Fusion Configuration Tool Administrator Guide

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Note: The Fusion Configuration Tool Administrator Guide will no longer be updated. For up to date Fusion information, see our knowledge base. https://knowledgebaseclarecontrols.atlassian.net.

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Version

This document applies to Fusion Configuration Tool version 3.0.

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Chapter 1
Introduction

Summary

Welcome to the Fusion Configuration tool, a part of the ClareHome suite of tools, the first home automation system managed from the cloud. ClareHome leverages cloud-based protocols to provide secure remote communications with ClareOS controllers without compromising homeowner network firewalls. Fusion lets you connect to customer servers for system management and maintenance from the cloud, and then quickly download any changes remotely.

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Presenting the Fusion Configuration Tool

The Fusion Configuration Tool builds the logic that matches the wiring connections from installation, and in turn centralizes control of the home automation system.

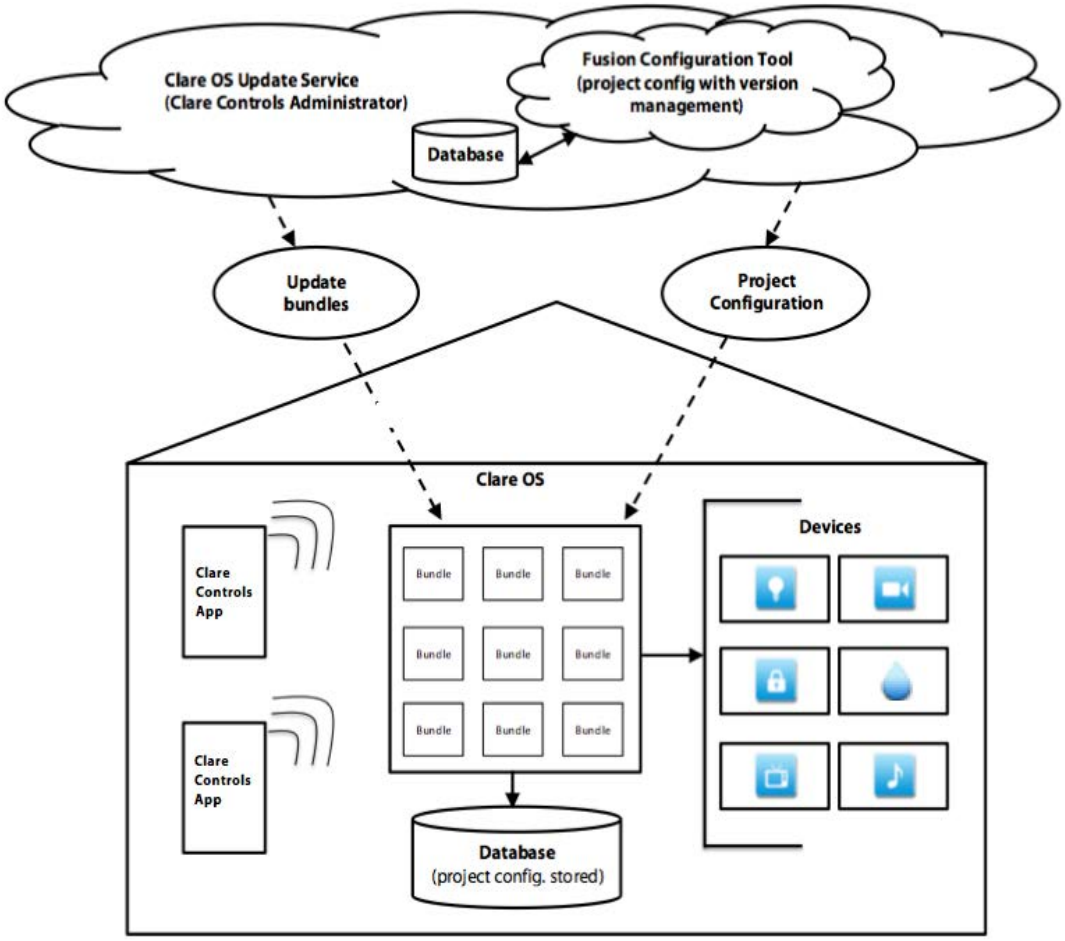
Fusion is available through the ClareCloud central portal where dealers can configure, program, monitor, and service ClareHome remotely and in real-time. Fusion follows an intuitive flow that lets you easily configure home automation projects. It leads you from one pane to another, moving left to right, as follows:

- Create your project in the Projects pane, and then, if desired, create your areas in the Areas pane.
- Configure all the devices for your project in the Devices pane, and then create associated services that make the devices appear on the customer's mobile device (iPad, iPhone, Android).
- Create scenes and rules that perform many of the actions normally done by the customer.

ClareOS Update Service and Fusion

Clare Controls manages and maintains the ClareOS Update Service. The ClareOS Update Service manages versions of deployed software, and all silent updates to be deployed to ClareHome systems. Fusion allows you (the dealer) to configure devices in a project and to deploy that project. ClareHome system projects can be updated seamlessly without shutting down the system.

