User Guide

Tracer® Ensemble™

⚠ SAFETY WARNING

Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.

May 2020 BAS-SVU036E-EN

Introduction

Read this manual thoroughly before operating or servicing this unit.

Warnings, Cautions, and Notices

Safety advisories appear throughout this manual as required. Your personal safety and the proper operation of this machine depend upon the strict observance of these precautions.

The three types of advisories are defined as follows:

WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION	Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It could also be used to alert against unsafe practices.
NOTICE	Indicates a situation that could result in equipment or property-damage only accidents.

Important Environmental Concerns

Scientific research has shown that certain man-made chemicals can affect the earth's naturally occurring stratospheric ozone layer when released to the atmosphere. In particular, several of the identified chemicals that may affect the ozone layer are refrigerants that contain Chlorine, Fluorine and Carbon (CFCs) and those containing Hydrogen, Chlorine, Fluorine and Carbon (HCFCs). Not all refrigerants containing these compounds have the same potential impact to the environment. Trane advocates the responsible handling of all refrigerants-including industry replacements for CFCs and HCFCs such as saturated or unsaturated HFCs and HCFCs.

Important Responsible Refrigerant Practices

Trane believes that responsible refrigerant practices are important to the environment, our customers, and the air conditioning industry. All technicians who handle refrigerants must be certified according to local rules. For the USA, the Federal Clean Air Act (Section 608) sets forth the requirements for handling, reclaiming, recovering and recycling of certain refrigerants and the equipment that is used in these service procedures. In addition, some states or municipalities may have additional requirements that must also be adhered to for responsible management of refrigerants. Know the applicable laws and follow them.

WARNING

Proper Field Wiring and Grounding Required!

Failure to follow code could result in death or serious injury.

All field wiring MUST be performed by qualified personnel. Improperly installed and grounded field wiring poses FIRE and ELECTROCUTION hazards. To avoid these hazards, you MUST follow requirements for field wiring installation and grounding as described in NEC and your local/state/national electrical codes.

⚠ WARNING

Personal Protective Equipment (PPE) Required!

Failure to wear proper PPE for the job being undertaken could result in death or serious injury.
Technicians, in order to protect themselves from potential electrical, mechanical, and chemical hazards, MUST follow precautions in this manual and on the tags, stickers, and labels, as well as the instructions below:

- **Before installing/servicing this unit, technicians MUST put on all PPE required for the work being undertaken (Examples; cut resistant gloves/sleeves, butyl gloves, safety glasses, hard hat/bump cap, fall protection, electrical PPE and arc flash clothing). ALWAYS refer to appropriate Safety Data Sheets (SDS) and OSHA guidelines for proper PPE.**
- **When working with or around hazardous chemicals, ALWAYS refer to the appropriate SDS and OSHA/GHS (Global Harmonized System of Classification and Labelling of Chemicals) guidelines for information on allowable personal exposure levels, proper respiratory protection and handling instructions.**
- **If there is a risk of energized electrical contact, arc, or flash, technicians MUST put on all PPE in accordance with OSHA, NFPA 70E, or other country-specific requirements for arc flash protection, PRIOR to servicing the unit. NEVER PERFORM ANY SWITCHING, DISCONNECTING, OR VOLTAGE TESTING WITHOUT PROPER ELECTRICAL PPE AND ARC FLASH CLOTHING. ENSURE ELECTRICAL METERS AND EQUIPMENT ARE PROPERLY RATED FOR INTENDED VOLTAGE.**

⚠ WARNING

Follow EHS Policies!

Failure to follow instructions below could result in death or serious injury.

- **All Trane personnel must follow the company's Environmental, Health and Safety (EHS) policies when performing work such as hot work, electrical, fall protection, lockout/tagout, refrigerant handling, etc. Where local regulations are more stringent than these policies, those regulations supersede these policies.**
- **Non-Trane personnel should always follow local regulations.**

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Getting Started

What is Tracer Ensemble?

Tracer Ensemble is a web-based building automation system (BAS) that dramatically simplifies the complex requirements of managing and operating multiple facilities. Accessible from most PCs, tablets, and smart phones, Tracer Ensemble provides immediate access to your building systems from virtually any location, allowing you to maintain comfortable, healthy conditions and satisfied occupants.

Logging In to Tracer Ensemble

All Tracer Ensemble users must know the IP address (for example, 168.0.100.1) or the URL (for example, http://www.traceres.trane.com/live) of the Tracer Ensemble server and have a User ID and password, which can be created by a system administrator.

To log in to Tracer Ensemble:

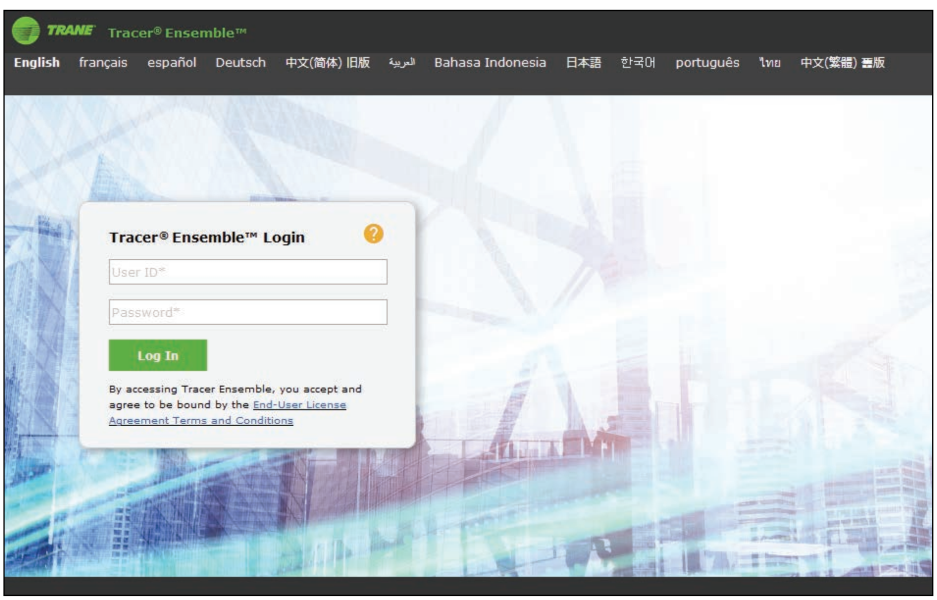
1. Launch a Web browser.

   Note: *Refer to the Tracer Ensemble Release Notes for a full list of supported browsers.*

2. Enter the address of the Tracer Ensemble server into the browser's address bar. Tracer Ensemble may take up to a minute to load, depending on available network and computer resources.
3. Select an alternate language, if needed, by clicking the button for the desired language.
4. Enter your User ID and password and click **Login**.

   Note: *If it is your first time logging in to the software, you must read and accept the Terms of Service agreement to continue. Read the agreement (you must scroll down to the bottom), then click **Yes, I do accept**, and **Continue** to indicate your agreement.*

Figure 1. Tracer Ensemble Login



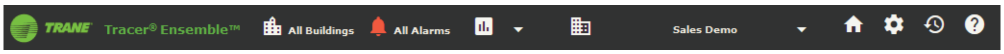
Navigating Tracer Ensemble

Tracer Ensemble Header

The content area on every Tracer Ensemble page changes from page to page. But all pages contain this header, which includes the following links:

Note: *Pages with custom graphics may appear without the top page header. This is an option that can be specified by the graphic creator.*

Figure 2. Tracer Ensemble header



- **All Buildings:** go to the building health page.
- **All Alarms:** go to the main alarms page to see all alarms in the system.
- **Dashboards/Reports:**
  - Dashboards: view, modify, and create dashboards (optional licensed feature).
  - Manage Reports: design, modify, and schedule custom and standard reports.
  - Completed Reports: view, e-mail, and delete reports that have been generated in the past.
- **Tenant Services:** access the tenant services feature (optional licensed feature).
- **Your User Name:**
  - General Preferences: view and edit your general, data display, and regional preferences.
  - Alarm Preferences: view and edit your alarm preferences.
  - Change Password: change your Tracer Ensemble password.
  - Log Out: log out of Tracer Ensemble.
- **My Home Page:** : go to the location you have designated as your home page.
- **Actions and Settings:** icon: links to common tasks and settings, including alarms, buildings, logs and reports, schedules, appearances and graphics, system, and user and roles.
- **Process Tracker:** icon: View the Process Tracker to view the status of long-running processes such as site synchronization.
- **Help** icon: launch the complete Tracer Ensemble help system.

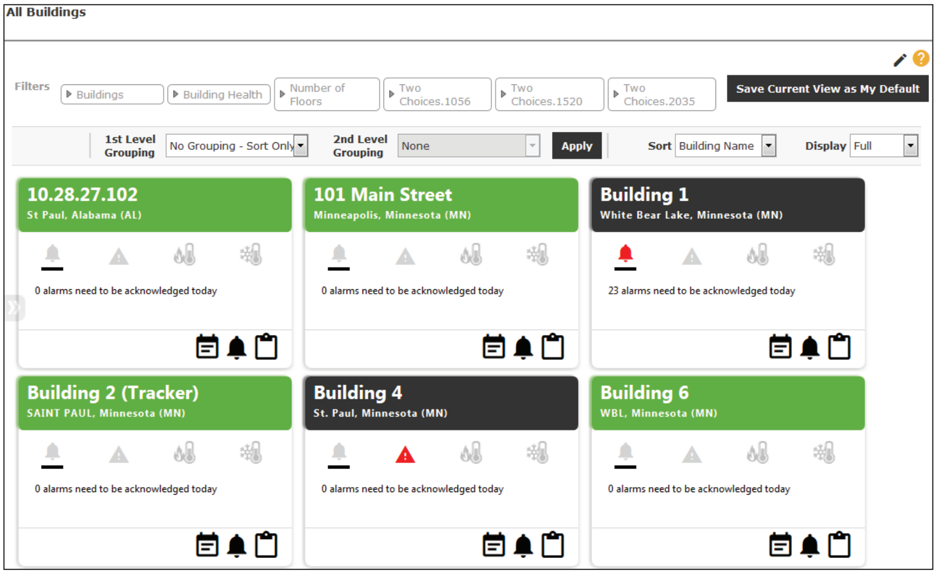
All Buildings Page

The All Buildings page allows you to assess the health of a building, view alarms, and access schedules for every building. To access the All Buildings page, click **All Buildings** in the Tracer Ensemble header.

Buildings are displayed in a card format. A green header indicates that the building is online, black header indicates that the building is offline, and a gray heading indicates that the building's health status display is disabled. Other information on the building card includes:

- Building name and location
- Number alarms that need to be acknowledged today
- Number so spaces that are too hot
- Number of spaces that are too cold

Figure 3. All Buildings page



Personalizing Your View

Use the sort, display, filter, and group features to customize the display of your All Buildings page. When finished, click **Save Current View as My Default** to remember your selections.

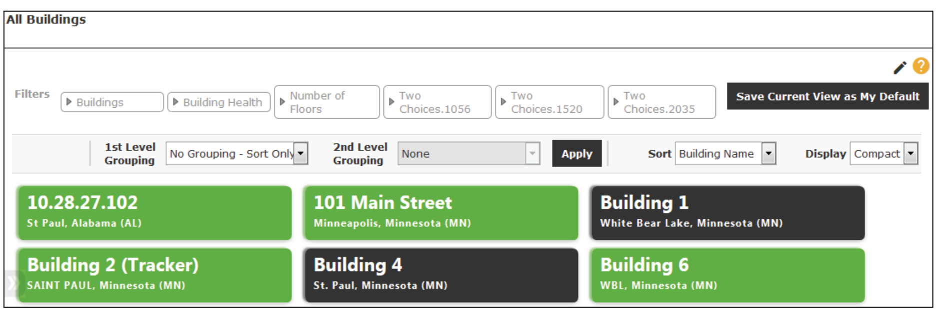
Sort

Select sort by **Building Name** or **Building Health**.

Display

Select to display either the full building card or a compact view.

Figure 4. All Building page compact view



Filter

You can filter buildings by quickly find critical information. Select one or more filter criteria and click **Filter** to narrow your results.

- Buildings - enter all or part of a building name and click **Filter**.
- Building Health - select one or more health criteria (unacknowledged alarms, hot spaces, offline SC or BCU, or cold spaces)

Group

You can specify the way buildings are organized on the All Buildings page in one of three ways according to your preference.

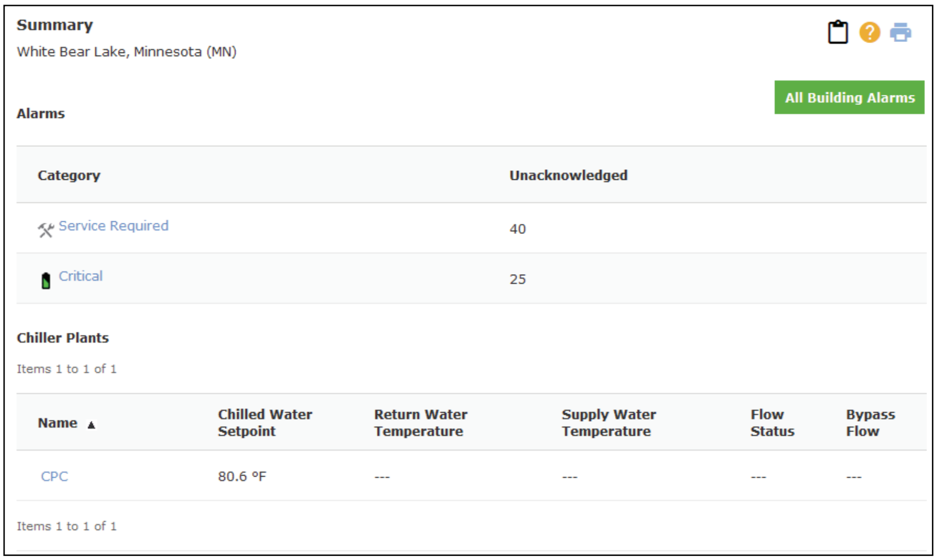
- No grouping - buildings are listed in alphabetical order.
- One grouping level - buildings are grouped by a building attribute of your choice.

- Two grouping levels - buildings are grouped by two building attributes of your choice (one general and one specific).

Building Summary Page

The Building Summary Page provides a overview of the building. Use this page to assess the health of a building, view recent alarms, or view the status of the building's spaces, equipment, and subsystems.

Figure 5. Building Summary Page



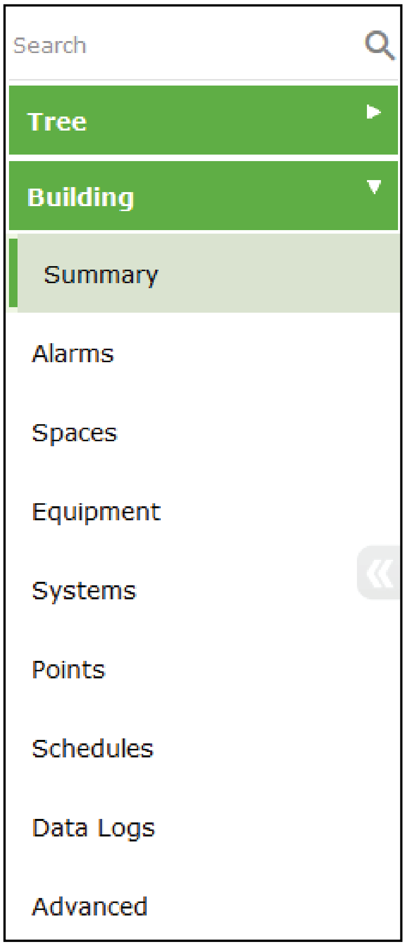
From this page you can:

- Add notes about the building. Click the clipboard icon to add notes about the building.
- View alarms. Click the alarm category to view alarms specific to that category. Or click **All Building Alarms** to view all alarms for the building.
- View equipment. Click on the equipment name to view more information.
- View critical information about spaces. Click on the space name to view more information.

Building Navigation Menu

The Building Navigation menu provides quick access to information about the building. To access the Building Navigation menu, click **Building** at the bottom of the left-hand navigation window.

Figure 6. Building Navigation Menu



- **Summary**: Provides an overview of the building
- **Alarms**: Shows all alarms affecting the building
  - Map Priorities: Allows you to map alarm priorities for each panel type
  - Set Up Alarm Actions: Allows you to create new, edit, and delete e-mail routing and alarm escalation rules for each alarm priority level.
- **Spaces**: Lists the spaces in operation in the building and provides operational details about each space.
- **Equipment**: Lists all equipment in the building.
- **Systems**: Lists systems in operation in the building (variable air systems, areas, heat pump loops, inputs, outputs, and chiller plants), and provides operational details about each subsystem.
  - Air Systems: Lists variable air systems in operation in the building and provides operational details about each air system.
  - Area: Lists areas in the building and the status of several points in the area.
  - Chiller Plant: Lists the building's chiller plants and the status of several points in the chiller plant.
  - Heat Pump Loop: Lists the building's heat pump loops and the status of several points in the heat pump loop.
- **Points**: This page is a gateway to the summary page for analog inputs, analog outputs and setpoints, binary outputs and setpoints.

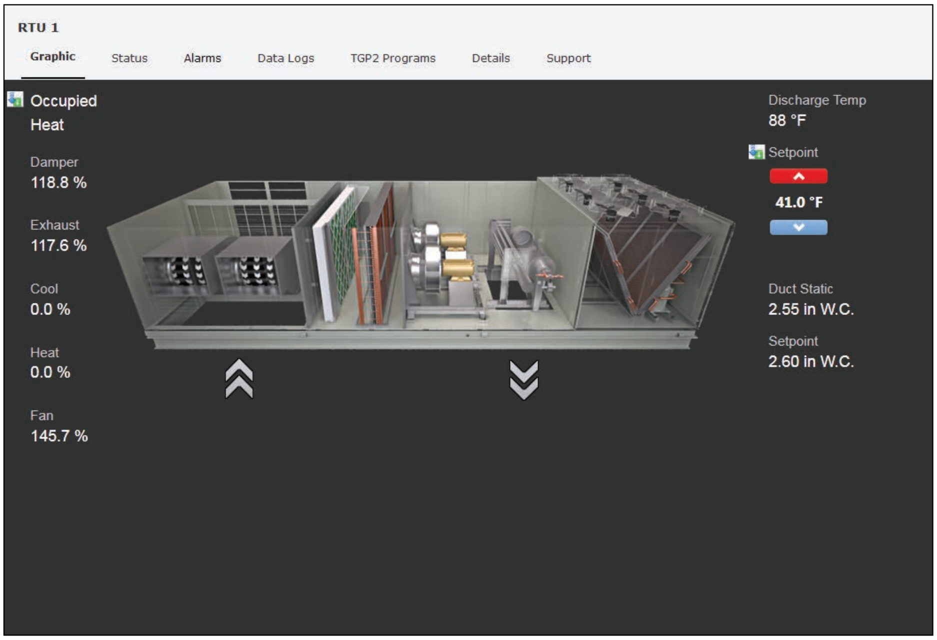
- **Schedules**: Shows all schedules in the building, listed by name.
  – Normal: Shows all normal schedules in the building.
  – Exceptions: Lists all exception schedules that are currently in effect for the building.
  – Templates: Lists all exception templates for the building.
  – Calendars: Provides a consolidated view of the building's calendars and allows you to edit and delete calendars.
  – Attributes: View and change the names of building schedule attributes.
  – View Panel: Lists panels schedules for the building.
- **Data Logs**: Lists all active data logs for the building and key components of each data log.
  – Map Panel: Allows you to set up data logs for a panel.
- **Advanced**: Allows you to view and edit values for building attributes, including Network Identity, Building Information, Building Attributes, Time & Synchronization, and Subgroups.
  – BACnet Viewer: Allows you to view all BACnet objects in the building according to their BACnet Object Type.
  – Panel Utilities: Provides technical details about building panels and allows you to perform advanced functions.
  – Device Updates: View details about the database and time synchronization schedule for this building and allows you to manually synchronize devices.
  – Tree Editor: Allows you to edit the Navigation Tree.

Standard Pages

Areas, spaces, equipment, and systems pages feature a tabbed layout. Equipment pages have either a standard graphic depicting the equipment or a custom graphic. These pages also provide an overview of the status, alarms, data logs, and details for the selected area, space, equipment, or system. The tabular layout allows for easy navigation.

