

Crestron Fusion® Software Enterprise Management Software

Reference Guide
Crestron Electronics, Inc.

Original Instructions

The U.S. English version of this document is the original instructions.

All other languages are a translation of the original instructions.

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Introduction

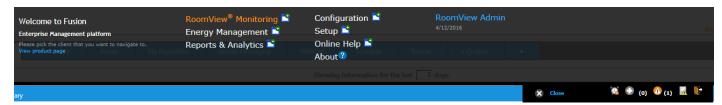
This document provides configuration instructions for using Crestron Fusion® software.

For questions and additional information, contact the Crestron Fusion Deployment Team representative assigned to the project at 855-754-5962 or email fsg@crestron.com.

Crestron Fusion Web Interface

Crestron Fusion® software is a web-based application and any interaction described in the following document is completed through the Crestron Fusion Web Client. The two main components are the Crestron Fusion application running on a Microsoft® Windows Server® operating system and Microsoft SQL Server® database system where data is collected and stored in a database. Direct interface to the SQL Server database is not necessary or recommended.

Crestron Fusion Web Client



The following sections are accessible from the Crestron Fusion Web Client:

- RoomView® Monitoring software provides feedback coming from programmed rooms. The monitoring section also contains tabs for interaction with the room through the use of Fusion Insite, Assets, Scheduling, Webcam, Xpanel, and Instant Messaging.
- Energy Management shows information about the rooms relating to lighting, HVAC, and other controls which also allow settings to be saved when certain room conditions occur (e.g., occupied/not occupied, meeting/no meeting, etc.). This section contains a calendar for automating events and showing real time energy usage as well as historical energy usage data.
- **Reports & Analytics** allows for end users to run reports on data that is collected by Crestron Fusion. The reports can be tailored to specific rooms and data.
- **Configuration** contains global settings for the Crestron Fusion server(s) as well as for interaction with other systems (scheduling, SMTP, etc.).
- **Setup** is the main focus of this document and contains the majority of the components for creating the customization of the Crestron Fusion website for the end client.
- Online Help opens the context sensitive online help for Crestron Fusion.
- About opens a window displaying the current version of Crestron Fusion.

Log In

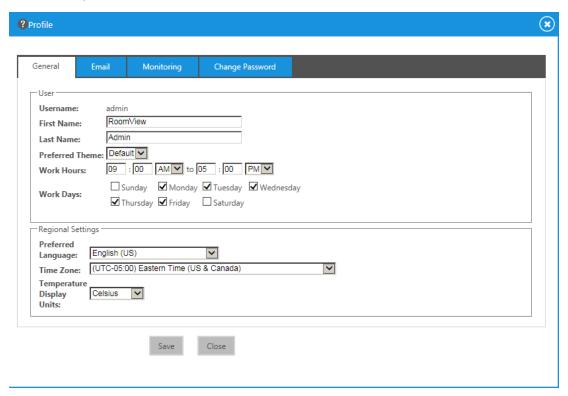
The default website for Crestron Fusion is "http://servername/fusion/webclient" where "servername" is the hostname or IP Address of the server the Crestron Fusion is installed on. The default login for the Crestron Fusion website is "admin" for both the username and password.

Complete a Profile

Complete the profile information before using the Crestron Fusion.

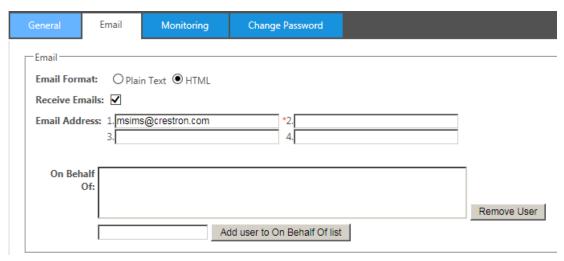
1. Log into Crestron Fusion. The **Profile** dialog box displays. The **Profile** dialog box only displays the first time the user logs into Crestron Fusion or if an email address has not been entered.

Profile Dialog Box



- 2. Enter the user's time zone from the **General** tab.
- 3. Enter the user's email address from the **Email** tab.

Profile Dialog Box



4. Click the Receive Emails check box to receive emails from Crestron Fusion.

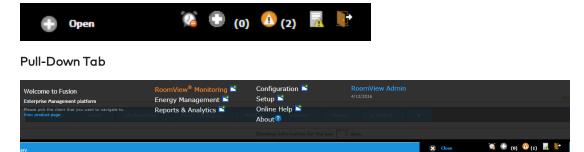
NOTE: The **Profile** dialog box will continue to open upon login until an email address has been entered for the account. Any future changes to the profile can be made by clicking the user's name from the Crestron Fusion header tab.

Navigate the Website

After logging in and completing the profile information, the RoomView Monitoring section loads.

1. From the Crestron Fusion Cloud header tab, click the + (plus) icon located to the left of the **Open** link to open the pull-down tab.

Crestron Fusion Header Tab



- 2. Navigate to the different sections by clicking the name.
 - The icons (in the lower right area) show notification information and are visible from all sections.
 - The Logout icon (open door) logs out the current user.

NOTE: The Logout icon will not be present during Windows® operating system Authentication.

• Hover the mouse pointer over these icons to view information about the icon.

Geographic Regions and Time Zones

The Time Zone and Geographic Regions components affect the software on a global level.

- Time Zone information must align in order for scheduling information to display correctly and for the end user's experience to be accurate. The server may be located in one time zone while the user is in a different time zone and the room itself may be in a different time zone from the server and user.
- Geographic Region information affects additional features of Crestron Fusion, such as Pinpoint™ software and the Outlook® Add-In (OLAI) software. Pinpoint is a mobile app that allows an end user to find and book available rooms and to view personal calendars. It also includes built-in abilities for waypoint navigation and no-touch presentation if these are available in a room. OLAI is plug-in software for Microsoft Outlook, which allows end users to search for available spaces based on regional information and criteria (capacity, AV equipment in space, etc.). It also provides a section to add predefined actions to the beginning or the end of a meeting (e.g., Turn System On and Turn System Off).

Set the Default Time Zone

To set the default time zone:

1. From the Crestron Fusion header tab, click the + (plus) icon located to the left of the **Open** link to open the pull-down tab.

Crestron Fusion Header Tab



2. Click the **Configuration** link.

Configuration Link



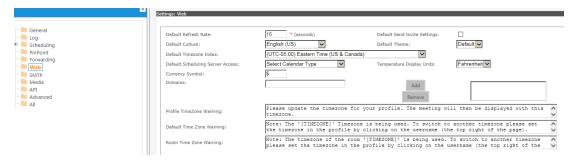
3. Click the **Configuration** tab located at the bottom left corner of the page.

Configuration Tab



4. Click Web on the left side of the page. The default time zone is displayed.

Default Time Zone



Create Geographic Regions

Nodes in Crestron Fusion are equivalent to a folder. Rooms are then added within the nodes similar to adding a file to a folder. For the OLAI or Crestron PinPoint™ app, it is necessary to create the Geographic Regions hierarchy. Geographic Regions are created in the Crestron Fusion Setup section. These are customizable fields that can be completed for each space and node.

To create and edit field names:

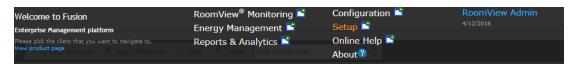
1. From the Crestron Fusion header tab, click the + (plus) icon located to the left of the **Open** link to open the pull-down tab.

Crestron Fusion Header Tab



2. Click the **Setup** link.

Setup Link



3. Click the **Objects** tab located at the bottom left corner of the page.

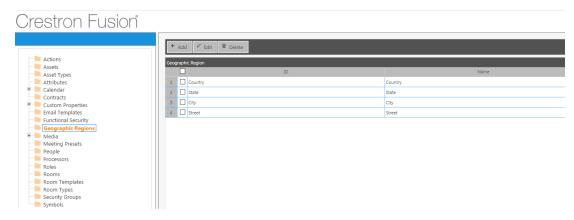
Objects Tab



A list of the default regions is displayed in the right-hand window.

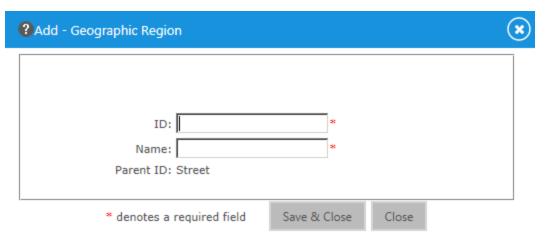
- Each region has a common name and an ID. The ID cannot contain spaces. To keep
 information aligned correctly in the database and also create custom regional
 information, delete all entries and recreate them if the order of the default structure
 is not suitable (recommended).
- The order is important. Work down from the broadest regional scope to the smallest regional scope (For example: City, Campus, Building, Floor, and so forth).

Geographic Regions



4. Click Add. The Add - Geographic Region dialog box is displayed.

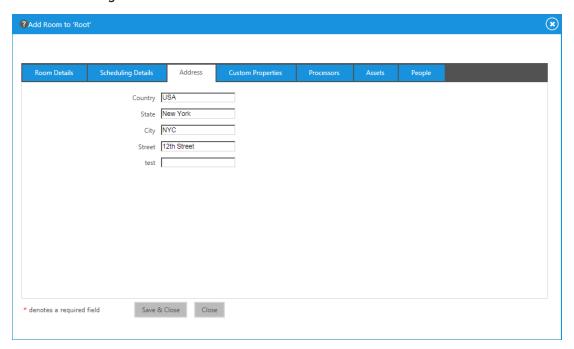
Add - Geographic Region Dialog Box



- 5. Enter an **ID** and **Name** for the region. The ID is used for database purposes and cannot contain a space. This helps distinguish names if a specific region must be listed twice.
- 6. Click Save & Close.
- 7. Repeat steps 5 and 6 until the hierarchy of regional information is completed.

NOTE: When a room is added, the Geographical Region information appears on the **Address** tab.

Add Room Dialog Box



Design the Room Tree (Nodes)

The room tree has two main purposes: organization and security. The room tree is structured to organize similar rooms together and to provide an easier way to find specific rooms when searching. The room tree also serves as a grouping for assigning security permissions to limit what a user can and cannot do to rooms in that particular node. The tree design is very similar to a file and folder structure found on almost all operating systems.

Change the Root Node Name

- 1. Log in to the Crestron Fusion website using the link "http://servername/fusion/webclient", where "servername" is the name of the server.
- 2. From the Crestron Fusion header tab, click the + (plus) icon located to the left of the **Open** link to open the pull-down tab.

Crestron Fusion Header Tab



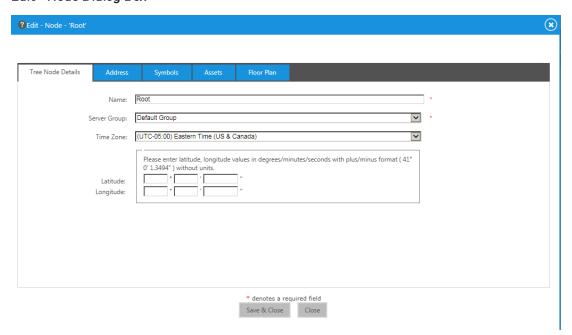
3. Click the **Setup** link.

Setup Link



4. Double-click the top level node to open the **Edit - Node** dialog box.

Edit - Node Dialog Box

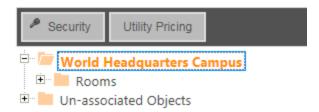


- 5. If desired, Change the name in the **Name** field. The default name is "Root".
- 6. Enter any optional information as needed.
- 7. Click Save & Close.

Add a New Node

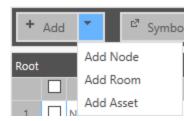
1. In the tree, highlight the existing node to place the new node underneath it. The new node displays under the selected existing node.

Add a New Node

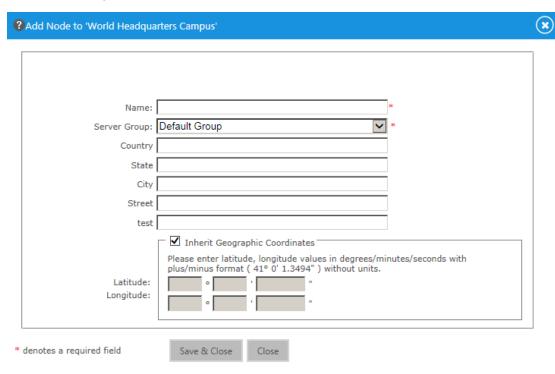


2. Click Add Node. The Add Node dialog box displays.

Add Drop-Down List



Add Node Dialog Box

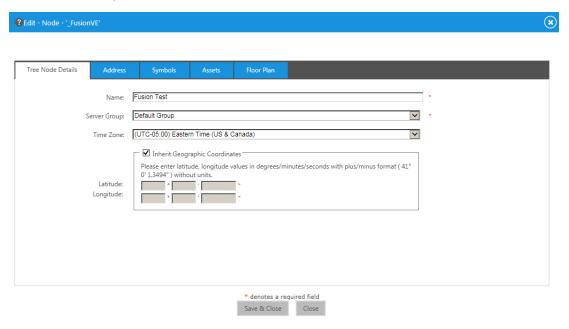


- 3. Enter a name in the Name field.
- 4. Enter any optional information as needed.
- 5. Click Save & Close.

Change a Node Name

1. In the room tree, double-click the node name that is to be changed. The **Edit -Node** dialog box displays.

Edit - Node Dialog Box



- 2. Enter a new name in the **Name** field.
- 3. Enter any optional information as needed.
- 4. Click **Save & Close**.

