Healthcare User Guide

Cognosos Portal Indoor Asset Tracking

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Introduction

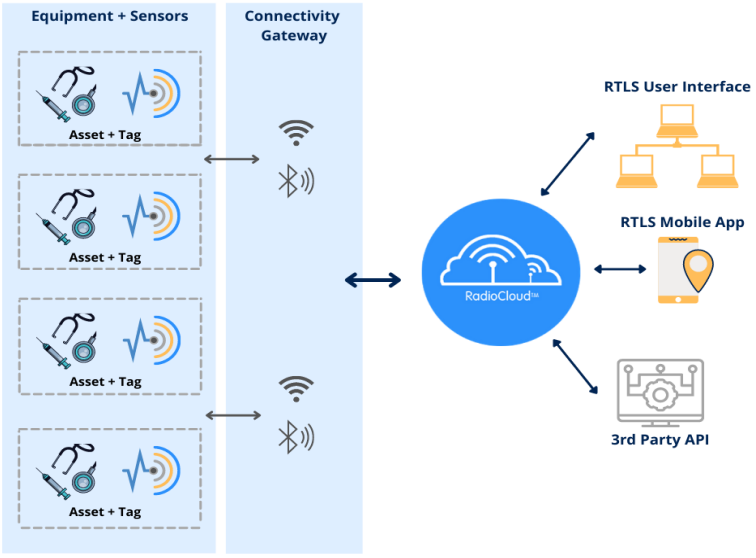
1.1 Overview

The Real-Time Location Services (RTLS) platform provides visibility to vital medical equipment and inventory even as it moves around the healthcare facility. This allows clinicians and staff to quickly and easily locate medical equipment without losing valuable time searching across rooms, floors or even buildings. Administrators and management gain fast access to key data such as inventory distribution and utilization in order to optimize the budget and lower the bottom line.

Through the use of a web-based user interface and a mobile application, the RTLS solution gives up-to-date location and utilization information through a dashboard, map, and site list views. In addition to the ability to quickly identify, track, and locate medical equipment, users can filter and search on various asset properties and apply business rules to oversee and maintain par levels.

1.2 System Infrastructure

Cognosos RTLS is an IoT (Internet of Things) solution that provides seamless data collection, analyzation, and presentation of the healthcare facility's valuable assets. The Cognosos RTLS solution includes location sensors (tags a.k.a. tags) that are attached to various pieces of equipment (assets) and a communication 'highway' over which data is transferred. By utilizing a unique asset ID, the system locates and provides real-time information about an asset's position within the facility. Movement alerts, utilization rates, and battery health provide the information necessary to operate effectively and make important business decisions.



Asset movement data is transmitted through the system where it is analyzed, aggregated, and displayed through the RTLS user interface.

Within hospital settings, the RTLS Indoor Asset Tracking solution leverages Bluetooth Low Energy (BLE) technology to create digital maps of the facility, thus allowing room-level visibility to equipment and zone-based alerts (i.e., by floor, by department or unit, etc.).

Cognosos uses a proprietary wireless networking technology called RadioCloud® to reliably transmit location data without the need to install large amounts of infrastructure or hardware. This patented platform offers great flexibility and scalability, enables easy configuration, and supports a wide range of device and sensor types, while supporting long-range communication.

The Cognosos portal supports versions of major browsers (Chrome, Safari, Edge, Firefox) up to one year old.

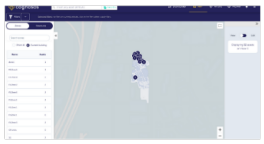
1.3 Portal Components

The Cognosos portal provides a web-based portal for accessing information about and managing an organization's medical equipment. Within the portal there are four primary views, or pages, from which users can access data: Dashboard, Map, My Site, and ProPAR (par replenishment levels).

Dashboard

- View facility wide information in graphical format
- Gain valuable information about inventory utilization and distribution, tamper alerts, and battery health from a single dashboard view
- Access more details regarding assets and asset tags with one click

Map



- View information in asset clusters by zone and floor
- Obtain asset information by zone
- Zoom in and out of clusters to view all the way down to the single asset level
- Locate assets using filter feature

My Site

- Manage assets, tags, zones, across your facility
- Locate assets or tags using filter and search features
- Attach and detach tags* to assets
- Access individual asset properties, movement history, and exact location with a single click
- Set up subscriptions for real-time notifcations on asset activities

ProPAR

- View asset inventory levels for clean and soiled equipment rooms via tiles or table
- Collect inventory needs at the room level using the pick list
- Set up subscriptions for real-time notifcations on ProPAR inventory activities

Functions on the Map and My Site dynamically interact so that when an action is taken from one area, the information refreshes across the system.

The user interface contains standard functions for data information, input and sorting:

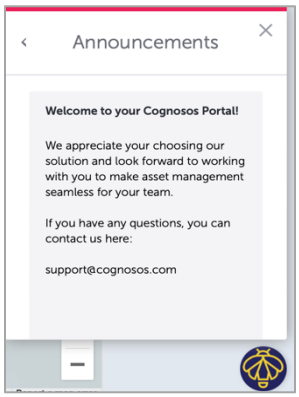
Data Views: Main/primary window, modal (pop-up) window, page, dashboard, map, list

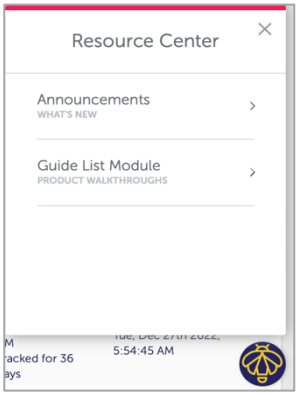
Input Controls: checkboxes, radio buttons, dropdown lists, list boxes, buttons, toggles, text and date fields, buttons

Navigational Components: primary or UI menu, page menu, left and right menus, search field, pagination, breadcrumb

Informational Components: icons, notifications, modal (pop-up) windows, message boxes, progress bar, graphs

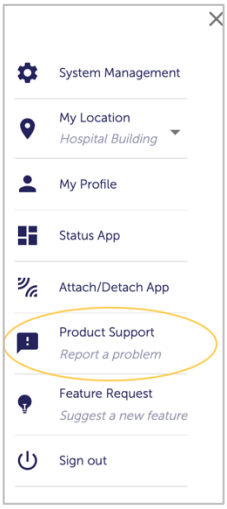
The Cognosos firefly icon displayed in the bottom right corner of all portal pages is there to provide you with more information and links to resources. From any page in the portal click the icon located in the bottom right corner of the screen. Look for announcements, resource links, and the like.



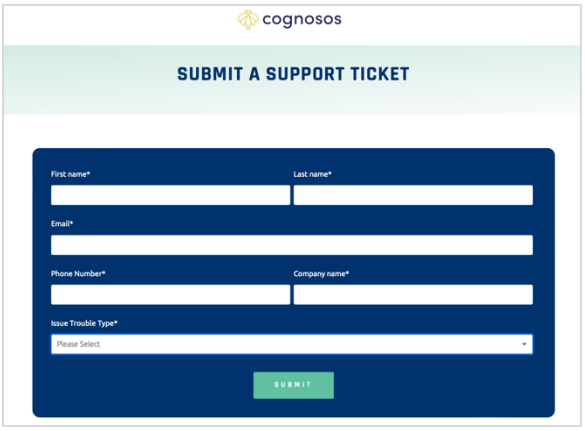


1.4 Cognosos Support

In the event there is an issue with the portal, communication gateways, asset tags, etc., you may connect to Cognosos Support Teams directly from the portal. Select the hamburger menu from the top right.



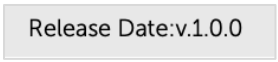
Select **Product Support**.



You will be taken to the Cognosos Support Ticket page. Complete all fields with an asterisk (*) and use the drop-down list to choose the Issue Trouble Type. The remainder of the page will populate to input more information based on the selection. The more descriptive the support ticket, the faster your support concerns can be fielded and addressed.

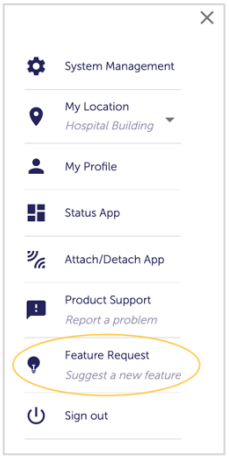
When you've put in all known information, select **Submit**. Your support ticket goes directly into the Cognosos Support Ticketing System and you will be contacted by a Field Services Engineer to address your concern.

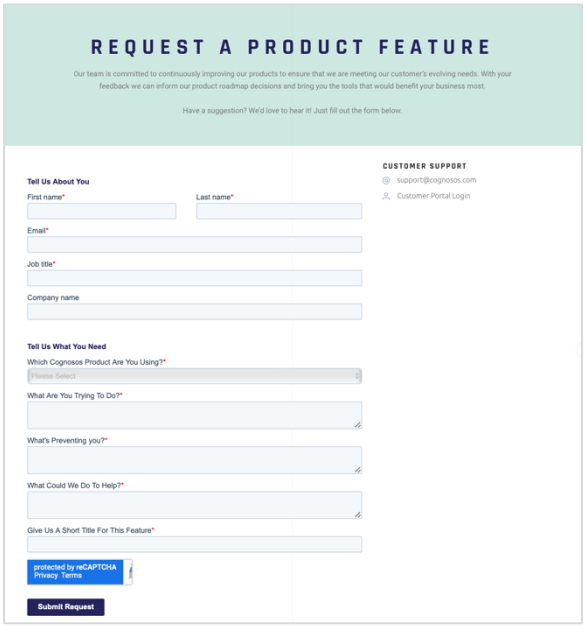
The version number of your portal is shown at the bottom of all portal pages. You are likely to need this information when requesting support.



Certain issues, such as user password reset or a forgotten password, can be addressed on site by an Administrator and in some cases by the users themselves. Refer to Section 2 of this document or the printed quick cards that are located on site near your Cognosos portal terminal.

Cognosos values the experiences and input of its customers and users so there is an option for sending requests to enhance workflow or product functionality. To access this form, select the hamburger menu and then **Feature Request**.



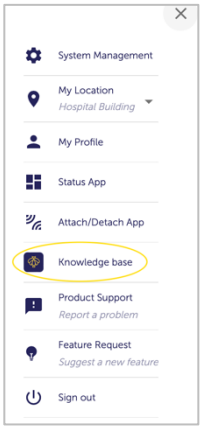


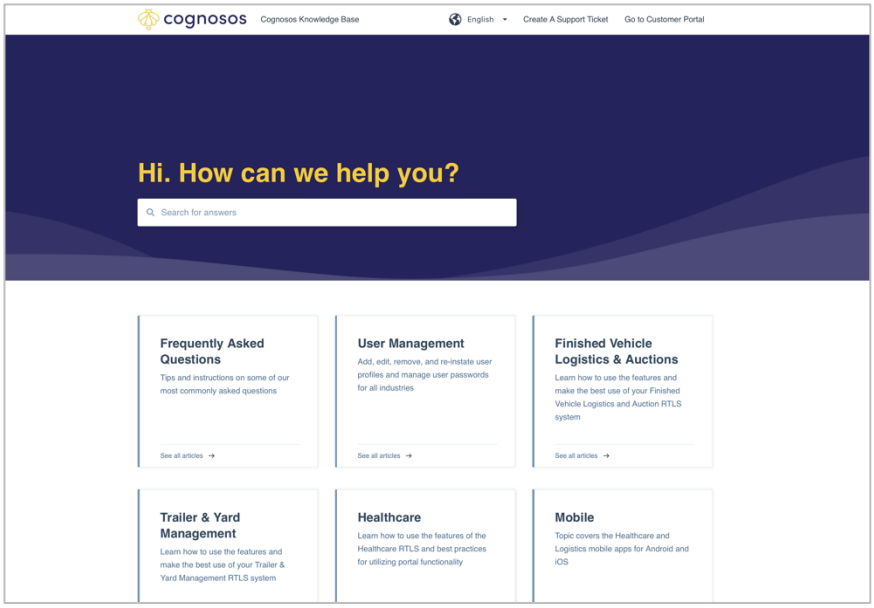
Use the form to input your contact information and give information about what needs to be accomplished through the RTLS and how the system can better serve your needs. Click **Submit Request** when complete and your information will be sent to the appropriate Cognosos Product Manager.

1.5 Information Access & Document Scope

This User Guide supports clients and users of the Indoor Asset Tracking System in hospitals and healthcare facilities. Broadly speaking, the User Guide covers the graphical user interface on the computer set-top and divides the system into three broad topics: (1) Data views, (2) Functionality and feature set, and (3) system administration.

Utilize the Cognosos Knowledge Base to access a wealth of information about your product. Select the portal's hamburger menu and then Knowledge base. Once inside the database you can search on the topic or question you're needing or go directly to the Healthcare topic.





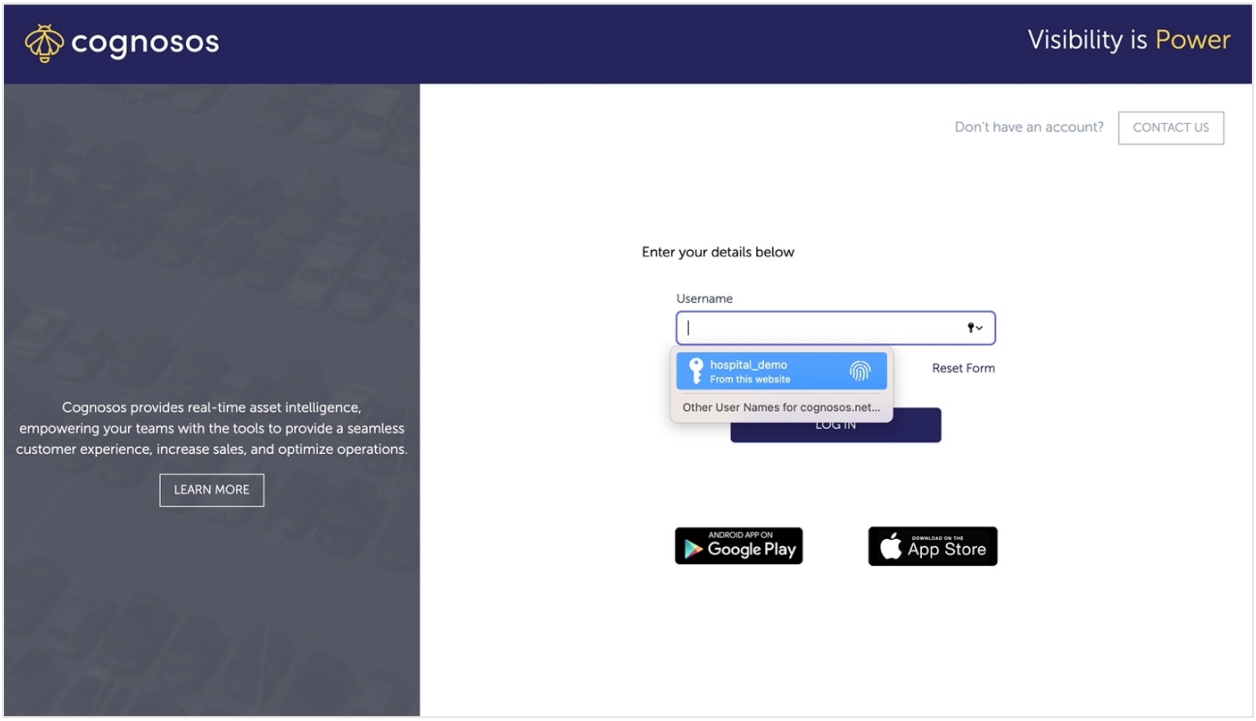
Due to the platform's configurability, there are potential differences in the ways in which hospitals and healthcare facilities configure the portal (e.g., zones and assets); as well as the use of certain RTLS features (e.g., Location AI or tamper alerts). The possibility of these variations is noted throughout the document as applicable.

If you are using the Cognosos Healthcare Mobile App on a mobile device, refer to the Quick Reference Guide for iOS or Android, whichever is applicable. For instructions and information on installation and set-up please refer to the Installation Guide; for information on hardware (tags/tags), please refer to the Product Data Sheet or Product Guide for that device.

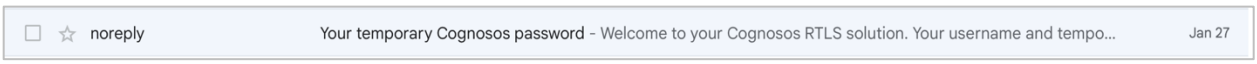
Access & User Roles

2.1 System Access

Cognosos provides is a web-based platform that is accessed through your organization's portal (e.g., portal.cognosos.net). From the browser, enter the website address to access the login page. Your Username and password are assigned by your System Administrator.



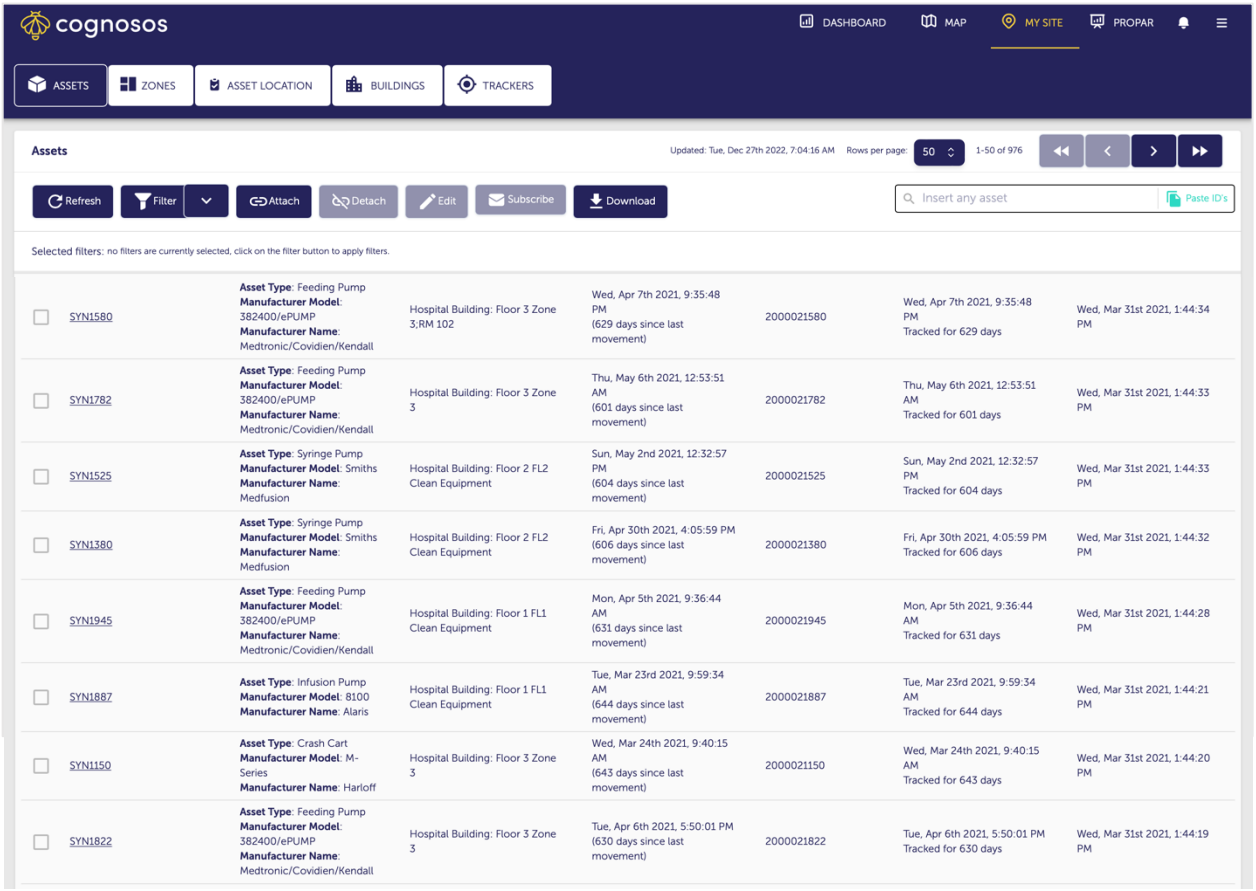
You will be given a temporary password for your initial login to the portal. Check your email for the temporary password.



Use the temporary password from the email as your initial login password. Upon login, you will be prompted to enter a new password. Input and save a new password (minimum of 8 characters; at least 1 capital letter, 1 number, and 1 special character).

If you do not see the email in your Inbox, check your Spam folder. The temporary password is good for 7 days once it is sent. If more than one week has passed, an Administrator may request a new temporary password using the Resend Invitation button on the Users page.

When logging into the portal users are taken directly to the list of assets under My Site, which displays RTLS inventory[1] across the organization. The features of this page are outlined in the Asset Management section.

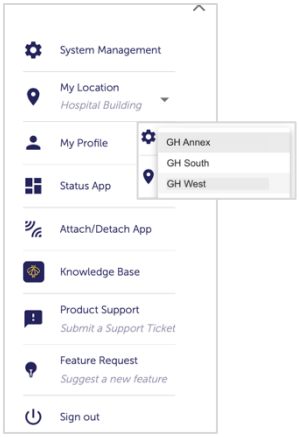


The system offers three different page views from which to access facility, asset, and asset tag (tag) information. The dashboard includes widgets that provide graphical views of inventory data, asset tag status, and tamper alarms. With one click users are taken to a map overview of the facility noting asset locations across zones, while My Site offers a more detailed list view of assets, location, and asset tag information. System management functions (symbolized by the bell icon) give you fast access to exception reporting, such as unresponsive tags, ProPAR overages/shortages, and the like. The system menu drops down from the bars icon (referred to as the hamburger menu).

[1] When a healthcare facility utilizes Departments, users will see only the asset inventory for the department to which the user is assigned. For example, if a user is assigned to the Radiology Department, they will see only assets assigned to the Radiology Dept.

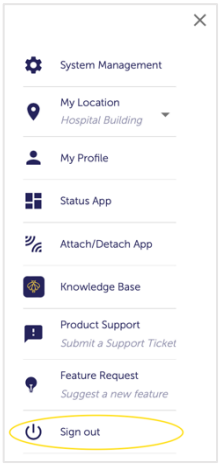
Each of these page views and their features is described throughout this User Guide. Although the way in which the facility data is displayed changes depending on which page view you select (dashboard, map, or list) the real-time information is the same across the entire system and many of the features are available no matter which page view you are on.

Hospital and healthcare organizations may have more than one defined location. To change the location of your current portal data, select the hamburger menu and then **My Location**.



When more than one location has been set up, there will be a drop-down list with additional locations. Select one to change the asset information shown in the portal.

To log out of the portal, click hamburger menu then select **Sign out**.



If multiple users utilize a public computer to access the portal, Cognosos recommends you log out when you are done with your tasks.

2.2 User Roles

Each user is assigned a login and user role by the Administrator. Availability of functions and features is based on the user role. The user roles are as follows:

Guest (guest features/functions are asset(s)-specific; see Creating Users)

View Only

Standard User

Administrator

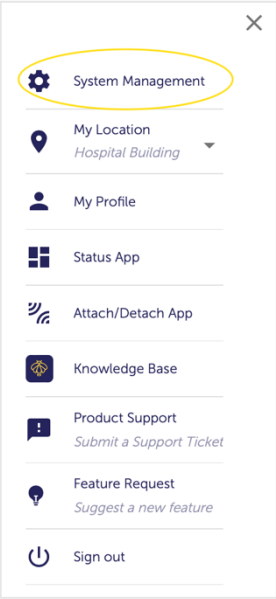
	User Role			
Feature/Function	**Guest**	**View Only**	**Standard**	**Admin**
Dashboard (page view)	x	x	x	x
Map (page view)	x	x	x	x
My Site (page view)	x	x	x	x
Tag Management (attach/detach)			x	x
Zone Management (name, type)				x
User Management				x
Application Settings				x
Departments				x
ProPAR			x	x
Events		x	x	x
Subscriptions	x	x	x	x
Notifications		x	x	x

Certain asset views may be restricted depending upon use of Departments and/or user role. If you believe that you should have certain functionality available and do not, please speak with your Administrator.

2.3 User Profile Management

System users and roles are managed by the Administrator. To access the Users option, you must have Administrator access rights. Users may edit their own profiles, which is outlined in Managing User Profiles.

Select **System Management** from the hamburger menu or click the bell icon. Select **Users** from the menu bar across the top of the window.

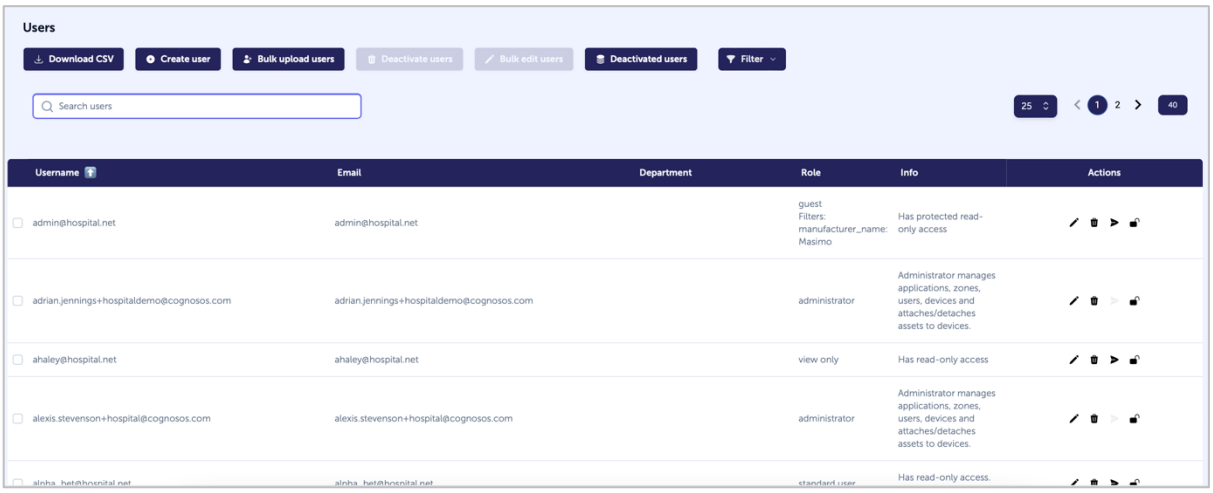


The **Users** option appears only for those logged in with an Administrator role.

Access the Users page to:

- Add new users to the RTLS portal (including access to the Healthcare mobile app)
- Edit user profiles, including application access
- Bulk upload and delete user profiles
- Remove user access to the portal
- Reset user passwords and resend new user invitations
- View and restore deactivated user profiles
- Assign users to departments

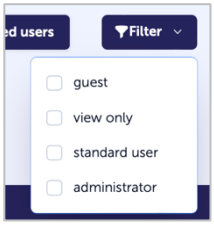
The main User page lists the current active users in alphabetical order ascending by username (default mode). Change the sort mode using the Username, Email, Department, or Role columns by placing the cursor over the column title and clicking.



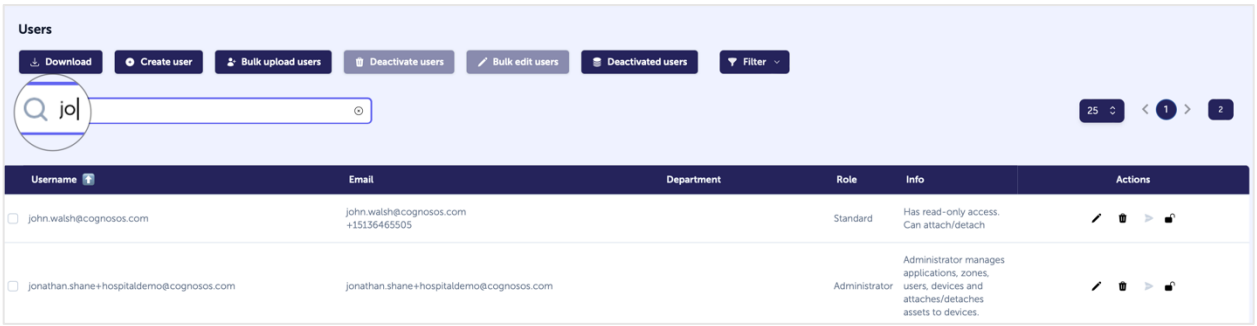
This page is also the starting point to create (add), edit, and delete users, as well as reset passwords, view and restore deleted users.

To fine-tune the list of users by role type, select the **Filter** button from the User page menu. Select the user role by which to filter and the Users page will refresh to display only users with that particular role.

To remove the filter and return to a list of all users deselect the previously chosen filter from the **Filter** drop-down.



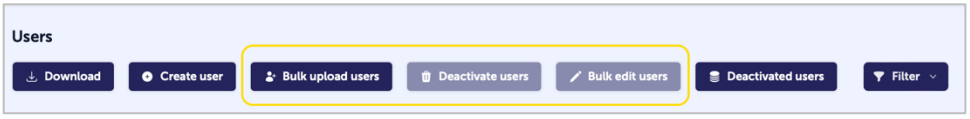
Use the Search bar to quickly locate a specific user. Begin to type inside the field and the user list automatically begins to adjust the user list as information is input. When the user you need is shown, continue with any actions.



To return to a full list of users, select the **x** in the search bar.

Actions necessary for a single user are listed in line with the username under the Actions column. Here you may choose to edit, delete, resend the user temporary password (new user), or reset a password. These functions are described in the sections that follow.

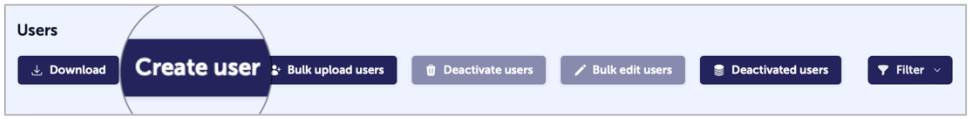
Bulk actions (upload, deactivate, and bulk edit) are available from the Users menu on the top of the page. If the healthcare facility utilizes the RTLS Department feature, Administrators can bulk assign users to a department.

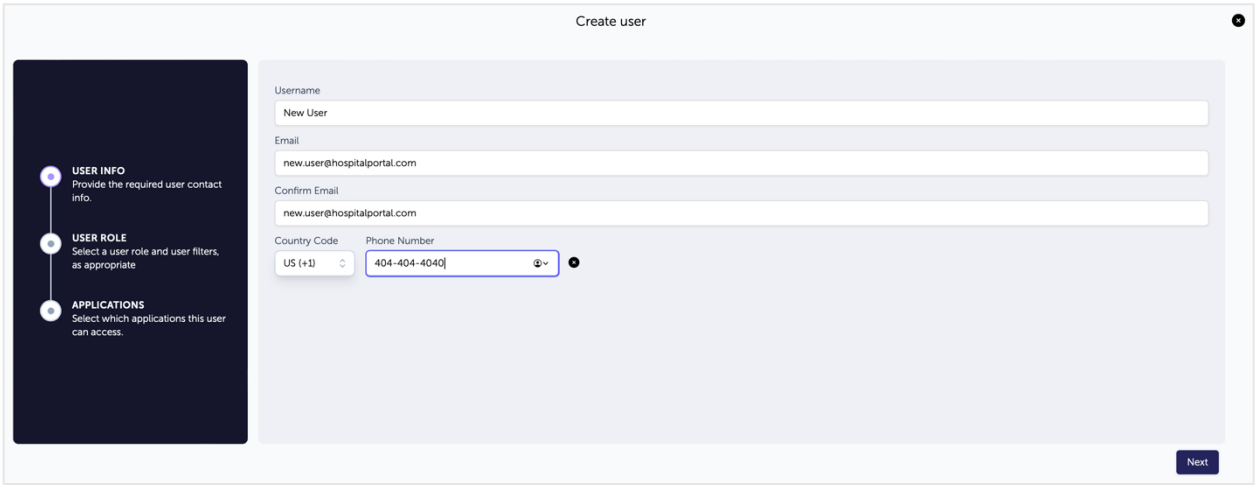


Use the **Download** button from the User page menu to download the user list (with or without filters) to a CSV file.

2.3.1 Creating Users

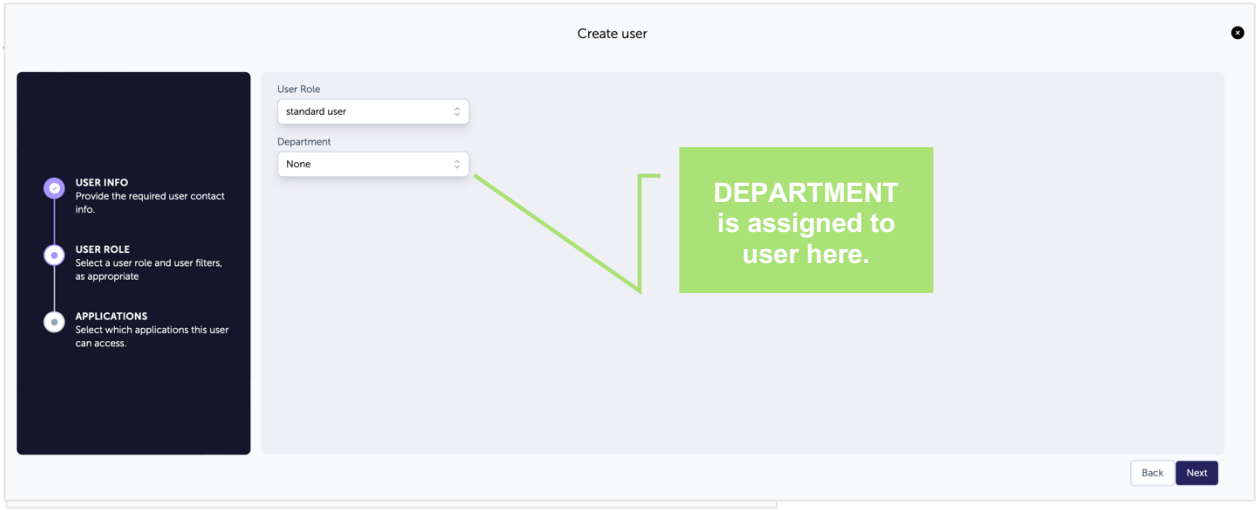
To create a new user profile, select **Create user** from the Users page menu. The Create user pop-up window will display to input the user information.



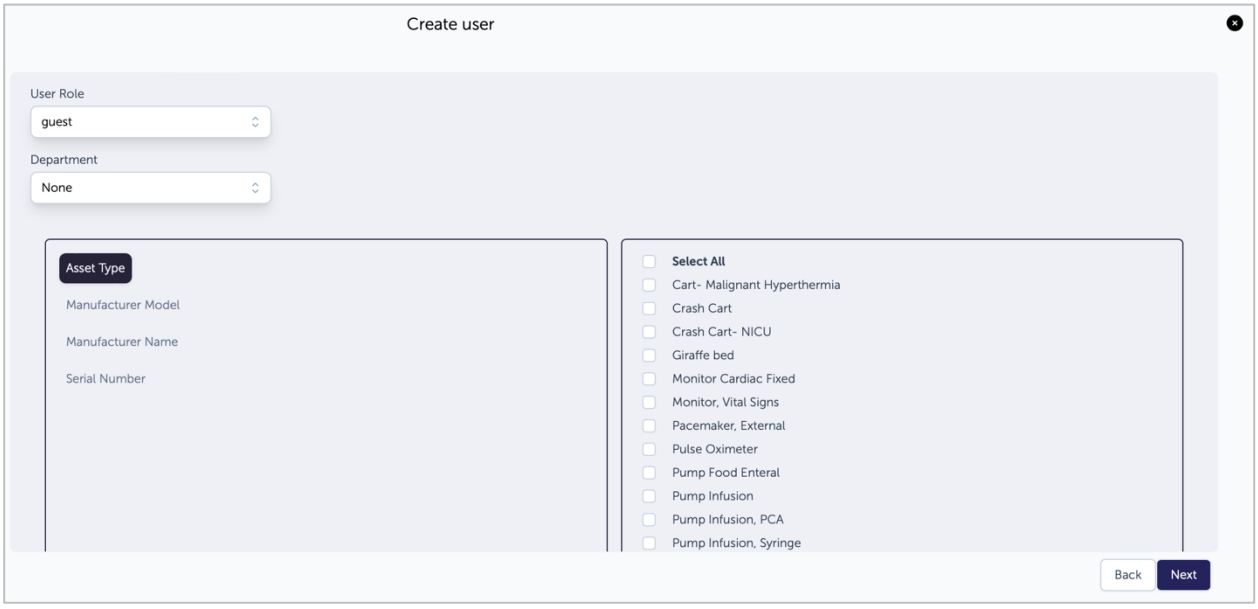


Enter the unique user information for the username (alphanumeric + special characters okay; no spaces), email address (used for alerts, subscriptions, notifications, and password reset activities). Use the drop-down list to select the correct country code and input mobile number (numeric values only). All fields except phone are required. Select **Next**.

Use the drop-down list to select the user role. Refer to the User Roles table (Section 2.2) if needed.

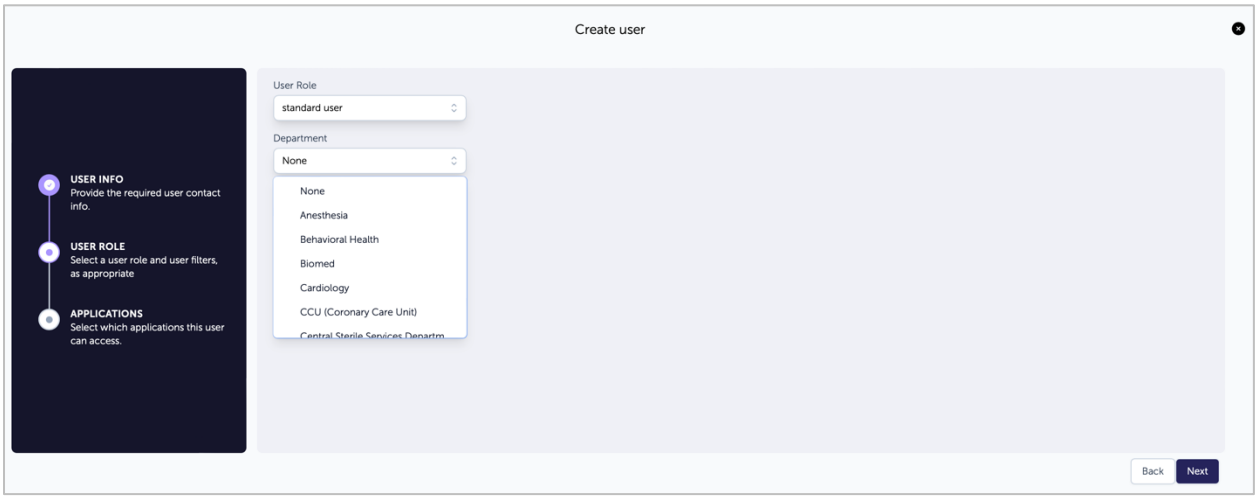


When the user has the Guest role, you will choose the assets to which the guest has access based on the asset type, manufacturer model or name, or serial number. For example, a guest user might be the 3rd party vendor who comes to do quarterly checks and maintenance on specific hospital equipment.



If your facility utilizes the Departments feature, use the drop-down list to assign the user to a department. This limits the user's view of assets and devices to only those assigned to the same department. The user setting applies across the entire RTLS portal and mobile app.

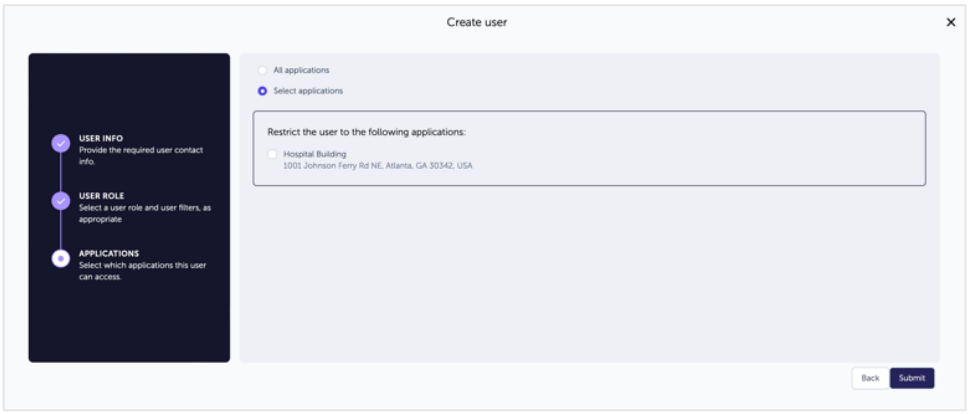
If the user should see all assets, leave this set to None. Those with Administrator user role will see all assets/devices.



Select **Next** to continue or **Back** to change to the user role.

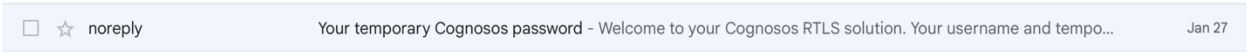
When a healthcare organization utilizes various applications (in house and third-party applications) to help streamline business operations, user access to those applications is defined here. Administrator roles are granted access to all applications and that setting may not be changed.