- The **Status** tab details the current conditions and the status values.
- The **Alarms** tab allows you to acknowledge, comment, remove, or ignore alarms.
- The **Data Logs** tab allows you to select the data points, display period, and display
- range of the data logs to view.
- The **Details** tab allows you to edit or set up data logs for additional data points.

Figure 7. Tabbed Page Layout



Status

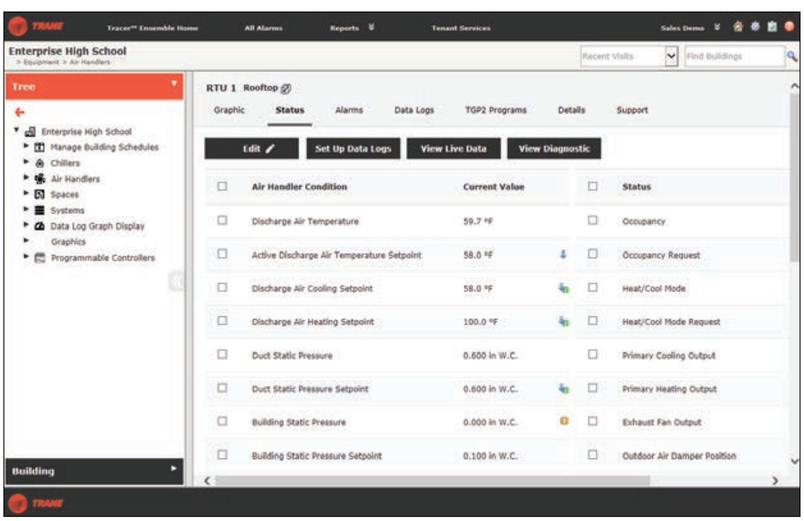
Common Behavior

Status pages for areas, spaces, equipments, and subsystems have similar layout and functionality. From the status tab, you can view status and edit/override points.

To view the status of areas, spaces, equipment, and subystems:

1. Select **Home** | *Building Name.*
2. On the Building Navigation menu, select **Spaces**, **Equipment**, or **Subsystem** and click on a name.
3. The Status tab for the selected item displays.

Figure 8. Status Tab



Points that are in fault are indicated by a red stop sign icon. Points that are out of service are indicated by a gold icon.

Edit Points

To edit point values:

1. Click **Edit** to change the page from view mode to edit mode.
2. Points that can be edited will have an editable field or a drop-down list. Edit the points.
3. Click **Save**.

Set Up New Data Log

To set up a new data log for a value:

1. Select one or more rows and click **Set Up Data Logs**.

Note: *If a data log is currently being collected for a point, Data Logs Currently Collected display. This allows you to determine if a new data log is necessary.*

2. Select a **Collection Interval** in hours or minutes.
3. Select a **Data Collection Type**.
4. Set the **Data Collection Effective Period**. Leave the end date blank to create a data log that runs indefinitely.
5. Click **Next**.
6. Review the Data Log Summary and click **Finish**.

Override Points

Points values that can be overridden are indicated with one of three override icons:

Overrideable Not in Override: indicates that the point is overrideable, but it is not currently in override.

Overridden No Expiration: Indicates that the point is overrideable and is currently overridden with no expiration time.

Overridden with Expiration: Indicates that the points is overrideable and overridden with an expiration time.

Spaces

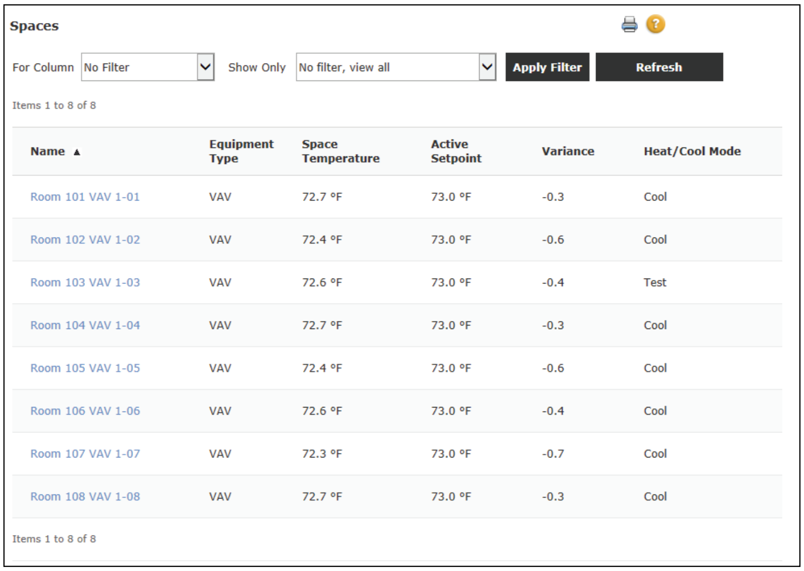
A space is a controller with primary responsibility for the comfort conditions of a single region or room in a building. A space can be small and simple (an individual damper controller) or large and complex (a rooftop unit with multiple compressors).

Spaces List

To view the status of a space:

1. Go to Home | *Building Name*.
2. Click **More Spaces**. A table displays with basic status data for each space. Click on the column headings to sort the data by Name, Equipment Type, Space Temperature, Active Setpoint, Variance, or Heat/Cool Mode.

Figure 9. Spaces List Page



Name ▲	Equipment Type	Space Temperature	Active Setpoint	Variance	Heat/Cool Mode
Room 101 VAV 1-01	VAV	72.7 °F	73.0 °F	-0.3	Cool
Room 102 VAV 1-02	VAV	72.4 °F	73.0 °F	-0.6	Cool
Room 103 VAV 1-03	VAV	72.6 °F	73.0 °F	-0.4	Test
Room 104 VAV 1-04	VAV	72.7 °F	73.0 °F	-0.3	Cool
Room 105 VAV 1-05	VAV	72.4 °F	73.0 °F	-0.6	Cool
Room 106 VAV 1-06	VAV	72.6 °F	73.0 °F	-0.4	Cool
Room 107 VAV 1-07	VAV	72.3 °F	73.0 °F	-0.7	Cool
Room 108 VAV 1-08	VAV	72.7 °F	73.0 °F	-0.3	Cool

The spaces list details:

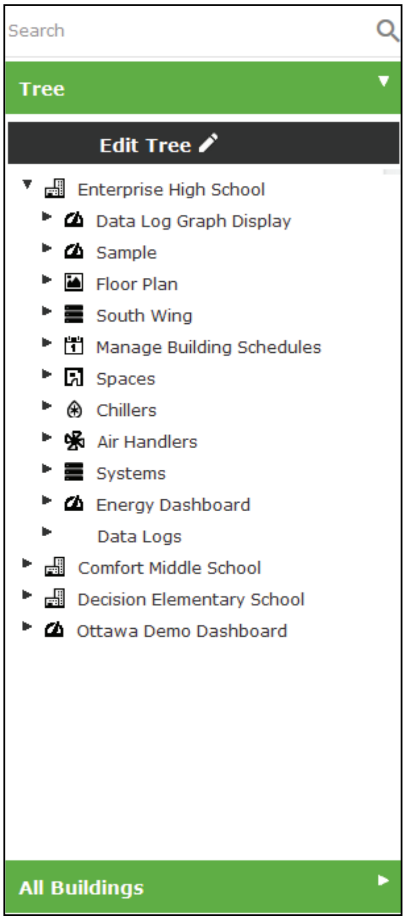
- **Name**: The name of the space.
- **Equipment Type**: The type of equipment.
- **Space Temperature**: The actual temperature of the space.
- **Active Setpoint**: The currently selected setpoint of the controller.
- **Variance**: The degree difference between the space temperature and the active setpoint.
- **Heat/Cool Mode**: Indicates the equipment's mode: heat, cool, pre-cool, off, etc.

Click the name of a space to see its summary page.

Navigation Sidebar

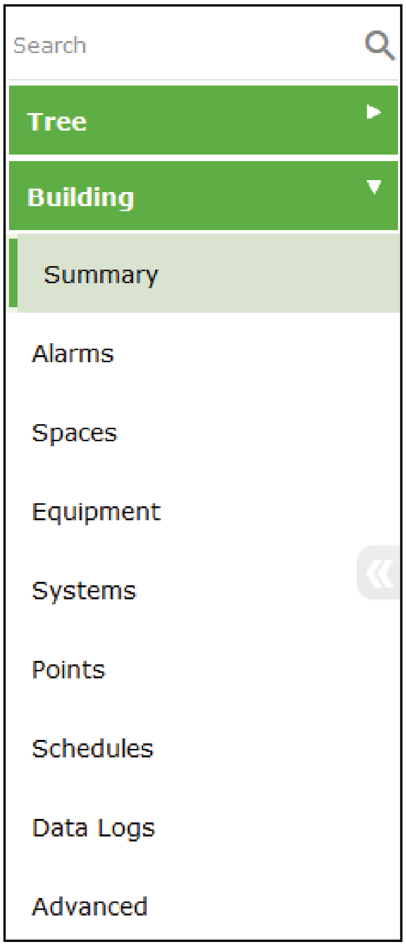
The left sidebar of the Tracer Ensemble window contains the navigation tree, a customizable way to navigate through Tracer Ensemble . Any Tracer Ensemble page, folder, graphic, or dashboard can be saved as a tree node. Nodes can then be sorted into a hierarchical structure for easy navigation. By default, the tree is always available in the left sidebar, but it can be hidden with the click of a button.

Figure 10. Navigation tree



When in a building, the building navigation pane is also available. This allows you quick access to the Building Summary page, alarms, spaces, equipment, systems, points, schedules, data logs, and advanced building schedules, as applicable. By default, the Tree is displayed when in the building. To access the building navigation, click the black Building heading at the bottom of the tree. To toggle back to the Tree, click the green Tree heading.

Figure 11. Building navigation



Global Search

The Navigation Tree provides global search functionary. Users can search for points, schedules, equipment, and buildings in Tracer Ensemble:

1. Enter your search term at the top of the Navigation Tree.
2. Hit enter or click the search icon.
3. Results are displayed as links. Click on one or more result.

Navigation Tree

Using the Tree

- To hide the tree, click the black arrow at the center right of the navigation pane. Click the arrow again to open the tree.
- To resize the tree width, click and drag the right border of the navigation pane.
- To expand a tree node, click the carrot next to the node.
- When you click on an item in the tree, you will only see the nodes for that building. Click the green arrow to navigate back to the main tree.

Editing the Tree

Users with administrative permissions can edit the navigation tree. Any Tracer Ensemble page, folder, graphic, or dashboard can be saved as a tree node. Nodes can then be sorted into a hierarchical structure for easy navigation.

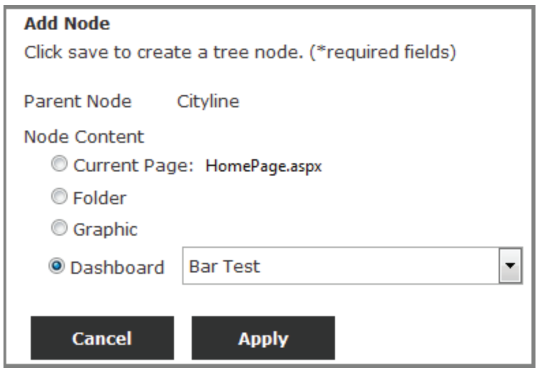
1. In the tree navigation pane, click **Edit Tree**. This only displays if you have the appropriate permissions. The tree text turns green, indicating that the tree is in edit mode.
2. Edit the tree as desired.
3. Click the green check to save your changes. Click the black X to disregard your changes. Or click **Reset** to discard your changes.

Add a Node

To add a new node to the Tree:

1. Click **Edit Tree**.
2. Click the green +.

Figure 12. Add Node



3. Select the **Node Content**:
   - Current Page: the page currently displayed in Tracer Ensemble
   - Folder: the folder of the current Tracer Ensemble page
   - Graphic: select the standard, custom, or building content
   - Dashboards: select a dashboard from the drop-down list
4. Click **Save**.
5. Click the green check to save your changes.

Delete a Node

To delete a node from the Tree:

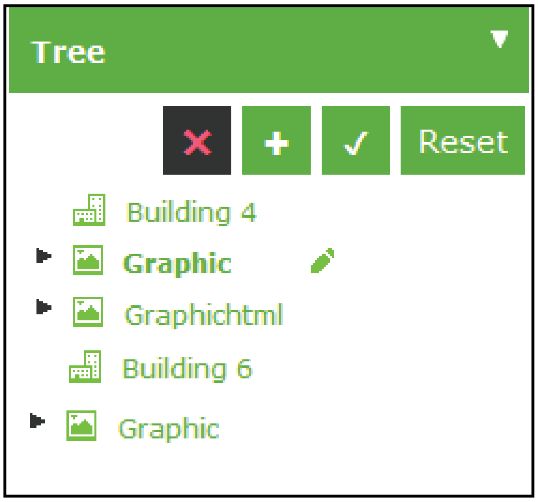
1. Click **Edit Tree**.
2. Select the node to delete.
3. Click the delete key on your keyboard.
4. Click the green check to save your changes.

Edit a Node

To edit a node:

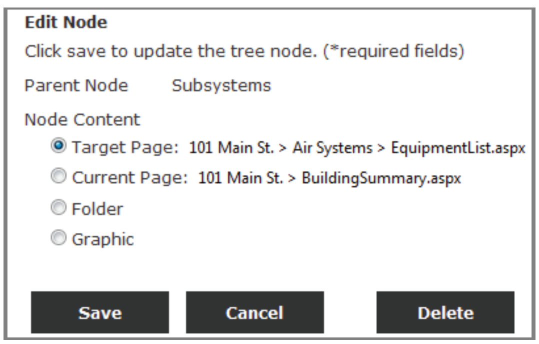
1. Click **Edit Tree**.
2. Click on the node name.

Figure 13. Edit Node



3. Click on the green edit pencil next to the node name.
4. Edit the node content.

Figure 14. Edit Node Content



5. Click the green check to save your changes.

Reorder the Tree

To reorder how nodes display on the tree:

1. Click **Edit Tree**.
2. Drag and drop nodes into the desired order.
3. Click the green check to save your changes.

Setting User Preferences

Users can customize their Tracer Ensemble experience by setting their user preferences. Each user has its own preferences; making changes to one profile does not affect the preference for another profile. User preferences include:

- **General Preferences:** includes your home page, default data display, default override priority, override level (advanced, advanced with point service, or simplified), and display filters.
- **Data Display Values**: the units of measurement for each unit type.
- **Regional Settings:** including language and date/time formats.

Note: *User role settings can prevent users from being able to change their own preferences. If the Edit button does not display on your preferences page, you have been assigned to a role that does not permit you to change your preferences. Contact an administrator for assistance.*

To edit your user preferences:

1. In the header, hover over your user name and select **General Preferences.**
2. Click **Edit.**
3. Edit your general preferences:
   a. **My Home Page**: Determines the page you will land on when you click My Home. Choices are All Alarms, Tracer Ensemble Home, any custom graphic, or a building of your choice.
   b. **Default Data Display**: Determines your initial preference to see the Tracer Ensemble Stock Pages, which are pages without custom graphics, or Custom Pages, which include graphics with customized information displays or controls.
   c. **Default Override Priority**: Determines what default priority level your overrides will have when applied to the system. You can select any priority level at or below the override priority level established for your user profile by the system administrator (you cannot assign a higher priority level than what is permitted for your profile).
   d. **Default Override**: Determines whether you will see the more-detailed "Advanced" override page or the less-detailed "Simplified" override page when you initiate an override.

      Note: *The default setting is "Simplified."*
   e. **Display Table Filters:** Determines whether you will be able to see table filters or not on pages where they are available.

Figure 15. General Preferences

General Preferences

Preference	Value
My Home Page	Custom/Floor Plan 2/Floor Plan 2.html
Default Data Display	Graphics
Default Override Priority	8 - Miscellaneous
Default Override	Simplified
Display Table Filters	Yes

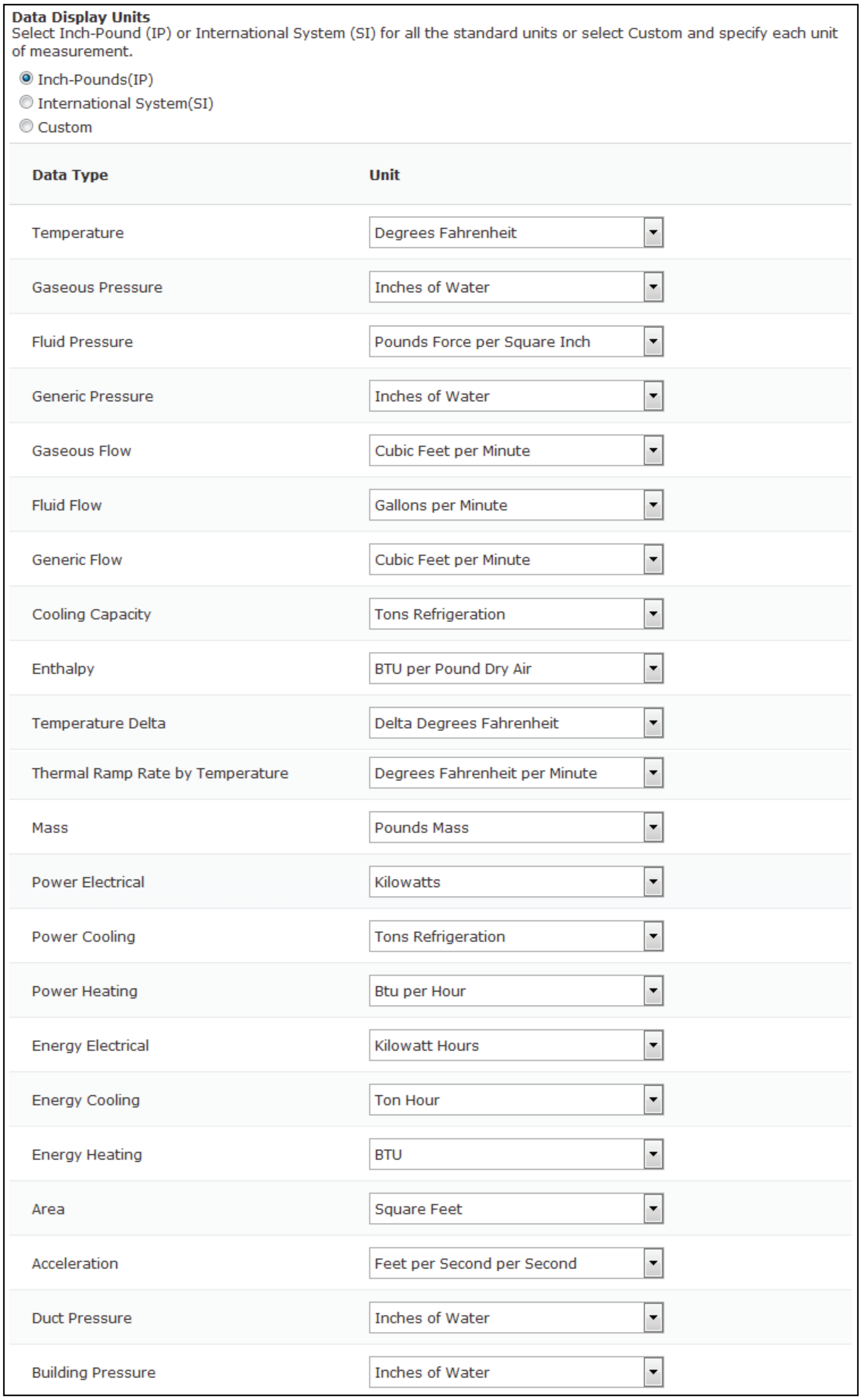
4. Edit the **Data Display Units**. This determines what units of measurement you see. Your units of measurement do not affect the units of measurement used by the building panels or seen by other users.
   a. If you select **Inch-Pound (IP)**, the choices you will see in the Unit column below will be

only those that are typically associated with Inch-Pound or standard Imperial measurement units.

b. If you select **International Systems (SI)**, the choices you will see in the Unit column below will be only those that are typically associated with Metric or non-Imperial measurement units.

c. If you select **Custom**, specify the unit for each data type in the chart below.

Figure 16. Data Display Units



Data Display Units
Select Inch-Pound (IP) or International System (SI) for all the standard units or select Custom and specify each unit of measurement.