Figure 1: ClareHome system architecture diagram



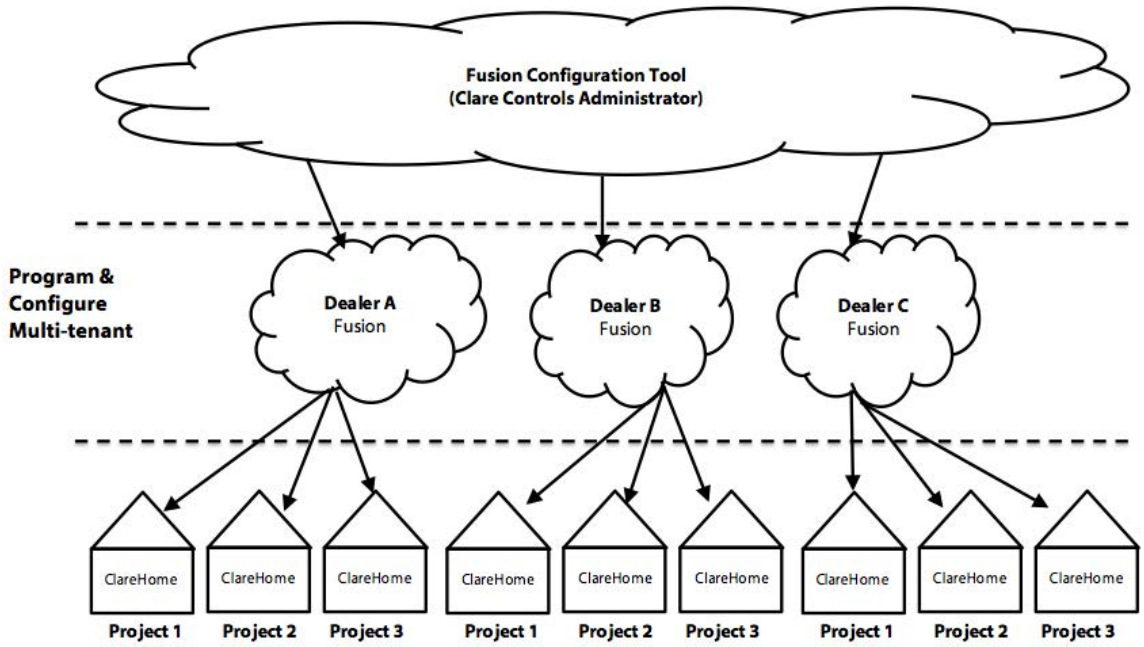
Multi-tenant environment

The architecture of ClareHome allows multiple dealers to program and configure multiple projects at the same time. This is known as a multi-tenant environment.

Clare Controls can access to each dealer company and can push updates seamlessly to each dealer's Fusion Configuration Tool. Refer Figure 2. to better understand the multi-tenant environment.

Note: After you deploy a project configuration, you become the owner of that project configuration. The ClareHome system stores this currently deployed project configuration in a database running in the home site.

Figure 2: Diagram of multi-tenant environment



Managing silent updates

As updates become available, Clare Controls pushes these updates silently to each ClareHome controller (CH-OS).Clare Controls pushes silent updates to templates without shutting down the system or disrupting users.