To choose specific applications, click the Select applications radio dial to open the list of defined applications. Place a checkmark next to application(s) to which user is granted access.



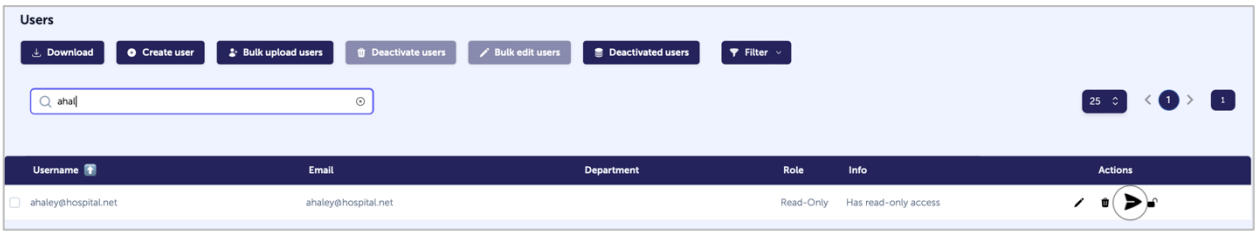
Select **Submit** to save the new user. Select **Back** to make changes.

For first time users, a temporary password is sent via email. The user will need to use the temporary password for the initial login and then change the password as prompted (refer to System Access).



Passwords must contain eight (8) characters, including one number and one special character.

The temporary password is good for 7 days. In the event the user does not set up a new password before the temporary password expires, Administrators should use the **Resend invite** option in the Actions column for that user.

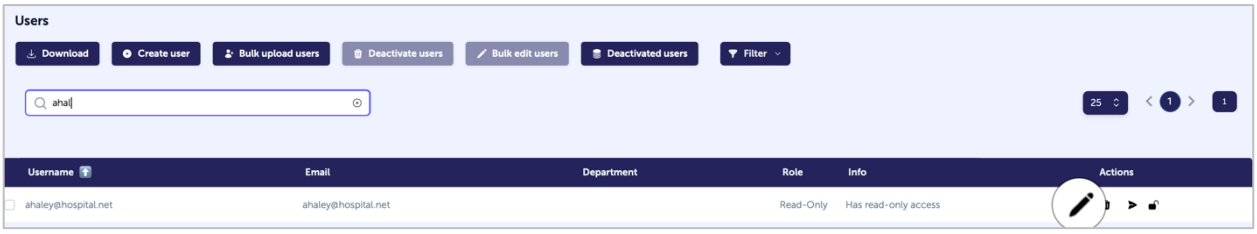


Make sure the user checks their Spam/Junk folder if they are not seeing the temporary password email in their Inbox.

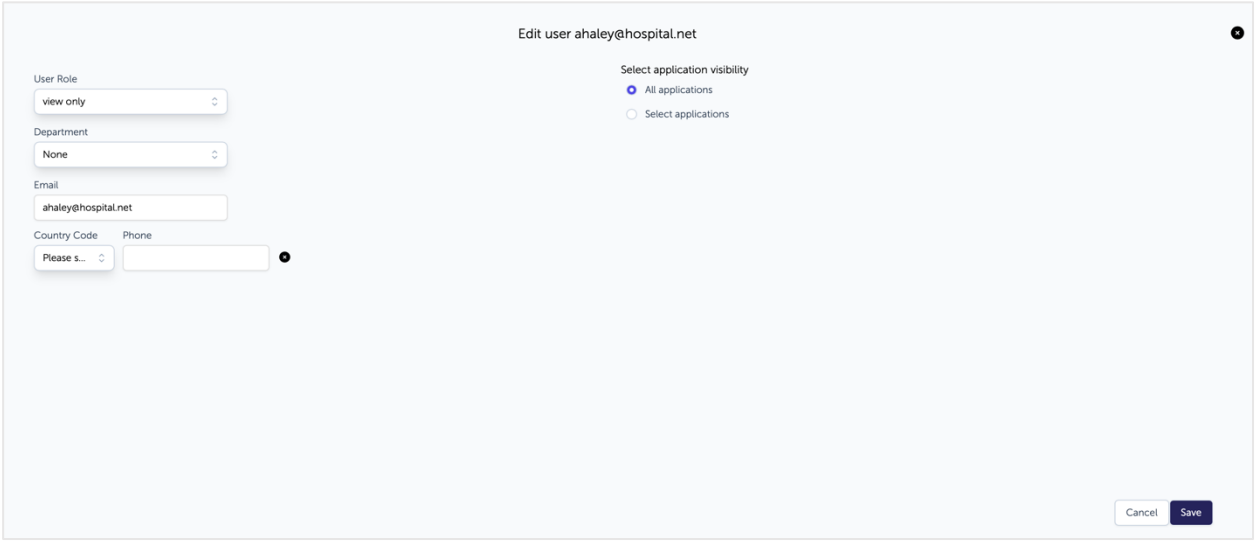
2.3.2 Editing User Profiles + Bulk Edit

Edit Single User

The system allows Administrators to make changes to a user's role, department, email address, and application access. Users may edit their own profile, which is described in Managing User Profiles. Administrators may also make bulk Department changes, which is described later in this section. To edit a specific user, select the **pencil** icon for that user. Use the search function first if needed.



Use the drop-down lists to change the User Role or Department. Edit the email and/or phone fields. To manage application access, select appropriate radio dial and proceed from there.



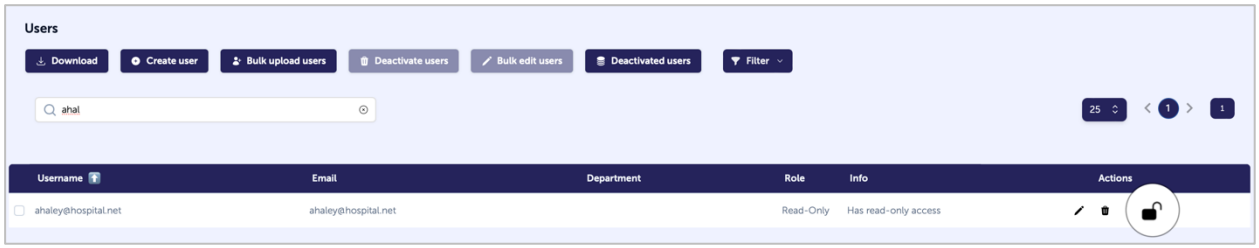
When working with departments, if you need to move multiple users to the same department, use the Bulk Edit function described below.

Not all organizations use Departments as a tool to manage user views of assets. The Departments option will be present only if this feature is turned on in the RTLS portal.

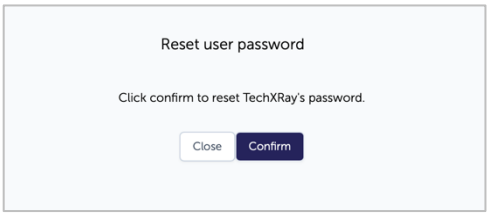
When changes are complete, select **Save**. The system will return to the main Users list page. Select **Cancel** to dismiss changes and return to main Users page.

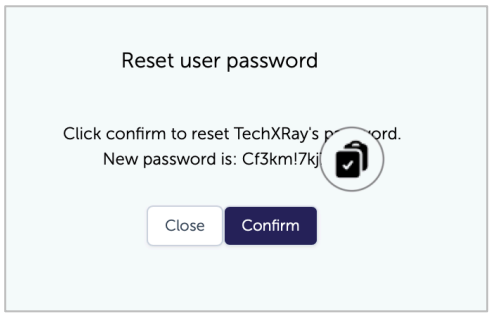
Password Reset

To reset a user's password, locate the user and select the **Reset password** icon.



Click **Confirm** in the pop-up window. The system will generate a new password. Copy and paste the password and send it to the user as their temporary login password. They should follow the steps outlined in System Access.

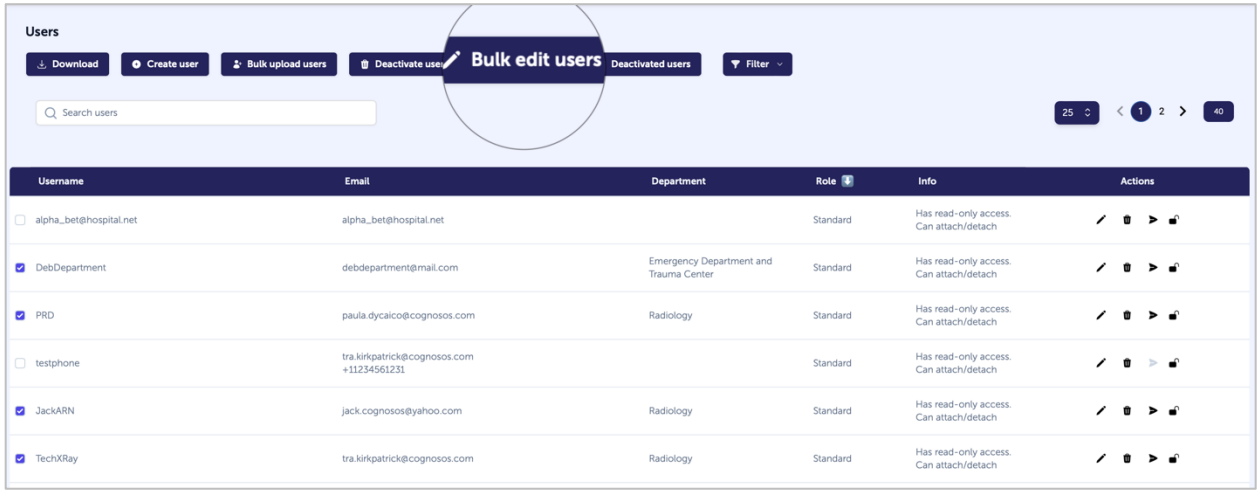




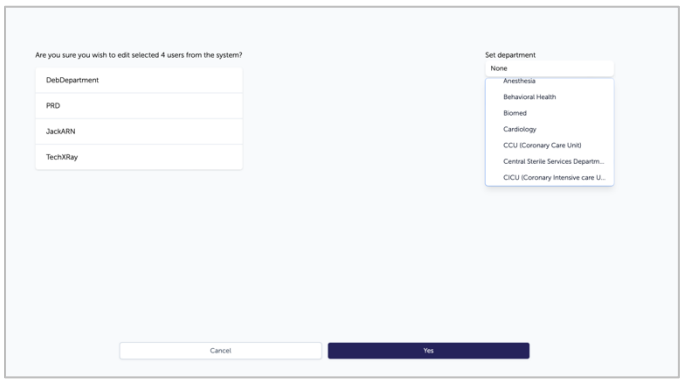
The user can also change the password under their user profile.

Bulk Edits

The Bulk Edit feature is used for making Department changes to more than one user at a time. (Note that this button may not appear on your menu if your facility does not use Departments.) Locate and place a checkmark next to the users you want to include in the bulk edit. The button will remain grayed out until at least one selection is made. Choose **Bulk edit users** from the menu.



Confirm the selected users in the pop-up window (the list scrolls) and select the Department from the drop-down list.



Click **Yes** to save the changes; **Cancel** to end the edit process without changes.

A small confirmation pop-up will appear to confirm the changes.

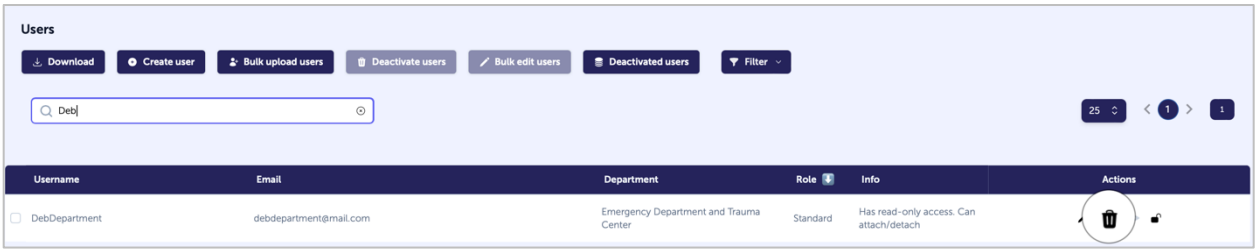
Note that it is not necessary that all users have a department assignment. Users who should have visibility and access to all assets, devices, and events should stay set to None for the department option.

2.3.3 Deactivate Users

Deactivating users removes their ability to log into both the Cognosos portal and mobile app. This is an Administrator-level function that can be used at the single user level or via bulk removal. Both options are described below.

Deactivate Single User

Locate the user to deactivate by searching on the main Users page. Click the **Deactivate user** icon.

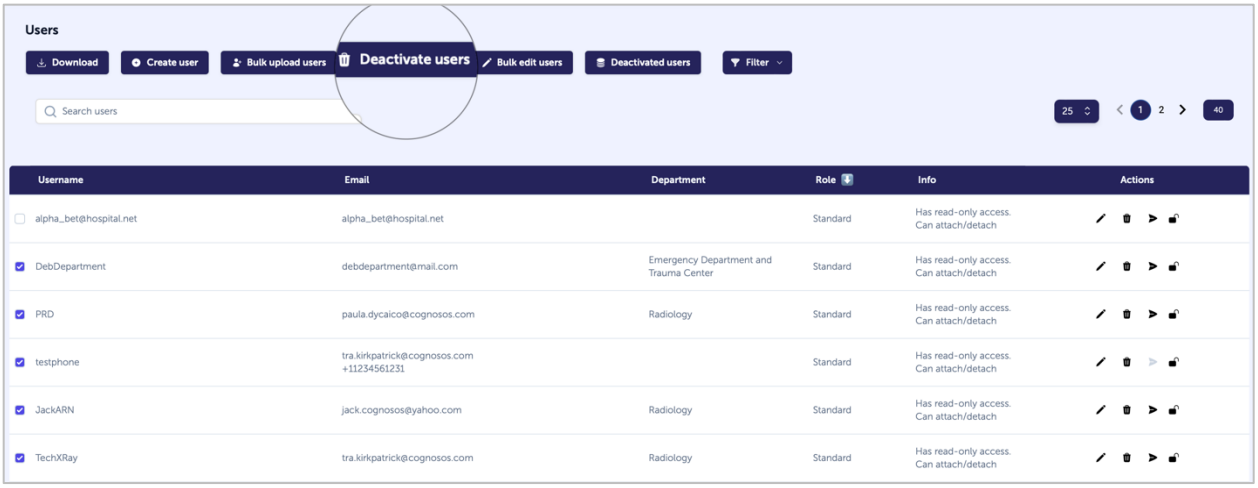


Select **Yes** in the confirmation window to continue with the process or **Cancel** to stop. The system will return to the main Users page.

Broadly speaking, users should only be removed if they no longer work for the organization or a vendor to whom was given access. If you accidentally deactivate a user, use the restore user function.

Bulk Deactivate

To delete more than one user at a time, place a checkmark next to all the users you want to remove from RTLS portal use. Click **Deactivate users** from the menu. The button will remain grayed out until one or more selections is made.



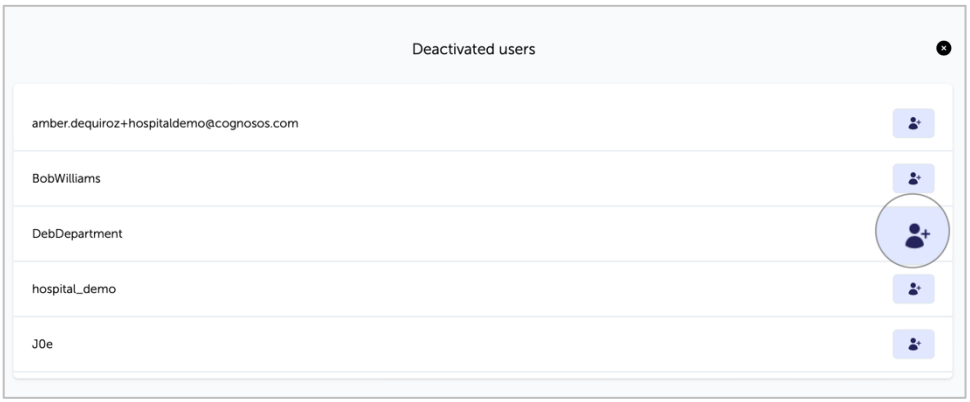
Confirm the list of users and click **Yes**; otherwise **Cancel**.

Deactivating user(s) with either function also removes them from mobile app access. Use the restore option to reactivate a user's profile and system access.

2.3.4 Restoring Users

Administrators can run a Deactivated Users view for a list of user profiles that have been deactivated from the portal and restore any user that has been inadvertently removed. Select the **Deactivated users** option on the Users menu to run the report.

A list of deactivated users will display.



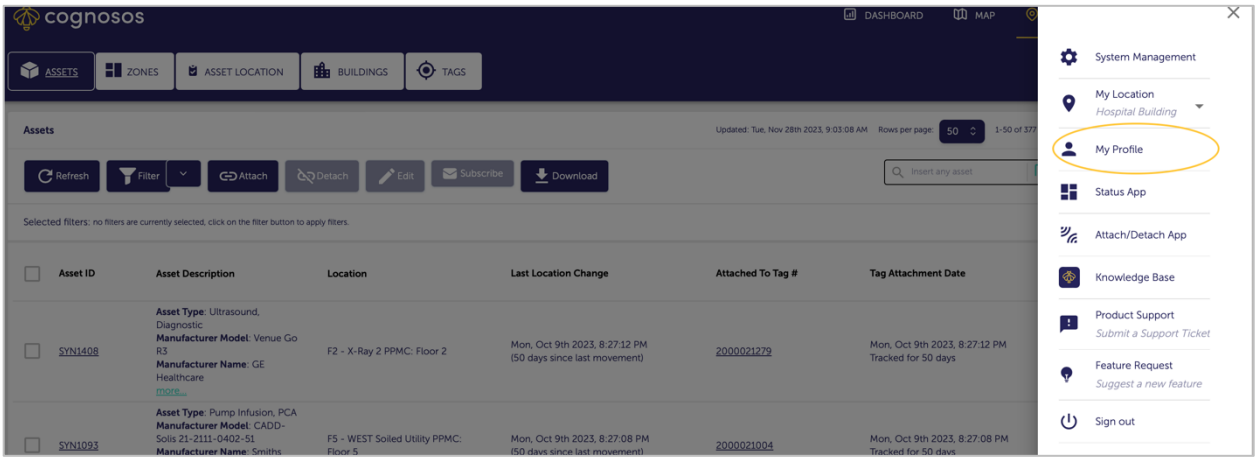
To restore a user to the system with the original user role and profile information, locate the user on the list and select the **Add** icon next to the user name. The user is restored to the portal and is given access rights again. Look for the successful message displayed on the screen.

To close the Deactivated Users window, select the X in the upper right corner.

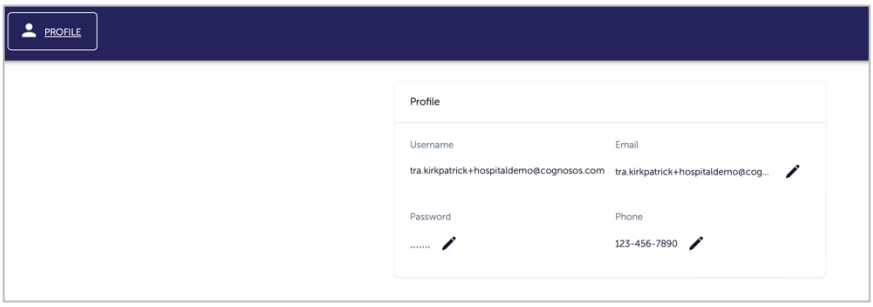
If the user does not remember their previous password, have them use the Forgot Password link on the login page and follow prompts. Administrators may also manually reset the password as outlined in Editing User Profiles.

2.3.5 Managing User Profiles

Users can view and make changes to their own user profiles. Once logged into the portal, click the hamburger menu then select **My Profile**.



In the Profile pop-up window, select the pencil icon for the value that needs to change. Note that the username may not be changed.

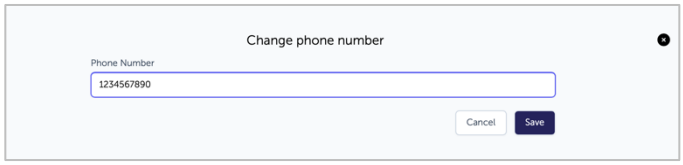


The profile displays data for the logged in user.

When changing the password, the user must enter their old (current) password in order to reset it. The new password must be at least 8 characters and contain at least one number and one special character. If user has forgotten their password and wants to change it, have them use the Forgot Password link on the portal login page or the Administrator may manually reset the password from the Users page.

For any edits, select **Save** to complete or **Cancel** without making any changes.

Continue to your next task.



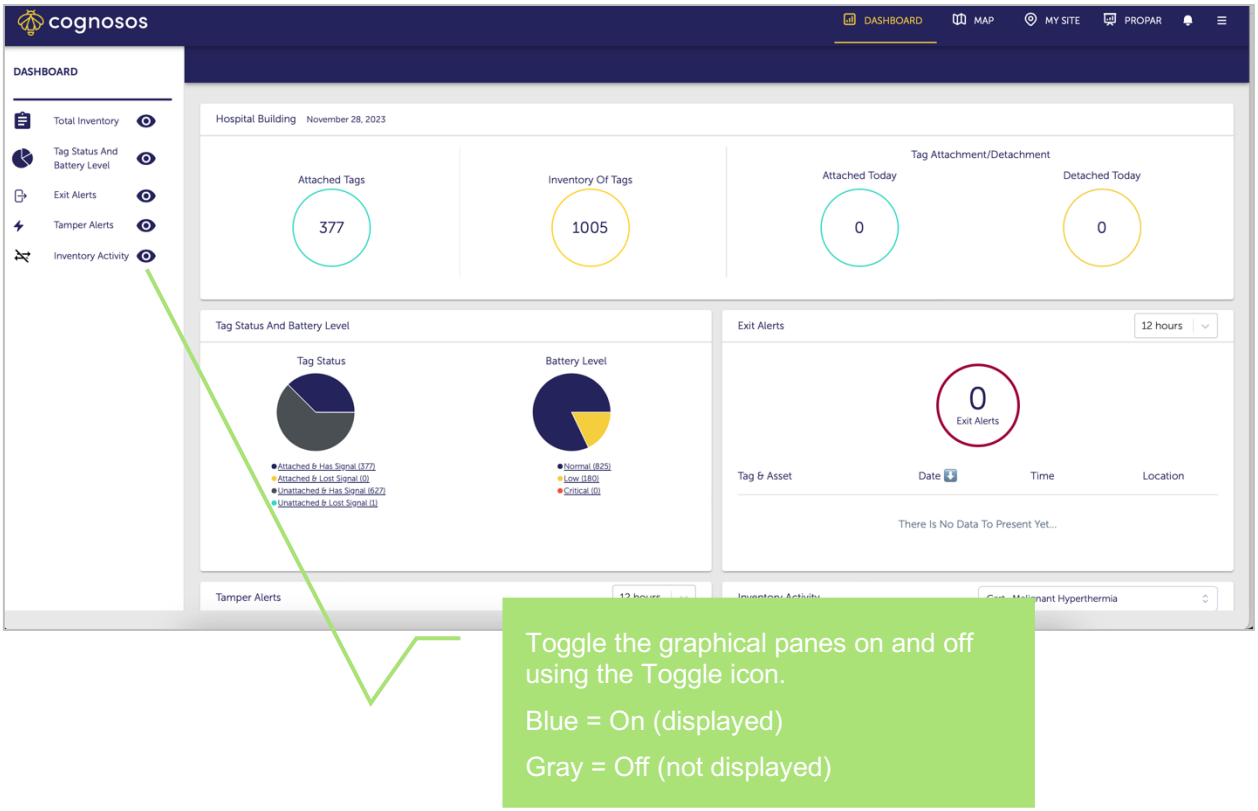
Only Administrators may add or edit a user's department assignment.

Dashboard

3.1 Dashboard Overview

The Dashboard provides a graphical bird's eye view of asset inventory and utilization across your organization. Access this page by selecting the **Dashboard** menu option at the top of the page.

From within the various dashboard graphs users can click to access more detailed information about overall inventory, asset inventory/utilization by zone, and individual assets. This is also the location to quickly view any tamper alert messages.



Change the graphical displays using the dashboard toggles to customize which graphical panes are in view.

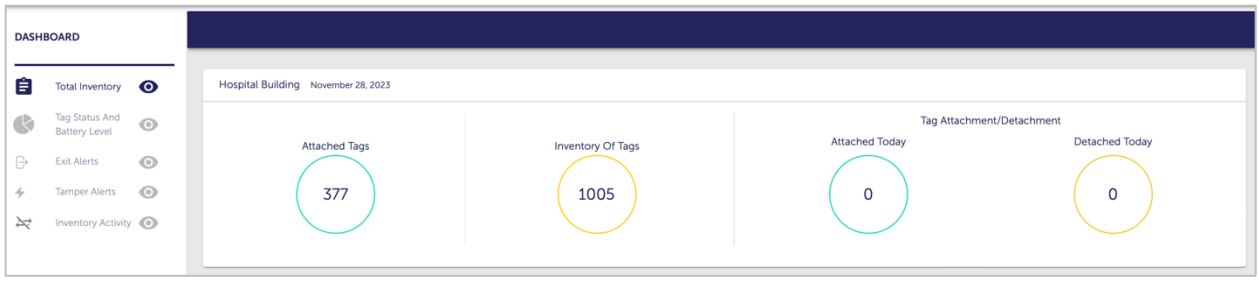
Because the Dashboard provides a graphic view of asset and tag data, the following sections provide information only on the features available on/from this page. Further sections of the manual go into detail about the data itself, including how and where to access specific information and make changes.

Users can always return to this view by selecting **Dashboard** from the primary user interface (UI) menu.

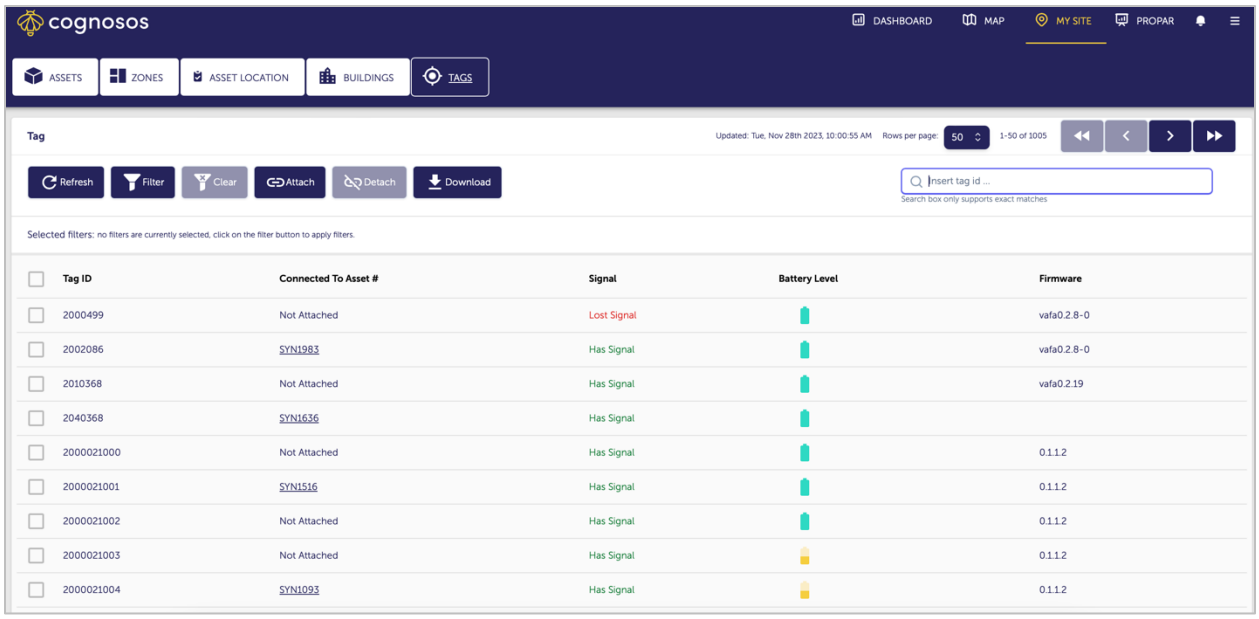
3.2 Dashboard Graphs

3.2.1 Total Inventory

Total inventory displays real-time data for the organization's tag and asset inventory as well as the number of tags added or removed for the day.



Click one of the value circles to open the My Site page for the data for the option selected. For example, Attached Tags opens to My Site listing all assets (pieces of medical equipment) that have an asset tag attached and defined in the system.

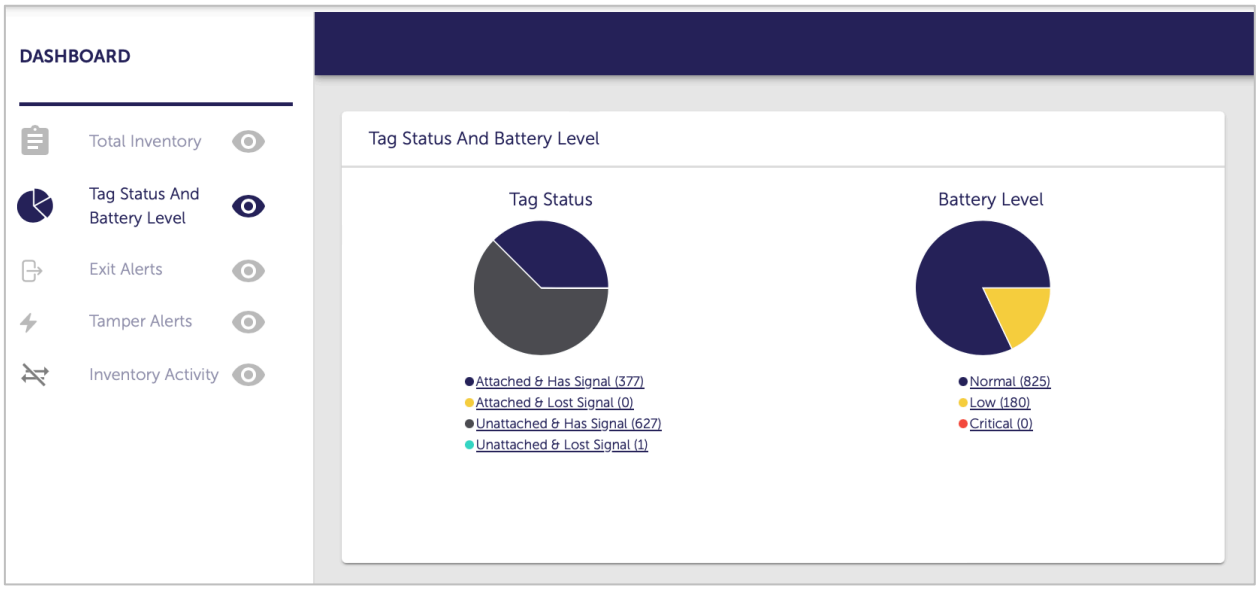


Inventory of Tags opens the list of total tag inventory (attached, not attached, has signal, lost signal). The Tag Attachment/Detachment area shows the number of tags attached or detached that calendar day.

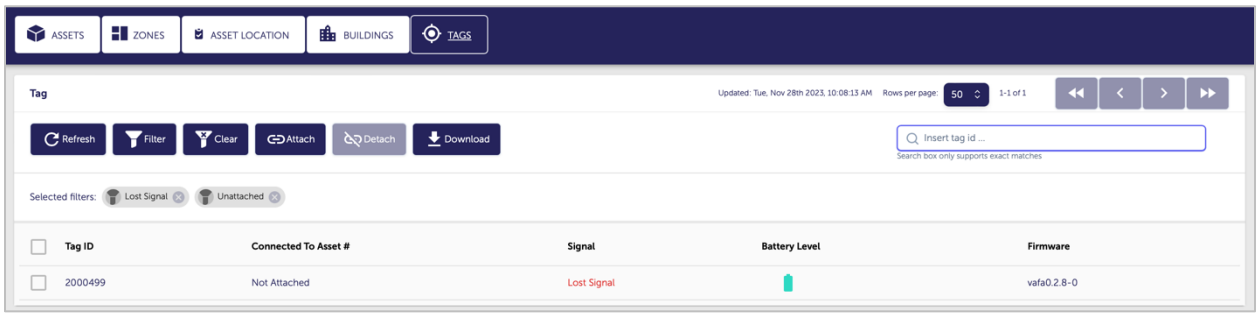
Go to Managing Assets for more information about assets; Managing Tags to learn about handling asset tags.

3.2.2 Tag Status and Battery Level

The Tag Status and Battery Level pane provides a quick view of tag status across the facility and battery health.



Drill down into detailed tag data by selecting one of the asset tag status links under Tag Status (Attached and Has Signal, Attached and Lost Signal, Unattached and Has Signal, or Unattached and Lost Signal). The portal opens to the appropriate filtered tag list, as shown below.

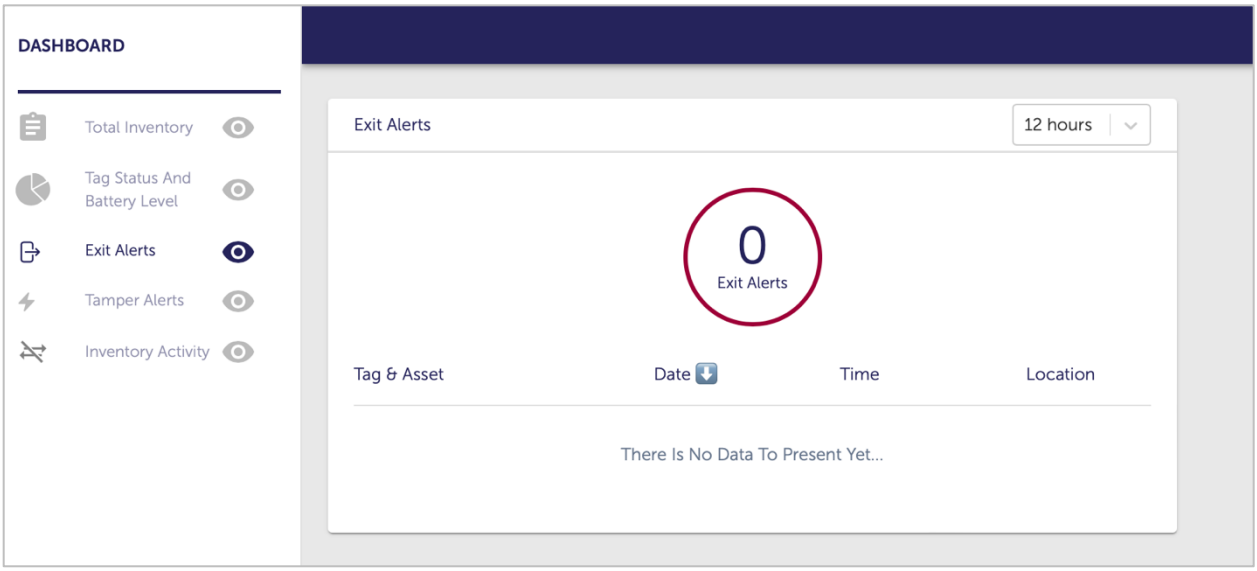


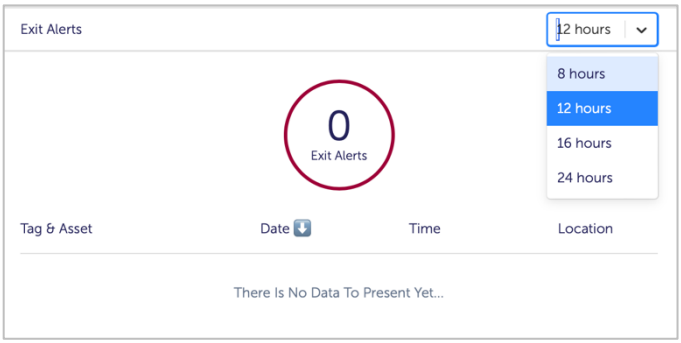
View detailed battery information through the Battery level links (Normal, Low, Critical). Selection of any Tag Status or Battery level link opens the My Site Tags page to display a list of tags meeting the selection criteria.

Tags with a 'lost signal' status may: (1) have a battery that has died, (2) have left the site still attached to equipment or out of range for another reason, (3) be unable to communicate with the gateway. Refer to the Managing Tags section.

3.2.3 Exit Alerts

Exit alerts provide a mechanism to notify staff when assets are in jeopardy of leaving the facility. Exit monitors are set up as a specific kind of zone with a special naming convention and can be used to set up subscriptions and alerts. Exit monitor zones are managed similarly to other zones and exit monitor subscriptions are similar to all subscription types. The dashboard widget shows how many exit alerts were signaled.

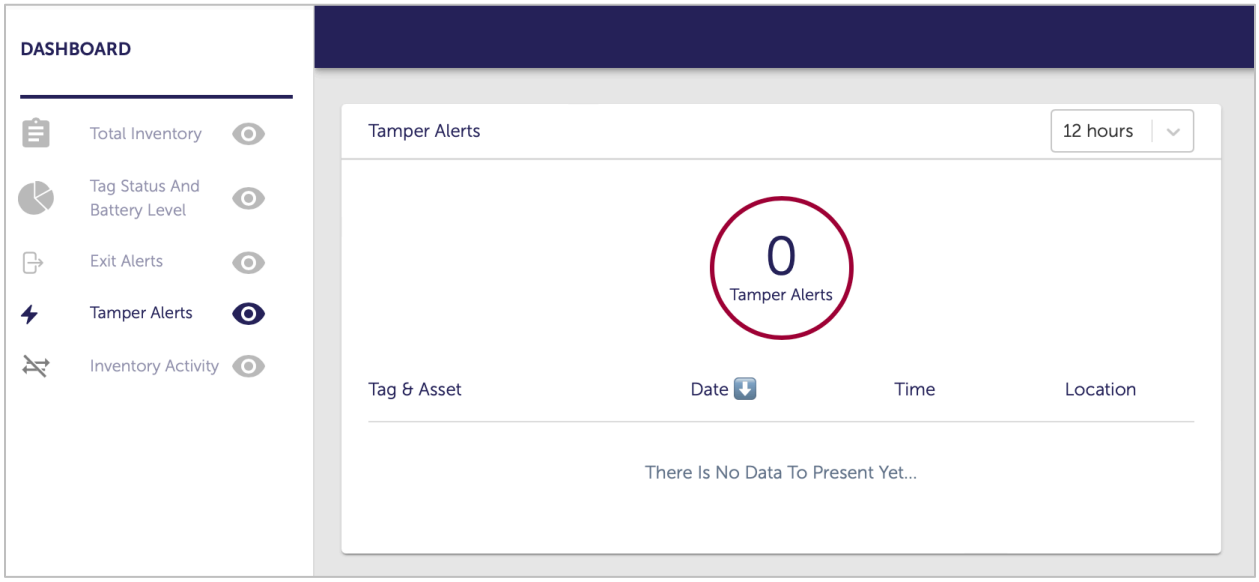




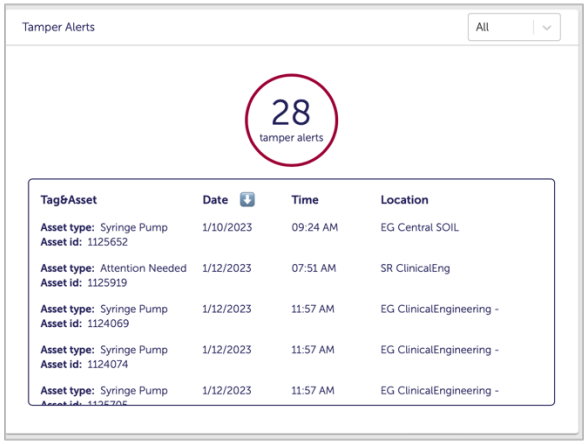
The default timeframe for the exit alerts widget is 12 hours (alerts that have been signaled in the last 12 hours). Use the drop-down box to choose a different timeframe.

3.2.4 Tamper Alerts

Tamper alerts provide a mechanism for knowing when an asset tag has been removed from its cradle on an attached asset. These alerts are managed similarly to subscriptions and are shown both on the dashboard and under Events. Refer to Subscriptions for information on setting up tamper alerts.