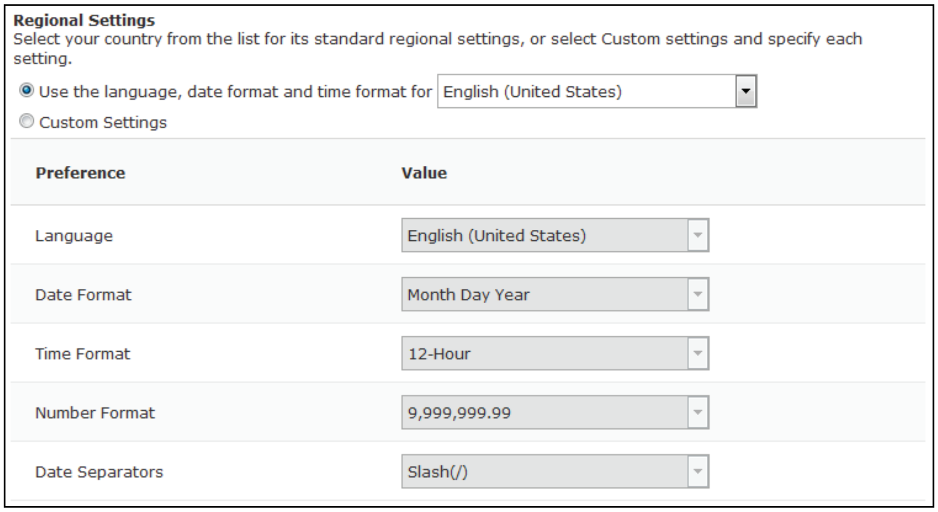
- (•) Inch-Pounds(IP)
- ( ) International System(SI)
- ( ) Custom

Data Type	Unit
Temperature	Degrees Fahrenheit
Gaseous Pressure	Inches of Water
Fluid Pressure	Pounds Force per Square Inch
Generic Pressure	Inches of Water
Gaseous Flow	Cubic Feet per Minute
Fluid Flow	Gallons per Minute
Generic Flow	Cubic Feet per Minute
Cooling Capacity	Tons Refrigeration
Enthalpy	BTU per Pound Dry Air
Temperature Delta	Delta Degrees Fahrenheit
Thermal Ramp Rate by Temperature	Degrees Fahrenheit per Minute
Mass	Pounds Mass
Power Electrical	Kilowatts
Power Cooling	Tons Refrigeration
Power Heating	Btu per Hour
Energy Electrical	Kilowatt Hours
Energy Cooling	Ton Hour
Energy Heating	BTU
Area	Square Feet
Acceleration	Feet per Second per Second
Duct Pressure	Inches of Water
Building Pressure	Inches of Water

5. Edit your **Regional Settings**. This determines the **Language**, **Time Format**, **Date Format,** and **Number Format** for Tracer Ensemble.
   a. If you select a country, the settings for each of the three sub-categories are filled in automatically.

b. If you select **Custom**, you can specify your own choices for each sub-category.

Figure 17. Regional Settings



6. Click **Save** to update your user preferences.

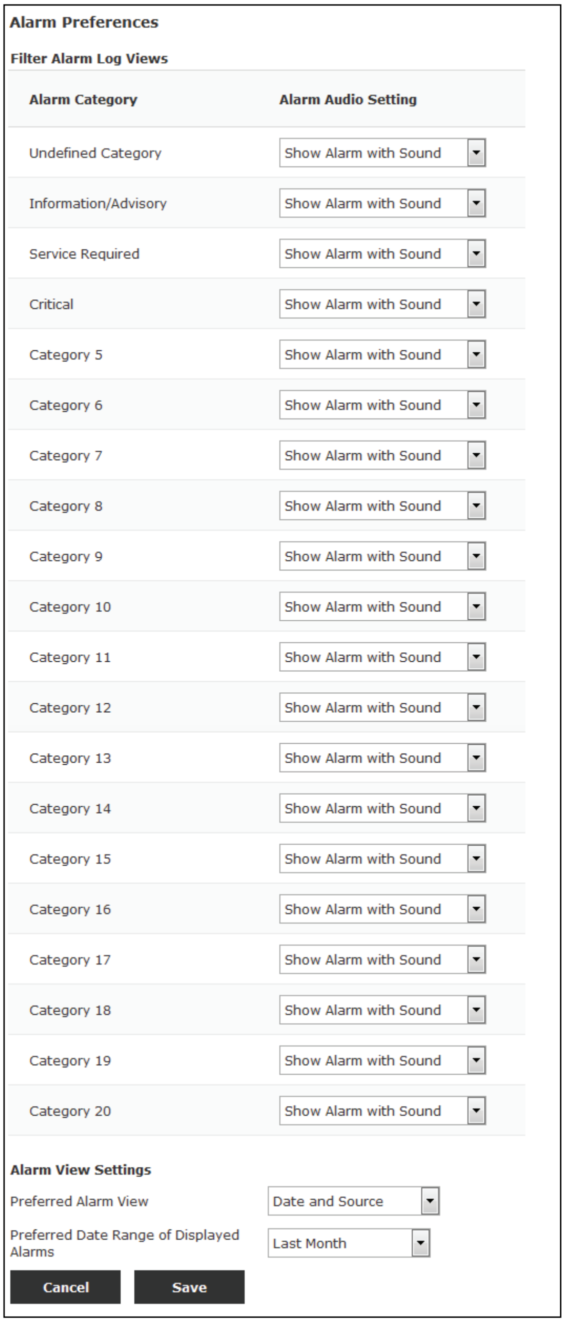
Alarm Preferences

Alarm Preferences allows you to specify what alarms (all alarms, building alarms, and status alarms) are shown in your alarm logs. By default, every alarm class is included in the alarm log.

To set your alarm preferences:

1. In the header, hover over your user name and select **Alarm Preferences**.
2. Click **Edit**.

Figure 18. Alarm Preferences



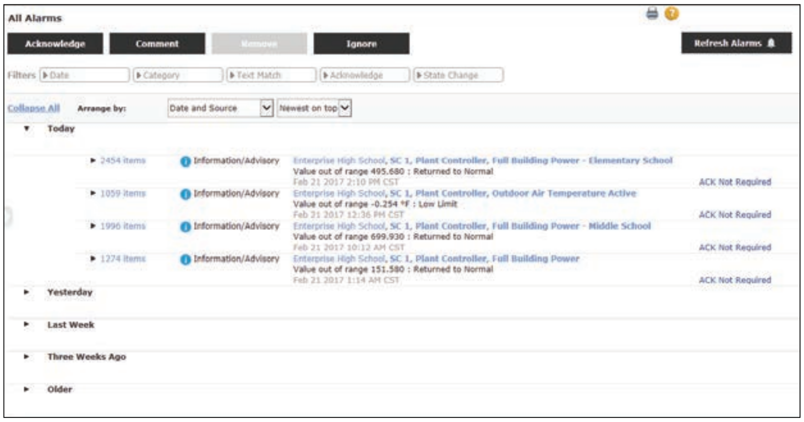
3. For each Alarm Category, indicate if Tracer Ensemble should:
   - **Show Alarm with Sound**: Alarm icon displays in header and alarm sounds until acknowledged.
   - **Show Alarm without a Sound**: This alarm is shown in the alarm log. Alarm icon displays in header.
   - **Hide Alarm**: This alarm is not shown in the alarm log. The alarm icon does not display and no alarm sound.
4. Set your preferred alarm view.
5. Set your **Preferred Date Range of Displayed Alarms**.
6. Click **Save**.

Alarming

All Alarms

The All Alarms pages shows all alarms affecting the system. From this page, you can view, acknowledge, comment, remove, or ignore alarm(s). To access the All Alarms page, in the header click **All Alarms**.

Figure 19. All Alarms

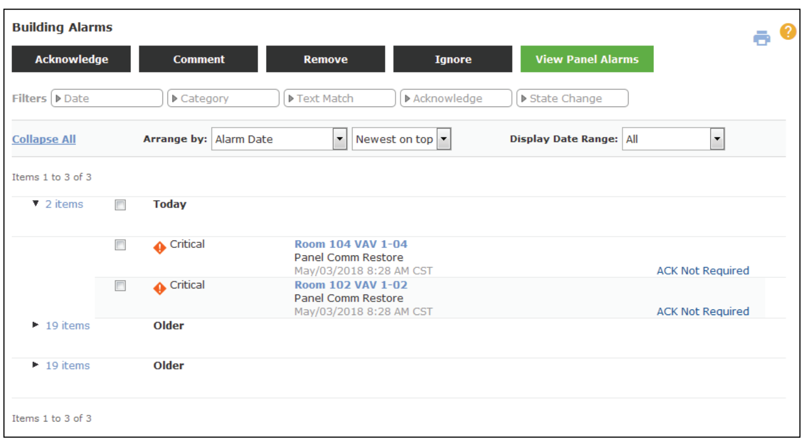


Building Alarms

The Building Alarms page shows all alarms affecting the building. From this page, you can view, acknowledge, comment, remove, or ignore alarm(s). To access the Building Alarms page:

1. Navigate to the building.
2. On the Building Summary page, click **More Alarms**. Or from the Building navigation menu, click **Alarms**.

Figure 20. Building Alarms



Viewing Alarms

Alarms can be grouped and filtered for easy consumption.

Filtering Alarm Results

To filter alarm results, use the filter criteria at the top of the page. You can apply multiple filters.

- **Date**: filter alarm results by today, yesterday, this week, last week, or older alarms. Or select Custom Date Range and select a from and to date.
- **Category:** select one or more alarm category to display in the alarm results.
- **Text Search**: apply one or more text search rules. Click the green + to add additional rules. Click Apply to filter alarms results.
- **Acknowledge**: filter alarms results by acknowledgment not required, acknowledged, or acknowledgment required by not acknowledged.
- **State Change:** filter alarms by change of state, out of range/limit, change of life, safety, normal to alarm, or alarm to normal.

Grouping Alarm Results

In addition to applying filter criteria, you can arrange how alarm results are displayed. Expand and collapse groups to view alarm results.

- **Grouping criteria**- select how to group alarms: Date and Source, Alarm Date, Alarm Category, Building, Alarm Type, Alarm Source, or No Groups - Sort only.
- **Time**: select Newest on top to display the most current alarms first or Oldest on top to display the oldest alarms first.

Click + or click the alarm count link to expand groups and view individual alarms. To select all alarms in a group, click the check box in the upper left corner of the group header.

Alarm Results

The following alarm attributes are displayed in table format:

- **Priority**: The priority level of the alarm.
- **Building Name**: (only available on the All Alarms page) The name (as identified in Tracer Ensemble system) of the building that contains the alarm source.
- **Alarm Source**: This equipment is producing the alarm. If the equipment is associated with a status page, you can click the link to go to the page.
- **Date/Time**: The date and time when the alarm first appeared in the system. As indicated by the time zone information, this is the building panel's local time, not the Tracer Ensemble user's local time if the building and user are in different time zones.
- **Acknowledge** - Whether the alarm needs to be acknowledged (ACK Required) or not (Not Required). Select one or more alarms and click Acknowledge to convey the acknowledgment After you acknowledge the alarm, your name and the date and time are shown in the acknowledge column.
- **Alarm Details**: A brief description of the actual alarm condition.
- **Comments**: Comments you or other users may have left after the alarm occurred. Select one or more alarms and click Comment to leave a written comment about the alarm for yourself or other users to see.

Managing Alarms

Select one or more alarms and click:

- **Acknowledge** to acknowledge the alarm(s).
- **Remove** to delete the alarm(s) from the table. If the alarm condition continues or reoccurs, it will reappear in the table.
- **Comment** to comment on the alarm(s).
- Select a single alarm and click **Ignore** to dismiss the alarm in Tracer Ensemble system:

– Upon ignoring the alarm, the alarm will no longer display in the Alarm log and will be ignored for all users.
– A popup confirmation will appear requesting you to confirm which alarm types you want to ignore.
– Ignoring the alarm does not acknowledge it in the panel.

Alarm Actions

An alarm actions rules lets you route alarms by building and priority level either to e-mail recipients of your choosing or escalate to a higher alarm category. For instance, you can route high priority alarms to on-call staff so they can respond quickly to problems. The recipients for alarm notifications can include Tracer Ensemble users with an e-mail address already in the system on their user profile pages, or other non-users whose e-mail address and other information is added only in the alarm routing section. Or you can escalate unacknowledged alarms after a specified period of time.

Note: *Tracer Ensemble users cannot receive e-mail notifications of alarms in buildings to which they do not have access. If you are working on a rule that applies to a single building, you will not see addresses for users who do not have access to the building, and users without access to the building can only be added if they are given access to the building by editing their user profile.*

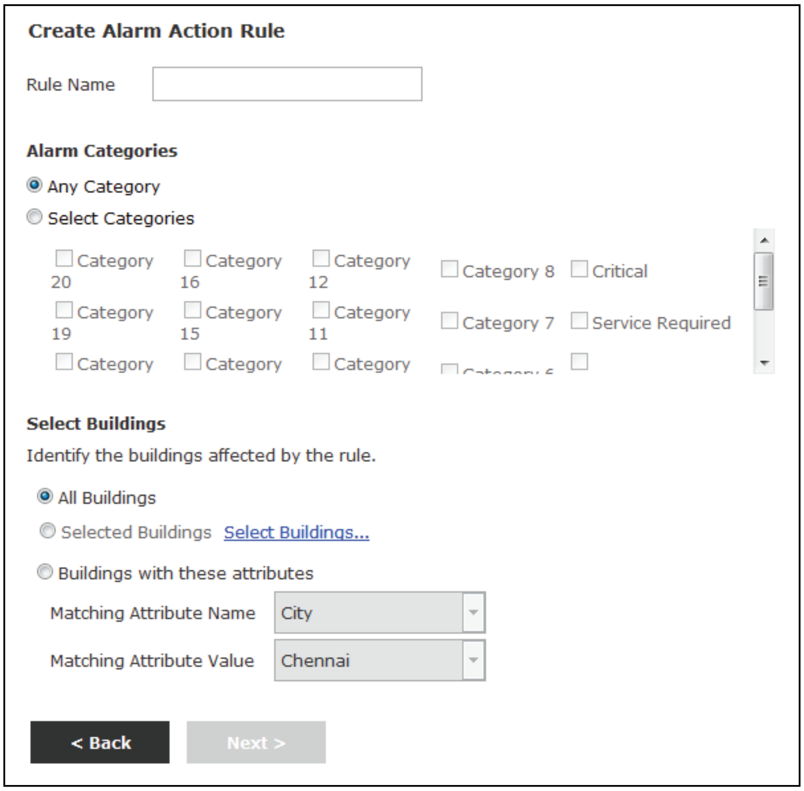
Alarm Action Rules

Global e-mail routing rules apply to all alarms in Tracer Ensemble. When you create a global e-mail routing rule, alarms across all buildings will be routed to the e-mail address(es) in the rule.

Create New

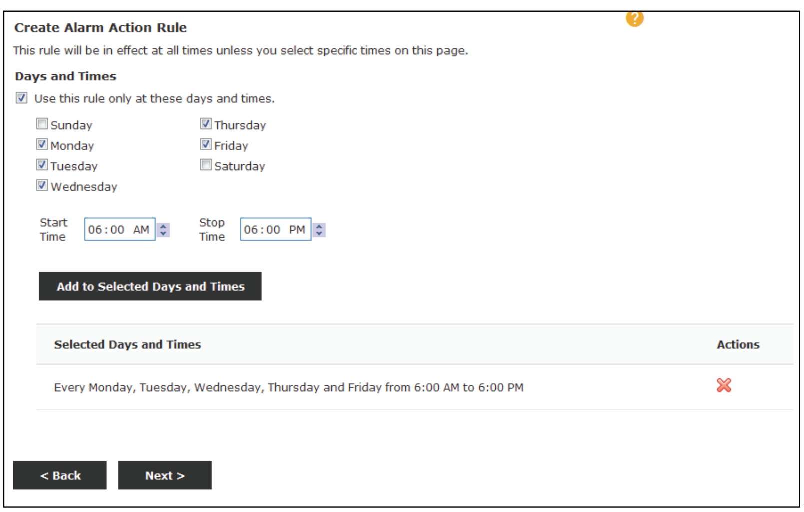
1. In the header, select Actions and Settings | Alarms | **Alarm Actions**.
2. Click **Create Alarm Action Rule**.
3. Enter a **Rule Name**.
4. Select **Any Category** to select all categories or **Select Categories** to specify only certain categories.
5. Select the building(s) to include in the rule:
   - Select **All Buildings** to receive alarm notifications for all buildings.
   - Select **Selected Buildings** to receive alarm notifications for specified buildings.
   - Select **Buildings with these attributes** and use the drop-down lists to select building attributes.

Figure 21. Create Alarm Action Rule



6. Click **Next**.
7. To limit an alarm action rule to specific days and times:
   a. Select Use this rule only at these days and times.
   b. Select one or more days of the week.
   c. Specify a Start Time and a Stop Time.
   d. Click Add to Selected Days and Times.
   e. Repeat Steps b to d as needed to create additional time rules.

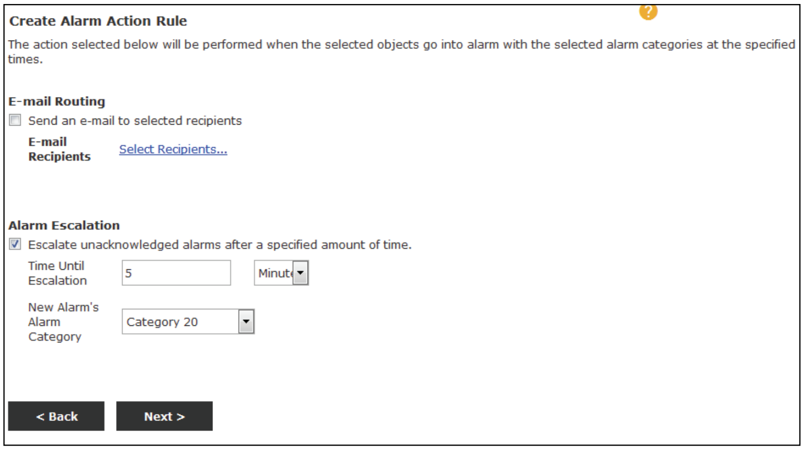
Figure 22. Create Alarm Action: Days and Times



8. Click **Next**.

9. Select **E-mail Routing** to send an e-mail when the selected object meets the alarm conditions.

Figure 23. Create Alarm Action: Alarm Escalation



   a. Click **Select Recipients**.

   b. Select one or more e-mail recipients from the list and click **Add**. Or enter e-mail addresses into the **Recipients** field.

   c. Click **Apply**.

10. Select **Alarm Escalation** to escalate unacknowledged alarms after a specified amount of time.

    a. Enter the time, in minutes, after which to escalate the alarm.

    b. Enter the alarm's new category.

11. Click **Next**.

12. Review the Alarm Action Rule Summary and click **Finish**.

View or Edit

To view or edit an existing alarm e-mail routing rule:

1. In the header, select Actions and Settings | Alarms | **E-mail Routing**.
2. Click the name of the rule. A series of pages begins.
3. Scroll through the pages to view the rule details or make changes and click **Finish** at the last page.

Delete

To delete alarm e-mail routing rule(s):

1. In the header, select Actions and Settings | Alarms | **E-mail Routing**.
2. Select one or more rule.
3. Click **Delete**.

Building Alarm Action Rules

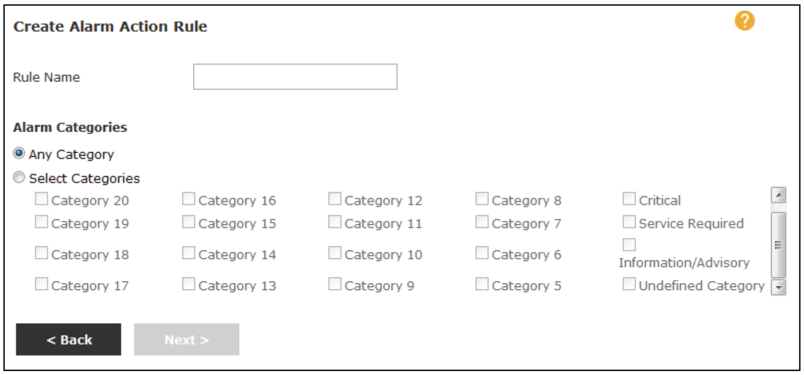
Building specific e-mail routing rules on apply to the specified building, notifying staff about issues in a single building. To create a building e-mail routing rule:

1. Navigate to the building.
2. On the Building Navigation Menu, click Alarms | **Set Up Alarm Actions.**.
3. Click on **Create Alarm Action Rules**
4. Enter a **Rule Name**.
5. Select **Any Category** to select all categories or **Select Categories** to specify only certain

categories.