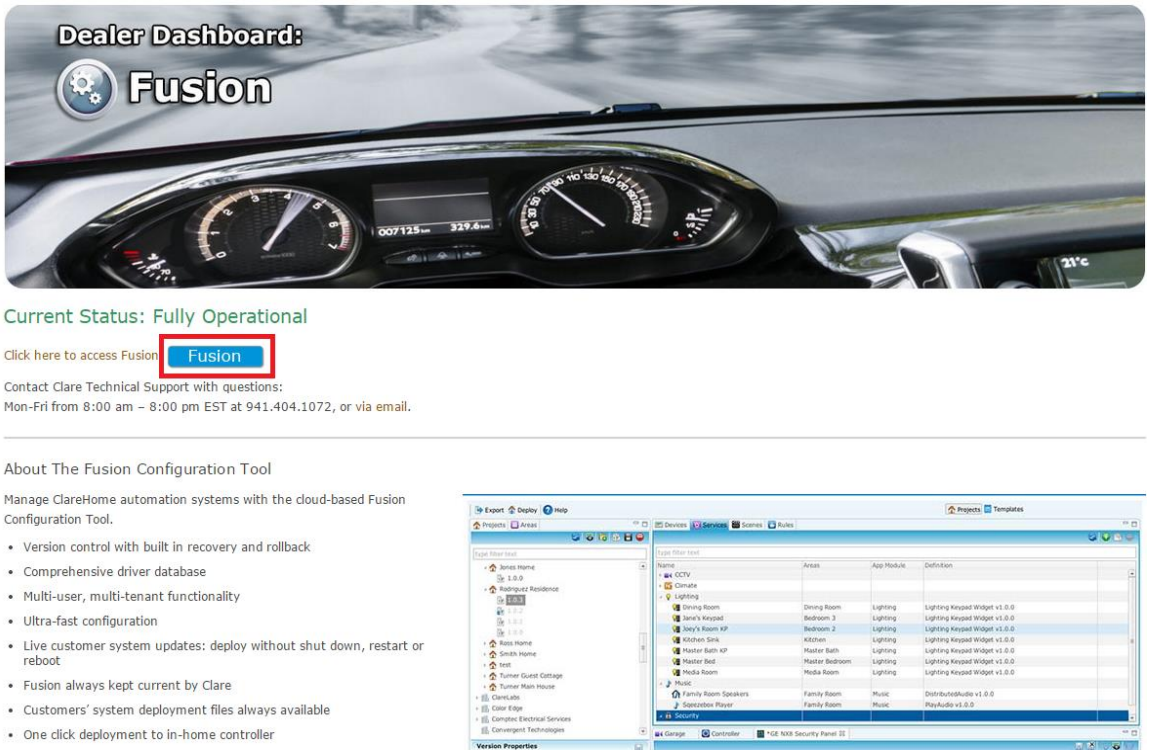
Logging into Fusion

You can easily access Fusion from the dealer portal on the ClareHome web page. We recommend that you operate the Fusion Configuration Tool using any of the following web browsers: Google Chrome or Firefox. Fusion is not currently compatible with Internet Explorer or Safari.

To log on to Fusion:

1. Using your favorite web browser (we recommend Google Chrome or Mozilla Firefox), go to http://www.clarecontrols.com/dealer/fusion-home/.
2. Click Fusion, located under the Dealer Dashboard banner. See Figure 3.

Figure 3: Fusion button on the Dealer Dashboard



Notes

- If you experience difficulty while accessing Fusion, contact Clare Controls Customer Support at 941-404-1072
- Once in Fusion, do not click the Refresh button on your browser's toolbar.

Chapter 2
Understanding the Fusion Workspace

Summary

This chapter provides a brief overview of Fusion customer interface. Each section provides a high-level description and concept of each pane within Fusion.

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The Fusion Workspace

Fusion is the tool you use to create, configure, and deploy a ClareHome project in the Fusion workspace. The Fusion workspace displays in two views, the Project view and the Project Version view.

The Project view is the first view. It displays summary information about the health of your ClareHome system so that you can quickly isolate any problem or troubleshoot a potential problem, thus eliminating the need to dispatch a technician to the customer site. See Figure 4.

The Project Version view displays all the tools needed to configure your ClareHome project. This includes the tools used to logically connect the devices at the customer site, to define the control parameters for those devices, and to build special scenes that combine several actions, such as arming security devices and turning off multiple lights, which can be triggered by the push of a single button. See Figure 5.

Figure 4: Project view workspace

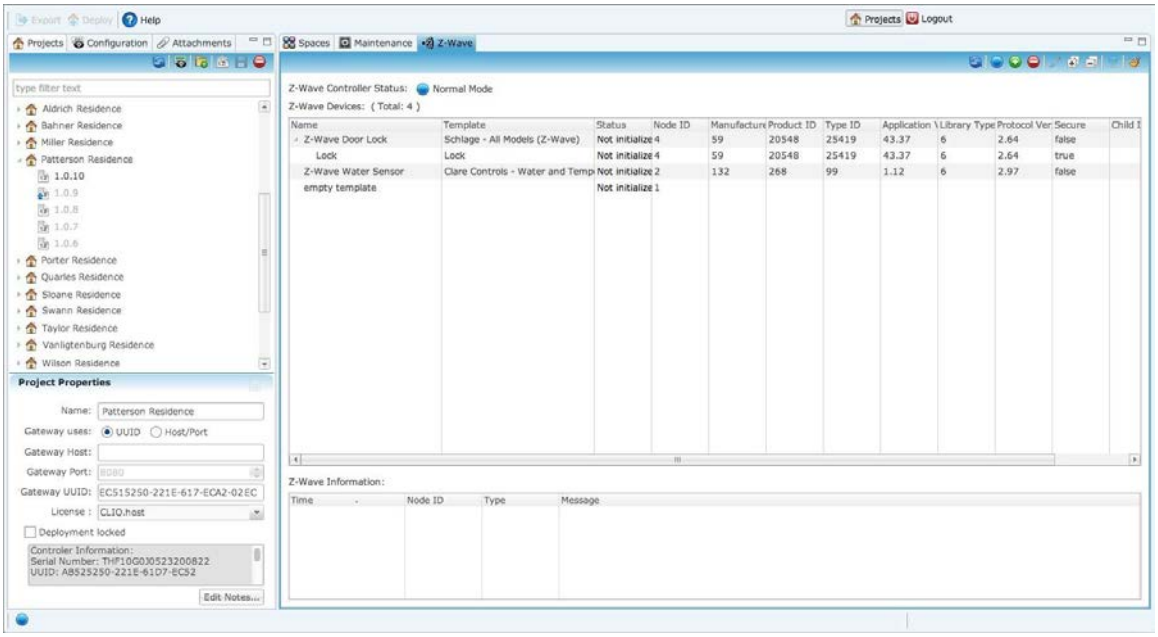
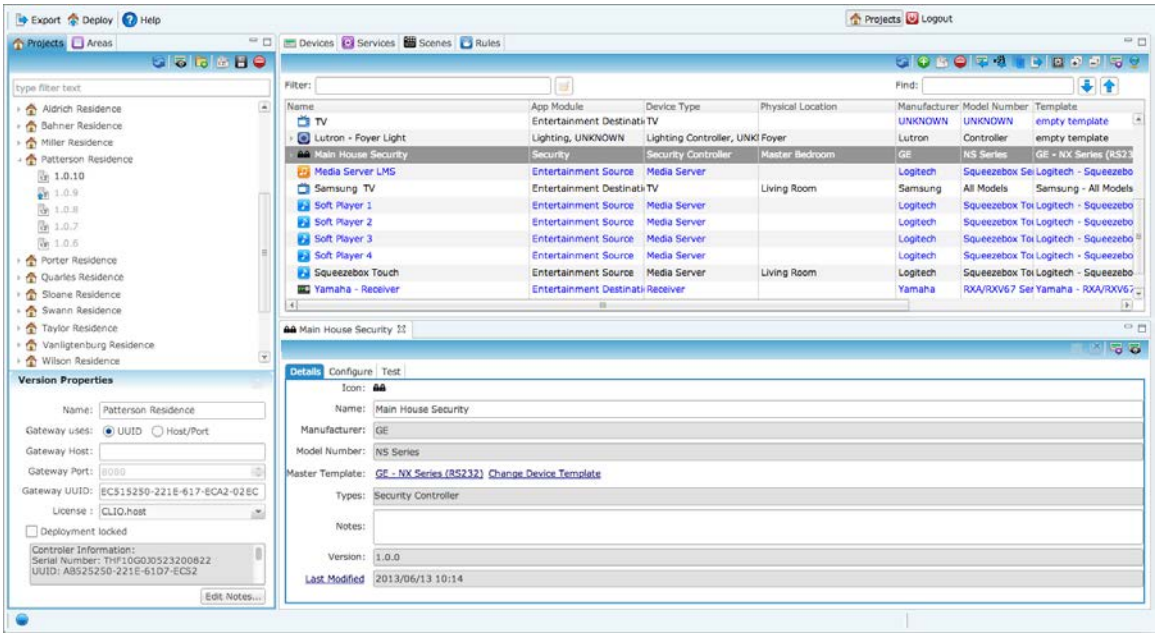