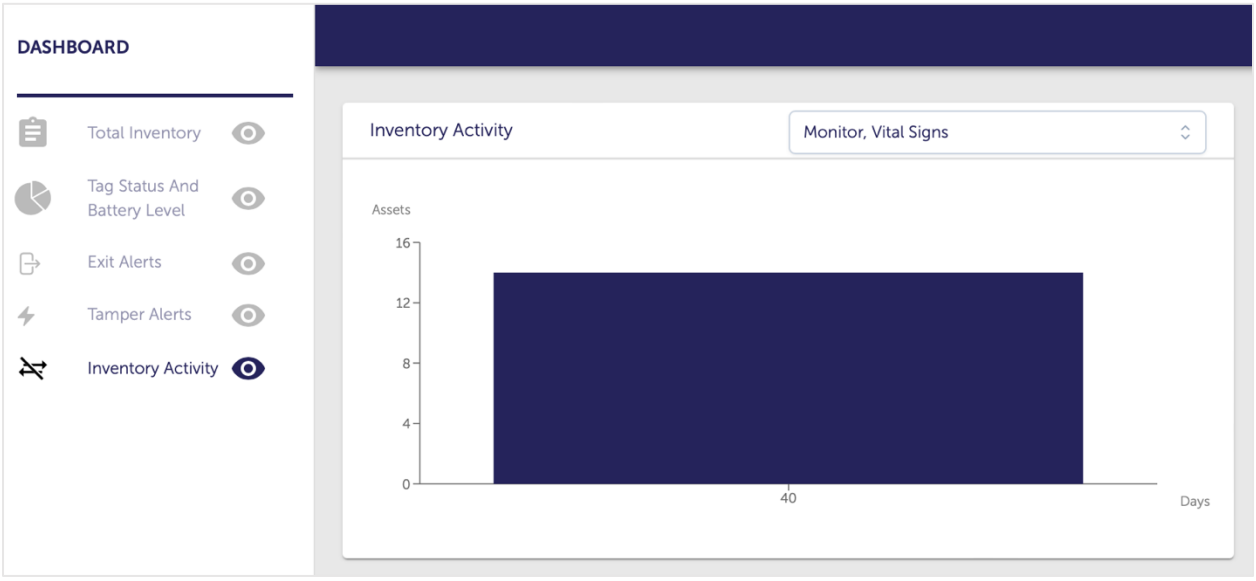
The dashboard pane displays the number of tamper alerts set off for the date range selected in the dropdown box. You may select to view tamper alerts for the past 8 hours, 12 hours, 16 hours, 24 hours, or all tamper alerts.



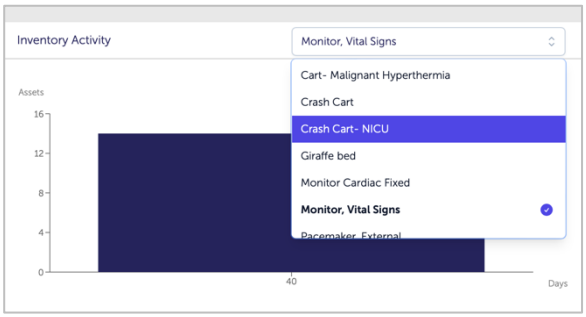
When the pane shows a list of alerts, you will see the asset type and unique ID, date and time of alert, and last known location (zone). You may click on a single event to open Asset Details for that asset. The map will display the asset location and you may take additional actions as needed from that page. Go to Managing Assets for details on various asset functions.

3.2.4 Inventory Activity

Inventory Activity is used to view the number of days an asset has been sitting idle (no movement). This data helps key hospital decision makers identify medical equipment that is sitting idle so that proper inventory adjustments or re-allocations can be made. The displayed asset defaults to the asset on the top of the asset list.

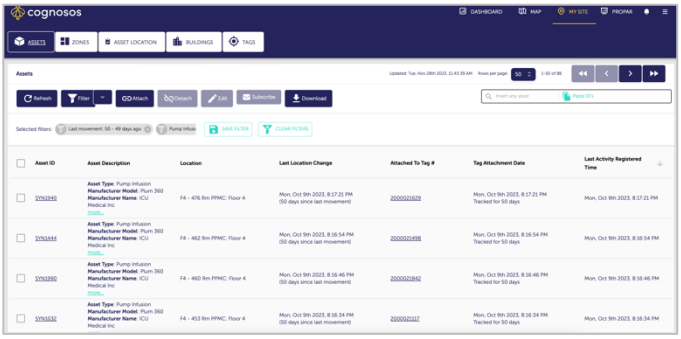


Use the drop-down list at the top of the graph to select a specific asset. The list will show a checkmark next to the asset name (bold type) of the asset currently shown on the graph. Hover the mouse over a bar on the graph to display asset summary data.



Click on the graph to launch the My Site Assets list with filters matching the graph (e.g., asset, last movement date range).

Take necessary actions with the asset, return to the Dashboard, or move to any other page in the portal.

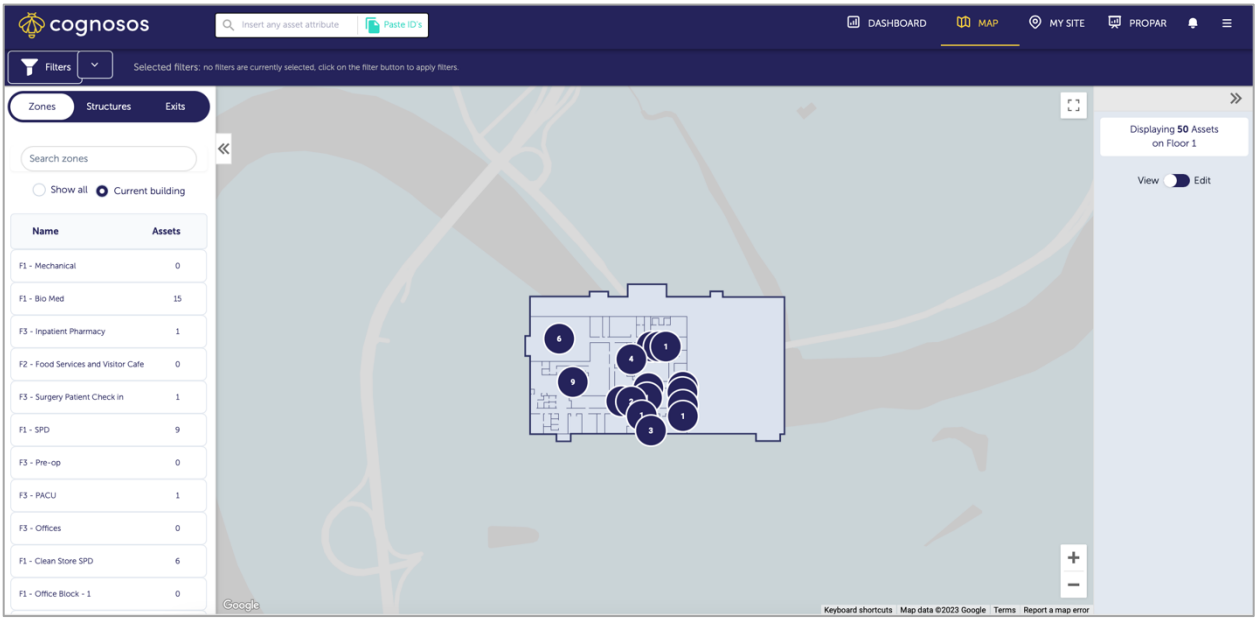


Refer to the locating assets sections for more information on searching and filtering assets.

Map

As one of three primary methods for viewing and accessing information regarding zone inventory and asset (equipment) data, the Map provides a zoned geographical view of each floor within the facility with a list of zones and current asset inventory for each. This is also the place to quickly view exit monitor status.

Select **Map** from the primary portal menu.



The map shows clusters of assets on a floor within a structure. Zoom operations drill down to smaller clusters and eventually to a single asset icon.

There are two methods for zooming in and drilling down into more detailed information from the map's cluster view: Click on the cluster itself or use the zoom in (+) and zoom out (-) options on bottom right corner of the map. With both options, zoom in/drill down until the map displays smaller clusters or individual assets.

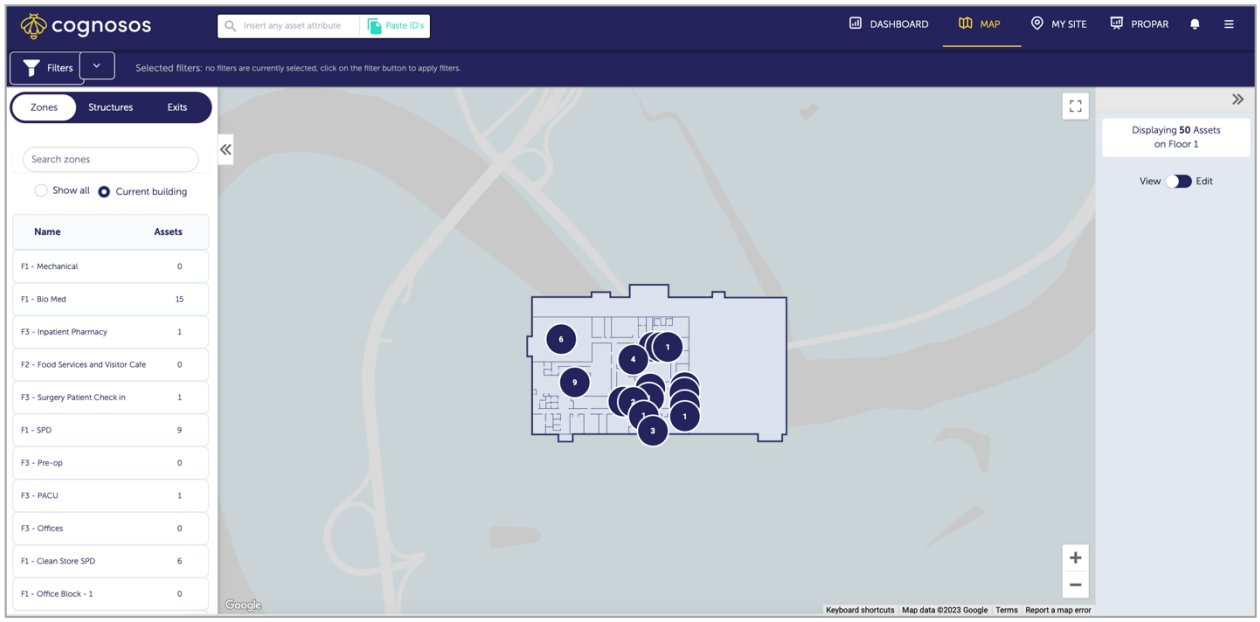
For a full screen view of the map (or to return to the window view) use the full screen toggle option located on the top right corner of the map.

Functions and features of map use are covered in Map Navigation. The remainder of this chapter covers using the map to access asset information.

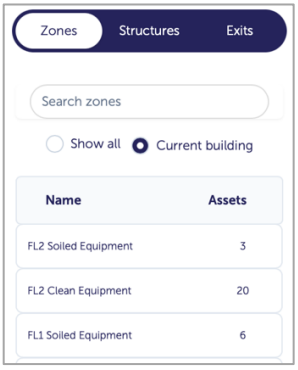
4.1 Map Navigation

This section describes the information displayed on this page, view options and ways to navigate the Map interface.

The map displays the facility by structure and by zone and displays one ‘map layer’ at a time. A map layer can be thought of as a specific floor within a specific building. Each layer displays assets (individual and cluster) for assets located on that floor.



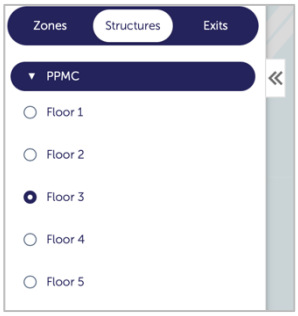
Two panes are available for changing the map layer displays and performing actions. Use << and << to open and close the panes.



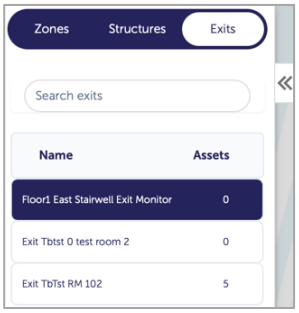
The left pane gives options to select specific zones, structures, and exit monitors. A zone is any defined area (floor, hospital room, treatment room, storage area, virtual, etc.) that holds assets.

The Zones tab can be filtered by a specific structure or all structures across the facility by selecting the desired radio dial. The Zone Information section covers information about the Zones tab and asset data found here.

A structure is a building; there may be one or more structures listed. A structure will always have at least one “floor” (in the case of a single story building) but may have multiple floors (multi-story building). Zones and structures are set up during the installation process.

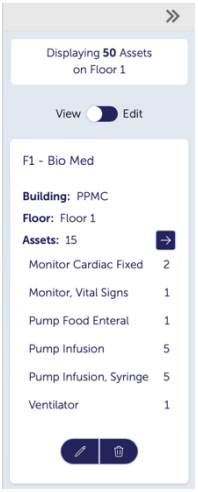


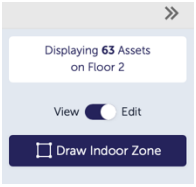
Exit monitors are the areas (doors, halls, elevators, etc.) that have been designated as an exit within the zone definition. Exit monitors alert personnel that an asset is at risk of leaving the area (or has left the area). Go to Exit Monitors for more information.



The map's right pane displays the floor name and number of assets on the floor (selected on Structures tab) when no zone is chosen on the Zone list.

If a Zone is highlighted on the Zones tab, the right pane displays asset counts and the zone name for the floor on which the zone is located and detailed asset counts for the zone.





For organizations that do not utilize the Cognosos Location AI, Administrators have the option to view or edit zones. When the map is in edit mode, the right menu provides facility management functions related to zones. Go to Zone Management in the User Guide.

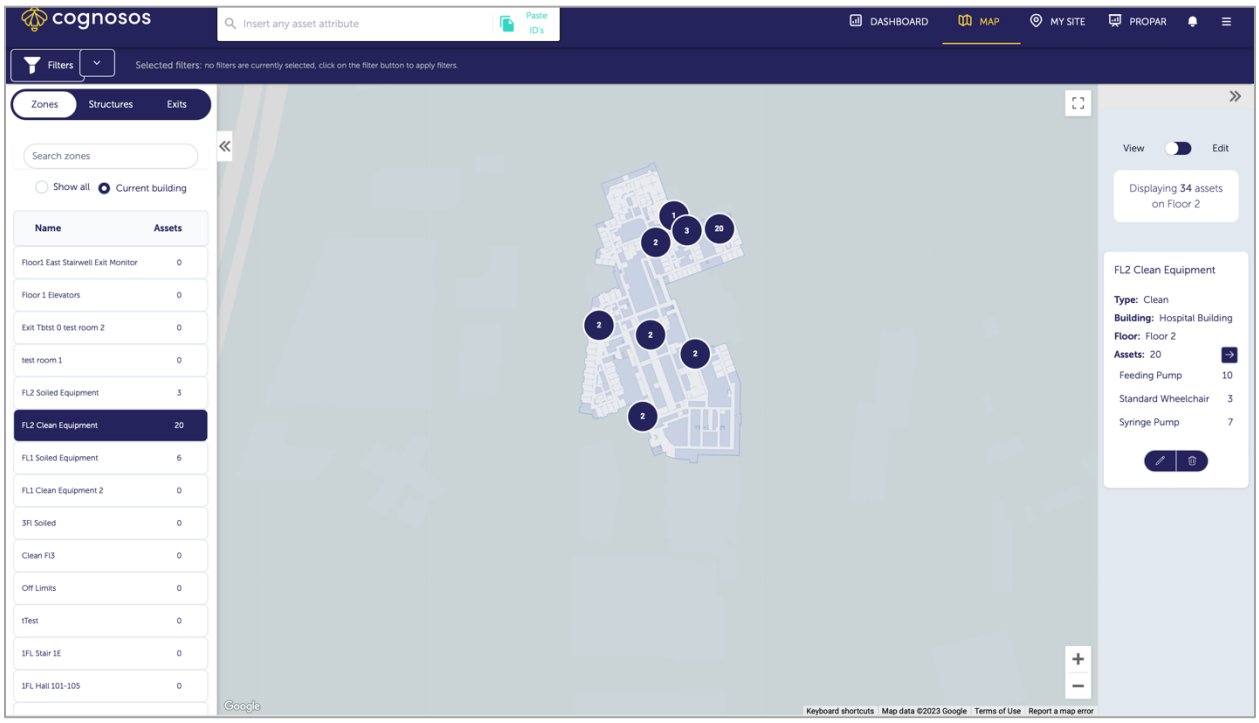
Cognosos Location AI

Cognosos offers even more powerful asset location services with the Location AI add-on. This feature provides the ability to pinpoint the location of a given asset within a larger, open area (e.g., a sizeable storage facility). RTLS platforms equipped with Location AI use fixed zones so the View/Edit option will be unavailable.

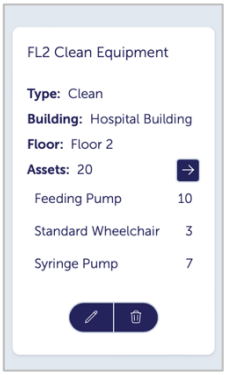
4.2 Zone Information

4.2.1 All Zones

When selecting a zone from within the Zones list, the right menu on the map dynamically refreshes to display zone information and asset inventory for that zone.



The displayed zone on the right pane may be an entire floor, an area within a floor, a specific room or exit way. Zones (shape, size, placement, location) are defined during install and managed by Cognosos Customer Success teams.



The top of the menu pane shows the zone name; followed by the zone type (clean, soiled, exit monitor, none), building and floor on which the zone is located. The remainder of the window displays the asset inventory for the zone (asset type and count).

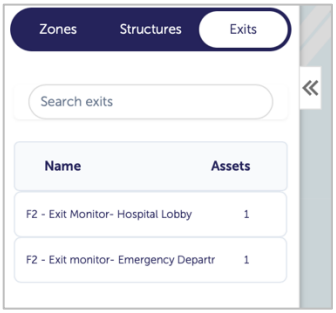
To view asset inventory for the selected zone, click the **arrow** icon to the right of the asset count. The Asset Location page for that zone opens. Refer to Viewing Asset Inventory to read more about asset location.

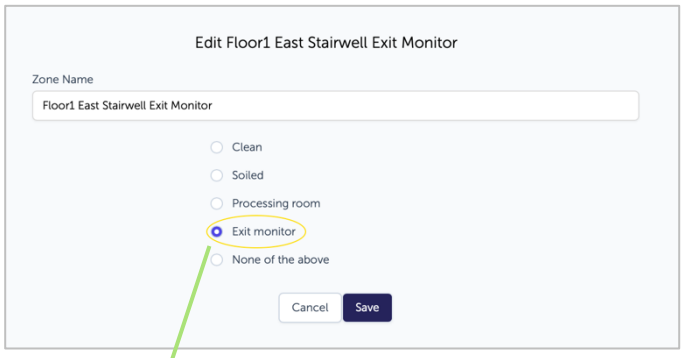
For those with the Administrator user role, the **Edit** button is shown at the bottom of the menu. Refer to Zone Management for editing zone details.

If there is a need to make changes to a zone (size, shape, location), please contact Cognosos Customer Support.

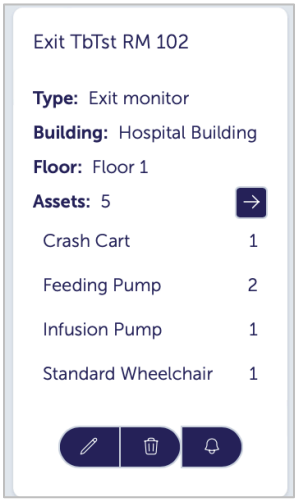
4.2.2 Exit Zones

The Exits tab displays all the zones that have been identified as an exit monitor on the zone definition.





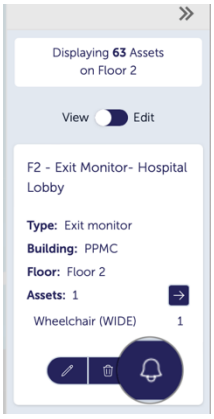
A zone must be designated as an exit for it to display on the map as such. Go to Exit Monitors for more information.



Exit monitor zones display a warning icon on the map when there is at least one asset located in that zone.

Click the exit zone on the Exits tab or the icon on the map to display the exit zone information on the right and highlight the zone on the map.

Users may subscribe to an exit zone directly from the map. Within the right menu pane, select the bell icon to open the subscriptions window. More information is found in exit monitor subscriptions. (This icon is available only when an Exit zone is selected.)

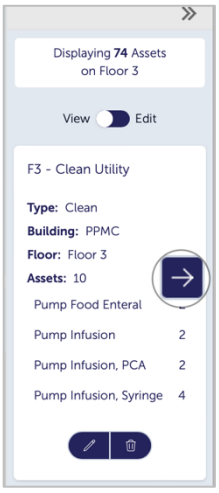


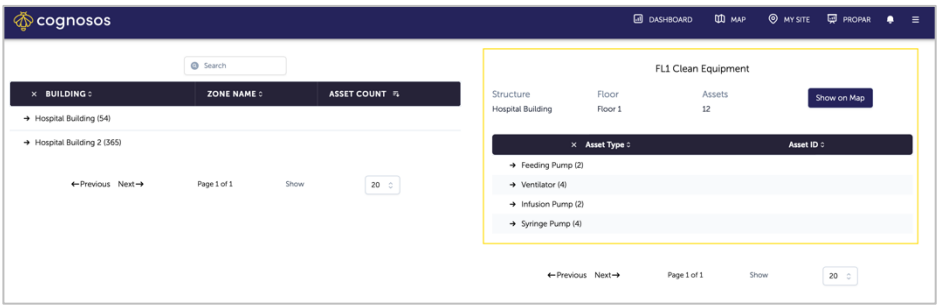
4.3 Asset Information

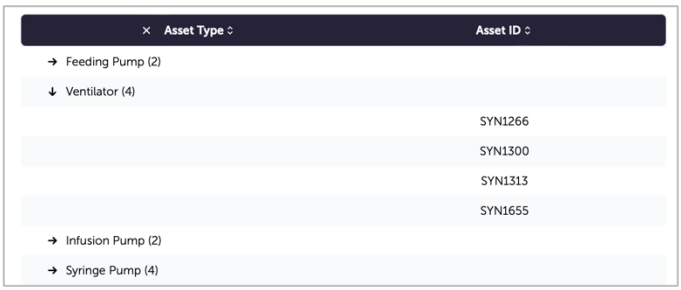
Assets refer to pieces of medical equipment (syringe pump, bed, scanner, etc.). Each asset has associated data (e.g., type, manufacturer name, asset model number, etc.), some of which is unique to the asset, such as the asset ID. Asset information is utilized by the RTLS to aggregate reports (such as dashboard graphs), provide real-time inventory information (ProPAR), and maintain up to date location data.

Each facility organizes its map layers (structures and zones) and assets unique to its operating principles. Although the way your system displays these areas and equipment may be different than what is shown in the User Guide, the functionality is the same.

The map displays small clusters of assets and single asset icons, one floor at a time. The number value in the cluster circle represents the number of assets within that cluster (e.g., a cluster of assets are located within a single room). Click on an asset icon to display the zone information in which the asset(s) is located. Use the **arrow** icon on the map's right pane to open the asset details list for the zone in which the asset is located.







On the Asset Details screen open the asset type (e.g., Feeding Tube) to display the individual asset IDs for that asset type in that zone.

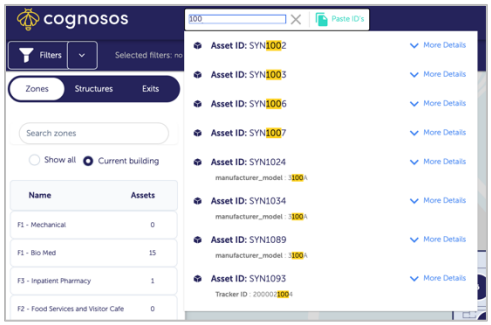
You can then use the asset ID to look up the asset's information using Search from My Site.

4.3.1 Locating Assets via Search

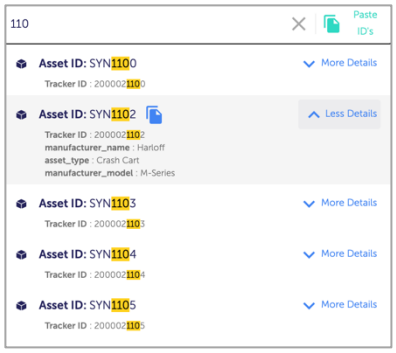
Look up and locate any tagged asset within the facility using the search feature from the map menu bar. Search by any asset attribute (asset ID, description, asset type, etc.). Search by a single asset ID or multiple asset IDs. Use the Search option to quickly look up information about an asset, such as the asset tag ID, manufacturer model, asset ID.

If you want to search for a specific zone, structure, or exit, use the search bar inside the left menu on the map.

The system filters assets real-time as data is input. As such, a dynamic drop-down list will appear, changing to meet the criteria as it is input into the search field.



Click a specific asset from the list to refresh the map with the single asset showing.

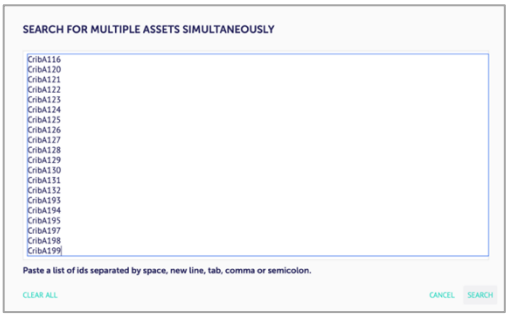


Select More Details carat to the right of the asset ID for more information about that particular device. Select Less Details to collapse the information.

Select the X in the Search field to clear the search filters. The map will refresh to the original map and asset cluster layer from which the search was initiated.

To search by multiple assets IDs at one time, copy and paste or download a list of asset IDs from My Site. Select **Paste IDs** next to the search field then use standard paste functionality to paste IDs in window.

You can paste the asset IDs separated by a space, tab, comma, semicolon, or new line (as shown). Select **Search** to filter the map view based on the search criteria. Select **Clear All** to remove the asset IDs (keeps window open) or **Cancel** to close window and return to the map without changing the asset view.



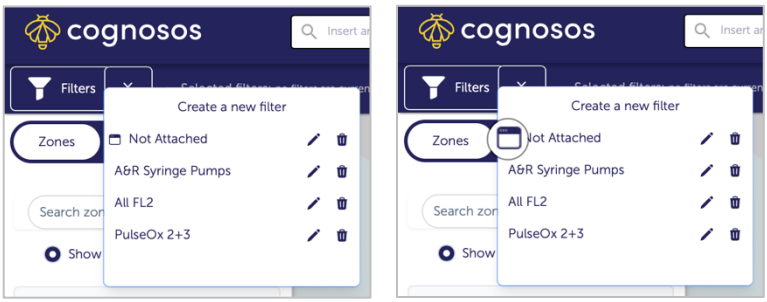
Searches applied to the map cross over to My Site Assets so view that page for a single list of all assets meeting the search criteria.

4.3.2 Locating Assets via Filter

Filters provide another mechanism for locating assets within the facility. Different than the Search function, filters can be saved for future access to asset location information quickly and easily.

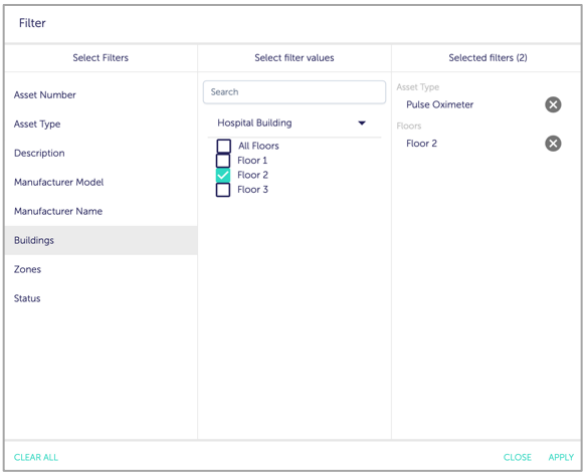
Filters create a list of records that meet a common value. Filtering begins from the full list of results and eliminates from that list based on which results do not match certain criteria. Multiple filters can be used at one time.

Look for the **Filters** option on the top left of the map page. Use the carat to: (1) Choose a saved filter from the list, (2) Create a new filter from the drop-down list; or click the **Filters** button to open the New Filter dialog box.



Filters listed with a folder icon represent application wide filters (available for all users). Otherwise, the filter is only for the logged in user.

If the desired filter is already on the list, select it to run and display the results on the map. Otherwise, click the **Filter** button or **Create a new filter** from the drop-down list.

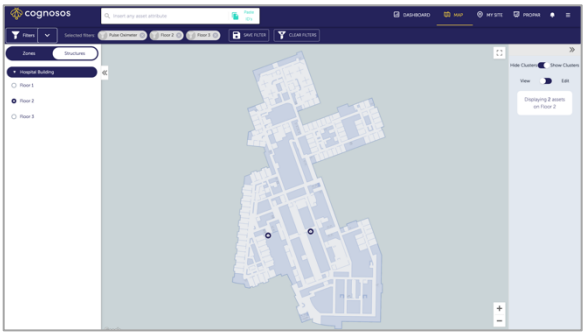


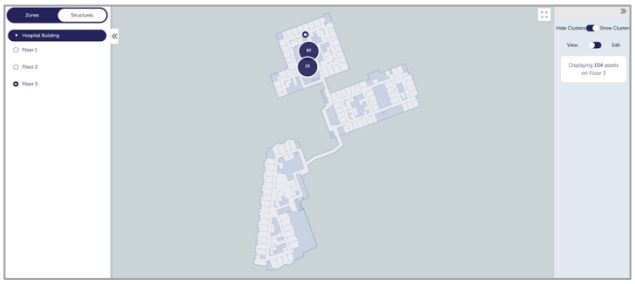
The Select Filters and Select Filter Values columns data come from the asset attributes that were defined when the assets were set up in the RTLS portal. Because each organization is unique in its set-up and business processes, the filter value options shown in this User Guide may be different than your system.

Select the criteria for the filter. You may have multiple selections within the Select Filters and Select Filter Values columns.

At any time during the selection process a filter may be removed by selecting the **X** next to the value in the Selected Filters column. Use the **Clear All** option to remove all filters that have been selected.

Once filter criteria are defined, select **Apply** to filter the map showing filtered assets located in a specific zone and/or structure.



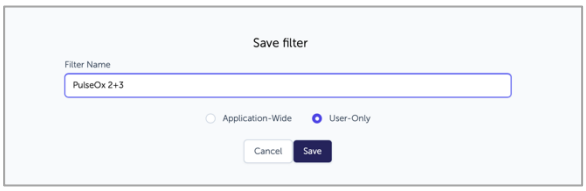


Because the map displays one map layer (floor for example) at a time, you may need to select a different structure or floor to see all the filtered assets. In the graphics examples above some of the filtered assets are located on Floor 2 and some are on Floor 3. Filters applied to the map cross over to My Site Assets so view that page for a single list of all assets meeting the filter criteria.

Saving a New Filter

Once the map is filtered, the selected filter values display adjacent to the Filters option. Save or clear the filters from here. Clear a single filter by selecting the X next to that item; remove all by selecting **Clear Filters**.

Click **Save Filter** to save for future use. In the Save Filter pop-up window input a descriptive name for the filter and select Application-Wide (to save to all users across the portal) or User-Only to save filter only for the logged in user and choose **Save**. Click **Cancel** if you do not want to save this particular filter.

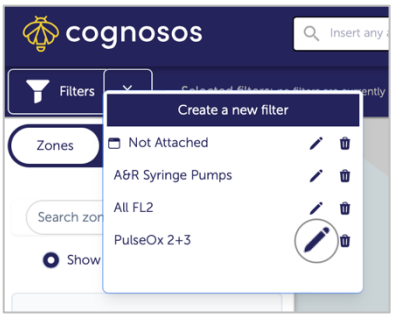


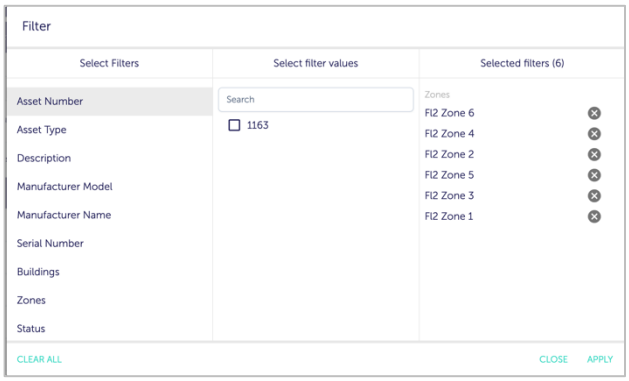
Only the Standard and Administrative user roles may save filters; only Administrators may save Application-Wide filters. Refer to Managing Users + Roles on user role access and changes.

Saved filters appear in the Filters drop-down list in both the Map and My Site views. If the filter was created as a User-Only subscription, it only appears on the lists for the logged in user (on portal and mobile app); if it was created as an Application-Wide filter, it will display for all active RTLS users (on portal and mobile app).

Editing a Filter

Users may make changes to their own defined filters and Administrators may edit application-wide filters. Open the filter dropdown list and select the pencil icon to open the filter settings window.

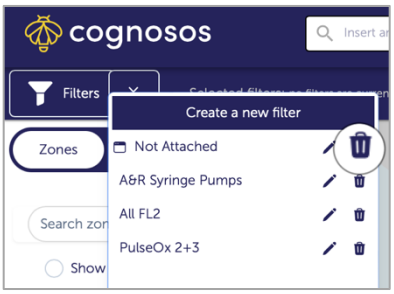


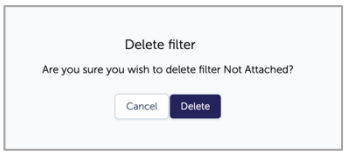


Selected criteria are listed in the Selected Filters column. You may remove any filter criteria by selecting the X next to that item. Add other filter criteria as described above. When complete with changes, select **Apply**. The view (map or assets list) refreshes to meet the updated criteria. You may save the filter or carry on with other activities without saving.

Deleting a Filter

To remove a filter, open the **Filters** drop-down from either the Map or My Site Assets page. Select the trash can icon next to the filter you want to delete. Note that application-wide (all user) filters will NOT show the trash can icon if the filter was created by a different user; only for the Administrator user who created the filter.





In the Delete filter pop-up window select **Delete** to continue or **Cancel** to end the process.

A small message window will confirm that the filter was deleted. Regardless of the filter type (all or single user) the filter will no longer appear in the Filter drop-down list once removed. Filter is removed from the portal and mobile app.

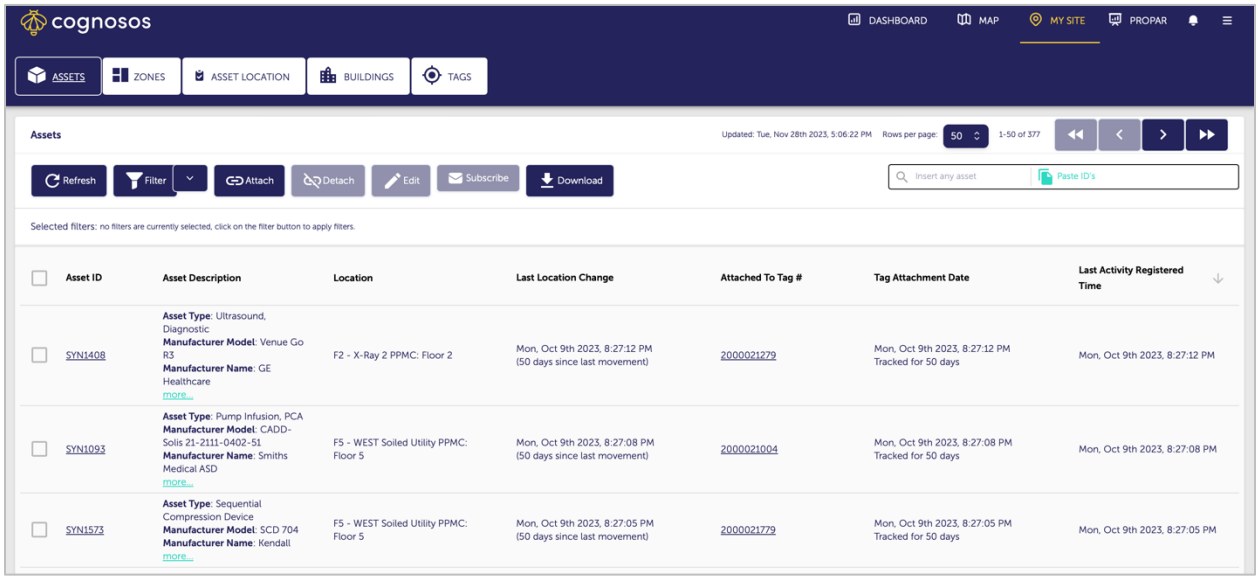
My Site

While the dashboard and map provide graphical navigation methods for locating assets and viewing zone information, My Site uses tables or lists views to manage assets, asset tags, zones, and buildings. My Site is accessible through various functions on the dashboard and map and directly through the main menu.

Use My Site to:

- Curate asset and asset tag lists
- View asset location and counts by zone
- Run asset and tag “reports” using filters and search options
- Download lists to CSV files; manage assets and zones
- Attach/detach asset tags

Select **My Site** from the main portal menu. The system defaults to the Assets page.



My Site contains five tabs: Assets, Zones, Asset Location, Buildings, Tags. Each of these tabs has its own set of functions and features. Depending on your user role functions may or may not be available. Refer to User Roles for more information.

Assets: View and edit asset details, track/follow/subscribe to assets, view asset movements, attach and detach tags

Zones: View defined zones (floors, rooms, stations, hallways, etc.), number of assets per zone, zone occupancy, edit zone names, edit and delete zones (only for Administrative user roles)

Asset Location: View asset types and counts by zone; view asset types and IDs per zone; display selected zone on map

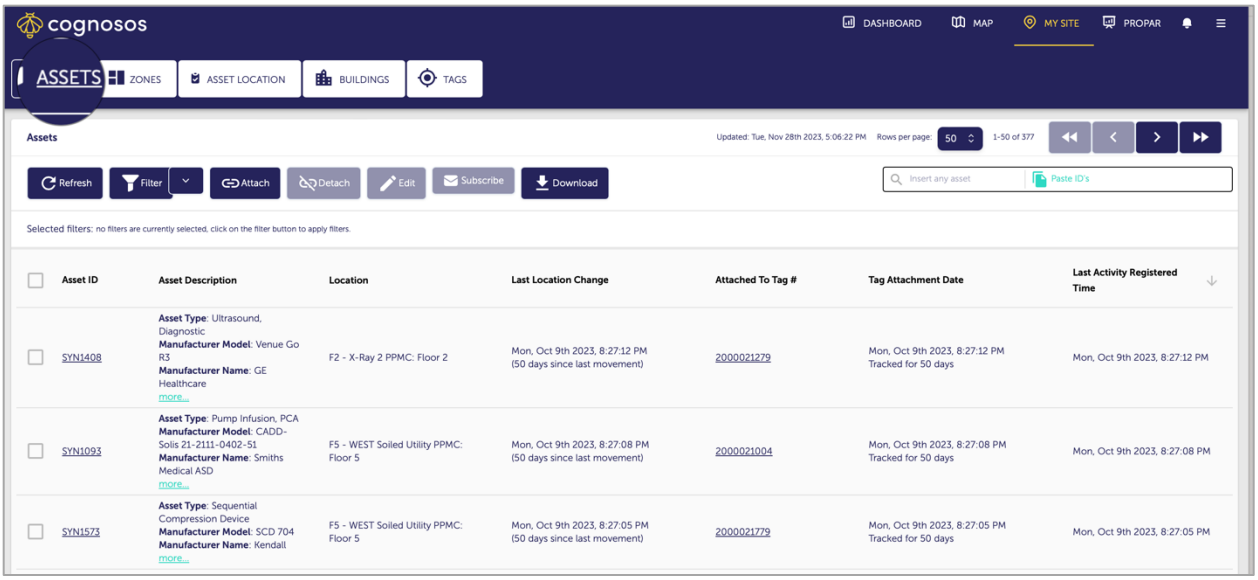
Buildings: View defined buildings and zones, number of assets per building, building occupancy

Tags: View tags and tag health, attach and detach tags, link to individual asset movements and details (for the equipment to which the tag is attached), link to Google map to locate tag

The remaining sections in this chapter outline the various tabs and features on each.

5.1 Asset Management

Assets refer to pieces of medical equipment (syringe pump, bed, scanner, etc.). The My Site Assets page defaults to a list of assets so long as there is an asset tag association with the asset. To view assets that have a status of 'Not Attached' use the Filter option. Whereas the map displays the assets in clusters by the floor and structure, My Site provides a listing of individual assets.



The Asset ID and Asset Description come from data input when assets are defined or updated in the system. The Tag Attachment Date is the date the asset and asset tag were attached in the system; while Attached to Tag # is the unique identification for that particular tag/asset. Location, Last Location Change, Last Activity Registered Time all come from the tag.

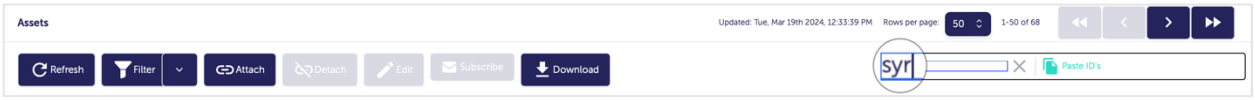
With the exception of Asset Description and Location, all columns can be sorted in ascending and descending order.

From the assets list, several actions can be taken including: edit asset details, attach/detach tag, view asset movements, and follow asset. This functionality is described throughout the sections that follow.

Click the link in the Attached to Tag # column to view the asset's tag status, battery level, and firmware version.

