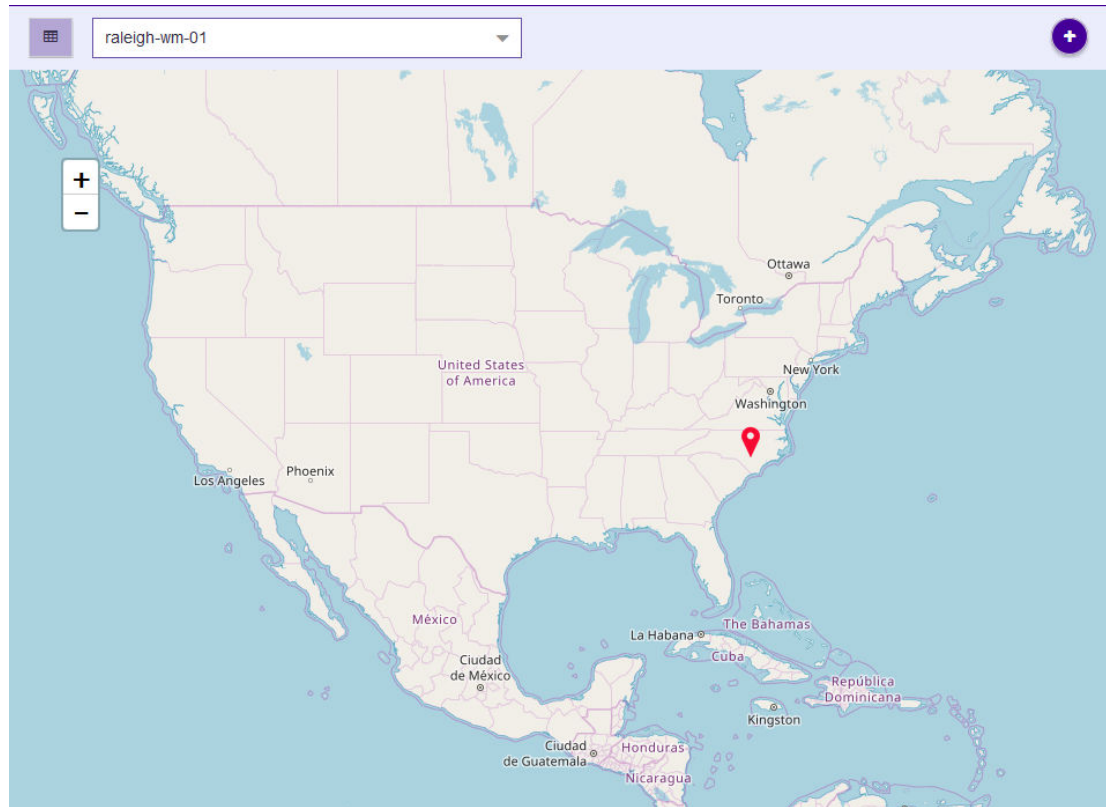
The drop-down list displays a list of the Site Groups (indicated by  icon) followed by the list of individual sites (indicated by  icon) for this ExtremeLocation Essentials account.

When a *Site Group* is selected, the **Sites** screen zooms to an appropriate zoom level to show all the sites in the group in the same screen.



**Figure 38: Site Group view**

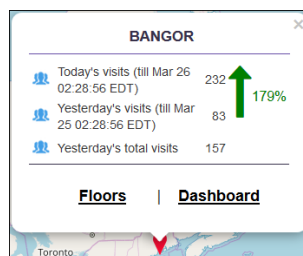
When a site is selected, the **Sites** screen shows the icon for the selected site and hides all other sites for this ExtremeLocation Essentials account.



**Figure 39: Site view**

3. Use the  buttons to the left of the screen to manually zoom in or out in the ExtremeLocation Essentials **Sites** screen.
4. Select the site of interest.

The **Site Information** dialog opens.



**Figure 40: Site Information**

From the dialog, select one of the following links:

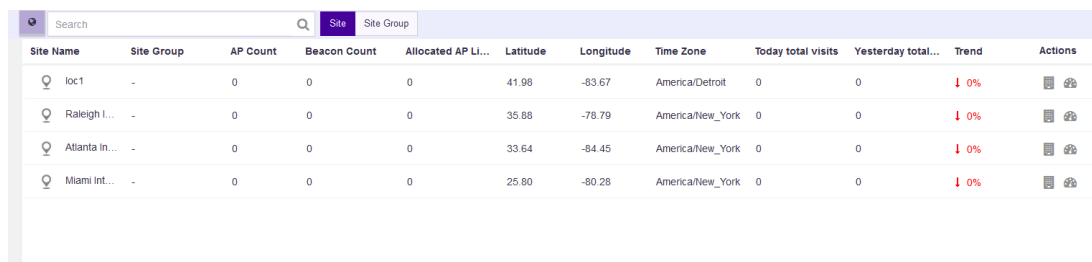
- **Floors** - Displays the floor maps for this site. See [Device View](#) on page 85.
- **Dashboard** - Displays the default dashboard for this site. See [Dashboard](#) on page 17.

## Sites - Main Screen - Grid View

Use the  button to launch the **Sites Grid View** screen. This button is located to the left of the **Sites** drop-down list at the top left of the **Sites** screen.

The **Sites Grid View** displays all sites configured for the ExtremeLocation Essentials account as a list. This is provided as an ease of use feature. You can edit any site, launch its floor maps screen, and view its dashboard from within this screen.

To return to the map view, select the  icon.



| Site Name     | Site Group | AP Count | Beacon Count | Allocated AP Li... | Latitude | Longitude | Time Zone        | Today total visits | Yesterday total... | Trend | Actions                                                                                                                                                                 |
|---------------|------------|----------|--------------|--------------------|----------|-----------|------------------|--------------------|--------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| loc1          | -          | 0        | 0            | 0                  | 41.98    | -83.67    | America/Detroit  | 0                  | 0                  | ↓ 0%  |   |
| Raleigh I...  | -          | 0        | 0            | 0                  | 35.88    | -78.79    | America/New_York | 0                  | 0                  | ↓ 0%  |   |
| Atlanta In... | -          | 0        | 0            | 0                  | 33.64    | -84.45    | America/New_York | 0                  | 0                  | ↓ 0%  |   |
| Miami Int...  | -          | 0        | 0            | 0                  | 25.80    | -80.28    | America/New_York | 0                  | 0                  | ↓ 0%  |   |

The following details are displayed for each site in this list:

| Field                  | Description                                                                                                                       |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Site Name              | Displays the name of the site.                                                                                                    |
| Site Group             | If this site is a part of a <b>Site Group</b> , then this field displays the name of the Site Group.                              |
| AP Count               | Displays the number of access points assigned to this site.                                                                       |
| Beacon Count           | Displays the number of BLE beacons assigned to this site.                                                                         |
| Allocated AP Licenses  | Displays the number of access point licenses allocated to this site.                                                              |
| Latitude               | Displays the location (latitude) of this site.                                                                                    |
| Longitude              | Displays the location (longitude) of this site.                                                                                   |
| Time Zone              | Displays the time zone in which this site is located. This is a calculated value based on the latitude and longitude of the site. |
| Today Total Visits     | Displays the total visits to this site today. This value is calculated from 00:00 hours for the current day.                      |
| Yesterday Total Visits | Displays the total visits to this site yesterday. This value is calculated for the time 00:00 - 23:59 for the previous day.       |

| Field   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Trend   | Displays the trend for this site. When the number of visits have gone up with respect to the previous corresponding period, a green upward facing arrow is displayed. When the number of visits have gone down with respect to the previous corresponding period, a red downward facing arrow is displayed. The field also displays a numerical percentage (%) value of the swing in visits. This value is displayed in the same color as the trend arrow.                                                                                                                                                                                                          |
| Actions | <p>Displays a set of icons that indicate the actions that can be performed on the site. The following actions are available:</p> <ul style="list-style-type: none"> <li>• <i>Floor Map</i> - Selecting the  icon launches the <b>Floor Map</b> screen from where you can manage the floors for this site.</li> <li>• <i>Dashboard</i> - Selecting the  icon launches the <b>Dashboard</b> screen which displays the default dashboard with the information relevant for this site.</li> </ul> |

### Site Groups

The **Site Groups Grid View** screen display a list of Site Groups configured for this ExtremeLocation Essentials account. Use **Site Groups** to group similar sites and use it to manage all the grouped sites as a single unit.

Use the **Site Group** button to view the list. The following information is displayed:

| Field                | Description                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Site Group Name      | Displays the name of the Site Group.                                                                                                                                                                                                                                                                                                                                                                                                         |
| Parent Site Group    | Displays the name of the Site Group that is the parent of this Site Group. Use this field to create a hierarchy of Site Groups for your ExtremeLocation Essentials account.                                                                                                                                                                                                                                                                  |
| Children Site Groups | Displays the names of the site groups that consider this Site Group as their parent. This establishes a hierarchy of Site Groups within your ExtremeLocation Essentials managed network.                                                                                                                                                                                                                                                     |
| Site                 | Displays the names of the sites that make up this Site Group.                                                                                                                                                                                                                                                                                                                                                                                |
| Actions              | <p>Displays a set of icons that indicate the actions that can be performed on the site. The following actions are available:</p> <ul style="list-style-type: none"> <li>• <i>Dashboard</i> - Selecting the  icon launches the <b>Dashboard</b> screen which displays the default dashboard with the information relevant to this Site Group.</li> </ul> |

## Common Tools

The **Floor Map** view provides a set of tools to manage a floor on a site.



### Note

A floor plan image is required for all ExtremeCloud IQ floors. ExtremeLocation Essentials does not recognize a floor without a floor plan image.

The following tools are available in the **Floor Map** view:



Select this icon to go back to the **Sites** view.

**SITE:** 6480, Via Del Oro  
**FLOOR:** Floor 1

This area displays the current site's name. It also displays the name of the currently selected floor on the site.

**FLOOR**

Use the **Floor** drop-down to select a floor on the site.



### Device

Select this icon to display the *Device View*. Use this to view client device activity and other related data.



### Heatmap

Select this icon to display a heat map for this floor. Use the heat map of this floor to view device concentration throughout the floor. You can then use this information to take business decisions.



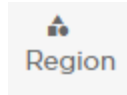
### Crowding

Select this icon to display crowding events in your ExtremeLocation Essentials managed network. Use this view to see which areas of your floor are crowded and take appropriate action to address the crowding.



### AP

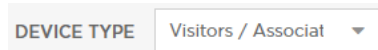
Select this icon to display the *Access Point* view. Use this view to manage access points, regions, and categories for this floor.



Select this icon to display the *Regions View* from where you can manage your regions.



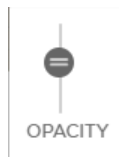
Select this icon to display the traffic flow between regions. Specify a time period from the *Duration* drop-down.



Use the *Device Type* drop-down to filter different devices types. This filter option is only available for the **Devices** and the **Crowding** screens.



Use the **Regions** switch to show or hide the region boxes on the floor map.



Use the **Opacity** slider to set the opacity of the Floor Map.



Use this icon to manually refresh the data being displayed.

## Device View

The **Device** screen is the default view of all floors within any site managed by your ExtremeLocation Essentials account. When you select a site that you manage, this screen displays for the default floor for that site.

The **Device** screen displays all visitors devices seen on a floor on the floor map. Use this screen and its controls to filter and view the different client types (*Visitors/Staff, Assets, and BSS*) for a floor in a site within your ExtremeLocation Essentials managed network.

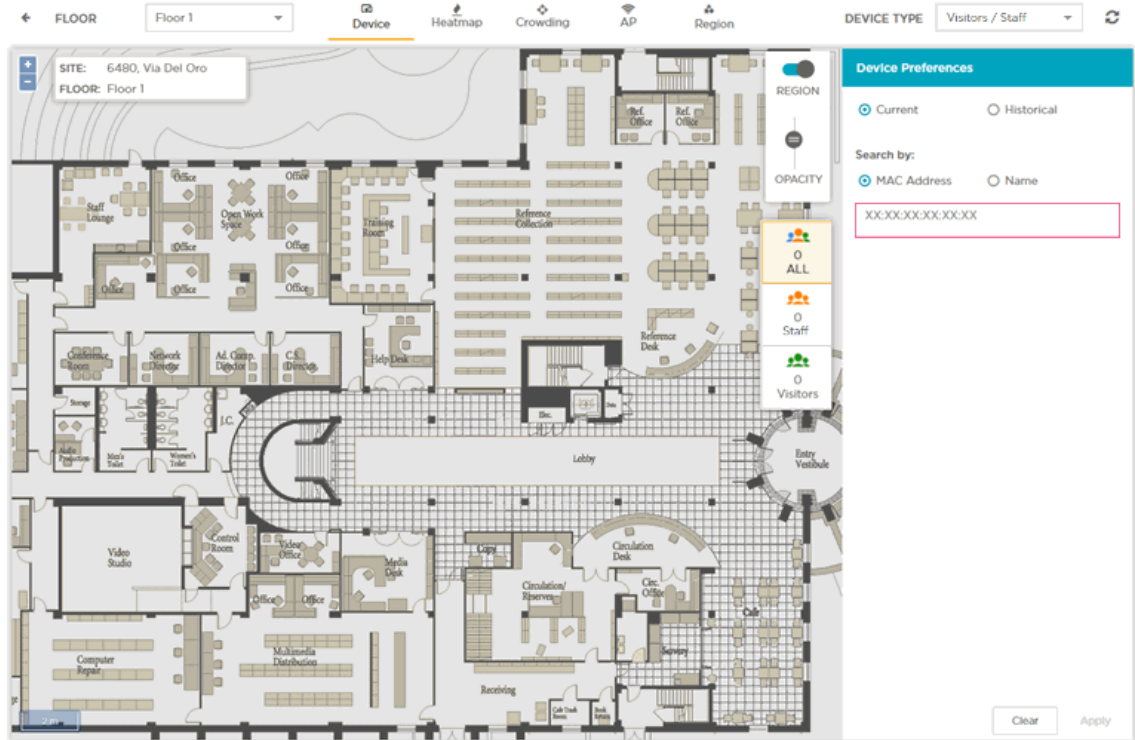


### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

**Note**

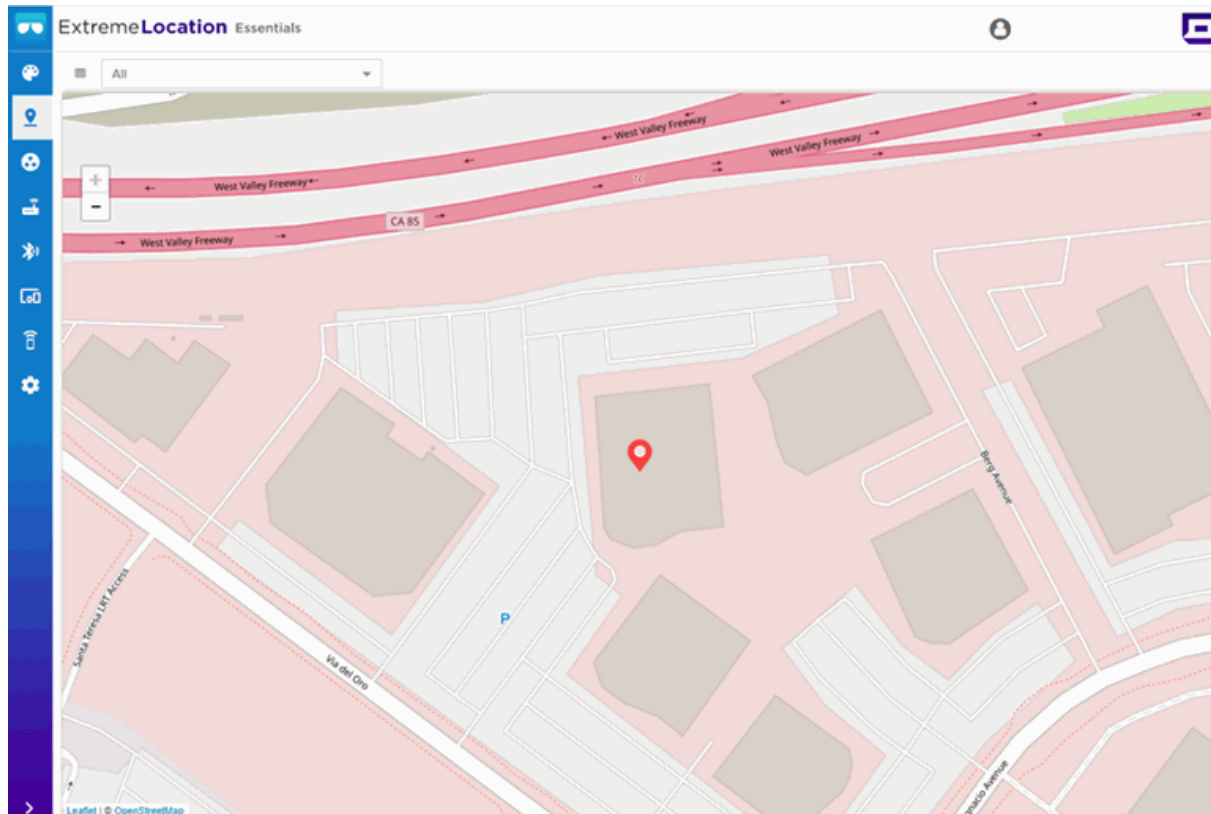
If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.



To view device details for a floor:

1. Select **Sites** from the main menu.

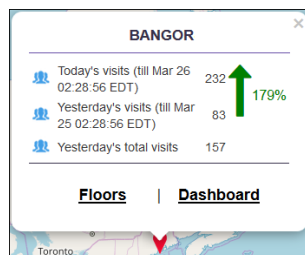
The **Sites** screen displays.



**Figure 41: Sites Screen**

2. Select your local site from the **Map**.

The site's information is displayed.



**Figure 42: Site Information Dialog**

3. Select the **Floors** link to display the **Floor View**.

- Use the Visitor/Staff drop-down list located to the top right of the screen to switch between viewing different kinds of client devices.

The following device types can be viewed:

- Visitors/Staff - Use this option to filter to devices that are classified as *Staff* and *Visitors*.
- Assets - Use this option to filter to devices classified as *Assets*. These devices are those that your company might want to track.
- BSS Devices - These devices, within your monitored environment, broadcast BSS (Basic Service Set) identifiers that indicate that they offer Wi-Fi connection to any device that may want to connect to it. BSSs with a managed environment can be authorized or unauthorized. Unauthorized BSSs are a security risk for the environment they are found in and need to be monitored for and the devices tracked.

Refer to topic [Common Tools](#) on page 84 for information on the other tools available for use in the **Sites** screens.

The screen immediately refreshes to display the selected device type.

- From the **Device Preferences** area of the screen, select one of *Current* or *Historical* options. Use these options to select the time duration for which you want to view the devices for.

The screenshot shows the 'Device Preferences' section with a teal header. Below the header, there are two radio buttons: 'Current' (selected) and 'Historical'. Underneath, there is a 'Search by:' section with two radio buttons: 'MAC Address' (selected) and 'Name'. At the bottom, there is a text input field containing the placeholder text 'XX:XX:XX:XX:XX:XX'.

When you select *Current*, the screen displays all devices of the type selected in the **Device Type** field. This screen refreshes periodically.

When you select *Historical*, the screen expands to display a few more fields that you can use to select a particular period of time for which you want to view the devices for.

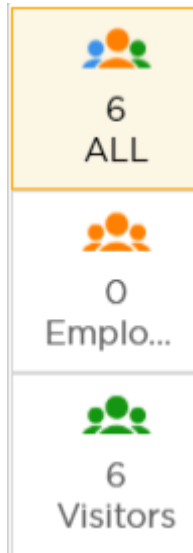
The screenshot shows the 'Device Preferences' section with a teal header. Below the header, there are two radio buttons: 'Current' and 'Historical' (selected). Underneath, there is a date picker showing '10/26/2020' with a calendar icon. Below the date picker, there are two time pickers: '18:00' and '19:00', each with a dropdown arrow. Underneath, there is a 'Search by:' section with two radio buttons: 'MAC Address' (selected) and 'Name'. At the bottom, there is a text input field containing the placeholder text 'XX:XX:XX:XX:XX:XX'.

If you want to filter to a particular device, you can use the **Search by** field to do so. You can search for a device using its MAC address or its name.

6. Use the **Device Classification** toolbar at the right of the map view to select the device types to display.

This toolbar changes when you change the device type selected in the **Device Type** control.

For example, the following toolbar displays when you select *Employee/Visitor*.

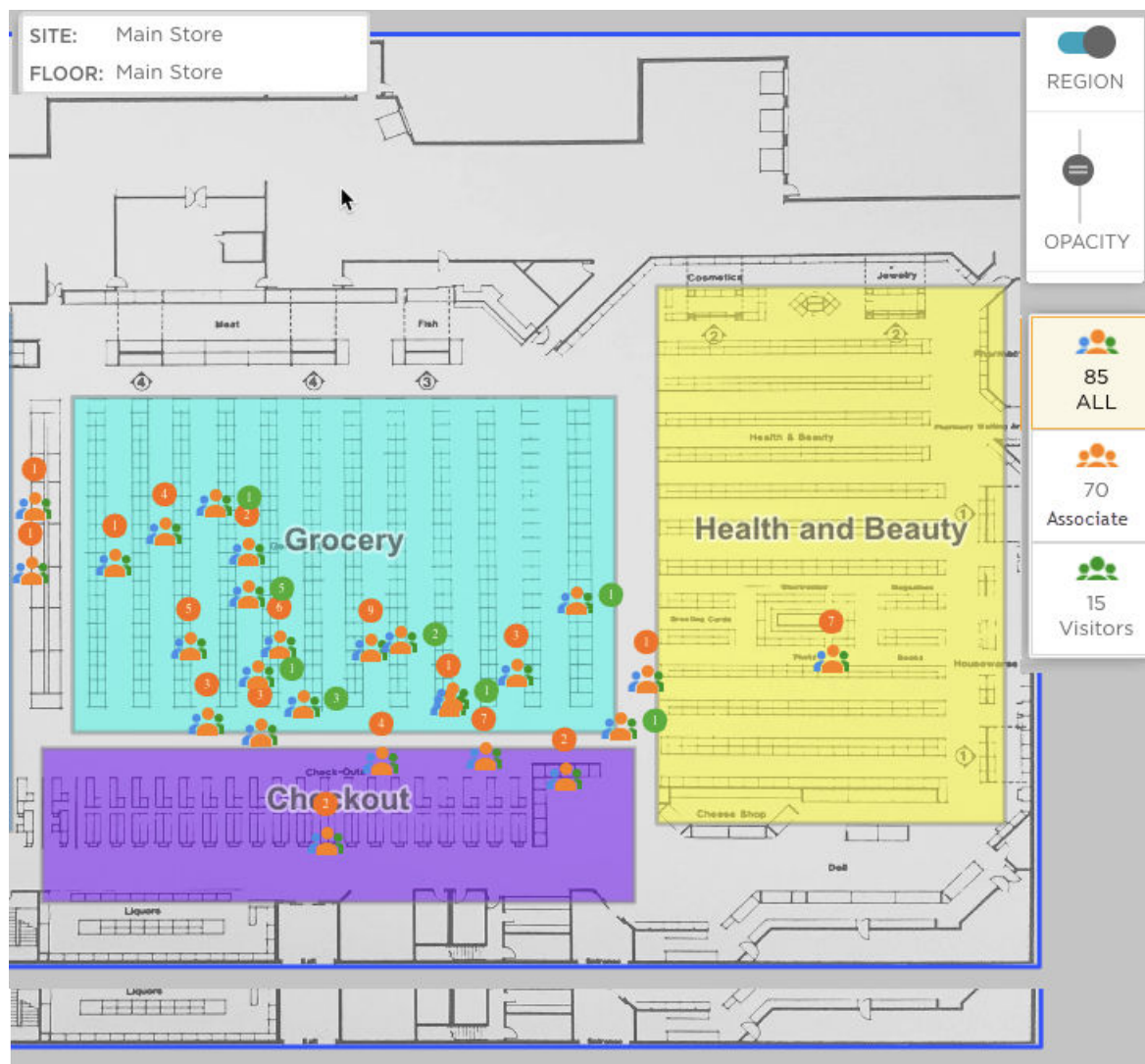


By default, the **Floors** view displays all the devices classified as *Employee/Visitor* that are seen on the floor.