Figure 5: Project Version view workspace



Switching between views

You can switch between the Project view and the Project Version view in Fusion.

To switch to the Project view:

1. In the Projects tab, click the name of the project you want to view.

The window refreshes and displays the panes used in this view.

To switch to the Project Version view:

1. In the Projects tab, click the Expand button for the project you want.
2. Click the version number that you want.

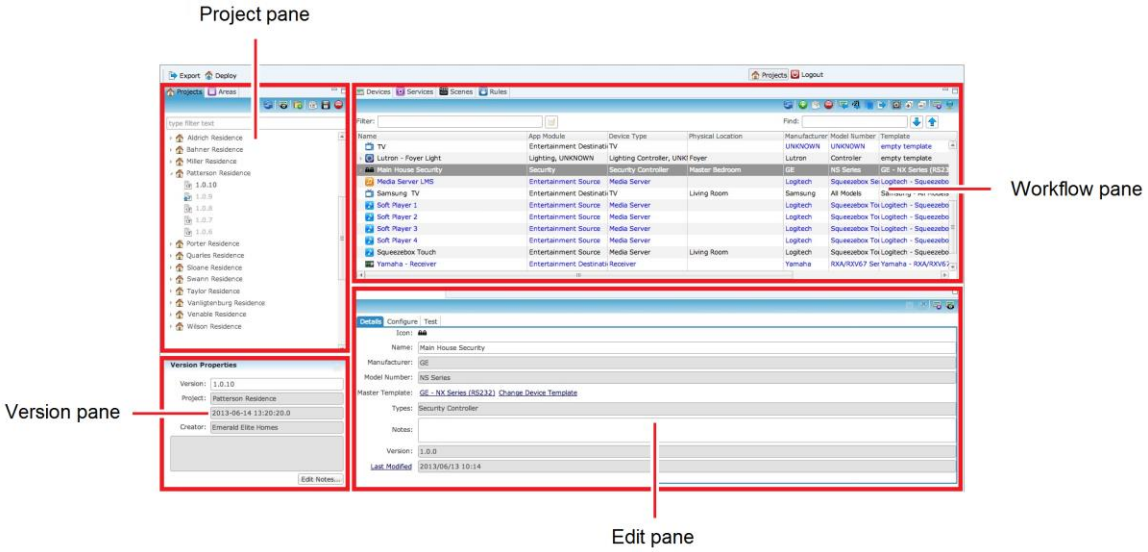
The window refreshes and the displays the panes used in this view.

Parts of a Fusion workspace

Panes

The Fusion window is divided in to four sections called panes: the Project pane, the Version pane, the Workflow pane, and the Edit pane. Depending on the view you choose, these panes will display information and device configurations differently. Use the panes to configure your Fusion projects.

Figure 6: Fusion workspace panes



Tabs

Depending on the view you choose, each pane will display one or more tabs. Tabs contain specific information about your project, or they contain the tools used to create the project. Some tabs display additional tabs, or second level tabs, that provide even greater detail about a task or tool.

Figure 7: Pane with tabs and second level tabs

Toolbars and buttons

A toolbar displays at the top-right of each tab. Each toolbar contains a series of buttons that you can use when working in a tab. These buttons appear as icons in the toolbar. Click the button's icon to activate that button feature. If you are unsure of a buttons function, simply mouse over the button to display a pop-up description of that button's function.