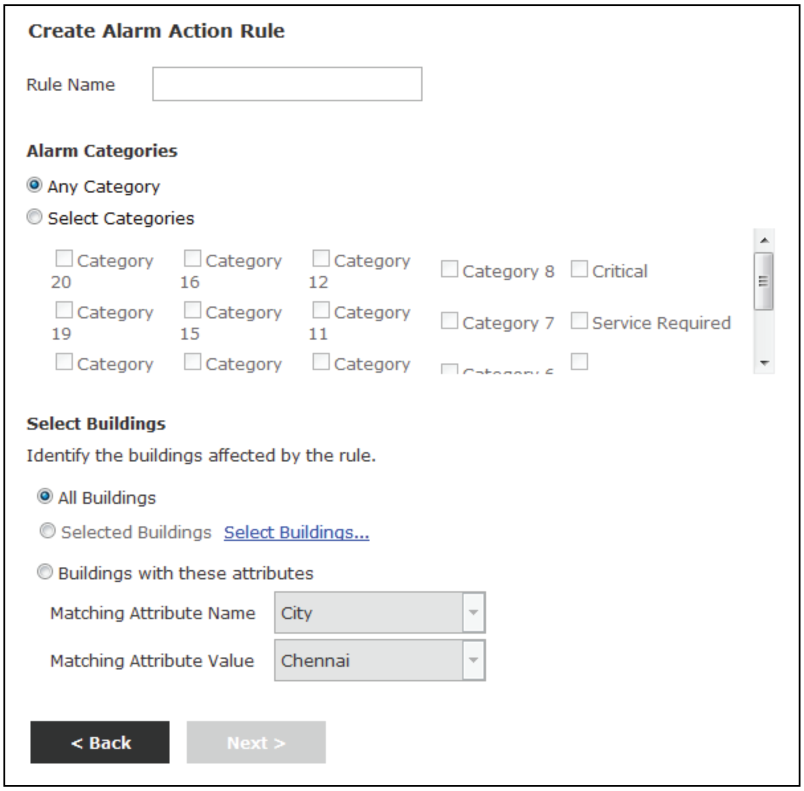
6. Select the building(s) to include in the rule:
   - Select **All Buildings** to receive alarm notifications for all buildings.
   - Select **Selected Buildings** to receive alarm notifications for specified buildings.
   - Select **Buildings with these attributes** and use the drop-down lists to select building attributes.

Figure 24. Create Alarm Action Rule for Building



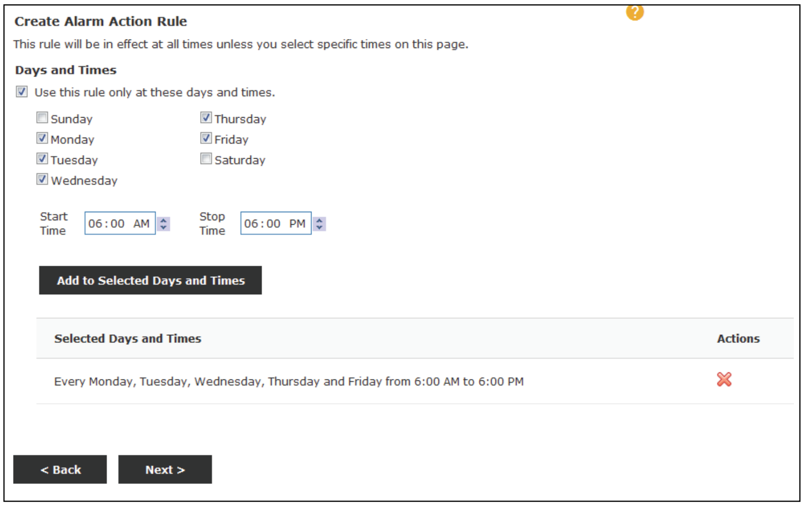
7. In the header, select Actions and Settings | Alarms | **Alarm Actions**.
8. Click **Create Alarm Action Rule**.
9. Enter a **Rule Name**.
10. Select **Any Category** to select all categories or **Select Categories** to specify only certain categories.
11. Select the building(s) to include in the rule:
    - Select **All Buildings** to receive alarm notifications for all buildings.
    - Select **Selected Buildings** to receive alarm notifications for specified buildings.
    - Select **Buildings with these attributes** and use the drop-down lists to select building attributes.

Figure 25. Create Alarm Action Rule



12. Click **Next**.
13. To limit an alarm action rule to specific days and times:
    a. Select Use this rule only at these days and times.
    b. Select one or more days of the week.
    c. Specify a Start Time and a Stop Time.
    d. Click Add to Selected Days and Times.
    e. Repeat Steps b to d as needed to create additional time rules.

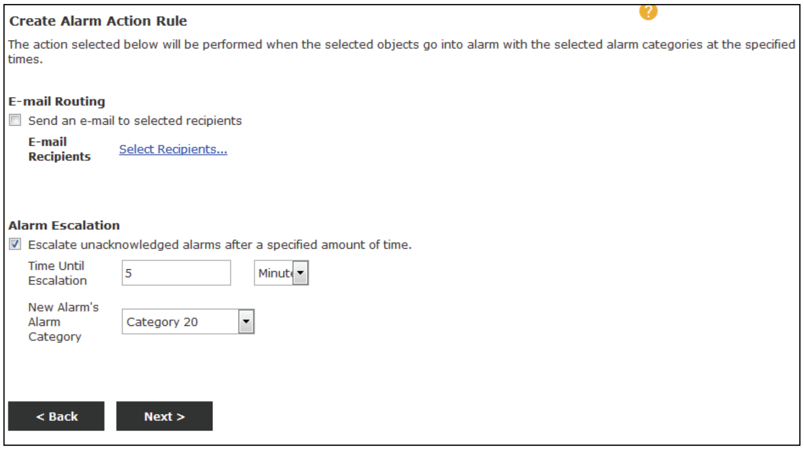
Figure 26. Create Alarm Action: Days and Times



14. Click **Next**.

15. Select **E-mail Routing** to send an e-mail when the selected object meets the alarm conditions.

Figure 27. Create Alarm Action: Alarm Escalation



a. Click **Select Recipients**.
b. Select one or more e-mail recipients from the list and click **Add**. Or enter e-mail addresses into the **Recipients** field.
c. Click **Apply**.

16. Select **Alarm Escalation** to escalate unacknowledged alarms after a specified amount of time.

a. Enter the time, in minutes, after which to escalate the alarm.
b. Enter the alarm's new category.

17. Click **Next**.
18. Review the Alarm Action Rule Summary and click **Finish**.

Scheduling

Scheduling Overview

Tracer Ensemble scheduling capability overlays the native scheduling capabilities of the individual building control panels. When you create, edit, or delete schedules in Tracer Ensemble, your changes are written to the building panels and tracked within the Tracer Ensemble database. You can use the Tracer Ensemble scheduling application to complete the following building-level tasks:

- Create, view, and edit normal schedules.
- Create, view, edit, and cancel exception schedules.
- Create, view, edit, delete, and apply exception templates.
- Activate or Deactivate the emergency schedule.
- View panel schedules.

In addition to the building-level scheduling capabilities, you can use Tracer Ensemble global scheduling abilities to make global changes to schedules and to create, view, edit, or delete the emergency schedule.

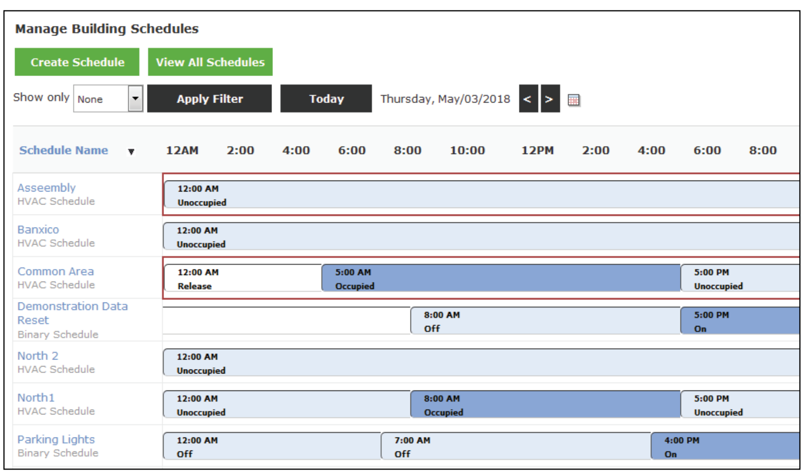
Note: *Tracer Ensemble does not recognize holidays as a separate schedule type. Use exception schedules to create holidays.*

Manage Building Scheduling: Quick Edits

The Manage Building Schedules page shows all schedules for a selected building, listed by name. By default, today is shown, but you can view other days by clicking the < or > buttons or selecting a day from the calendar.

From this page, you can quickly edit a scheduled event or add new events or exceptions to a schedule.

Figure 28. Manage Building Schedules

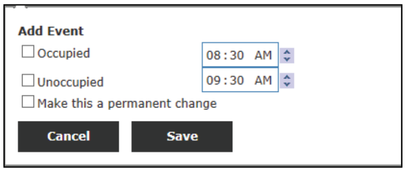


Add New Event

To add a new event:

1. Click anywhere on the bar inside the time chart.
2. The Add Event pop up displays.

Figure 29. Add Event



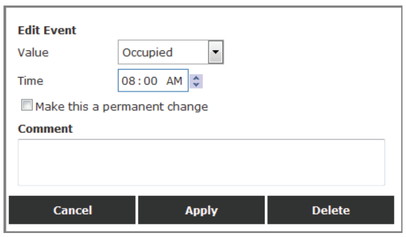
3. Edit the event details.
4. To add the event to the building's normal schedule, check **Make a permanent change**. Do not check this box if this change is an exception.
5. Click **Save**.

Edit Event

To edit an existing event:

1. Click on the name of the existing event. For example, click **Occupied**.

Figure 30. Edit Event



2. Edit the event and click **Apply**.

Normal Schedules

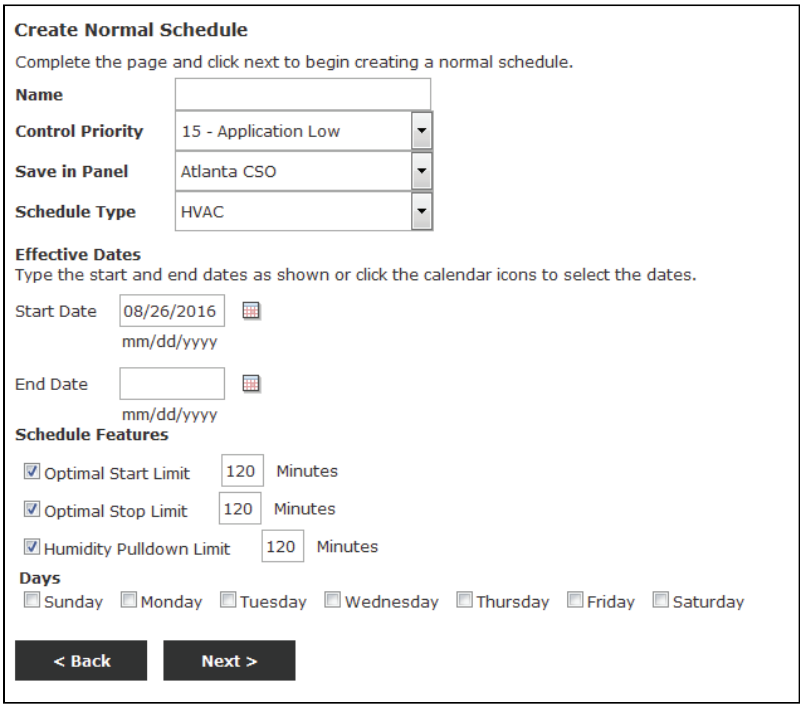
A Normal schedule is also known as a time of day schedule. It is used on a regular basis and under normal circumstances. Normal schedules can be of type HVAC, Lighting, Set Analog, Binary or Multistate. Binary and Multistate schedules are valid only in BACnet-compliant controllers. HVAC schedules are valid only for Trane Tracer SC, Tracer Summit or Tracker panels. Lighting schedules are valid only for Tracer Summit BCU schedules.

Create Normal Schedule

To create a normal schedule:

1. Go to Home | building name | Schedules | **Normal**.
2. Click **Create Schedule.** On the Create Normal Schedule page, enter basic schedule information and dates.

Figure 31. Create Normal Schedule



a. Enter a unique schedule **Name**.

b. Set where to save the schedule in the **Save in Panel** drop down.

c. The **Schedule Type** defines which members and types of events are available in the pages that follow.

d. You must specify a **Start Date** for the schedule, but the **End Date** is optional. If you do not specify an end date, the schedule is applied until it is manually removed.

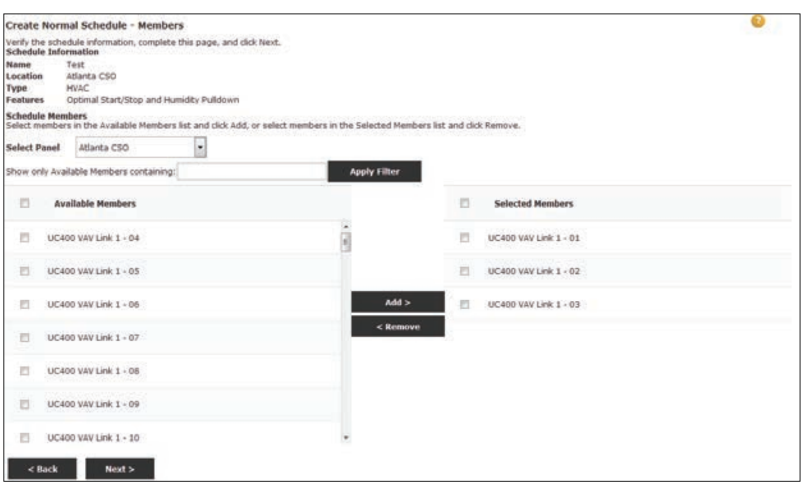
e. Set the **Schedule Features**.

f. Click **Next**.

3. On the Create Normal Schedule - Members page, select the schedule(s) that you wish to apply the exception to. You can select multiple schedules to apply a single exception to.

   Note: *Options vary based on the Schedule Type selected above.*

Figure 32. Create Normal Schedule — Members



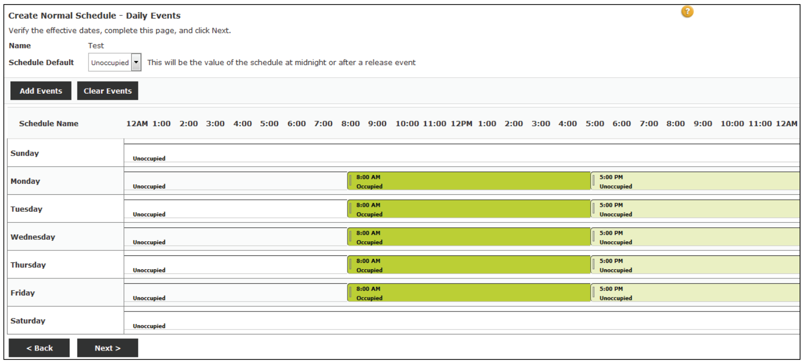
Note: *Only members of the appropriate type are available to be added to the schedule.*

a. Select members in the **Available Members** list and click **Add** to move them to the **Selected Members** list. This assigns them to the schedule.

b. Click **Next**.

4. On the Create Normal Schedule - Daily Events page, specify the events for the schedule you are creating.

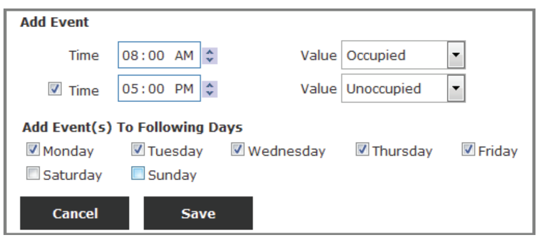
Figure 33. Create Normal Schedule — Daily Events



a. Set the **Schedule Default**. This is the value of the schedule at midnight or after a release event. This only applies to BACnet schedules.

b. To add an event, click **Add Events**.

Figure 34. Add Event



- Set the **Time** and **Value**.
- To end the event (if applicable), check the second **Time** box and set a stop time.
- Set the days for the event to occur.
- Click **Save**.

c. Repeat for each event to add to the schedule.

d. To delete all events from the schedule, click **Clear Events**. Click **Yes** to confirm that you want to delete all events.

e. When finished editing schedule daily events, click **Next**.

5. On the Create Normal Schedule Summary, verify the schedule information, schedule members and event details for accuracy. To modify any part of the schedule, click the **Back** button.

6. Click **Finish** to apply the normal schedule.

Exception Schedules

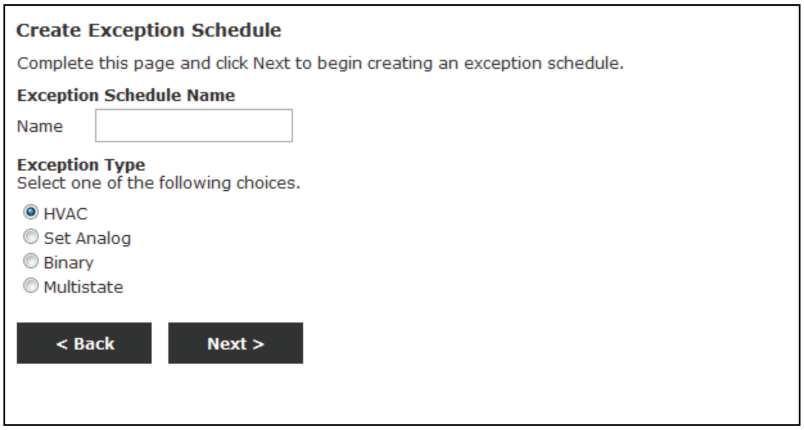
An exception schedule is a temporary schedule that is applied to a normal schedule for specific days. Exceptions can be used for holidays or other occasions that require an extension, reduction, or other change to typical building operation. The start date is always defined and the end date is typically defined, but not required.

Create

To create an exception schedule:

1. Go to Home | building name | Schedules | **Exceptions**.
2. Click **Create New Exception Schedule**.

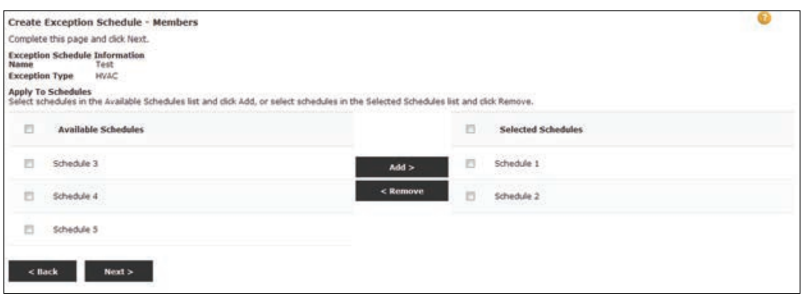
Figure 35. Create Exception Schedule



   a. Enter a unique exception schedule **Name**.
   b. Select an **Exception Type**. The type determines which schedules will display on the next page.
   c. Click **Next**.

3. On the Create Exception Schedule - Members page, select the schedule that you wish to apply the exception to. You can apply the exception to multiple schedules.