The **Device Classification** toolbar enables you to quickly filter to the devices category you are interested in. The category labels are based on the Industry vertical that you have configured in ExtremeCloud IQ . For more information about Device Classifications, see [Device Classification Settings](#) on page 144.

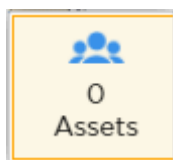
The screen refreshes to display the data for the selected device classification.

[Device View](#) on page 85 displays Associates and Visitors labels for the Retail vertical. Filter the display for Associates only, Visitors only, or show All devices.



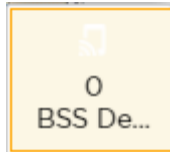
**Figure 43: Client Retail View - All Devices Displayed**

When you choose *Assets* from the **Device Type** drop-down list, the screen refreshes to display the tracked assets.



Hover over an Asset device icon on the site map to display the Hostname or Asset Name and Username details.

When you choose *BSS*, the screen refreshes to display only those devices that broadcast themselves as capable of creating a hotspot within your network.



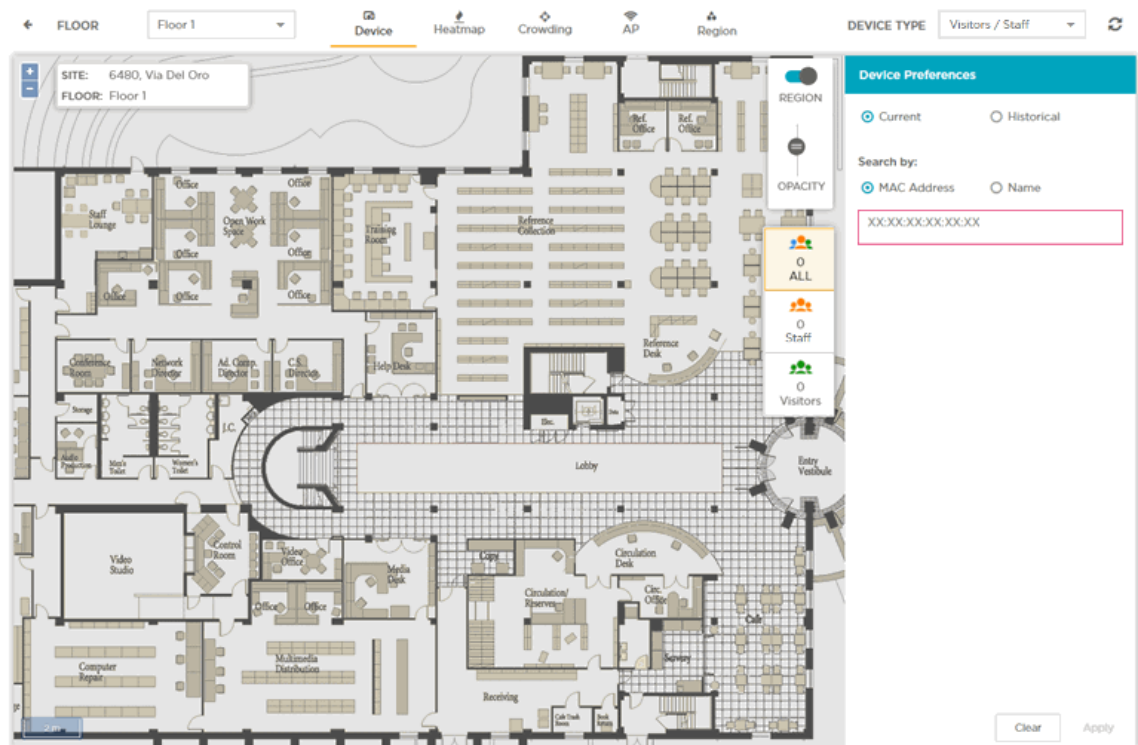
7. Select **Current** from the user interface and provide the MAC address of the device of interest in the text box. You can also search for multiple devices using their MAC address. Keep adding the devices to this list. Select **Apply** to fetch the data for the device.

The screen refreshes to display data for the selected MAC address or addresses, with the specified device marked on the floor map.



#### Note

If the system cannot triangulate a device within 60-120 seconds, then the last known position of the device can display on the map using the past 48 hours of locate data. The time of the last known position displays when you hover over the device.



**Figure 44: Locate Device Using MAC Address**

At any time, select **Clear** to clear the search results.

8. Select **Historical** from the user interface to display historical data for a device. Once done, select **Apply** to fetch the data for the device.

Provide the following additional parameters:

#### Date

Use the calendar control to select the date to fetch the data for.

### Time From

Use the drop-down list to select the hour from which data should be fetched for the date specified in **Date** field. You can edit the minutes for this field by typing the value.

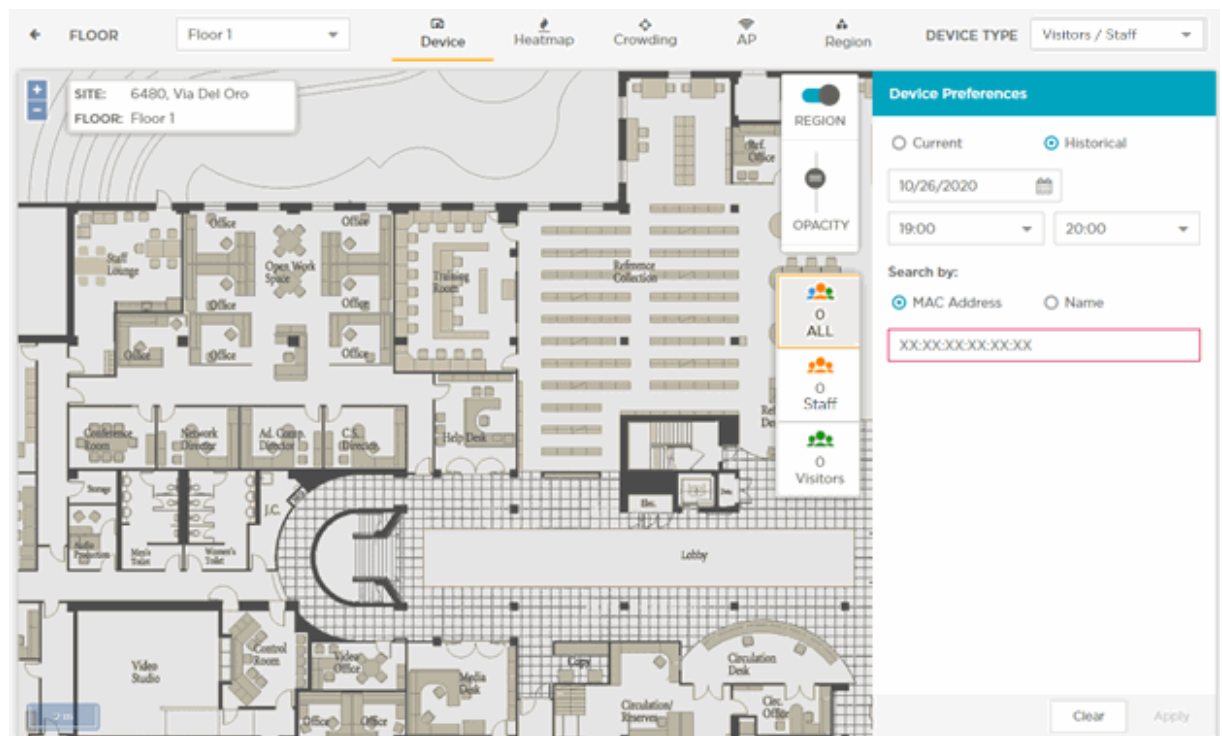
### Time Till

Use the drop-down list to select the hour till which data should be fetched for the date specified in **Date** field. You can edit the minutes for this field by typing the value.

### MAC Address

Enter the MAC Address of the device of interest.

The screen refreshes to display data for the selected MAC address, with the specified device marked on the floor map. You can also view historical data for multiple devices using their MAC addresses.



**Figure 45: Historical Device Data Using MAC Address**

At any time, select **Clear** to clear the search results.

## Heatmap View

The **Heat Map** view displays a visual representation of device activity on the floor using color gradation indicating areas with heavy activity to areas of low or no activity.



### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



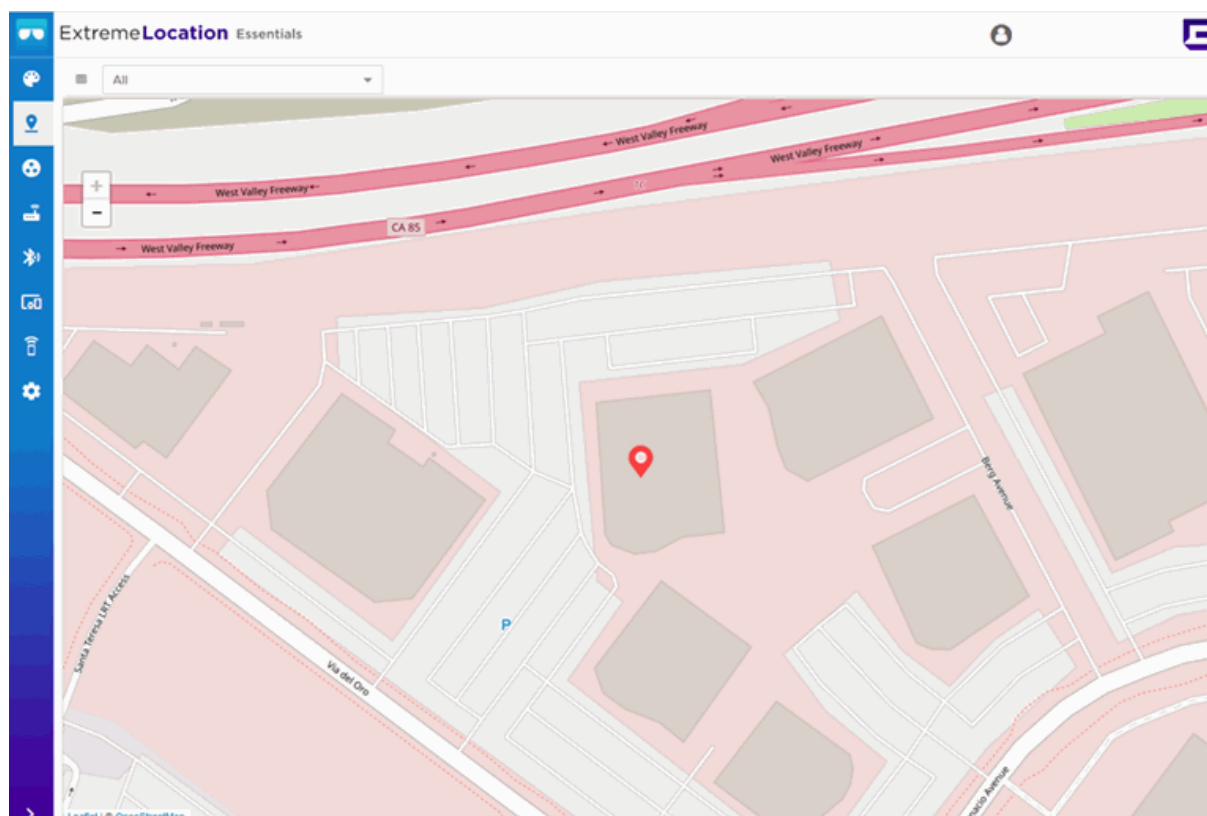
### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

To view the heat map:

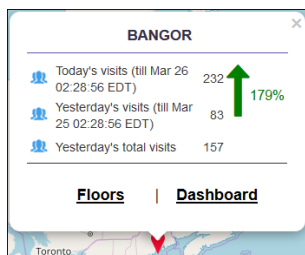
1. Select **Sites** from the main menu.

The **Sites** screen displays.



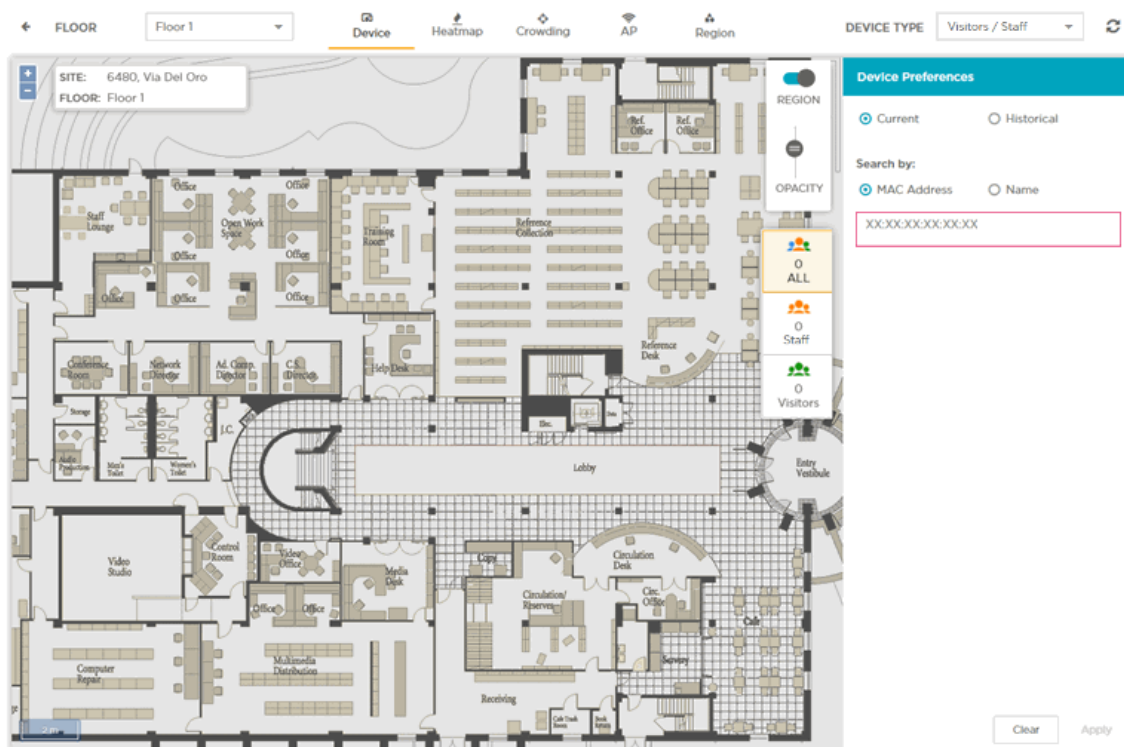
**Figure 46: Sites Screen**

2. Select your local site from the **Map**.  
The site's information is displayed.



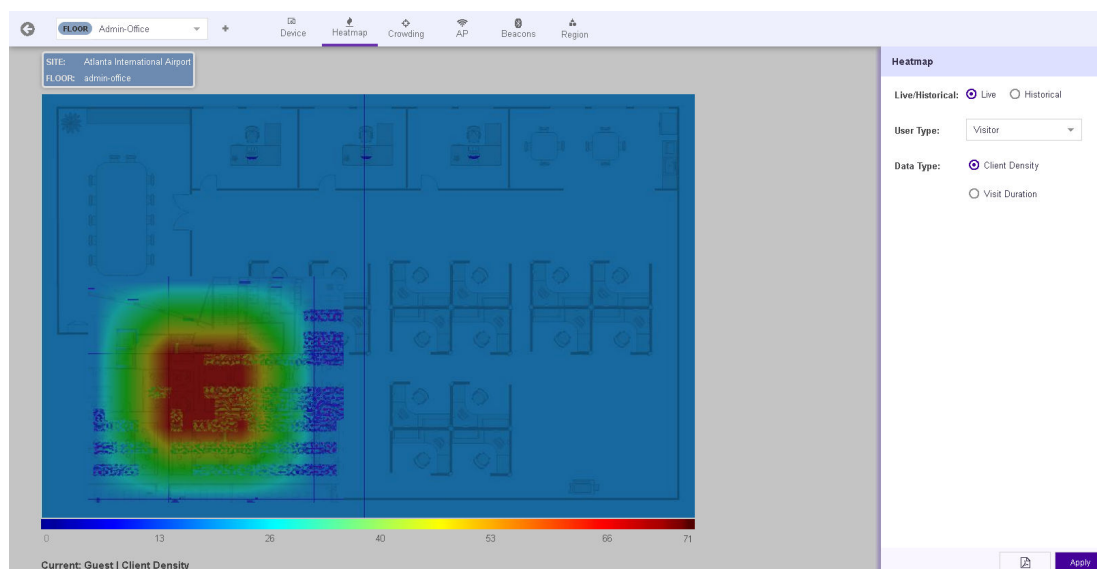
**Figure 47: Site Information Dialog**

3. Select **Floors**.  
The **Sites** screen displays the default floor for this site.



**Figure 48: Floor Map**

4. Select **Heatmap** from the toolbar.  
The following Heatmap screen displays.



**Figure 49: Maps Screen - Heatmap**

By default the **Heatmap** area displays live Client Density heatmap for visitors. The heatmap is color graded ranging from the color BLUE to the color RED where the color BLUE indicates no visitors and the color RED indicates maximum density of visitors. A scale is displayed below the heat map to indicate the number of visitors and the colors that represent these numbers.

5. From the **Heatmap** area, select the criteria to display the heatmap data.  
Configure the following top level parameters to view the heatmaps:

#### Live

Select this option to display the live heatmap on the screen. Use the **Device Type** and **Data Type** fields to fetch the required data for the heatmap.

#### Historical

Select this option to display the historical heatmap on the screen. Use the **Date**, **Device Type** and **Data Type** fields to fetch the required data for the heatmap.

6. Select **Live** option to display the live data on the heatmap.

The **Heatmap** screen displays the **Visitors** vs **Client Density** data by default.

Configure these additional parameters to customize the data to display on this screen:

#### User Type

Lists the user type to show on the heatmap. Select the appropriate user type from the drop-down list.

#### Data Type

Select the appropriate option to one of the two available data types.

#### Client Density

Select this option to view client density data for the selected **Device Type**.

#### Visit Duration

Select this option to view visit duration data for the selected **Device Type**.

7. Select **Historical** option to display historical data on the heatmap.

The **Heatmap** screen displays the **Visitors vs Client Density** data by default for the previous day. Previous day is one day before today.

Configure these additional parameters to customize the data to display on this screen:

#### Date

Use the calendar control to set the date for which to display historical data.



#### Note

Historical data is available for one eighty days (180) days before today.

#### User Type

Lists the user type to show on the heatmap. Select the appropriate user type from the drop-down list.

#### Data Type

Set the data type value to one of the two available options.

#### Client Density

Select this option to view client density data for the selected **Device Type**.

#### Visit Duration

Select this option to view visit duration data for the selected **Device Type**.

8. Select **Apply** to fetch the data for the defined criteria.

Use the  button to export the heatmap as a *Portable Document Format* (PDF) file.

The **Heatmap** screen displays hourly maps for this floor from 00:00 hours till 23:59 hours for the selected day. This will be repeated till you exit the screen or change the parameters and select **Apply** again.

## Crowding View

The **Crowding** screen shows a visualization of crowding events by region on a floor plan.

Crowding events occur when the ratio of number of visitors to number of staff in a category or a zone exceeds the minimum threshold value configured for that category or globally at the site level.



#### Note

Global crowding configuration is set from the **Settings > Crowding** screen. This setting is overridden by the crowding setting at the Category level.

**Note**

The Crowding event is cleared when:

- the ratio between the number of visitors to the number of staff goes below the configured setting.
- the number of visitors to the category goes below the configured threshold as the visitors move away from the category.

When the time specified in the **Event Time Out** field under the **Settings** > **Crowding** screen elapses, the presence of this event is again polled for. If the event is cleared, then this alert is removed from the floor map.