Asset Types

Crestron Fusion® software can track asset information such as AV warranty expiration, lifespan deprecation, service intervals, etc. The assets can be grouped together by the Asset Type. The Asset Type might be DVD player, Codec, Switcher, etc. An asset listed in Crestron Fusion is associated with an Asset Type. For example, a Crestron® switcher is listed with Asset Type named "Switcher."

Add an Asset Type

1. From the Crestron Fusion header tab, click the + (plus) icon located to the left of the **Open** link to open the pull-down tab.

Crestron Fusion Header Tab



2. Click the **Setup** link.

Setup Link



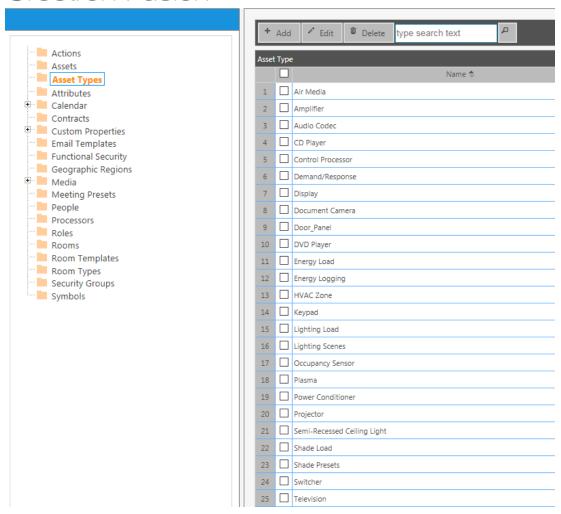
3. Click the **Objects** tab, and then click **Asset Types**. A list of the default asset types is displayed.

Objects Tab



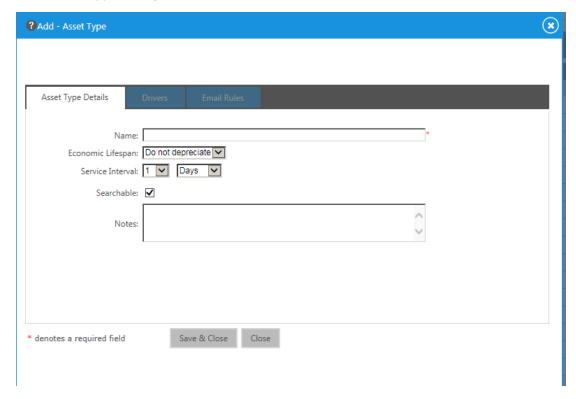
Asset Types Folder

Crestron Fusion



4. Click Add. The Add - Asset Type dialog box displays.

Add - Asset Type Dialog Box



- 5. Complete the following fields as necessary.
 - Name: The Asset Type name
 - Economic Lifespan: The longevity of the Asset Type expressed in years
 - Service Interval: How often the Asset Type should be serviced
 - Searchable: Determines if the Asset Type is searchable using the OLAI
 - Notes: Allows the user to add additional information about the Asset Type

NOTE: The **Drivers** and **Email Rules** tabs remain grayed out when an Asset Type is added and become clickable when an Asset Type is edited.

6. Click Save & Close.

Edit an Asset Type

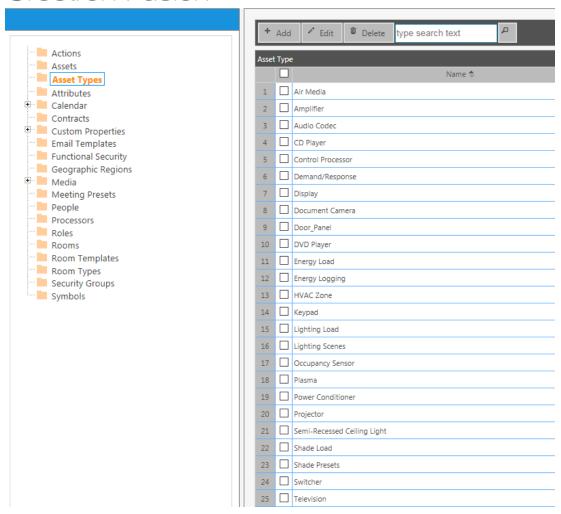
1. Click the **Objects** tab, and then click **Asset Types**. A list of the default asset types is displayed.

Objects Tab



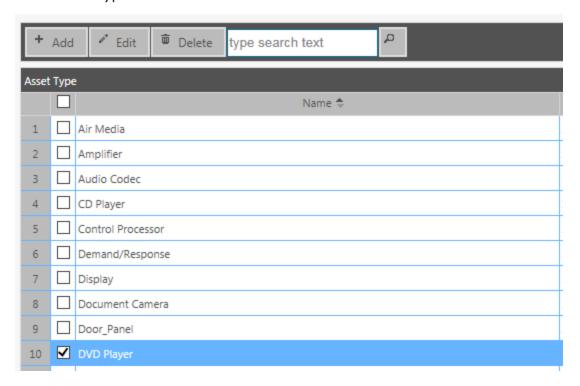
Asset Types Folder

Crestron Fusion



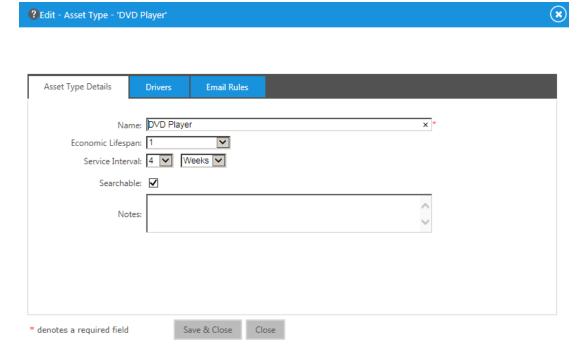
2. Click the **Asset Type** check box to the left of the asset to be edited. To select all assets, click the check box above the list.

Edit an Asset Type



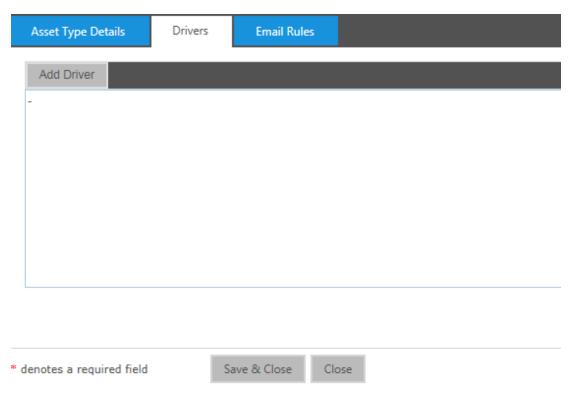
3. Click **Edit**. The **Edit - Asset Type** dialog box displays.

Edit - Asset Type Dialog Box



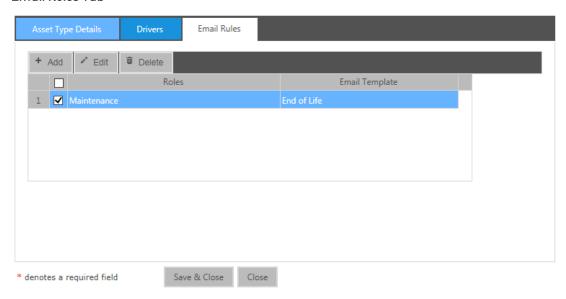
- 4. Make the desired changes to the asset from the **Asset Type Details** tab.
- 5. Click Save & Close.
- 6. Click the **Drivers** tab. The **Drivers** tab is used for Crestron Direct Connect devices. Any XML-based drivers used for these devices are listed under **Drivers**.

Drivers Tab



- 7. Click Add Driver to add drivers.
- 8. Click Save & Close.
- 9. Click the **Email Rules** tab. The **Email Rules** tab is used for configuring email notification when service is due or the economic life span has expired. Email rules can be added, edited, or deleted.

Email Rules Tab



To add an email rule, do the following:

- a. Click the **Email Template** to use for this notification.
- b. Click **Add**. The **Add Email Rule to Asset Type** dialog box displays.

* denotes a required field

Cancel

Update

Add Email Rule to Asset Type Dialog Box

- c. Select an **Email Rule**, **Email Template**, and then click the **Associated Roles** that should receive this email for the room.
- d. Click Update.

Delete an Asset Type

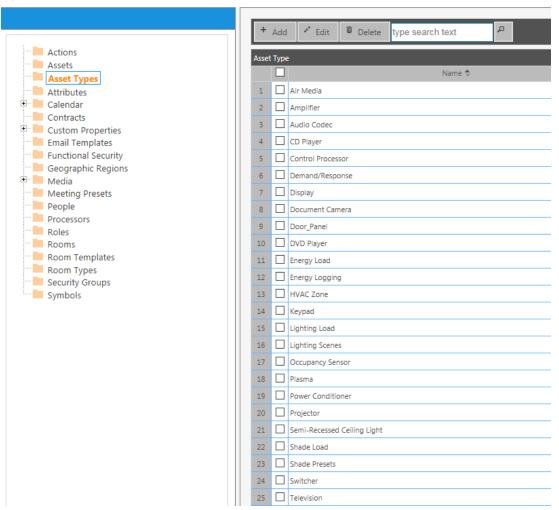
1. Click the **Objects** tab, and then click **Asset Types**. A list of the default asset types is displayed.

Objects Tab



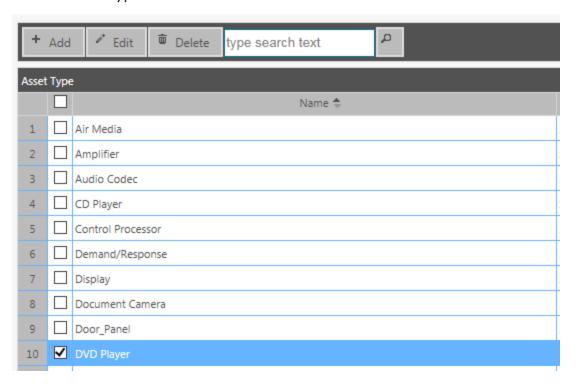
Asset Types Folder

Crestron Fusion®



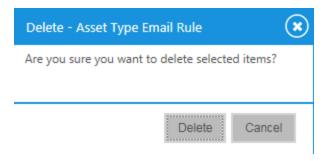
2. Click the Asset Type check box to the left of the asset to be deleted, and then click Delete.

Delete an Asset Type



3. The **Delete - Asset Type Email Rule** message box displays. Verify the item(s) that were selected for deletion, and then click **Delete**.

Delete - Asset Type Email Rule Message Box



Roles in Crestron Fusion

Roles in Crestron Fusion help define how information about the room is sent to people. A user's role determines what email notifications the user receives from the system. Roles are a function of the room, and user accounts are assigned to the Roles for that room.

Add a Role

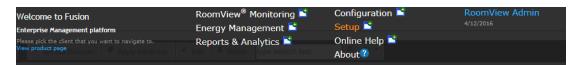
1. From the Crestron Fusion header tab, click the + (plus) icon located to the left of the **Open** link to open the pull-down tab.

Crestron Fusion Header Tab



2. Click the **Setup** link.

Setup Link



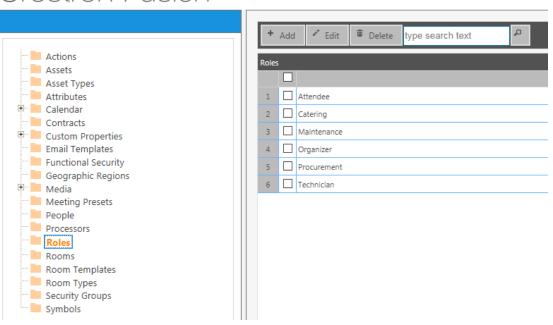
3. Click the Objects tab, and then click Roles. A list of the default roles is displayed.

Objects Tab



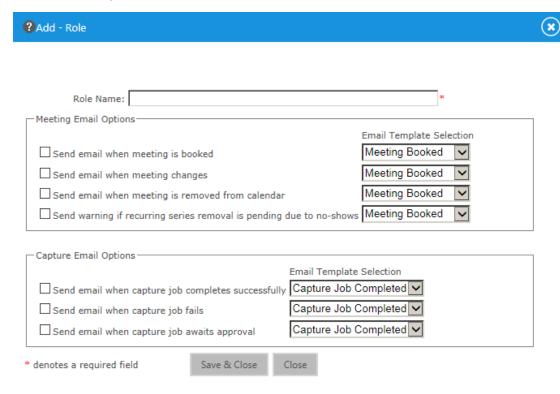
Roles Folder

Crestron Fusion



4. Click Add. The Add - Role dialog box displays.

Add - Role Dialog Box



- 5. Complete the fields as necessary.
 - Role Name: The job description
 - Meeting Email Options: These options enable an email to be sent for the meeting criteria listed in the section. Click the applicable check box next to the desired meeting e-mail notification. Select the e-mail template to be used for the notification.
 - Capture Email Options: These options enable an e-mail to be sent for the meeting criteria listed in the section. Click the applicable check box next to the desired Capture e-mail notification. Select the e-mail template to be used for the notification.
- 6. Click Save & Close.

Edit a Role

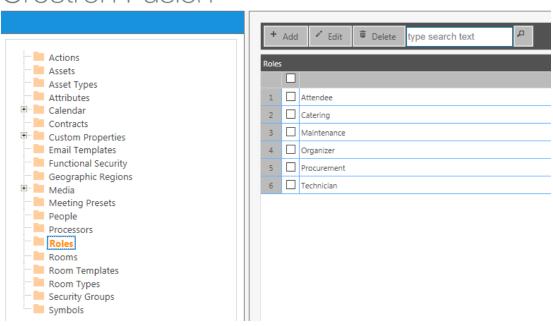
1. Click the **Objects** tab, and then click **Roles**. A list of the default roles is displayed.