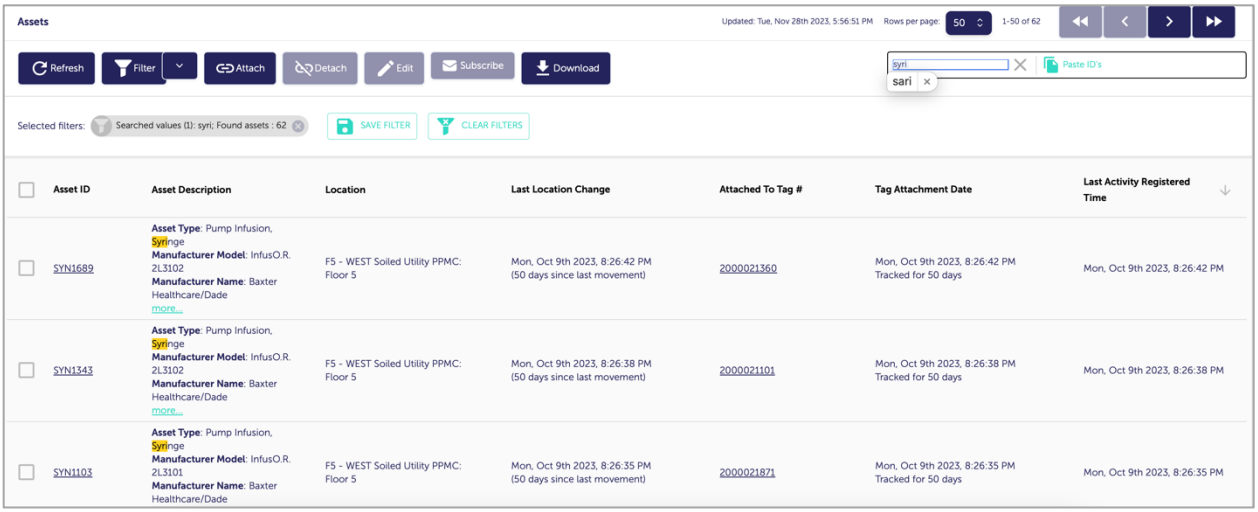
5.1.1 Locating Assets via Search

Look up and locate any asset within the facility using the search feature located in the Assets menu bar. Searching supports a wide array of attributes so that you can find the assets for which you are searching. The search function here operates the same way as on the Map page.



Search by any asset attribute (asset ID, description, asset type, etc.). Search by a single asset ID or multiple asset IDs using the **Paste IDs** option. Asset Information covers these functions in detail.

As attribute values are input into the Search field, the asset list auto-refreshes displaying all assets that meet the search criteria. Matching criteria are highlighted within the asset list. An attribute can be the asset type, manufacturer name or model, asset ID. The Search field allows letters and numbers.



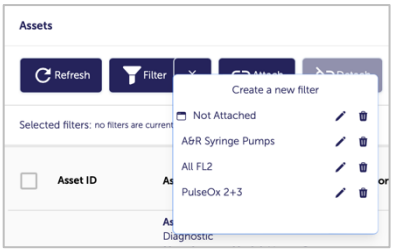
If needed, export the list to a CSV file using the **Download** option.

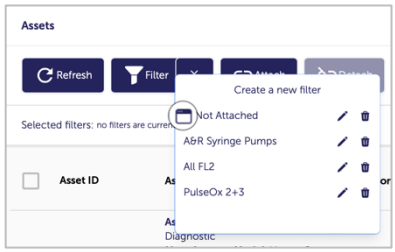
To clear the search filters, select the X in the Search field or in the Selected filters field. You can also select the **Clear Filters** option next to Selected Filters. The list will refresh to all assets. The map mirrors the searched data displayed on this page unless or until the search is cleared.

5.1.2 Locating Assets via Filter

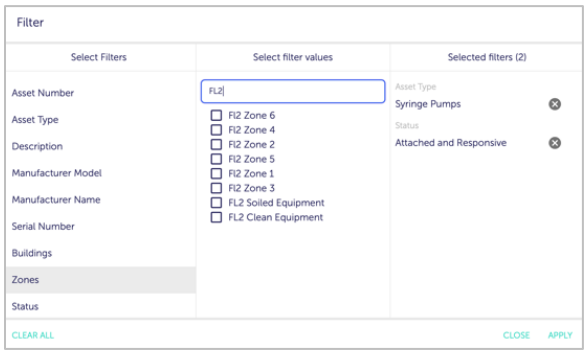
Filters provide another mechanism for locating assets within the facility. Filters are maintained only for the user who created and saved the filter, unless it is an application-wide filter created by an Administrator.

To start a new filter, open the Assets page and select the **Filters** button from the top left to launch the Filter settings window. Alternatively, select the Filters carat to open the Filters drop-down list and click **Create a new filter** from the top. If the desired filter is already listed, select the filter name to view.





Filters listed with a folder icon represent application wide filters (available for all users). Otherwise, the filter is only for the logged in user.



When creating a new filter, the Filter dialog box opens. Select Filters and Select Filter Values columns data come from the asset attributes defined when the assets were set up in the RTLS portal. Because each organization is unique in its set-up and business processes, the filter value options shown in this User Guide may be different than your system.

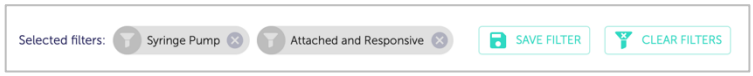
Select the criteria for the filter. You may have multiple selections within the Select Filters and Select Filter Values columns.

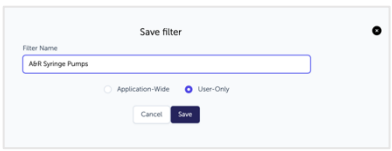
At any time during the selection process a filter may be removed by selecting the **X** next to the value in the Selected Filters column. Use the **Clear All** option to remove all filters that have been selected.

Once filter criteria are defined, select **Apply** to filter the assets list on the Assets page.

Saving a Filter

Once filter criteria are applied, the selected filter values display adjacent to the Filters option. Save or clear the filters from here. Clear a single filter by selecting the X next to that item; remove all by selecting **Clear Filters**.



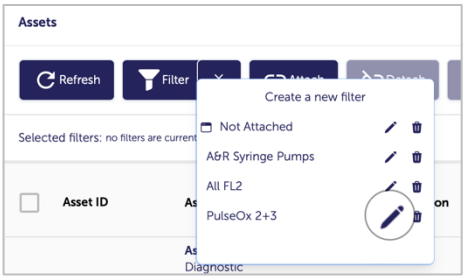


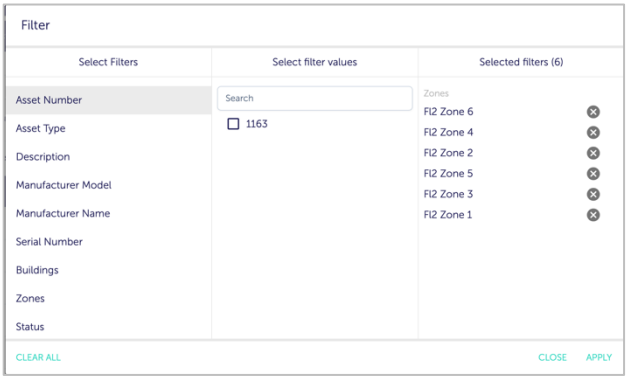
In the Save Filter pop-up window input a name for the filter. If you are an Administrator user, choose the Application-Wide (all users) or User-Only radio dial. Select **Save**. Choose **Cancel** if you do not want to save the filter for future use.

Once filter is saved, it displays in the drop-down list on both the My Site Assets and Map views (portal and mobile app). If a filter is Application-Wide, it is available to all users; when set as user only (or created by a non-Administrator level user), it is displayed only for the logged in user who created the filter.

Editing a Filter

Users may make changes to their own defined filters and Administrators may edit application-wide filters. Open the filter dropdown list and select the pencil icon to open the filter settings window.

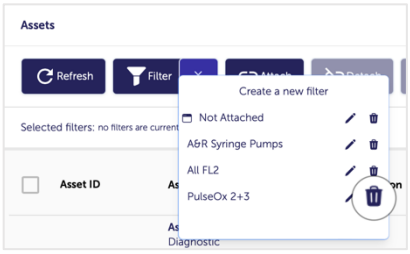


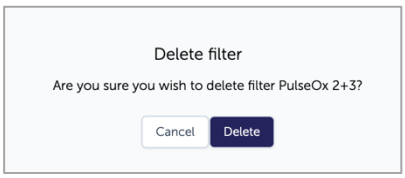


Selected criteria are listed in the Selected Filters column. You may remove any filter criteria by selecting the X next to that item. Add other filter criteria as described above. When complete with changes, select **Apply**. The view (map or assets list) refreshes to meet the updated criteria. You may save the filter or carry on with other activities without saving.

Deleting a Filter

Any user may delete their own user-defined filters and Administrators may delete Application-Wide filters. To remove a defined filter, open the **Filter** drop-down. Highlight the filter to delete and select the trash can icon next to the filter. Note that application-wide (all user) filters will NOT show the trash can icon if logged in user is not the Administrator who created the filter; standard user roles lack permission to create or delete application-wide filters.





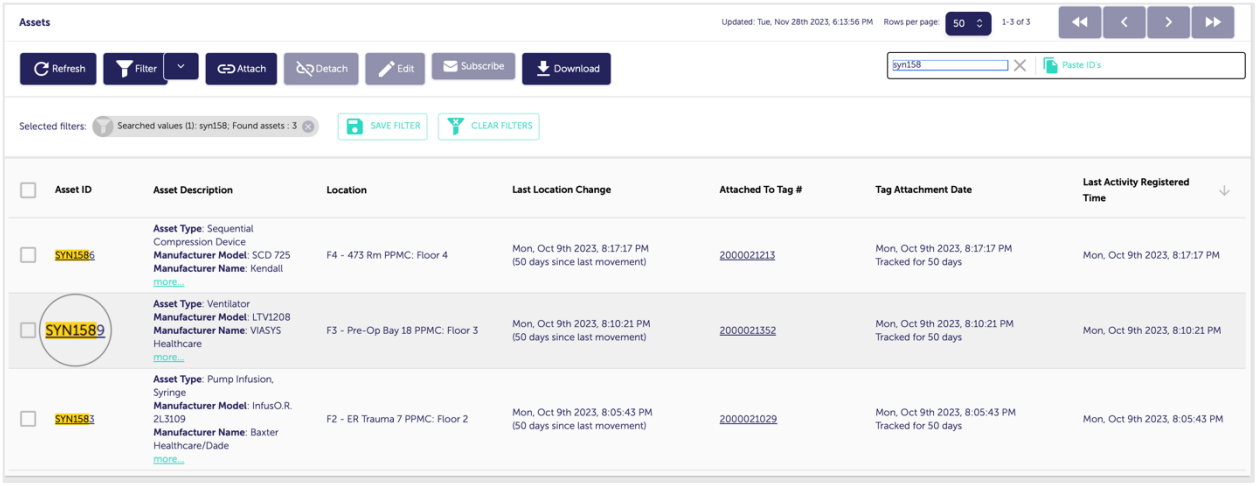
In the Delete Filter window select **Delete** to continue or **Cancel** to end.

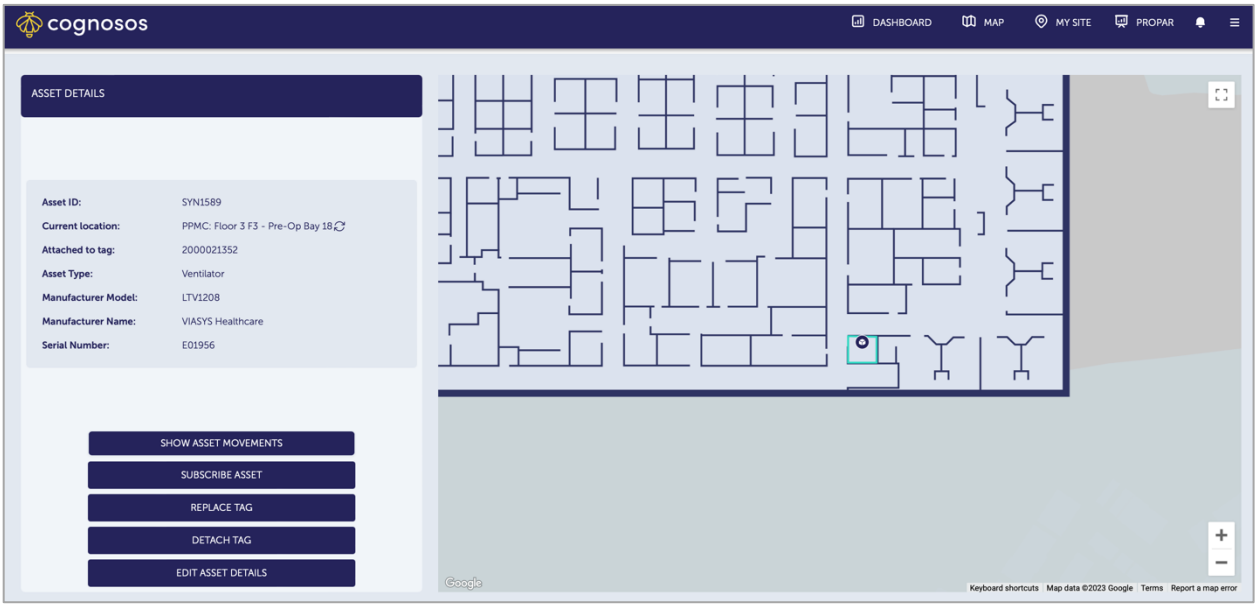
Upon confirmation, the filter is removed from My Site and Map (portal and mobile app). If an Administrator is deleting an application-wide filter, it is removed for all users.

5.1.3 Locating a Single Asset on the Map

Asset Details provide a fast track to locating the exact known location of an asset on the geo-graphic map. This feature is available for a single asset at a time. For a general map view of assets, refer to the Map section on locating and viewing assets.

From the Assets list in My Site, locate the specific asset (use search or filter option if needed). Select the link in the Asset ID column to open the Asset Details page.



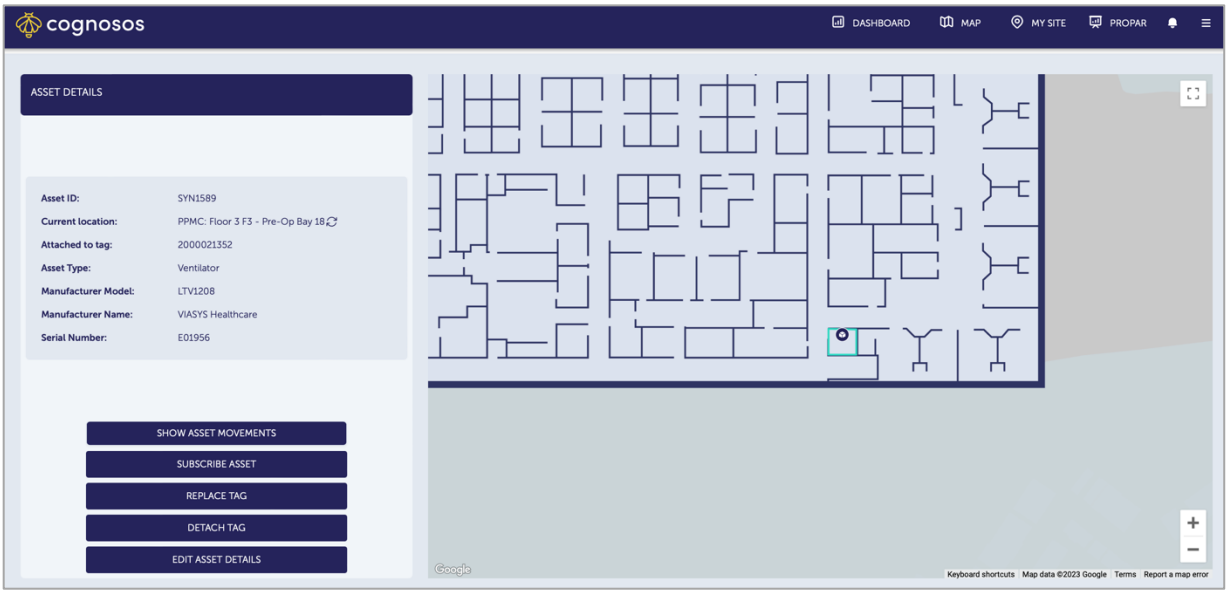


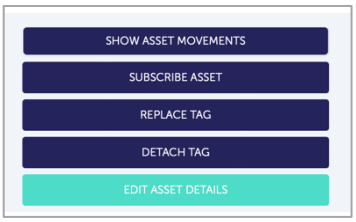
The left Asset Details pain displays the current location of the asset (if known) along with other pertinent asset data. View the sections to follow on managing the asset from here.

5.1.4 Viewing + Editing Asset Details

The Asset Description column from the Assets table allows for quick access to summary details for each of the assets listed. Depending on the attributes input for the asset, the description may include a more… link. Click to expand the asset information. Once expanded, click less… to collapse.

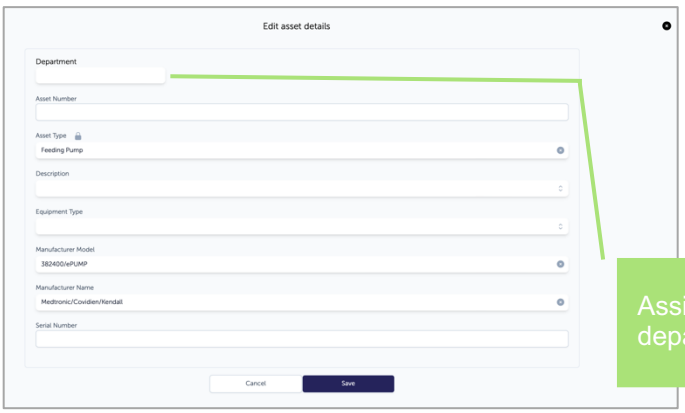
To view more details about the asset and to access additional functions, click on the link in the Asset ID column. The Asset Details page for the selected asset will open.





To edit details for a specific asset, select **Edit Asset Details**.

Use the input fields and drop-down lists to make necessary changes to the asset by changing, adding, or removing data. The more details associated with the asset, the more relevant the inventory and asset tracking data will be.

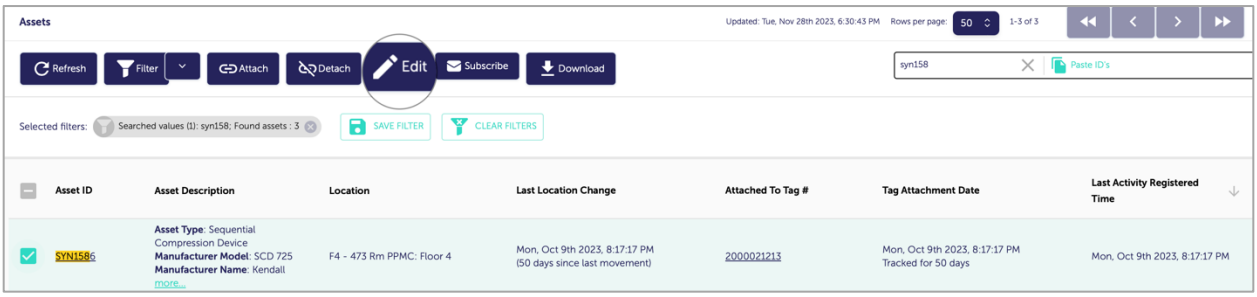


Select **Save** to finish and close the pop-up window. The system will return to the Assets page and a small pop-up message will appear indicating that the asset details were successfully updated.

Select **Cancel** to return to the previous screen without saving any changes.

Go to Department Management for more information on setting up departments and assigning assets and users to departments. Not all organizations use this feature, so it may not appear on your screen.

Alternatively, you may edit asset details for an asset from the Assets page. Locate the asset to edit and select the checkmark box next to the asset. You may select only one asset at a time. Click **Edit** from the Assets menu.

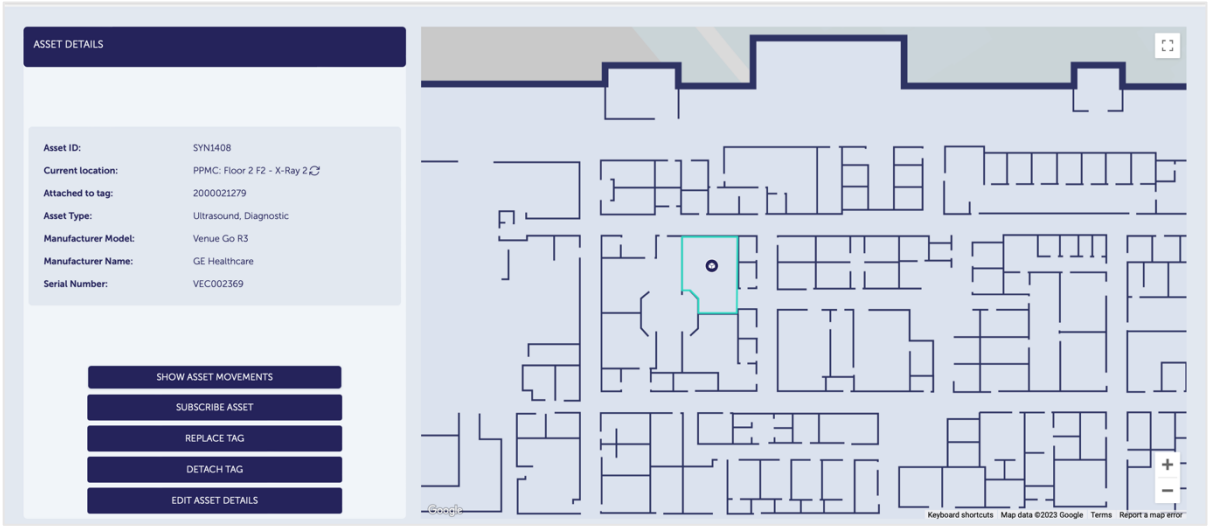


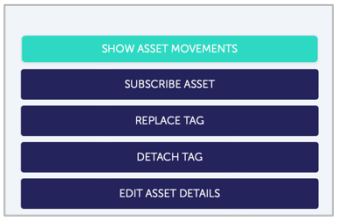
When the Edit Details pop up window opens, follow the same steps as just described.

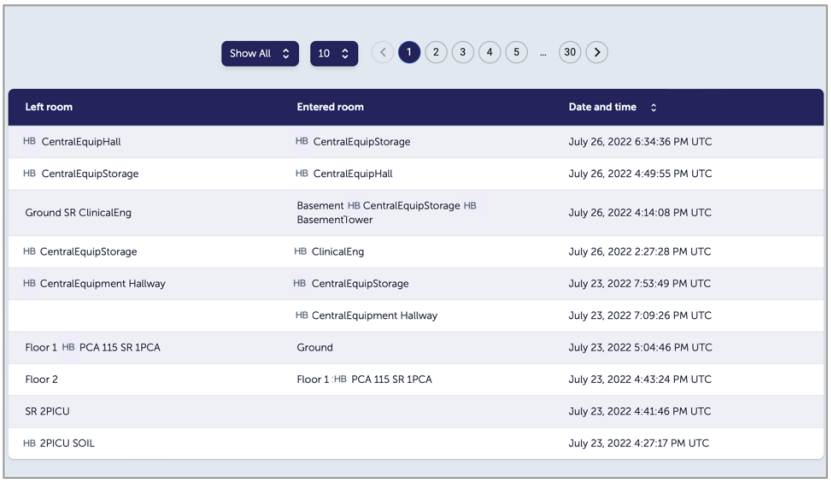
5.1.5 Viewing Asset Movements

One important benefit of the Cognosos portal is the ability to dynamically view asset movement across the facility. Not only does this aid in locating key equipment, asset movement is an indicator of inventory control factors such as equipment shortages, under-utilization of certain medical devices, and the like.

Use Search or Filter to locate the asset for which to show movements. Open the Asset Details page for the desired asset. The view defaults to displaying the asset's location on a map. Click **Show Asset Movements**.



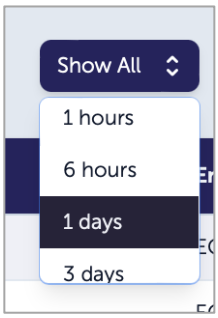




The Asset Movements pane lists all of the movements for the asset, including the areas the asset entered, exited and the associated times of each movement. By default, all available movements are listed.

Use the pagination arrows (left and right arrow buttons) to scroll through the pages or click a page number. To jump to a higher number page, click the highest page icon shown and then page backward (e.g., click 30 to display icons for the last five pages 29-25).

The page defaults to all logged movement (Show All). Filter the display by using the drop-down and selecting a different movement range option (minimum 1 hour; maximum 3 weeks).

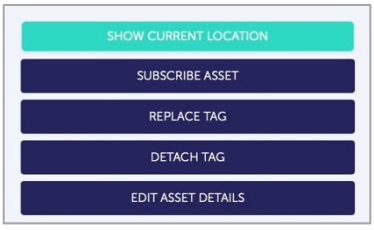


Show more or less movement history per page by changing the number setting. The system defaults to the last 10 movements.

The higher the number, the more movements shown. The minimum is the last five (5) movements; maximum is 100 movements.

This option may be used in conjunction with the Show filter described above.

Click **Show Current Location** on the left to close asset movements and display the asset's location on the map.



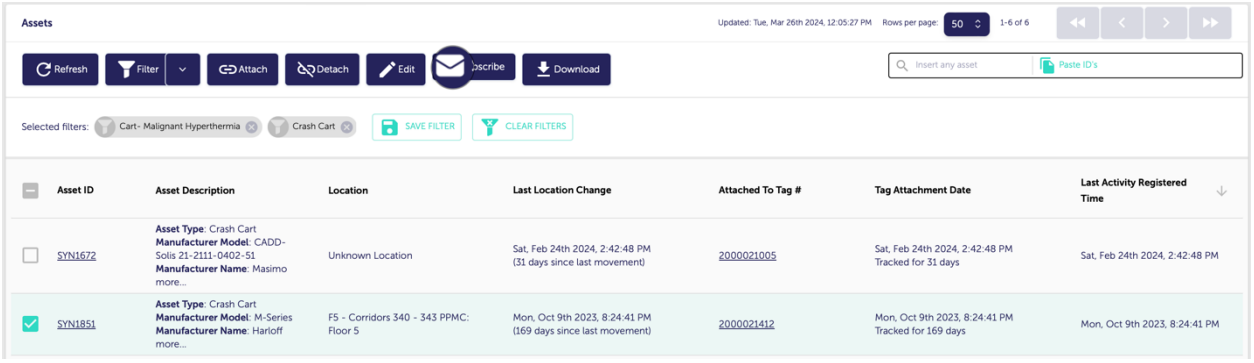
If you need to take a different action with the asset, use one of the other options on the Asset Details screen. Otherwise, use your browser's back arrow to return to the My Site Assets listing page.

5.1.6 Creating Asset Subscriptions

When team members need to receive real-time alerts regarding assets, user should subscribe to the asset.

This section describes subscribing to a single asset. Other subscriptions include: ProPAR rooms, zones tamper alerts, and exit monitors.

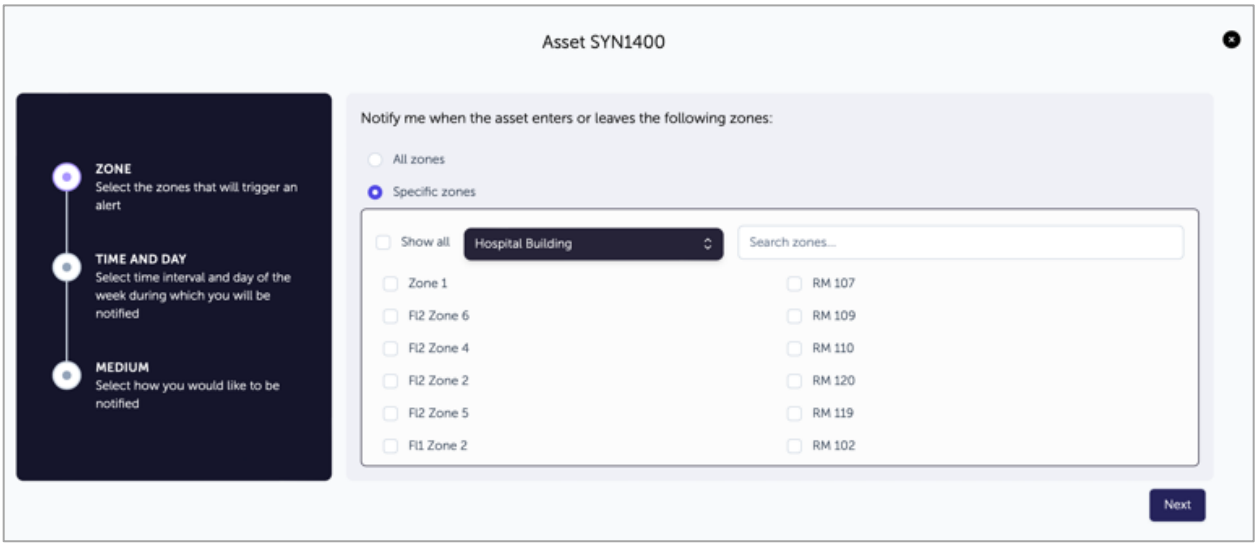
Locate the asset to which the subscription is needed. From the Assets list, place a checkmark next to the asset and select **Subscribe** from the Assets menu. You must choose one asset for the Subscription menu item to activate.



Alternatively, from Asset Details choose **Subscribe Asset**.

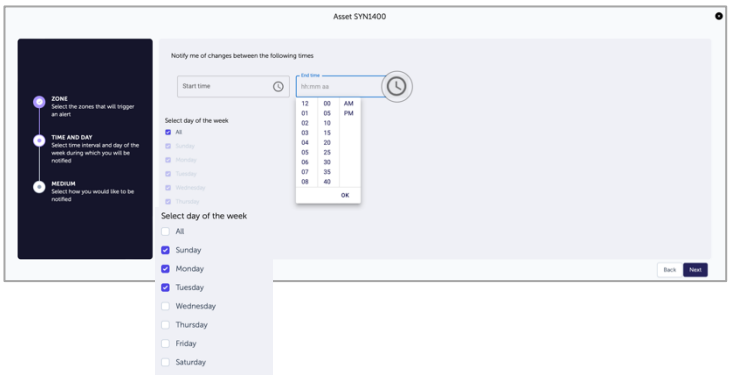
Select All zones to receive alerts anytime the asset passes through a zone. Otherwise, click Select zones and checkmark the zone(s) to which you'd like to subscribe.

Click **Next** to continue. Click the X in the upper corner to close the window and discontinue the process.



Enter the time range to trigger the alert. Click inside the field to type time or clock face to use time selector. Use the days of week checkboxes under the clock to set for specific days or leave set to All.

Select **Next**. Click **Back** to change zone settings.

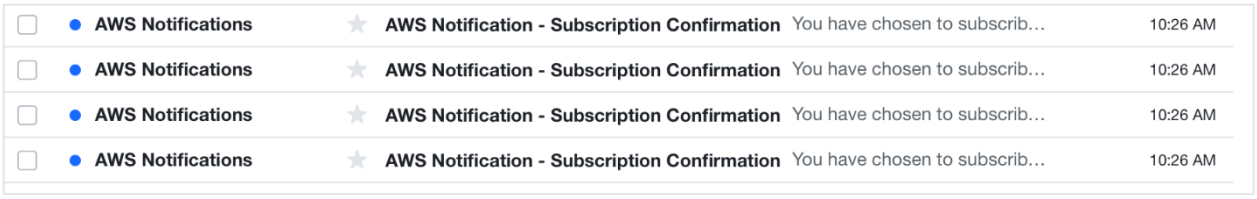


Set the delivery medium(s) for the asset subscription notifications. Enter either a mobile number or email address (or both; at least one is required) to which the notifications will be sent.

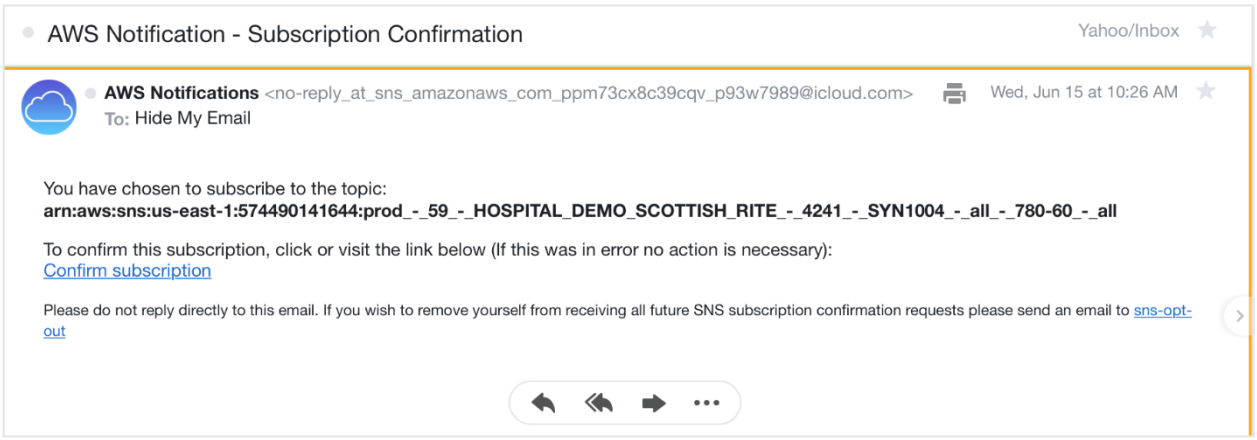
Select **Submit** to save the subscription and return to the Assets tab. To change the notification time range or days to send notifications, click **Back**.

The system displays a confirmation for each of the subscriptions defined. A subscription comprises one delivery method and one zone. For example, if the subscription is for a single asset in one zone and the delivery method is both phone and email, there will be two subscriptions. If the subscription is for a single asset in three zones and the delivery method is both phone and email, there will be six subscriptions.

When subscribing to an asset via email for the first time, you will first receive an email from Amazon Web Services confirming your permission to email you. As described above, you will receive a confirmation email per zone requested with the email delivery method.



You must open and confirm each one by selecting the Confirm subscription link in the email.



Subscriptions are created and saved for individual or groups of assets and through unique user IDs and therefore do not automatically carry across multiple users. New subscriptions are added to the Subscriptions list.

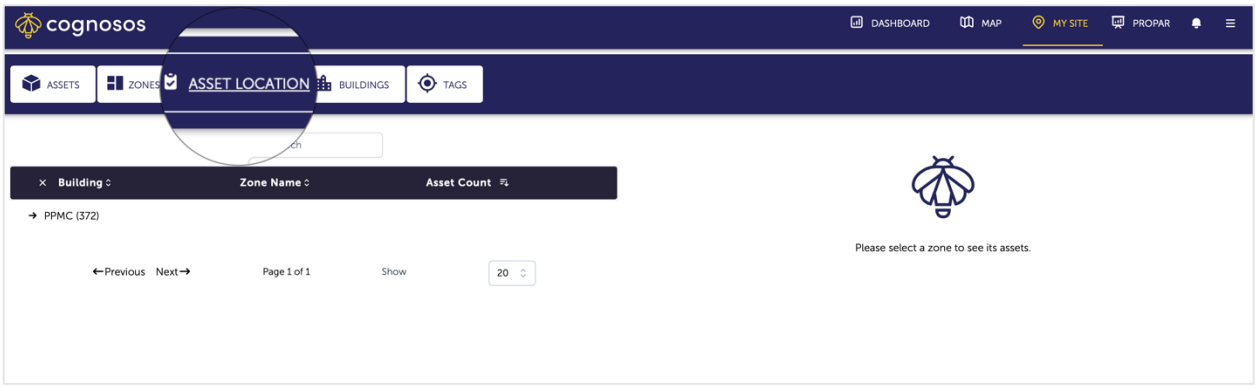
When asset movement meets the input criteria, a notification will be sent to the phone number and/or email address set up in the subscription.

For more information on managing subscriptions and notifications, refer to Subscriptions.

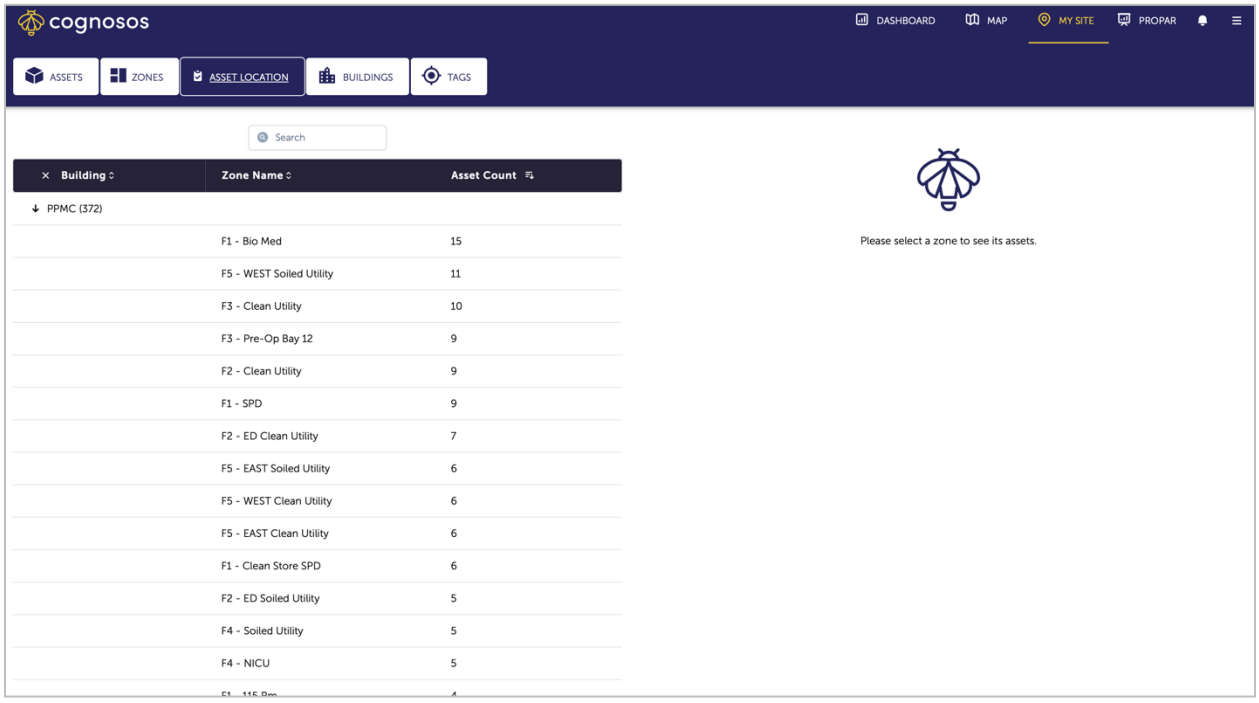
5.1.7 Viewing Asset Inventory

The Asset Location option under My Site provides asset inventory break-down by zone allowing fast access to inventory location and needs. For example, see all assets that are currently located in the bay or storage. ProPAR inventory is viewed in another area of the portal.

Select **Asset Location** from the My Site menu to view the primary page.

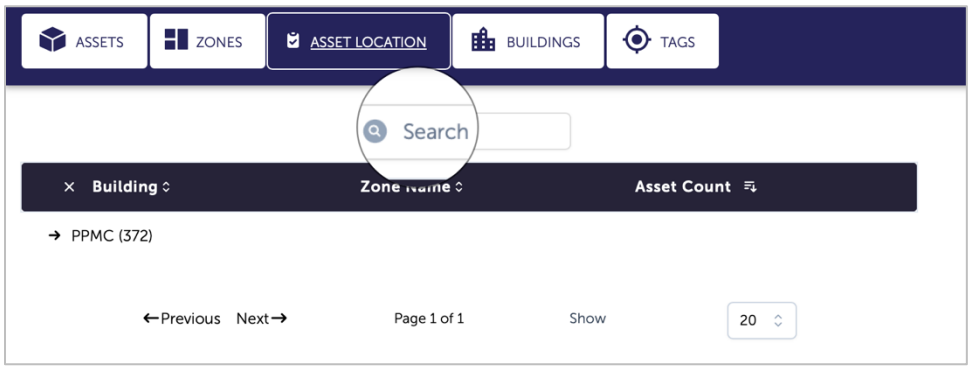


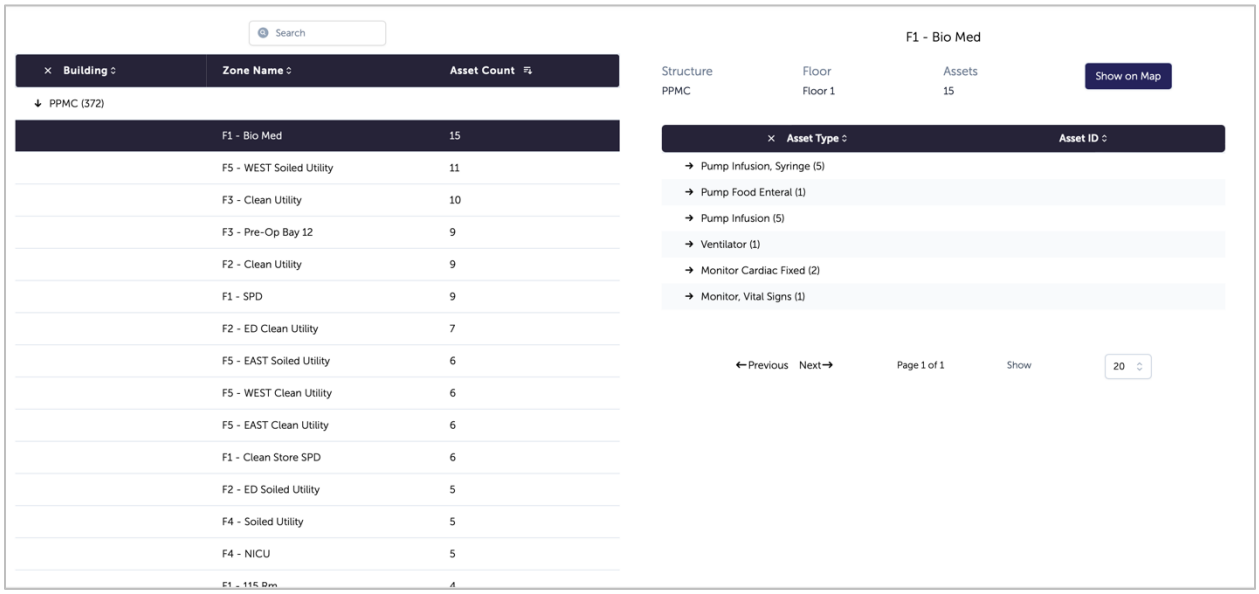
The bottom of the page includes standard pagination options and the ability to select the number of items to display per page. The Building column lists the name(s) of the structures and the total number of zones defined in that building, noted in parenthesis next to the building name. Select the arrow next to the building name to display the zones for that building. Each zone includes the current asset count.