**Note**

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

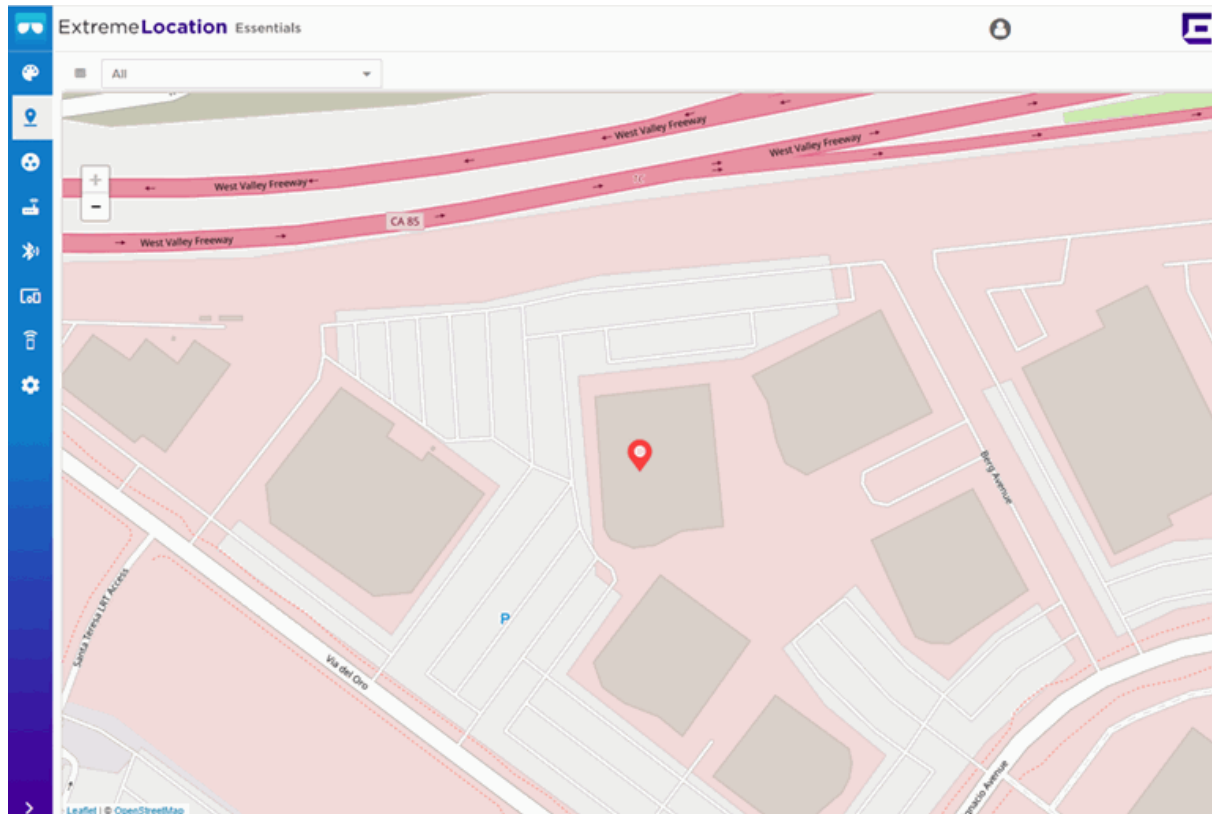
**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

To access the Crowding View:

1. Select **Sites** from the main menu.

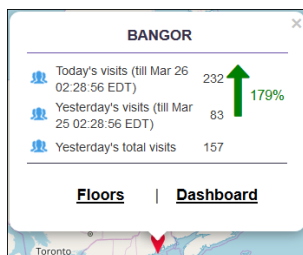
The **Sites** screen displays.



**Figure 50: Sites Screen**

2. Select your local site from the **Map**.

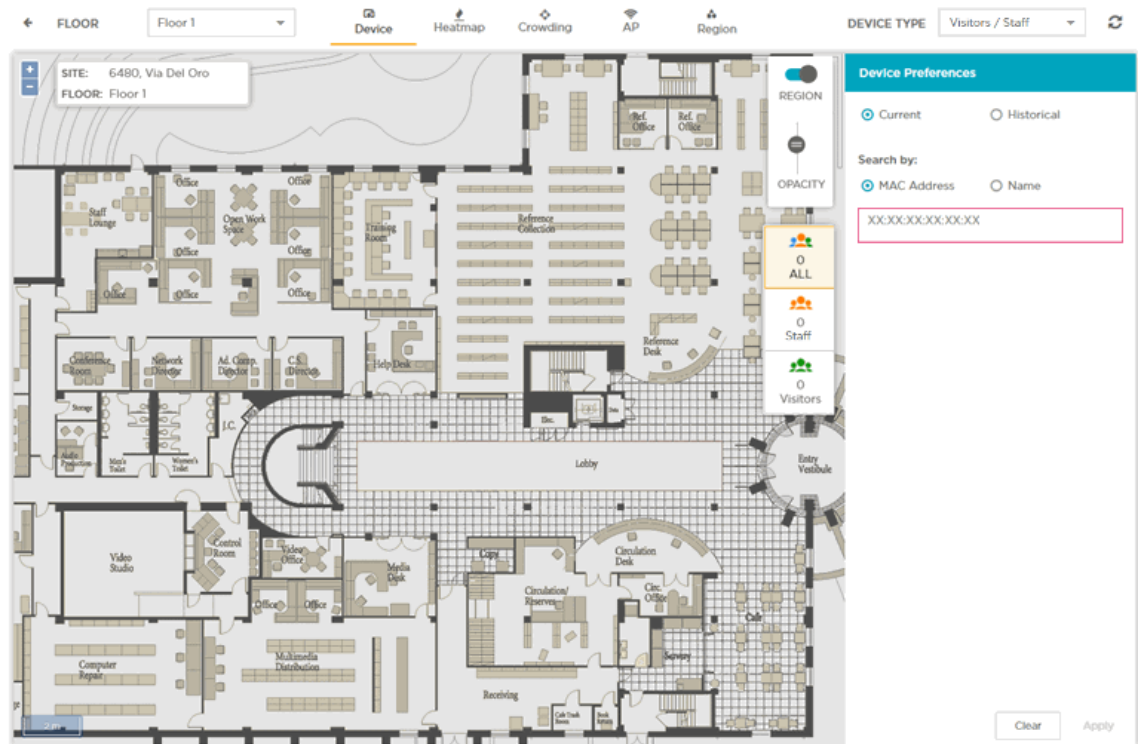
The site's information is displayed.



**Figure 51: Site Information Dialog**

### 3. Select **Floors**.

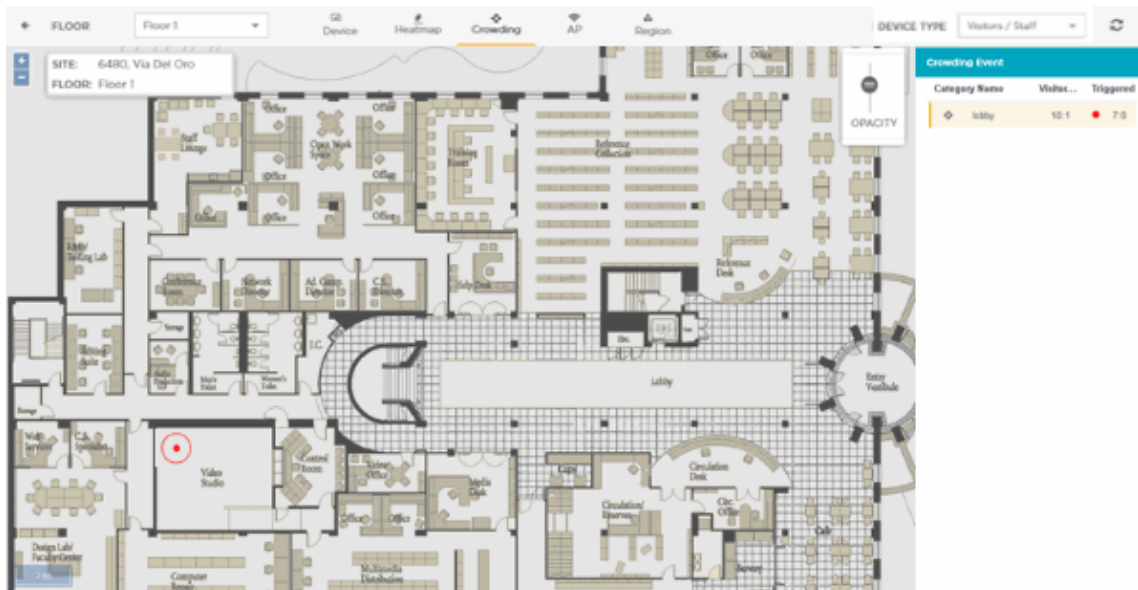
The **Sites** screen displays the default floor for this site.



### Figure 52: Floor Map

4. Select **Crowding** from the toolbar.

The **Crowding Events** screen displays.



### Figure 53: Crowding Events on Floor

5. Use the **Device Type** drop-down, to select the device type to view the crowding event for. You can view crowding events for devices classified as *Visitors/Staff*.  
The screen immediately refreshes to display the appropriate details.

## AP View

---

The **AP** screen displays all APs on a floor on the floor map. Use this screen and controls to filter and view the different APs for a floor in a site within your ExtremeLocation Essentials managed network.

**Note**

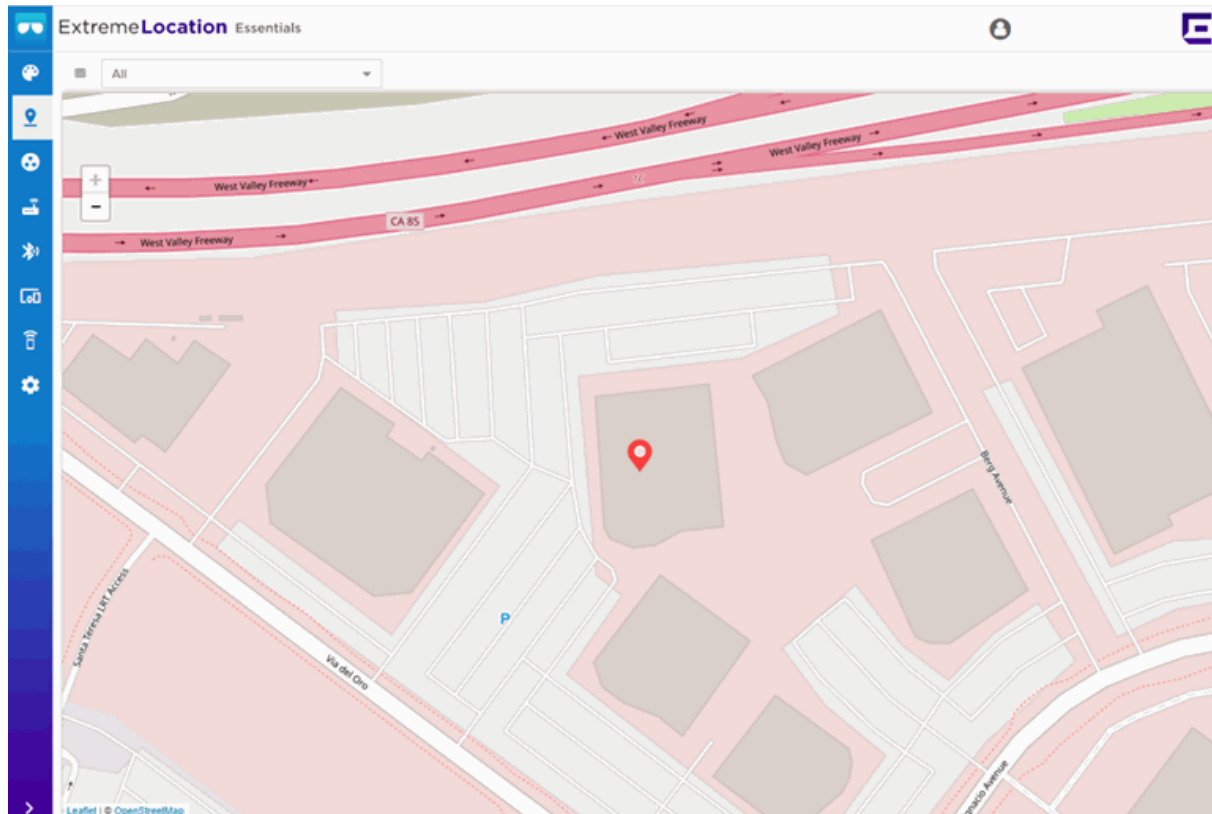
If client data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

**Note**

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

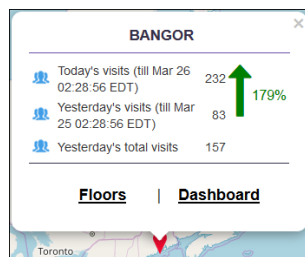
To view device details for a floor:

1. Select **Sites** from the main menu.  
The **Sites** screen displays.



**Figure 54: Sites Screen**

2. Select your local site from the **Map**.  
The site's information is displayed.



**Figure 55: Site Information Dialog**

3. Select the **Floors** link to display the **Floor View**.
4. Select **AP** from the toolbar.  
Refer to topic [Common Tools](#) on page 84 for information on the other tools available for use in the **Sites** screens.

The AP screen displays.

5. From the **Floor Preferences** area of the screen, select the criteria to display the AP data.

Configure the following top level parameters to view the APs:

#### MAC Address

Enter a specific MAC address of an access point to display on the screen.

#### Mac

Select a MAC address from the **Mac** drop down menu.

#### Category

Select a category from the **Category** drop down menu.

For more information about how to manage and use Categories, see [Categories](#) on page 109.

#### Zone Threshold

Select a zone threshold from the **Zone Threshold** drop down menu.

For more information about how to manage and use Thresholds, see [Threshold Configuration and Management](#) on page 148.

6. Select **Save** to view the AP data for the defined criteria, OR select **Reset** to clear the AP data.

## Region View

The **Region** view displays a visual representation of user-defined regional areas on the floor map. You can add, edit, and delete regions from the Region view.



#### Note

If client data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



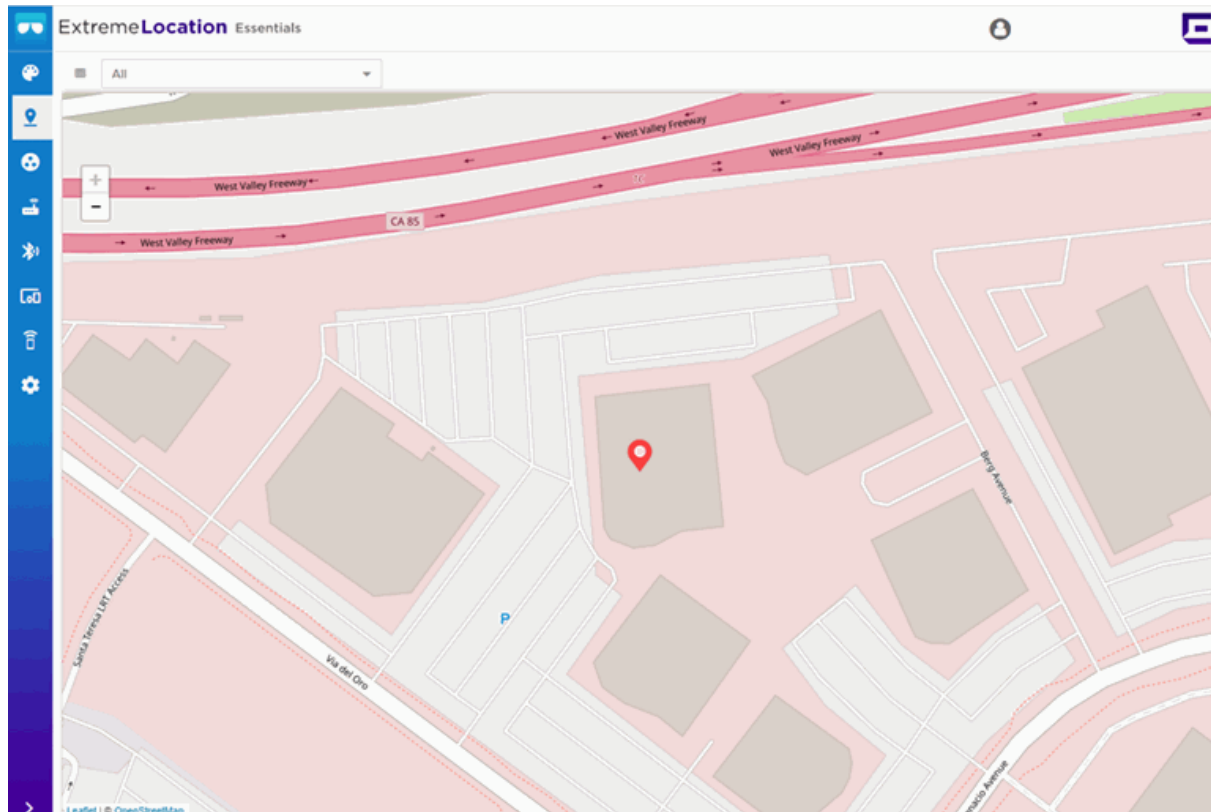
#### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

To configure a region:

1. Select **Sites** from the main menu.

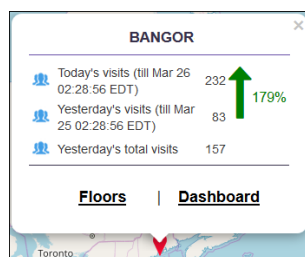
The **Sites** screen displays.



**Figure 56: Sites Screen**

2. Select your local site from the **Map**.

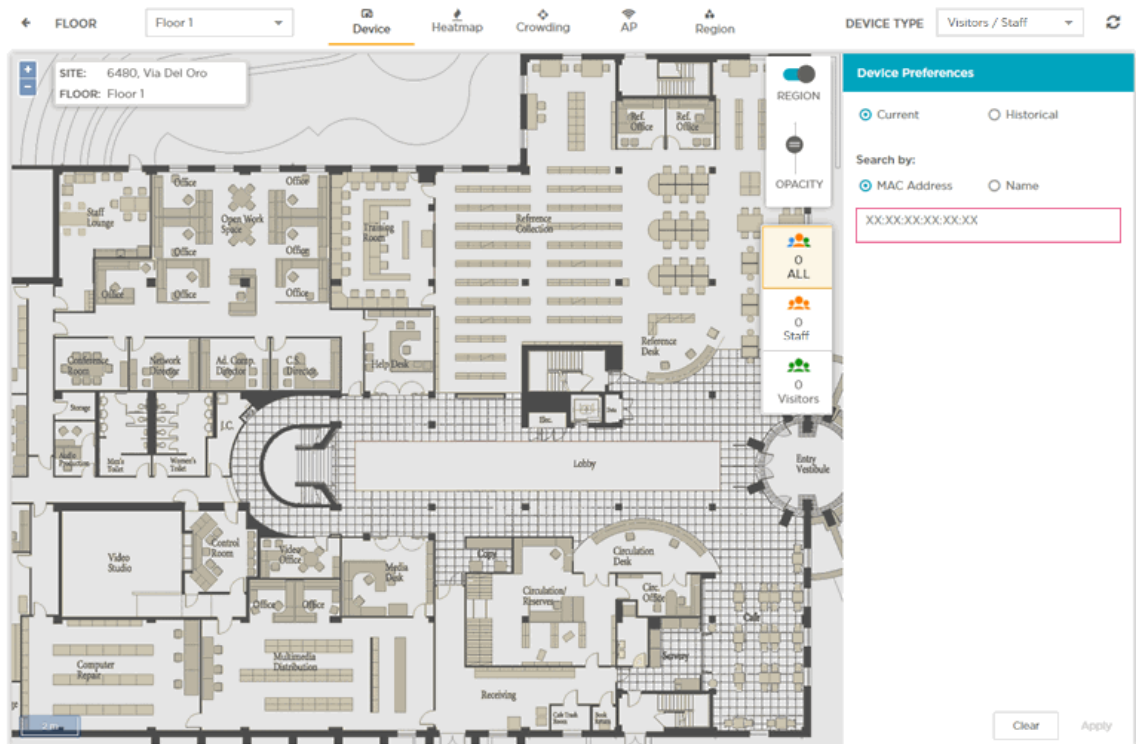
The site's information is displayed.



**Figure 57: Site Information Dialog**

### 3. Select **Floors**.

The **Sites** screen displays the default floor for this site.



### Figure 58: Floor Map

4. Select **Region** from the toolbar.
5. Select **Add Region** from the **Region Preferences** area.
6. Enter a region name into the **Region Name** field.
7. Select a region color from the **Color** field drop down menu, and select **OK**.

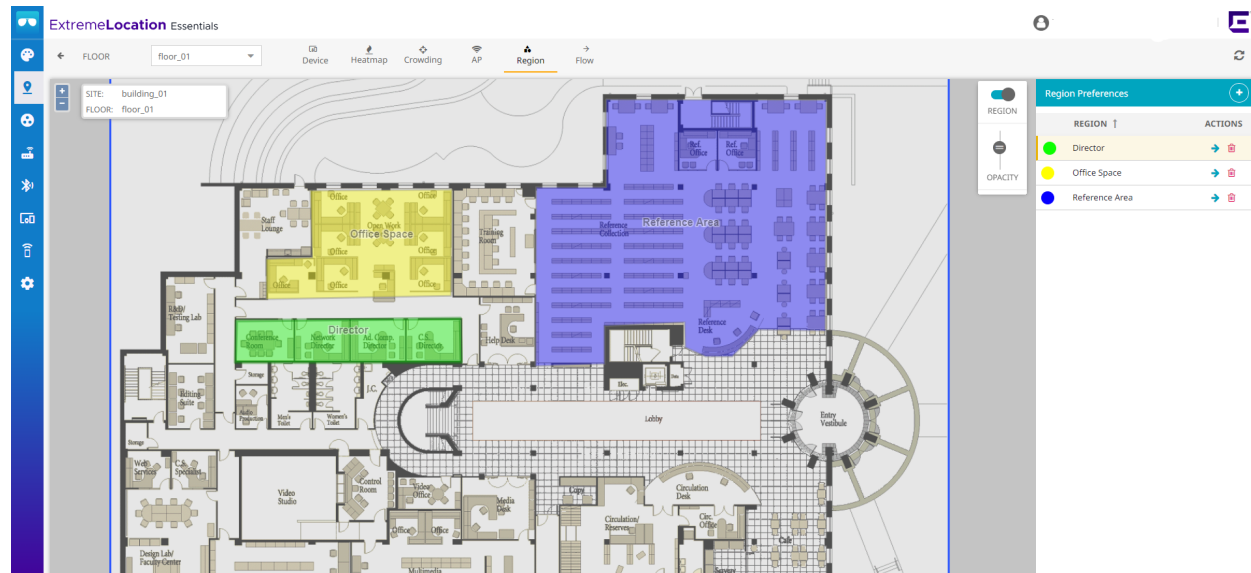


### Note

You can use the color selectors or hexadecimal to create a custom region color.

8. Select a region category from the **Category** drop down menu (OPTIONAL).  
For more information about how to manage and use Categories, see [Categories](#) on page 109.
9. Move your cursor over the Floor Map to show the drawing pen tool.
  - a. Click once on the floor map at the starting point where you want to start drawing a region polygon.
  - b. Move your cursor to the next point on the floor map that you want the region polygon to cover. A line follows your cursor.
  - c. Click to draw a line between the two points. Move your cursor to the next point you require to continue building a region polygon.

- d. Use point to point to point clicks to continue to draw lines to build a region polygon in the shape you require to cover a region on the floor map.
- e. Click at the start point to complete the final line, and the region polygon color changes from solid to opaque to indicate completion. Your last line to complete a region polygon must return to the start point to complete the region polygon drawing.