Objects Tab



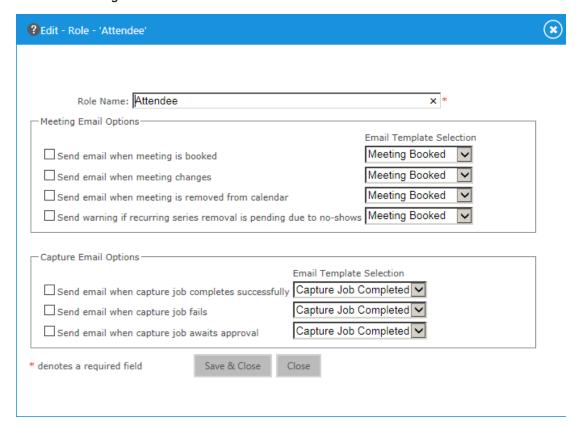
Roles Folder

Crestron Fusion®



- 2. Click the check box next to the role to be edited.
- 3. Click Edit. The Edit Role dialog box displays.

Edit - Role Dialog Box

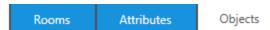


- 4. Make the desired changes.
- 5. Click Save & Close.

Delete a Role

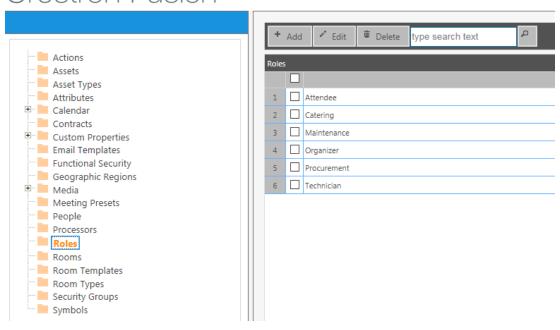
1. Click the **Objects** tab, and then click **Roles**. A list of the default roles is displayed.

Objects Tab



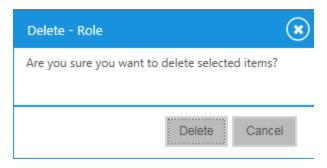
Roles Folder

Crestron Fusion



- 2. Click the check box next to the role to be deleted.
- 3. Click **Delete**. The **Delete Role** message box displays.

Delete - Role Message Box



4. Verify the items that were selected for deletion, and then click **Delete**.

Users (People) in Crestron Fusion

Crestron Fusion® software has the ability to allow multiple users (referred to in Crestron Fusion as People) to log in to the website simultaneously. New users can be created and then assigned to security groups to affect rights and views that the user has within the websites.

The two main ways for authenticating users are Forms Authentication and Windows® software Authentication.

- Forms Authentication maintains Users and Security Groups within the Crestron Fusion database
- Windows Authentication allows Crestron Fusion to leverage Active Directory® service domain users and domain security groups to provide rights and permissions within Crestron Fusion. A Windows domain is a grouping of all registered users, computers, and printers. Active Directory can be defined as the database that these objects are stored in.

NOTE: Crestron Fusion does not support Active Directory Integration.

Add a User

1. From the Crestron Fusion header tab, click the + (plus) icon located to the left of the **Open** link to open the pull-down tab.

Crestron Fusion Header Tab



2. Click the Setup link.

Setup Link



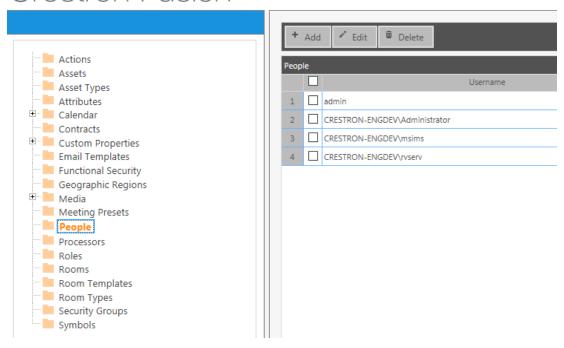
3. Click the **Objects** tab, and then click **People**.

Objects Tab



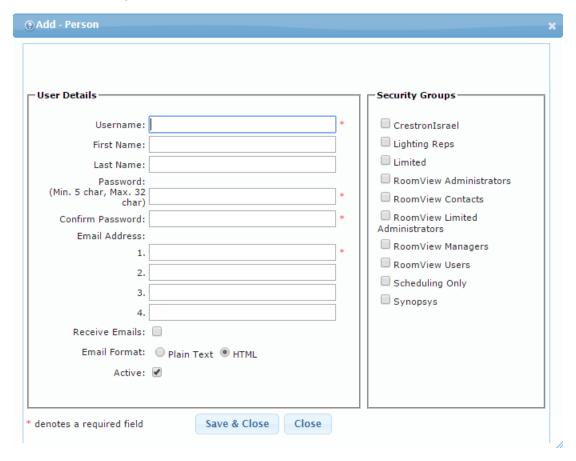
People Folder

Crestron Fusion®



4. Click Add. The Add - Person dialog box displays.

Add - Person Dialog Box



- 5. Complete the fields as necessary:
 - Username: The login username given to the end user accessing Crestron Fusion
 - First Name/Last Name: The formal first name and last name of the end user (This displays in the Crestron Fusion header tab.)
 - Password/Confirm Password: Where the end user enters the password (The minimum password length is four characters, which is the only requirement.)
 - **Email Address:** This email address is used for email notifications. There are three additional email fields for adding multiple email addresses for one user.
 - Receive Emails: Dictates whether or not this account receives email messages from Crestron Fusion
 - Email Format: The email can be sent to the user in Plain Text or HTML format
 - Active: Defines whether the account is Active or Inactive. An inactive account does not allow the user to log in
 - **Security Groups:** Defines what access the end user has to Crestron Fusion (Check any boxes that apply for the account.)

NOTE: Users should not be placed in multiple security groups, as this creates conflicts when users access the Crestron Fusion website.

6. Click Save & Close.

Edit a User

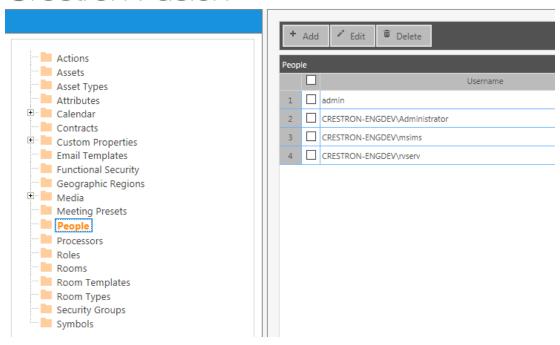
1. Click the **Objects** tab, and then click **People**.

Objects Tab



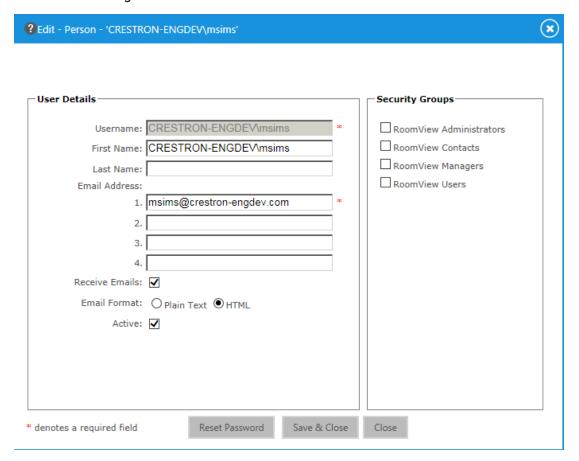
People Folder

Crestron Fusion®



- 2. Click the check box to the left of the user to be edited.
- 3. Click **Edit**. The **Edit Person** dialog box displays.

Edit - Person Dialog Box



- 4. Complete the fields as necessary.
- 5. Click Save & Close.

Delete a User

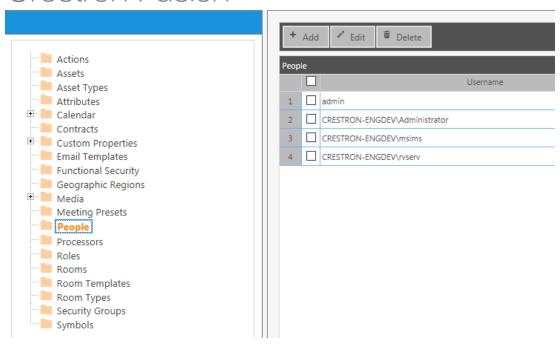
1. Click the Objects tab, and then click People.

Objects Tab



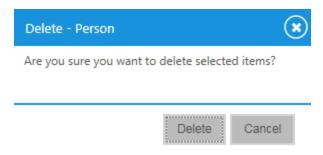
People Folder

Crestron Fusion®



- 2. Click the **People** check box to the left of the user to be deleted.
- 3. Click **Delete**. The **Delete Person** message box displays.

Delete - Person Message Box



4. Verify the user to be deleted, and then click **Delete**.

Additional Information

- All permissions within Crestron Fusion are assigned to Security Groups. Users are added to Security Groups and inherit the permissions.
- If using Windows Authentication, do not create Security Groups and People within the Crestron Fusion interface. Active Directory Groups must be manually added to functional and object security policies.

- In Windows Authentication, access is granted to Active Directory Security Groups, and an Active Directory User account is automatically created at the first login.
- In Forms Authentication and Windows Authentication, individual users cannot be assigned permissions and access directly in Crestron Fusion.
- In Forms Authentication and Windows Authentication, users can be added to a Role for the room and receive notifications for that particular room depending on which Role is selected.

Add Crestron Connected Devices

Using the Crestron Connected® protocol, Certain Crestron® products have the ability to connect directly to Crestron Fusion® software via a network without needing a Crestron processor. These devices are added as Assets to the room.

The following table lists devices supported in Crestron Fusion and devices supported in Crestron Fusion (on-premises).

Crestron Connected Device Support

| Crestron Fusion Cloud | Crestron Fusion On-Premises |
|--|--|
| 3-Series® Processor: Firmware version 1.012.0017 or newer | 2-Series and 3-Series Processors |
| TSW-732 Scheduling Panel: Firmware version 2.01.08 or newer | TPMC-3SM, TPMC-4SM, TSS-752, TSW-732, and TSW-730 (Discontinued) |
| TSS-752 Scheduling Panel: Firmware version 2.01.08 or newer | Crestron Connected Projectors* |
| AirMedia® presentation gateway software (not recommended, No SSL support): Firmware version 1.2.1 or newer | AirMedia |
| Crestron RL® system: Firmware version 15.14.08 or newer | Crestron RL |
| | CaptureLiveHD® system |

^{*} A more extensive list of supported manufacturers' displays with the ability to connect directly to Crestron Fusion can be located on the Crestron website at http://www.crestron.com/products/line/crestron-connected.

Two methods can be used to add Crestron Connected Assets to a Room:

- Add the asset and then associate it to a room.
- Add the asset at the time of the room creation.

Add a Crestron Connected Device (On-Premises Only)

1. From the Crestron Fusion header tab, click the + (plus) icon located to the left of the **Open** link to open the pull-down tab.

Crestron Fusion Header Tab



2. Click the **Setup** link.

Setup Link



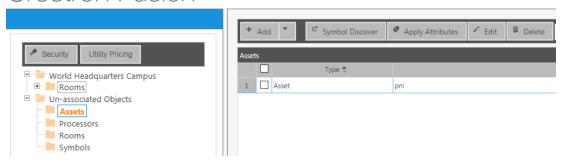
3. Click the Rooms tab, and then click Assets. A list of nodes or rooms is displayed.

Rooms Tab



Assets Folder

Crestron Fusion®

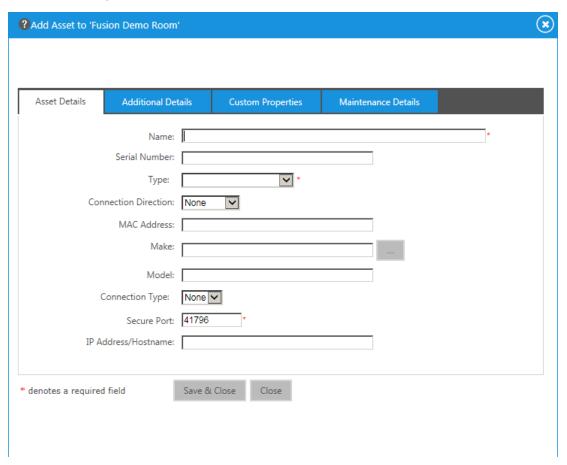


4. Click the **Node** or **Room** that the asset will be associated with.

NOTE: All Crestron Connected devices must be associated to a room.

5. Click Add, and then click Add Asset. The Add Asset dialog box displays.

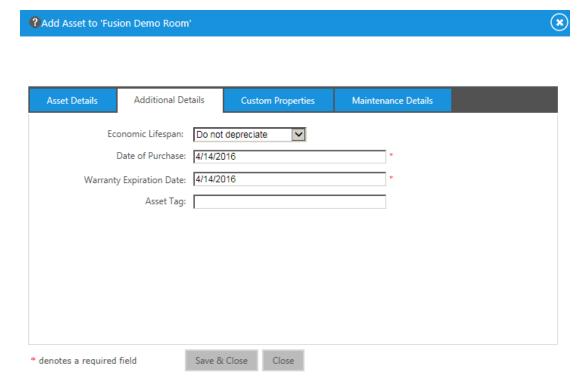
Add Asset Dialog Box



- 6. Complete the following fields as necessary:
 - Name: The specific name of the asset
 - Serial Number: This is the serial number of the asset.
 - **Type:** The Asset Type that defines what group this asset would fall under (There are specific Asset Types for Crestron Connected devices.)
 - Touch Panel: Select for all scheduling panels.
 - Video Conference: Select for Crestron RL.
 - Video Capture: Select for CaptureHD.
 - Presentation Gateway: Select for AirMedia.
 - Projector: Select for all Crestron Connected manufacturers' displays.
 - Connection Direction: The Connection Direction (Select either None or Outbound.)
 - MAC Address: The asset's MAC Address, if it has one
 - Make/Model: For Crestron Connected devices, click the browse ("...") button and then select the appropriate driver for the device.