Figure 36. Create Exception Schedule — Members

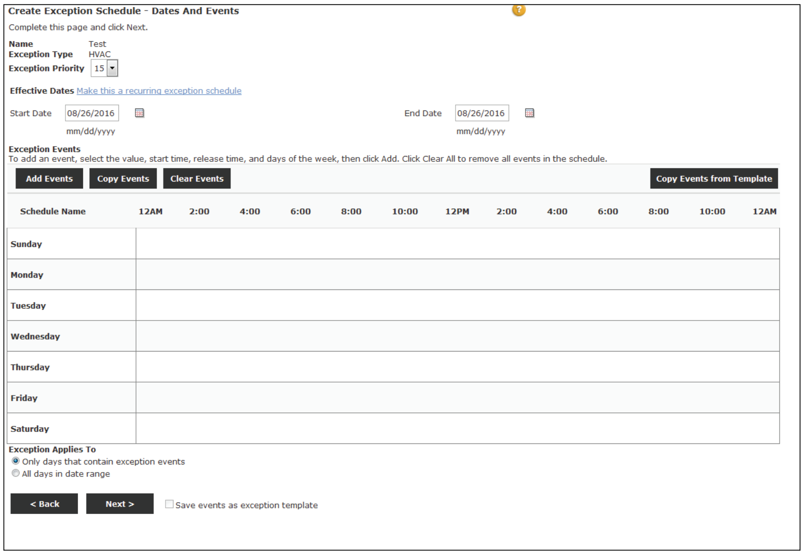


   Note: *Only schedules of the selected schedule type are available to be added to the exceptions schedule.*

   a. Select affected schedules in the Affected Schedules list and click **Add** to move them to the Selected Schedules list. This assigns them to the schedule.
   b. Click **Apply**.

4. On the Create Exception Schedule - Days and Events page, specify the exception events.

Figure 37. Create Exception Schedule — Days and Events



a. Set the **Priority** of the exception. The priority of the exception is relative to other exceptions. It does not change the priority with which the affected schedules write to members.

Note: *The priority levels available to you are determined by your role permissions. By default, the priority level is the highest level override priority for your role.*

b. Specify a **Start Date** and **End Date** (if applicable) for the schedule. If both days are the same, the exception will be effective for that day only.

c. Make your schedule changes:

- To add a new event, click **Add Events**. Select a start time, end time (if applicable), and values. Click **Save**.
- To copy events from a different day of the week, click **Copy Events**. Select the day to **Copy events from** and select one or more day to copy events to. Click **Copy**.
- To delete all events from the schedule, click **Clear Events**. Click **Yes** to confirm.
- To copy events from a template, click **Copy Events from Template**. Select the template and click **Add**.

d. Select when the schedule applies:

- Select **Only days that contain exception events** if you do not want the exception to apply to days that have no events in them.
- Select **All days in the date range** if you want the exception schedule to include days that do not have events defined. This will include days without events from the exception schedule.

e. Click **Next**.

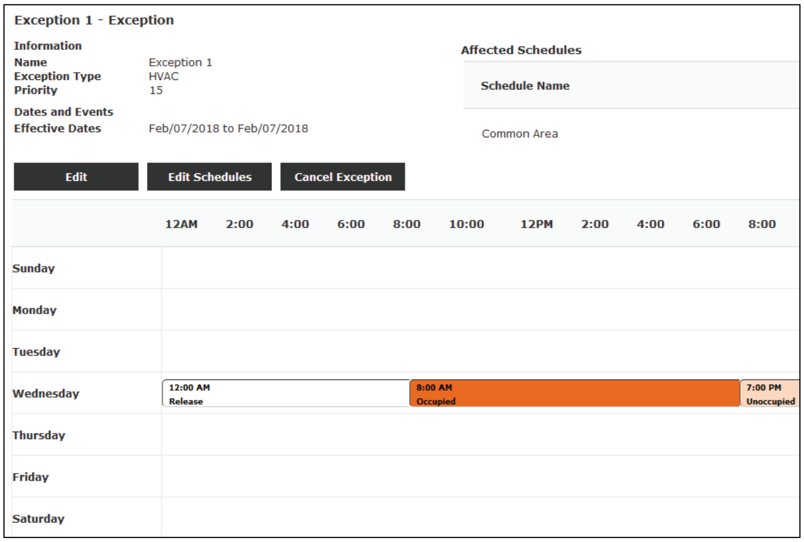
5. On the **Create Exception Schedule Summary**, verify the schedule information, schedule members and event details for accuracy. To modify any part of the schedule, click the Back button.
6. Click **Finish** to apply the exception schedule.

View/Edit

To view or edit an exception schedule:

1. Go to Home | building name | Schedules | **Exceptions**.
2. Click on the name of the exception schedule. The schedule summary page contains all viewable information about the schedule.

Figure 38. Edit Exception Schedule



3. Edit the schedule:
   - Click **Edit** to edit the exception events. Edit the exception events and click **Save**.
   - Click **Edit Schedules** to edit the affected schedules. Add or remove affected schedules and click **Save**.
   - Click **Cancel Exception** to delete the exception. Click **Yes** to confirm.
4. Repeat step 3 for additional changes.

Data Logging

Use data logging in Tracer Ensemble to collect historical data from your building control systems. This data can be used for a variety of purposes, from monthly energy usage reporting to equipment troubleshooting. After the data is collected, you can view one or more logs as a graph or a table in Tracer Ensemble or you can export the data for use by other applications for storing or presenting the data.

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Types of Data Logs

There are two types of data logs: panel data logs and data logs created directly from Tracer Ensemble.

- **Panel data logs (best practice)**—A panel data log is trend log (data that is being directly collected and stored in a building-level controller) being read/harvested by Tracer Ensemble. Because the trend log already has a sampling frequency, you only need to specify when the data is collected. And because the data is collected and stored in the panel when it is sampled, Tracer Ensemble does not need to collect each sample one at a time. Setting up data logs in the panel and then harvesting them in Tracer Ensemble is considered best practice because if there is a loss in communication between the Tracer Ensemble server and a panel, all missed data will be available once communication is restored.
- **Tracer Ensemble data logs**—This type of data log is set up directly in Tracer Ensemble. You select a data point of interest and specify details about when the data is sampled, and Tracer Ensemble requests and records the data according to your specification. The data is sampled and collected at the same time. These direct data logs are mainly used to augment existing data logs with different time intervals or as method to capture additional critical data. Be aware that when communication is lost between the server and controller where the data is being collected, all data will be lost during that time period.

View

To view data logs:

1. Go to Home | building name.
2. Click **Data Logs**.
3. Select one or more data logs and click **View**.

Create

Standard Data Logs

1. Go to Home | building name.
2. Navigate to the status page containing the data points you want to log.
3. Select one or more data points.
4. Click **Set Up Data Logs**. A series of pages begins.
5. Complete each page in the series and click **Finish** at the last page.

Panel Data Logs

1. Go to Home / building name.
2. Click **Data Logs**.
3. Click **Map Panel**.
4. Select one or more trends. Click **Next**. A series of pages begins.

5. Complete each page in the series and click **Finish** at the last page.

Edit

To edit data logs:

1. Go to Home | building name.
2. Click **Data Logs**.
3. Select a data log and click **Edit.**
4. Edit the data log.
5. Click **Save**.

Export

To export data logs:

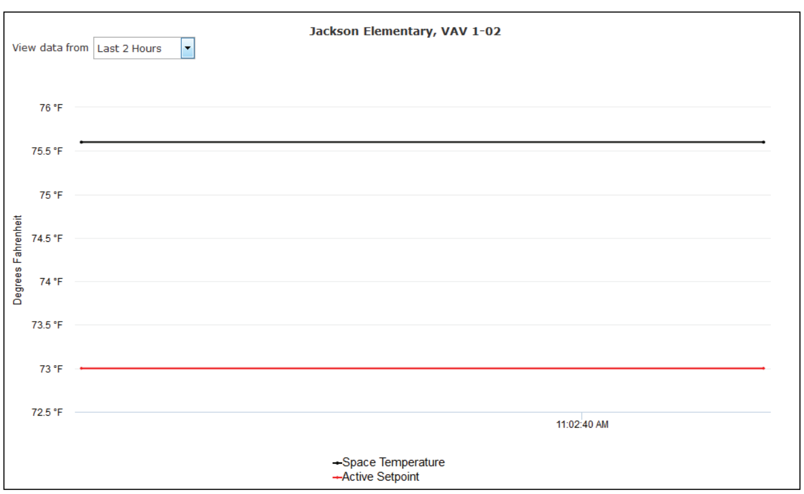
1. Go to Home | building name.
2. Click **Data Logs**.
3. Select one or more data logs and click **Export**.
4. Select the **Format**, enter a **File Name**, and select the **Display Period**.
5. Click **Finish**.

View Live Data

Tracer Ensemble allows you to view live data trends for one or more points. To access live data trends for spaces or equipment:

1. Navigate to the building.
2. On the left hand menu, click Spaces or Equipment.
3. Click on the desired space or equipment.
4. On the status tab, select one or more points and click View Live Data. A pop-up window displays.
5. Select the desired data period.

Figure 39. View Live Data



Reporting

Standard Reports

Tracer Ensemble has the following standard reports:

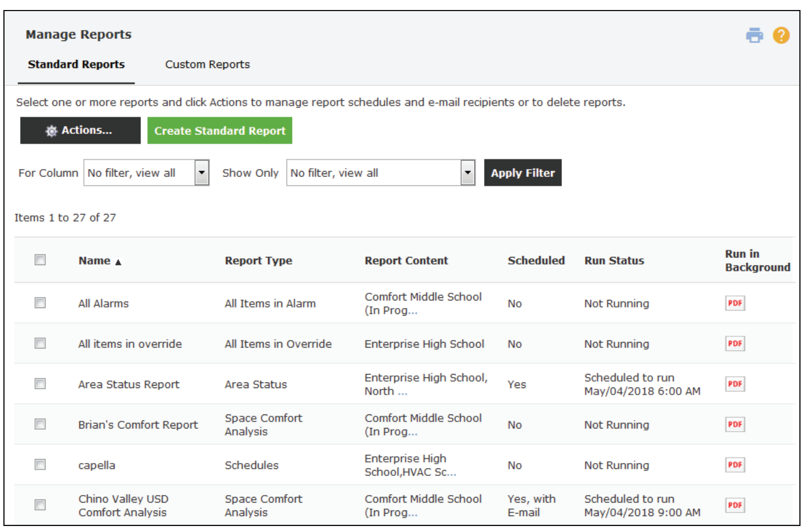
- **Air Handler Status**: details the current status and a brief history of the operation of the selected air handler.
- **Air System Status**: details the current status and a brief history of the operation of the selected variable air system (VAS).
- **All Items in Alarm**: details all points that are in the alarm for the selected buildings.
- **All Items in Override**: details all points that are in the override for the selected buildings.
- **Area Status**: details the current status and a brief history of the operation of the selected area.
- **Chiller Plant Status**: details the current status and a brief history of the operation of the selected Chiller Plant.
- **Chiller Status (ASHRAE):** industry standard chiller status report for one or more chillers in one or more buildings.
- **Schedules**: List of all weekly events for all schedules in the selected building(s).
- **Site Comissioning**: details the value of all points in the selected buildings.
- **Space Comfort Analysis**: List of spaces which meet the following criteria for potential comfort issues: temperature variance, high temperature, low temperature, unoccupied spaces.
- **Space List**: Current status of multiple spaces in the selected building(s).
- **Space Status**: details the current status and a brief history of the operation of the space.

Create New Standard Report

To create a new standard report:

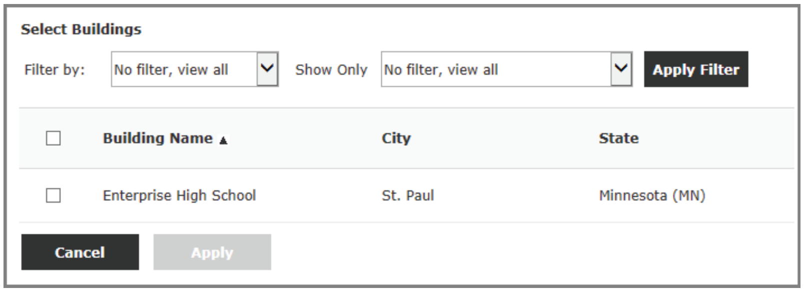
1. Select Reports | **Manage Reports**.
2. Click the **Standard Reports** tab.

Figure 40. Standard Reports



3. Click **Create Standard Report**.
4. Select a **Report Type**.
5. Click **Select Buildings**.

Figure 41. Standard Reports: Select Buildings



6. Select one or more buildings and click **Apply**.
7. Enter a **Report Name**.
8. Click **Save**.

Custom Reports

The Tracer Ensemble Custom Report Designer allows you to create meaningful, customized reports with minimal effort. You select the system, building, and equipment data point(s), set time parameters, and add graphics and text to the report.

Create New Custom Report

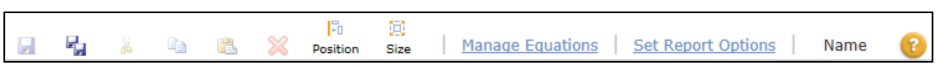
To access the Report Designer to create a new report:

1. On the header, hover over Reports and click **Manage Reports**.
2. On the Custom Reports tab, click **Create New Report**.
3. Add elements to your report.

Report Toolbar

The report toolbar, which runs along the top of the screen, contains tools to edit and format the report:

Figure 42. Report Toolbar



- **Save**
- **Save As**: use this to save the elements in the report as a new report with a different name.
- **Cut**
- **Copy**
- **Paste**: pasted elements are formatted and contain the same data mapping as the original element.
- **Delete**
- **Position**: select two or more items to align. Select alignment options from the menu.
- **Size**: select two or more report items to resize. Select size options from the menu. Note
- that only charts can be resized..
- **Manage Equations**: accesses the Custom Equation Editor.
- **Set Report Options**: set or update report information:
  - Report Name
  - Description
  - Page Size and Orientation
- **Name**: the name of your report. This only displays after you have saved your report.

Adding Content

To add content to your report, drag elements from the tool palette on the left-hand side of the screen to the report canvas in the middle of your screen. Individual elements can be resized by dragging their borders or moved by clicking and dragging.

Report Elements

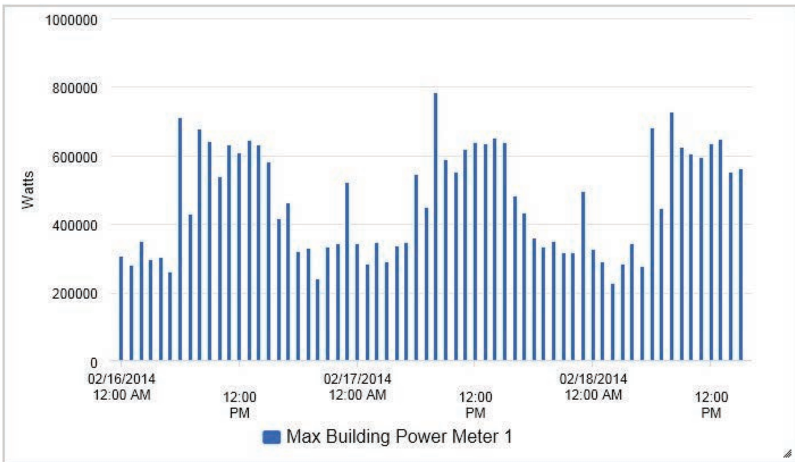
You can add the following elements to your custom report:

Bar Chart

Use a Bar Chart to compare and contrast groups of data, such as average energy usage for a particular space at different times throughout the day.

To add a Bar Chart to your report, drag the Bar icon from the tool palette to the report canvas. Edit the Bar Chart title, chart period, data sources, and formatting in the element properties box on the right side of the screen.

Figure 43. Bar Chart Example

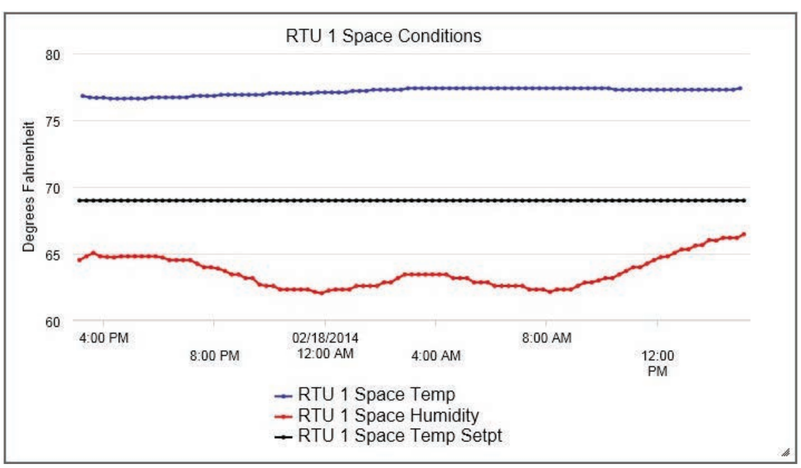


Line Chart

Use a Line Chart to show data trends, such as space temperature and humidity during a specific time period.

To add a Line Chart to your report, drag the Line icon from the tool palette to the report canvas. Edit the Line Chart title, chart period, data sources, and formatting in the element properties box on the right side of the screen.

Figure 44. Line Chart Example

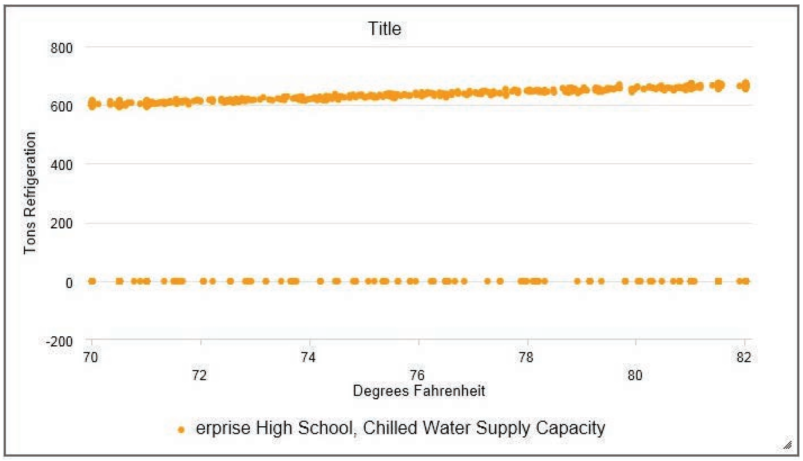


Scatter Chart

Use a Scatter Chart to show a relationship between two sets of data, for example how much energy is used in relation to temperature changes.

To add a Scatter Chart to your report, drag the Scatter icon from the tool palette to the report canvas. Edit the Scatter Chart title, chart period, data sources, and formatting in the element properties box on the right side of the screen.

Figure 45. Scatter Chart Example

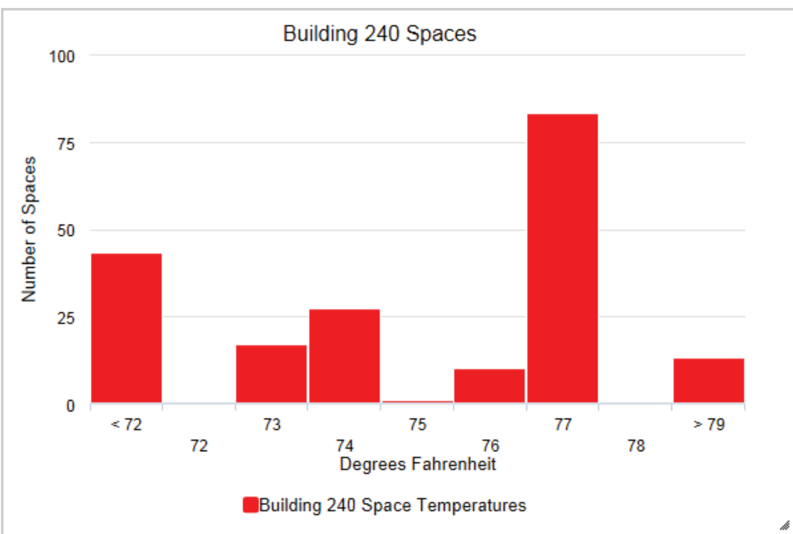


Histogram

Use a Histogram to analyze the frequency of data, such a s the number of spaces that are within a temperature range.

To add a Histogram to your report, drag the Histogram icon from the tool palette to the report canvas. Edit the Histogram Chart title, chart period, axis labels, data ranges and sources, and formatting in the element properties box on the right side of the screen.

Figure 46. Histogram Example



Pie Chart

Use a Pie Chart to compare parts of a whole.

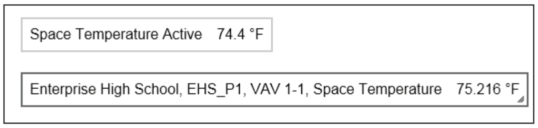
To add a Pie Chart to your report, drag the Pie icon from the tool palette to the report canvas. Edit the Pie Chart title, data sources, and formatting in the element properties box on the right side of the screen.