**Figure 59: Region Polygons Drawn on a Floor Map**



#### Note

Single point undo is not available while drawing the region polygon. While drawing a region on the floor map a solid color polygon follows your cursor. If you make a mistake you can double-click to stop active drawing, then click **Reset** to erase the incorrectly drawn region polygon, and also clear the new region fields. You can now restart the new region steps and draw again. The best practice is to keep region drawn areas separated and to not overlap region polygons.

10. Select **Save**.

The **Region View** is shown on the floor map with the user-defined region colors and names displayed. You can use the **REGION** toggle to display or hide the regions, or the **OPACITY** slider to increase or decrease region color transparency. You can edit or delete regions from the Region Preferences area **ACTIONS** column.

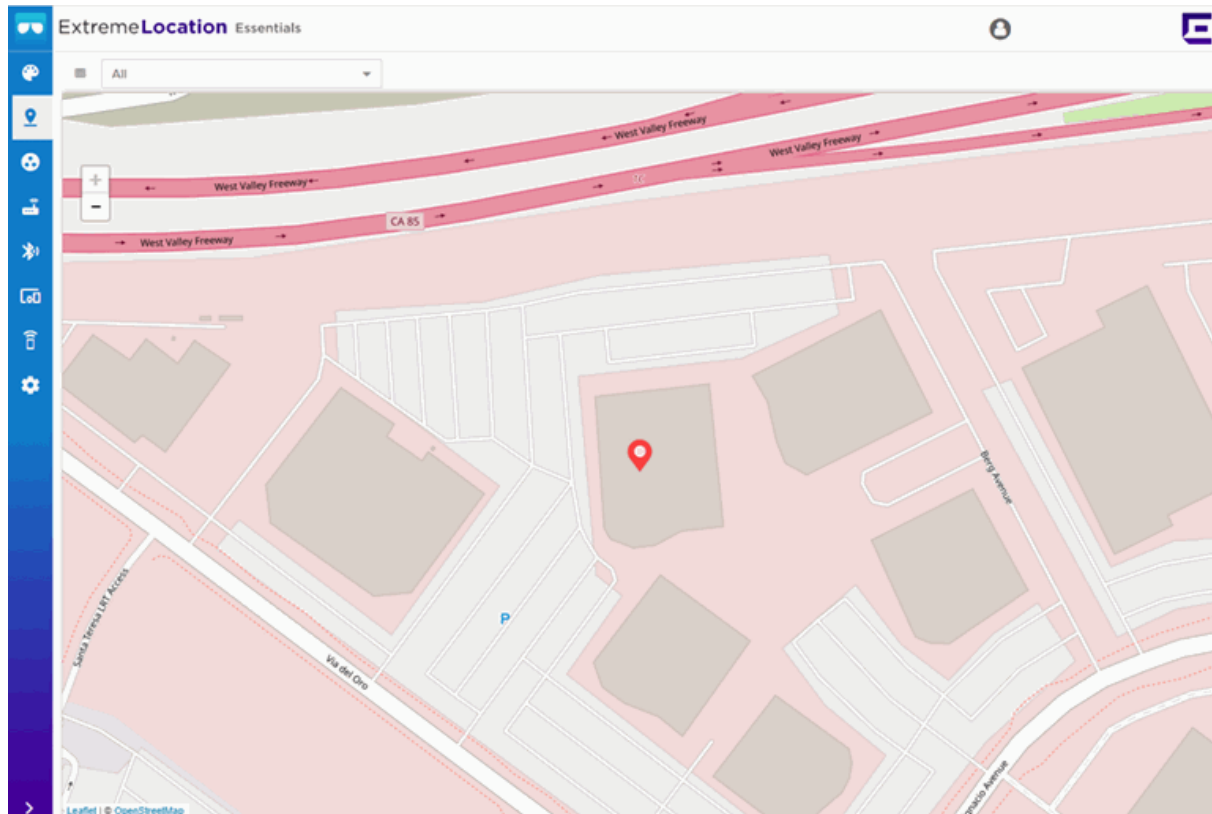
## Flow

**Flow** (Zone Flow) is the ability to visualize traffic over a period of time between regions drawn on a floor plan.

To access the Flow view:

1. Select **Sites** from the main menu.

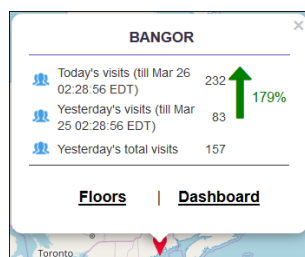
The **Sites** screen displays.



**Figure 60: Sites Screen**

2. Select your local site from the **Map**.

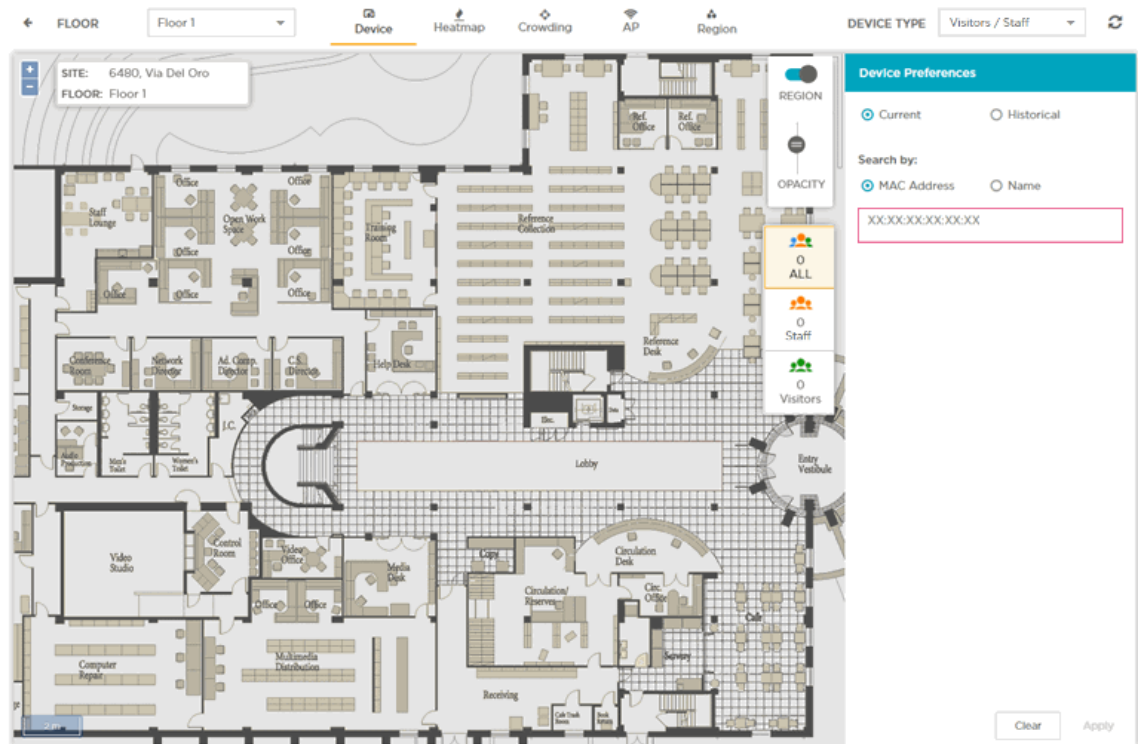
The site's information is displayed.



**Figure 61: Site Information Dialog**

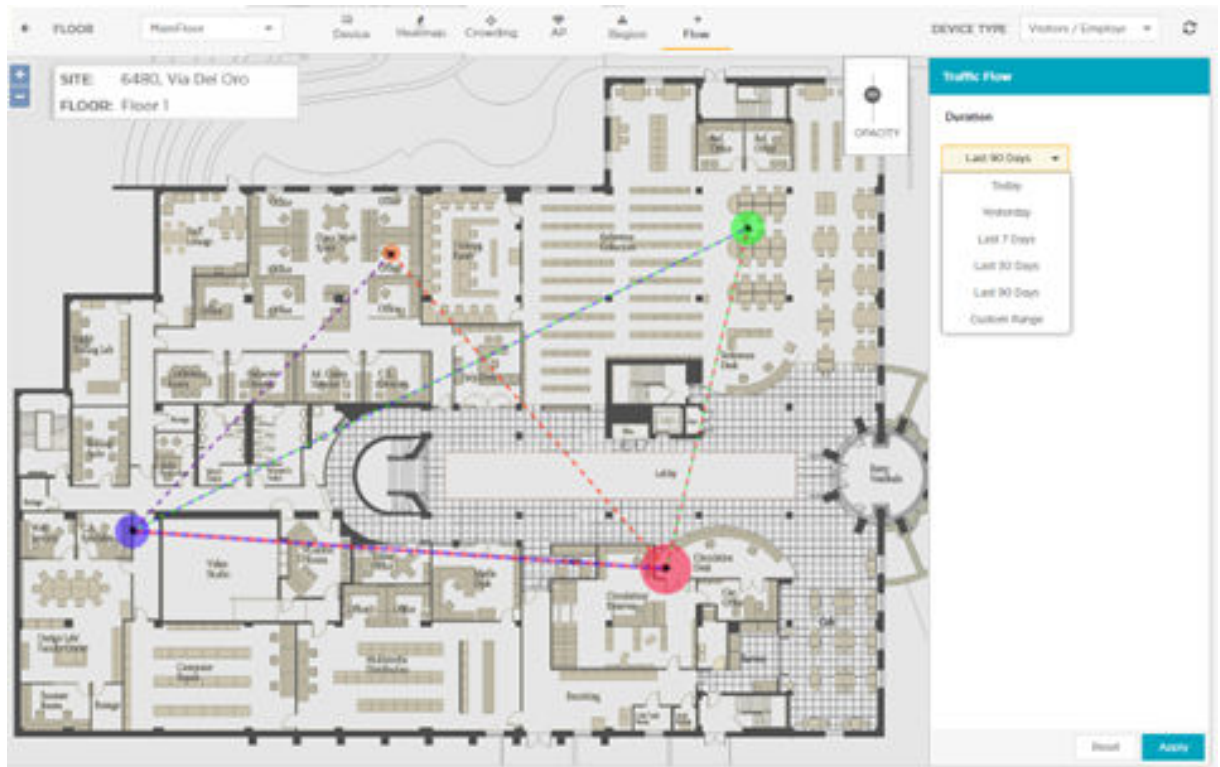
### 3. Select **Floors**.

The **Sites** screen displays the default floor for this site.



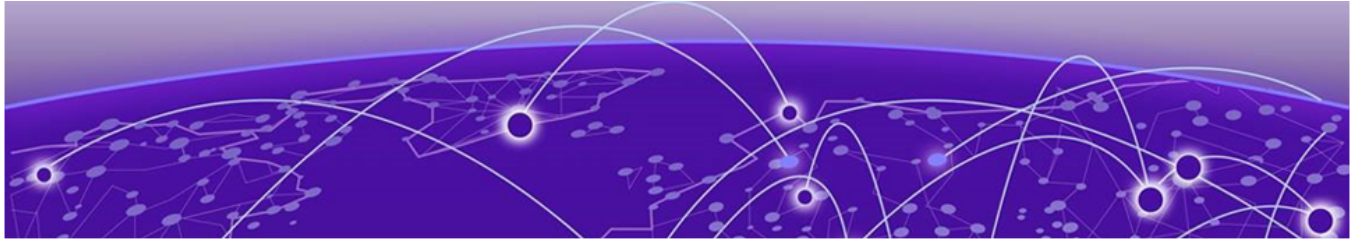
### Figure 62: Floor Map

4. Select **Flow** from the toolbar.  
The **Flow** screen displays.



**Figure 63: Sites Screen - Flow**

5. Select a time range to view from **Duration**. You can select a time range to analyze up to the last 90 days or enter a custom range.



# Categories

---

[Engagement Category](#) on page 110

[Asset Category](#) on page 113

ExtremeLocation Essentials enables you to categorize your physical areas and assets into logical groupings for ease of management.



## Note

If client data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



## Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

Use the *Engagement Category* grouping to create zones within your sites and use the categories to engage with your customers. You can use these categories to run analysis and for improving your business intelligence. Engagement Category is also defined as a logical region on a floor on which you can run user engagement activities.

For more information on how to manage and use Engagement Categories, see the topic [Engagement Category](#) on page 110.

For more information on how to create new Engagement Categories, see the topic [Add an Engagement Category](#) on page 111.

Use the *Asset Category* grouping to group and manage your tracked assets. Use this grouping to collect and manage similar assets for effective tracking management. Use the *Asset Category* grouping to group devices based on their restrictions or permissions, their device types, how they are tracked (BLE/Wi-Fi), and any other combination that is needed for your unique requirements.

For more information on how to manage and use Asset Categories, see the topic [Asset Category](#) on page 113.

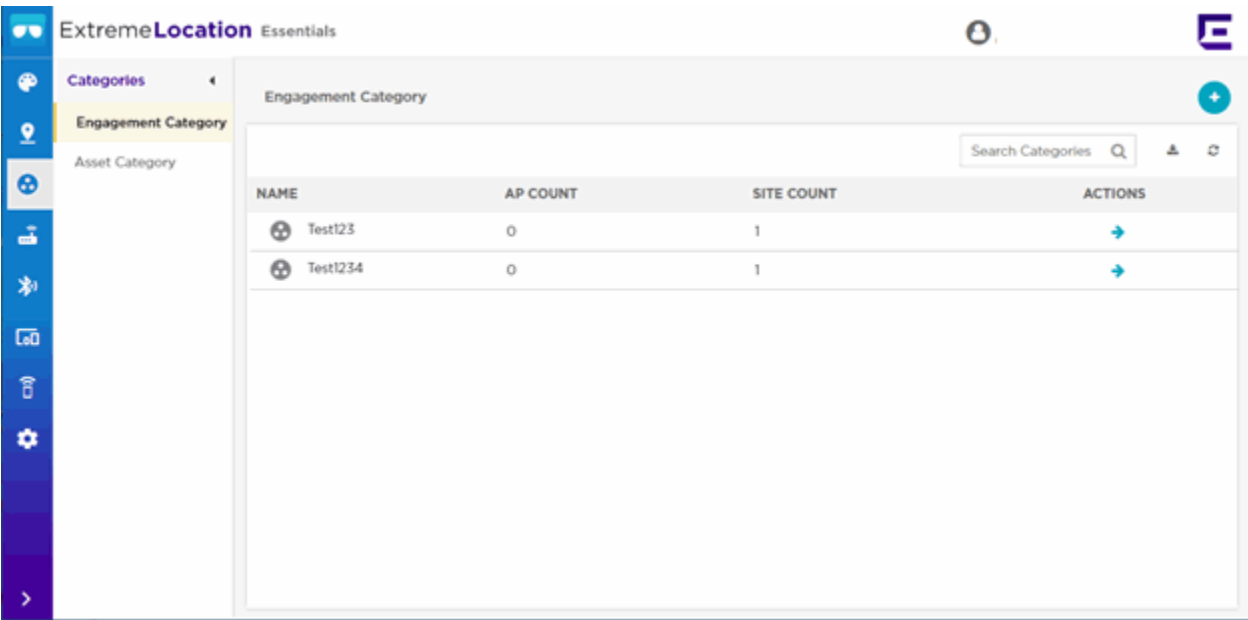
For more information on how to create a new Asset Category, see the topic [Add an Asset Category](#) on page 115.

## Engagement Category

In ExtremeLocation Essentials, an Engagement Category is defined as a logical region on a floor on which you can run analytics and user engagement activities.

Use the  icon to view the **Category** screen.

By default the **Engagement Category** screen displays. This screen displays a list of categories that you have defined for engaging with your visitors. ExtremeLocation Essentials also uses these categories for analysis of visitor flow when using Wi-Fi tracking.



**Figure 64: Engagement Category**

The **Engagement Category** screen displays the following information:

| Field      | Description                                                                                                                                                                                                               |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name       | Displays the name of the category.                                                                                                                                                                                        |
| AP Count   | Displays the number of access points to which this category is assigned.                                                                                                                                                  |
| Site Count | Displays the number of sites that have used this category.                                                                                                                                                                |
| Actions    | Lists the actions that can be performed on this category entry. Select the  icon to view this category's details in a separate screen. |

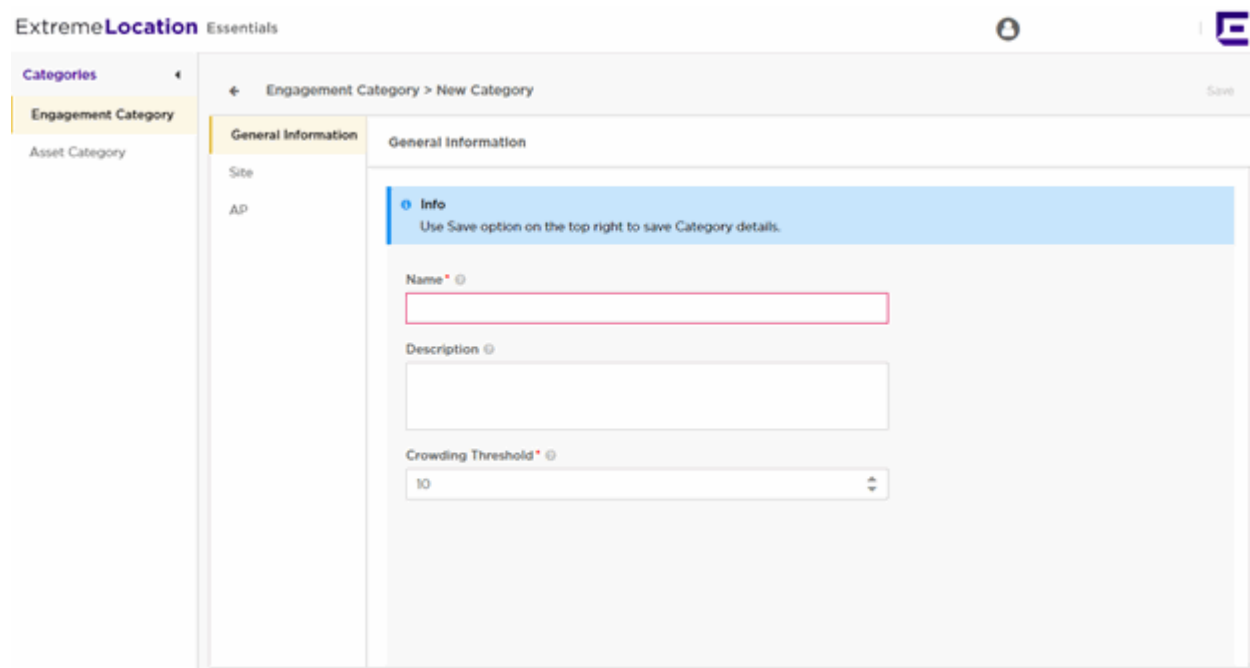
Periodically use the  button to refresh this screen manually.

Use the  icon to download the categories listed in this screen in a .csv file.

### Add an Engagement Category

To create a new engagement category:

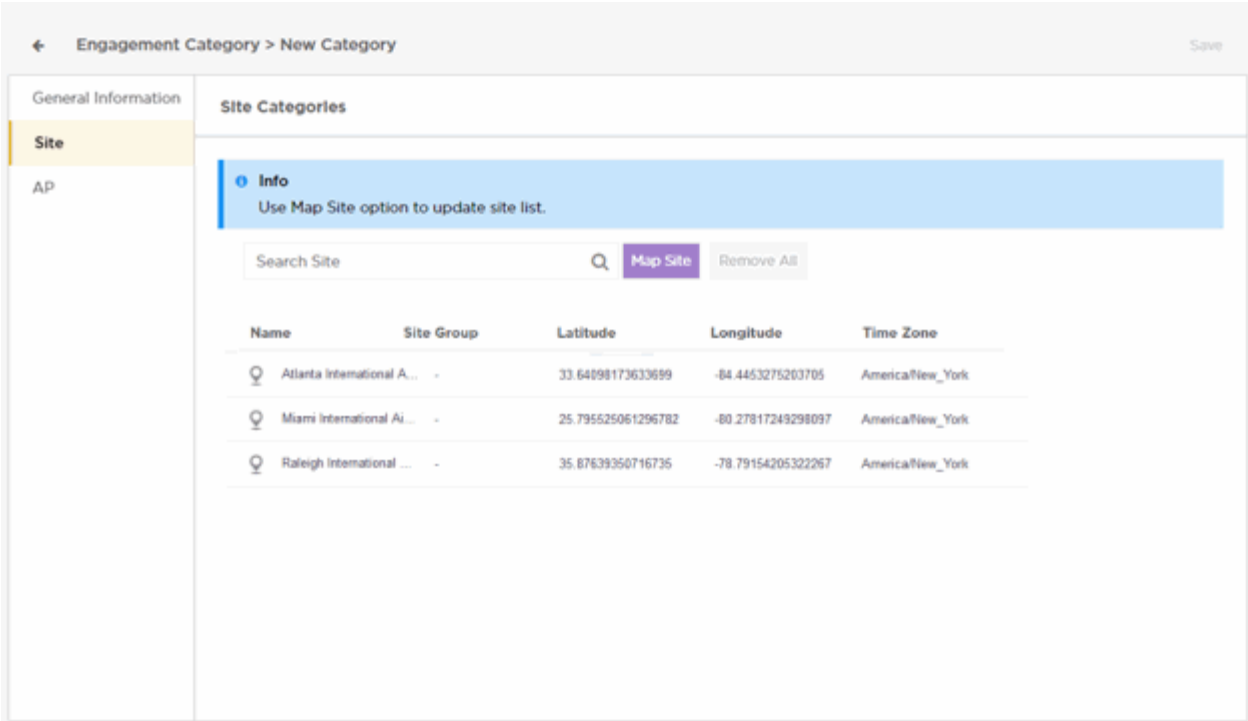
- 1. Use the  icon to add a new engagement category.  
A new Engagement Category is created and the following screen displays.



Enter the following information for the new category:

| Field              | Description                                                                                                                                                                                                                                                                                     |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name               | Enter a name for this category. The name should be such that it identifies the category among other similar ones.                                                                                                                                                                               |
| Description        | Enter a brief description about this category. Use this space to provide more information about this category.                                                                                                                                                                                  |
| Crowding Threshold | Use this spinner to set the crowding threshold for this category. When this threshold exceeds, a crowding event is generated for this category. A crowding event is generated when the ratio of the number of visitors to the number of staff assigned to this category exceeds this threshold. |

- 2. Select the **Save** button to save the changes made to the **General Information** screen. At any time, select the **Cancel** button to exit without creating the category.
- 3. Select the **Site** menu item.  
The **Site Categories** screen displays.