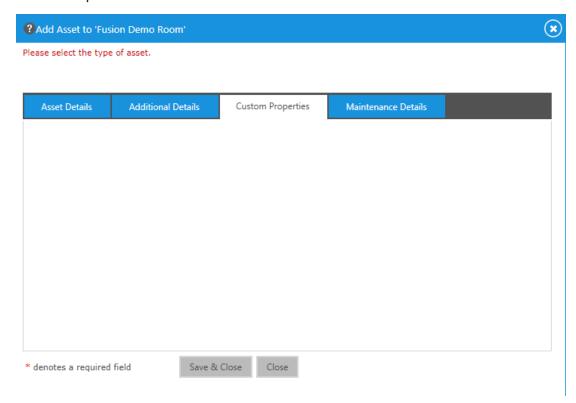
- Connection Type: Set the connection type to Network when using Crestron Connected devices.
- Secure Port: Leave as default unless programmed or instructed otherwise.
- IP Address/Hostname: The IP Address or hostname of the Crestron Connected device (This is how Crestron Fusion connects to the device over TCP/IP.)
- 7. Click Save & Close.
- 8. Click the Additional Details tab.

Additional Details Tab



- 9. Complete the fields as necessary.
 - Economic Lifespan: Marks the end-of-life status for this asset
 - Date of Purchase: The date of device purchase or delivery
 - Warranty Expiration Date: The date the device warranty expires
 - **Asset Tag:** Used for a custom asset reference and is issued by the end client (The end client may have another asset tracking product that issues these numbers.)
- 10. Click Save & Close.
- 11. Click the **Custom Properties** tab.

Custom Properties Tab



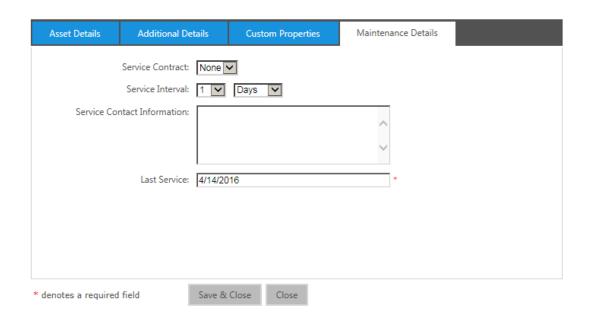
12. Complete the fields as necessary.

NOTE: These custom property fields are created within Crestron Fusion.

13. Click the Maintenance Details tab.

Maintenance Details Tab



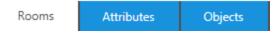


- 14. Complete the fields as necessary.
 - **Service Contract:** Contains service contract information or a digital copy of the contract (stored in the database)
 - **Service Interval:** Determines how often a notification is invoked for maintenance on the asset
 - **Service Contract Information:** Any additional information for the maintenance of this device should be included here.
 - Last Service: This field automatically gets updated unless overwritten manually.
- 15. Click Save & Close.

Edit an Asset

1. Click the Rooms tab.

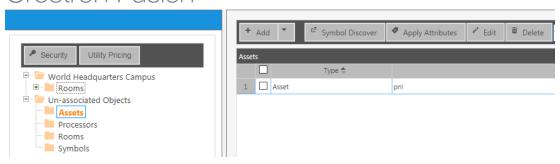
Rooms Tab



2. From the room tree, click the room in which the asset is located. Associated assets are listed for the room.

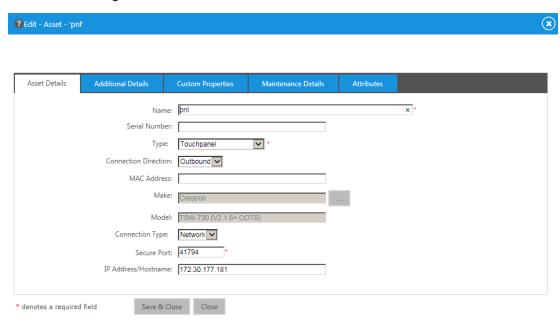
Edit an Asset

Crestron Fusion®



3. Click the check box to the left of the asset to be edited, and then click **Edit**. The **Edit - Asset** dialog box displays.

Edit - Asset Dialog Box

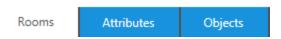


- 4. Add, delete, or change the asset details as needed.
- 5. Click Save & Close.

Delete an Asset

1. Click the **Rooms** tab.

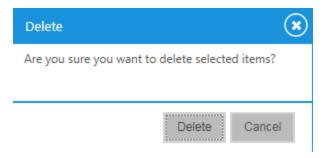
Rooms Tab



2. From the room tree, click the room where the asset is located. Associated assets are listed for the room.

3. Click the check box to the left of the asset to be deleted, and then click **Delete**. The **Delete** message box displays.

Delete Message Box



4. Verify the asset to be deleted, and then click **Delete**.

Use Templates to Add Rooms (On-Premises Only)

Templates are helpful when adding rooms into the system. Templates populate information to aid in quick room creation and consistency in naming objects. Templates also allow the user to add a processor, symbol, assets, and custom attributes into Crestron Fusion.

Create a Template

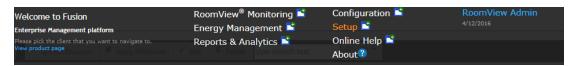
1. From the Crestron Fusion header tab, click the + (plus) icon located to the left of the **Open** link to open the pull-down tab.

Crestron Fusion Header Tab



2. Click the **Setup** link.

Setup Link



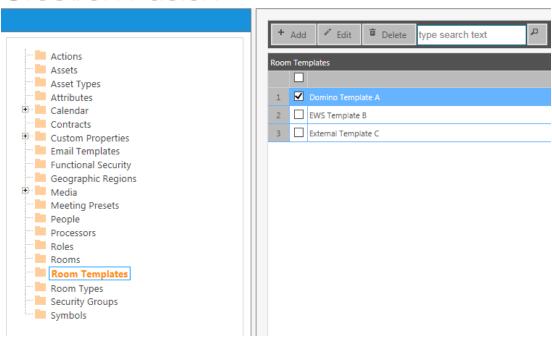
3. Click the **Objects** tab, and then click **Room Templates**. Any templates that have been previously created are displayed on the right window.

Objects Tab



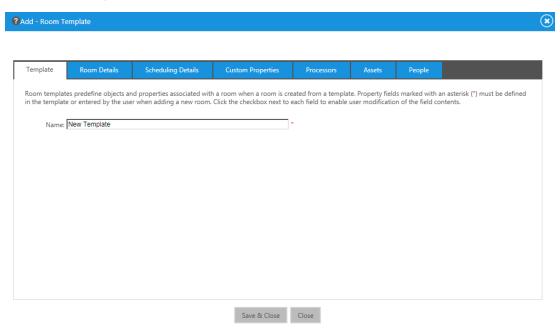
Room Templates Folder

Crestron Fusion®



4. Click Add. The Add - Room Template window is displayed.

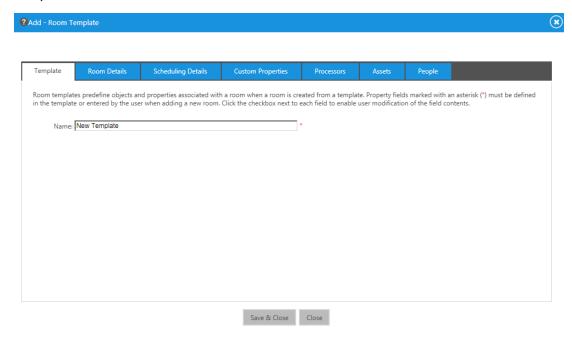
Add - Room Template Window



The following tabs can be accessed from the Add - Room Template window: Template, Room Details, Scheduling Details, Custom Properties, Processors, Assets, and People.

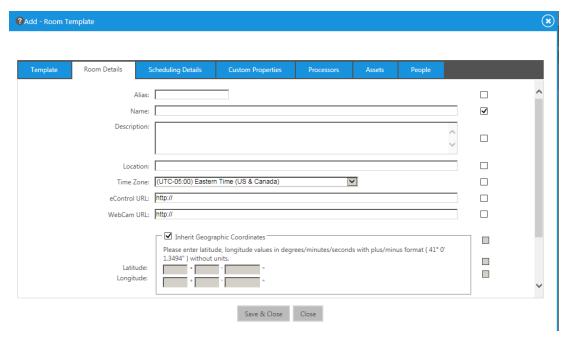
5. Click the **Template** tab.

Template Tab



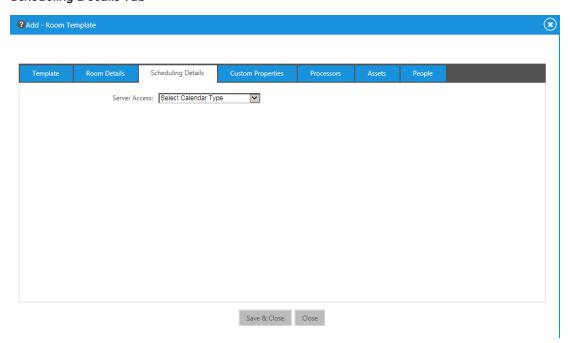
- 6. Enter a descriptive name for the template in the Name field.
- 7. Click the **Room Details** tab. The **Room Details** tab contains check boxes at the end of each field indicating whether or not the user can change or edit this value when creating a room based on this template. If the box is unchecked, the value listed cannot be changed and will be grayed out when the user creates a room from the template.

Room Details Tab



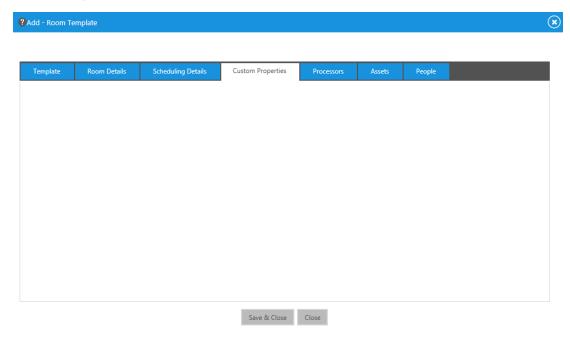
8. Complete the following fields as necessary:

- Alias: This field can be used when LDAP has been configured. LDAP is an enterprise tool that can look up room information based on a partial entry into the field. Two things are required for this to work. Crestron Fusion must be configured to point at a LDAP server; and the room must be listed in Active Directory® service.
- Name: This field is where the name of the room is entered. If scheduling panels are used, the name entered here displays on the panel.
- Description: This field is where details on the room are provided.
- Location: This field provides the location of the room and is used for the Find Available Rooms feature on scheduling panels. The information typed here needs to be consistent. The "first floor" on one room is seen differently than "1st Floor" on another room.
- Time Zone: This is set to the time zone where the room is located.
- **eControl URL:** This is the URL for the web-based Xpanel for the room. The desktop executable for Xpanels cannot be used here.
- WebCam URL: This is the URL for an IP-based camera for the room.
- Inherit Geographic Coordinates: This is where the latitude and longitude values are entered.
- Click the Scheduling Details tab to specify the scheduling provider for the room.
 Scheduling Details Tab



- 10. Click the **Server Access** drop-down list and select a provider in which Crestron Fusion can integrate.
- 11. Click the **Custom Properties** tab.

Custom Properties Tab

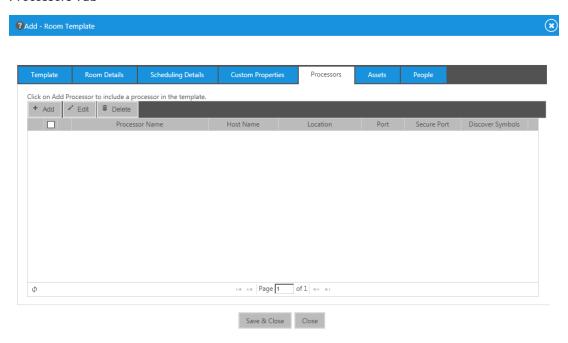


12. Depending on the provider, complete the required fields and test the connectivity.

NOTE: The fields in the **Custom Properties** tab are custom created within the software.

13. Click the **Processors** tab. The **Processors** tab contains all of the connectivity information to connect to the processor and set the room to use Symbol Discovery.

Processors Tab



Click Add to add a processor to a template. The Add Processor dialog box displays.
 Add Processor Dialog Box

| ? Add Processor to 'New Te | nplate' | | × |
|----------------------------|----------|---|----------|
| Name: | | * | ✓ |
| Location: | | | |
| IP Address/Hostname: | | * | ✓ |
| MAC Address: | | | ✓ |
| Connection Direction: | Outbound | ~ | ✓ |
| Port: | 41794 | * | ✓ |
| Secure Port: | 41796 | * | ✓ |
| Username: | | | |
| Password: | | | |
| Discover Symbols——— | | | \neg |
| Discover Symbols: | | | |
| Use SSL: | | | |
| | | | |

*denotes a required field when adding a room from template.

