Wireless Site Maps Overview

Cisco Prime Infrastructure 3.2

Job Aid
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Wireless site maps illustrate wireless network devices based on their physical relationships in geographical and hierarchical contexts, making maps an important tool for monitoring and troubleshooting the wireless network, including:

- Wireless access points.
- Cisco wireless LAN controllers.
- Wired routers.
- Client devices, such as laptops, tablets, and mobile phones.

When you open wireless site maps, the system opens a location level view that includes all of the sites that system users have configured by using wireless map functions.

**Note:** The sites that you see depend on the virtual domains to which you have access and the virtual domain in which you are currently working.
Wireless maps report faults by using visual indicators, so you can identify and respond to current or potential issues and identify the areas of the network that could be affected more efficiently.

You access wireless site maps on the Maps menu under Wireless Maps.

This job aid introduces you to the Site Maps (New!) navigation, layout, and tools for monitoring and interacting with the wireless network for those locations that system users have configured.

Note: When you make changes to site maps, those changes appear on both the new and deprecated site map types.
Map Organization and Hierarchy

System users organize maps hierarchically by physical location, beginning with the campus (parent site), then each building, and then each outdoor area at the site and the floors and basements of each building.

Skills

To recognize the uses of wireless site maps, you need the following experience.

**Basic**

- Prime Infrastructure navigation and concepts

**Proficient**

- Wireless network device configurations
- Wireless networking and monitoring concepts
Terms

Building

In the hierarchy structure, a level below the site or campus, which can contain floors or basements.

Fault

Indicator of conditions that are falling outside of acceptable health metric or alarm thresholds.

Location display color-code to indicate the highest severity level fault or faults that are occurring at that location level. Device icons indicate fault severity at the device and radio levels.
Floor or Basement

In the hierarchy structure, the level below a building and belonging to the building, which can include access points, clients, chokepoints, and WiFi Time Delay on Arrival (TDOA) receivers.

Outdoor Area

In the hierarchy structure, a level below the site or campus and outside of buildings, which can include access points, clients, chokepoints, and WiFi Time Delay on Arrival (TDOA) receivers.

Outdoor areas are most commonly associated with a building or buildings.
Site or Campus

In the hierarchy structure, the container that defines the top, or parent level, of a physical location, which can include buildings and outdoor areas.

In some instances, the system uses the terms site and campus interchangeably.

Virtual Domain

Administrators configure virtual domains as a method of limiting system users’ accesses to only those devices with which or areas of the application in which they need to work.

Depending on your role, you can have access to one or more virtual domains.
Navigating Wireless Site Maps

The Location Level View

Layout and Features

Layout Overview

The parent site level layout includes:

- The **Domain Navigator**, which lists all of the available wireless sites and provides navigation to those sites or their dependent locations.
- The site level search and sort toolbar.
- The view toolbar.
- Site level dashlets.
- The visual representation of the sites:
  - When the system has connectivity to the Internet, an interactive geographical map layout.
When system users have uploaded image files, the applicable image.

When the system does not have Internet connectivity or an uploaded image file, a blank layout with highlight boxes to illustrate locations and dimensions.

Wireless maps display sites by using icons and report conditions by color-coding the icons.

To see icon and color code definitions:

- On the view toolbar, click **Legend**.
Changing the Location Level View Layout

By using the toolbar, you can toggle the view so that it displays sites:

- In a visual representation, referred to as a map view, which is the default view and can show the sites in their geographical context when maps or map images are available.
- In a grid view, which provides a zoomed view of each geographical location.
- In a table view, which list the sites.

The system highlights the button for the view that is active.

Each view provides summary data for each site, including the numbers of each of the following by default:

- Buildings
- Outdoor areas
- Floors and basements
- Access point radios and whether any access point radios are reporting critical alarms (faults)
- Wireless clients currently associated with the site
In the table view, you also can include or remove list items.

Changing Reporting Preferences

You can control how the wireless maps functions present and report data.

Note: For detailed information on each of the preference settings, refer to the Edit Map Properties topic in the Cisco Prime Infrastructure 3.2 User Guide.
Geographical Map Features

Depending on the zoom level of the map, the map presents location groups that are geographically close together in a single icon that indicates the number of sites that are grouped.

When you zoom in to a specific area, the icons update to represent each site individually.

The icon color-code at individual and grouped site levels represents the most critical alarm (fault) occurring on one or more devices associated with the site or sites.

To zoom the map in more closely on a location:

- Click a site icon.

Navigating Sites and Site Details

The location level view provides several ways to navigate to or open site details.

By Using the Domain Navigator

The Domain Navigator lists all of the sites that users have added, including those that do not include geographical coordinates.

When sites include dependent sites, an expand icon is available beside the site name. You can expand entries to see its dependent locations.
By Using the Site Search

A site search feature is available in all views that contain dependent locations, below the Sites heading. This function is helpful when you are managing large numbers of sites.

As you type, the page updates to display those sites with names containing the string that you are typing.

By Using Site Summary Dashlets

In the map view, the system lists summary data by site in dashlets on the left side of the page. You can navigate to the next level of dependent locations by clicking a link in a summary.
When you navigate to a dependent level location, the **Sites** heading becomes a link, so that you can navigate to a higher level location efficiently. The site summary links also update when additional site levels are available.