The following information is displayed:

| Field      | Description                                                                                               |
|------------|-----------------------------------------------------------------------------------------------------------|
| Name       | Displays the name of the site attached to this category.                                                  |
| Site Group | If the site is associated with a site group, then that site group name or names are listed in this field. |
| Latitude   | Displays the latitude of the physical location of this site.                                              |
| Longitude  | Displays the longitude of the physical location of this site.                                             |
| Time Zone  | Displays the local time zone at this site.                                                                |

Use the **Map Site** button to map sites to this category.

- 4. Select the **Save** button to save the changes made to the **Sites** screen.
- 5. Select the **AP** menu item.

The **Access Point Categories** screen displays.

The following information is displayed.

| Field      | Description                                                                                                            |
|------------|------------------------------------------------------------------------------------------------------------------------|
| AP MAC     | Displays the MAC address of this access point.                                                                         |
| Host Name  | Displays the host name assigned to this access point. If the host name is not assigned, shows a blank entry.           |
| Site Name  | Displays the name of the site where this access point is deployed.                                                     |
| Floor Name | Displays the name of the floor where this access point is deployed.                                                    |
| Last Seen  | Displays the timestamp when this access point was last seen by ExtremeLocation Essentials system.                      |
| Status     | This field provides a visual indication about the access point. A Green dot indicates that the Access Point is active. |

## Asset Category

For ExtremeLocation Essentials, an Asset is a physical device or item that your company wishes to track. It could be some device that is critical in nature and the absence of knowledge about its whereabouts has the potential to cause financial damage. It could be a device that is mobile and expensive to re-stock if lost.

ExtremeLocation Essentials enables you to track such critical or costly assets within your sites using BLE or using the device's WiFi radio. The *Asset Tracking and Management* feature enables you to locate a tracked asset within your site. This feature also has an ability to raise alarms if your tracked asset moves out of its designated area or enters an area where it is prohibited to enter. It can also raise an alarm if the asset that you track is not seen within your site for a configured period of time.

ExtremeLocation Essentials enables you to track assets using the asset's own WiFi radio or by using an external BLE beacon attached to the asset.

When using a BLE beacon to track an asset, you must onboard the BLE beacon, classify it as an asset, and then physically attach that BLE beacon to the asset that needs to be

tracked. ExtremeLocation Essentials will then map the tracked BLE beacon, indicating the asset, on the floor map of the site.

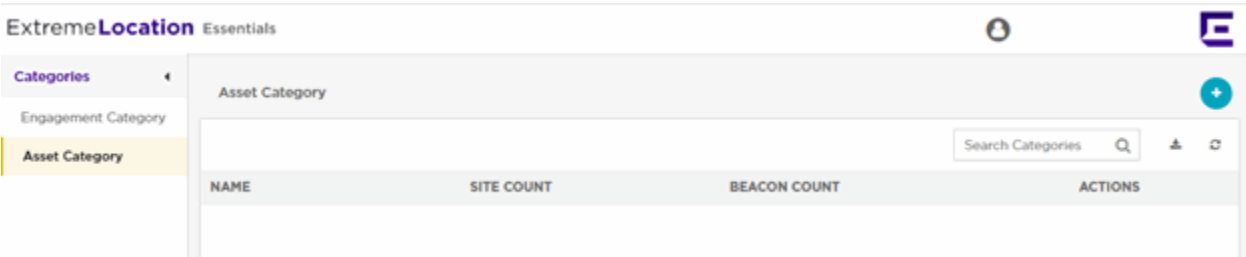
If your asset has inbuilt WiFi radio, then you can configure ExtremeLocation Essentials to track the MAC address of that asset's radio. ExtremeLocation Essentials will then map the tracked asset on the floor map of the site.

Assets must be classified into groups for ease of maintenance and applying policies on a group of devices. Once you have created your asset categories, they must be assigned to the sites where you need your asset tracked. Also, your asset's radio or the BLE beacon that is attached to your asset, must be included within this group.

Use the  icon to view the **Category** screen.

By default the **Engagement Category** screen displays. This screen displays a list of categories that you have defined for engaging with your visitors.

Select the **Asset Category** menu item from the list on the left of the screen. The **Categories** screen displays a list of all asset categories defined for your ExtremeLocation Essentials account.



The **Categories** screen displays the following information:

| Field        | Description                                                                                                                                                                                                               |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name         | Displays the name of the category.                                                                                                                                                                                        |
| Site Count   | Displays the number of sites that have used this category.                                                                                                                                                                |
| Beacon Count | Displays the number of BLE beacons to which this category is assigned.                                                                                                                                                    |
| Actions      | Lists the actions that can be performed on this category entry. Select the  icon to view this category's details in a separate screen. |

Periodically use the  button to refresh this screen manually.

Use the  icon to download the categories listed in this screen in a .csv file.

Add an Asset Category

To create a new asset category:

- 1. From the **Asset Categories** screen, use the  icon to add a new asset category. A new Asset Category is created and the following screen displays.

Enter the following information for the new category:

| Field       | Description                                                                                                                              |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Name        | Enter a name for this asset category. The name should be such that it identifies this category among other similar ones.                 |
| Description | Enter a brief description about this category. Use this space to provide more information about this category, its use, and its purpose. |

- 2. Select the **Save** button to save the changes made to the **General Information** screen. At any time, select the **Cancel** button to exit without creating the category.
- 3. Select the **Beacon Defaults** menu item  
The **Beacon Default** screen displays.

Asset Category > New Category Save

General Information

**Beacon Defaults**

Site

Beacons

**Info**  
Use Save option on the top right to save Category details.

**General Settings**

Advertisement Interval (ms)  ⓘ

RSSI  ⓘ

UUID  ⓘ

**Broadcast Settings**

Broadcast Types  ⓘ

iBeacon

The following are the **Beacon Defaults** configuration:

| Field                       | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Advertisement Interval (ms) | Set the duration in milliseconds between two consecutive beacon broadcasts.                                                                                                                                                                                                                                                                                                                                                                                      |
| RSSI                        | This value (Received Signal Strength Indicator) is the strength of the beacon's broadcast. Select the signal strength using the RSSI value field. The default RSSI calibrated value is one meter.                                                                                                                                                                                                                                                                |
| UUID                        | The <b>UUID</b> is an ID is to distinguish iBeacons in your network, from all other <b>beacons</b> . ExtremeLocation Essentials configures twelve (12) unique regions for identifying beacons. Each beacon must be assigned one of these twelve regions. This unique value is used to facilitate the identification of a beacon within multiple categories that are next to each other. Use the drop-down list to select an appropriate region for the category. |
| Broadcast Types             | This setting is always set to <i>On</i> and cannot be modified. ExtremeLocation Essentials supports only the <i>iBeacon</i> format. <ul style="list-style-type: none"> <li>iBeacon - iBeacon is Apple™ proprietary beacon format. Select this option to indicate the beacon broadcasts in the iBeacon format.</li> </ul>                                                                                                                                         |

4. Select the **Save** button to save the changes made to the **Beacon Defaults** screen.
5. Select the **Site** menu item.

The **Site Categories** screen displays.

The following information is displayed:

| Field      | Description                                                                                               |
|------------|-----------------------------------------------------------------------------------------------------------|
| Name       | Displays the name of the site attached to this category.                                                  |
| Site Group | If the site is associated with a site group, then that site group name or names are listed in this field. |
| Latitude   | Displays the latitude of the physical location of this site.                                              |
| Longitude  | Displays the longitude of the physical location of this site.                                             |
| Time Zone  | Displays the local time zone at this site.                                                                |

Use the **Map Site** button to map sites to this category.

6. Select the **Save** button to save the changes made to the **Sites** screen.
7. Select the **Beacons** menu item.

The **Beacon Categories** screen displays.

The following information is displayed:

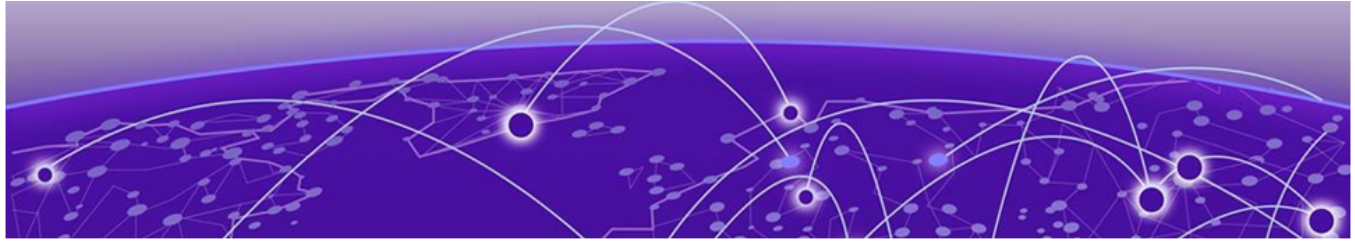
| Field       | Description                                |
|-------------|--------------------------------------------|
| Name        | Displays the name assigned to this beacon. |
| MAC Address | Displays the MAC address of this beacon.   |

| Field    | Description                                                               |
|----------|---------------------------------------------------------------------------|
| Site     | Displays the name of the site where this beacon is deployed               |
| Category | Displays the name of the category to which this beacon is associated.     |
| Interval | Displays the configured beacon broadcast interval for this beacon.        |
| UUID     | Displays the unique UUID assigned to this beacon.                         |
| RSSI     | Displays the RSSI value, which is the strength of the beacon's broadcast. |
| Status   | Displays the status of the beacon.                                        |

**Note**

You cannot add or modify beacons using this screen.

No beacons are displayed for this category as they have not been assigned this category yet.



# Access Points

---

[Access Point Status](#) on page 119

The **Access Points** screen displays a list of all access points used or available for use within the ExtremeLocation Essentials account. Access point information can be filtered based on search criteria to display only those access points that are of interest.

The Access Points screen can display live status for access points in a selected site or for all sites configured for the ExtremeLocation Essentials account.



## Note

If client data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



## Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

You can enable radio usage options for ExtremeLocation Essentials and for supported APs (305C) in ExtremeCloud IQ . You can select Client Access as the radio option to enable the service and access ExtremeLocation Essentials.

## Access Point Status

---

By default, the **Access Points** displays the live status of all access points (deployed or yet to be deployed) for all the sites managed by this ExtremeLocation Essentials account.



## Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.

To view the **Access Points** screen:

1. Select the  icon from the menu on the left.  
The **Access Points** screen displays.

| AP MAC           | SERIAL NUMBER  | AP MODEL | HOST NAME  | SITE NAME         | FLOOR NAME | LAST SEEN | STATUS | ACTIONS |
|------------------|----------------|----------|------------|-------------------|------------|-----------|--------|---------|
| ff:c5:2e:2b:f... | 98530258633960 | AP_30    | SIM-2BF280 | 6480, Via Del Oro | Floor 1    |           | ●      | ➔       |
| ff:e5:f7:76:d... | 98054805500525 | AP_460C  | SIM-76D965 | 6480, Via Del Oro | Floor 1    |           | ●      | ➔       |
| ff:9e:07:84:...  | 98869680661857 | AP_410C  | SIM-84E118 | 6480, Via Del Oro | Floor 1    |           | ●      | ➔       |
| ff:a5:d7:96:9... | 98119904319209 | AP_410C  | SIM-96976A | 6480, Via Del Oro | Floor 1    |           | ●      | ➔       |
| bc:f3:10:5d:7... | 04102005200894 | AP_410C  | AH-5d74c0  | 6480, Via Del Oro | Floor 1    |           | ●      | ➔       |
| ff:45:85:f3:d... | 98204499125210 | AP_410C  | SIM-F3D529 | 6480, Via Del Oro | Floor 1    |           | ●      | ➔       |

This screen displays detailed information and status of each access point that is added to this ExtremeLocation Essentials account. By default, all access points are displayed.

2. Select a site from the **Site** drop-down list.

The screen refreshes to display the access point status for the selected site.

| AP MAC           | SERIAL NUMBER  | AP MODEL | HOST NAME  | SITE NAME         | FLOOR NAME | LAST SEEN | STATUS | ACTIONS |
|------------------|----------------|----------|------------|-------------------|------------|-----------|--------|---------|
| ff:c5:2e:2b:f... | 98530258633960 | AP_30    | SIM-2BF280 | 6480, Via Del Oro | Floor 1    |           | ●      | ➔       |
| ff:e5:f7:76:d... | 98054805500525 | AP_460C  | SIM-76D965 | 6480, Via Del Oro | Floor 1    |           | ●      | ➔       |
| ff:9e:07:84:...  | 98869680661857 | AP_410C  | SIM-84E118 | 6480, Via Del Oro | Floor 1    |           | ●      | ➔       |
| ff:a5:d7:96:9... | 98119904319209 | AP_410C  | SIM-96976A | 6480, Via Del Oro | Floor 1    |           | ●      | ➔       |
| bc:f3:10:5d:7... | 04102005200894 | AP_410C  | AH-5d74c0  | 6480, Via Del Oro | Floor 1    |           | ●      | ➔       |
| ff:45:85:f3:d... | 98204499125210 | AP_410C  | SIM-F3D529 | 6480, Via Del Oro | Floor 1    |           | ●      | ➔       |

**Figure 65: Access Point Status for a Site**

3. Review the data displayed on this screen to look for access points of interest.

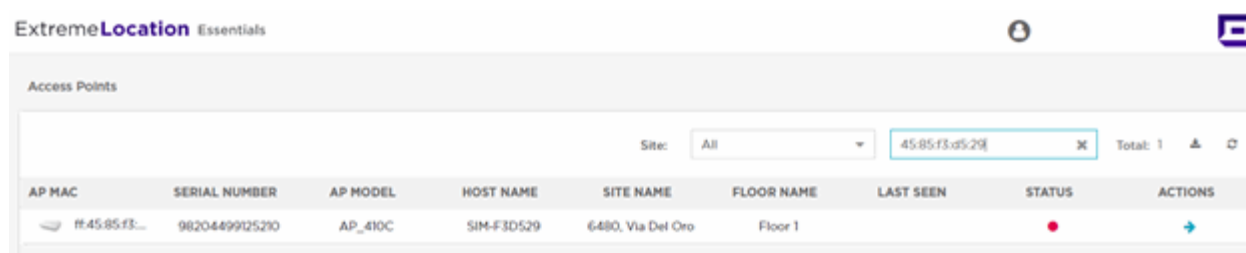
| Field         | Description                                                                                                                        |
|---------------|------------------------------------------------------------------------------------------------------------------------------------|
| AP MAC        | This field displays the access point's MAC address.                                                                                |
| Serial Number | This field displays the serial number of the access point. This field displays the serial number of the access point if available. |
| AP Model      | This field displays the model name of the access point. If the model name is not provided, then this field is empty.               |
| Host Name     | This field displays the host name.                                                                                                 |
| Site Name     | This field displays the site where the access point is deployed.                                                                   |
| Floor Name    | This field displays the floor in which the access point is deployed.                                                               |

| Field     | Description                                                                                                                                                  |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Last Seen | This field displays the time this access point was last seen.                                                                                                |
| Status    | This field displays the current status of the access point. A red dot indicates that the access point is offline.                                            |
| Actions   | Use the icons in this column to perform specific actions on the selected access point. You can remove the access point's association with the selected site. |

- Use the **Search** field to filter to the data of interest. Enter a search string in this field.

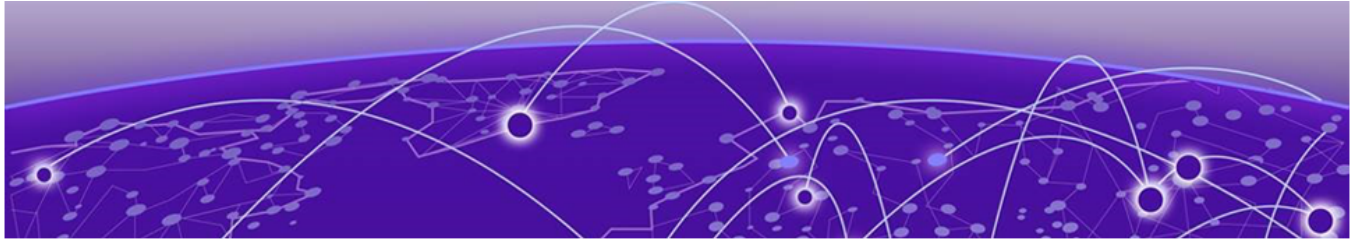
Search terms are not case sensitive.

The displayed data is automatically sorted based on the search string.



**Figure 66: Search Function**

- Occasionally use  button to refresh data.  
The data in this screen does not refresh automatically. The screen has to be manually refreshed to view the latest data.
- Use the  button to download the list of devices to your local PC as a .csv (comma separated value) file.



# Beacons

[Add Third-Party Beacons](#) on page 122

ExtremeLocation Essentials includes the ability to add third-party beacons that can be used with its locationing service. A third-party beacon is a beacon that is not manufactured by Extreme Networks. Once these third-party beacons are onboarded, they can perform all the functions as the Extreme Networks beacons.

You can use any programmable beacon from any manufacturer. However, ExtremeLocation Essentials only supports *iBeacon* beacon broadcasting format on these third-party beacons.

The following are the important points to remember when using third-party beacons with ExtremeLocation Essentials.

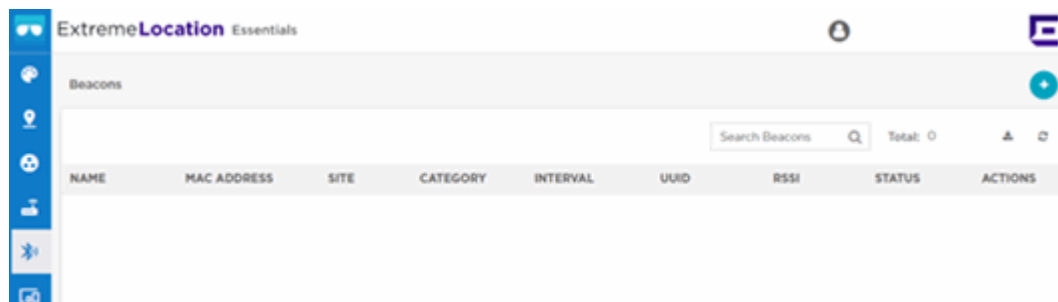
1. The third-party beacons must be programmable.
2. You should have access to the beacon's MAC address for use while creating the beacon's entry in ExtremeLocation Essentials.
3. You should have the third-party beacon's RSSI value reading at one (1) meter distance.
4. Before you onboard the beacon with the beacon's onboarding app, you must add it to ExtremeLocation Essentials and make a note of the *Major:Minor* value. This value will be required when you onboard the beacon using its app.

## Add Third-Party Beacons

The **Beacons** screen default view displays all the configured third-party beacons for all the sites managed by this ExtremeLocation Essentials account.

To add a third-party beacon:

1. Use the  icon to load the **Beacons** screen.



2. Select the  icon on the top right of the screen.  
The **Onboard Third-Party Beacon** dialog appears.

✕ Onboard Third-Party Beacon

Name <sup>\*</sup> 

Description 

Site:

Select a Site for the Beacon ▾

UUID <sup>\*</sup> 

XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX

Major Version <sup>\*</sup> 

Major Version ▴ ▾

Minor Version <sup>\*</sup> 

Minor Version ▴ ▾

Cancel

SAVE

3. Provide the following information for each third-party beacon that you add to ExtremeLocation Essentials.

| Field         | Description                                                                                                                                                                                          |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name          | Enter the name of your third-party beacon. Use the name to uniquely identify this beacon among others.                                                                                               |
| Description   | Enter a brief description for this beacon. Your description should enable you to uniquely identify this beacon among similar beacons.                                                                |
| Site          | Use the drop-down list to select the site in which this third-party beacon will be deployed. Once you select the site where this beacon will be deployed, the dialog expands to display more fields. |
| UUID          | Enter the universally unique identifier (UUID) of your third-party beacon.                                                                                                                           |
| Major Version | Enter a UUID Major Version value between 1 and 65535.                                                                                                                                                |
| Minor Version | Enter a UUID Minor Version value between 1 and 65535.                                                                                                                                                |

**Onboard Third-Party Beacon**

Name \* ⓘ  
test-beacon-02

Description ⓘ  
test beacon #02

Site:  
Atlanta International Airport

Category:  
movable-critical

Beacon MAC Address \* ⓘ  
xxxxxxxxxxxx

RSSI \* ⓘ  
-59

Advertisement Interval (ms) \* ⓘ  
600

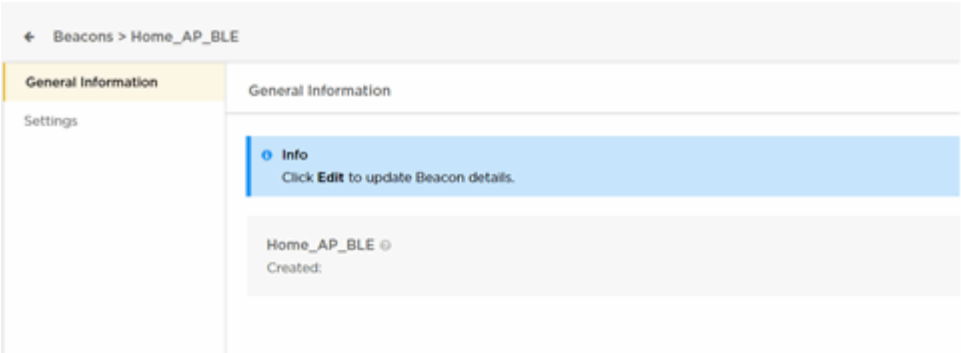
Broadcast Types:  
☒ iBeacon

Cancel Save

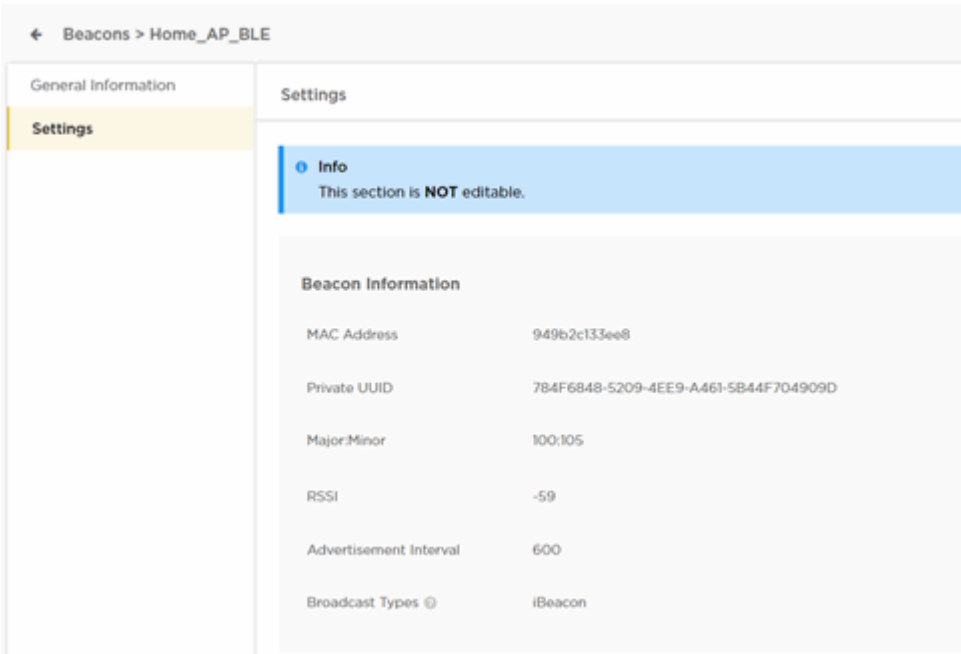
Provide these additional details about your third-party beacon.

| Field                       | Description                                                                                                                                                                             |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Category                    | Use the drop-down list to select the category to assign this beacon to. This drop-down lists those categories that are assigned to the site selected in the <b>Site</b> drop-down list. |
| Beacon MAC Address          | Enter the MAC address of the third-party beacon.                                                                                                                                        |
| RSSI                        | Enter the RSSI value for this beacon. This is the calibrated RSSI value at a distance of one (1) meter from the beacon.                                                                 |
| Advertisement Interval (ms) | Use this field to set the duration (in milliseconds) between two consecutive beacon broadcasts from this beacon. This value will be available in the beacon's data sheet.               |
| Broadcast Types             | ExtremeLocation Essentials only supports third-party beacons broadcasting in the <i>iBeacon</i> format. You cannot modify this field.                                                   |

4. Select the **Save** button to save the changes made to this screen.
- On saving, the new third-party beacon, it is immediately added to the list of beacons managed by ExtremeLocation Essentials.
5. Double click the newly added third-party beacon or use the ➡ icon under the **Actions** column to view the beacon's details.
- The beacon's **General Information** screen displays.