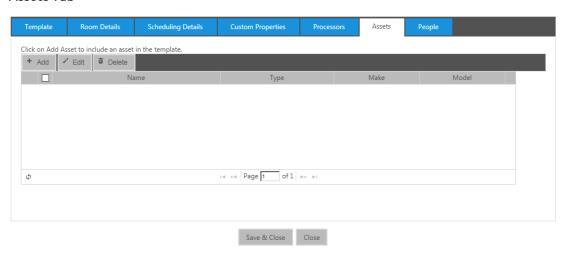


- 15. Complete the following fields as necessary:
 - Name: Where the name of the room is entered. If scheduling panels are used, the name entered here displays on the panel.
 - Location: The location of the room, used for the Find Available Rooms feature on scheduling panels. The information typed here must be consistent. (for example, the "first floor" on one room is seen differently than "1st Floor" on another room).
 - IP Address/Hostname: Used by Crestron Fusion to connect to the processor.
 - MAC Address: The MAC address of the processor.
 - Connection Direction: Shows the connection direction. The Connection is dependent on the Crestron Fusion solution. If the solution is a Crestron Fusion instance, all connections will be Inbound (processor initiates connection to Crestron Fusion). If the solution is On-Premises, the connection can be set to Inbound or Outbound. Crestron Fusion initiates connection to the processor.

NOTE: Inbound connections require configuration on the processor. Two commands must be evoked. These commands are cloudenable (On/Off) and cloudurl (a properly formatted Crestron Fusion URL).

- Port: The default Crestron communications port. Do not change unless instructed.
- **Secure Port:** The default port for secure communication. Do not change unless instructed.
- **Username/Password:** These settings are required only if the processor has been set with the login option to access the processor. If a username and password are required for the processor, enter the information here.
- **Discover Symbols:** Allows the user to discover symbols and use SSL. Click the check box if the symbol has been programmed for discovery. If SSL is invoked, click the **Use SSL** check box.
- 16. Click the **Assets** tab.

Assets Tab



17. Click **Add** to open the **Add Asset** dialog box. From this dialog box, Crestron Connected assets can be added to the template.

? Add Asset to 'New Template'

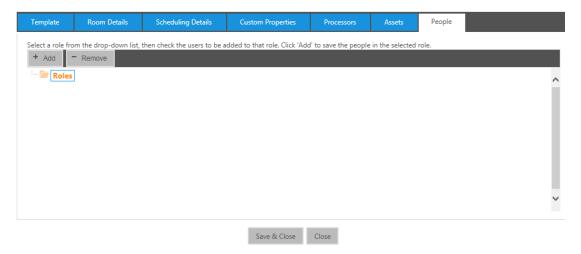
| Asset Details | Additional Details | Custom Properties | Maintenance Details | |
|---------------|---------------------------|----------------------------|---------------------|---|
| | Nama | | * | |
| | Name | | | ✓ |
| | Serial Number: | | | |
| | Туре: | | * | ✓ |
| | Connection Direction: Nor | ne | ~ | |
| | MAC Address: | | | |
| | Make: | | | |
| | Model: | | | |
| | Connection Type: Nor | ne | ~ | |
| | IP Address/Hostname: | | | |
| | Secure Port: 417 | 96 * | | |
| | *4 | d field when adding a room | - f t | |

| Save & Close | Close |
|--------------|-------|
|--------------|-------|

NOTE: Assets for the room or space should have already been added to the programming and will automatically import upon discovery, if Symbol Discovery is used.

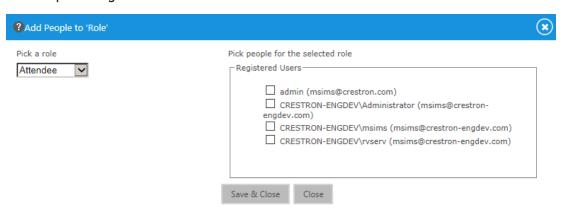
18. Click the **People** tab. The **People** tab is used to add individuals to different Roles for the room.

People Tab



19. Click the Add to open the Add People dialog box.

Add People Dialog Box



- 20. Complete the following fields as necessary:
 - Pick a Role: Use this drop-down list to determine which role to assign users to.
 - Pick people for the selected role: Click the check box for one or more of the users listed to be added to the role for this room.

NOTE: A user account must be created beforehand. If the user account is a Windows® OS account, the user must log in so the account can be created.

Edit a Template

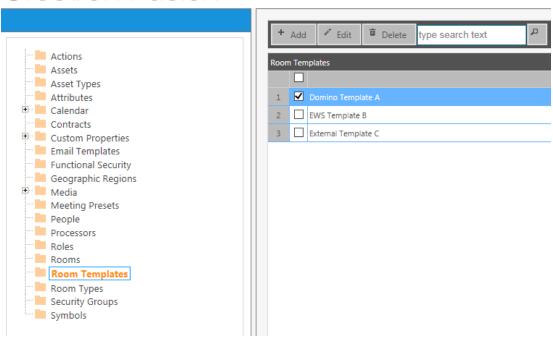
1. Click the **Objects** tab, and then click **Room Templates**. A list of previously created templates is displayed on the right window.

Objects Tab



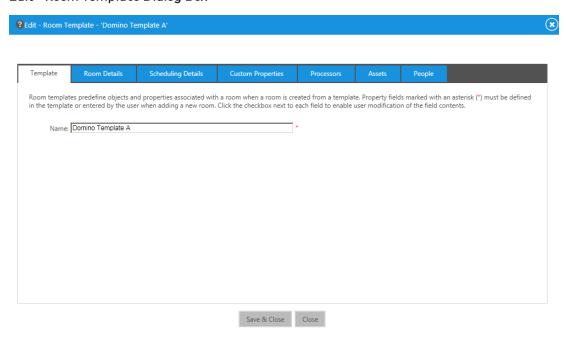
Room Templates Folder

Crestron Fusion®



- 2. Click the check box for the template to be edited, and then click **Edit**.
- 3. The Edit Room Template dialog box opens for editing the template.

Edit - Room Template Dialog Box



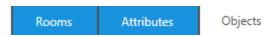
4. Enter a descriptive name for the template in the **Name** field.

5. Click Save & Close.

Delete a Template

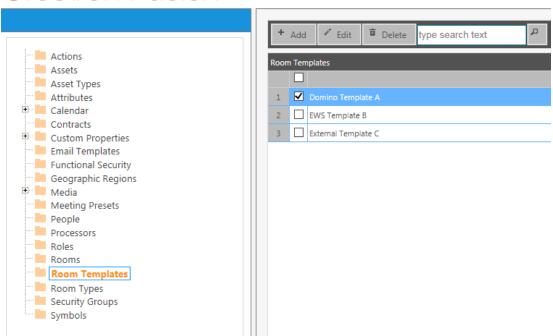
1. Click the **Objects** tab, and then click **Room Templates**. A list of previously created templates is displayed on the right window.

Objects Tab



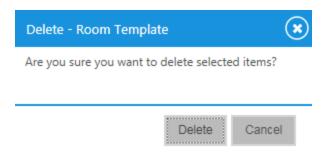
Room Templates Folder

Crestron Fusion



2. Click the check box for the template to be deleted, and then click **Delete**. The **Delete - Room Template** message box displays.

Objects Tab



3. Verify the deletion, and click **Delete**.

Organize Attributes

Attributes are one of the cornerstones of Crestron Fusion® software. Attributes provide feedback and control for specific properties in the room. There are three types of attributes: digital, analog, and serial. Attributes are defined in programming and are then associated to the room within Crestron Fusion. Specific properties for each attribute can be set in the Attribute Details, Log Settings, Email Rules, and Forwarding Rules tabs.

Configure Attributes

1. From the Crestron Fusion header tab, click the + (plus) icon located to the left of the **Open** link to open the pull-down tab.

Crestron Fusion Header Tab



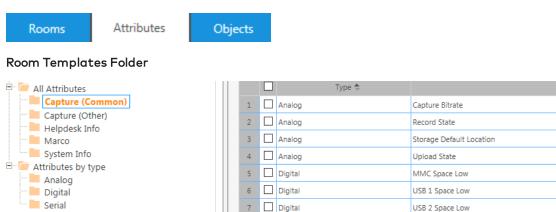
2. Click the Setup link.

Setup Link



3. Click the **Attributes** tab, and then click **Room Templates**. Any templates that have been previously created are displayed on the right window.

Attributes Tab

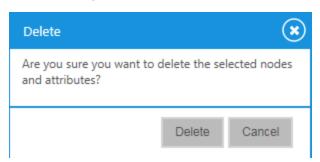


The Attibute Tree is structured as follows:

• Attributes are organized in almost the same way as they are for rooms. The folders in the tree are referred to as nodes. The nodes and attributes are organized similarly to how files and folders are organized in common operating systems.

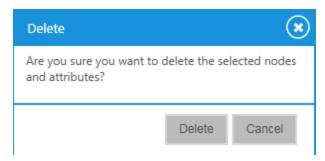
- There are two default nodes: All Attributes and Attributes by Type. Every attribute
 is listed under Attributes by Type, but not every attribute has to be listed under the
 All Attributes node.
 - All Attributes: The node represents collections of attributes for organization and creation of views under the Monitoring section on the Rooms tab. Within these views (Nodes), each attribute is represented as a column where the attribute name is listed at the top.
 - Attribute by type: The attributes are organized by their type (digital, analog, and serial).
- 4. To associate an attribute to a node, under **All Attributes**, drag and drop the attribute from the window on the right to the specific node on the left.
- 5. Removing an attribute from a node within All Attributes dissociates the attribute but does not delete it permanently. To delete an attribute:
 - a. Click the node containing the attribute to be removed.
 - b. Click the check box to the left of the attribute to be deleted, and then click **Remove**.
- 6. Deleting an attribute completely deletes it from the database. To delete an attribute:
 - a. Click the node containing the attribute to be removed.
 - b. Click the check box to the left of the attribute to be deleted, and then click **Delete**.
 - c. The **Delete** message box displays. Verify the selected nodes and attributes to be deleted, and then click **Delete**.

Delete Message Box



- 7. To apply a new attribute to all symbols, click the attribute.
- 8. Click the **Apply to All Symbols** button. This associates the selected attribute(s) to all symbols in the database.
- 9. Click Save in the Add Attributes to Symbols message box that is displayed.

Delete Message Box



Edit an Attribute

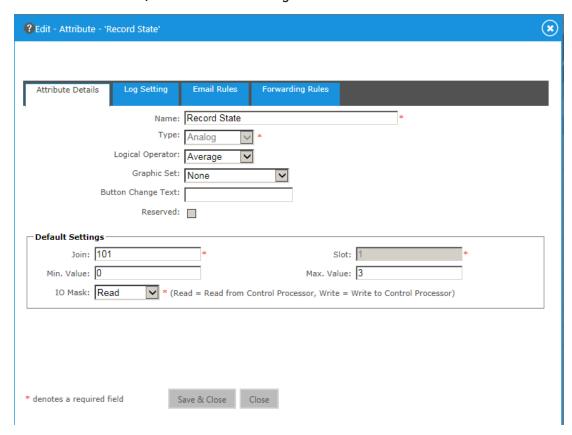
1. Click the **Attributes** tab.

Attributes Tab



- 2. Click the attribute from either the **All Attributes** node structure or the **Attributes by type** node structure.
- 3. Click the check box to the left of the attribute to be edited, and then click Edit. The Edit Attribute dialog box displays with the Attribute Details tab open.

Attribute Details Tab / Edit - Attribute Dialog Box



- 4. Make any necessary changes.
- 5. Click Save & Close.

Configure Email Alerts

One of the more popular features of Crestron Fusion is the ability to send emails to users based on conditions that may change in the room. Precise notification for the condition changes can be accomplished by creating rules based on the values of the three types of attributes: digital, analog, and serial.

Add an Email Alert Rule for Digital Attributes

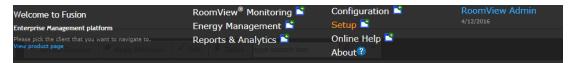
1. From the Crestron Fusion header tab, click the + (plus) icon located to the left of the **Open** link to open the pull-down tab.

Crestron Fusion Header Tab



2. Click the **Setup** link.

Setup Link



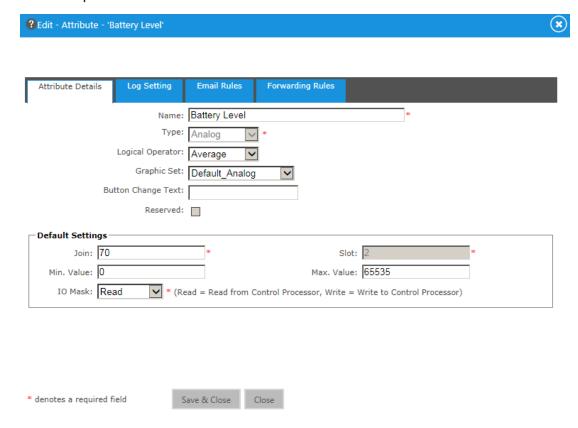
3. Click the Attributes tab.

Attributes Tab



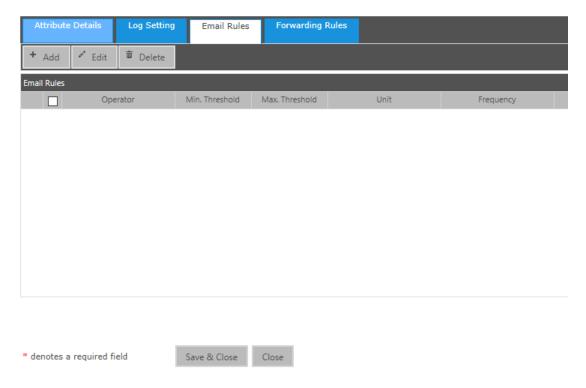
- 4. Locate the attribute in the Attributes by type node (digital, analog, or serial).
- 5. Click the check box to the left of the attribute, and then click **Edit**. The **Edit Attribute** dialog box is displayed.