Sort any of the columns (Building, Zone Name, Asset Count) in ascending or descending order.

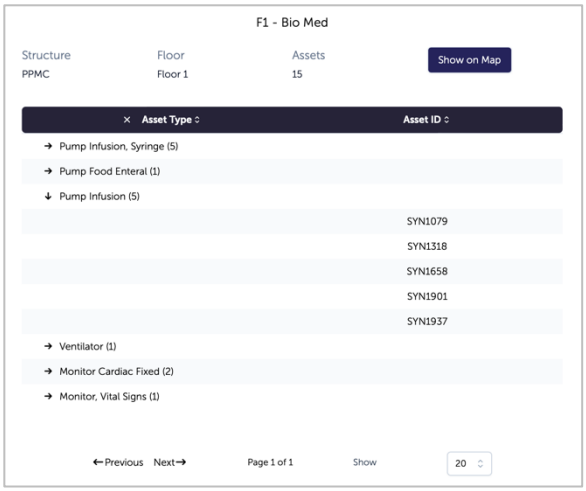
Select the zone name to view a list of the tracked asset inventory in that zone. If you have many buildings or zones, use the Search field to search for a specific zone or key term.



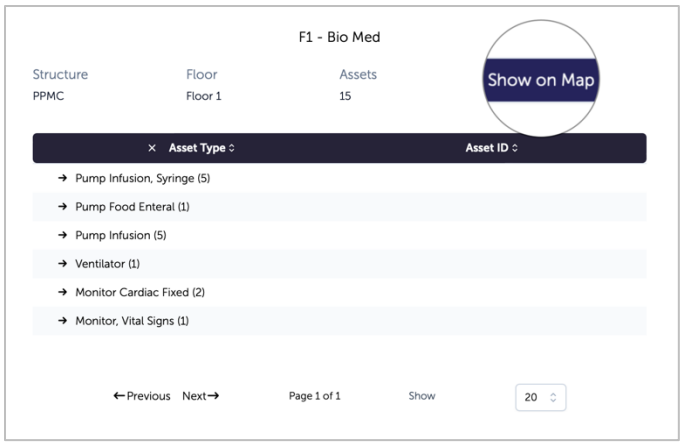


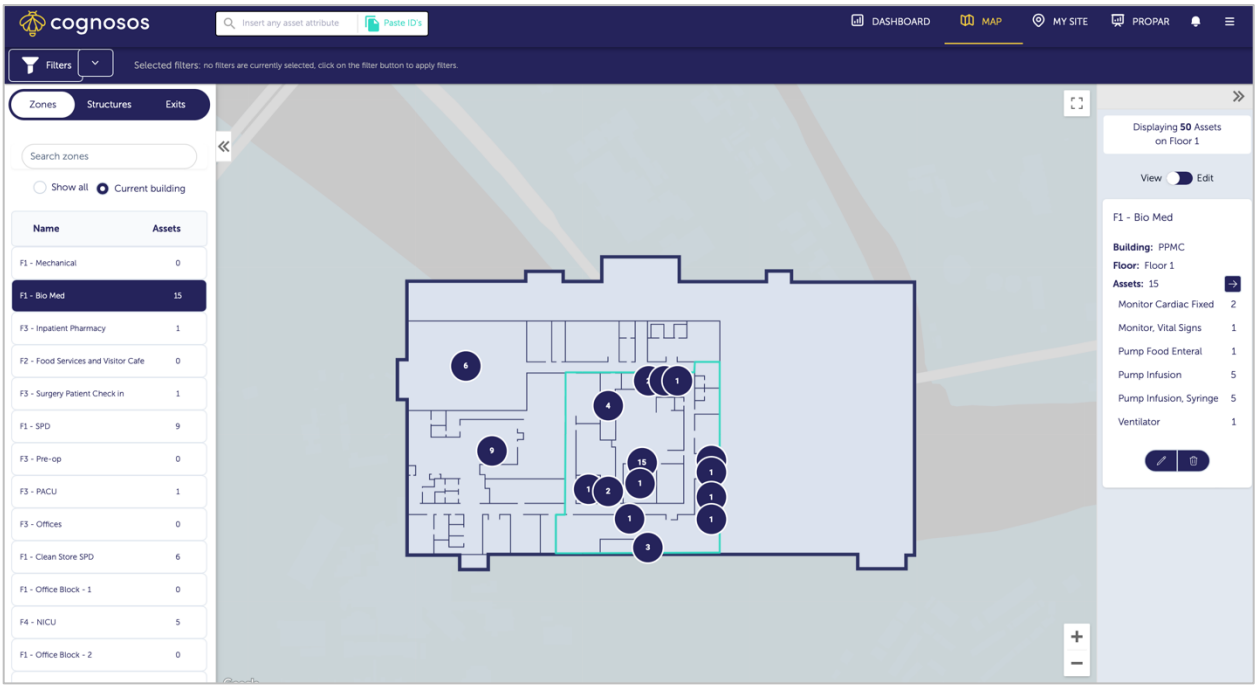
The right side of the page includes zone name, structure (building), floor and asset count at the top; below is a list of asset inventory listed by asset type. Open the Asset Type to view the individual asset IDs for that asset type.

Both the Asset Type and Asset ID columns can be sorted in ascending or descending order (alphanumeric).

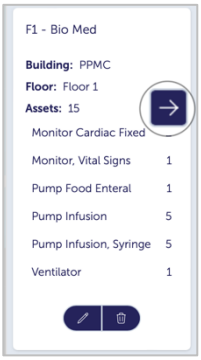


Click **Show on Map** to open view the zone and asset(s) on the map. The zone will display in teal with the assets shown in cluster groups or individual icons (dependent upon the number of assets in the zone).





Continue necessary zone or asset activities from here. Return to Asset Details using the arrow icon on the right side of the map.

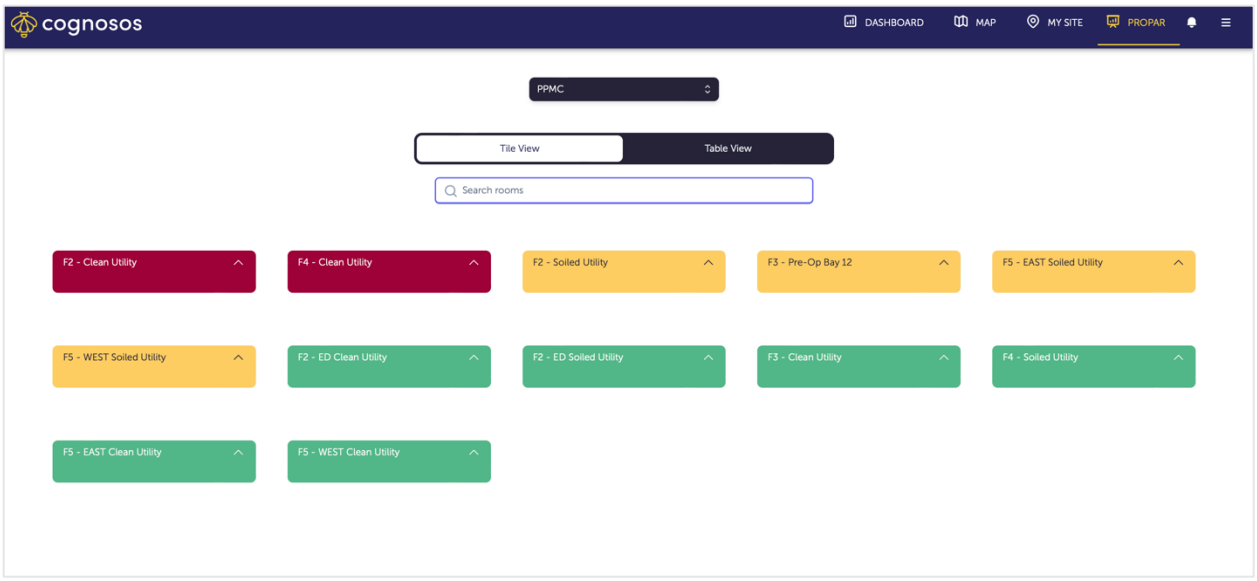


For information on managing clean and soiled inventory see the ProPAR section.

5.2 Proactive Asset Replenishment (ProPAR)

The Cognosos platform proactively tracks periodic asset replenishment (ProPAR) levels for clean and soiled equipment rooms and shows overall PAR status on a simple dashboard. With the ability to drill down at the room level, hospital staff can replenish equipment in a timely and efficient manner. A pick list feature provides equipment runners with an easy method to collect inventory replenishment information. Users can also subscribe to alerts for immediate notification when a piece of equipment reaches a critical level in a room.

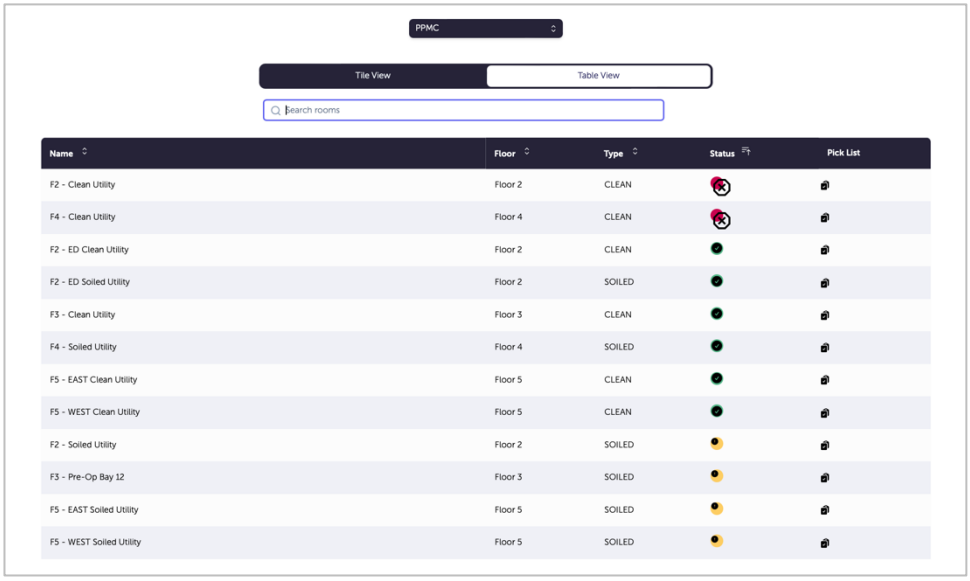
Select **PROPAR** from the main menu to display the full list of clean and soiled rooms. The page displays all the rooms defined as clean or soiled and the inventory levels of each. Scroll down the page to see all the rooms.



Use the drop-down field at the top of the page to select the building or structure (when there is more than one structure.

If this screen is blank, or you are missing rooms that should be tracking PAR levels, please use the Zones setup on the map to make rooms are identified as soiled for soiled rooms and clean for cleaned rooms.

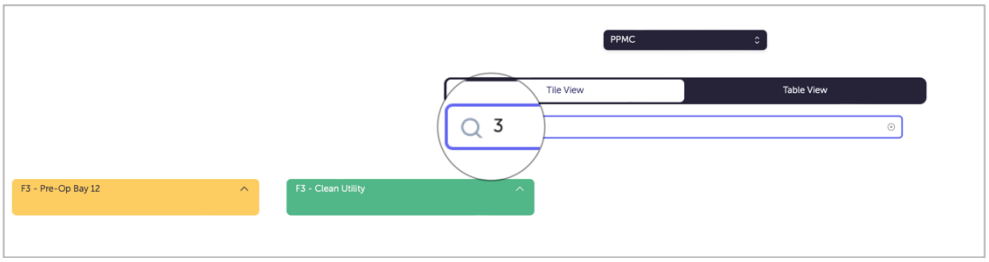
The data may be shown in a tile (default) or table view by changing the view output.



In table view, each of the columns is sortable. Use the carat arrows next to each column header to re-sort the display.

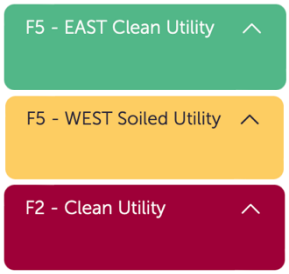
The use of Department assignments may impact a user's ability to access ProPAR. When a user is assigned to a specific department, they will not have access to ProPAR functionality.

Utilize the **Search** function to narrow down the display of rooms from either tile or table view. The field accepts alphanumeric characters.



Clear the search by selecting the X in the search bar.

The inventory status of a room is indicated by the color of the tile (Tile View) or the Status icon (Table view). Refer to the Clean Room and Soil Room sections that follow for more information regarding specific level warnings.



Status of room is good

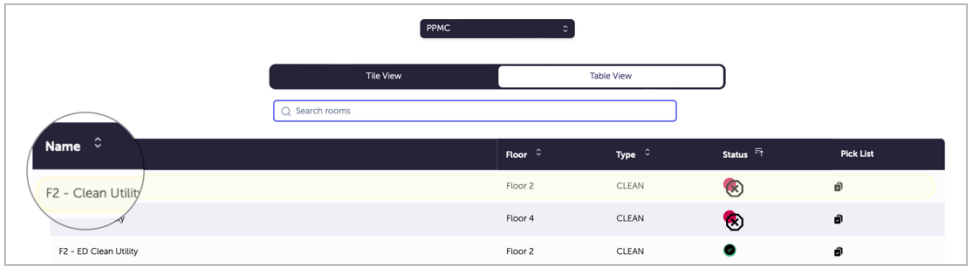
Status of room is at warning level

Status of room is critical

Quickly review inventory numbers for any room. On the Tile View, select the carat next to the room name.

Click **See more** to view detailed inventory levels and asset statuses by opening the bar graph for the room.

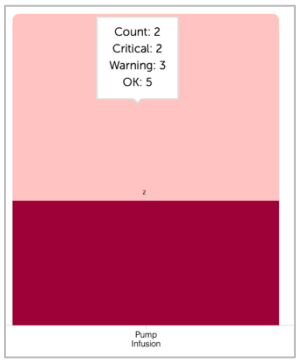
From Table View, click the row for the room to open the bar graph.



Clean Room PAR Levels

Clean equipment rooms track low and critical status by asset type; as the asset count decreases, the status level increases (Ok -> Warning -> Critical). When a zone is selected, the system shows a bar graph displaying assets and inventory of each in that room. An asset's status may be full (green), low (yellow), critical (red). The bar represents a percentage based on inventory level settings and current asset counts. See Managing ProPAR Settings for information on setting status levels.

The top of the page shows the building and floor of the selected room and the room status icon. Information about the room and location (building, floor, room type) and asset inventory are also shown.



Hover over any bar to view the asset's inventory count and PAR status levels.

Count: Current asset inventory count

Critical: Low level asset count for critical status (red)

Warning: Mid-level asset count for warning status (yellow)

OK: Baseline # of assets required for good status (green)

Select the back arrow next to the room name to return to the main ProPAR tile view (default view).

Administrative users may add or make changes to asset levels from this page.

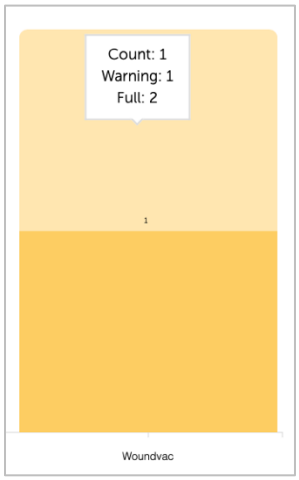
Use Pick List for equipment runners to gather a list of assets to replenish.

Subscribe to a room for up-to-date notifications of inventory changes. Use ProPAR subscriptions to stay alerted of inventory levels in sensitive or high demand areas/departments. For example, if Emergency and Operating room rooms (zones) are active during the weekend, setting up a notification to restock any rooms (zones) in that area first thing Monday morning can give your team a proactive action plan to support areas that are critical for patient care.

Soiled Room PAR Levels

Soiled equipment rooms track full status by asset type and overall asset count. An asset's status may be acceptable (green), warning (yellow), or full (red). As the asset count increases, the status level increases (from warning -> full).

The top of the page shows the building and floor of the selected room and the room status icon. Information about the room and location (building, floor, room type) and asset inventory are also shown.



Hover over any bar to view the asset's inventory count and PAR status levels.

Count: Current asset inventory count

Warning: Asset has reached PAR count for warning status (yellow)

Full: Critical status; # of soiled assets in room too high (red)

Select the back arrow next to the room name to return to the main ProPAR tile view (default view).

Administrative users may make changes to PAR inventory level requirements from this page.

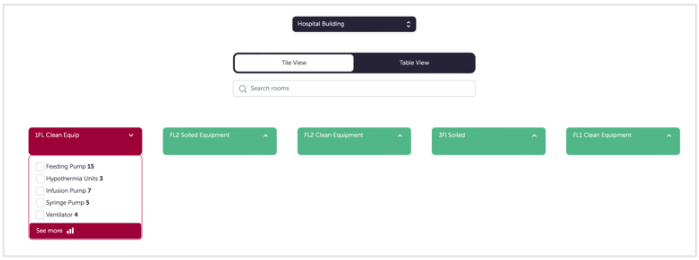
Use Pick List for equipment runners to gather a list of assets to distribute.

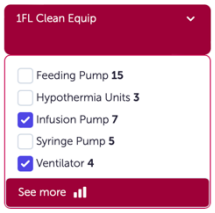
Create a ProPAR subscription to a room for up-to-date notifications in inventory changes.

5.2.1 Using the PAR Pick List

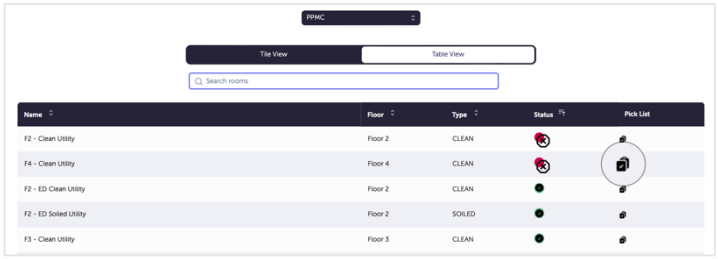
Availability of medical equipment is imperative to hospital inventory flow and patient care. ProPAR gives hospital staff multiple ways to quickly and easily access a zone's inventory checklist to replenish or distribute assets with the **Pick List** option. Print the pick list from the portal or access the ProPAR pick list on the Healthcare mobile app.

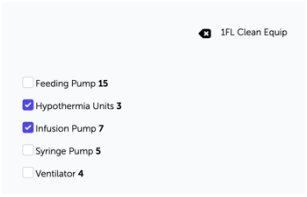
1. Tile View
   The pick list is available directly from the tile. Select a room tile. Click each item to replenish or distribute.





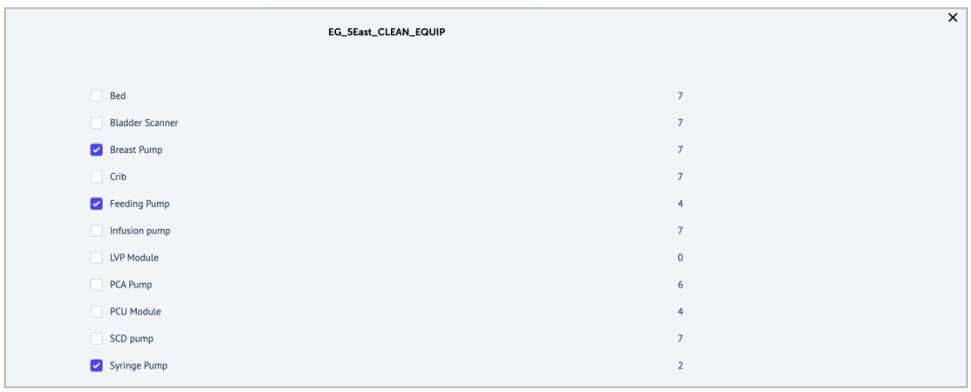
2. Table View
   Select **Pick List** icon for desired room from the table. Make inventory selections.





3. Asset Bar Graph
   Select the **Pick List** button on the bar graph page. The inventory list for the room shows as in option 2.

Place a checkmark next to each inventory item that needs to be replenished. You can print the list through your computer's browser or use the ProPAR feature through the Healthcare Mobile App on a mobile device. Either click the tile to close the pick list (from main tile view) or select the **X** (either next to room name or at top right of window) to return to the previous screen.



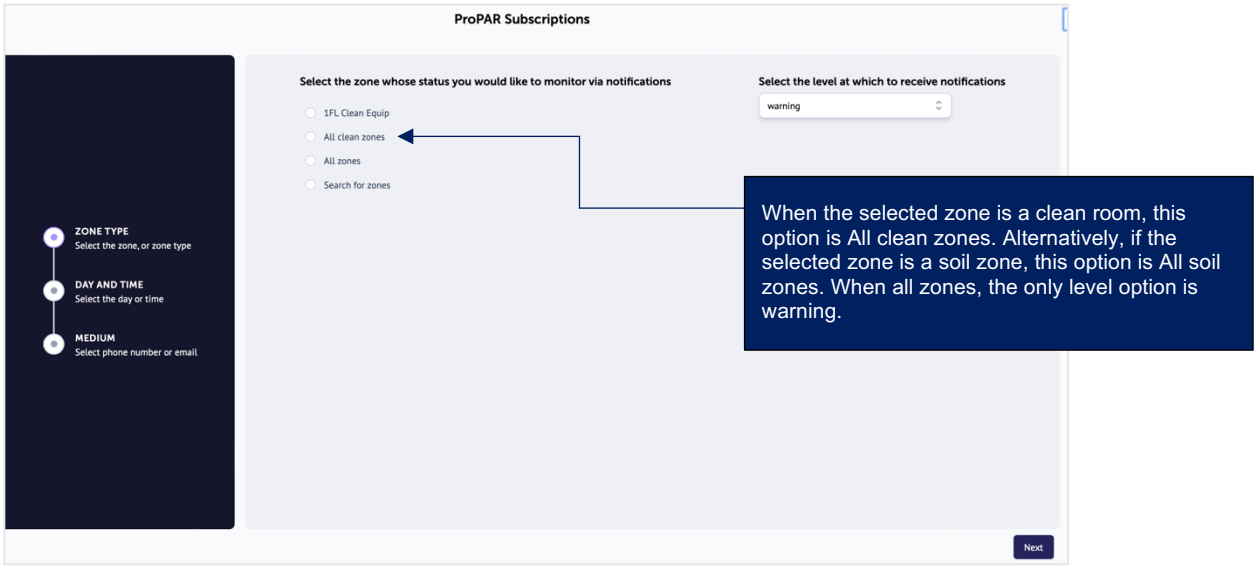
Regardless of steps to access the pick list, the state of the pick list is local only; no values are persisted to the server or shared across the portal (only asset movement updates the inventory numbers). The pick list option is provided so that equipment runners can easily gather the necessary data to replenish or distribute assets for that room.

5.2.2 *Subscribing to a ProPAR Zone*

Note: ProPAR subscriptions are generally pre-defined during the ProPAR set-up process. When a subscription is added to the portal or a new user after initial ProPAR set-up, the subscription will not trigger an alert until the status of a room or asset changes.

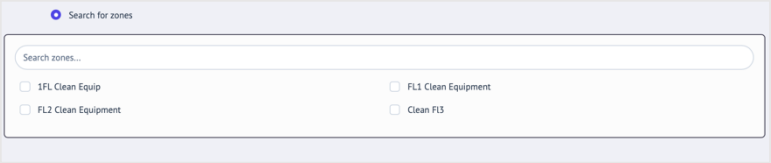
Maintain up to information on inventory levels for the most critical or high traffic areas in your facility with the ProPAR subscriptions option. Locate and select the zone from the main ProPAR listing (tile or table view) to open the room's page. Click **Subscribe**.

You may subscribe to the selected ProPAR clean or soiled zone, to all clean or soil zones (dependent on whether selected zone is a clean or soil room), or to all zones.

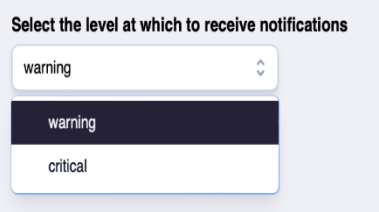


Best practices indicate that to get the best results in the subscription, you should choose the single ProPAR room; the more rooms or zones you select, the less details that are provided in the subscription.

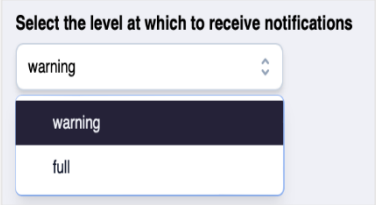
If a different zone(s) is needed, choose Search for zones.



For any zone option, use the drop-down list on the right to select the zone(s) status that will signal a notification. Clean rooms include warning and critical status; soil rooms include warning and full status. If All Zones was chosen, this drop-down list will only have waring.

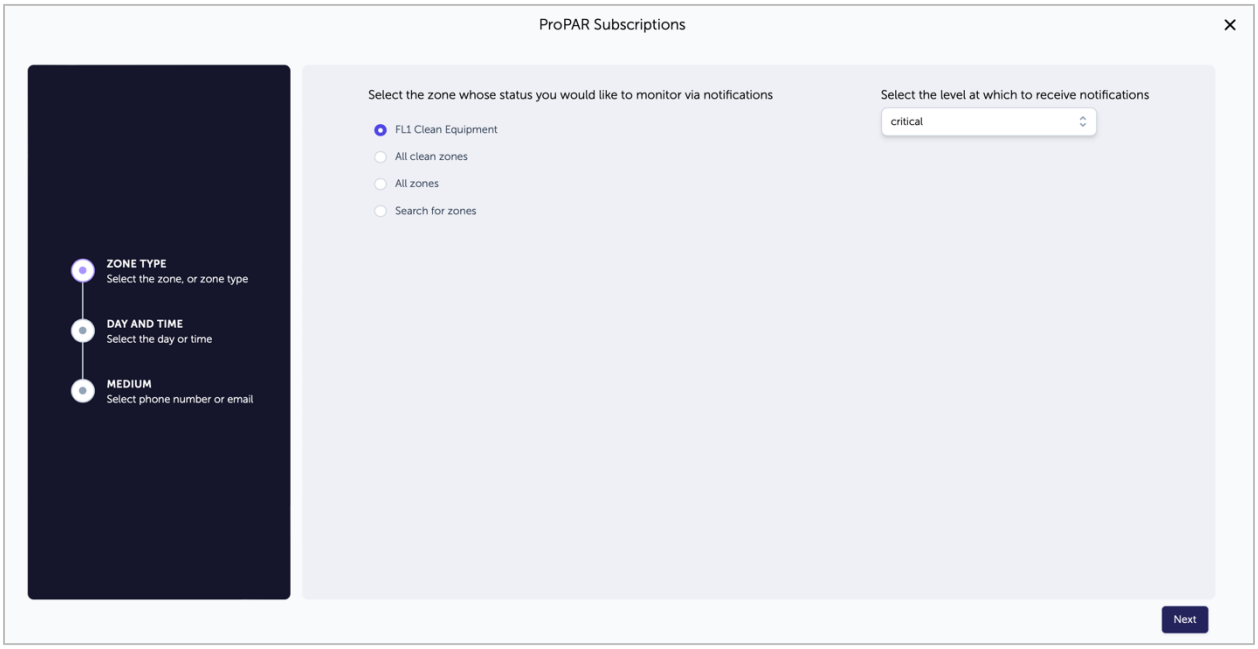


Clean Room Status

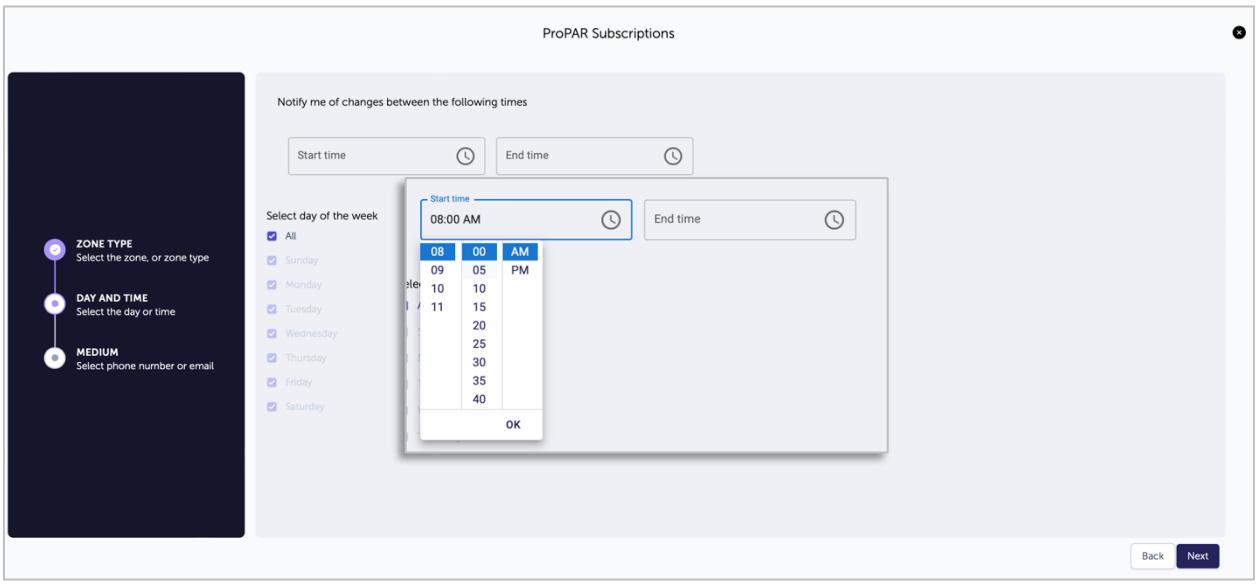


Soil Room Status

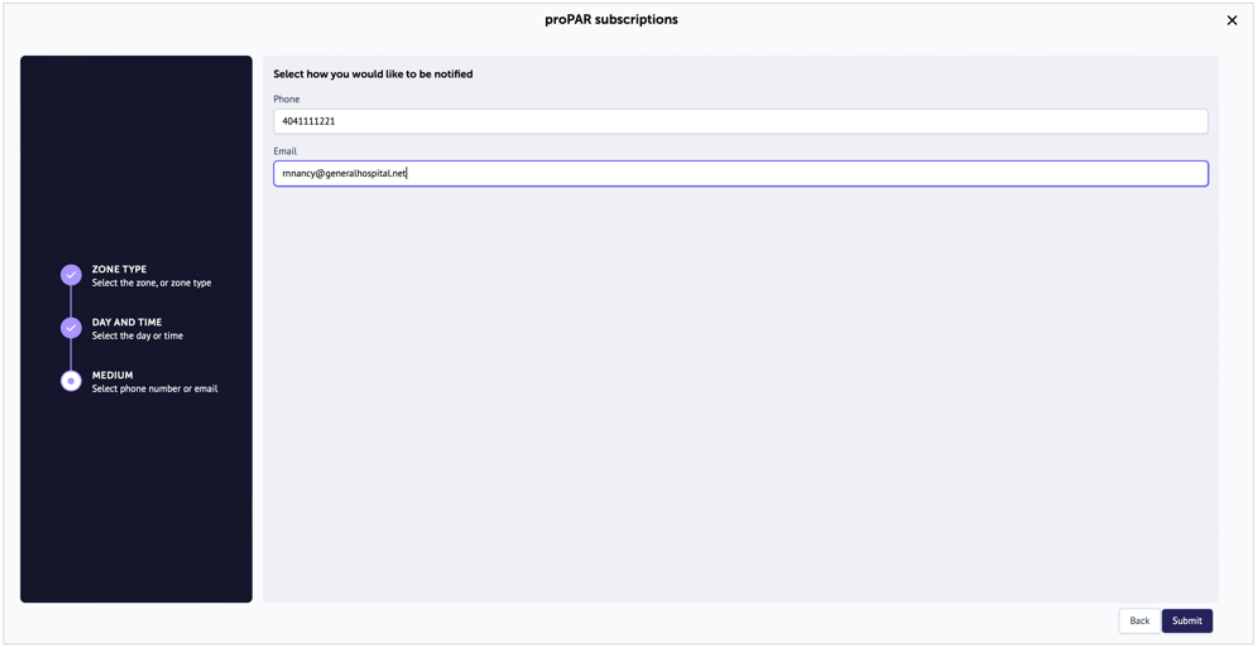
Once the zone and status level have been input, select **Next** to input the subscription schedule.



Input time and set days of week for the subscription. To enter time, click the clock and highlight the hour, minutes, and AM or PM. Hit OK. Repeat for end time. You may also type the time by clicking within the time box.



Subscriptions may be set for all days of the week, one or multiple days. Use the day of the week checkboxes to select the day of week for the subscription to run. Deselect **All** (default) to set to specific day(s). Select **Next**. To change the zone(s), select **Back**.



The phone and email address default to the information in the logged in user's profile. Make changes if needed. Select **Submit** to save the subscription and return to the zone page.

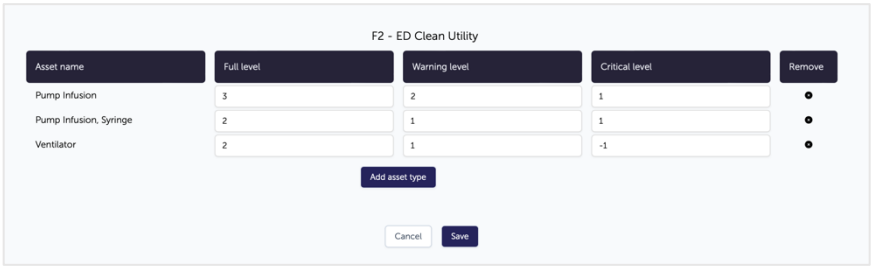
The subscription will appear on the subscriptions listing. See Subscriptions for more information about ProPAR, zone, and asset subscription management.

5.2.3 Managing ProPAR Settings

Edit + Remove Asset Levels

Users with an Administrative user role may edit the inventory settings for each of the zones, including asset levels and asset types. Locate and open the zone page from the main ProPAR listing (tile or table). Select **Manage asset levels** from the zone's page.

The portal shows a list of the assets assigned to the room and the baseline counts for each level: Full and Warning for soil rooms; Full, Warning, and Critical in the case of clean rooms. To note, clean and soil rooms have an inverse relationship with counts. With clean rooms, the lower the count, the more critical; with soil rooms, the higher the count, the more critical.



To change an asset's level, delete the existing value and enter a new value. Select **Save** to keep the new values and return to the room page. Otherwise, select **Cancel**.

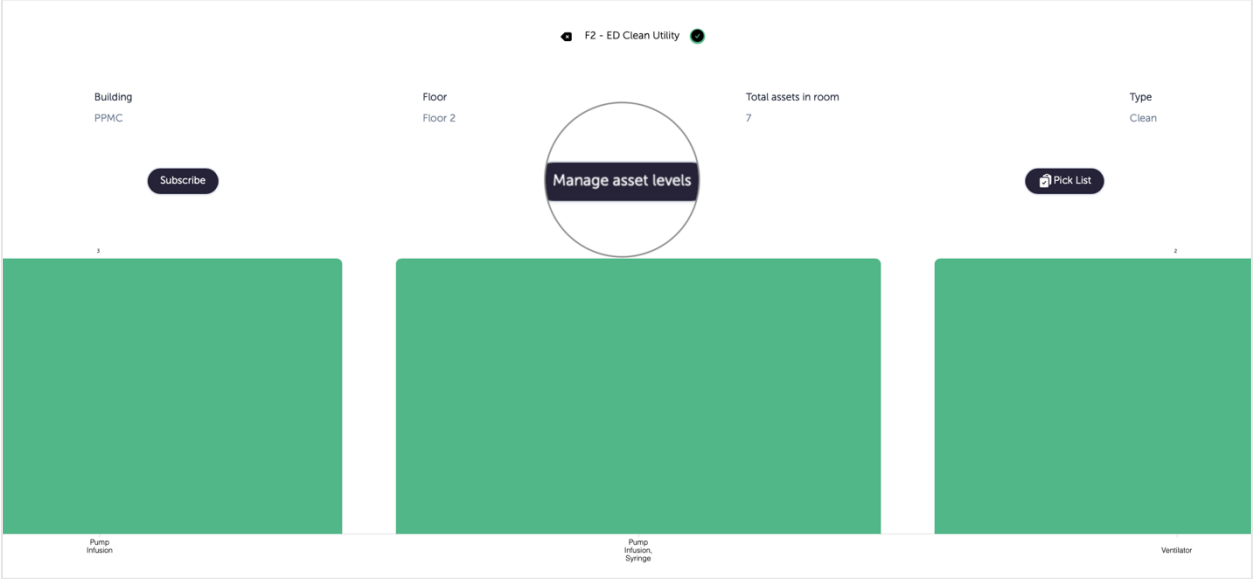
For clean rooms, asset levels include full, warning and critical levels; for soil rooms, full and warning levels.

To remove an asset from the room's inventory list, select the **X** under the Remove column for the asset. The asset is removed from inventory levels for that room and will no longer appear on the bar graph or the pick list for that room.

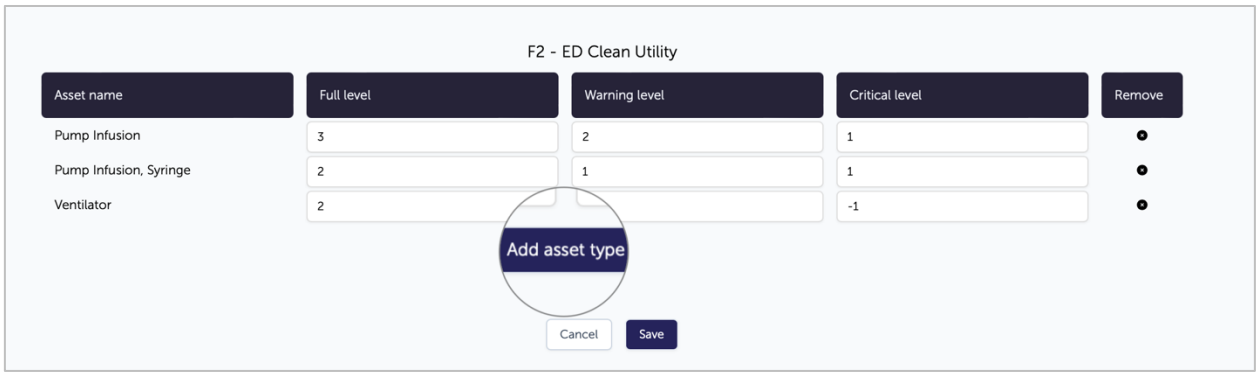
Add Asset Type + Levels

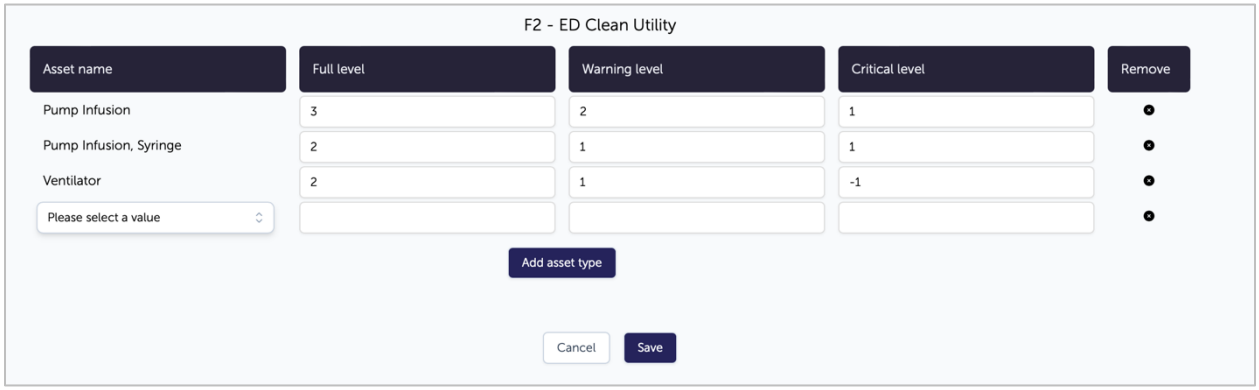
Asset levels need to be set up before ProPAR can be accessed. Contact your Customer Success team at Cognosos for information on best practices in setting up assets to maximize the ProPAR experience.