Figure 8: An example of a toolbar with buttons

Many of the same buttons appear on the different tabs. Table 1 lists the most common buttons used in Fusion. We highly recommend that you review this list and become familiar with these buttons, since you will be using them often when configuring your project. Later, as we go into greater detail about each tab, we will introduce you to additional buttons that are specific to that particular tab's toolbar. Although these additional buttons are used less often, they are equally important and will help speed you though the project-building process.

Table 1: Commonly used buttons

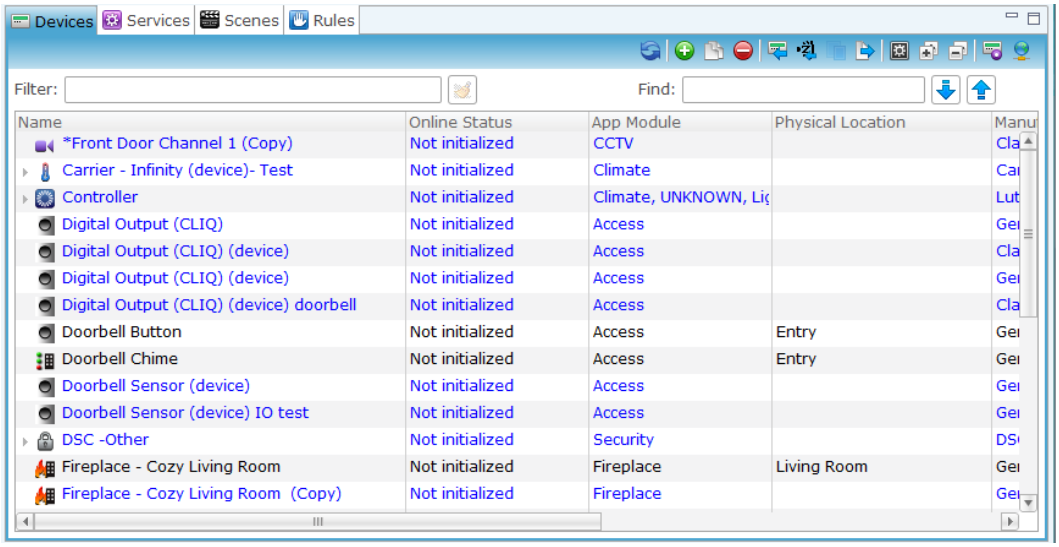
Button	Description
	New – Add a new item in the selected tab or pane.
	Delete – Delete the selected item in the tab or pane.
	Expand Nodes – Expand a parent node to display its child nodes.
	Collapse Nodes – Collapse a parent node to hide its child nodes.
	Refresh – Refresh the current pane.
	Save – Save the current project.
	Maximize – Maximize the pane to fill the entire window.
	Minimize – Minimize the pane to its original size.

Using drag-and-drop

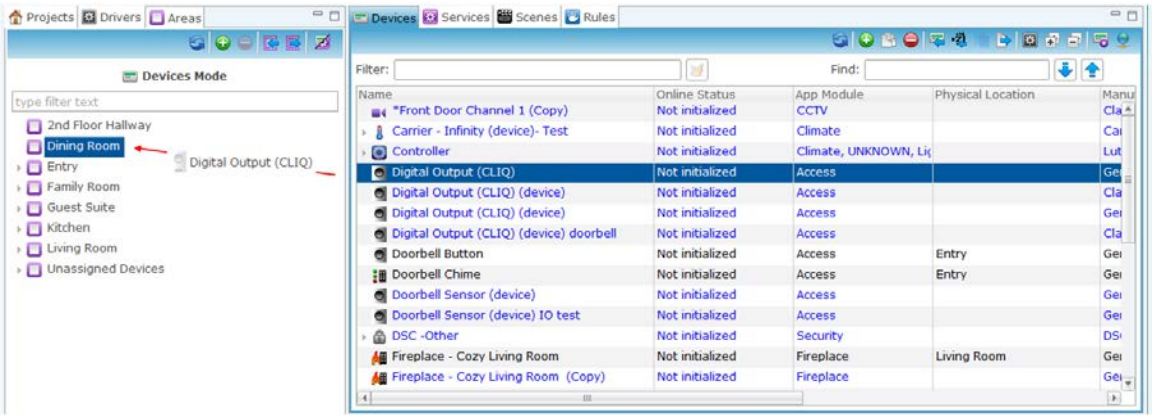
Perform operations in the user interface by dragging objects on the screen with the mouse, and then dropping them in a new location. For example, you can assign devices to an area by dragging and dropping the device in a room.

To use drag-and-drop:

1. Move the pointer to the object.
2. Press, and hold down, the button on the mouse or other pointing device, to "grab" the object.



3. "Drag" the object to the desired location by moving the pointer to that location.