Room Templates Folder



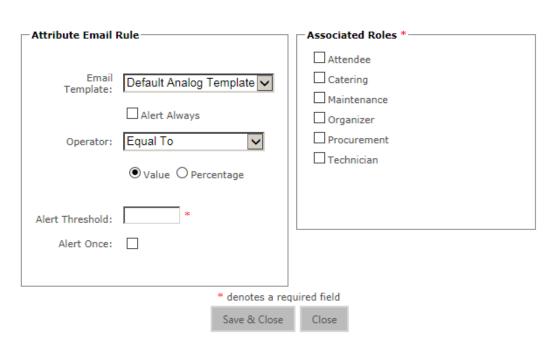
6. Click the **Email Rules** tab.

Email Rules Tab



7. Click **Add** to add a new rule. The **Add Email Rule** dialog box is displayed.





- 8. Complete the fields according to how the notification should trigger.
 - **Email Template:** Identifies what template should be used when the email notification is triggered.
 - Alert Always: Any time the value changes for this attribute, an email is sent. If the check box is checked, the rest of the settings are grayed out.
 - Operator: For serial attributes the choices are as follows:
 - **Equal To:** This sends notification for an exact serial string value match of the Alert Threshold.
 - **Not Equal:** This sends notification for each serial string value not matching the Alert Threshold.
 - Regular Expression: This sends notification when specific elements of the serial string match based on the Alert Threshold. A regular expression is a sequence of characters that define a search pattern, mainly for use in pattern matching with strings, or string matching.
 - Alert Threshold: Defines the actual value that the logical operator calculation depends on.
 - Alert Once: A single email notification is sent when the logical operation calculation is true.

- Associated Roles: Defines which associated role for the room receives the e-mail notification. Users are added to the role for the room under the room settings.
- 9. Click Save & Close.

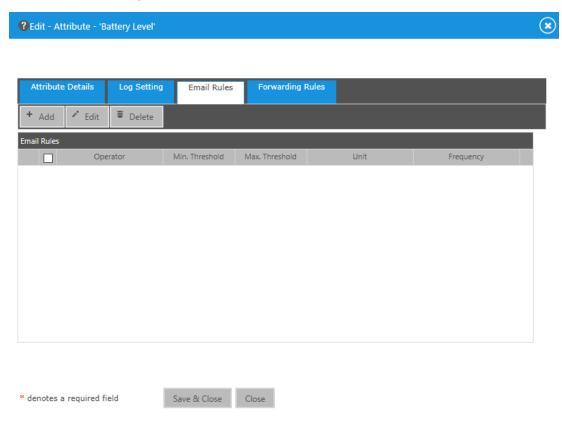
Add an Email Alert Rule for Analog Attributes

1. Click the **Attributes** tab.



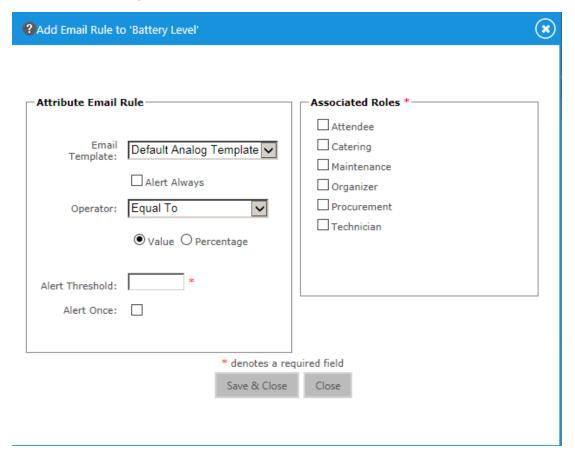
- 2. Locate the attribute in the Attributes by type node (digital, analog, or serial).
- 3. From the right side of the screen, click the check box to the left of the attribute type, and then click **Edit**.
- 4. The **Edit Attribute dialog** box displays. Click the **Email Rules** tab.

Edit - Attribute Dialog Box



5. Click Add to add a new rule. The Add Email Rule dialog box displays.

Add Email Rule Dialog Box



- 6. Complete the fields according to how the notification should trigger.
 - **Email Template:** Identifies what template should be used when the email notification is triggered.
 - Alert Always: Any time the value changes for this attribute, an email is sent. If the check box is checked, the rest of the settings are grayed out.
 - Operator: For serial attributes the choices are as follows:
 - **Equal To:** This sends notification for an exact serial string value match of the Alert Threshold.
 - **Not Equal:** This sends notification for each serial string value not matching the Alert Threshold.
 - Regular Expression: This sends notification when specific elements of the serial string match based on the Alert Threshold. A regular expression is a sequence of characters that define a search pattern, mainly for use in pattern matching with strings, or string matching.
 - Value or Percentage: Defines whether the threshold is a specific value or a percentage of the attribute range (analog is 0-65535).

- Alert Threshold: Defines the actual value that the logical operator calculation depends on.
- Alert Once: A single email notification is sent when the logical operation calculation is true.
- Associated Roles: Defines which associated role for the room receives the e-mail notification. Users are added to the role for the room under the room settings.
- 7. Click Save & Close.

Add an Email Alert Rule for Serial Attributes

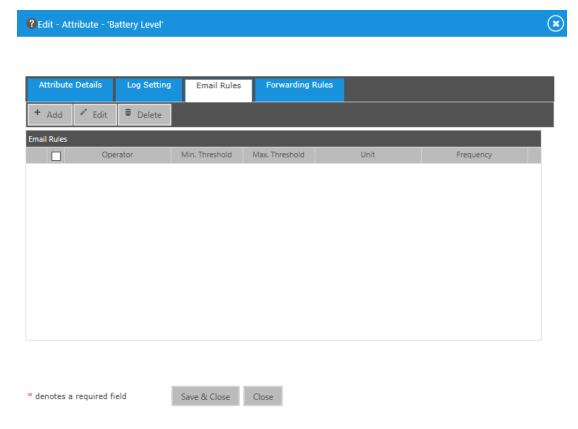
1. Click the **Attributes** tab.

Attributes Tab



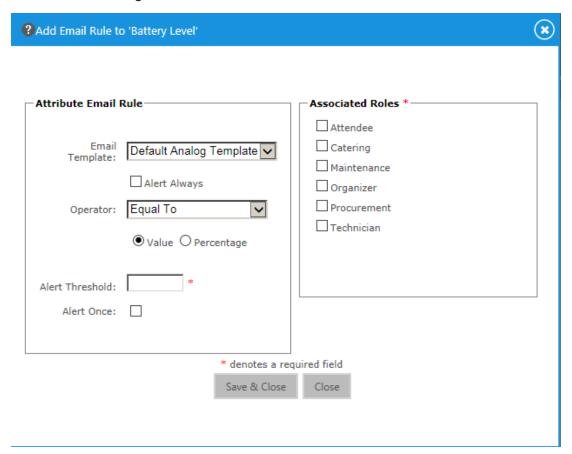
- 2. Locate the attribute in the Attributes by type node (digital, analog, or serial).
- 3. From the right side of the screen, click the check box to the left of the attribute type, and then click **Edit**.
- 4. The **Edit Attribute dialog** box displays. Click the **Email Rules** tab.

Edit - Attribute Dialog Box



5. Click **Add** to add a new rule. The **Add Email Rule** dialog box displays.

Add Email Rule Dialog Box



- 6. Complete the fields according to how the notification should trigger.
 - **Email Template:** Identifies what template should be used when the email notification is triggered.
 - Alert Always: Any time the value changes for this attribute, an email is sent. If the check box is checked, the rest of the settings are grayed out.
 - Operator: For serial attributes the choices are as follows:
 - **Equal To:** This sends notification for an exact serial string value match of the Alert Threshold.
 - **Not Equal:** This sends notification for each serial string value not matching the Alert Threshold.
 - Regular Expression: This sends notification when specific elements of the serial string match based on the Alert Threshold. A regular expression is a sequence of characters that define a search pattern, mainly for use in pattern matching with strings, or string matching.
 - Alert Threshold: Defines whether the threshold is a specific value or a percentage of the attribute range (analog is 0-65535).

- Alert Once: A single email notification is sent when the logical operation calculation is true.
- Associated Roles: Defines which associated role for the room receives the e-mail notification. Users are added to the role for the room under the room settings.
- 7. Click Save & Close.

Use Actions in Crestron Fusion

Actions in Crestron Fusion® software are used to trigger a single attribute value or multiple attribute values to one or more rooms. Actions can be sent manually or can be added to scheduling events or meetings for automation.

Create an Action

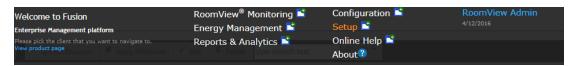
1. From the Crestron Fusion header tab, click the + (plus) icon located to the left of the **Open** link to open the pull-down tab.

Crestron Fusion Header Tab



2. Click the Setup link.

Setup Link



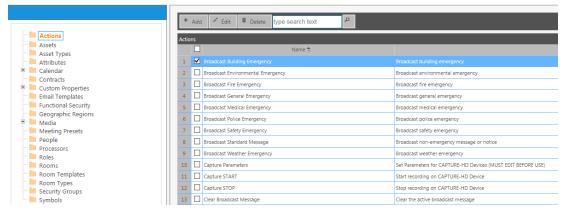
3. Click the **Objects** tab, and then click **Actions**. A list of default actions is displayed on the right window.

Objects Tab



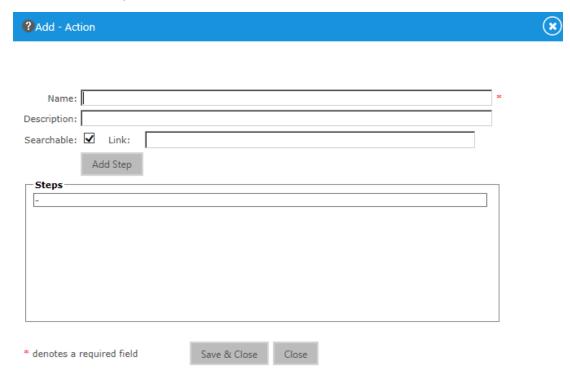
Default Actions

Crestron Fusion



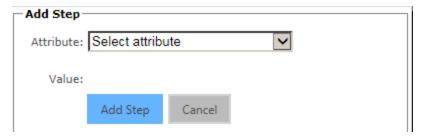
4. Clck Add. The Add - Action dialog box displays.

Add - Action Dialog Box



- 5. Complete the fields as necessary.
 - Name: A descriptive name to define this action.
 - **Description:** Additional information about the asset.
 - Searchable: TDefines whether the action displays as an option under the OLAI.
 - Link: A URL link to the action.
 - Add Step: Opens the Add Step dialog box to add steps to set one or more attribute values.

Add Step Dialog Box



- From the **Attribute** drop-down list, click the attribute and define the value to be sent.
- Repeat this process until all steps have been added.
- When complete, click **Add Step**. The **Add Action** dialog box displays.
- 6. Click Save & Close.

Send an Action for the Room Tree

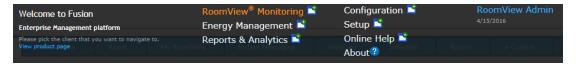
1. From the Crestron Fusion header tab, click the + (plus) icon located to the left of the Open link to open the pull-down tab.

Crestron Fusion Header Tab



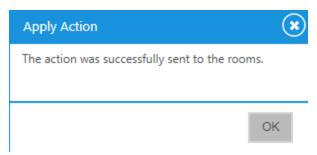
2. Click the **RoomView® Monitoring** link.

RoomView® Monitoring Link



- 3. Select the room or node to apply the action. All rooms in a selected node receive the action.
- 4. Click the Apply Action drop-down list, and then select the Action to send.
- 5. The **Apply Action** message box displays. Review the information, and then click **OK**.

Apply Action Message Box



NOTE: These actions are applied to the room immediately. Be careful to select the appropriate rooms and nodes so as not to inadvertently send actions to the wrong rooms and possibly disrupt business activities.

Schedule an Action

1. From the Crestron Fusion header tab, click the + (plus) icon located to the left of the **Open** link to open the pull-down tab.

Crestron Fusion Header Tab



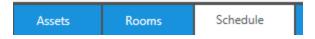
2. Click the Setup link.

Setup Link



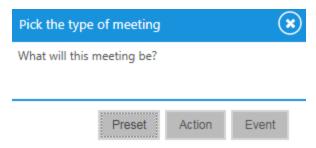
- 3. From the tree, click the room where the action is to be scheduled.
- 4. Click the Schedule tab, and locate the time and date the action should occur.

Schedule Tab



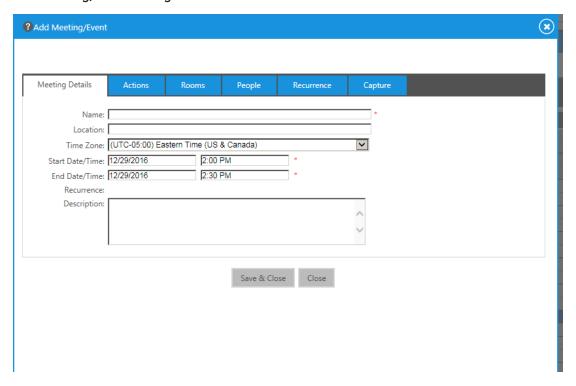
5. Double-click the time slot. The **Pick the type of meeting** dialog box is displayed.

Pick the type of meeting Dialog Box



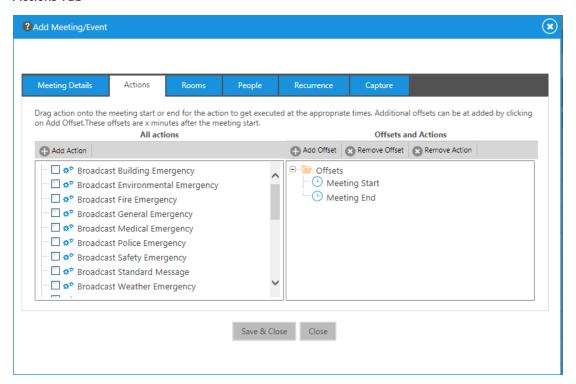
6. Click the type of meeting and the **Add Meeting/Event** dialog box displays with the **Meeting Details** tab selected.