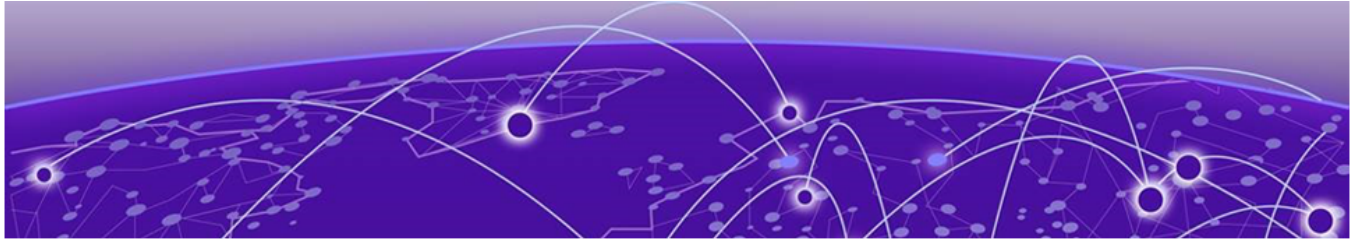


6. Select **Settings** menu item from the options on the left.  
The **Settings** screen displays.



| Field        | Description                                                                                                                                                                                                                                                     |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Private UUID | Private UUID is a unique value associated with this third-party beacon. A beacon can be assigned one private UUID only. This value is used internally by the ExtremeLocation Essentials system.                                                                 |
| Major:Minor  | This value pair is used to uniquely identify this beacon. This value is used internally by the ExtremeLocation Essentials system. Choose any one of the pair of <b>Major:Minor</b> values. However, you must ensure that you use the values from the same pair. |

7. When programming the third-party beacon using its app, provide the above values as required.



# Asset Management

---

[Add an Asset](#) on page 128

[Remove an Asset](#) on page 130

[View Asset Alarms](#) on page 131

## Assets

---

For ExtremeLocation Essentials, an asset is a physical device or item that you want to track. It could be a device that is critical in nature, or a device that is mobile and expensive to replace if lost.



### Note

If client data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

ExtremeLocation Essentials enables you to track such critical or costly assets within your sites using BLE beacons or by using the device Wi-Fi radio. Using the *Asset Tracking and Management* feature, you can locate a tracked asset within your site. This reduces the time that you spend searching for and locating it. This feature also has the ability to raise alarms if your tracked asset moves out of its designated area or enters a prohibited area. It can also raise an alarm if the asset that you track is not seen within your site for a configured period of time, and notifies you of possible theft of that tracked asset.

When using a BLE beacon to track an asset, you must onboard the BLE beacon, map the beacon to the asset entry, and then physically attach that BLE beacon to the asset that needs to be tracked. ExtremeLocation Essentials then maps the tracked BLE beacon, indicating the asset on the floor map of the site.

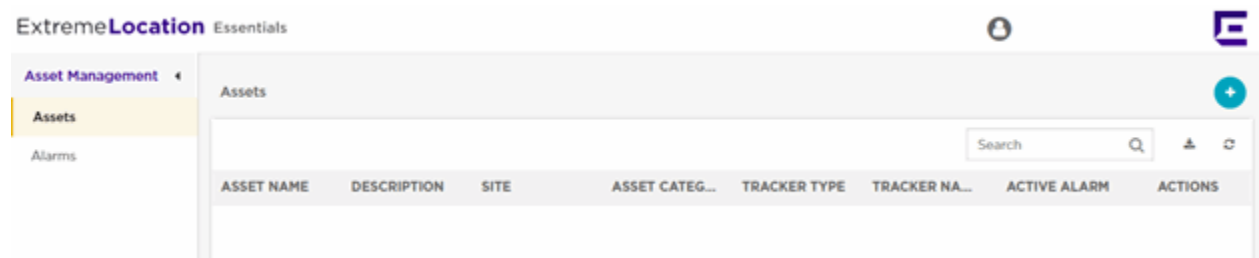
If your asset has built-in Wi-Fi radio, you can configure ExtremeLocation Essentials to track the MAC address of the asset radio. ExtremeLocation Essentials can map the tracked asset on the floor map of the site.



#### Note

Asset entities are not considered in Historical View or analytics. Because Assets remain in the customer location, the Dwell Time widgets do not apply to Assets.

Assets are managed from the **Asset Management** screen. Use the  icon to launch the **Asset Management** screen.



The **Assets** screen displays the following information on each asset tracked for this ExtremeLocation Essentials account.

| Field           | Description                                                                                                                                                                                                                                                                           |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Asset Name      | Displays the name of the asset being tracked.                                                                                                                                                                                                                                         |
| Description     | Displays additional information about the asset being tracked.                                                                                                                                                                                                                        |
| Site            | Displays the name of the site where this asset is deployed or used.                                                                                                                                                                                                                   |
| Asset Category  | Displays the name of the category assigned to this asset being tracked. Asset categories are used to combine similar assets as a group for ease of tracking and management.                                                                                                           |
| Tracker Type    | This field indicates the method used to track this asset. Assets can be tracked by: <ul style="list-style-type: none"> <li>• Wi-Fi - This method uses the asset Wi-Fi radio to track it.</li> <li>• BLE - This method uses a BLE beacon attached to the asset to track it.</li> </ul> |
| Tracker Name ID | This field displays the unique ID assigned to the asset tracking device. For an asset with a Wi-Fi radio, the radio MAC address is displayed. For an attached BLE beacon, the beacon serial number is used.                                                                           |

| Field        | Description                                                                                                                                                                                                                                                                                                                                           |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Active Alarm | This field displays <i>true</i> if the asset has an active alarm. If the asset has not raised any alarms in the immediate past, this field displays <i>false</i> . At the expiry of the time specified in the <b>Asset Alarm Timeout</b> setting is exceeded, the alarm is automatically cleared from the <b>Asset Management &gt; Alarms</b> screen. |
| Actions      | Use the icons in this column to perform specific actions on the selected asset. You can edit the asset information or remove it.                                                                                                                                                                                                                      |

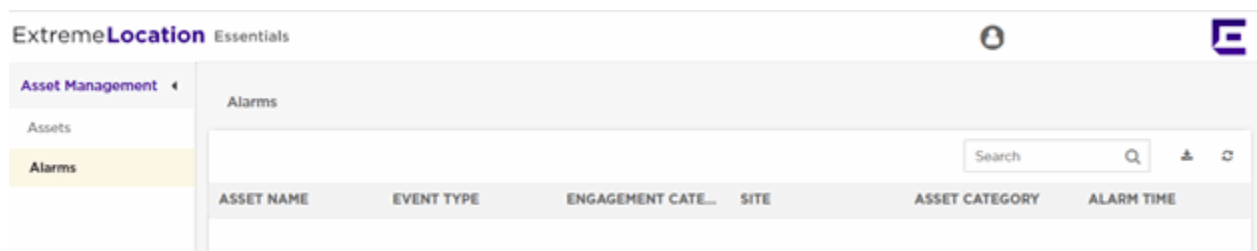
Periodically use the  icon to refresh this screen manually.

Use the  icon to download the assets listed in this screen as a .csv file.

## Alarms

The **Alarms** screen displays a list of all alarms raised by the tracked device monitored by ExtremeLocation Essentials. Use this screen to take appropriate actions to safeguard your assets.

Select the **Alarms** item from the menu on the left. The **Alarms** screen displays.

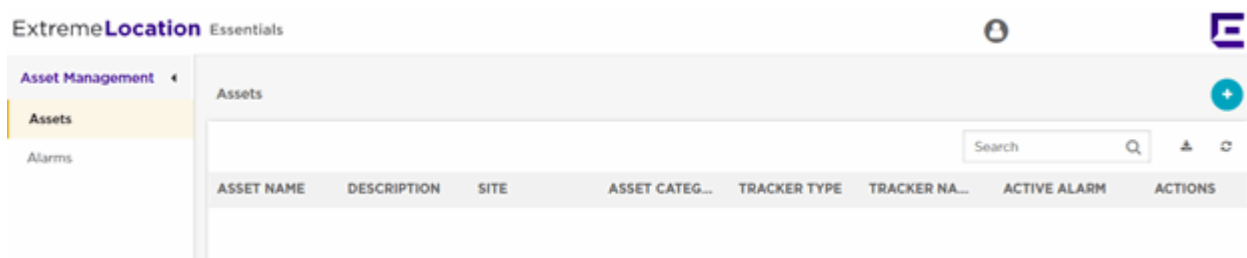


For more information on the **Alarms** screen and its contents, see the topic [Alarms Configuration](#) on page 153.

## Add an Asset

To add an asset to be tracked by ExtremeLocation Essentials:

1. Select the  icon to load the **Asset Management** screen. The **Assets** screen displays.



2. Select the  icon located to the top right of the screen.  
The **Add Asset** screen loads.

For a new asset, provide the following information.

| Field          | Description                                                                                                                                                                                                              |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name           | Enter a name for this asset. Use this field to uniquely identify this asset among similar assets. Asset name cannot be longer than 32 characters.                                                                        |
| Description    | Enter a brief description of this asset. The description should be such that you can easily identify this asset among similar assets within your account.                                                                |
| Site           | Use the drop-down list to select the site where this asset is deployed and is to be tracked.<br>You must enable asset tracking for each site individually.                                                               |
| Asset Category | Use the drop-down list to select the asset category to assign to this asset.<br>You must create your asset categories before assigning it to an asset. For more information, see <a href="#">Categories</a> on page 109. |

| Field           | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tracker Details | <p>Use this field to select the type of tracker that is used for tracking this asset. Select from one of the following types:</p> <ul style="list-style-type: none"> <li>• <i>WiFi</i> - Select this option to indicate that the asset being tracked has a built-in Wi-Fi radio and to indicate to ExtremeLocation Essentials to use that radio's MAC address. When this option is selected, you will be prompted to enter the asset's radio's MAC address in the <b>MAC Address</b> field.</li> <li>• <i>Beacon</i> - Select this option to indicate that the asset will be tracked by using a BLE beacon attached to it. You will be prompted to select the beacon from a drop-down list. Those beacons that have been on-boarded using the <i>ExtremeLocation Essentials Beacons App</i> will be listed in this drop-down. This list also displays the third-party beacons that were added to ExtremeLocation Essentials through the <b>Add Asset</b> screen. For more information on how to onboard your beacons, see the <i>ExtremeLocation Essentials Beacon Onboarding Guide</i>. This document can be downloaded from the . For more information on adding your third-party beacons, see <a href="#">Add Third-Party Beacons</a> on page 122.</li> <li>• <i>None</i> - Use this option to indicate that you are uploading the asset's information as a placeholder before actually deploying it.</li> </ul> |
| Alarm Settings  | <p>Use this field to select the categories to which the asset is assigned or prohibited. Select from the following:</p> <ul style="list-style-type: none"> <li>• <i>Confined Categories</i> - Use the drop-down list to select the engagement categories to which the asset is confined. If the asset is no longer in that category, an alarm is generated.</li> <li>• <i>Prohibited Categories</i> - Use the drop-down list to select the engagement categories in which the asset is not allowed to be included. This list will display only those engagement categories that are assigned to the site selected in the <b>Site</b> field of this screen.</li> </ul> <p>For more information on assigning engagement categories to a site, see <a href="#">Categories</a> on page 109.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

3. Select the **Save** button to save the new asset.

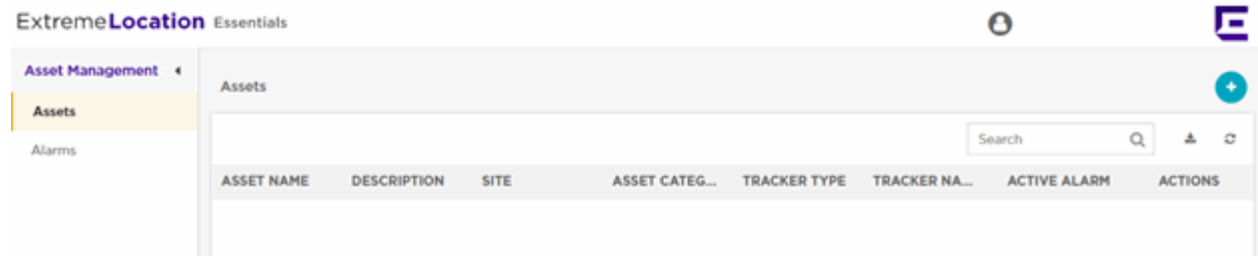
At any point of time, select the **Cancel** button to exit without adding this asset.

## Remove an Asset

To remove an asset managed by ExtremeLocation Essentials:

1. Select the  icon to load the **Asset Management** screen.

The **Assets** screen displays.



- 2. From the list of the assets managed by ExtremeLocation Essentials, select the asset that you want to remove.
- 3. Select the  icon under the **Actions** column to remove the asset. A confirmation dialog displays.



Select the **Yes** button to remove the asset from being tracked by ExtremeLocation Essentials. Select the **No** button to exit without removing the asset.

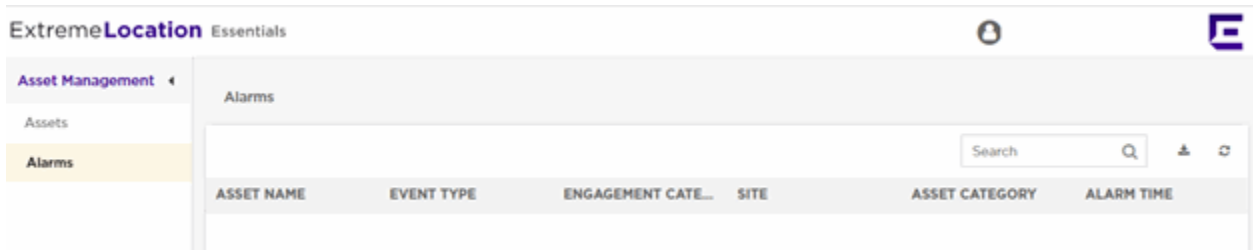
When an asset that is tracked by BLE beacon is removed, you can reuse the beacon to track another asset if required.

## View Asset Alarms

### Alarms

The **Alarms** screen displays a list of all alarms raised by the tracked device monitored by ExtremeLocation Essentials. Use this screen to take appropriate actions to safeguard your assets.

Select the **Alarms** item from the menu on the left. The **Alarms** screen displays.



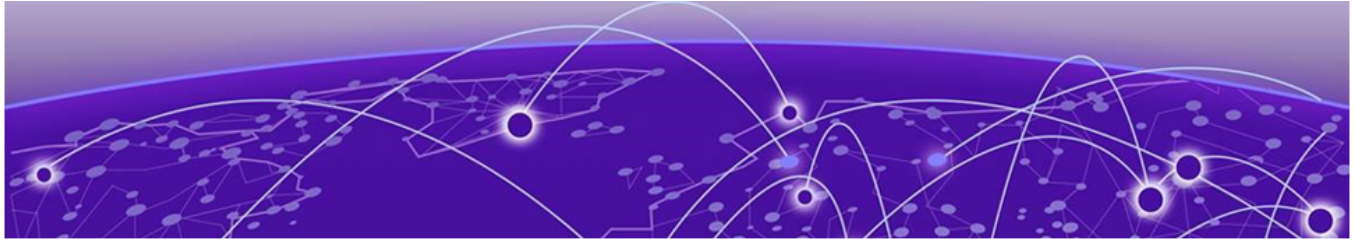
The **Alarms** screen displays the following information for each alarm raised by ExtremeLocation Essentials for the assets tracked by it.

| Field               | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Asset Name          | Displays the user assigned name for the asset being tracked.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Event Type          | Displays the type of event that was generated for this asset. The following event types are generated: <ul style="list-style-type: none"> <li>• <i>Site Exit</i> - This event is generated when the tracked asset exits the site where it is deployed.</li> <li>• <i>Prohibited Category Enter</i> - This event is generated when a tracked device enters a category where it is prohibited from entering.</li> <li>• <i>Confined Category Exit</i> - This event is generated when a tracked device exits a category to which it is confined or restricted to.</li> </ul> |
| Engagement Category | Displays the name of the category the tracked asset was in when this alarm was raised.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Site                | Displays the name of the site where this asset is deployed and tracked.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Asset Category      | Displays the name of the asset category the asset is classified into.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Alarm Time          | Displays the time stamp when this alarm was raised.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

Periodically use the  icon to refresh this screen manually.

Use the  icon to download the alarms listed in this screen as a .csv file.

All the alarms on this screen are displayed for the period of time configured in the **Settings > System Settings > Alarms** screen. The value for the **Asset Alarm Timeout** field in this screen controls the duration for which the alarms are displayed. An alarm is displayed for this period and then is automatically removed from the list.



# Devices

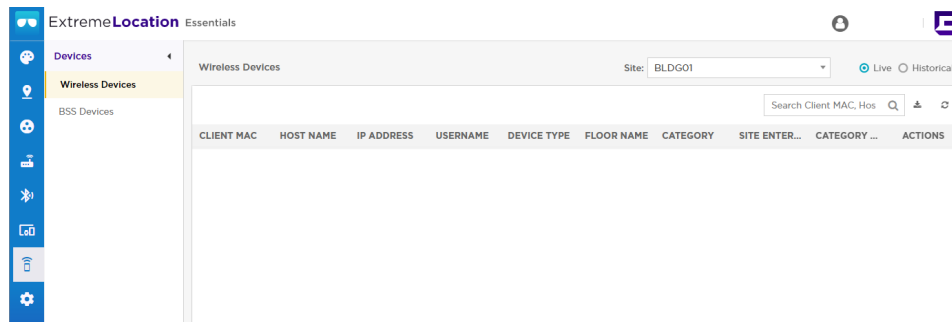
[Wireless Devices - Live Data](#) on page 134

[Wireless Devices - Historical Data](#) on page 136

[BSS Devices - Live Data](#) on page 139

[BSS Devices - Site Historical Data](#) on page 141

Devices are managed from the **Devices** screen. Use the  icon to launch the **Devices** screen.



The **Devices** screen displays a log of all wireless devices seen in a user selected site. This screen displays data for both user and BSS devices. Device information can be filtered based on search criteria to display the data is of interest.

You can view the following kinds of device data:

- **Live Data** - Displays live location data for the devices identified in the selected site.
- **Historical Data** - Displays the location data for visitor devices (BSS and user devices) for a user selected period of time and information type. This information is displayed for the user selected site.



## Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



## Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

## Wireless Devices - Live Data

This screen displays the live data for all wireless devices identified by ExtremeLocation Essentials in the selected site.



### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

1. Occasionally use  button to refresh data.  
The data in this screen does not refresh automatically. The screen has to be manually refreshed to view the latest data.
2. Select a site from the **Site** drop-down list.  
The screen refreshes to display a list of all devices identified in this site.

| Site: <span>t1-building</span>                                                                       |             |            |            |                     |                     | <input checked="" type="radio"/> Live <input type="radio"/> Historical                                                                                                                |
|------------------------------------------------------------------------------------------------------|-------------|------------|------------|---------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="text" value="Search"/>                                                                  |             |            |            |                     |                     | Total: 68   |
| CLIENT MAC                                                                                           | DEVICE TYPE | FLOOR NAME | CATEGORY   | SITE ENTER TIME     | CATEGORY ENTER...   | ACTIONS                                                                                                                                                                               |
|  10:4a:7d:c3:b... | Visitor     | t1-floor   | category-1 | 2020-11-17 11:41:33 | 2020-11-17 14:42:53 |                                                                                                  |
|  a4:4e:31:52:1... | Visitor     | t1-floor   | category-1 | 2020-11-17 11:41:34 | 2020-11-17 14:21:13 |                                                                                                  |
|  b4:2d:56:8c...   | Visitor     | t1-floor   | category-1 | 2020-11-17 11:41:35 | 2020-11-17 14:17:11 |                                                                                                  |
|  6c:88:14:35:2... | Visitor     | t1-floor   | category-1 | 2020-11-17 11:41:35 | 2020-11-17 14:12:32 |                                                                                                  |
|  3c:a9:f4:72:e... | Visitor     | t1-floor   | category-1 | 2020-11-17 11:41:35 | 2020-11-17 14:37:33 |                                                                                                  |
|  84:3a:4b:57...   | Visitor     | t1-floor   | category-1 | 2020-11-17 11:41:37 | 2020-11-17 14:17:11 |                                                                                                  |
|  10:4a:7d:c4:9... | Visitor     |            |            | 2020-11-17 11:41:38 |                     |                                                                                                  |
|  d8:84:66:79...   | ASSET       | t1-floor   | category-1 | 2020-11-17 11:41:38 | 2020-11-17 14:12:32 |                                                                                                  |
|  c4:d9:87:49...   | Visitor     | t1-floor   | category-1 | 2020-11-17 11:41:38 | 2020-11-17 14:16:54 |                                                                                                  |

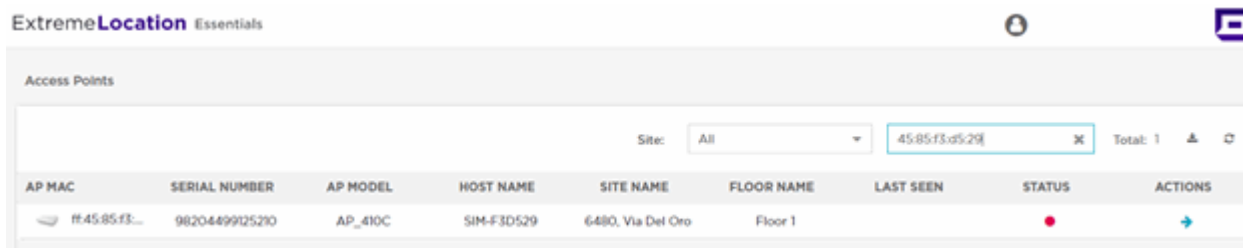
**Figure 67: Live Devices List for a Site**

3. If the **Live** option is not selected, select it. **Live** is the default option for this screen.

4. Review the data displayed on this screen to look for devices and activities of interest.

| Field               | Description                                                                                                                                                                                                                                                      |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Client MAC          | This field displays the client device's MAC address.                                                                                                                                                                                                             |
| Device Type         | This field displays the device type. This is the classification of the identified device. You can classify devices within a specific vertical. See <a href="#">Device Classification Settings</a> on page 144 for information on vertical device classification. |
| Floor Name          | This field displays the floor on which the device was identified.                                                                                                                                                                                                |
| Category            | This field displays the area where this device was identified or seen. A category is a user defined part of a site that logically divides the site based on the usage of the area. For example, "Warehouse", "Lobby", "Canteen" or similar.                      |
| Site Enter Time     | This field displays the time the identified device was first seen and identified on this site.                                                                                                                                                                   |
| Category Enter Time | This field displays the time the identified device was categorized as one of Visitor, Asset, or Staff.                                                                                                                                                           |

5. For the Actions column, use the icons to perform specific actions on the selected asset. You can edit the asset's information or remove it.
6. Use the **Search** field to filter to the data of interest. Enter a search string in this field. Search terms are not case sensitive. The displayed data is automatically sorted based on the search string.



**Figure 68: Search Function**

7. Use the  icon in the **Actions** column to edit the device's automatic device type classification. The **Update Device Type** window displays

**Figure 69: Update Device Type screen**

Select the appropriate **Device Type** using the available options in this screen.

Once done, select the **Update** button to update the device's device type classification. At any time, select the **Cancel** button to exit without modifying the automatic device type classification.

8. Occasionally use  button to refresh data.  
The data in this screen does not refresh automatically. The screen has to be manually refreshed to view the latest data.
9. Use the  button to download the list of devices to your local PC as a `.csv` (comma separated value) file.

## Wireless Devices - Historical Data

This screen displays the historical data for wireless devices tracked by ExtremeLocation Essentials in the selected site. You can use the **Search** field to filter data or devices of interest to you.



### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

1. Occasionally use  button to refresh data.  
The data in this screen does not refresh automatically. The screen has to be manually refreshed to view the latest data.

2. Select a site from the **Site** drop-down list.

The screen refreshes to display a list of all devices identified by ExtremeLocation Essentials in this site.

| Client MAC        | Host Name | IP Address | Device Type | Floor Name | Category | Site Enter Time     | Category Enter Time | Actions |
|-------------------|-----------|------------|-------------|------------|----------|---------------------|---------------------|---------|
| 00:23:14:c9:c5:54 |           |            | VISITOR     | 2ndFloor_1 | Florist  | 2019-07-09 20:41:13 | 2019-07-09 21:10:13 |         |
| 68:94:6b:05:32:e8 |           |            | VISITOR     | 2ndFloor_1 | Florist  | 2019-07-09 21:05:22 | 2019-07-09 21:10:22 |         |
| 68:94:6b:66:d8:28 |           |            | VISITOR     | 2ndFloor_1 | Florist  | 2019-07-09 21:10:39 | 2019-07-09 21:58:39 |         |
| 68:94:6b:05:25:9c |           |            | VISITOR     | 2ndFloor_1 | Florist  | 2019-07-09 21:14:07 | 2019-07-09 21:14:07 |         |
| 84:24:8d:47:23:a0 |           |            | ASSET       | 2ndFloor_1 | Florist  | 2019-07-09 23:58:09 | 2019-07-10 01:57:41 |         |
| 84:24:8d:93:b0:e0 |           |            | ASSET       | 2ndFloor_1 | Florist  | 2019-07-10 00:01:41 | 2019-07-10 00:23:41 |         |
| 68:94:6b:67:33:10 |           |            | VISITOR     | 2ndFloor_1 | Florist  | 2019-07-10 00:01:43 | 2019-07-10 00:09:53 |         |
| 84:24:8d:47:2e:d0 |           |            | ASSET       | 2ndFloor_1 | Florist  | 2019-07-10 00:01:45 | 2019-07-10 01:30:25 |         |
| a4:4e:31:52:1e:f8 |           |            | VISITOR     | 2ndFloor_1 | Florist  | 2019-07-10 00:01:45 | 2019-07-10 01:39:07 |         |
| c4:d9:87:49:f2:64 |           |            | VISITOR     | 2ndFloor_1 | Florist  | 2019-07-10 00:01:45 | 2019-07-10 02:36:45 |         |
| 10:4a:7d:c3:bf:b3 |           |            | VISITOR     | 2ndFloor_1 | Florist  | 2019-07-10 00:01:47 | 2019-07-10 03:38:01 |         |
| 84:24:8d:93:a6:00 |           |            | ASSET       | 2ndFloor_1 | Florist  | 2019-07-10 00:01:49 | 2019-07-10 03:47:50 |         |

**Figure 70: Live List of Wireless Devices**

3. If the **Historical** option is not selected, select it.

The user interface changes to display more fields to refine the historical data.

Site: Miami International Airport Live Historical Date: 05/09/2019 By: Site Visit Show

**Figure 71: Historical Data Filter Fields**

4. Use the calendar control to set the **Date** to filter historical data. The default value for this field is one day less than the current date. You can display data for the last thirty (30) days before today.
5. Use the **By** drop-down list to classify by either *Site Visit* or *Category Visit*.

Where data can be classified based on:

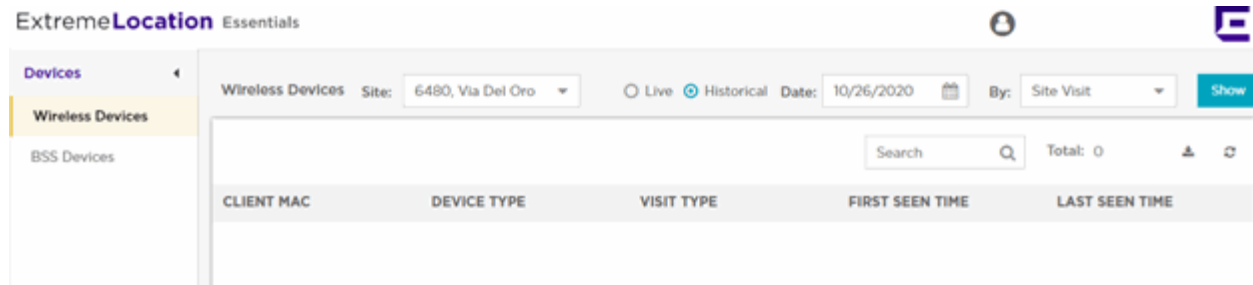
- **Site Visit** - Displays the data for all the devices monitored at the site.
- **Category Visit** - Displays the data for all devices monitored at the site and shows the category last visited by each device.

6. Select the **Show** button.

The screen refreshes to display the data for the selected date and visit type.

7. Select *Site Visit* from the **By** drop-down list.

Review the data displayed on this screen to look for devices and activities of interest.



**Figure 72: Site Visit Data**



**Note**

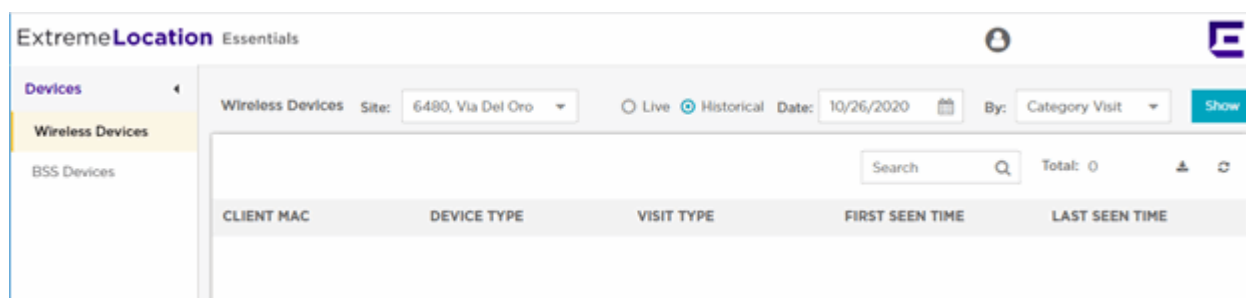
Asset entities are not considered in Historical View or analytics. Because Assets remain in the customer location, the Dwell Time widgets do not apply to Assets.

The following information is displayed for each wireless device.

| Field           | Description                                                                                                                                                                                                                                                      |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Client MAC      | This field displays the client device's MAC address.                                                                                                                                                                                                             |
| Device Type     | This field displays the device type. This is the classification of the identified device. You can classify devices within a specific vertical. See <a href="#">Device Classification Settings</a> on page 144 for information on vertical device classification. |
| Visit Type      | This field displays the device's visit type classification. Visit types can be one of Bounced, Inside Bounced, or Inside Engaged.                                                                                                                                |
| First Seen Time | This field displays the exact time when the device was first seen in the site or in a specific category.                                                                                                                                                         |
| Last Seen Time  | This field displays the exact time when the device was last seen in the site or in a specific category.                                                                                                                                                          |

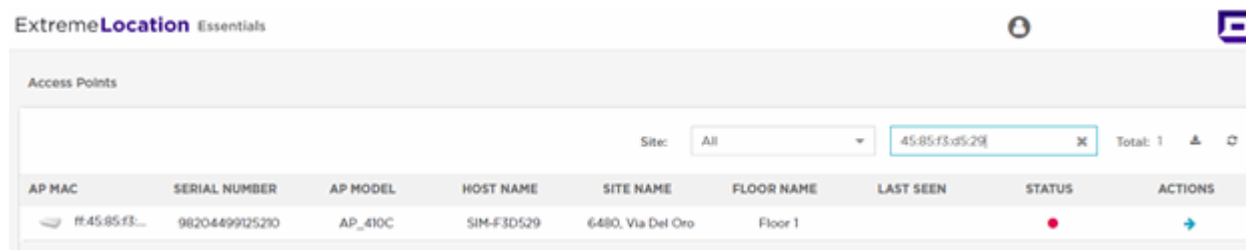
8. Select Category *Visit* from the **By** drop-down list.

Review the data displayed on this screen to look for devices and activities of interest.



| Field           | Description                                                                                                                                                                                                                                                      |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Client MAC      | This field displays the client device's MAC address.                                                                                                                                                                                                             |
| Device Type     | This field displays the device type. This is the classification of the identified device. You can classify devices within a specific vertical. See <a href="#">Device Classification Settings</a> on page 144 for information on vertical device classification. |
| Floor Name      | This field displays the floor on which the device was identified.                                                                                                                                                                                                |
| Category        | This field displays the area where this device was identified or seen. A category is a user defined part of a site that logically divides the site based on the usage of the area. For example, "Warehouse", "Lobby", "Canteen" or similar.                      |
| First Seen Time | This field displays the exact time when the device was first seen in the site or in a specific category.                                                                                                                                                         |
| Last Seen Time  | This field displays the exact time when the device was last seen in the site or in a specific category.                                                                                                                                                          |

9. Use the **Search** field to filter to the data of interest. Enter a search string in this field. Search terms are not case sensitive. The displayed data is automatically sorted based on the search string.



**Figure 73: Search Function**

## BSS Devices - Live Data

This screen displays the live data for all BSS devices identified by ExtremeLocation Essentials in the selected site.

BSS Devices are those devices within your monitored environment that broadcast BSS (Basic Service Set) identifiers that indicate they offer Wi-Fi connection to any device

that may want to connect to it. BSSs with a managed environment can be authorized or unauthorized. Unauthorized BSSs are a security risk for the environment in which they are found; they need to be monitored, and the devices that connect to them need to be tracked.



#### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



#### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

To view a list of the identified BSS devices within your site:

1. Occasionally use  button to refresh data.  
The data in this screen does not refresh automatically. The screen has to be manually refreshed to view the latest data.
2. Select the **BSS Devices** menu item from the options on the left.  
The **Devices** screen refreshes to display the BSS devices identified for the selected site.

3. If the **Live** option is not selected, select it. **Live** is the default option for this screen.
4. Review the data displayed on this screen. The following information is displayed for each identified BSS device:

| Field      | Description                                                           |
|------------|-----------------------------------------------------------------------|
| BSS        | This field displays the BSS device MAC address.                       |
| SSID       | This field displays the SSID being broadcast by the BSS device.       |
| Floor Name | This field displays the floor on which the BSS device was identified. |
| RSSI       | This field displays the RSSI signal of the BSS device.                |
| FREQUENCY  | This field displays the radio signal frequency of the BSS device.     |

- Use the **Search** field to filter to the data of interest. Enter a search string in this field. Search terms are not case sensitive.  
The displayed data is automatically sorted based on the search string.

ExtremeLocation Essentials

Access Points

Site: All 45:85:f3:d5:29 Total: 1

| AP MAC         | SERIAL NUMBER  | AP MODEL | HOST NAME  | SITE NAME         | FLOOR NAME | LAST SEEN | STATUS | ACTIONS |
|----------------|----------------|----------|------------|-------------------|------------|-----------|--------|---------|
| 45:85:f3:d5:29 | 98204499125210 | AP_410C  | SIM-F3D529 | 6480, Via Del Oro | Floor 1    |           |        |         |

**Figure 74: Search Function**

- Occasionally use  button to refresh data.  
The data in this screen does not refresh automatically. The screen has to be manually refreshed to view the latest data.
- Use the  button to download the list of devices to your local PC as a .csv (comma separated value) file.

## BSS Devices - Site Historical Data

This screen displays the historical data for the BSS devices identified in your selected site. You can use the **Search** field to filter data or devices of interest to you.



### Note

If a client's data is deleted in ExtremeCloud IQ, all configured, cached, Live, and Historical data related to that client is also deleted from ExtremeLocation Essentials.



### Note

If Reset VIQ is selected in ExtremeCloud IQ, all configured data for locations, devices, and clients is cleared from ExtremeLocation Essentials. In addition, all cached, Live, and Historical data related to that VIQ is cleared from ExtremeLocation Essentials.

- Select the **BSS Devices** menu item from the options on the left.  
The **Devices** screen refreshes to display the BSS devices identified for the selected site.

ExtremeLocation Essentials

John Kennedy (Application Menu)

Devices

Wireless Devices

BSS Devices

BSS Devices Site: PLM-LAB Live Historical Date: 04/18/2023

Search BSS N

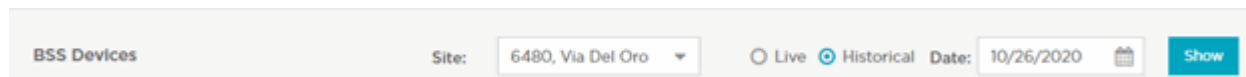
| BSS             | SSID | FLOOR NAME | RSSI | FREQUENCY |
|-----------------|------|------------|------|-----------|
| b0:27:cf:6e:... |      | floor1     | -37  | 5745      |

2. Select a site from the **Site** drop-down list.

The screen refreshes to display a list of all BSS devices identified in this site.

3. If the **Historical** option is not selected, select it.

The user interface changes to display more fields to refine the historical data.

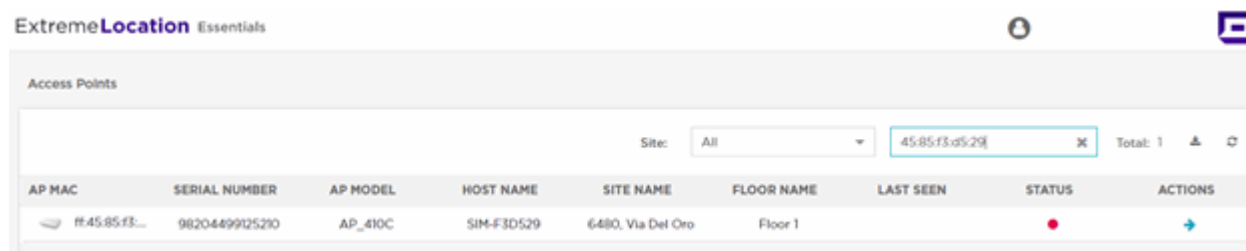


**Figure 75: Historical Data Filter Fields**

4. Use the calendar control to set the **Date** to filter historical data. The default value for this field is one day less than the current date. You can display data for the last thirty (30) days before today.
5. Select the **Show** button to display the historical BSS device data for the selected date.
6. Review the data displayed on this screen. The following information is displayed for each identified BSS device:

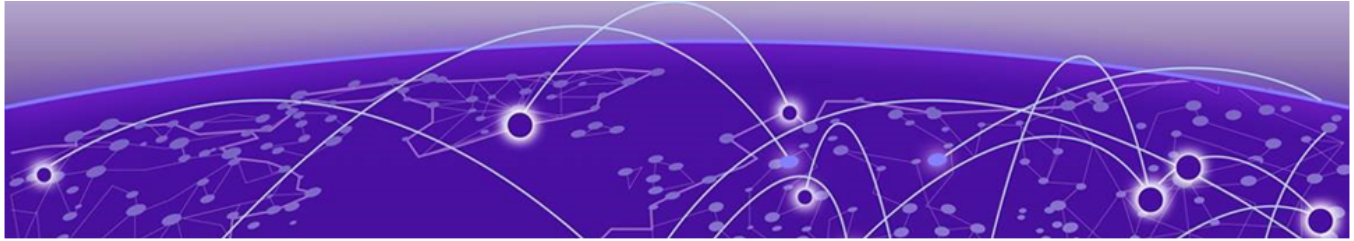
| Field      | Description                                                           |
|------------|-----------------------------------------------------------------------|
| BSS        | This field displays the BSS device MAC address.                       |
| SSID       | This field displays the SSID being broadcast by the BSS device.       |
| Floor Name | This field displays the floor on which the BSS device was identified. |
| RSSI       | This field displays the RSSI signal of the BSS device.                |
| FREQUENCY  | This field displays the radio signal frequency of the BSS device.     |

7. Use the **Search** field to filter to the data of interest. Enter a search string in this field. Search terms are not case sensitive. The displayed data is automatically sorted based on the search string.



**Figure 76: Search Function**

8. Occasionally use  button to refresh data. The data in this screen does not refresh automatically. The screen has to be manually refreshed to view the latest data.
9. Use the  button to download the list of devices to your local PC as a .csv (comma separated value) file.



# Settings

---

[System Settings](#) on page 143

The **Settings** menu item in your ExtremeLocation Essentials account sets the global preferences and configuration parameters for your ExtremeLocation Essentials account. The System Settings global settings can be managed from the **Settings** screens.

System Settings - Manages the various system settings for this ExtremeLocation Essentials account.

- **Device Classification** - Sets the parameters for device classification at the site level. See [Device Classification Settings](#) on page 144.
- **Thresholds** - Sets the various thresholds for data capture for analysis. See [Threshold Configuration and Management](#) on page 148.
- **Third-Party Configuration** - Sets the configuration for sending data capture logs to a remote server and ExtremeLocation Essentials Cloud Service integration. See [Third Party Configuration](#) on page 151.
- **Alarms** - Sets the configuration for managing Crowding and Asset Tracking Alarms. See [Alarms](#) to know more about configuring these alarm types.

## System Settings

---

The **System Settings** menu item includes important settings that you use to configure the performance of the ExtremeLocation Essentials system for this account. Select the



icon to load the **System Settings** menu.

This menu has the following configuration options:

- **Device Classification** - The **Device Classification** screen sets the different parameters for automatic and manual device classification. Device classification is used in location and device analysis. See [Device Classification](#) topic to know about configuring device classification parameters.
- **Threshold** - The **Threshold** screen sets the different thresholds for *Presence*, *Zone*, and *Age Out* settings. See [Threshold](#) topic to know about configuring the different thresholds.
- **Third-Party Configurations** - The **Third-Party Configurations** screen sets the information required for ExtremeLocation Essentials to push events and notifications to remote server for analysis. See [Subscriber Settings](#) topic to know

about configuring a remote server. This screen also sets the information required to connect to your ExtremeLocation Essentials Cloud Server account.

- **Alarms** - Sets the configuration for managing Crowding and Asset Tracking Alarms. See [Alarms](#) to know more about configuring these alarm types.

## Device Classification Settings

You can classify devices within a specific vertical. From ExtremeCloud IQ, select the vertical classification. Relevant naming displays in ExtremeLocation Essentials. Go to the ExtremeCloud IQ **Global Settings** > **Organization Information** > **Industry** to select from the following device classes:

- **Common:**

Assets - Devices displayed on the floor plan under Assets as well in several widgets for analytics. Note: Assets do not appear in Historical Data.

Excluded Devices/Staff Personal Devices - Excluded devices are excluded from analytics.

- **Retail:**

Visitor - Walk in devices as counted. Option for connected devices only or all devices seen the in the air. Not tied to classification.

Associate - Devices that are classified based on time or SSID. Associate devices provide analytics, visibility on a floor plan, and integration with crowding detection.

- **Education (K-12 and Higher Ed):**

Student -Walk-in devices as counted. Option for connected devices only or all devices seen the in the air. Not tied to classification.

Faculty - Devices that are classified based on time or SSID. Faculty devices provide analytics, visibility on a floor plan, and integration with crowding detection.

- **Enterprise:**

Visitor - Walk-in devices as counted. Option for connected devices only or all devices seen the in the air. Not tied to classification.

Employee - Devices that are classified based on time or SSID. Employee devices provide analytics, visibility on a floor plan, and integration with crowding detection.