As you continue to open dependent locations, the higher level site names become links.

In the grid view, you can click a site summary panel to open dependent locations.
In the table list view, you can click a site name link to open dependent locations.

### Navigating Outdoor Areas or Buildings at a Site

In the maps hierarchy, system users can add outdoor areas or buildings at a site level or, most often as dependent locations associated with a site. At this point, outdoor areas and buildings present the same features and functions.

System users can upload images of locations, which are visible when the map view is active. When a site contains more than one defined location, the map outlines and shades those locations. You can point to a location outline to see its name.

At this level, the page layout and features are the same as those available at the location level.

The screenshot below illustrates a site layout with one outdoor area and with a site image.
The screenshot below illustrates a site layout with buildings and with the map available with Internet connectivity.

When there are multiple locations at a site level, system users can navigate to an individual location level, a single outdoor area, or a building.

At this level, system users also can upload images, which are visible when the map view is active. The map indicates the individual outdoor area or building with a highlight.

The page layout and functions are the same as those at a site level.

To monitor and manage the devices at each of these individual areas, system users add outdoor area layouts or floors and basements to buildings.
Navigating the Building Level View

When you open the view for a single building, the system displays dashlets for each floor or basement configured for it.

The dashlets display a thumbnail of the floor layout and indicate the number of AP radios, connected clients, and access points reporting faults.

You can see the configuration or edit the configuration details, or delete the floor, by using the dashlet tools.

To open a floor view:

- Click the floor dashlet.
Navigating an Outdoor Area or a Building Floor or Basement

Features and Tools

System users can add assets and overlays on the outdoor area, floor, or basement, which helps system users remain oriented during monitoring and troubleshooting activities.

At the level, the page features and tools are the same for outdoor areas, floors, and basements.

The following screenshot illustrates an outdoor area with its access point radios. The map displays the coverage heat map by default, which indicates the signal strength of each radio.

You can refer to the legend on the left to determine the strength values.
The following screenshot illustrates a floor with its access point radios and coverage heat map.
When you open an individual outdoor area or floor, the Display Settings tools are visible by default, indicated by the highlighted button on the toolbar.

Using the Display Settings tools, you can control the assets and types of data that appear on the map.

To control how the map presents the item:

- Expand the item panel to access and enable additional presentation features.

To display an item on the map, select the associated check box.
The toolbar provides access to display and data controls, and monitoring and editing tools.

The following screenshots describe the uses of the tools on the toolbar.

**Note:** When you select the setting that includes both radio frequencies, the map overlays the heat maps for each. You can select a single frequency in the drop-down list to see its associated heat map.

When the view of the map is affected, the map displays a notification indicator.

**To review the notification:**

- Point to the notification indicator.

The screenshots below show indicators for unpositioned access point and filters that are restricting the information appearing on the map.
The layout provides zoom tools and....

...to read the map effectively, access to a detailed legend.

To open the legend:
- Click the Get Help button.

The access point device is in FlexConnect mode and reports the AP status based on the most critical fault occurring on the device or one if its radio bands. In this case, the most critical fault is minor.

The 8.2.11 a/n/c radio band is not reporting issues.

The 8.2.11 b/g/n radio band is reporting a radio status of a minor fault.

Additional wireless network components that the layout can display and on which it can report.
**Reviewing Access Point (AP) Radio Details**

Access point (AP) radio icons are interactive, providing additional details about the specific device. You can access summary and detailed information about the device.

To open a pop-up window with summary information:
- Point to an AP radio icon.

The pop-up window opens and provides summary detail about the radio. You can click an option button to see related information.
To open detailed information about the AP radio:

- Click the AP radio icon.

The icon displays a highlight and detailed information opens to the right of the map.
Device level information is available and you can take actions to monitor or configure the device.

You also can see the total alarm count and navigate to alarm details, which helps you to address alarms efficiently.

**To evaluate or act on device alarms:**

- **Beside Alarms**, click the number link.

The system navigates to an **Alarms** page that lists the alarm or alarms that are associated with the device or its radios.
Below the device level information, radio level information is organized on tabs.

You can scroll to see information about neighboring radios and interferers.
You can open detailed device information by clicking the link icon. The system navigates to and opens the access point’s device details.
Overview Video

Watching Videos

To watch a video:

- Click the link below, which opens an MP4 file.

  Based on your system and configuration, you might need to start the video manually.

  Note: Video download and streaming times can vary.

Navigating Wireless Site Maps

Watch the Video

To review the layout, navigation, and tools available on new wireless site maps, watch the Navigating Wireless Site Maps video.

Approximate runtime: 8:00
Links

To Product Information

Visit the Cisco Web site to learn more about Cisco® Prime Infrastructure.

Visit the Cisco Web site to review or download technical documentation.

To Training

Visit the Cisco Web site to access other Cisco® Prime Infrastructure learning opportunities.

Visit the Cisco Web site to access learning opportunities for other Cisco products.

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Follow your regular business process to request technical support or address technical or application-related questions.