Add Meeting/Event Dialog Box



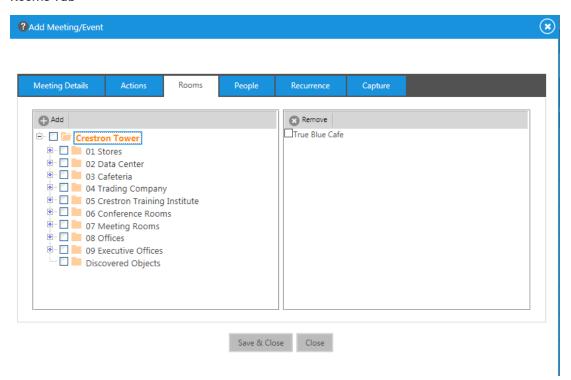
- 7. Complete the fields as necessary.
 - Name: The subject of the meeting or event.
 - Location: Where to fill in the meeting location, if required.
 - Time Zone: The time zone for the room by default (unless otherwise specified).
 - Start Date/Time: Defines the start date and start time of the meeting. If this is an event, only the Start Date/Time is displayed.
 - End Date/Time: Defines the end date and end time of the meeting.
 - Recurrence: Displays only after a meeting is saved.
 - Description: A short description of the meeting.
- 8. Click the Actions tab.

Actions Tab



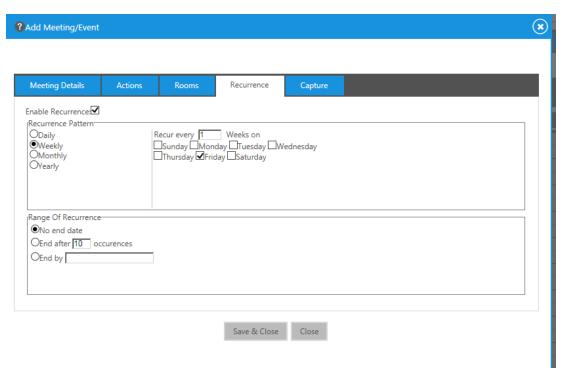
- 9. Drag and drop the desired action to the **Meeting Start** or **Meeting End** field so that the action gets executed at the appropriate times.
 - Another way to add an action is to highlight **Meeting Start** or **Meeting End**, click the check box for the desired action, and then click **Add Action**. To delete an action, click **Remove Action**.
- 10. Click **Add Offset** to add a delayed predetermined time from the start of a meeting for the action.
- 11. Click the Rooms tab.

Rooms Tab



- 12. Click the Room Tree to add additional rooms for the scheduled action, and then click Add.
- 13. Click the **Recurrence** tab to set the pattern for a recurring meeting.

Recurrence Tab



- 14. Complete the fields as necessary.
- 15. Click Save & Close.

NOTE: The Capture tab is available only when a Capture HD® device is assigned to a room.

Delete a Meeting

To delete a meeting after saving and closing the Add Meeting/Event dialog box:

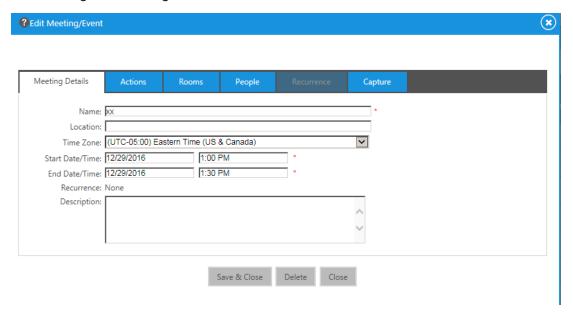
1. Click the meeting displayed on the calendar.

Delete a Meeting

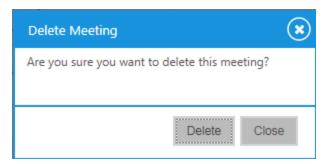


2. Click **Delete** in the **Edit Meeting/Event** dialog box that is displayed. The **Delete Meeting** dialog box opens.

Edit Meeting/Event Dialog Box



Delete Meeting Dialog Box



3. Click **Delete**. The meeting will be removed from the calendar.

Manage Help Requests

Help Request messaging allows the staff utilizing a room to send a message to request help (using a touch panel in the room) to Crestron Fusion® software. Typically, these are predefined messages sent from the program based on a button press. The message is sent to Crestron Fusion, where it is posted to the website. Audible and visible alerts can be seen and heard from the website along with an email notification if configured.

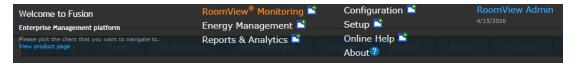
1. From the Crestron Fusion header tab, click the + (plus) icon located to the left of the **Open** link to open the pull-down tab.

Crestron Fusion Header Tab



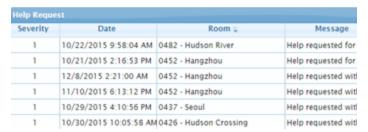
2. Click the RoomView® Monitoring link.

RoomView® Monitoring Link



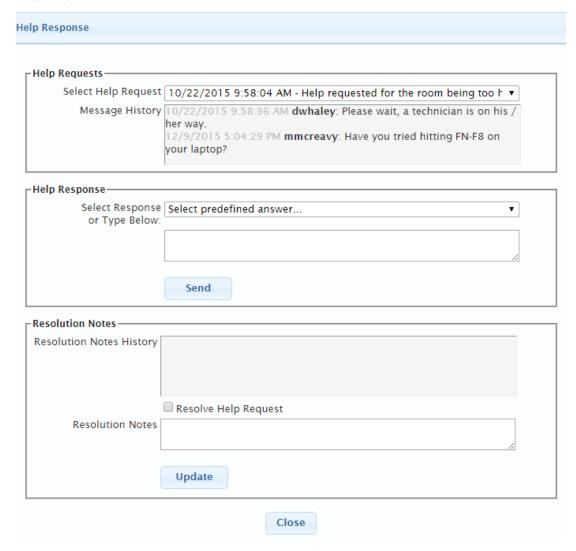
3. Click the My RoomView tab. The help requests appear at the bottom of the window.

Help Requests List



- 4. Double-click a help request row to open the help request.
- 5. The Help Response dialog box is displayed. Respond and add notes as necessary.

Help Requests List



- 6. Complete the fields as necessary:
 - Select Help Request: The currently selected Help Request.
 - Message History: The touch screen in the room can be programmed to send and receive messages. An interaction between the two parties as it relates to this message is tracked here.
 - Select Response or Type Below: Contains generic responses to be sent back to the room. The field directly underneath allows a custom message to be sent back to the room. This message displays on the touch screen through programming.
 - Send: Click this button to send the help response.
 - Resolution Notes History: The history of the Help Request and Help Responses.
 - Resolve Help Request: Once the Help Request is completed, click the check box. The help request will be closed and removed from the My RoomView tab.

- Resolution Notes: After clicking the Resolve Help Request check box, enter notes in this field to describe what the issue was and how it was resolved.
- Update: Click this button to clear help requests.
- 7. When complete, click **Close** to close the window.

Monitor Rooms

The Crestron Fusion® Monitoring web client contains all of the live feedback, control options, and views for rooms across the facility. This information is dependent upon the selection made on the room tree. Either a single room or an entire node can be viewed at once.

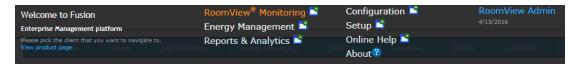
1. From the Crestron Fusion header tab, click the + (plus) icon located to the left of the **Open** link to open the pull-down tab.

Crestron Fusion Header Tab



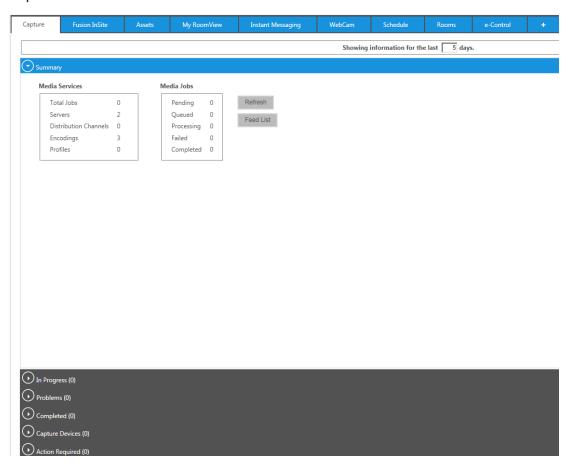
2. Click the RoomView® Monitoring link.

RoomView® Monitoring Link



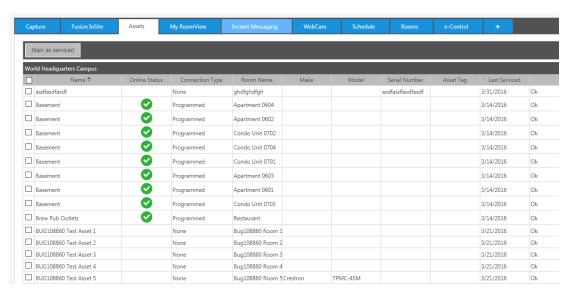
3. Click the Capture tab. This displays all of the information for using CaptureLiveHD.

Capture Tab

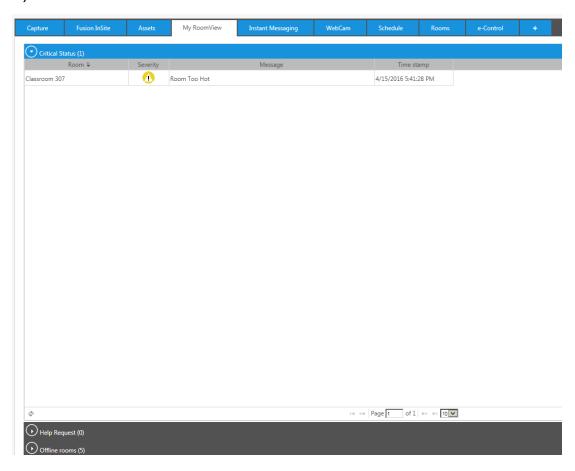


- 4. Click the tabs to view the following status information:
 - **Summary:** Yhe total jobs that are processed and distributed. The Feed List launches the RSS Feed for all processed jobs.
 - In Progress: The current jobs that are being processed by Crestron Fusion.
 - **Problems:** Any transcoding error issues.
 - Completed: A list of successfully completed transcodings.
 - Capture Devices: All Capture HD units associated with the Crestron Fusion software. This view provides live feedback and information on the hardware.
 - Action Required: Any jobs that require additional information or need to be processed.
- 5. Click the **Assets** tab. The **Assets** tab shows all Assets that are associated with the room or node that has been selected.

Assets Tab

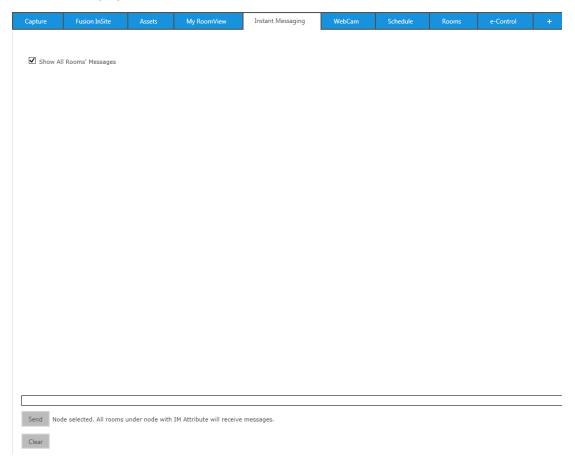


6. Click the **My RoomView** tab. This tab shows all critical status messages and help requests. **My RoomView Tab**



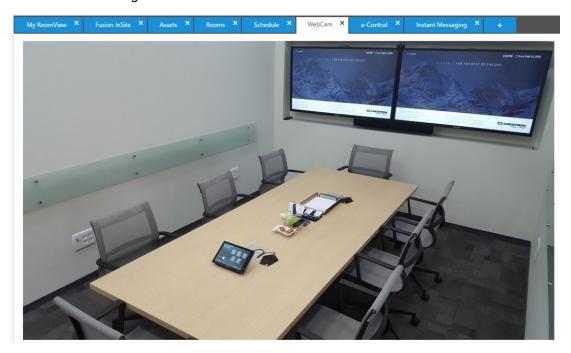
7. Click the **Instant Messaging** tab. This provides the ability to message back and forth with the selected room.

Instant Messaging Tab



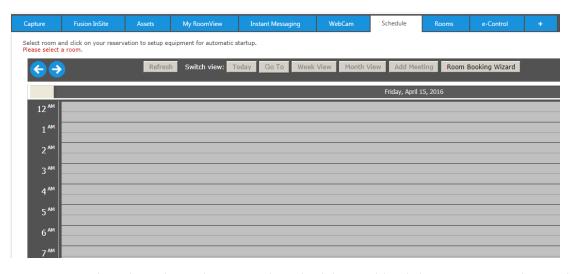
8. Click the **WebCam** tab. This loads a video image from an IP camera. The URL for the stream is entered when the room is created under **Setup**.

WebCam Video Image



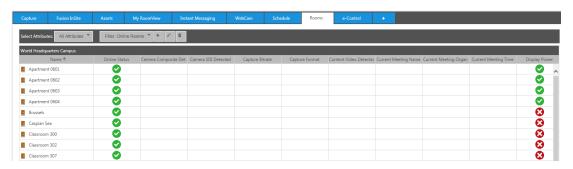
9. Click the **Schedule** tab. The **Schedule** tab shows the schedule for the room. Scheduling data is accessed from the internal scheduler or an integrated scheduling provider.