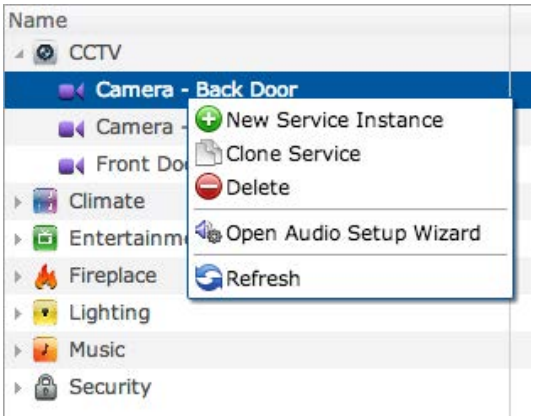


4. Repeat step 3 for each device

Using right-click

Fusion includes the right-click option for many of its objects. Right-click the mouse button brings up a pop-up window with options applicable to the object over which the cursor is positioned.

Figure 9: Right-click pop-up menu



Chapter 3
Getting Started

Summary

This chapter explains how to manage your Fusion projects. As a dealer and integrator, you are responsible for managing multiple projects within Fusion.

Note: The system will place an asterisk * next to any tab name that you have made changes to and have not yet saved. As a safeguard, the system will ask you to save your changes prior to closing or leaving configuration tabs.

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Creating new projects

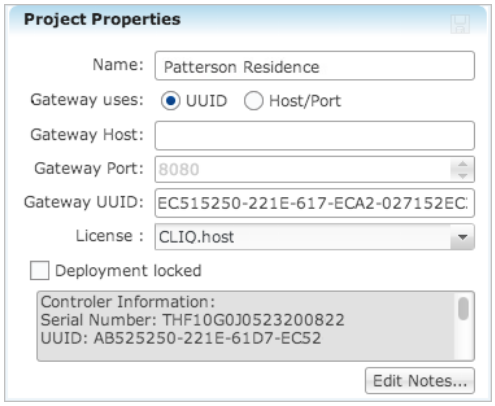
From the Projects pane you can create and manage your projects. You can create and configure unique projects for each customer.

Project names should be easily associated with the project customer. You should use a similar naming convention for consistency. For example, name a project “Patterson Residence” or “Jones Home”. If there are multiple project properties for one customer, you could use “Smith Home NY” or “Smith Home LA” to represent those multiple properties.

To create a new project:

1. Go to the Projects view, and then click the Projects tab, if it is not already selected.

2. On the toolbar, click the New Project button .
3. Go to the Project Properties pane and enter a name for your project in the Name field.



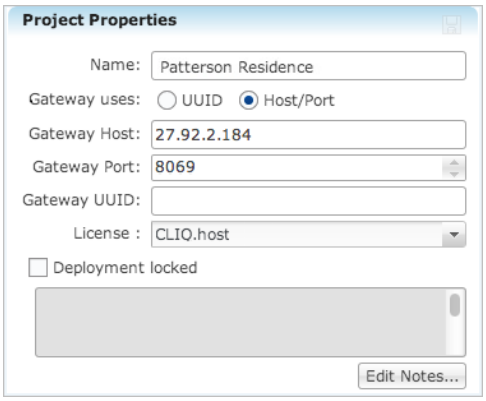
4. Click the type of gateway you want to use. Choose UUID or Host/Port.
5. If you choose UUID, enter the UUID number in the Gateway UUID field.

   The UUID number is printed on a label on your CH-OS device.

   - or -

   If you choose Host/Port, enter the IP address for your gateway in the Gateway Host field and the gateway port for number your gateway in the Gateway Port field.

   The Gateway Host address is the static IP address or dynamic DNS name of home router. The port is the port you opened on the router and forwarded to the CH-OS static IP address.



6. In the Notes field, enter any additional information that will help you with your project.
7. Select the Save button to save your new project.

Managing project versions

Each time you create a new project, the system automatically assigns the initial version number “1.0.0.” Then, as you make changes to your project and deploy those changes the version number increments (e.g., 1.0.1, 1.0.2, and so on). You can change a version number as appropriate for your organization’s numbering conventions, if you desire.

To change a version number:

1. On the Projects tab, click your project’s version number that you want to rename.
2. In the Version Properties pane, click inside the Version field to highlight the version number, and then enter a new version number.
3. Click the Save button .

The version number automatically updates.

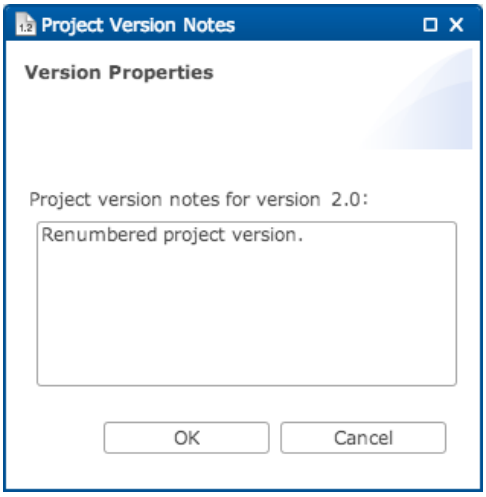
Adding version notes

It is good practice to enter notes about what you configured or changed in each project version. This practice ensures that others, such as programmers and service technicians in your organization, will know exactly what has been configured or changed within a specific project.