To add a new asset to a zone, click **Manage asset levels** from the zone's page.

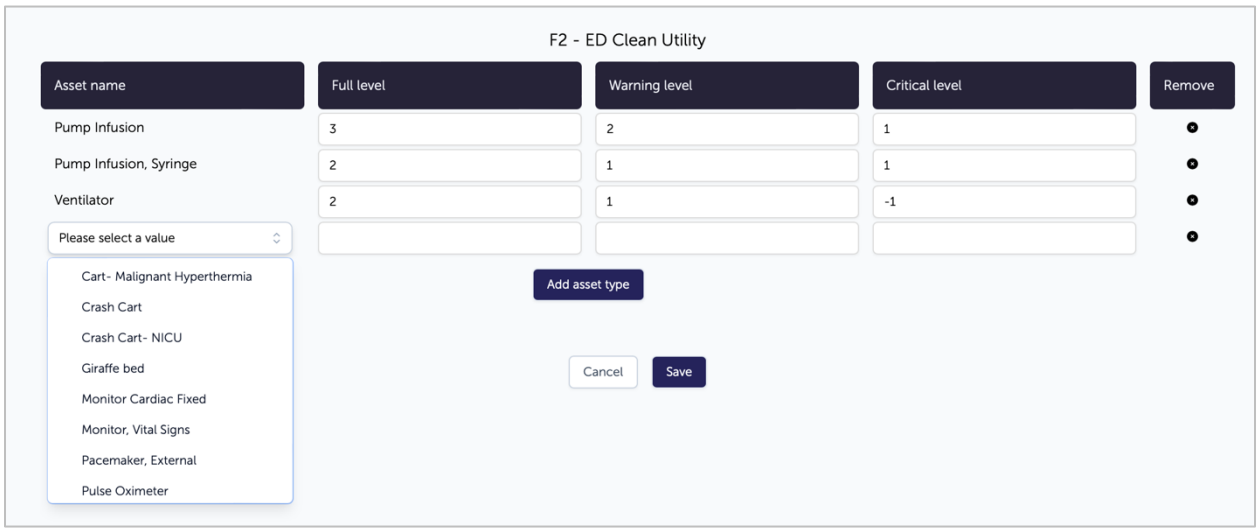


Select **Add asset type** to populate the table with a new row.





Use the dropdown list to select the Asset Type and populate the warning levels.



Continue this process for each asset you need to add to the zone. Once complete, select **Save** to add the asset(s) to the zone. Otherwise, select **Cancel**.

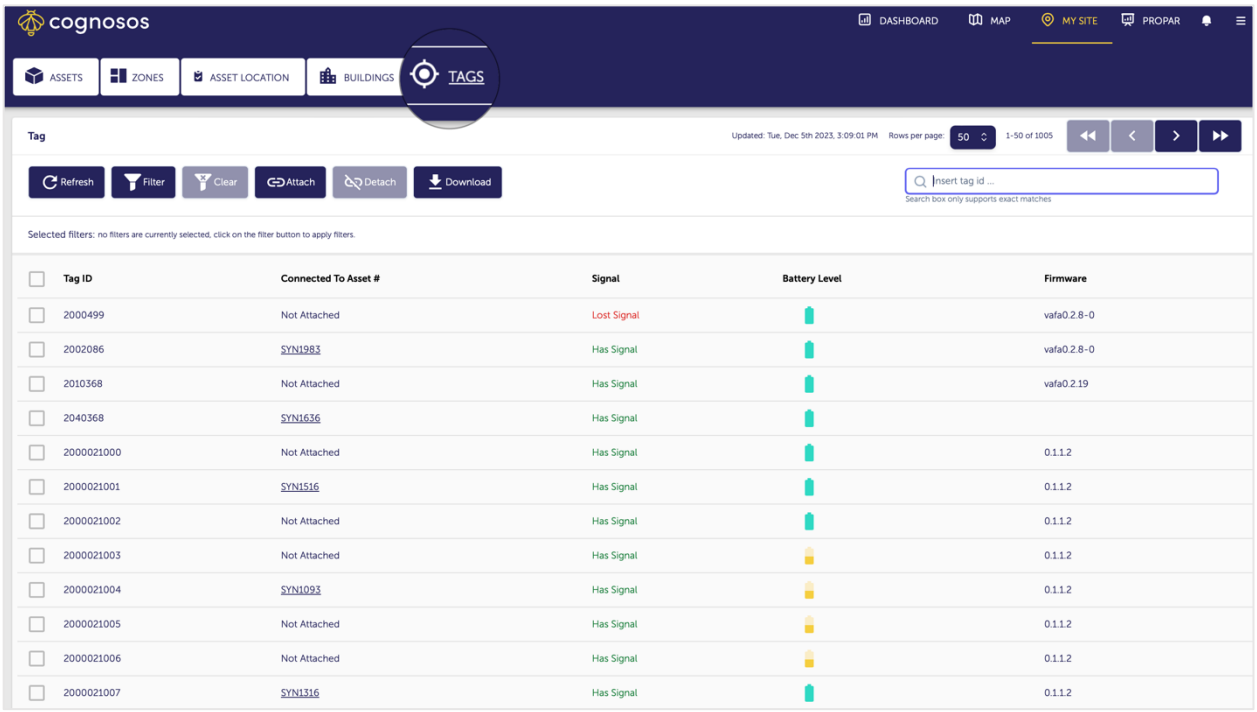
The new assets will be displayed on the bar graph and pick list for the room and inventory level data for the new assets/zone will be maintained.

Both clean + soiled rooms have Full and Warning levels; only clean has Critical level.

5.3 Tag Management

The Tags tab in My Site provides a way to view tags and tag health, attach and detach tags, and link to individual asset movements and details (for the equipment to which the tag is attached). A location link also takes users to a Google map noting the tag's location. A tag is a device (tag) that is adhered to a piece of medical equipment and provides wayfinding services.

When the Tags tab is opened the page defaults to a list of all tags.



The Tag ID, Battery Level, and Firmware columns are sortable. Hover and click over the column you want to resort.

At any point the list can be saved to a file using the **Download** option in the Tag menu bar. This option downloads the data to a CSV file that can be saved to another location.

Tag and connection statuses may exhibit:

- Has signal: Tag and asset are connected, and all operations are normal. No action needed.
- Lost signal: Tag and asset are connected, but there is no communication between tag and gateway. Check battery level; ensure tag is operational; follow tag replacement protocol if necessary.
- Not Attached: Tag is not associated to the asset in the Cognosos portal. Attach tag.
- Low or Critical Battery: Replace tag battery following battery replacement protocol.

An asset must have a 'Has Signal' status to report location and movement data to the Cognosos portal. Contact Customer Support if needed.

5.3.1 Locating Tags via Search

Locate a specific tag within the facility using the search feature located in the Tag menu bar. Unlike assets which can be searched by any attribute, the complete and correct tag ID needs to be input into the Search field.

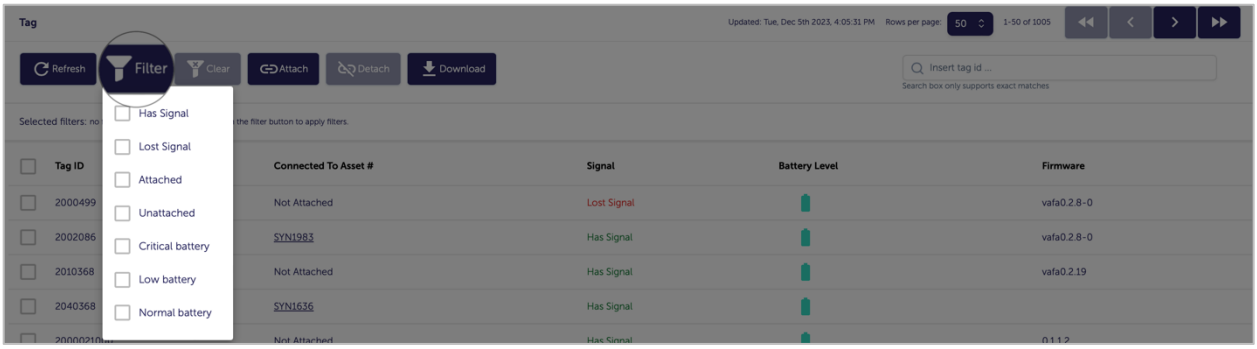
When the tag list refreshes the single tag will appear. Available actions for the device are dependent upon the tag status.

Select the X in the search field to clear the search and refresh the page to all tags.

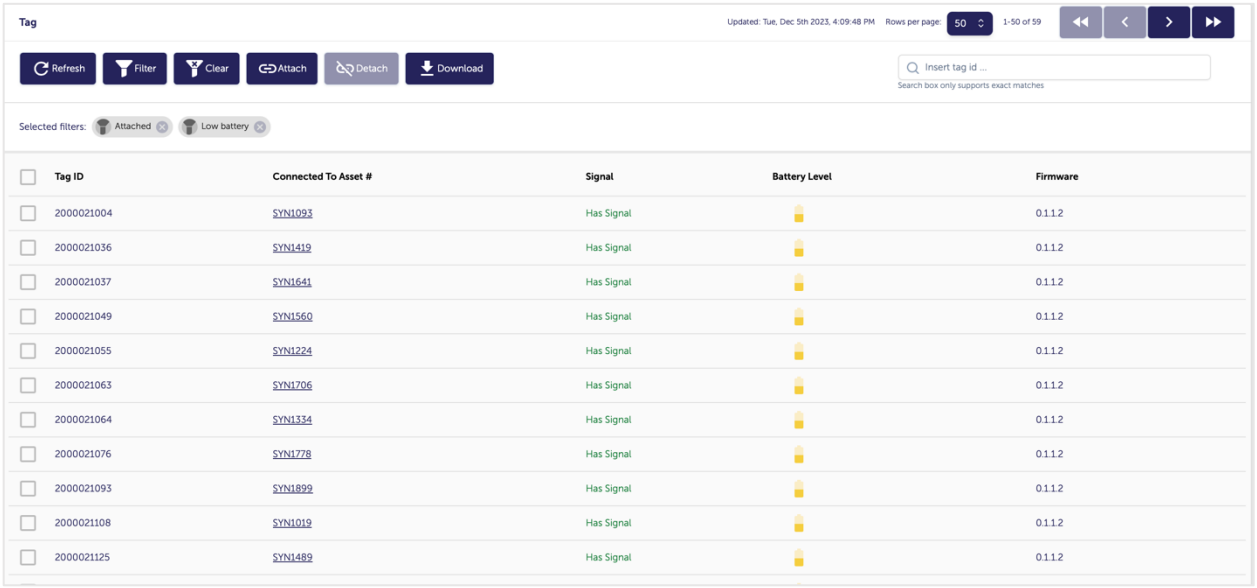
5.3.2 Locating Tags via Filter

Filters provide the ability to quickly locate tag(s) with a common factor within the facility. Unlike filtering assets, the tag filter provides pre-defined options (tag and battery operation status), and no new filters may be saved. Select the **Filter** button from the Tags menu and choose one or more of the pre-defined filters:

- Has Signal, Lost Signal refer to the tag (communication) status.
- Attached, Unattached indicate whether there is an assigned association to an asset.
- Critical/Low/Normal battery are regarding the tag's battery level.



The tags list refreshes with tags meeting selected filters. Selected filters are shown above the resulting list.



Take appropriate actions from there to open Asset Details or attach or detach tag. Click the X in the filters display to clear the filter and refresh the page. You can also select the **Clear** button in the Tag menu bar to clear filters and refresh the page.

5.4 Tag Attach + Detach

The Cognosos portal provides multiple inroads for attaching and detaching tags. When an asset and tag are attached, it means that tag has been physically adhered to the medical device and both the asset (device) and tag have been associated to one another within the system. Users with the role of Standard and Administrator have access to this feature.

Attaching or detaching the tags arises from various needs: an asset does not currently have a tag attached; an asset has gotten a new tag; a tag has become defective and needs to be detached and replaced; and so forth. As such, asset and tag relationships can be defined from the:

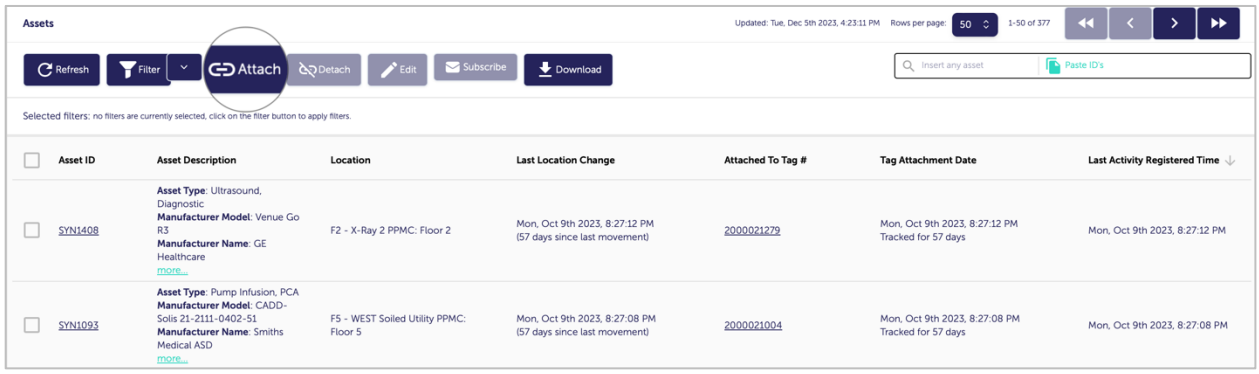
- Assets Tab - attach or detach from assets tab
- Asset Details – replace or attach tag and detach tag
- Tags Tab - attach and detach from tags tab

Regardless of the page or tab from which you are attaching or detaching, the use of Department assignments may impact a user's ability to view devices and take the action. When the user is assigned to a specific department, they can only view and attach or detach tags to/from assets that are assigned to their same department.

5.4.1 Attaching + Detaching via Assets Tab

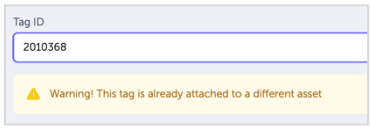
Attach Tag

From the Assets tab in My Site either place a checkmark next to a specific unattached asset or leave all the checkboxes blank (no selection) and click the **Attach** button from the Assets menu.

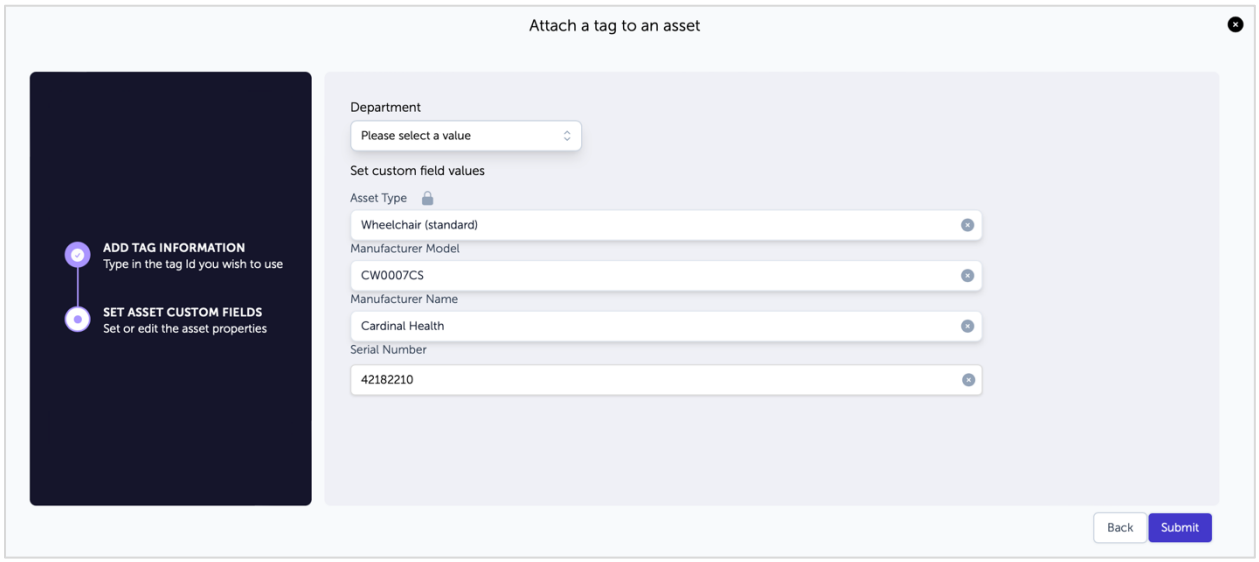


The Attach Tag settings open. If there was an asset selection from the Assets tab, the asset ID will auto-populate in the Asset ID field. If no asset was selected, both fields will be blank. Input valid value(s) and select **Next**. Otherwise click the X in the upper right corner of the window.

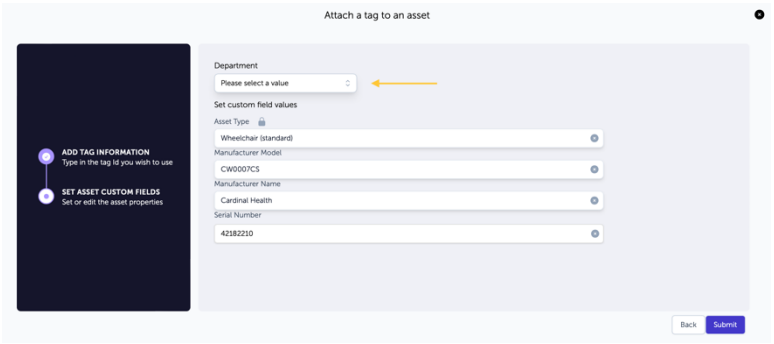
If you input a tag ID that is already attached to another asset, the system will return an error. Make corrections and continue.



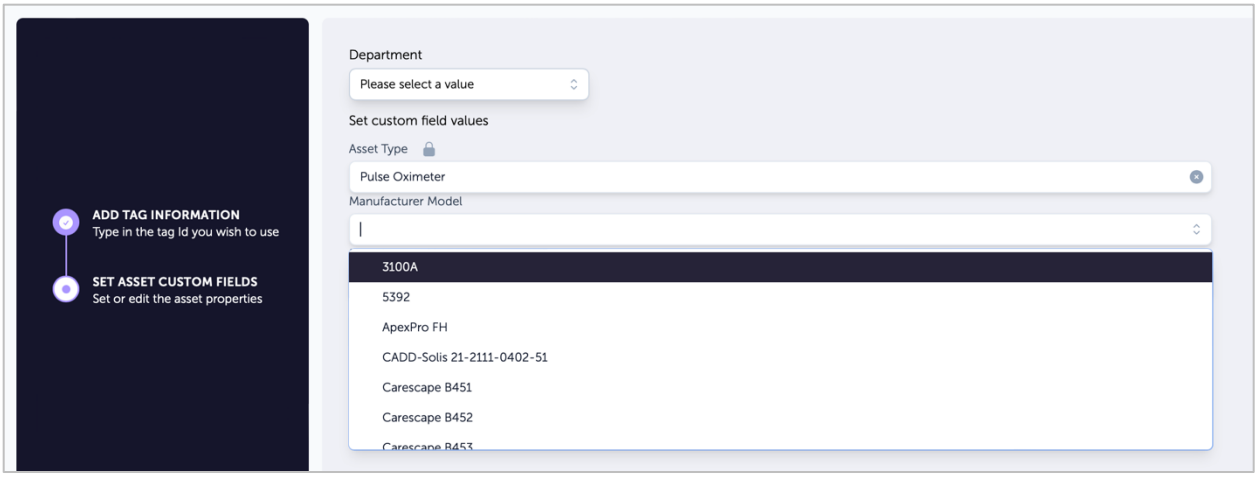
Set the custom properties for the asset. Asset details ensure that assets can be easily searched for using a variety of data and identifying information. The more details, the easier it is to locate the asset and to track data that may impact business operations.



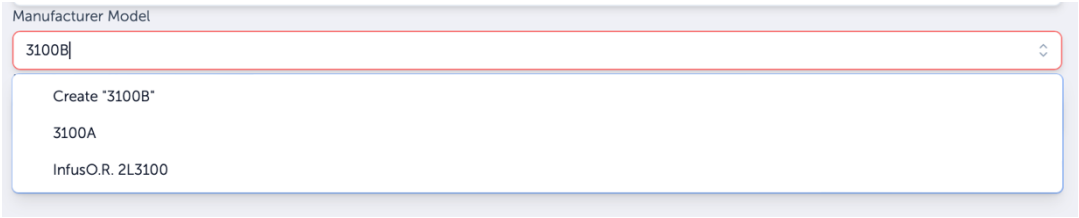
Depending on your RTLS configuration, the Department field may or may not be present on this page. If the asset is assigned to a department, use this dropdown list to select the department.



Use the data fields and drop-down lists to input the asset attributes (custom field values). With drop-down list fields, a new value may be input, or one may be selected from the list.



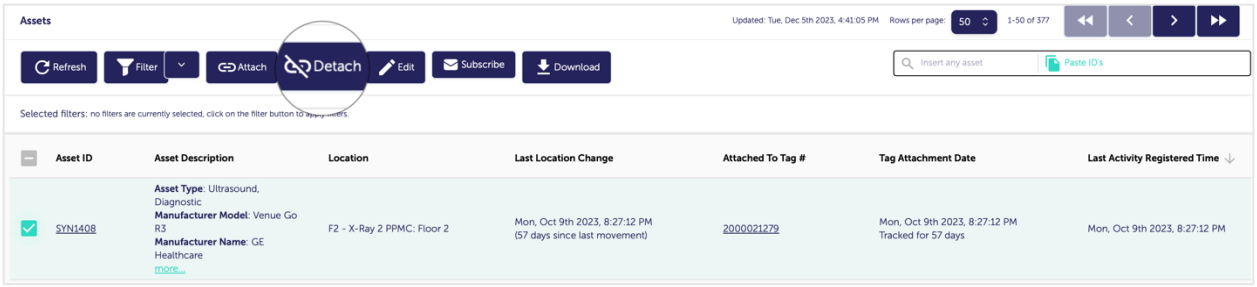
To add a new value, enter the custom attribute and select Create "_____".



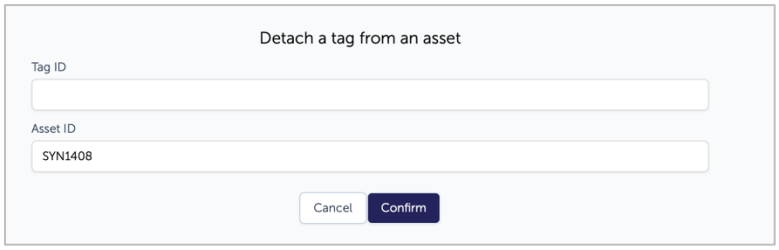
When all values are complete select **Submit** and complete the tag attachment process. Choose **Back** to make changes. Use the X to close window and cancel attach action.

Detach Tag

From the Assets tab, select an asset from the Assets list and select **Detach** from the menu. The system allows only one asset-tag detachment at a time so a single selection must be made. Otherwise, the button will remain grayed out.



In the Detach tag pop-up window, the Asset ID field will have the tag number for the asset selected. You may leave the Tag ID field blank.



Select **Confirm** to continue the process or **Cancel** to disregard the action. Once detached, that tag will appear in the portal with a status of Not Attached. This operation removes the association between the tag and the asset; therefore the asset is no longer trackable until a new tag is associated to the asset in the portal via a new attach tag action.

5.4.2 Detaching + Replacing Tag via Asset Details

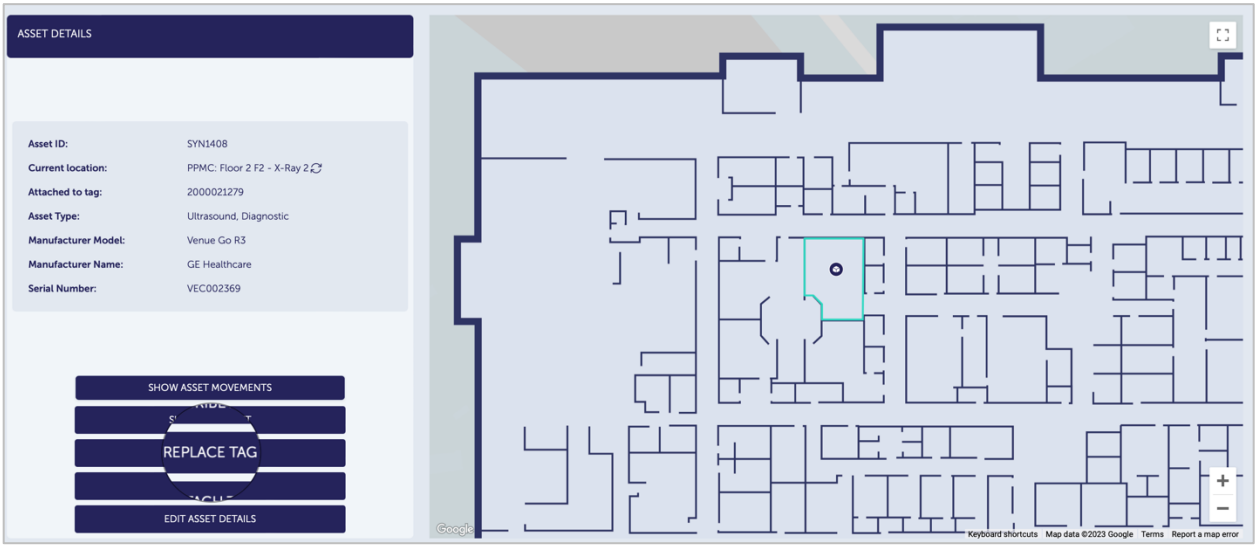
Detach Tag

From the Asset Details page select **Detach Tag**. The asset must have a current status of Attached for this button to be present.

The Detach tag pop up window opens. Confirm or cancel the process. Once detached, the association with the asset is removed and the asset can no longer report to the Cognosos portal. Attach or replace the tag in the system.

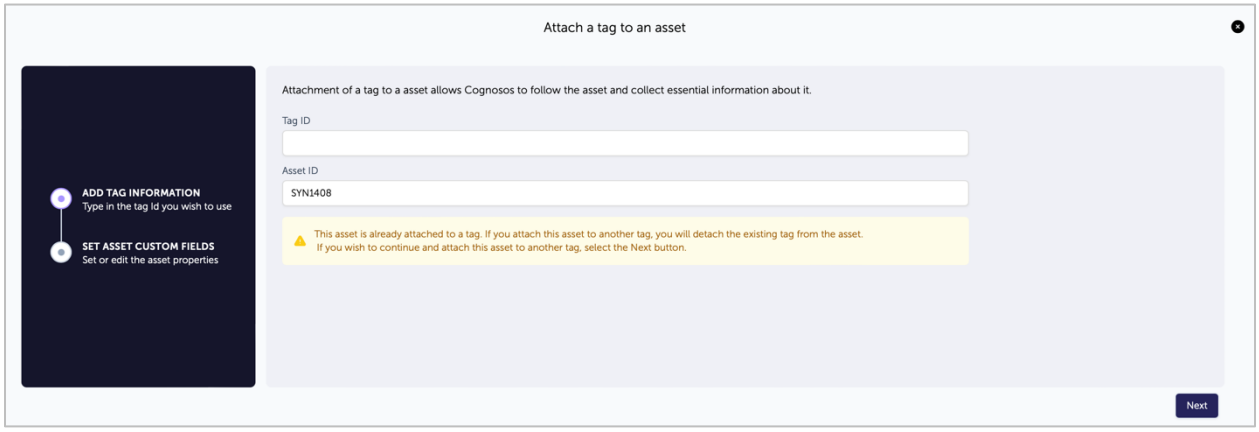
Replace or Attach Tag

To detach the old tag and attach a new tag in one step use **Replace Tag** to assign a new tag to the asset.



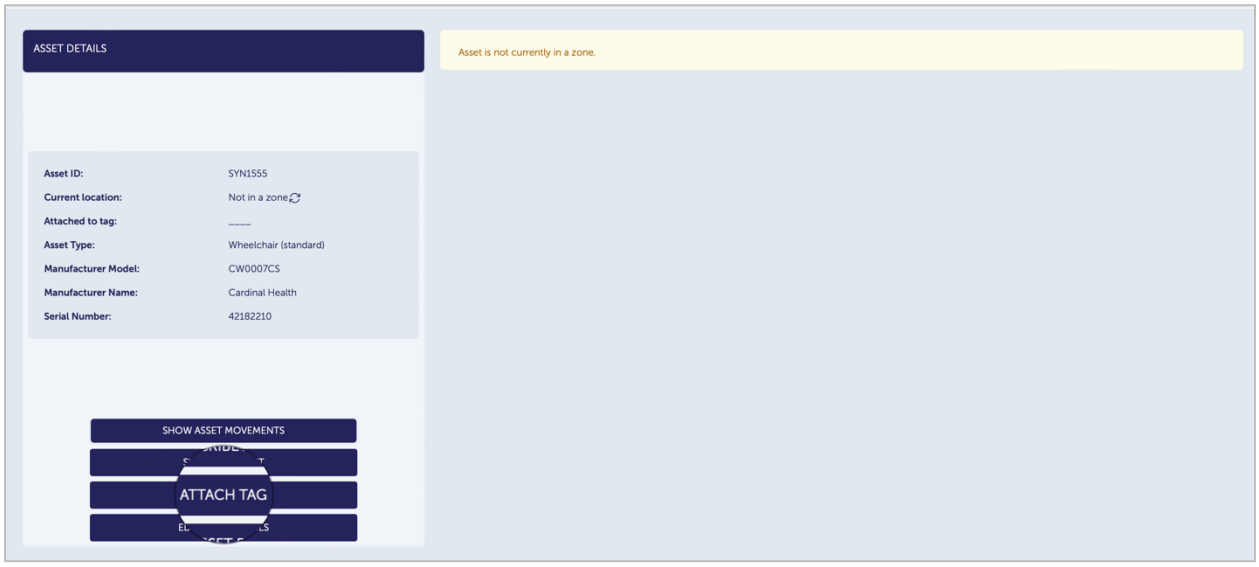
The asset must have a status of Attached for Replace Tag option. If the tag has a status of Unattached, the button reads Attach Tag.

Enter the new tag number in the Tag ID field. Note the message regarding tag detachment of old tag. The remaining steps follow the same process as attaching an asset.



Once input is complete, the asset will be attached to the new tag.

If the asset has a status of Unattached, the Asset Details tab will display Attach Tag.

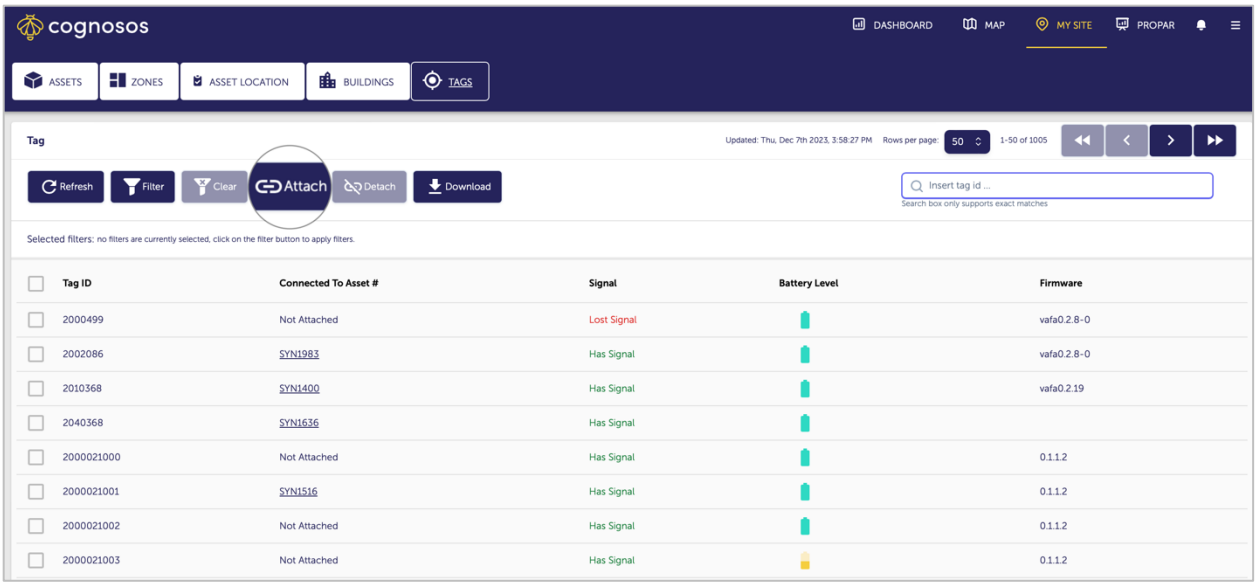


Input valid tag ID and the asset's attributes as prompted and described in attaching an asset.

5.4.3 Attaching + Detaching via Tags Tab

Attach Tag

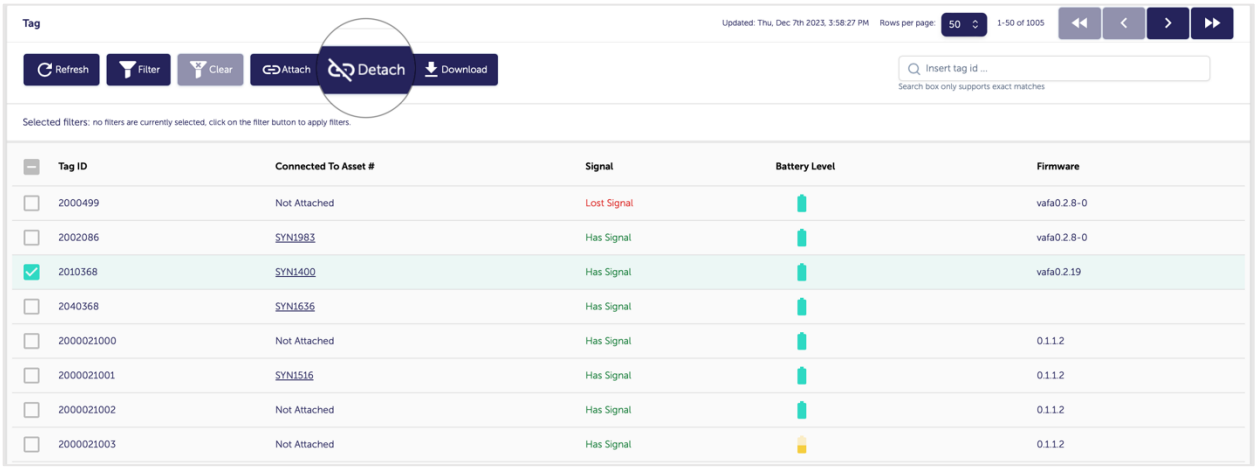
Open the Tags tab. Click **Attach** from the Tag menu with (not attached tag) or without a tag selected. The Attach tag window opens.

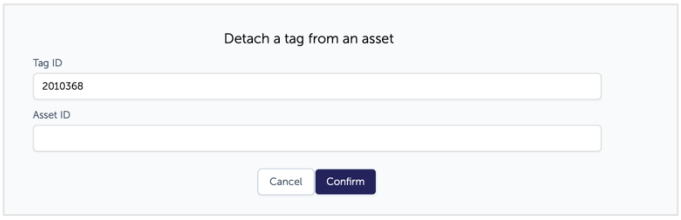


If a not attached tag was selected, the Tag ID will hold a value already. Otherwise, input a tag ID that is not currently attached to another asset. Ensure the tag has proper battery life. Input values in the Attach tag window. The process continues as described in attaching an asset.

Detach Tag

To detach a tag from its asset, locate and place a checkmark for the tag ID. Select **Detach** in the Tag menu. You must select (only) one tag or the Detach button remains grayed out.





Choose **Confirm**. Otherwise, click **Cancel** to end the process and return to the Tag list without detaching.

Once detached, that tag and asset will no longer be associated for location and data gathering purposes. Ensure this is the operation you want to carry out. Attach a new tag to the asset if needed.

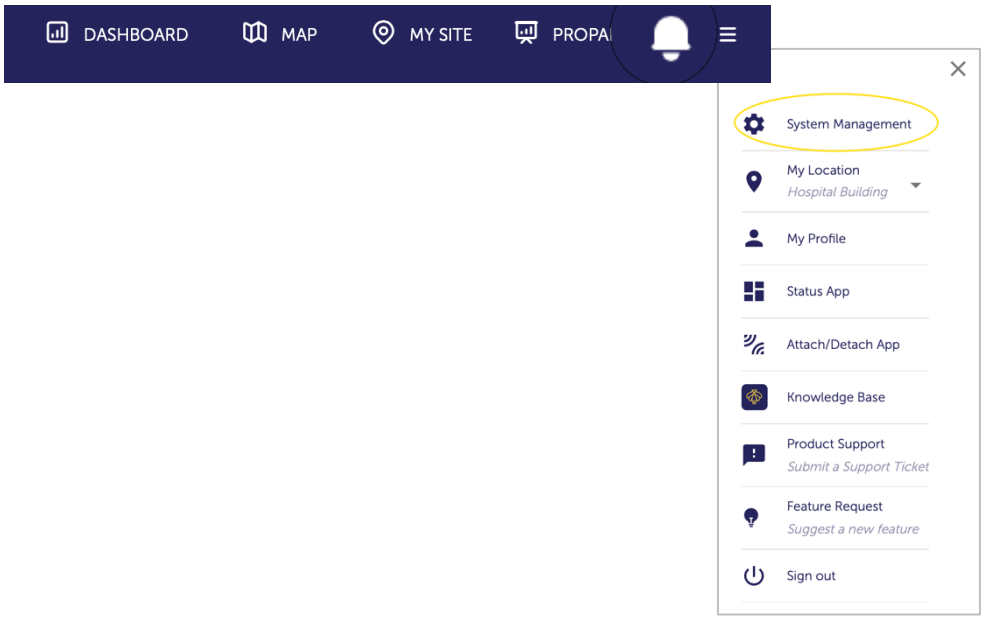
Return to Tag Management for feature-use information on this tab.

Events, Subscriptions & Notifications

COGNOSOS REAL-TIME LOCATION SERVICES

The Cognosos portal provides several mechanisms for tracking and disseminating important asset information, thus providing a lens to real-time inventory data. Users have the ability to set up subscriptions and notifications to track asset movement and subscribe to specific asset activities such as tamper alerts and exit monitoring (for customers who use exit monitors). Subscriptions are also available through the ProPAR page. Additionally, an events log provides all historical information for a wider view of asset information and exceptions. All system users have access to events, subscriptions, and notifications.

Events, subscriptions, and notifications are all accessed through the same icon and menu option. Either select the bell icon located in the main portal menu or use the hamburger menu and select **System Management**. In both instances, the portal opens to the Notifications tab. Simply select the tab from the system menu that you wish to view.



Notifications: View notifications that have been triggered by unresponsive or uncommunicative tags.

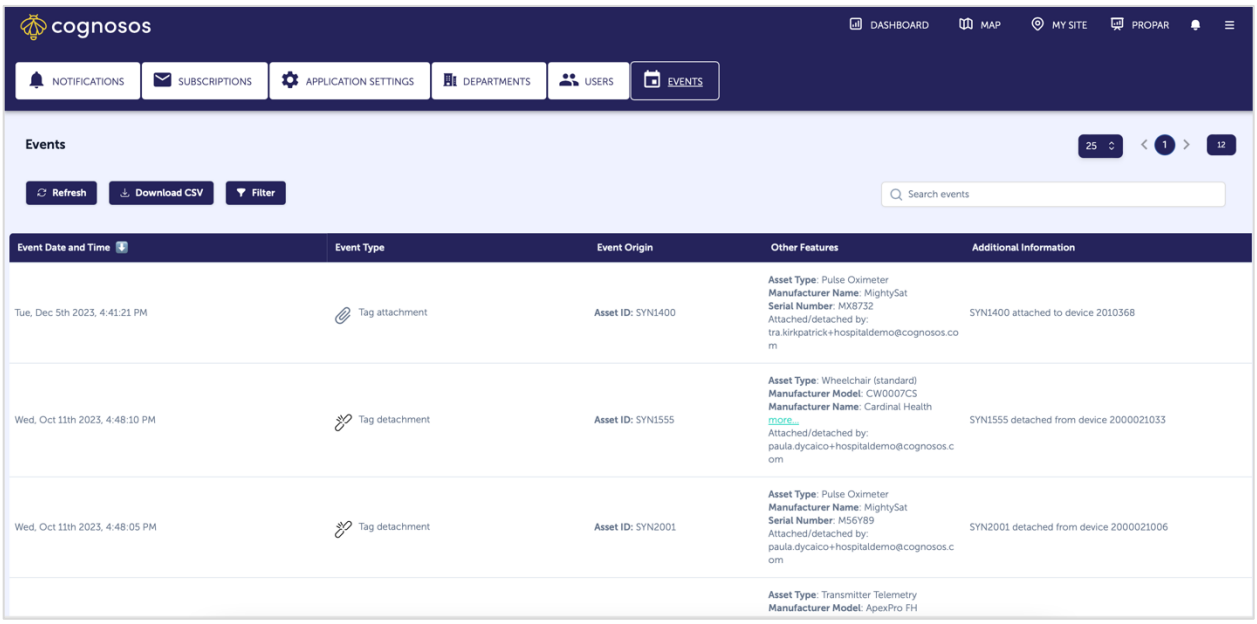
Subscriptions: View email and text subscriptions for assets and zones including ProPAR subscriptions and tamper alerts. Pause and resume subscriptions.