Single Value

Use a Single Value to report on one specific data point, such as a space temperature.

To add a Single Value to your report, drag the Single Value icon from the tool palette to the report canvas. Edit the Data Value label, data period, data source, and formatting in the element properties box on the right side of the screen.

Figure 47. Single Value



Values Table

Use a Values Table to convey multiple data points in table form, such as airflow, occupancy, and space temperature for a specific space.

To add a Values Table to your report, drag the values table icon from the tool palette to the report canvas. Edit the Values Table period, data source, and formatting in the element properties box on the right side of the screen.

Figure 48. Values Table

Date and Time	Enterprise High School, Enterprise High School, Classroom 101, Air Flow (units:CFM)	Enterprise High School, Enterprise High School, Classroom 101, Air Flow Setpoint Active (units:CFM)	Enterprise High School, Enterprise High School, Classroom 101, Occupancy	Enterprise High School, Enterprise High School, Classroom 101, Space Temperature (units:°F)
02/24/2014 12:51 PM	215.764	206.739		74.987
02/24/2014 1:03 PM			Occupied	
02/24/2014 1:06 PM	201.828	206.482		74.727
02/24/2014 1:18 PM			Occupied	
02/24/2014 1:21 PM	170.576	166.889		74.506
02/24/2014 1:33 PM			Occupied	
02/24/2014 1:36 PM	132.128	104.916		74.227
02/24/2014 1:48 PM			Occupied	
02/24/2014 1:51 PM	132.466	151.967		74.954
02/24/2014 2:03 PM			Occupied	
02/24/2014 2:06 PM	152.568	167.740		75.367

Data Log Table

Use a Data Log Table to display a data log.

To add a Data Log Table to your report, drag the data log table icon from the tool palette to the report canvas. Edit the Data Log Table period, data source, and formatting in the element properties box on the right side of the screen.

Figure 49. Data Log Table Example

Date and Time	Enterprise High School, EHS_P1, VAV 1-1, Space Temperature
02/21/2014 12:14 AM	74.720 °F
02/21/2014 12:29 AM	74.850 °F
02/21/2014 12:44 AM	74.564 °F
02/21/2014 12:59 AM	74.764 °F
02/21/2014 1:14 AM	73.881 °F
	. . .

User Change Log Table

Use a User Change Log Table to display user changes for specified criteria.

To add a User Change Log Table to your report, drag the user change log table icon from the tool palette to the report canvas. Edit the User Change Log Table period, data source, and formatting in the element properties box on the right side of the screen.

Text

Use the Text element to add text to your report.

To add Text to your report, drag the text icon from the tool palette to the report canvas.

Image

Use the Image element to add photographs or graphics to your report. To add an Image to your report:

1. Drag the image icon from the tool palette to the report canvas.
2. In the properties pane on the right-hand side of the screen, click Browse.
3. Select the file and click Upload.

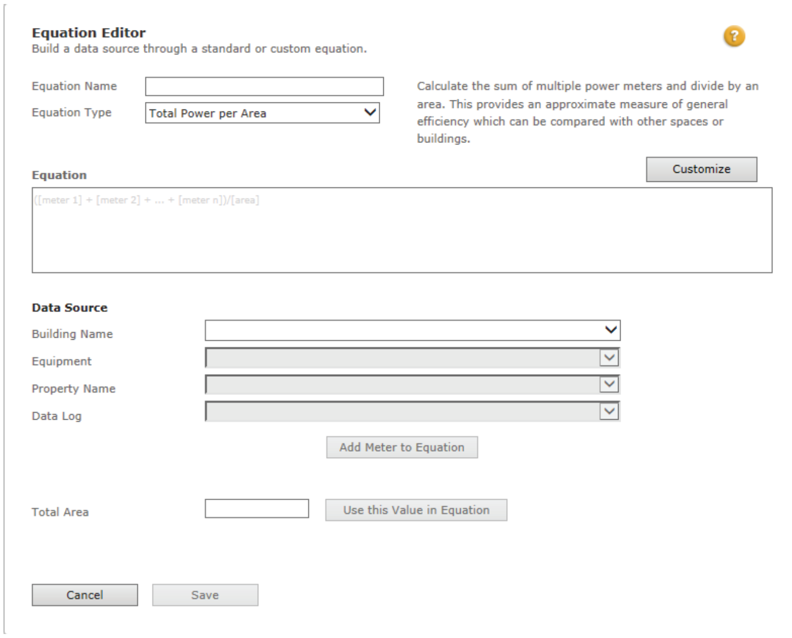
Equation Editor

The equation editor allows you build complex data sources for use in custom reports. To access the equation editor, click Manage Equations in the report toolbar.

To create a new equation:

1. Click Create Equation.
2. Enter an Equation Name.
3. Select an Equation Type:
   - Total Power Per Area and Total Power are standard equations, allowing you to quickly build a data source.
   - Custom allows your to build a complex data source by creating a custom equation.

Figure 50. Equation Editor



Standard Equation

To build a standard equation:

1. Select a **Building Name**.
2. Select the **Equipment**.
3. Select the **Property Name**.
4. Select a **Data Log**.
5. Click **Add Meter to Equation**.
6. Enter the **Total Area** and click **Use this Value in Equation**. (Only for Total Power per Area).
7. Click **Save**.

Custom Equation

To build a custom equation:

1. Select a **Data Source** using the drop down menus. The menus will update dynamically based on your selections.
2. Create a **Nickname** for the data source (optional). Use of nickname(s) may make your equation easier to understand.
3. Click **Insert into Equation** to include the selected data source in the equation.
4. Use the provided operators and number functions to perform calculations.
5. Repeat steps 2 and 3 until your equation is complete.
6. Click **Save** to save your equation.

Managing Reports

After you have created custom or standard reports, you schedule reports to run at regular intervals, export reports, and set up e-mail notifications to that interested parties receive reports when they are generated.

Scheduling Reports

To schedule a report to run at regular intervals or to replace an existing report schedule with a new schedule:

1. Select Reports | **Manage Reports**
2. Click either the **Standard Reports** or **Custom Reports** tab.
3. Select one or more reports that you want to schedule.
4. Select Actions | **Create / Replace Schedule**.
5. Edit the **Schedule Events** section:
   a. To create new Schedule Events, click the edit icon.
   b. **Add Dates** for the event. Select the reoccurrence (single date, date range, weekly, monthly, or yearly) and the details.
   c. **Add Time** that the event occurs.
   d. Click **Add to Effective Dates and Times** to add the event to your schedule.
   e. Repeat steps b-d for each event.
   f. For custom reports, select how the report should be formatted. Choose PDF and/or Excel. If you select Excel, you can choose to have a new Excel file created each time the report is run or reuse the existing Excel file, appending a new worksheet to the file each time the report is run.
   g. To save your changes, click the save icon.
6. Edit the **E-mail** section.
   a. To create new or edit existing e-mail settings, click the edit icon.
   b. To add e-mail recipients, click the **To**: or **Cc**: buttons.
   c. Select recipients from list of Tracer Ensemble users and click **Add**. Or to add additional e-mail recipients, type in e-mail addresses in the Recipients field.
   d. Click **Apply**.
   e. By default, the e-mail subject is the report name. To customize the subject, uncheck **Use the report name as the subject** and enter the subject line in the **Subject** field.
   f. Enter a **Message** to include with the report (optional).
   g. To save your changes, click the save icon.

Editing Report Schedules

To edit a report's schedule:

1. Select Reports | **Manage Reports.**
2. Click either the **Standard Reports or Custom Reports** tab.
3. Select the report that you want to edit the schedule for. Note that you can only edit the report schedule for a single report at a time.
4. Select Actions | **Edit Report Schedule**.
5. To update the **Schedule Events** section, click the edit icon. Make your changes and click the save icon.
6. To update the **E-mail** section, click the edit icon. Make your changes and click the save icon.

Appending Schedule Events

After creating a schedule for a report, you can append the schedule, adding additional dates and times to run the report without having to recreate the entire schedule. To append a report schedule:

1. Select Reports | **Manage Reports**.
2. Click either the **Standard Reports** or **Custom Reports** tab.
3. Select one or more reports that you want to append the schedule for.
4. Select Actions | **Append Schedule Events**.
5. **Add Dates** for the event. Select the reoccurrence (single date, date range, weekly, monthly, or yearly) and the details.

6. **Add Time** that the event occurs.
7. Click **Add to Effective Dates and Times** to add the event to your schedule.
8. Repeat steps 5-7 for each event.
9. Click **Save** to save your changes.

Appending E-Mail Recipients

After creating a schedule for a report, you can append the e-mail recipients, adding additional email recipients quickly and easily. To append a report's e-mail recipients:

1. Select Reports | **Manage Reports**.
2. Click either the **Standard Reports** or **Custom Reports** tab.
3. Select one or more reports that you want to append the e-mail recipients for.
4. Select Actions | **Append E-mail Recipients**.
5. Select recipients from list of Tracer Ensemble users and click **Add**. Or to add additional e-mail recipients, type in e-mail addresses in the Recipients field.
6. Click **Save** to save your changes.

Suspending/Resuming Schedules

After creating a schedule for a report, you can suspend the report schedule so the report does not run. This allows you to preserve the schedule and easily resume running the report when desired. To suspend or resume a report schedule:

1. Select Reports | **Manage Reports**.
2. Click either the **Standard Reports** or **Custom Reports** tab.
3. Select one or more reports that you want to suspend or resume the schedule for.
4. Select Actions | **Suspend/Resume Schedules**.

Cancelling Schedules

To cancel a report's schedule:

1. Select Reports | **Manage Reports**.
2. Click either the **Standard Reports** or **Custom Reports** tab.
3. Select one or more reports that you want to cancel the schedule for.
4. Select Actions | **Cancel Report Schedules**.

Deleting Reports

To delete a report definition from Tracer Ensemble:

1. Select Reports | **Manage Reports**.
2. Click either the **Standard Reports** or **Custom Reports** tab.
3. Select one or more reports that you want to delete.
4. Select Actions | **Delete Report** .
5. Confirm that you want to delete the report. Click **Delete (Custom or Standard) Report**.

Note: *Deleting a custom or standard report definition from Tracer Ensemble does not delete any system data.*

Exporting Reports

Report definitions for custom reports can be exported from Tracer Ensemble. To export a custom report definition:

1. Select Reports | **Manage Reports**.
2. Click the **Custom Reports** tab.
3. Select the report that you want to export.

4. Select Actions | **Export Report** .
5. Save the file to a local drive.

Completed Reports

Completed reports are reports that have been generated based on either a standard or custom report definition. Completed reports capture data at a particular point in time - when the report was either run manually or systematically by Tracer Ensemble.

To access completed reports:

1. Select Reports | **Completed Reports**.
2. Click either the **Standard Reports** or **Custom Reports** tab.
3. A table with all completed standard reports displays. From here, you can filter results and/or view, e-mail, or delete completed reports.

Filtering Completed Reports

To filter report results, select a filter from the **For Column** drop-down list, enter or select filter constraints and click **Apply Filter**. For example, to show reports for "Building 1", select Name, enter "Building 1", and click Apply Filter.

E-mailing Completed Reports

To e-mail completed reports:

1. Select one or more reports.
2. Select Actions | **Send E-mail**.
3. Complete the e-mail recipients, subject, and message field on the form.
4. Click **Send**.

Deleting Completed Reports

To delete completed reports:

1. Select one or more reports.
2. Select Actions | **Delete Reports**.
3. Confirm that you want to delete the report. Click **Yes**.

Managing Users

Users with the appropriate permissions can:

- Create, view, edit, delete, activate, and deactivate user profiles.
- Create, edit, delete, and assign user roles.
- View and edit user preferences.

User Profiles

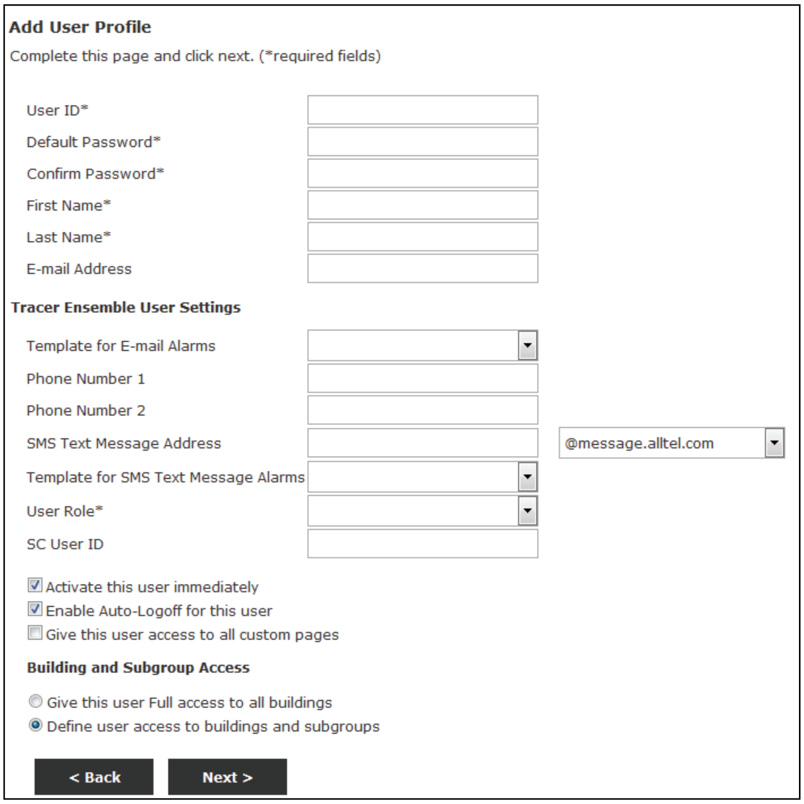
For security reasons, each Tracer Ensemble user should have his or her own user profile. The Tracer Ensemble profile contains a User ID, private password, access role, building and graphics permissions, and contact or other information.

Create User Profiles

To create a user profile:

1. Go to Actions and Settings | **Add a New User**.
2. On the Add User Profile screen, complete the required fields:
    - Personal & contact information: **User ID**, **Default Password** (for new profiles), **First Name**, **Last Name**, **Phone Number 1** & **2**, and **E-mail Address**. Fields with * are required.
    - **Template for E-mail Alarms** defines which alarm message template will be used when an alarm message is e-mailed to the user.
    - **SMS Text Message Address** is the ten-digit phone number and mobile phone service provider name to be used for sending SMS text messages. (For example 651-555-1234 @ Sprint.)
    - **Template for SMS Text Message Alarms** defines which alarm message template will be used when an alarm message is sent by SMS text message to the user.
    - **User Role** determines how much access a user will have based on roles defined by the system administrator.
    - If the user is going to have Direct Link Access to Tracer SCs, enter the **SC User ID**.
    - For new user profiles, **Activate this user immediately** can be selected for immediate use or cleared to deactivate the user but retain the account in the database.
    - **Enable Auto-Logoff** can be selected to force the system to log out the user after a period of inactivity.
    - **Give this user access to all custom pages** can be selected to permit the user to access all custom pages, which are pages with custom graphics on them.
    - **Give this user FULL access to all buildings** can be selected to permit the user to access all buildings in the system.

Figure 51. Add User Profile



Add User Profile

Complete this page and click next. (*required fields)

User ID*
Default Password*
Confirm Password*
First Name*
Last Name*
E-mail Address

Tracer Ensemble User Settings

Template for E-mail Alarms
Phone Number 1
Phone Number 2
SMS Text Message Address @message.alltel.com
Template for SMS Text Message Alarms
User Role*
SC User ID

Activate this user immediately
Enable Auto-Logoff for this user
Give this user access to all custom pages

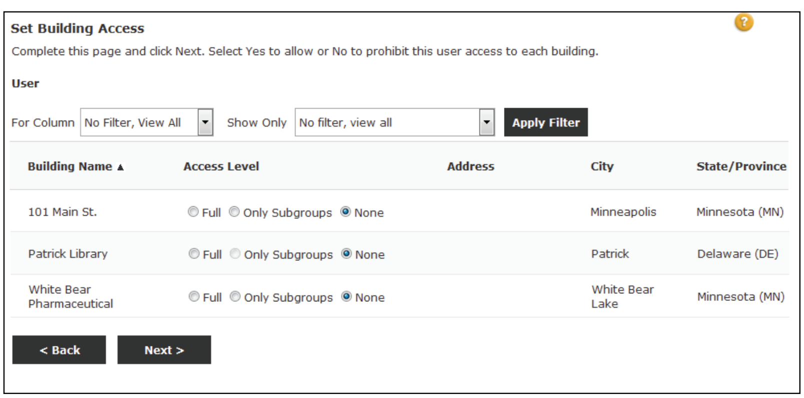
Building and Subgroup Access

Give this user Full access to all buildings
Define user access to buildings and subgroups

< Back Next >

3. Click **Next**.
4. If you did not select **Give this user FULL access to all buildings** on the previous page, the Set Building Access screen displays. Specify the user's access for each building:
   - Selecting **Full** permits the user to access everything in the building.
   - Selecting **Only Subgroups** permits the user to see only the subset of equipment that is assigned to their subgroup(s). The user cannot perform building discovery or configuration. Select subgroups from the popup list and click Save.
   - Selecting **None** denies the user access to the building.

Figure 52. Set Building Access



Set Building Access

Complete this page and click Next. Select Yes to allow or No to prohibit this user access to each building.

User

For Column No Filter, View All Show Only No filter, view all Apply Filter

Building Name ▲	Access Level	Address	City	State/Province
101 Main St.	Full Only Subgroups None		Minneapolis	Minnesota (MN)
Patrick Library	Full Only Subgroups None		Patrick	Delaware (DE)
White Bear Pharmaceutical	Full Only Subgroups None		White Bear Lake	Minnesota (MN)

< Back Next >

5. On the Assign Custom Graphic Access page, specify the user's access to custom graphics and click **Next**.
6. On the User Profile Summary Screen, review the user's Personal Information.

7. Click **Back** to make changes or **Finish** to save the role to the database with the information as it is shown.

View or Edit User Profiles

To view or edit a user profile:

1. Go to Actions and Settings | **User Profiles**.
2. Click the user's name. The User Role Summary displays.
3. To edit the user profile, click **Edit Profile**. A series of pages begins. Edit the profile as necessary.
4. Complete each page in the series and click **Finish** at the last page.

Activate/Deactivate User Profiles

You can deactivate unneeded user profiles, saving all of the profile settings. Deactivated user profiles can then reactivate at a later date. You can also create a profile and leave it inactive until needed.

To activate/deactivate user profiles:

1. Go to Actions and Settings | **User Profiles.**
2. Select the profile(s) to activate or deactivate.
3. Click **Activate** to activate the profile(s) or click **Deactivate** to deactivate the profile(s).

User Roles

Each user profile must be assigned to a role, which defines what type of equipment or activities the user is permitted access.

- **Equipment Permissions**: Users assigned to a user role can have varying levels of access with each broad category (such as Chillers) or even sub-category (Absorbtion Chillers) of equipment that Tracer Ensemble can interact with can Permission levels are None, View, Override, and Full.
- **Application and Administrative Permissions**: Users assigned to a user role can have permission to perform tasks as they're organized by the Tracer Ensemble application categories (editing schedules or inserting comments in alarms).

You must assign a profile to a role when you create the profile, but you can also change the role assignment by editing the profile.

Preconfigured Roles

Tracer Ensemble comes with four preconfigured roles:

- **Administrator**: full access to all equipment, applications, and administrative functions.
- **Advanced Building Operator**: full access to all equipment, access to all applications except Point Service Override, view access to User Administration, and access to all Global Applications except the BACnet Viewer and Reports.
- **Building Operator**: full access to all equipment, access to all applications except Point Service Override, no access to Site Administration, User Administration, or Global Applications,
- **View**: view only access to equipment, alarms, schedules, and data logs.