To add notes to a version:

1. In the Version Properties pane, click the Edit Notes button Edit Notes... .

2. In the Project Version Notes dialog, enter your version notes, and then click OK.



3. Click the Save button .

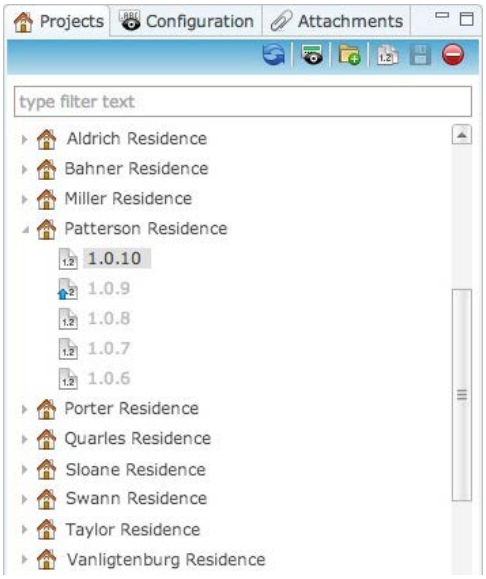
If you need to configure multiple changes for a customer, you should consider cloning the project version before configuring and saving your changes. Cloning a project version maintains your previous settings along with any new configurations. In the event of any system issues, technical support may refer to previous project versions to resolve any issues.

Cloning project versions

It is possible for you to clone project versions, and then create new projects based on those clones. This may be desirable in situations when you have one or more projects that are similar in scale and use similar devices. This way you can start with all devices, scenes and rules, and other configuration already in place, and then simply reconfigure device-specific information (network addresses, network ports, MAC addresses, and so on), as needed.

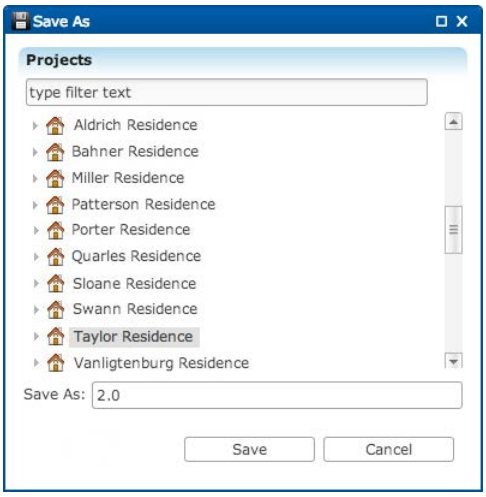
To clone a project:

1. From the Projects pane, create your new project.
2. Select the project version from an existing project that you want to clone.



3. With the existing project version selected, click the Save As button .

   The system displays the Save As dialog.



4. From the Save As dialog, select the new project for which you want to save the existing project version, and then click Save.

With the version cloned, you can now edit the new project as needed. When you have finished editing your new project, to deploy it.

Configuring notifications

This section describes how to configure notifications for your customers. Notifications let the customer know about the status of their systems. For example, when a customer is out of town and the security alarm is activated, or the temperature rises too high within the home, the customer may want to receive immediate a notification. There are three types of notification available in Fusion.

- Email – notifications sent to an email address
- SMS (Short Message Service) – notifications sent as text messages to a smart phone or mobile device
- APNS (Apple Push Notification Service) – notifications sent to an Apple device

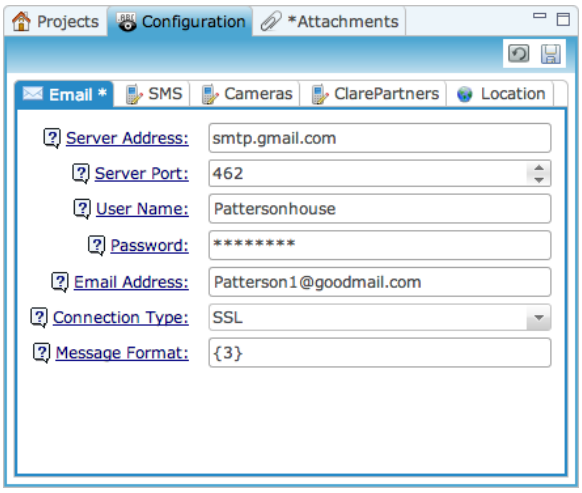
To send notifications via email or SMS, you must first configure the providers for each. Use the Email and SMS tabs in the Projects pane. Next, you must create a scene and a rule for each notification using the Scene and the Rules tabs, located in the Workflow pane. You do not need to configure a provider for APNS notifications. APNS notifications are managed entirely by scenes and rules.

The following provides directions for configuring the provider for email and SMS notifications. For directions about creating scenes and rules for email, SMS, and APNS notifications, see “Configuring notifications using scenes and rules” on page 190.