Schedule Tab



- 10. A room must be selected in order to see the schedule. Double-click an open time slot to allow for meeting creation.
- 11. Click the **Rooms** tab. This is the main view for feedback on attributes in Crestron Fusion. Feedback is displayed based on the room or node selected.

Rooms Tab



- Select Attributes: The drop-down menu reflects the nodes populated on the Attributes tab under the Setup section of the website. Selecting an entry from this drop-down menu shows a different set of attributes, sometimes referred to as a view.
- **Filter:** Filters can be created to qualify the data presented on the page. For instance, a filter can be created to show only rooms whose projectors show more than 1500 hours.
- 12. Click the **e-Control** tab. This loads a web-based Xpanel that allows for direct control of the room. Either the Xpanel is embedded into the web page or a secondary browser window is launched to load and display the Xpanel.





Enable Accessibility

In the Crestron Fusion® Web Client, accessibility support is applicable only for the following tabs and sections:

- My RoomView tab
- Assets tab
- · Rooms tab
- Schedule tab
- User Profile
- · Room booking wizard
- Tree View
- · Navigation shade
- · Apply Action drop-down

Operating System

Both Windows and macOS support accessibility functionality. In order to use accessibility, screen reader and keyboard navigation features need to be enabled.

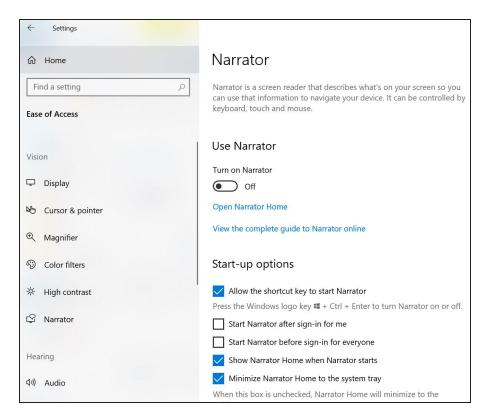
Enable Screen Reader on Windows

To enable screen reader on Windows:

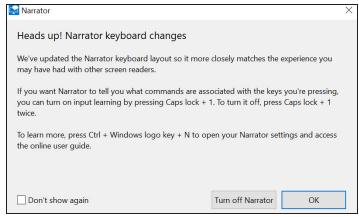
1. Click **Start/Settings**. The Windows Settings appears.



- 2. Click **Ease of Access**. The Display window appears.
- 3. Click Narrator in the left navigation pane. The Narrator window appears.



4. Set the Turn on Narrator button to On. The Narrator dialog box appears.



5. Click OK.

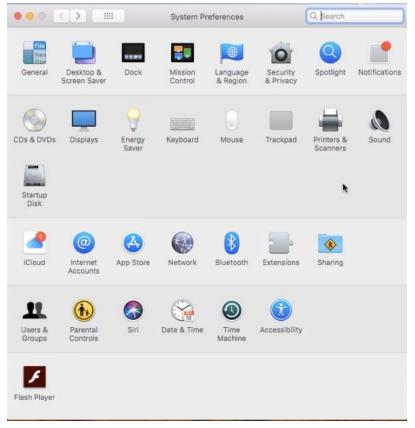
NOTE: Keyboard navigation is enabled on Windows by default.

For more information about the accessibility features of Windows, refer to the Microsoft website.

Enable Screen Reader and Keyboard navigation on macOS

To enable screen reader and keyboard navigation on macOS:

1. Click Apple Menu/System Preference. The System Preference window appears.



- 2. Click Accessibility. The Accessibility window appears.
- 3. To use the screen reader, click **VoiceOver** from the left navigation pane and select the **Enable VoiceOver** checkbox.
- 4. To use keyboard navigation, select the **Use keyboard navigation to move focus between controls** checkbox.

For more information about the accessibility features of macOS, refer to the Apple website.

Browser Support

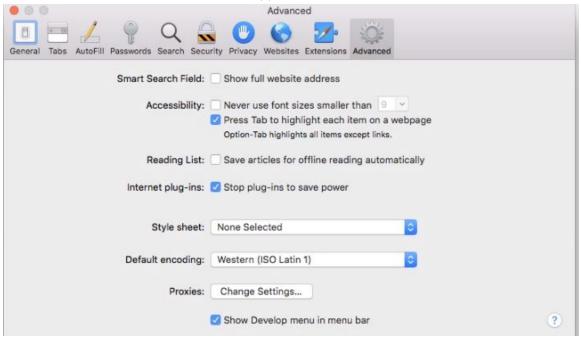
Browsers on Windows and macOS support accessibility functionality.

- Windows: Use the **Tab** key to navigate between different web elements on supported browsers.
- macOS: For the Safari browser, the Tab key needs to be enabled to navigate between different web elements.

Enable Tab key on Safari

To enable the Tab key on Safari:

- 1. Open the **Safari** browser.
- 2. Click **Safari/Preferences**. The Preference window appears.
- 3. Click Advanced. The Advanced window appears.



4. Select the **Press tab to highlight each item on a webpage** checkbox.

Screen Readers

Crestron Fusion software is compatible with screen readers. For example, Narrator, VoiceOver, and NVDA.

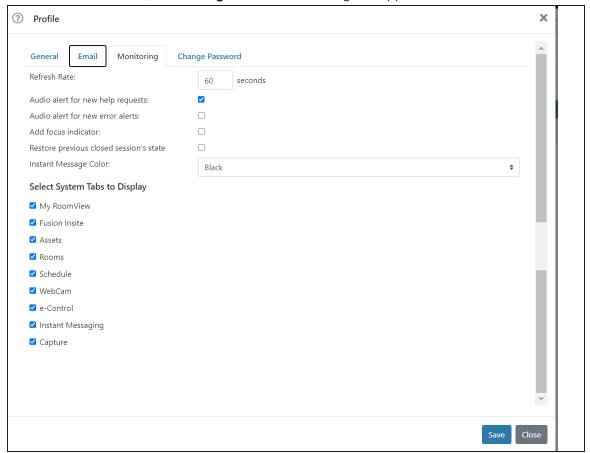
Focus Indicator

The Focus Indicator is a visual marker that indicates which element on the interface is under focus. When moving the focus, a box is placed around the focused element to provide a clear visual marker for the element. Only one element can be focused at a time. Enable the focus indicator in the Monitoring web client.

Enable the Focus Indicator

To enable the focus indicator in the Monitoring web client:

1. Click the User Profile/Monitoring tab. The Monitoring tab appears.

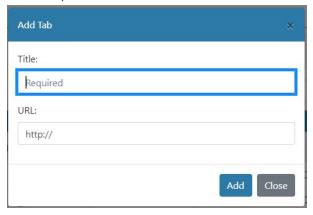


- 2. To enable the focus indicator, select the Add focus indicator checkbox.
- 3. Click Save.

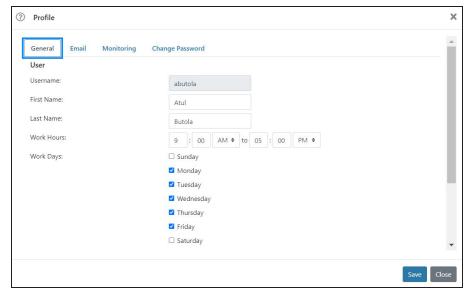
Modal Dialogs

Focus is set based on the content of each dialog. The following examples describe focus indicator usage in different scenarios:

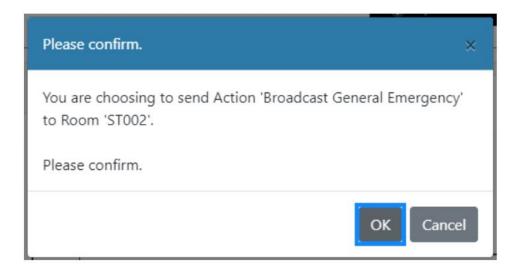
• In an input dialog box, focus will be on the first input field. In the following image, the focus is on the input **Title** field.



• In a window with tabs, focus will be on the first tab. In the following image, the focus is on the **General** tab.



• In a confirmation dialog box, focus will be on the first button. In the following image, the focus is on the **Ok** button.



The following key actions are supported for Modal Dialogs:

- **Tab**: In the dialog box, use the **Tab** key to move the focus to the next element. If the focus is on the last element, it moves to the first element in the dialog box.
- **Shift + Tab**: In the dialog box, use the **Shift +Tab** keys to move the focus to the previous element. If the focus is on the first element, it moves to the last element.

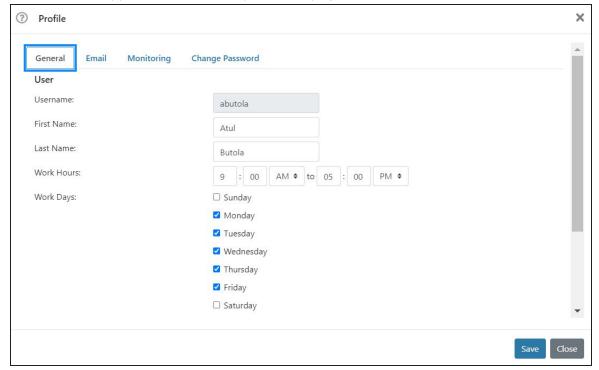
Notifications

When a notification appears, the focus will be on the first button of the notification dialog box. The screen reader will read out the notification message. If the notification is not audible, then depending upon the screen reader, use the appropriate shortcut keys to hear the message again.



Tabs

When focus is applied, the entire tab panel is displayed.



The following key actions are supported for Tabs:

- **Tab**: When the focus is moved to a tab list, the focus is on the active tab. Use the **Tab** key to move the focus to the next tab in the window.
- Enter or Space: When the focus is on a tab, use the Enter or Space key to activate the tab and display the entire tab panel.
- **Right Arrow**: When the focus is on a tab list, use the **Right Arrow** key to move the focus to the next tab. If the focus is on the last tab, it will move to the first tab of the window.
- **Left Arrow**: When the focus is on a tab list, use the **Left Arrow** key to move the focus to the previous tab. If the focus is on the first tab, it will move to the last tab of the window.
- **Delete**: In some cases, when the focus is on a tab list, using the **Delete** key will remove the tab and move the focus to the previous tab of the window.

Grids

When focus is applied, the grid displays the focused cell data.



- Using the standard navigation keys, data cells can be focused. For example, **Home**, **End**, **Right Arrow**, and **Left Arrow**.
- If a grid has a link, then the link will be activated when in focus.
- Use the screen reader table navigation keys while navigating through the grid cells.

NOTES:

- The Page Up and Page Down keys are not supported.
- The focus can not be applied to the header cells if the grid's header cells do not support column sorting.

Trees

When the focus is applied to a node in the Tree View, the node's information is displayed in the right navigation panel of the Monitoring window.



The following key actions are supported for Trees:

- Enter or Space: When the focus is on a node, use the Enter or Space key to execute the default action.
- **Down Arrow**: When the focus is on a node, use the **Down Arrow** key to move the focus to the next node without opening or closing the node. If the focus is on the last node, it will not move and remains on the last node.

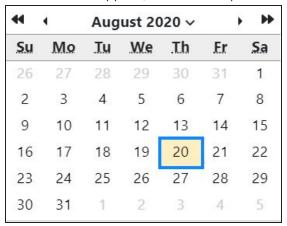
- **Up Arrow**: When the focus is on a node, use the **Up Arrow** key to move the focus to the previous node without opening or closing the node. If the focus is on the first node, it will not move and remains on the first node.
- **Right Arrow**: When the focus is on a closed node, use the **Right Arrow** key to open the node. If the focus is on an open node, the focus will move to the first node inside the open node. If the focus is on the last node, it will not move and remains on the last node.
- Left Arrow: When the focus is on an open node, use the Left Arrow key to close the node. If the focus is on either the last child node or a closed node, it will move to the parent node. If the focus is on the root node, which is either an end node or a closed node, the focus will not move and remains on the root node.
- **Home**: When the focus is on one of the nodes, use the **Home** key to move the focus to the first node without opening or closing a node.
- **End**: When the focus is on one of the nodes, use the **End** key to move the focus to the last node without expanding any node.

Tables

Tables do not support focus; therefore, they do not have keyboard support or JavaScript code associated with them. Depending upon the screen reader, tables can be read and navigated.

Date Pickers

When focus is applied, use the date picker to pick a date from the date picker widget.



The following key actions are supported for date pickers:

- Left Arrow: Use the Left Arrow key to move the focus to the previous day. If the focus is on the first day of a month, it will move to the last day of the previous month.
- **Right Arrow**: Use the **Right Arrow** key to move the focus to the next day. If the focus is on the last day of a month, it will move to the first day of the next month.
- Up Arrow: Use the Up Arrow key to move the focus to the same day of the previous week.
- Down Arrow: Use the Down Arrow key to move the focus to the same day of the next week.
- Page Up: Use the Page Up key to move the focus to the same date of the previous month.

- Page Down: Use the Page Down key to move the focus to the same date of the next month.
- Alt + Page Up: Use the Alt + Page Up keys to move the focus to the same date of the previous year.
- Alt + Page Down: Use the Alt + Page Down keys to move the focus to the same date of the next year.
- Home: Use the Home key to move the focus to the first day of the month.
- End: Use the End key to move the focus to the last day of the month.
- **Tab** or **Shift** + **Tab**: If the date picker is in modal mode, use **Tab** or **Shift** + **Tab** to move the focus between the calendar grid and the close, previous or next selection buttons.
- Enter or Space: Use the Enter or Space key to move the focus to the date field by populating it with the selected date and the date picker widget will close.

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