Events: View asset events (location changes, tag events, inventory changes, etc.).

The Users features and options are covered in System Access. Healthcare organizations that use the Department feature can go here for more information. Functions carried out under Application Settings are generally handled with the Cognosos Customer Success and Support teams.

6.1 Events

The Events tab lists important asset and tag events, including the time stamp of event, that take place across your facility. Some logged events include tag attach/detach, lost signal, exit alert, temperature, and more. Events provide a historical view. Use subscriptions and alerts to stay abreast of asset activity in real-time. Click **Events** to open the tab.



Pagination options at the top allow a page by page browse of events; choose the number of events to display per page using the drop-list next to the pagination options (5 to 100 per page).

The use of Department assignments may impact a user's ability to view events. When the user is assigned to a specific department, they can only see events for assets that are assigned to their same department.

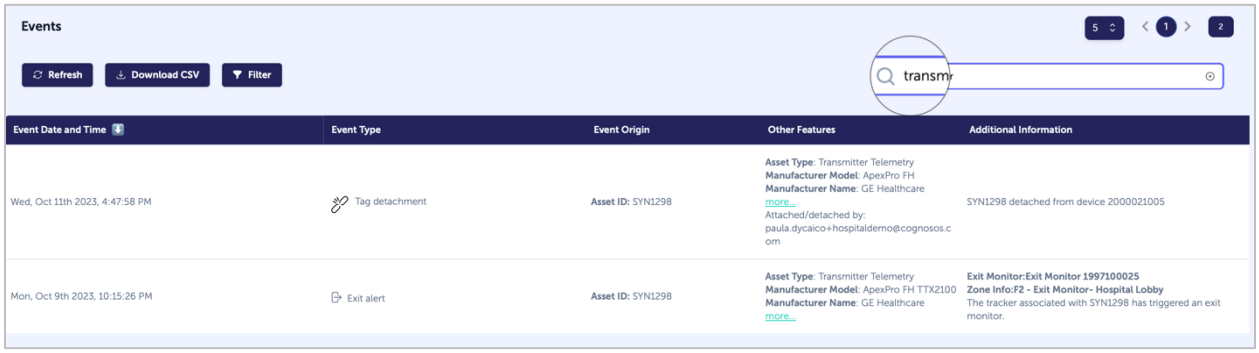
Events can be downloaded to a file using the **Download CSV** button in the Events menu bar.

The Other Features column provides summary data for the asset. In the case of any attach or detach activities, this column shows the user who performed the action. Depending on the event type, this column may show asset number, description, manufacturer information, and more.

The Additional Information column provides more data, which also changes depending upon the event type. For example, a battery level update displays the battery level; a zone transition shows the asset ID with the zones that it left and entered (when applicable); a location change provides a link to the Google map coordinates of the asset's current location. When the event type is a location change the system provides a map link to view the location of the tag/asset. Highlight and copy the link then open a new browser window. Paste the link to access the asset's location via the map coordinates and location through Google maps.

6.1.1 Locating Events via Search

Use the Search box on the top right of the page to search for one or more assets. The search function here works the same as described in earlier sections of the manual, except that the refreshed list does not highlight the matching criteria. The search field accepts numbers, letters, and special characters. The nature of the Search function provides users with a wide variety of search options to track down equipment (last known location), monitor equipment transfers in departments or zones, and more.



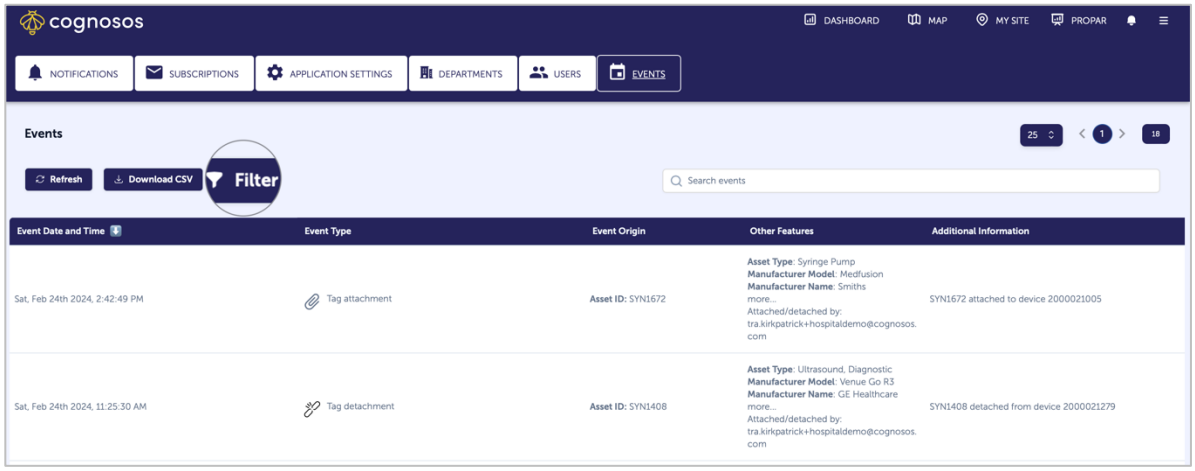
Perform a simple search by asset, zone, tag ID, or structure. You can also run more complex searches to find targeted events for a specific zone. For example, input “entered PICU” in the Search field and add a date filter to quickly track down all equipment that enters PICU during the specified date range.

The Event list refreshes to reflect Search field input.

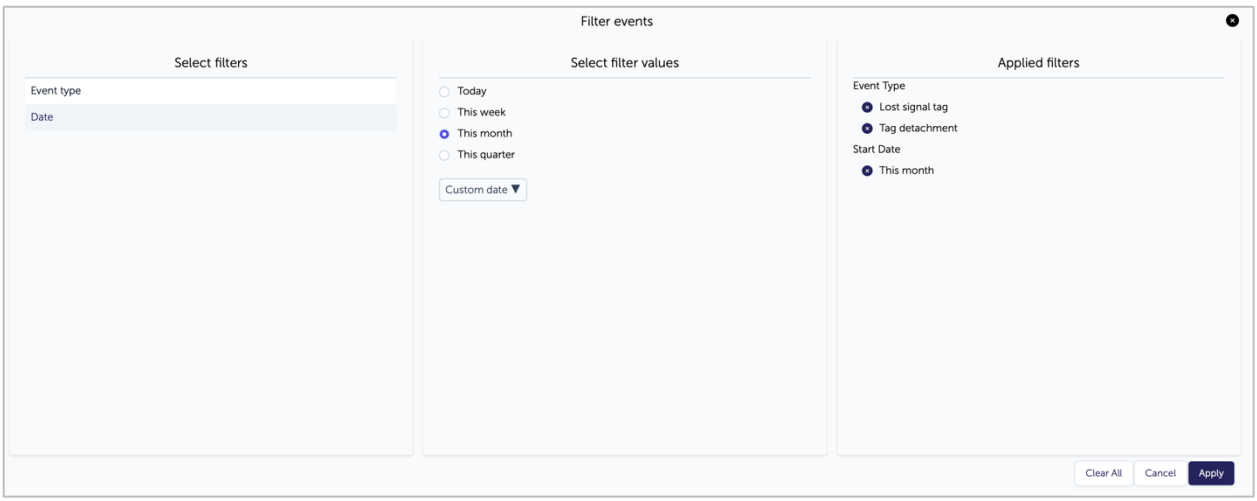
Return to a full list of events by using the X in the Search bar.

6.1.2 Filtering Events

Use the filtering option to view events of a specific date and/or event type, such as battery level updates or failed asset attach attempts. The filter feature can be used instead of or in tandem with the search function. Select **Filter** in the Events menu.



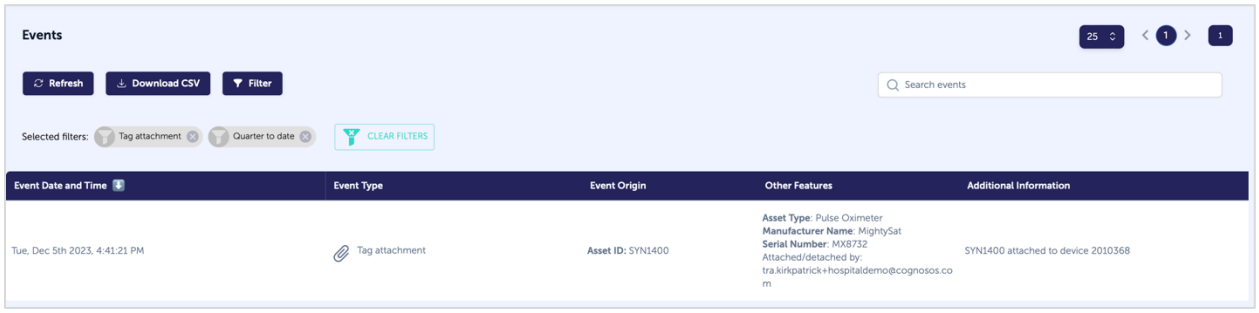
The Filter pop up window opens. To filter a specific event, highlight Event Type in the Select Filters column then check the event(s) to display on the list. These values are predefined; select one or more filter values. Click Date under Select Filters to filter all events by date range or to apply a date range to the event filter.



To remove an event type from the filter, click the X next to the event type in the Selected filters column.

When selections are complete choose **Apply** or **Close** to return to the Events page with the filters applied. Select **Clear All** to remove all selected filters. Make new selections or close the pop-up window be selecting **Close.**

When the filters are applied the page refreshes with events matching the filters.

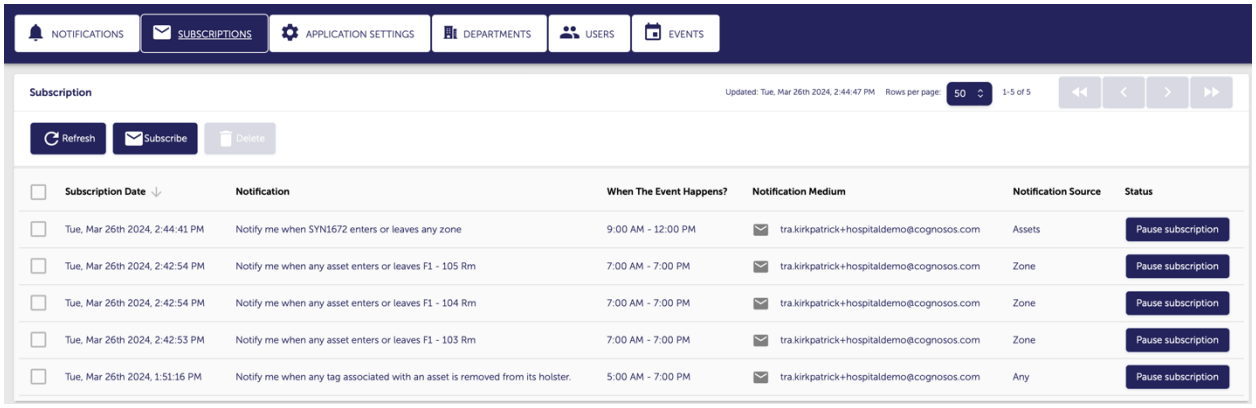


Download to CSV if you need to save the information. Clear a single filter by using the X next to the filter. Choose **Clear Filters** to refresh the page to all events.

6.2 Subscriptions

A subscription provides a mechanism for users to receive notifications for various asset and zone activities. Subscriptions set up in multiple areas of the portal, such as in Asset Details, ProPAR, and Zones are shown on this page.

Select **Subscriptions** to open the tab.



The tab displays a row for each subscription and notification medium defined (there is a row for email and row for phone number even when they are the same subscription). Sort the Subscription Date column by ascending or descending order. Sort the Notification Medium column by phone and email.

From this tab users may add subscriptions and delete subscriptions, as well as pause and resume subscriptions, and set up tamper alerts.

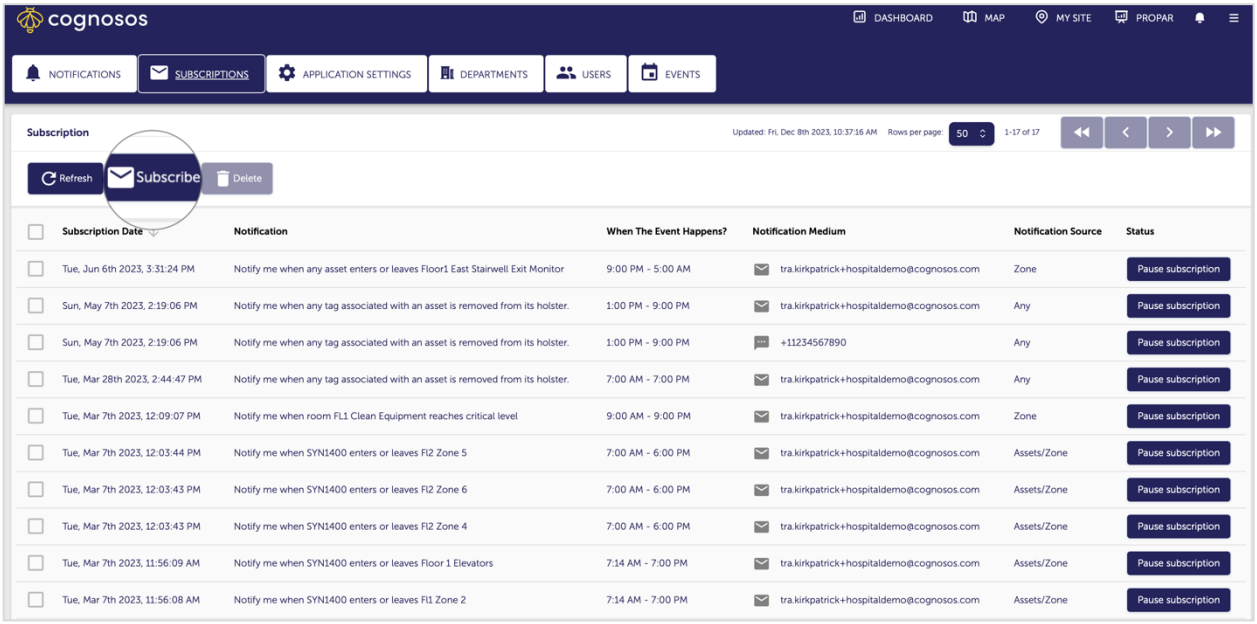
Use the Tamper Alerts filter option under Events to run a report on tamper alerts. Alternatively, use the Tamper Alerts widget on the Dashboard to view alerts.

6.2.1 Creating Subscriptions

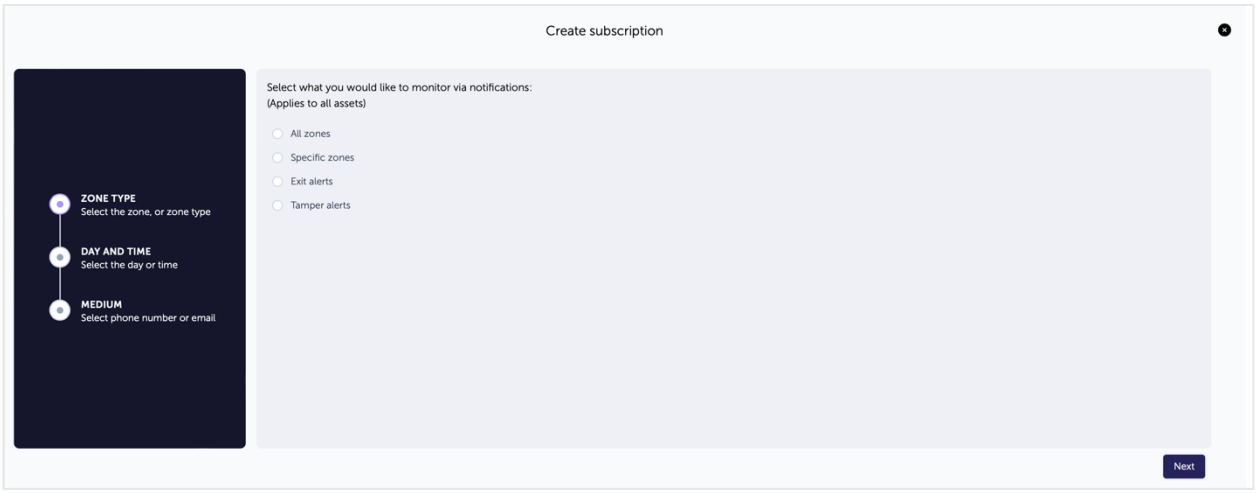
Unlike single asset subscriptions that are created directly from the Asset Details page, subscriptions set up here are for all assets across the facility. Subscription notifications are triggered on any asset movement, either within a specific zone(s) or all zones. This is also the page for setting up tamper alerts. If you need to create a subscription for an individual asset, see Creating Asset Subscriptions. ProPAR subscriptions are covered in Subscribing to a ProPAR Zone. You may also set up zone-specific subscriptions and exit monitors subscriptions.

Tamper alerts! Come here to set up Tamper Alert subscriptions. Tamper alerts will send notifications when an equipment tag is removed from its holster on an attached asset.

To create a new subscription select **Subscribe** on the Subscriptions menu.



Subscriptions can be set up for specific or all zones (with the exception of tamper alerts, which are for all zones). You must have an Administrator role to set up tamper alerts. Select the radio dial for the appropriate option.



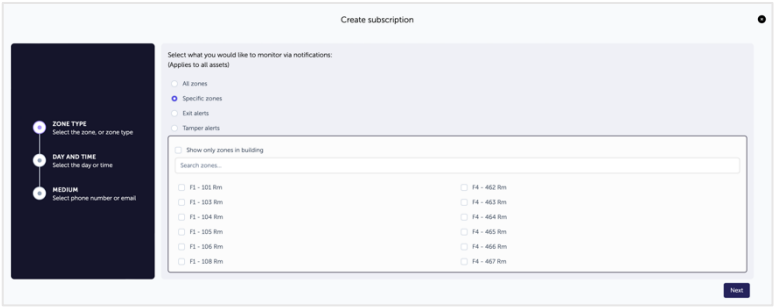
All zones: Subscription set for all assets in all zones

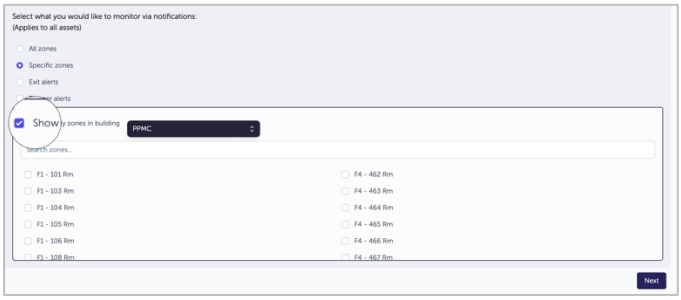
Specific zones: Subscription is set for all assets in chosen zone(s)

Exit alert: Subscription is set for all assets that pass into a defined exit zone

Tamper alert: Subscription is set for all assets with an associated, attached tamper alarm and for all zones (no option to choose zones)

In the Select zone window place a checkmark next to each zone to include (one or multiple). Search zones and/or use the drop-down list to filter zones to a particular building.

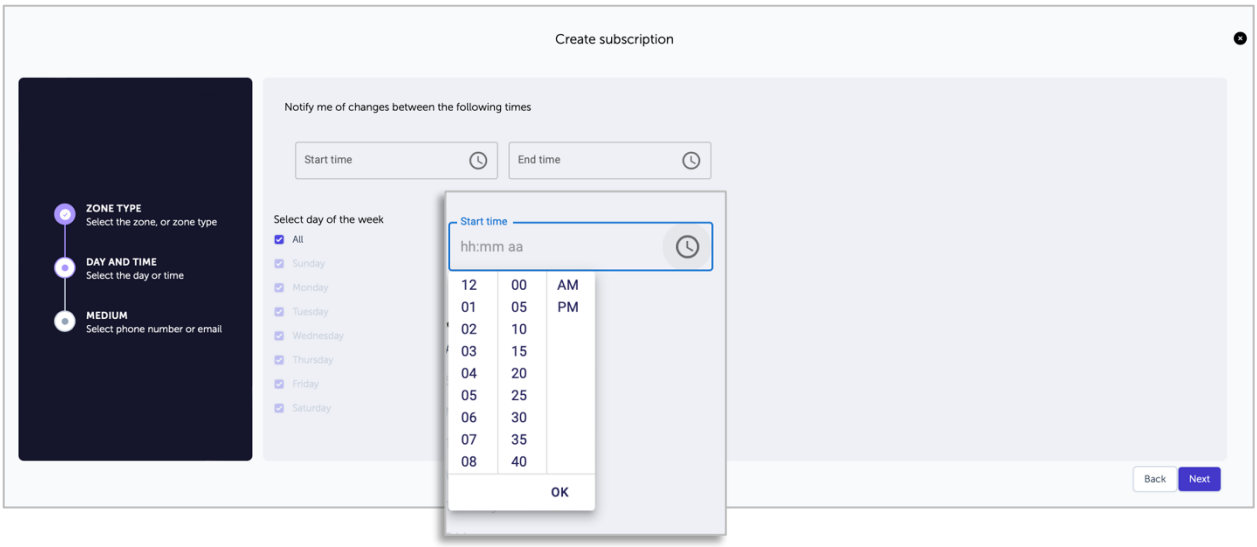




Select **Next** to continue.

To cancel out of the process, select the X in the upper right corner of the window.

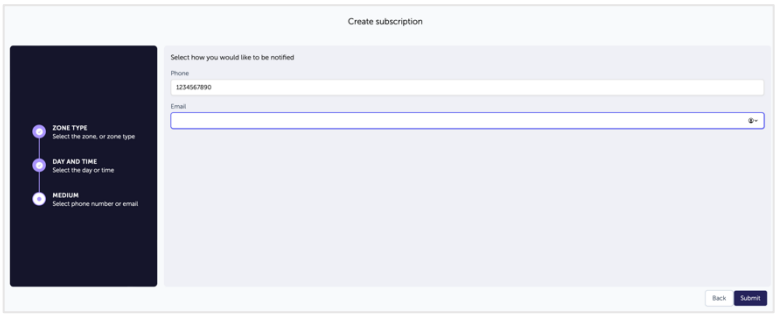
Enter the start time for the subscription. Click on the clock face and select the hours, minutes, and AM or PM. Alternatively, click inside the time box and type the time. Click OK. Repeat for end time. The time range determines when the system should “look” for the assets in the selected zone(s).



Set the days of week for running the subscription. Leave to All or deselect and choose one or multiple weekdays.

Click **Next** to continue. To change a zone selection, select **Back**.

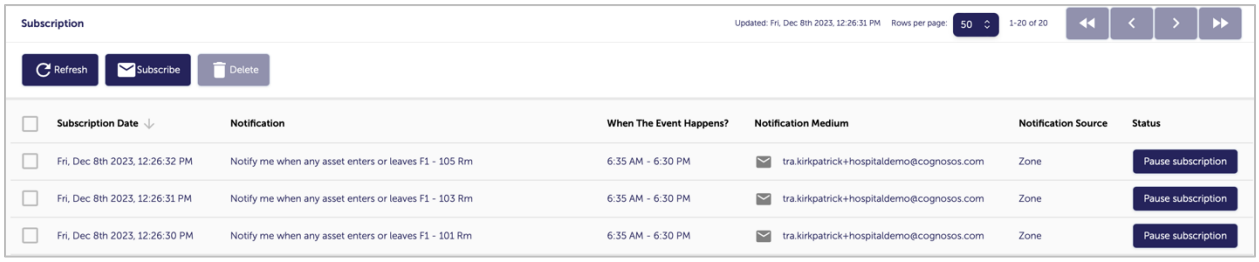
Confirm or change the delivery medium (email and/or phone). The fields will auto populate with the email address of the logged in user and the mobile phone number from the user profile, if present. You can keep or change the fields. One delivery method must be present.



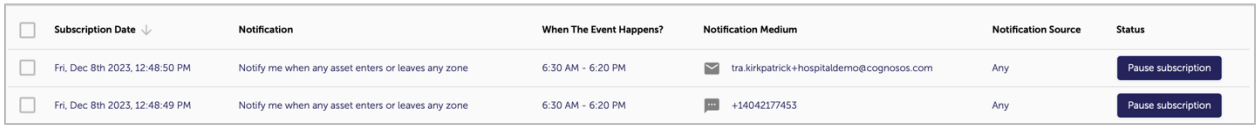
Click **Submit** to create the subscription.

The first time a subscription is set up by a user, the user will need to confirm the Amazon Web Subscription (AWS) via email. The email confirmation must be initiated to receive the subscription email alerts.

Following the submission, the subscriptions list refreshes with the new subscription added to the top of the page (if the Subscription Date column is in descending order).



The subscription list includes a row for each zone and each delivery method set up in the subscription. Utilize the Notification and Notification Source columns to determine the kind and frequency of subscription.



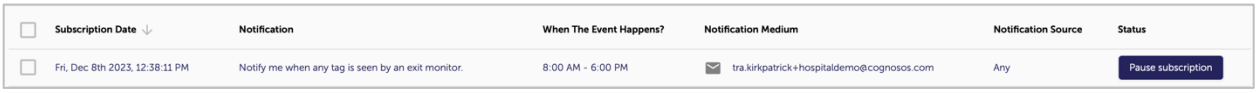


Figure 2 Exit Monitor Subscription

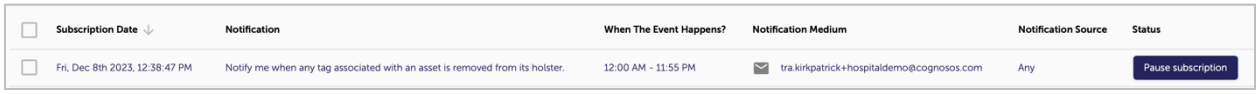


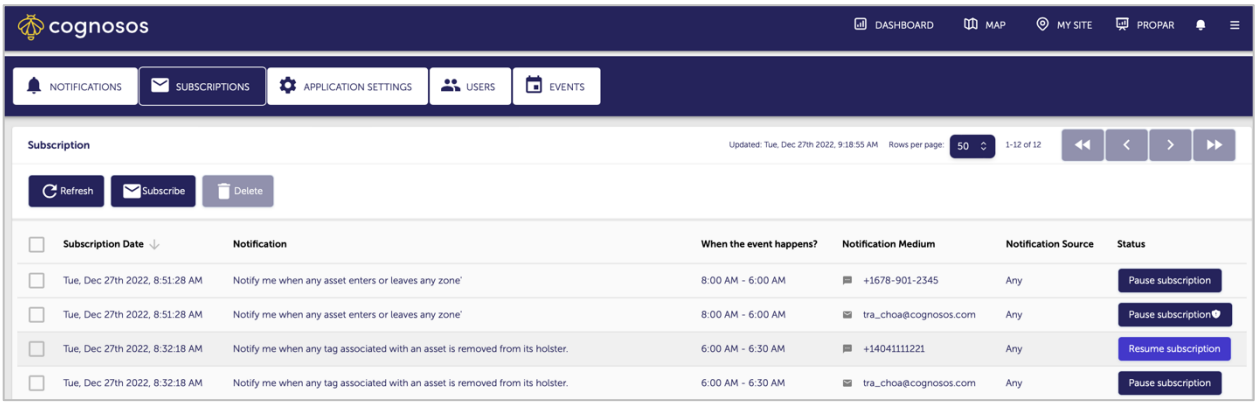
Figure 1 Tamper Alert Subscription

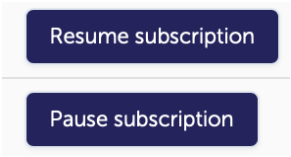
Regardless of subscription type, pause and resume the subscription as needed (e.g., vacation) or delete part or all of the subscription.

6.2.2 Pausing/Resuming Subscriptions

Once a subscription has been defined, you may pause and resume the subscription. This option may be more appropriate than deleting the entire subscription.

All subscriptions include the Pause/Resume option on the main Subscriptions table. You may pause only your own subscriptions.



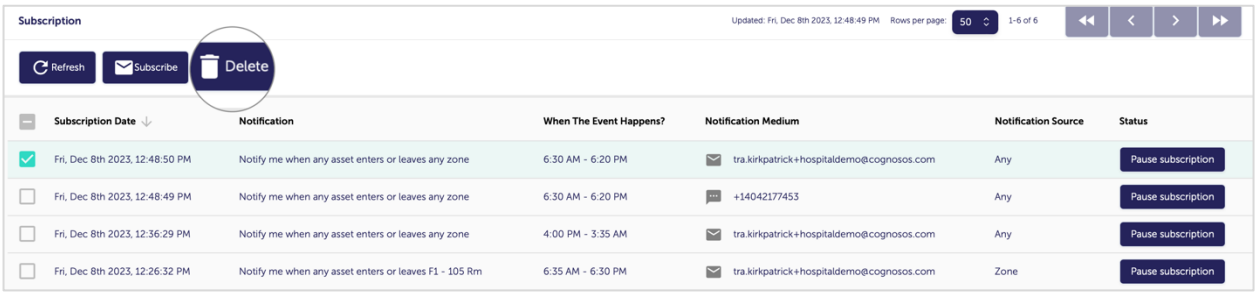


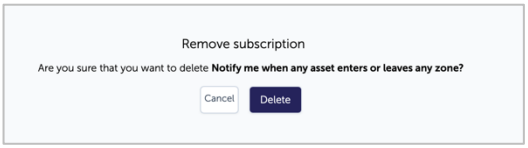
To temporarily pause the subscription select Pause Subscription. Likewise, to re-start the subscription, select Resume subscription.

The pause/resume option applies to the alert medium. If you run a subscription that alerts both email and mobile phone, you need to pause all parts to pause the entire subscription. This is similarly true of subscriptions that contain more than one zone.

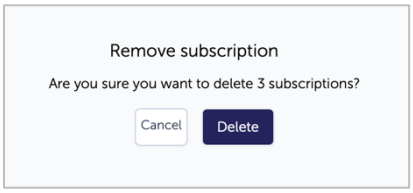
6.2.3 Deleting Subscriptions

Remove subscriptions that are no longer necessary directly from the subscriptions list, no matter the origin of the subscription creation. You may delete a subscription in its entirety or delete one delivery method within a single subscription. Locate the subscription(s) to remove and select the checkbox for that subscription. You may choose one, multiple, or all. Click **Delete** from the Subscription menu.





In the Remove Subscription pop up window select **Delete** to continue the process or **Cancel** to return to list without removing selected subscription(s).



When more than one subscription is selected, the confirmation window displays the number selected.

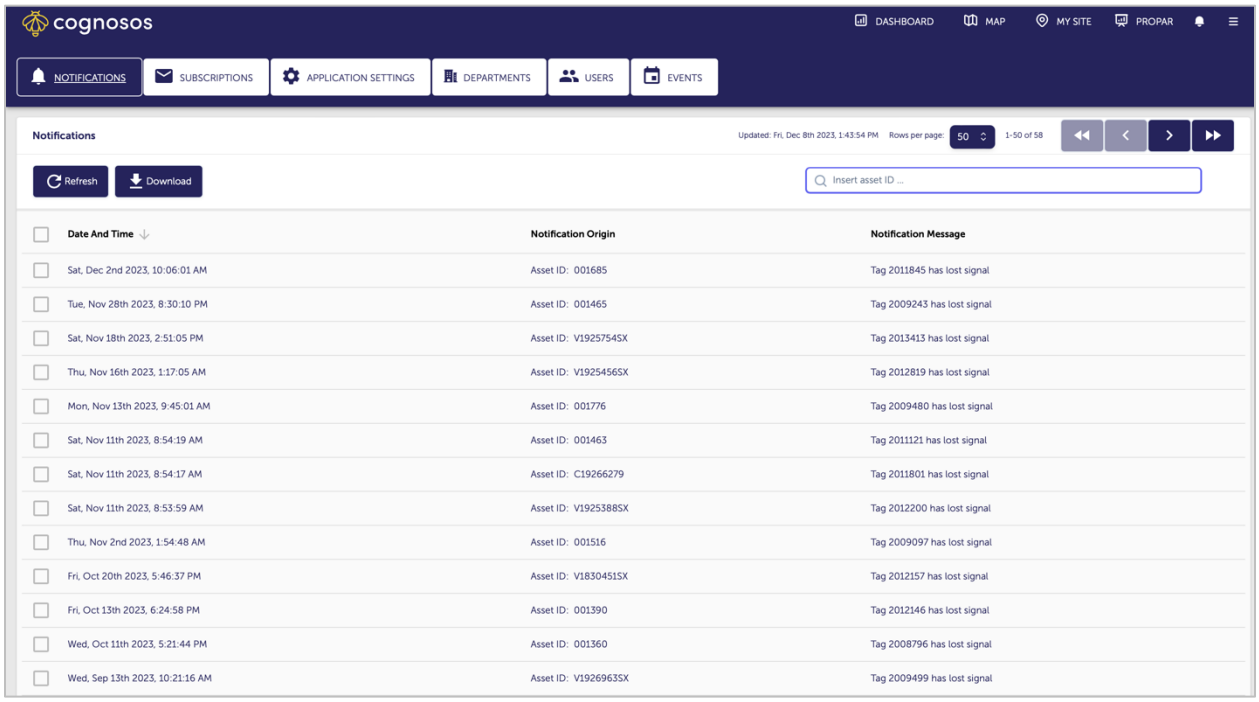
A small pop-up will appear stating the subscription was successfully deleted and the list will refresh.

The subscription is removed and the user will no longer receive notifications via the deleted delivery method; or regarding that asset and/or zone(s) if an entire subscription was deleted.

Subscriptions may be added or removed only. If a subscription needs to be changed once it's created, delete and create a new subscription.

6.3 Notifications

The Cognosos portal provides exception reporting regarding the responsiveness of tags and notes these exceptions on the Notifications tab. Tags listed on the report are likely to have bad/critical batteries or the equipment has lost communication with the gateway for another reason. Select the **Notifications** menu option to open the tab.



The list displays tags that have become unresponsive defaulting in date descending. Select the Date and Time column header to resort to ascending. Notification Origin indicates the asset to which the tag is attached. This column can also be sorted in both ascending and descending order. The Notification Message identifies the tag.

Use the Search field to locate a specific asset ID (search by asset ID only).

Download the exception report using **Download** from the Notifications menu bar.

Zones + Departments

COGNOSOS REAL-TIME LOCATION SERVICES

The foundation for the Cognosos portal and the success of the wayfinding system lie in the set-up of geo-fences during the initial system installation process. The Cognosos real-time asset location technology leverages digital maps of the property, which are segmented into buildings, floors, and zones to provide asset location information.

Generally speaking, the hierarchy of the geo (digital) map is as follows:

Buildings	Refers to the physical facility (hospital, healthcare center, etc.). There may be one or more buildings for an organization. Buildings are set up by the installation teams.
Floors	Defined during portal set up by the installation teams. There may be one or more floors per building.
Zones	Zones are created at the floor level and can consist of any defined space (hospital room, storage room, nursing station, hallway, etc.) Zones 'hold' assets and each zone has an asset occupancy.

All users can view information regarding the buildings, floors, and zones on the digital map as described in the sections below; certain users may edit limited zone details as described in the sections that follow. The addition or removal of zones is managed by the Cognosos Customer Success team.

Cognosos Location AI

Cognosos offers even greater asset location with the Location AI add-on. This feature provides the ability to pinpoint the location of a given asset within a larger, open area (e.g., a sizeable storage facility). RTLS platforms equipped with Location AI use fixed zones so the View/Edit option will be unavailable. Users may edit zone names and zone type.

Healthcare organizations with a high volume of assets, employees, and patient traffic may utilize the Departments feature, which provides a method for assigning assets and team members to specific departments. The use of this feature is described in Section 7.4 and throughout this User Guide where warranted. Please note that the Departments functionality may or may not be turned on within your RTLS portal.

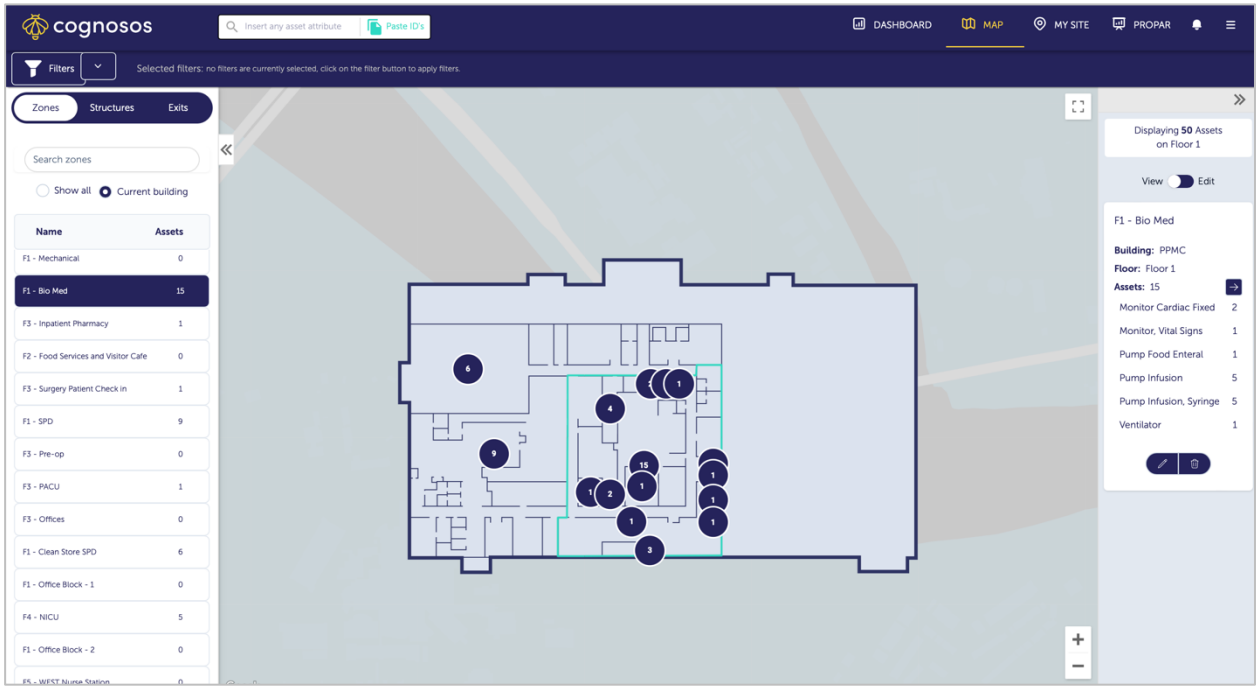
For information on navigating and utilizing the digital map, refer to Map Navigation before proceeding to the following sections.

7.1 Zone Inventory

The Cognosos portal provides powerful insights that help provide visibility to asset patterns, movement, and use. One such metric is asset utilization, which aggregates information related to how often and where medical equipment is used across the facility. This helps management identify spikes and drops in demand for certain types of equipment, and/or equipment within certain departments or areas of the hospital.

7.1.1 Viewing Zone Inventory via Map

For a quick summary view of real-time asset inventory information for a zone open the map. From the left-hand menu, select the Zones tab and then locate the zone and click. You can use the Search function on the tab to quickly find a specific zone (e.g., Radiology East). The Show all and Current building radio dials just above the list provide broader listings, which can be helpful when the zone name or location is uncertain. When selecting Current building, go to the Structures tab and ensure the building you want is highlighted.



Once a zone is chosen, the map will outline the zone in teal and the right-hand menu will display a zone summary box.