- **Healthcare:**

Patients - Walk in devices as counted. Option for connected devices only or all devices seen the in the air. Not tied to classification.

Staff - Devices that are classified based on time or SSID. Staff devices provide analytics, visibility on a floor plan, and integration with crowding detection.

- **Manufacturing:**

Visitor - Walk in devices as counted. Option for connected devices only or all devices seen the in the air. Not tied to classification.

Employee - These devices are classified based on time or SSID and will provide analytics, visibility on a floor plan and integration with crowding detection.

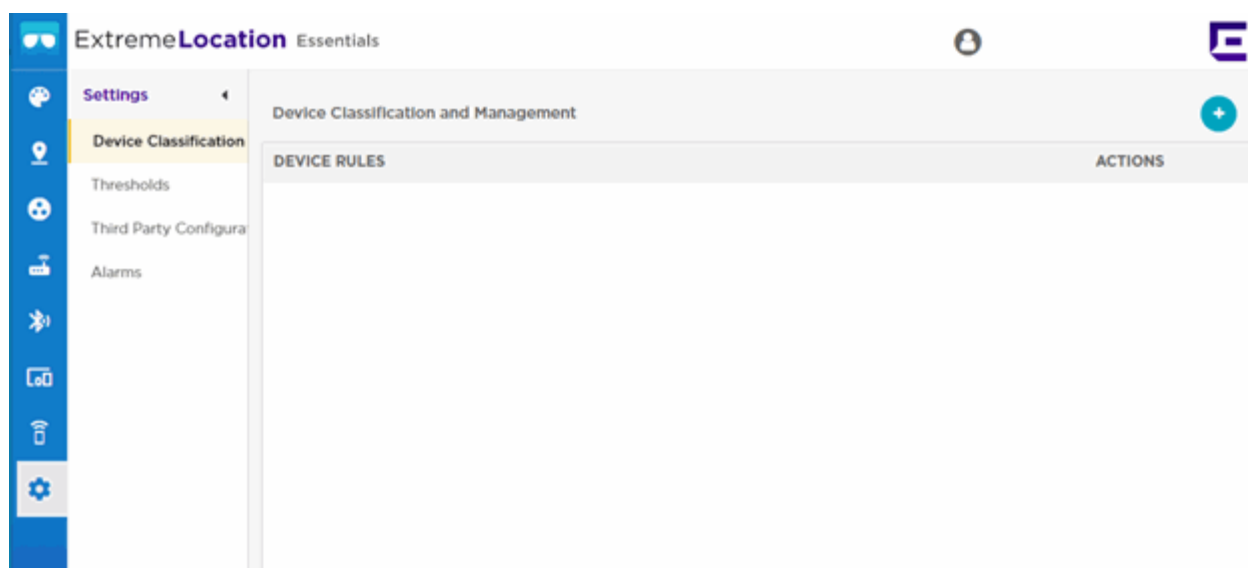
- **Government:**

Visitor - Walk-in devices as counted. Option for connected devices only or all devices seen the in the air. Not tied to classification.

To set the parameters for device classification:

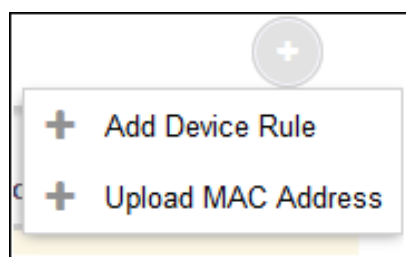
1. Select **Settings > System Settings > Device Classification**.

The **Device Classification and Management** window opens. This window displays the device classification rules configured for this ExtremeLocation Essentials account.



**Figure 77: Device Classification and Management window**

2. Select the  icon. The following menu displays.



3. Select the **Add Device Rule** menu item to add a new **Device Classification and Management** rule.

The **Configure Rule** screen displays.

4. Configure the following to create a device classification rule:

#### Select Visitor type

Use the drop-down list to select the appropriate visitor type. The following options are available:

- Asset
- Staff
- Staff Personal Devices



#### Note

You can create one rule per visitor type. Once a rule for a visitor type is created, it is no longer available as a selection in this drop-down list.

#### Provide SSID

Devices are classified based on the SSID that the device associates itself to at the site.

#### Visitor Duration

Devices are classified based on the duration the device remains at the site.

5. Select **Provide SSID** to classify devices based on the SSID that the device associates itself to at the site.

When classifying devices using SSIDs, you must manually provide the SSID that is

used for the classification. Use the  button to add SSIDs manually. The following field appears when you select the button.

Enter a valid SSID into the **SSID** field and select **Add** to add the entered SSID to the list. Then, select the appropriate SSID from the **SSID** drop-down list to create your classification rule.

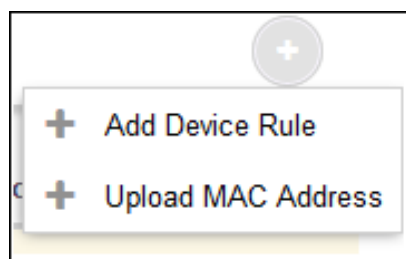
6. Select **Visitor Duration** to add a rule that classifies a visitor based on the length of time the visitor stays in the site.

Use the fields to set the minimum duration in hours and minutes the visitor needs to spend inside the site for it to be classified automatically.

7. Select **Save** to save the changes made to the **Device Classification** parameters.

At any time, select the **Reset** button to revert the changes made to the device classification parameters.

8. Select the  icon. The following menu displays.



9. Select **Upload MAC Address** menu item to add a list of device MAC addresses.

The **Upload MAC** screen displays.

10. Use the **Select Visitor Type** drop-down list to select the visitor type for the devices in this list.
11. Use the **Browse** button to search for and upload a *Comma Separated Value* file to the ExtremeLocation Essentials account.

Use the **Sample CSV** link to download a sample file to base your manual device classification data CSV file.

12. Select **Save** to save the changes made to the **Device Classification** parameters.  
At any time, select the **Reset** button to revert the changes made to the device classification parameters.

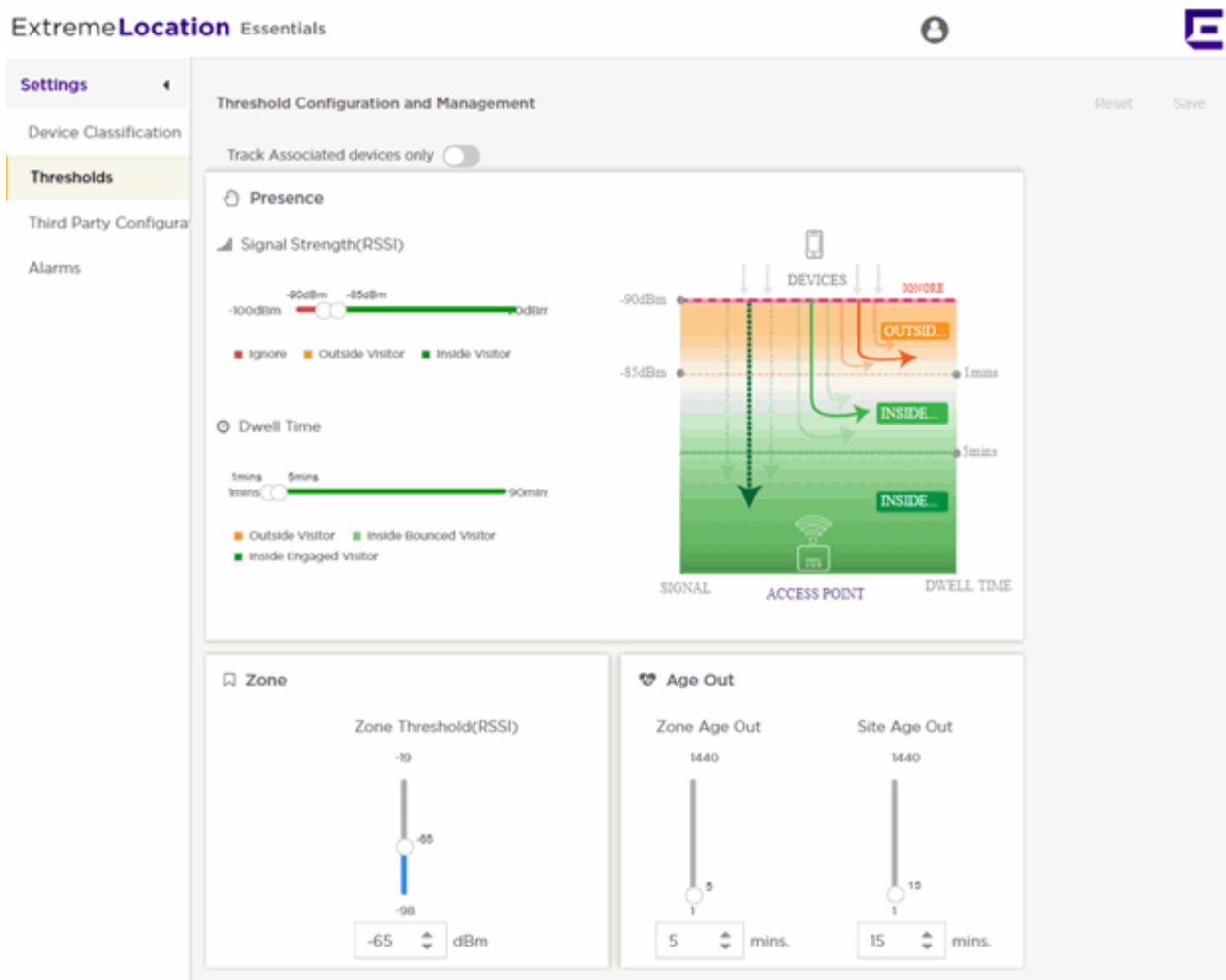
## Threshold Configuration and Management

Use the fields in this window to classify visitors to the site, set thresholds for device categorization based on zones, and set the different age outs for devices seen at the site.

To configure the different thresholds:

1. Select **Settings > System Settings > Thresholds**.

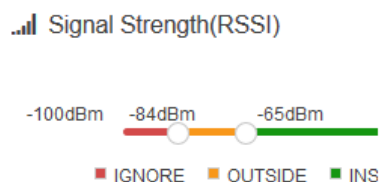
The **Threshold Configuration and Management** window opens.



**Figure 78: Threshold Configuration and Management window**

2. Select the **Track Associated devices only** switch control to track associated devices only. All other devices are ignored.

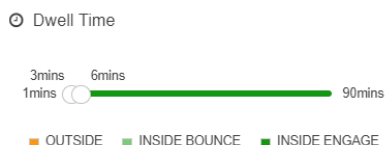
3. Set the following **Presence** values:



**Figure 79: Signal Strength (RSSI) slider**

Use the **Signal Strength** slider to set the values for device classification as one of *Ignored Devices*, *Outside Devices*, and *Inside Devices*.

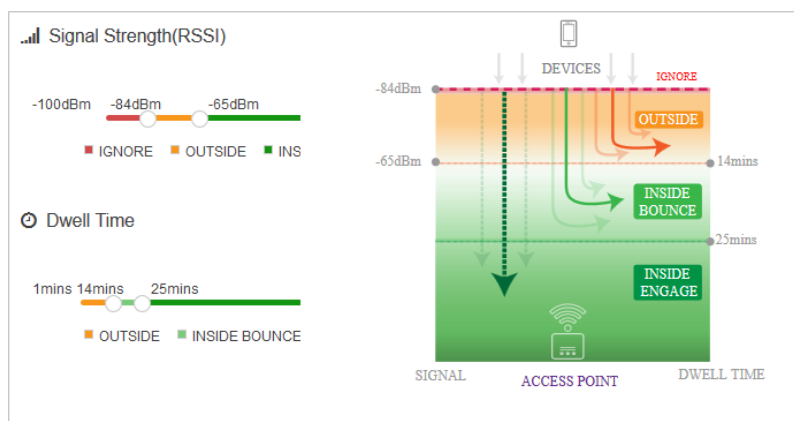
- A device is ignored if the signal strength (RSSI) of the device is below the signal strength value set by the first slider knob. This is indicated by the red portion of the **Signal Strength (RSSI)** slider. These devices will not be tracked for analysis.
- A device is considered as *Inside* if the signal strength (RSSI) of the device is above the signal strength value set by the second slider knob. This is indicated by the green portion of the **Signal Strength (RSSI)** slider.
- A device with a signal strength reading between the two knobs of the **Signal Strength (RSSI)** slider is considered as *Outside*. This is indicated by the orange portion of the **Signal Strength (RSSI)** slider.



**Figure 80: Dwell Time slider**

Use the **Dwell Time** slider to set the values for device classification as one of *Outside*, *Inside Bounce*, or *Inside Engaged*.

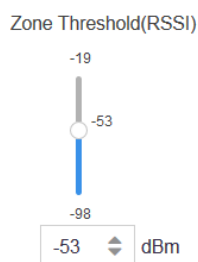
- A device is classified as *Outside* if the device is seen in the site for a duration that is less the duration set by the first slider knob. This threshold is indicated by the orange portion of the **Dwell Time** slider.
- A device is classified as *Inside Engaged* if the device is seen in the site for a duration greater than the duration set by the second slider knob. This threshold is indicated by the dark green portion of the **Dwell Time** slider.
- A device that is seen at the site for a duration between the times indicated by the two knobs of the **Dwell Time** slider is considered as *Inside Bounced*. This duration is indicated by the light green portion of the **Dwell Time** slider.



**Figure 81: Presence Configuration Graph**

Use the graph located to the right of the **Signal Strength (RSSI)** and **Dwell Time** sliders to get a visual representation of the values used for device classification.

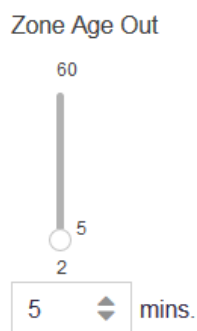
- Set the following **Zone** classification values.



**Figure 82: Zone Threshold (RSSI) slider**

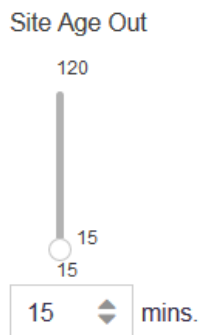
Use the **Zone Threshold (RSSI)** slider to set the threshold RSSI value above which a device is classified into a category.

- Set the following **Age Out** timeout values.



**Figure 83: Zone Age Out slider**

Use the **Zone Age Out** slider to set the zone or category age out value. This slider sets the time (in minutes) after which, if a visitor's location information is not received from the ExtremeLocation Essentials service, the visitor is considered to have left the category or region.



**Figure 84: Site Age Out slider**

Use the **Site Age Out** slider to set the age out value. This slider sets the time (in minutes) after which, if a visitor has not been seen by any sensor in a site, the visitor is considered to have left the site.

6. Select **Save** to save the changes made to the **Threshold** parameters.

Select the **Reset** button to revert the changes made to the threshold parameters.

## Third Party Configuration

### Third Party Servers

When an event is generated for any site in your ExtremeLocation Essentials account, it is sent to your remote web server in real-time. Filters, if any, are applied to the events before being transmitted. Filters are used to control the event types to be passed to your web server.

Use the **Third Party Configuration** window to configure the information required for ExtremeLocation Essentials to connect to your server. Also use this screen to filter the event types of interest for your deployment.

A web server or service must be configured to receive the data. This web server can then pass on the received data to third-party application data processors for further action or it can store the data locally.

To configure ExtremeLocation Essentials to connect to your remote web server:

1. Select **Settings > System Settings > Third Party Configurations**.

The **Third Party Configurations** window opens.

**Figure 85: Third Party Configurations window**

2. Provide the following values to configure the Third Party Configuration settings:

#### Subscriber Push URL

Configure the remote web server where all events types selected in the **Events** field is transferred to in real-time.



#### Note

The web server must listen on one of the standard ports, 443 (https) or 80 (http). ExtremeLocation Essentials does not support web servers listening on ports other than these two ports.

#### Username

Set the user name valid for accessing the remote web server.

#### Password

Set the password for the above user name.

#### Events

Select the events that will be pushed to the remote web server in real-time.

- **Presence** - All events of the type **Presence** will be included when events are pushed to the remote server. A presence event is generated when a device enters or exists a site or is in the vicinity of a site.
- **Category** - All events of the type **Category** will be included when events are pushed to the remote server. A category event is generated when a client device enters or exits a category.
- **Location** - All events of the type **Location** will be included when events are pushed to the remote server. A location event is generated when there is a change in position of a client device.
- **RSSI** - A location event is generated if the RSSI value of the device is above a specified duration.
- **Crowding** - All events of the type **Crowding** will be included when events are pushed to the remote server. A crowding event is generated when the ratio of number of visitor device to the number of staff devices exceeds a configured threshold.
- **Alarms** - All events of the type **Alarms** will be included when events are pushed to the remote sever. An alarm event is generated when an *Asset* monitored by ExtremeLocation Essentials exits its defined area of restriction. This event is only available if you have accepted the terms and conditions for *Asset Tracking*.

3. Select **Save** to save the changes made to the **Subscriber Settings** parameters.

At any time, select the **Reset** button to revert the changes made to the subscriber settings parameters.

4. Test the connection.

Select **Test Connection** to test the web server connection. The test also detects and mitigates a blocked tenant. If connection status is successful, blocked tenants are released and ExtremeLocation Essentials begins sending notifications.

## Alarms Configuration

Use the **Alarms Configuration** screen to configure the parameters that define a crowding event and the parameters for asset tracking alarms. These settings are applicable to all the sites managed by this ExtremeLocation Essentials account.

### Crowding Configuration

Crowding events occur when the ratio of number of visitors to number of staff in a category or a zone exceeds the minimum threshold value configured for that category or globally at the site level.



#### Note

The Crowding event is cleared when:

- the ratio between the number of visitors to the number of staff goes below the configured setting.
- the number of visitors to the category goes below the configured threshold as the visitors move away from the category.

When the time specified in the **Event Time Out** field under the **Settings > Crowding** screen elapses, the presence of this event is again polled for. If the event is cleared, then this alert is removed from the floor map.

### Asset Tracking Configuration

Asset Tracking events occur when a tracked asset is not seen within its permitted area for a set period of time, or has entered an area where it is not permitted into, or has exited an area to which it is restricted to. The settings in this screen define the time out after which an alarm is raised if the device is not seen and the time out after which the alarm itself is removed.

To configure the different alarm parameters:

1. Select **Settings > System Settings** from the main menu.
2. Select **Alarms** from the sub menu.

The **Alarm Configuration** screen displays.

Alarm Configurations Reset Save

⊙ Crowding Alarm Configurations

Minimum Visitor Count:  
5

Event Time Out:  
30 Minutes

⊙ Asset Tracking Alarm Configurations

Asset Alarm Timeout:  
30 Minutes

Asset Exit Interval:  
30 Minutes

3. Configure the following Crowding Alarm Configurations:

| Field                 | Description                                                                                                                |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------|
| Minimum Visitor Count | Set the minimum number of visitors to staff per zone that will trigger a global real-time crowding event.                  |
| Event Timeout         | Set the number of minutes that will transpire between events being triggered for that region. Default value is 30 minutes. |



**Note**

If there are no staff in a category, an event is triggered when the Minimum Visitor Count is exceeded. If there are staff in the category, then the Threshold is used to trigger the events.

4. Configure the following Asset Tracking Alarm Configurations:

| Field               | Description                                                                                                                                                                                                                                               |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Asset Alarm Timeout | Set the time out duration in number of minutes after which the Asset Tracking Alarms timeout.                                                                                                                                                             |
| Asset Exit Interval | When a device is not seen inside its restricted area or is not seen within the site or floor for this duration, an alarm is raised. Use the spinner to set the duration in minutes. If a tracked asset is not seen for this duration, an alarm is raised. |

5. Select **Save** to save the changes made to the **Crowding Configuration** screen.

## **NEW** BLE Webhook Configurations

### BLE Webhook Configurations

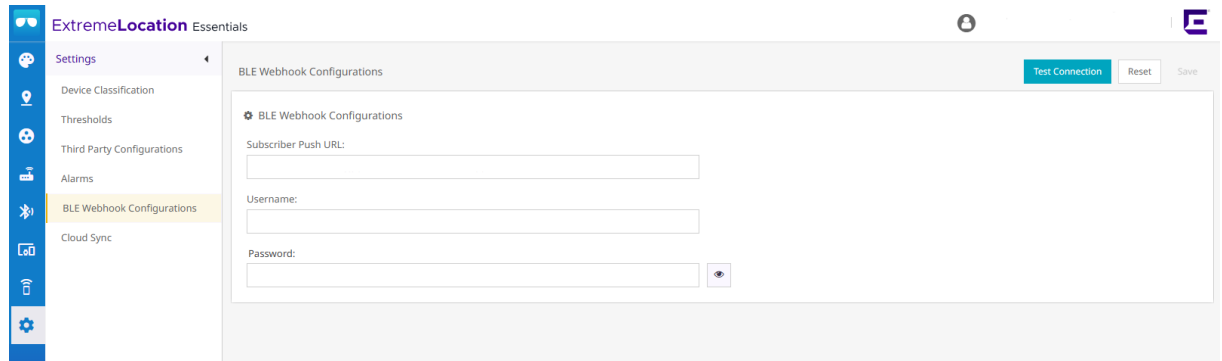
When an event is generated for any site in your ExtremeLocation Essentials account, it is sent to your remote web server in real-time. Use the **BLE Webhook Configurations** window to configure the information required for ExtremeLocation Essentials BLE webhook.

A web server or service must be configured to receive the data. This web server can then pass on the received data to third-party application data processors for further action or it can store the data locally.

To configure ExtremeLocation Essentials for BLE webhook configurations:

1. Select **Settings > System Settings > BLE Webhook Configurations**.

The **BLE Webhook Configurations** window opens.



**Figure 86: BLE Webhook Configurations window**

2. Provide the following values to configure the BLE Webhook Configuration settings:

#### Subscriber Push URL

Configure the remote web server URL where BLE webhook notifications can be transferred to in real-time.



#### Note

The web server must listen on one of the standard ports, 443 (https) or 80 (http). ExtremeLocation Essentials does not support web servers listening on ports other than these two ports.

#### Username

Set the user name valid for accessing the remote web server.

#### Password

Set the password for the above user name.

3. Select **Save** to save the changes made to the **Subscriber Settings** parameters.

At any time, select the **Reset** button to revert the changes made to the subscriber settings parameters.

4. Test the connection.

Select **Test Connection** to test the web server connection. The test also detects and mitigates a blocked tenant. If connection status is successful, blocked tenants are released and ExtremeLocation Essentials begins sending notifications.