Create User Role

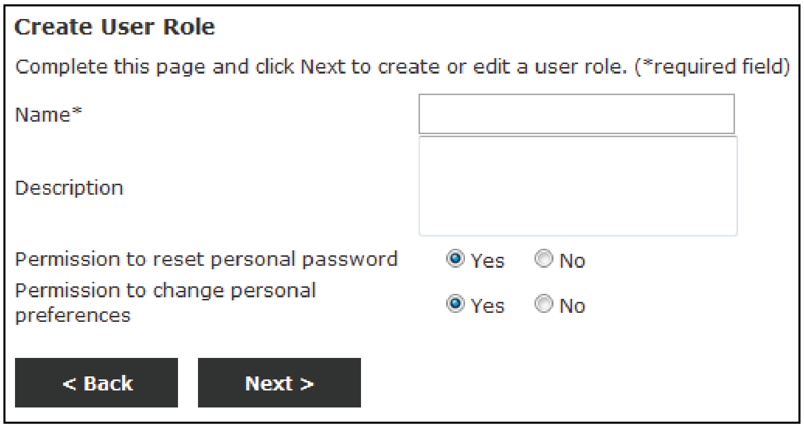
To create a new role:

1. Go to Actions and Settings | **User Roles**.
2. Click **Add a New Role**.
3. On the Create User Role screen:
    a. Enter a descriptive **Name** for the role and **Description** (optional).

b. Indicate if users assigned to this role can reset their passwords or change their personal preferences.

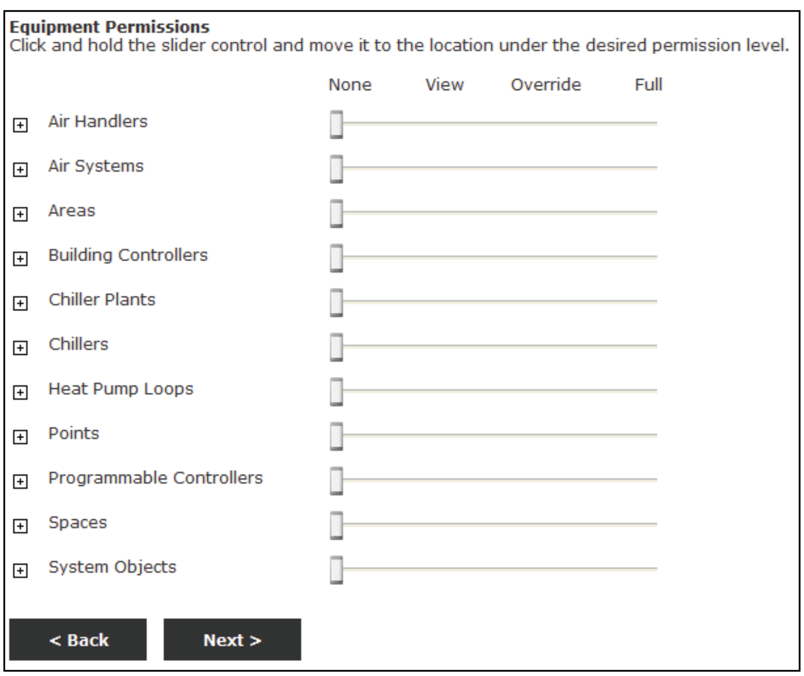
c. Click **Next.**

Figure 53. Create User Role



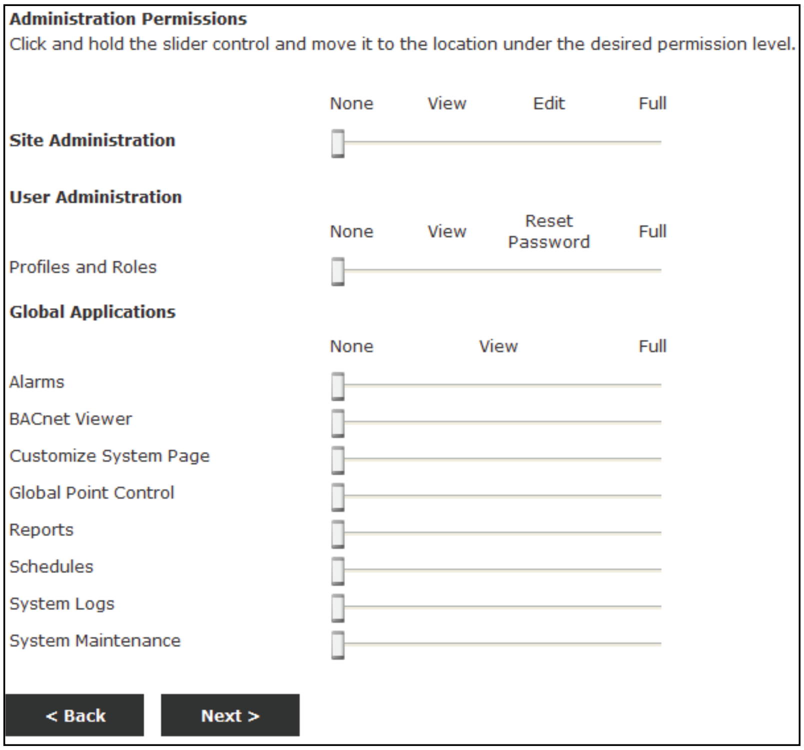
4. On the Equipment Permissions screen, set the permission level for each type of equipment and click **Next.**
   - **None** means users will be unable to view or make any changes to the equipment type.
   - **View** means users will be able to see data for the equipment type, but they will be unable to make any changes.
   - **Override** means users can view and apply overrides to objects in the equipment type. The priority level of the user's overrides is limited by the level set on the next page in the series.
   - **Full** means users have full access to the equipment type.

Figure 54. Equipment Permissions



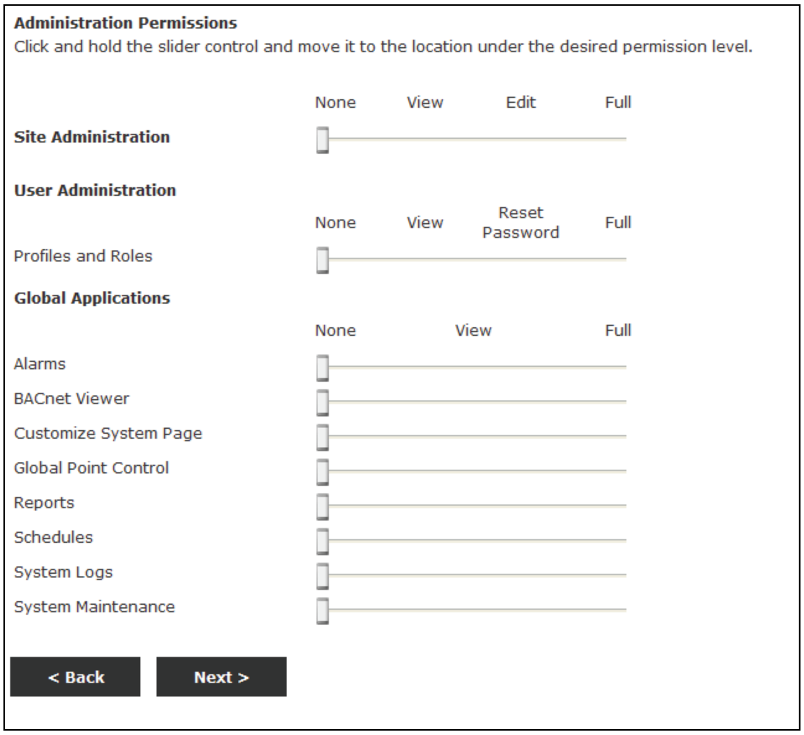
5. On the Application Permissions screen, set access for Alarms, Data Logs, Overrides, Schedules, All Data Logs, Global Change, and Direct Link to Panel. Click **Next.**

Figure 55. Application Permissions



6. On the Administrative Permissions screen, set access for Site Administration, User Administration, and Global Applications. Click **Next.**
   - **None** means users will be unable to view or make any changes within the category.
   - **View** means users will be able to see data in the category, but they will be unable to make any changes.
   - **Edit** (for Site Administration only) means users can make changes, but cannot delete buildings.
   - **Reset** Password (for User Administration only) means users can reset profile passwords, but have no additional user administration privileges.
   - **Full** means users have full access to the category. For Site administration, Full access means users can delete buildings.

Figure 56. Administrative Permissions



7. On the User Role Summary screen, review the Role Information and Equipment, Application, and Administration Permissions for the role. Verify that the information in each section is correct.
8. Click **Back** to make changes or **Finish** to save the role to the database with the information as it is shown.

Edit Existing Role

To edit an existing role:

1. Go to Actions and Settings | **User Roles**.
2. Click the name of the role. The User Role Summary page appears. All of the settings for the role are shown on the page.
3. Click **Edit**. A series of pages begins. Edit the role as necessary.
4. Complete each page in the series and click **Finish** at the last page.

Delete Role

To delete a role:

1. Verify that there are no User IDs assigned to the role you want to delete. The system will not permit you to delete a role with assigned user IDs.
2. Go to Actions and Settings | **User Roles**.
3. Select the role.
4. Click **Delete**.

Assign Role

To assign a role to one or more users:

1. Go to Actions and Settings | **User Roles**.
2. Select a single role and click **Assign**.

3. Select one or more users to assign to the role.
4. Click **Save**.

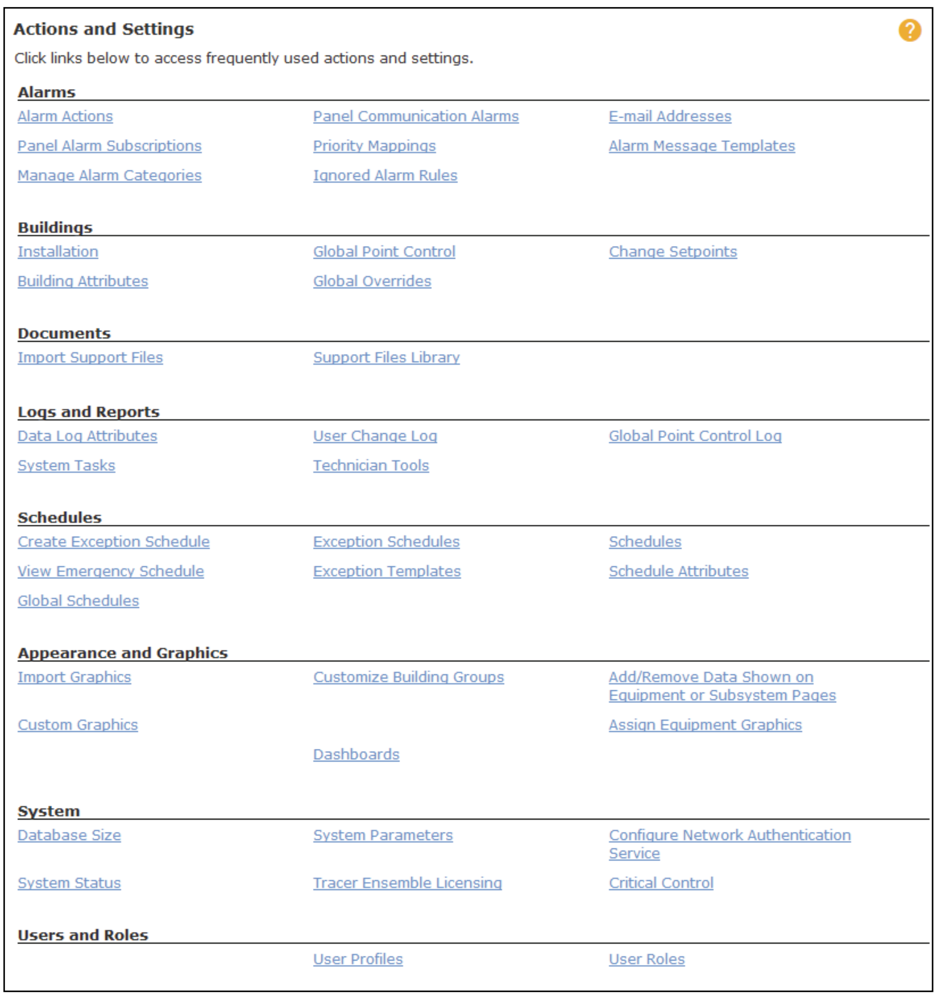
Advanced Features

Actions and Settings

The Actions and Settings page provides quick links to frequently used tasks and settings, as well as advanced functionality. Common tasks are split into the following categories:

- Alarms
- Buildings
- Documents
- Logs and Reports
- Schedules
- Appearance and Graphics
- System
- Users and Roles

Figure 57. Actions and Settings



Global Queries

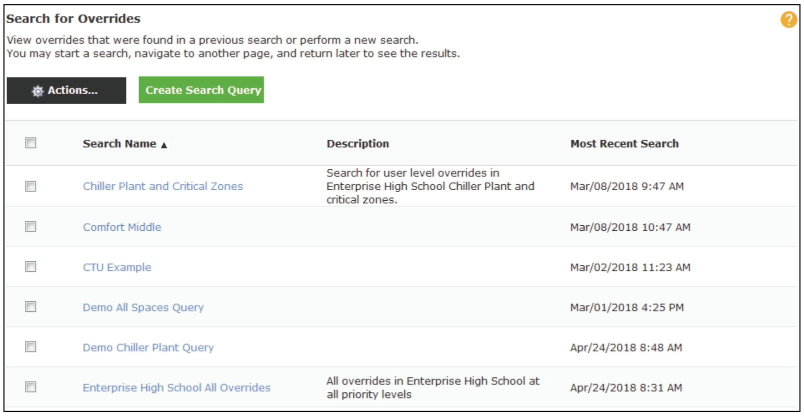
Search for Overrides

Search for Overrides allows you to search for overrides across all buildings and systems in

Tracer Ensemble. To access the Search for Overrides functionality:

1. In the Navigation Tree, click **All Buildings**.
2. Click **Setpoints & Overrides**. The Search for Overrides page displays.

Figure 58. Search for Overrides



Create Search Query

To search for overrides across all buildings and systems in Tracer Ensemble, click **Create Search Query**.

View Search Query Results

To view results of a search query, click on the Search Name. If the query has not been run, a pop up will prompt you to run the query.

Edit Search Query

To edit a search query:

1. Select the query.
2. Select Actions | **Edit**.
3. Edit the query.
4. Click **Save**.

Run Query

To run one or more queries:

1. Select one or more queries.
2. Select Actions | **Run**.

The search queries will run in the background. When complete, the Most Recent Search column will update with the date and time of the search results.

Delete Query

To run one or more queries:

1. Select one or more queries.
2. Select Actions | **Delete**.
3. A pop up warns that this will delete the search query and all related results. To confirm, click **Yes, Delete**.

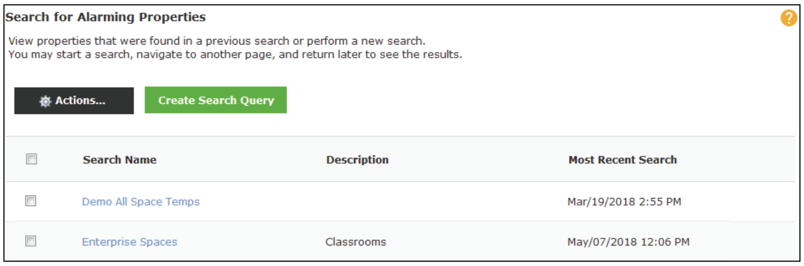
Search for Alarming Properties

Search for Alarming Properties allows you to search for alarms across all buildings and systems in Tracer Ensemble. To access the Search for Alarming Properties functionality:

1. In the Navigation Tree, click **All Buildings**.

2. Click **Configure Properties**. The Search for Alarming Properties page displays.

Figure 59. Search for Alarming Properties



A table displays the following about past search queries:

- **Search Name:** the name of the query.
- **Description:** (optional) description of the query.
- **Most Recent Search:** most recent date and time that the search query was run. If the query has not been run, that is also indicated.

View Search Results

To view search results, click on the **Search Name**. If not search results exist, you will be prompted to either cancel or run the search query. If the search query is currently running, a pop up will indicate that you need to wait.

Create New Search Query

To create a new search query, click **Create Search Query**.

Delete Search Query

To delete one or more search query:

1. Select one or more queries.
2. Select Actions | **Delete**.

Run Search Query

To run one or more search query:

1. Select one or more queries.
2. Select Actions | **Run**.

Edit Search Query

To edit a query:

1. Select the query.
2. Select Actions | **Edit**.

Emergency Schedules

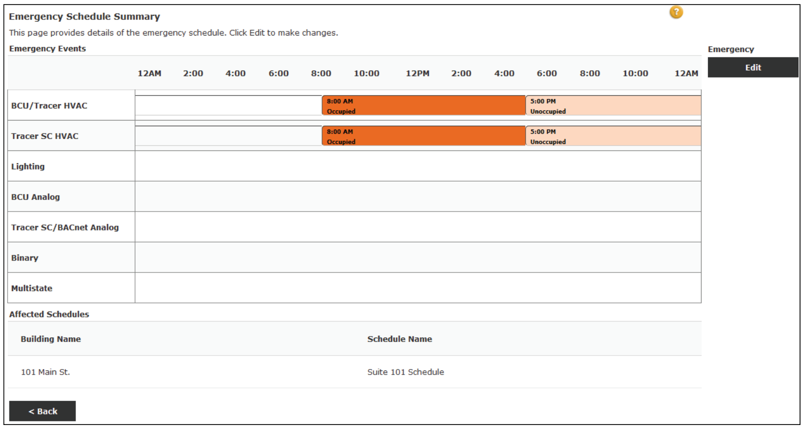
The emergency schedule is a preconfigured exception template that allows building operators to "one-click" apply exceptions to all pertinent schedules in a building in the event of a snow day or similar emergency day. All exception events are applied simultaneously. The emergency schedule can be applied to one or more building schedules in one or more buildings.

Create

To create an emergency schedule:

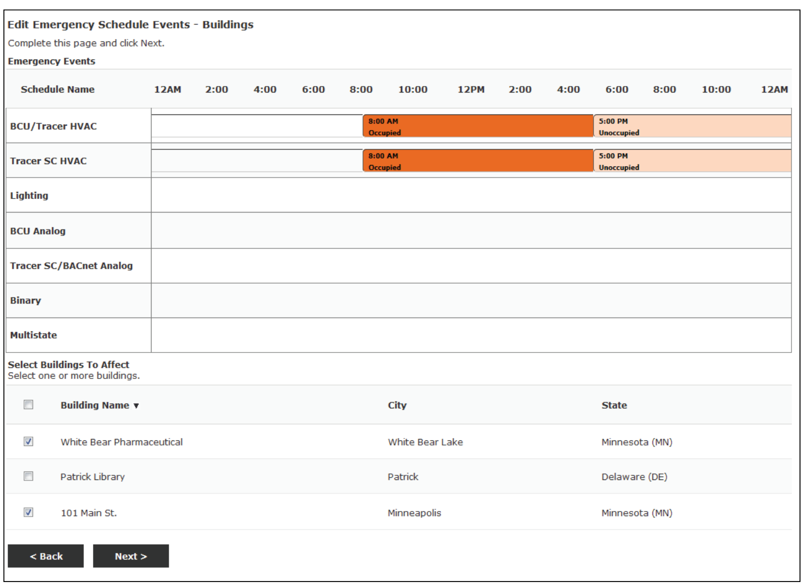
1. Go to Actions and Settings | **View Emergency Schedules**. The Emergency Schedule Summary page displays.

Figure 60. Emergency Schedule Events



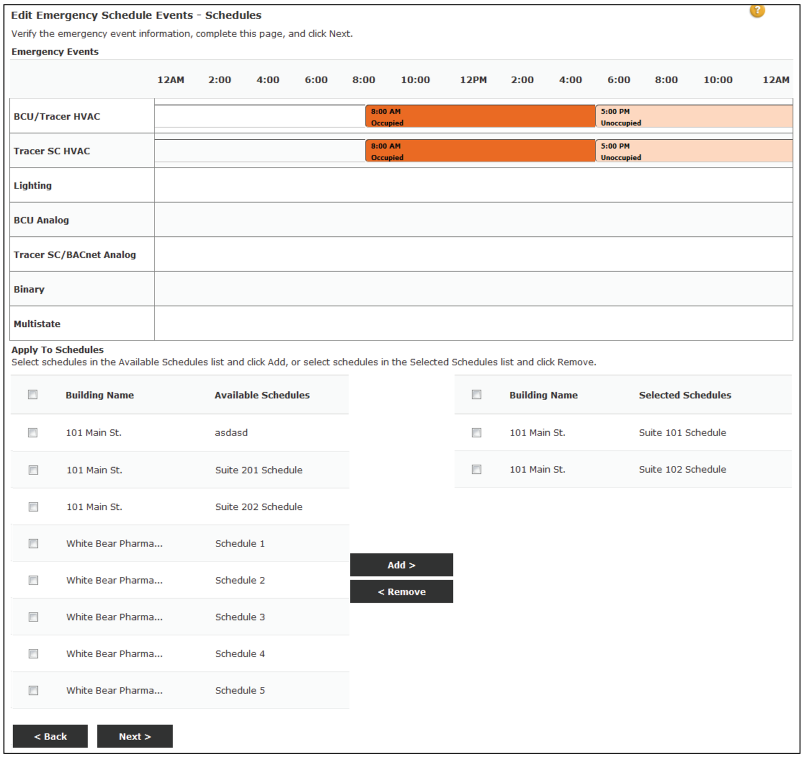
2. Click **Edit**.
3. Click **Add Events**.
4. To add a new event:
    a. Click **Add Events**.
    b. Select a start time, end time (if applicable), and values.
    c. Click **Save**.
5. Click **Next**.
6. Repeat Steps 3 and 4 for each event type.
7. Add Buildings to the schedule. Select the buildings that you want to apply the emergency schedule to.