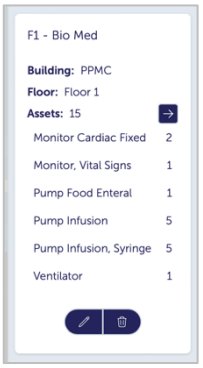
Zone Name

Building: Structure in which zone is located

Floor: Floor # on which zone is located

Assets: # of assets in zone (based on RTLS)

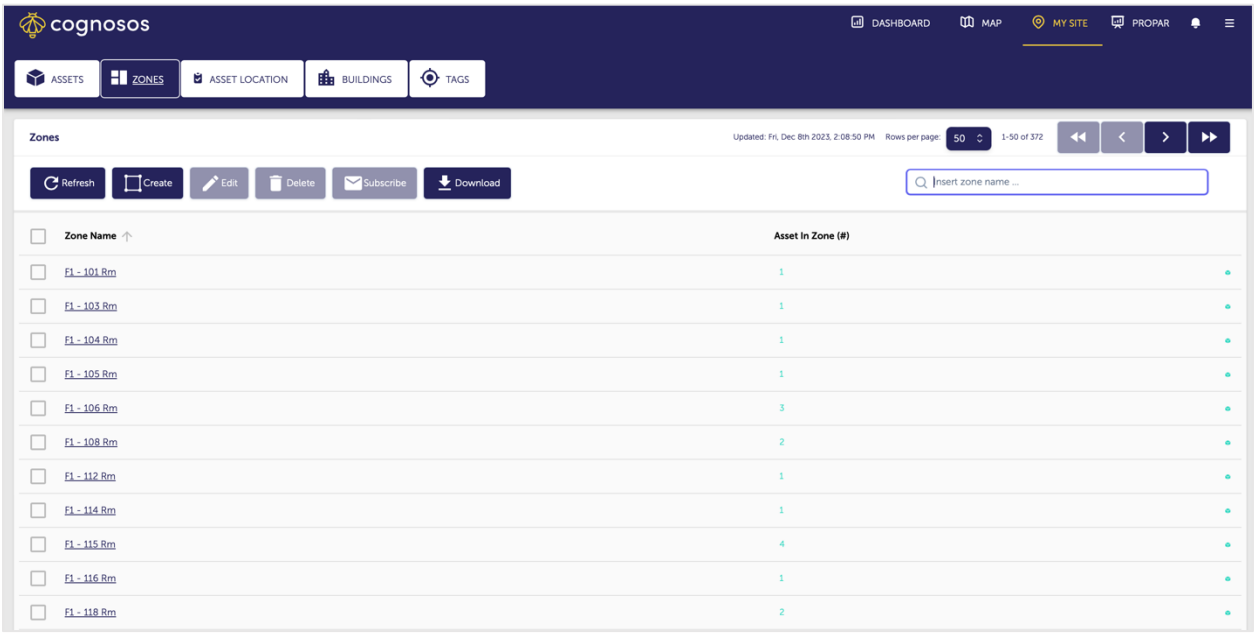
Breakdown of assets in the zone, per asset type



View the specific assets in the zone by clicking the arrow icon in the right menu, adjacent to the asset count (launches Asset Details).

7.1.2 Viewing Zone Inventory via Zone List

Open the Zones tab from the My Site menu to view a listing of all zones. Either scroll to and select a zone from the list or use the search feature to narrow down the list to a group of zones or a specific zone.



From this page, you may edit zone details related to zone type or inventory. Zone subscriptions are also set up from this list.

Select the Zone name link to go to Asset Details for the zone.

7.2 Zone Management

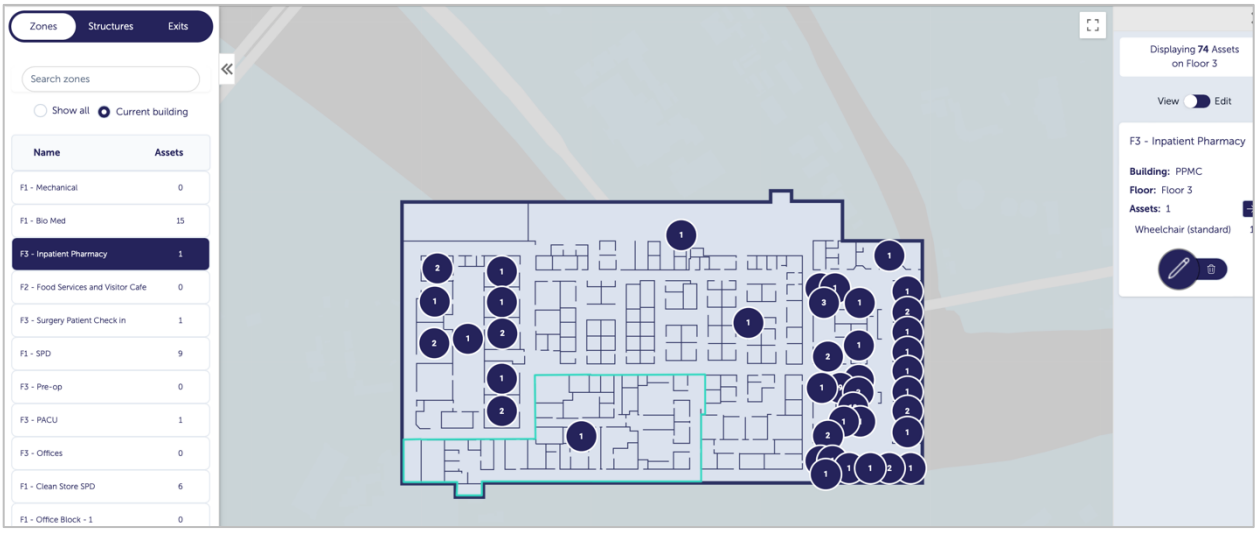
A zone is a digital area marked by a geo-fence that corresponds to a physical or virtual location on the facility's property. Zones can be rooms, hallways, closets, subsections of rooms, or any area in the facility that requires a geofence boundary for the most accurate asset location. In customer sites with exit monitors installed, asset location can be managed for inventory leaving the facility. Note that the customer site must have exit monitors installed to use exit monitors.

When zone additions or changes are needed, consult with Cognosos' Customer Success team to request those changes.

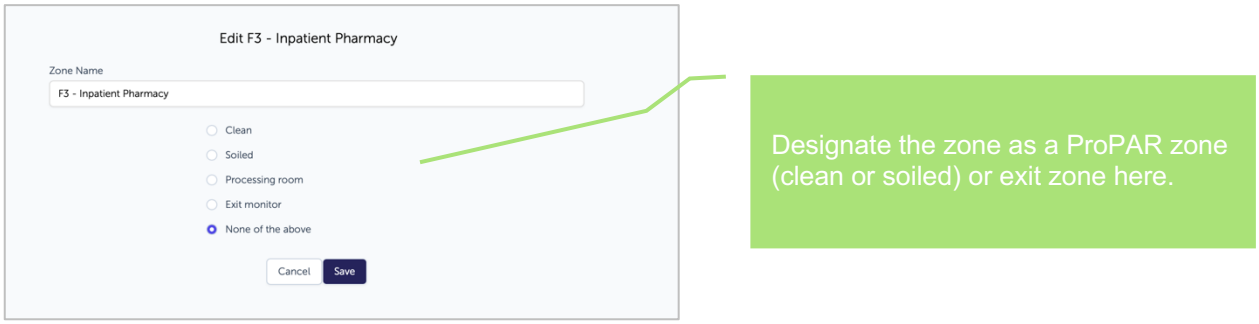
Cognosos further provides a location intelligence option that provides even more detailed asset tracking data to the portal. Zone options and functions will vary depending upon the use of the Cognosos location AI feature. Those are noted throughout this section.

7.2.1 Editing Zone Type

If you need to change the type of zone (virtual, clean, soiled) you can change those directly from the digital map. Once the zone is selected in the left-hand menu, select the **Edit** (pencil) icon in the Zone Summary box on the bottom of the right menu.

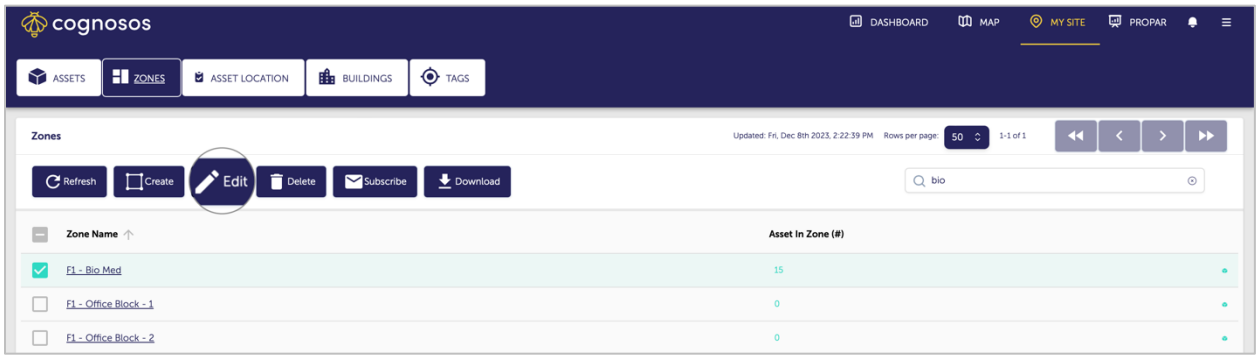


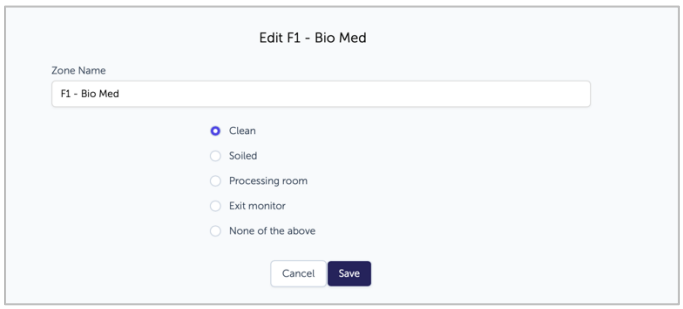
In the Edit Zone pop-up window, make changes to name or zone type.



Select **Save** to continue and return to the digital map; otherwise select **Cancel** to return to the map without changes.

Zone details can also be changed from the Zones tab in My Site. The Zones list defaults to all zones defined in the system. Use the search option to locate the zone that needs to change. Select the checkbox next to the zone to edit. Click **Edit** in the Zones menu bar. If the Edit button is grayed out, ensure that you have only one zone selected.





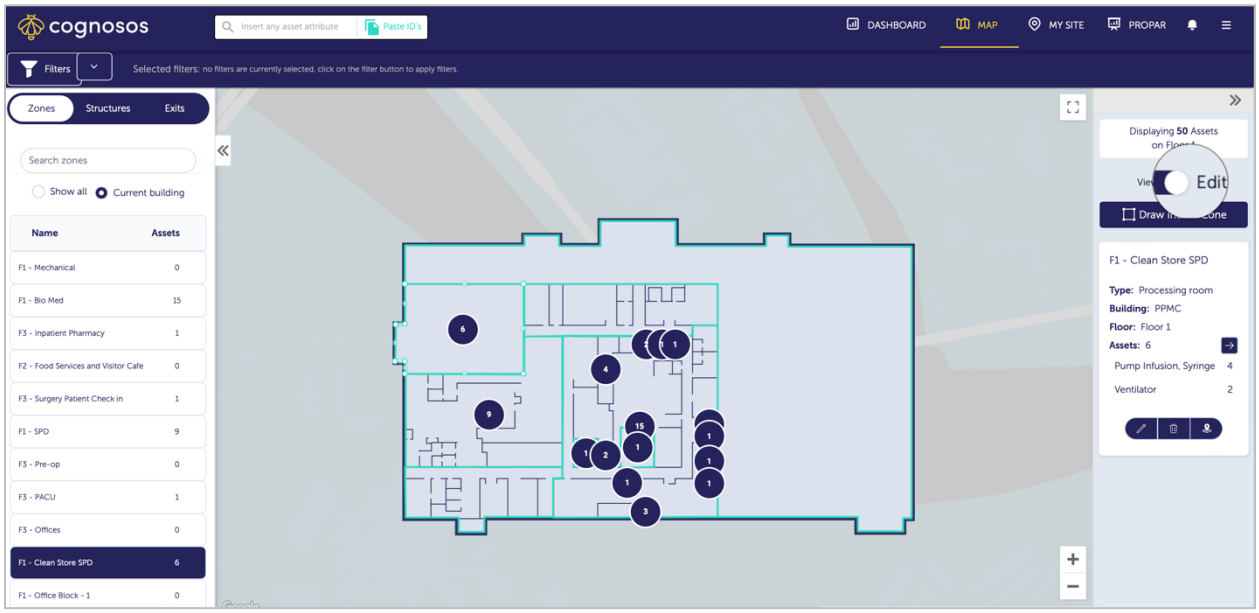
Make the necessary changes. Select **Save** to continue or **Cancel** to close without making changes.

Reminder that zone changes to clean and soiled rooms will impact ProPAR.

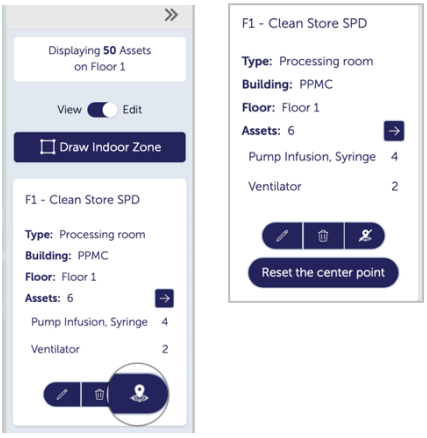
The system returns to Zones list.

7.2.2 Recentering Zone

Zone areas are set up during implementation and with rare exceptions changes are not needed following go-live. If you are directed by a Cognosos team member to recenter a zone, open the map and click the proper zone from the Zones tab. Change the map to Edit mode using the View/Edit toggle.



Click the **recenter zone** icon on the right. Click the **Reset the center point** button when it appears. Select **Save**.



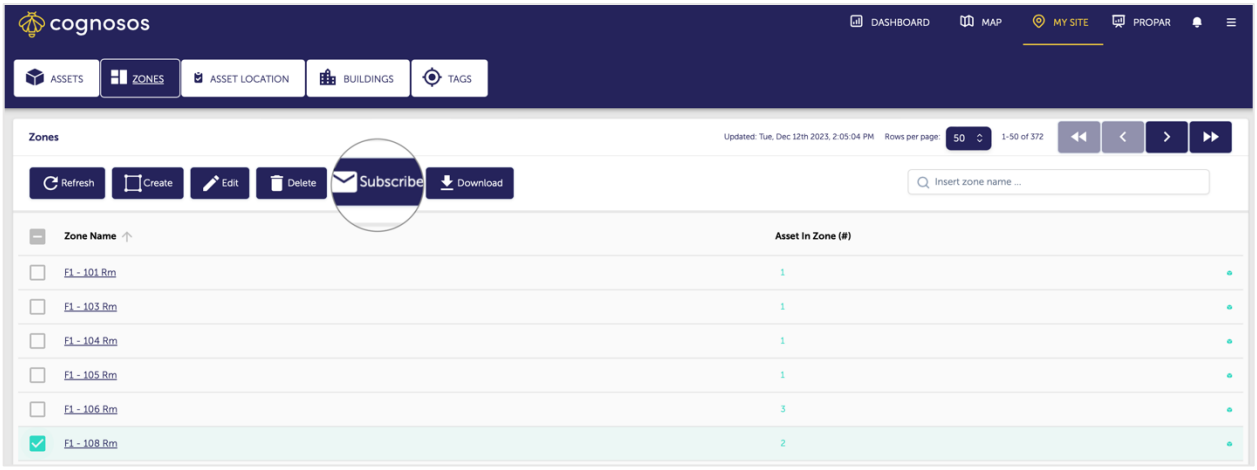
Remember that changes to the zone type (virtual) are unavailable when the portal uses Location AI. Updates to a clean or soiled zone will impact ProPAR activities and counts.

7.3 Zone Subscriptions

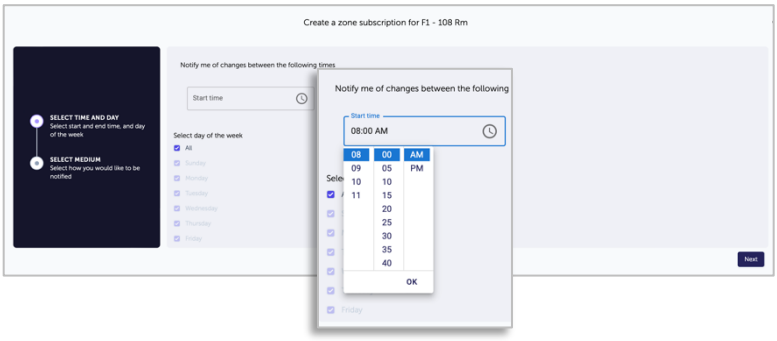
The RTLS provides zone-based subscriptions, which are beneficial for use with exit monitors and for staying abreast of asset movement in other critical areas of the hospital. Zone-based subscriptions apply to all assets within the zone. To manage subscriptions for your ProPAR zones, refer to Subscribing to a ProPAR Zone. If you need to create an exit monitor zone subscription, go to exit zones for the map and Creating Exit Monitor Subscriptions.

7.3.1 Creating Subscriptions

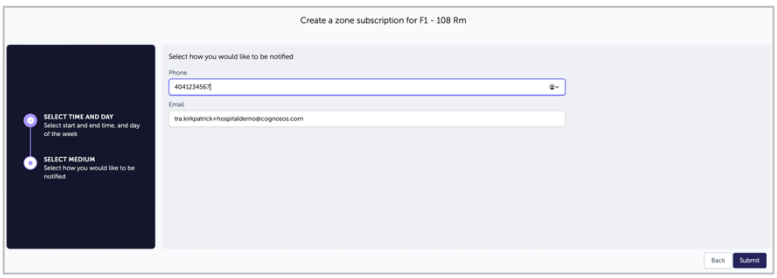
From the Zones page select the zone for which you want to set up a new subscription and click **Subscribe** from the Zones menu. You may select only one zone per subscription; the button will remain grayed out if there is no or more than one zone checked.



Click clock dial and scroll to input hours, minutes, and AM or PM. Select days of the week for the subscription to run or leave set to All.



Click **Next** to input the subscription delivery method.

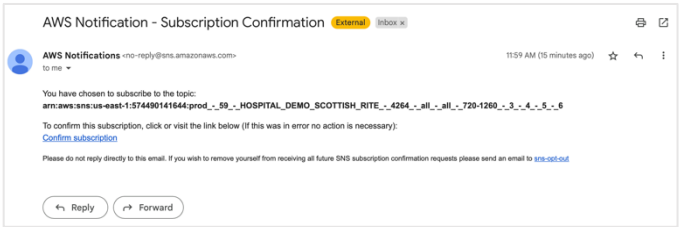


Phone and email address default to the information from the logged in user's profile. You can leave as-is or edit. You must have at least one delivery method.

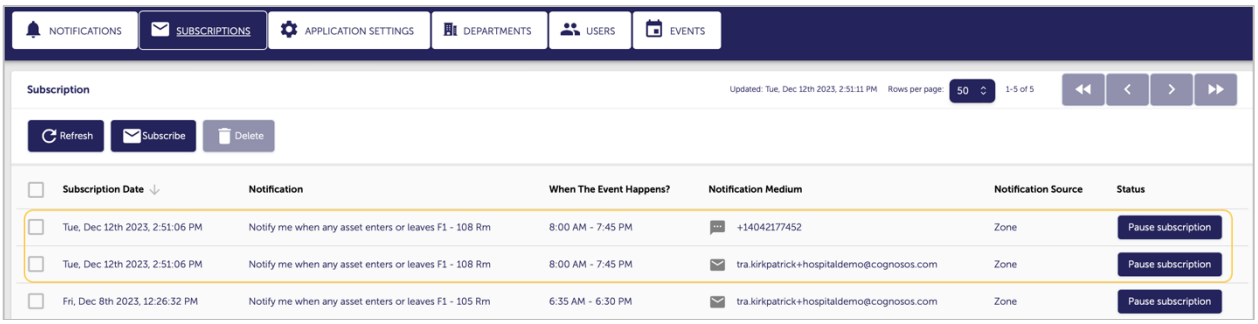
Select **Submit** to complete or **Back** to change the subscription timeframes.

Look for a small confirmation message that the subscription was added. A subscription is set up for each delivery method input.

For new email subscriptions, look for the AWS email in your Inbox and click the link in the email to confirm the subscription.



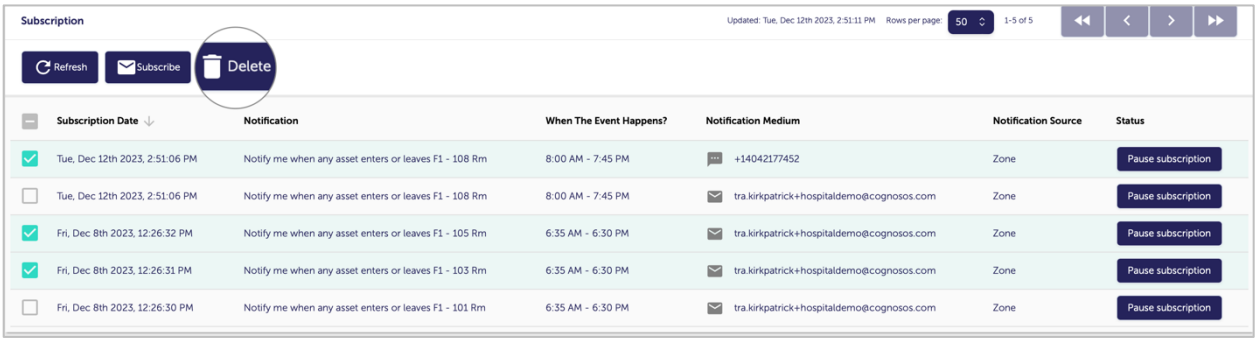
Zone subscriptions are shown on the Subscriptions page (under System Management). There will be a listing for each delivery method in the subscription. Zone subscriptions pertain to all assets within the zone.



You may pause and resume a subscription at any time. Use the Pause/Resume button on the Subscriptions page for this purpose. Refer to Subscriptions for more information on generally managing all subscriptions.

7.3.2 Deleting Subscriptions

Open the Subscriptions page under System Management. Locate the subscription(s) you want to delete, place a checkmark, and select **Delete** from the menu. You may delete a single delivery method or remove the entire subscription deleting both delivery methods.



Refer to Subscriptions for more information on generally managing subscriptions.

7.4 Exit Monitors

To detect accidental asset loss and protect data integrity, the RTLS provides the ability to alert key employees when an asset is within range of leaving a specific zone via the use of exit monitors. These exit monitors are set up through zone creation and monitored through zone subscriptions. Exit monitor alarms also display under system events.

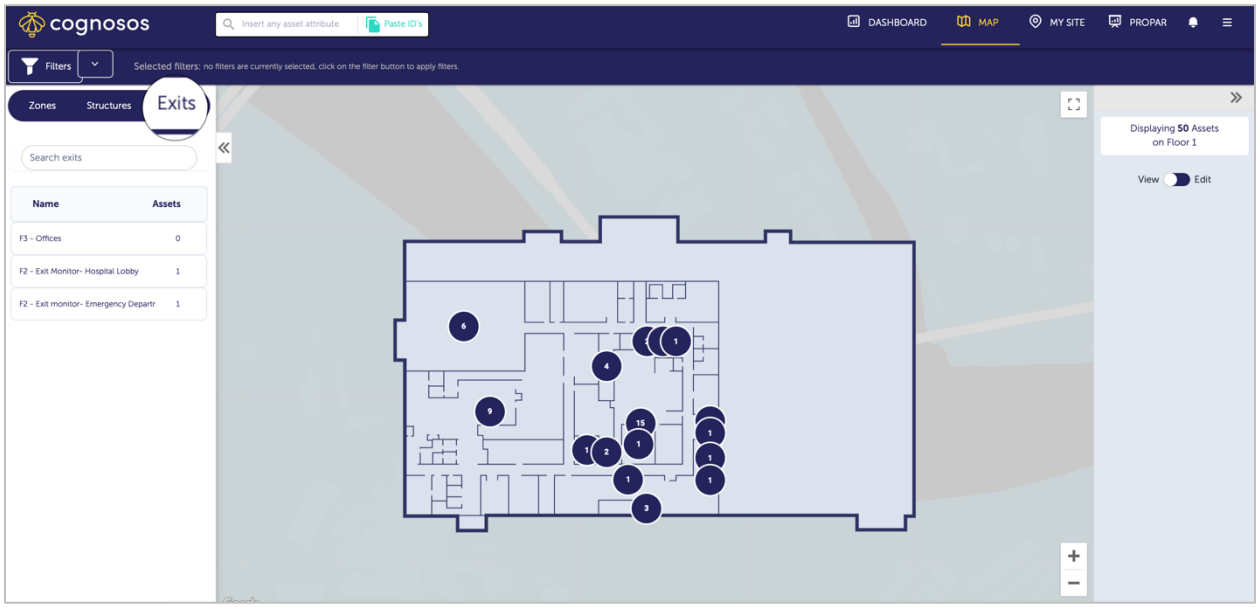
Exit monitor zones are created by the Cognosos Installation Team when your system zones are created. Your implementation team will work with you to create the exit zones based on best practices and your needs and consult with you on naming the zones for your facility.

The key to successfully monitoring exit zones is the naming convention. When exit monitor zones are named, use a naming convention that easily identifies the location, as well as that the zone is an exit monitor zone, e.g., FL 6 Admitting lobby Exit Monitor. A consistent naming convention ensures that the exit monitor zones are quickly identifiable for setting up subscriptions and viewing events.

When you have exit monitors installed in your facility, it's important to avoid storing tagged equipment in an exit monitor zone (within 7-10 feet) to avoid false alerts.

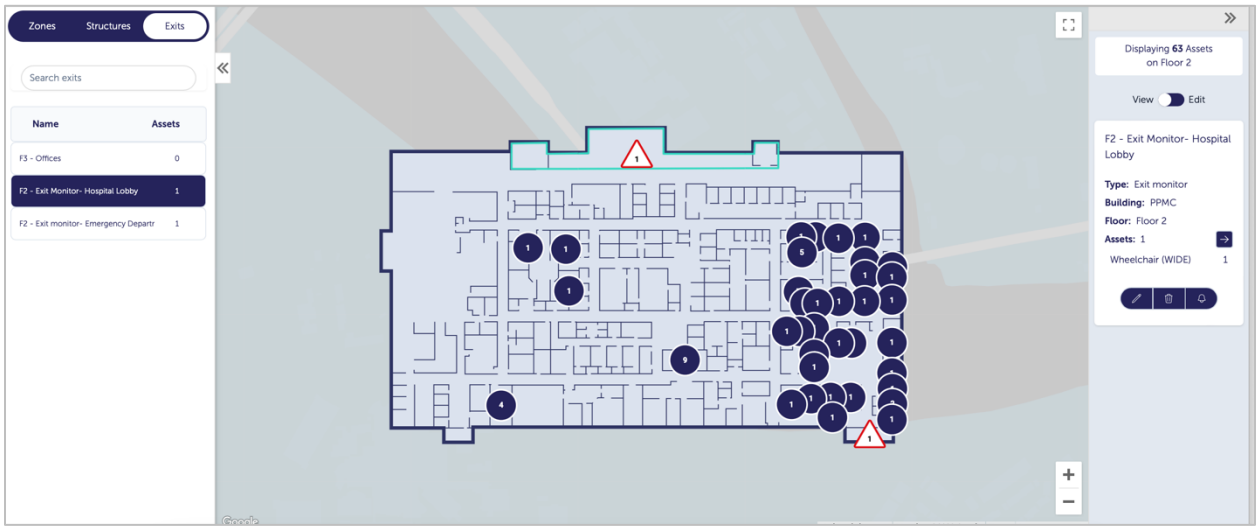
7.4.1 Viewing Exit Monitor Zone Information

The location of the exit monitor zone coincides with specific areas of the building that signal when an asset is in jeopardy of leaving an assigned area or the building at large. Open the Map and select the Exits tab from the left hand menu.



If a zone is supposed to be an exit zone and is not showing on the Exits tab, ensure the zone is defined as an Exit zone in Zone Settings.

Select an Exit zone from the left to display the zone on the map. Exit zones are outlined in teal when selected under Zones on the left. When there is at least one asset in the exit zone, the map displays a warning icon.



The right side of the map shows the exit monitor zone name, building location, and information regarding asset(s) in the zone.

Note: Exit monitors alone will not prevent assets from leaving your facility or prevent loss of assets. They are a tool to enable your staff to detect if an asset is in an exit zone and can help you see patterns of assets that are egressing from areas like laundry, trash, or exits to allow you to recover assets or plan strategies to prevent future loss.

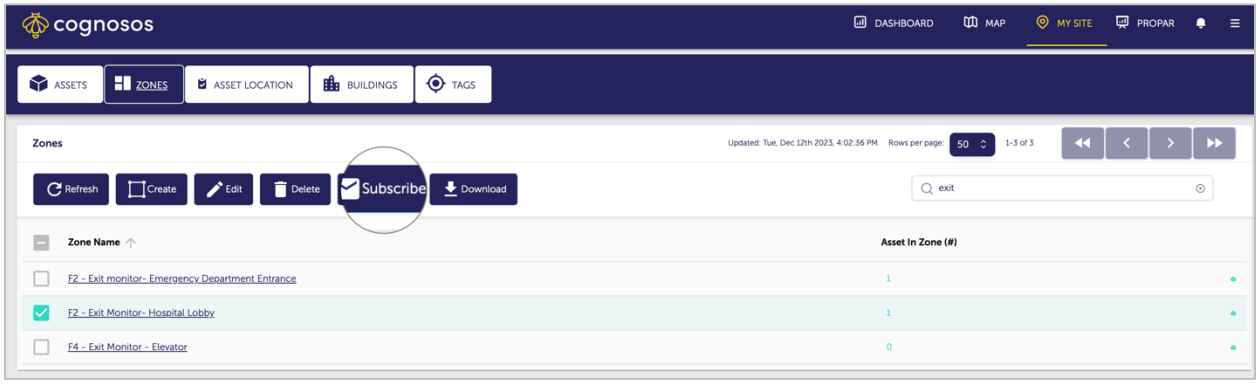
Exit monitor zones are treated no differently than other zones in the portal. Take steps to edit or delete the zone; view asset inventory for the zone; or create an exit monitor subscription.

7.4.2 Creating Exit Monitor Subscriptions

In order to receive exit monitor alerts, you will set up a subscription for each exit monitor zone for which you want alerts. Subscriptions for exit monitors are treated like any zone subscription and are created using the same steps described in Zone Subscriptions.

You can also create an exit monitor subscription from the map.

On the Zones tab in My Site select the exit monitor zone for which you'd like to set up the subscription and select **Subscribe**. The button will remain grayed out if there are zero or more than one zone selected.



Continue to set up the subscription as described in Zone Subscriptions.

Once the subscription is set up, it can be paused and resumed as with any asset or zone subscription.

Exit Monitor Zones

Exit monitor zones are no different than actual zones set up in the RTLS portal. The process for setting up, managing, and monitoring exit monitor zones is the same regardless as other zones; the key difference is the naming convention of the zones.

7.5 Department Management

The set up and use of departments allows hospitals to associate users and assets with certain departments, thus limiting their view of and accessibility to information only within their assigned department (rather than system/hospital-wide). Use of departments ensures assets remain in their proper areas, that devices attached/detached are from the right department for the user taking the action, and streamlines user-based processes within the RTLS saving time and money.

As a general overview, the workflow for setting up departments is:

1. Create the departments (e.g., anesthesiology, ER, OR, radiology) under System Management.
2. Assign assets to their respective departments under My Site.
3. Assign users to their respective departments.

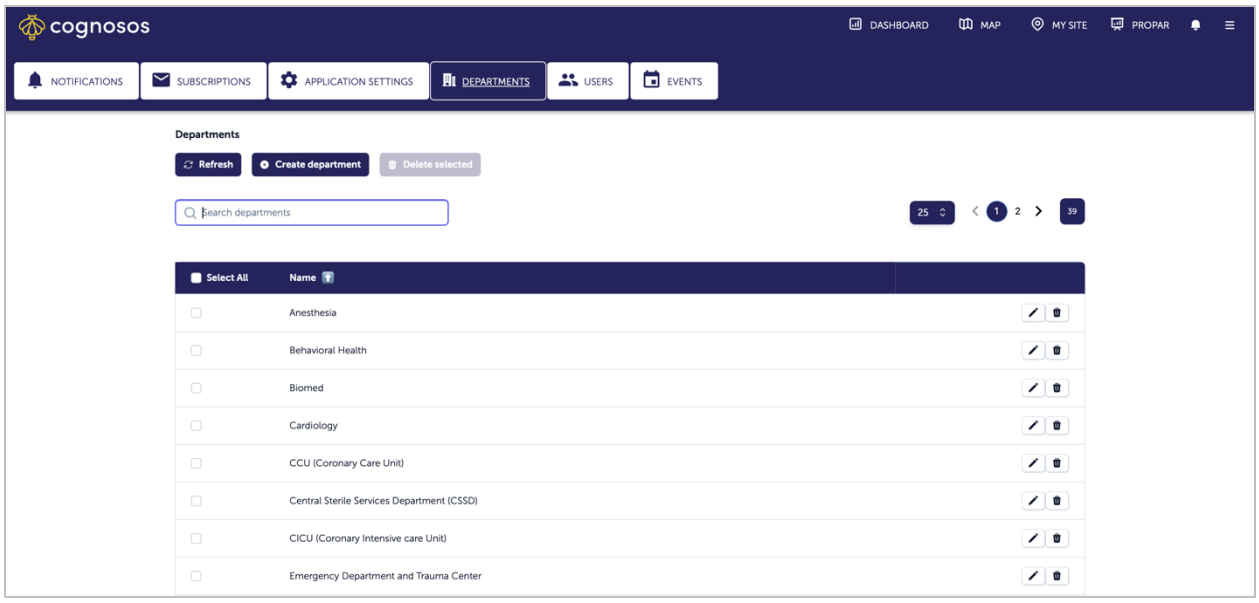
Department level assignments of users and assets will impact viewable inventory on the map, in My Site, ProPAR, and Events. Users will see only those items for the same department to which they are assigned. The exception is Administrator level users who will always see all assets, devices, and events.

Contact the Cognosos Customer Success team if you would like information on including this feature with your RTLS portal.

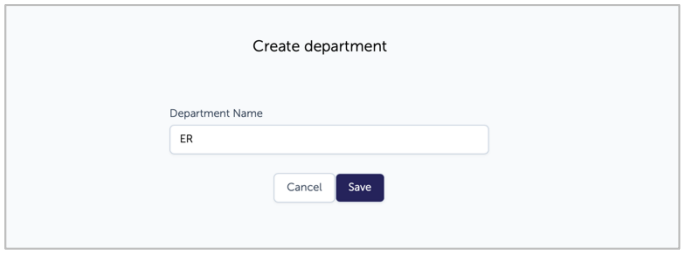
7.5.1 Adding Departments

Whether this is the initial set up of departments or a new department is being created/added, follow the steps outlined in this section. Only Administrators may manage departments.

Select **Departments** from the System Management page (use either the bell icon or the hamburger menu). The Departments page opens. If departments have been set up, they are listed here; otherwise the page is initially blank.



Click **Create department** from the Departments menu to open the Create department window. Input the department name and select **Save**. The new department is added and will display on the main list. Choose to **Cancel** to disregard and return to main list.

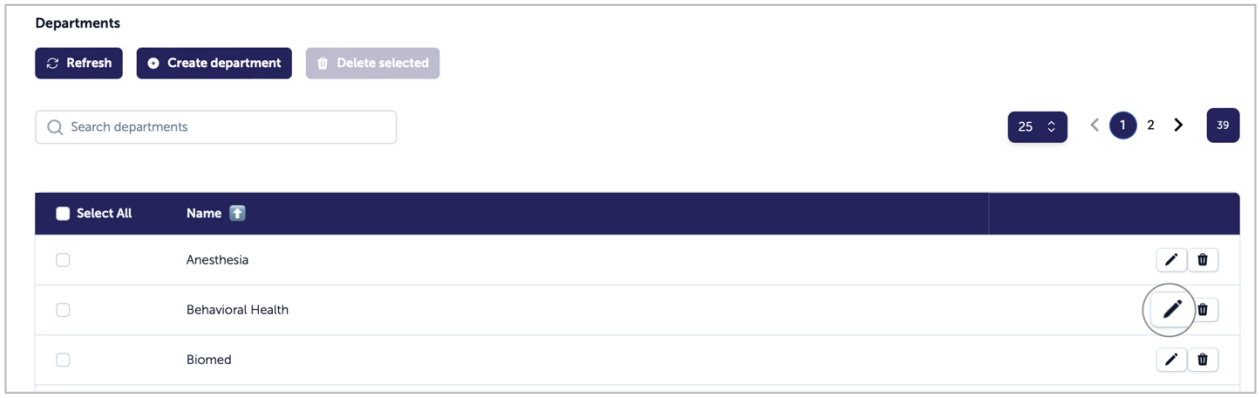


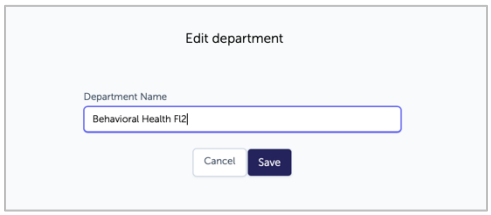
Repeat this process for each department you need to add.

Assign users and assets to the new department.

7.5.2 Editing Departments

To change the name of a department (the only permitted edit action) locate the department on the Departments page and select the **pencil** icon for the Department.



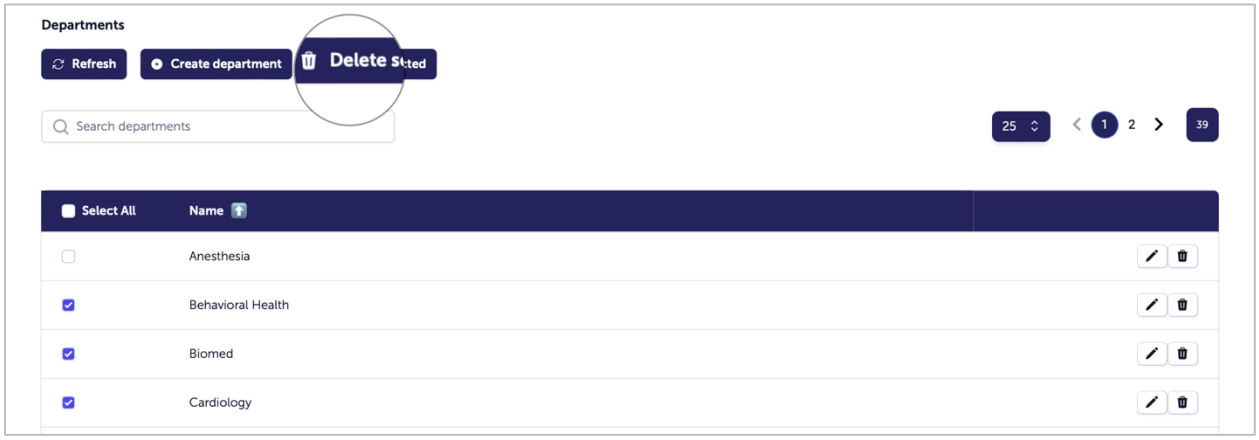


Make changes and click **Save**; otherwise **Cancel**. Saved changes are reflected immediately on the Departments page and throughout the portal (users and assets assigned to department will have new name).

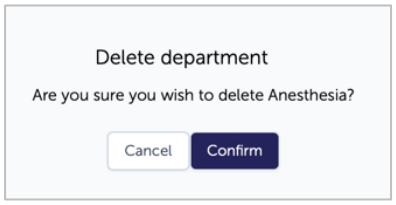
7.5.3 Deleting Departments

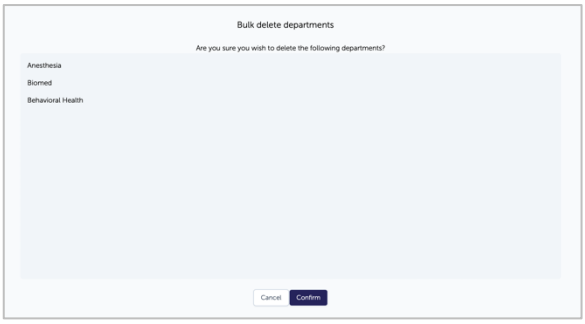
Departments may be removed either singularly or using bulk delete. To remove a single department, locate the department on the main Departments page and click the trash can icon for that department.

To remove multiple departments at one time, place a checkmark next to each department on the Departments page. Click **Delete selected**.

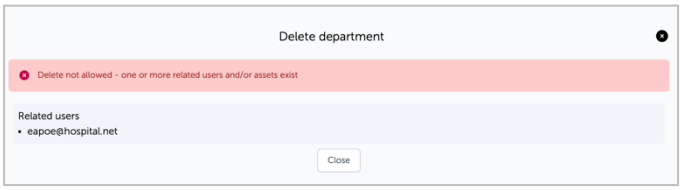


Continue the process by selecting **Confirm** for the single or bulk delete action. Return to the Departments list without deleting by selecting **Cancel**. Once confirmed, the department is removed and the system returns to the Departments page.





If any user or asset is assigned to the department, the system will return an error message and display any assigned users and/or assets.



Close the window and unassign as necessary using the edit user or edit asset options.

The portal confirms the deletion of department(s). If any listed department has assets or users assigned to it, the system will prohibit the removal.