Figure 61. Emergency Schedule: Buildings



    a. Select one or more **Buildings to Affect**.
    b. Click **Next**.
8. Assign individual building schedules the emergency schedule.

Figure 62. Emergency Schedule: Schedules



a. Select one or more schedule and click **Add**.

b. Click **Next**.

9. Review the Emergency schedule. Click **Finish** to save your schedule.

Activate

To activate your emergency schedule:

1. Go to Actions and Settings | **Manage Schedules**.
2. Select the buildings for which you want to activate the emergency schedule.
3. Click **Activate Emergency Schedule** to activate the emergency schedule for the selected buildings or click **Deactivate Emergency Schedule** to deactivate the emergency schedule for the selected buildings. The emergency schedule will stay active or inactive for the selected building until changed by a user.

Note: *You can also activate or deactivate the emergency schedule for a single building by going to the individual building summary page. However, the Emergency Schedule Activate and Deactivate buttons will only appear if the building is selected in the Emergency Schedule.*

Global Changes

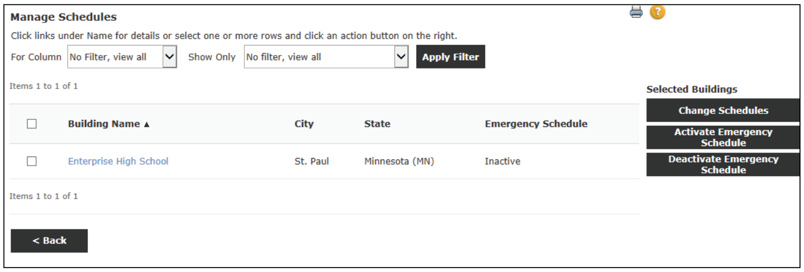
area or space setpoints across your entire building network. Changes take effect as quickly as they can be communicated to the individual building panels.

Global Schedule Change

To edit schedules globally:

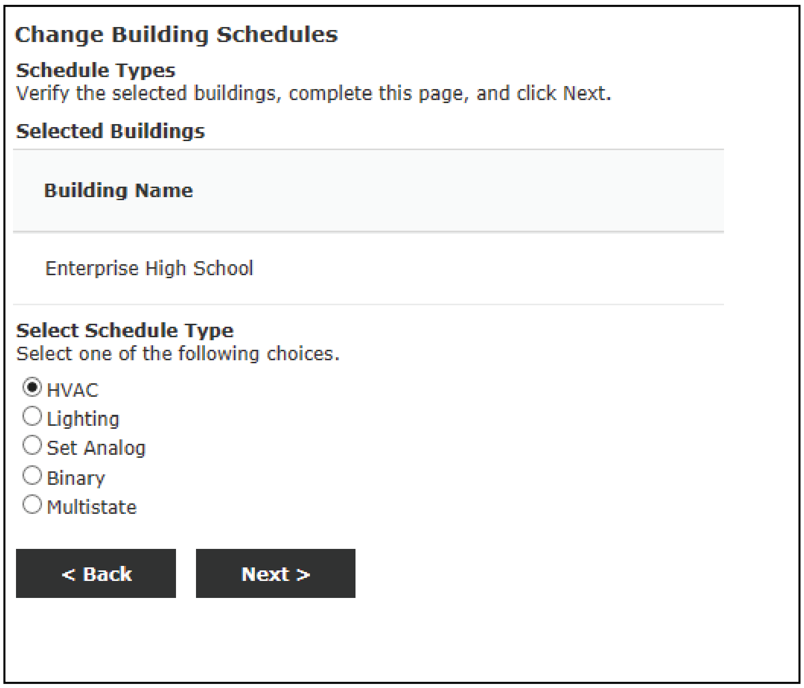
1. Go to Actions and Settings | **Schedules**.

Figure 63. Manage Schedules



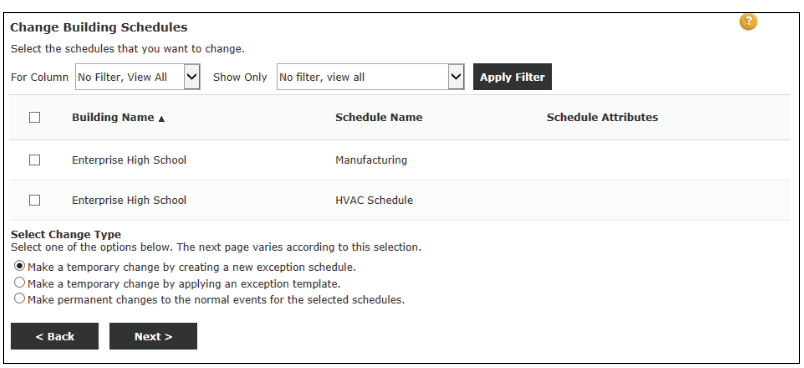
2. Select one or more buildings and click **Change Schedules**.

Figure 64. Global Change: Schedule Type



3. Select the Schedule Type.
4. Click **Next**

Figure 65. Global Change: Change Building schedules



5. Select the schedule(s) you want to change.
6. Select the change type:

- **Make a temporary change by creating a new exception schedule**: Choose this option if there is not already an exception template you can use.
- **Make a temporary change by applying an exception template:** Choose this option if there is an exception template and you want to use it.
- **Make a permanent change to the normal events for the selected schedules**: Choose this option if you want this change made now and kept as the permanent schedule.

7. Click **Next**.
8. Depending on the change type selected on the previous screen, you are prompted to either create a new exception schedule, apply a exception template, or update the normal schedule.
9. Click **Next** to review your changes.
10. Click **Finish**.

Global Point Control

Create Global Reference

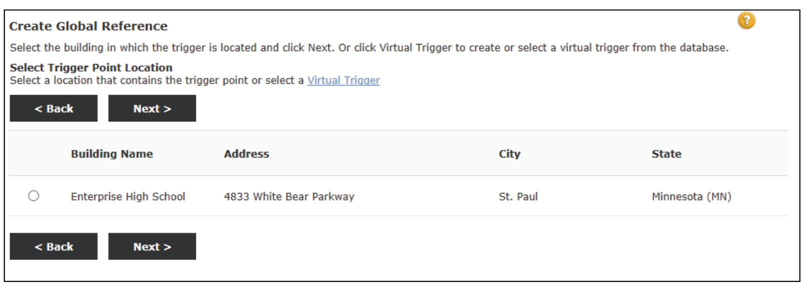
A global reference is a connection that is made between a data point in the Tracer Ensemble database and one or more systems that are configured to respond to the value of the data point. The global reference is made up of one trigger and one or more targets. The trigger can be an output from a local panel somewhere in the system or a virtual point that exists only in the Tracer Ensemble database. The targets can be any configurable inputs anywhere in the system.

You can create new global references, and edit or delete existing global references. You can also view the global point control activities in the system in the Global Point Control Log.

To create a new global reference:

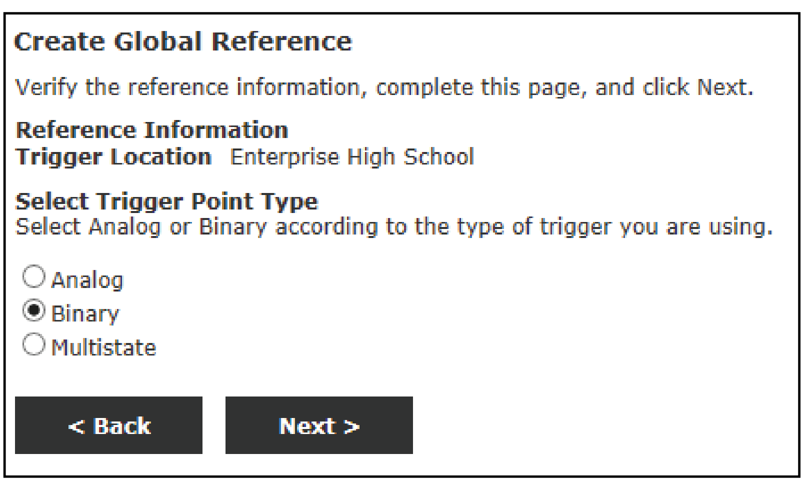
1. Go to Actions and Settings | Global Point Control | **Create a Global Reference**.

Figure 66. Create Global Reference



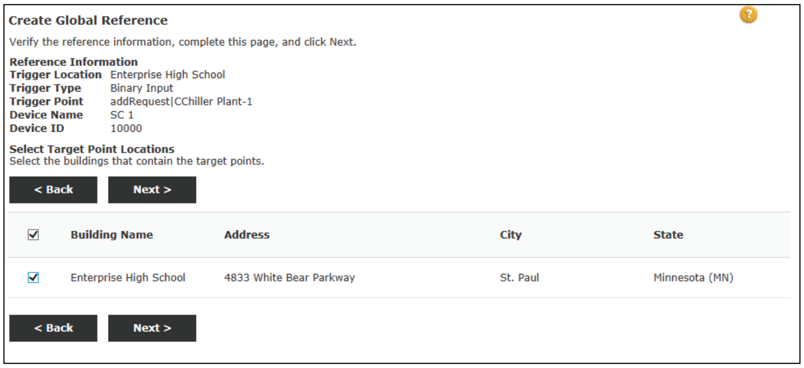
2. Select the Trigger Point Location. If you are creating a new global reference, click **Virtual Trigger** to create a new trigger or to select an existing trigger from a list.

Figure 67. Global Reference: Trigger Point Type



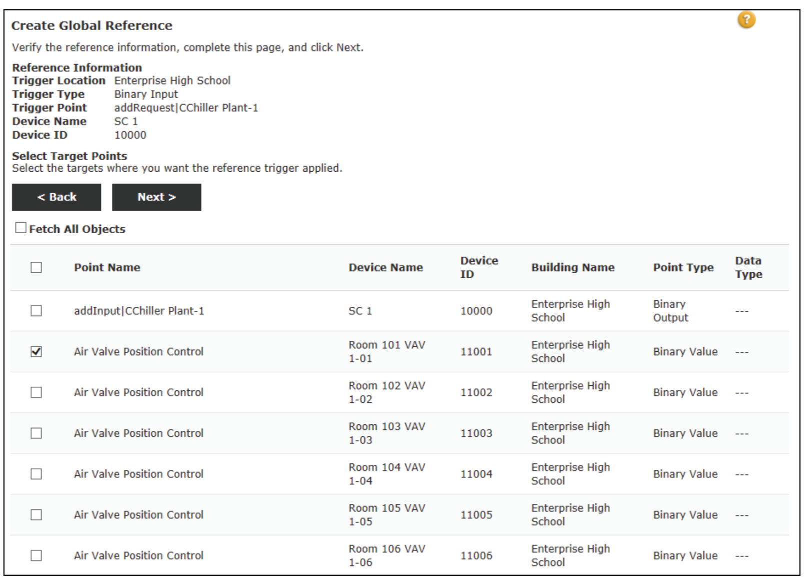
3. To create a new trigger, specify whether the trigger point is an **Analog**, **Binary**, or **Multistate**
4. Click **Next**.
5. Select Target Point Locations:
   a. Select each building that contains one or more targets for the global reference. The next screen will show only the available target points in those buildings. To avoid getting a longer-than-necessary list of targets on the next screen, do not select unnecessary buildings on this screen.
   b. Click **Next**.

Figure 68. Global Reference: Select Target Point Locations



6. Select the Target Points.
   a. Select the point you want from the list of available target points. If you do not see the point you are looking for, verify the correct target location and target type were selected.
   b. Click **Next**.

Figure 69. Global Reference: Select Target Points



7. Select Trigger Options:
   a. The **Polling Trigger** option specifies how frequently the targets of a global reference can change.
      - **Poll on Change of State:** the targets change as soon as the trigger point changes. Choose this option if you need every change in the trigger applied to the targets, regardless of the frequency of changes.

- **Poll Every** (1, 5, 10, 15, 30, 45, or 60) **Minutes**: the targets change to match the trigger point at each specified interval. Choose this option if you do not need every change in the trigger to be applied to the targets and are only concerned with keeping them updated periodically.
- Set **Load Offset** to the number of minutes you would like to wait before making a change initiated by a global reference. If you have a large number of systems likely to power on or need resources at the same time, setting up load offsets at various intervals may reduce system loading.

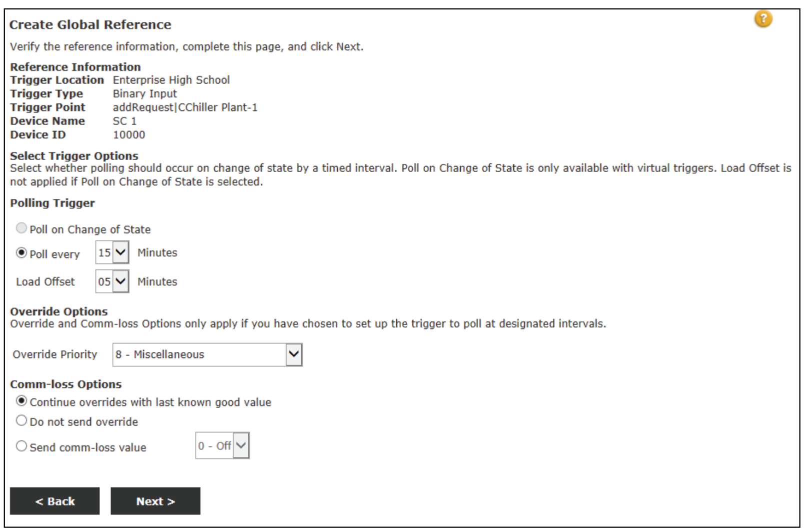
b. Select an option for **Override Priority** appropriate for the importance of the global reference.

c. The **Comm-loss Options** specify what should happen in the event that communication with the trigger is lost.

- **Continue overrides with last known good value**: the system behaves as if the global reference remains in the state of its last successful communication.
- **Do not send override**: the system does not permit the global reference to override the targets.
- **Send comm-loss value**: the value used by the global reference is user-defined. If you select this option, you must also select the value in the units of measure shown, if applicable.

d. Click **Next**.

Figure 70. Global Reference: Select Trigger Options



8. Review the Global Reference Summary. Click **Finish**.

Programmable Controllers

Programmable controllers include all general-purpose controllers that have no inherently defined function in an HVAC system. These controllers may serve a single purpose, such as the control of a customized air handler or heat pump loop, but they can be highly customizable and variable.

Note: *All non-Trane BACNet controllers and Tracer SC controllers appear as generic programmable controllers.*

To view a building's programmable controllers:

1. Go to Home | *Building Name*.
2. On the Building Navigation menu, click **Equipment**, then **Programmable**. Any programmable controllers (not assigned to a different equipment family) in the building will be listed. If the building has no programmable controllers, there will be no Programmable

link in the building navigation list.

3. To view details on a particular controller, click its name. The main status page for the controller appears.

Assigning Programmable Controllers to Equipment Family

In Tracer Ensemble, you can assign a programmable controller as an air handler, chiller or space. The programmable control then appears in the summary lists for the newly assigned controller type (it no longer appears in the Programmable Controllers list) and you can customize the data point assignments.

To assign a programmable controller to an equipment family:

1. Go to the main status page for the controller.
2. Click **Manage Programmable Controllers**.
3. Locate the programmable controller in the list.
4. Select a new value under Assigned Equipment Family.
5. Click **Apply New Values**.

Customize Data Point Assignments

To customize the data point assignments:

1. In the Building Navigation Pane, click Equipment or Spaces, according to the assigned equipment family you selected earlier.
2. Click the name of the programmable controller in the equipment list to which you assigned it. The main status page for the controller appears.
3. Click **Customize Programmable Controller.** A series of two pages begins.
4. Complete both pages and click **Finish** at the last page.

Support Files Library

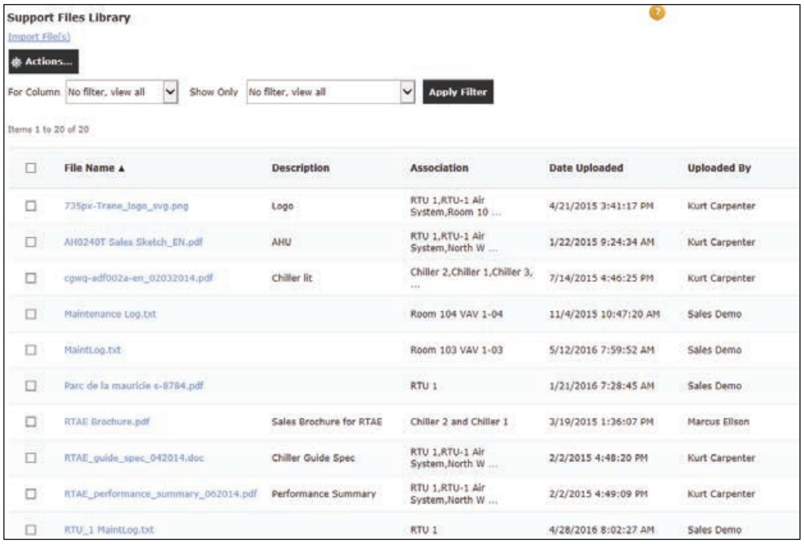
The Support Files Library is a central repository for documentation for equipment managed by Tracer Ensemble.

You can upload files, including product documentation, warranty information, etc., to Tracer Ensemble and associate each document to one or more pieces of equipment. Then when you need to refer to a document, it is easily accessible from a central location.

To access the Support Files Library:

1. Select **Actions and Settings**.
2. Click **Support Files Library**. From here, you can import new files, view, edit, and delete.

Figure 71. Support Files Library



Import New Files

To import a support file:

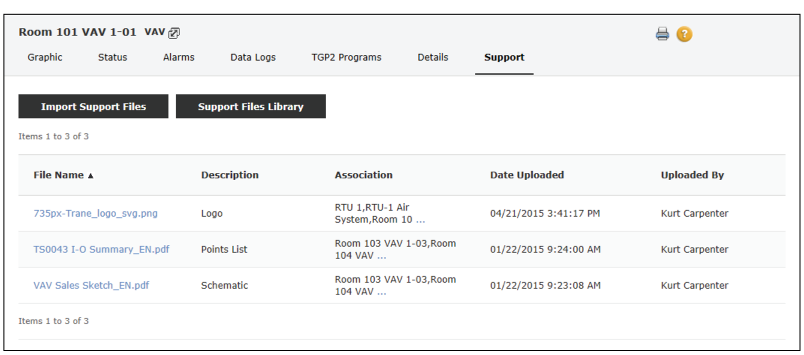
1. Select Actions and Settings | **Support Files Library**.
2. Click **Import File(s)**.
3. Click **Browse** to select a support file from a local drive.
4. Click **Open**.
5. Enter a **File Description** (optional).
6. Click **Upload** file.
7. Click **Associate with Equipment**.
8. Select one or more building to associate the file with. Click **Next**.
9. Select equipment to associate the file with. Click **Next**.
10. Review the support file associations. Click **Finish.**

View

To view a support file:

1. Navigate to the equipment associated with the file.
2. Click on the **Support** tab.
3. Click on the file name.

Figure 72. Support Tabe



Edit

To edit an existing file:

1. Select Actions and Settings | **Support Files Library**.
2. Select one or more files.
3. Select Actions | **Edit**.
4. Update the file information.
5. Click **Save**.

Delete

To delete an existing file:

1. Select Actions and Settings | **Support Files Library**.
2. Select one or more files.
3. Select Actions | **Delete**. Confirm that you want to delete the file(s).

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