Configuring email provider for notifications

To configure and email provider for notifications:

1. In the Projects pane, click the Configuration tab.
2. Click the Email tab, if it is not already selected.



3. In the fields, enter the following outgoing email information. This information is not for the customer receiving the email, but rather for the person sending the email notification. The email address sending the notification may be your organization's support address.
    - Server Address: The SMTP provider. You can find this information in your email preferences.
    - Server Port: The port at which your SMTP server accepts connection. You can find this setting in your email preferences.
    - User Name: The name of the user sending the notification.
    - Password: The password for the email address sending the notification.
    - Email Address: The email address of the user sending the notification.
    - Connection Type: Your connection type. Your options are: Plain, SSL or TLS.
    - Message Format: The Message Format allows you to configure a template for the generated email message. You can also use the "^" symbol instead of a new line in the Message Format field. This entry is a free-form string with the following special replacement options:
        - Priority Example: Setting the Alarm as highest priority.
        - Severity Example: Setting an Intrusion Event as highest severity.
        - Zone changes may be a lower level severity.
            - {0} is replaced with the message priority
            - {1} is replaced with the message severity
            - {2} is the subsystem from which the message is generated
            - {3} is the text of the notification message
4. Click the Save button .

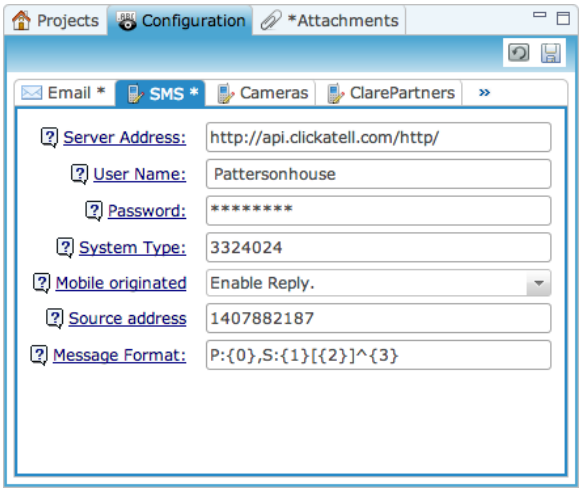
Configuring SMS provider for notifications

The Configuration tab allows you to enter settings for email or SMS notifications. The SMS address sending the notification is typically your organization's support number. The customer will see the number sending the notification in the SMS message and may choose to save this number, associating it with an appropriate name.

Note: You must create and provide your own Clickatell account to send SMS notifications through Fusion. Currently we only support Clickatell accounts for configuring SMS notifications in ClareHome.

To configure SMS provider for notifications:

1. In the Projects pane, click the Configuration tab.
2. Click the SMS tab.



3. On the SMS tab, enter the following outgoing SMS information in the fields provided.
   - Server Address: This is your Clickatell account address. You must set up a Clickatell account to send SMS notifications from Fusion.
   - User Name: This is your Clickatell username.
   - Password: This is your Clickatell password.
   - System Type: This number is your Application ID in the Clickatell gateway.
   - Mobile originated: From the drop-down list, select whether or not you want to enable a reply from the customer(s).
   - Source address: This is the phone number sending the SMS notification. For example, enter the number “1” in front of the area code (U.S.), and do not include spaces or dashes in the phone number.
4. Click the Save button .

Configuring APNS notifications

APNS (Apple Push Notification Service) notifications are ways for an application that isn't running in the foreground to let its users know it has information for them. The information could be a message, such as a warning that the security system has been armed, there is an impending event, or when new data that is sent automatically to the user's iPhone or iPad.

To use the APNS service:

1. At the Devices level, click the Rules tab, and then select the APNS option.
2. Create your APNS rules, and then click Deploy.

Once deployed, the ClareHome system pushes the notifications to the user's mobile device based on the rules you created.

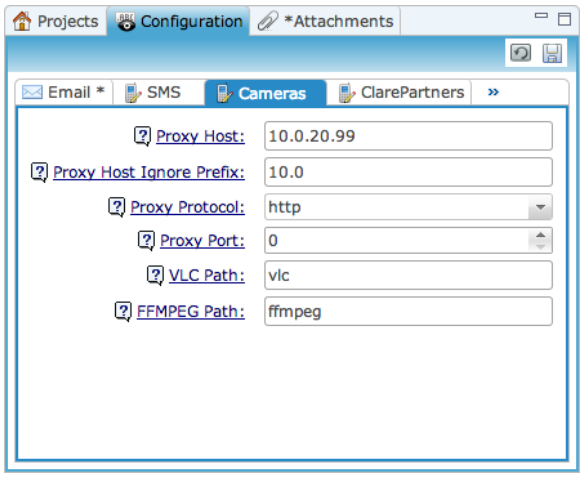
Configuring camera settings for use with CCTV devices

After configuring all the CCTV devices in the Device Management pane, you must configure the camera settings from the project perspective.

Note: Fusion and ClareHome do not support USB cameras.

To configure camera settings:

1. In the Projects pane, click the Configuration tab, and then click the Cameras tab.



2. On the Cameras tab, enter the camera settings in the fields provided.
   - Proxy Host - This is the CH-OS controller static IP address.
   - Proxy Host Ignore Prefix - Enter the first two octets of the Proxy Host IP address.

- Proxy Protocol - This is always “http”.
- Proxy Port - The Proxy Port is the port you forwarded on your router to the CH-OS static IP. The recommended port (from system setup) is “8080”.
- VLC Path - This would typically be the location in which VLC is installed on the CH-OS controller. The VLC path is not currently supported.
- FFMPEG Path - This is the location in which ffmpeg is installed on the CH-OS controller. Enter “ffmpeg.”

3. Click the Save button .

Configuring ClarePartner options

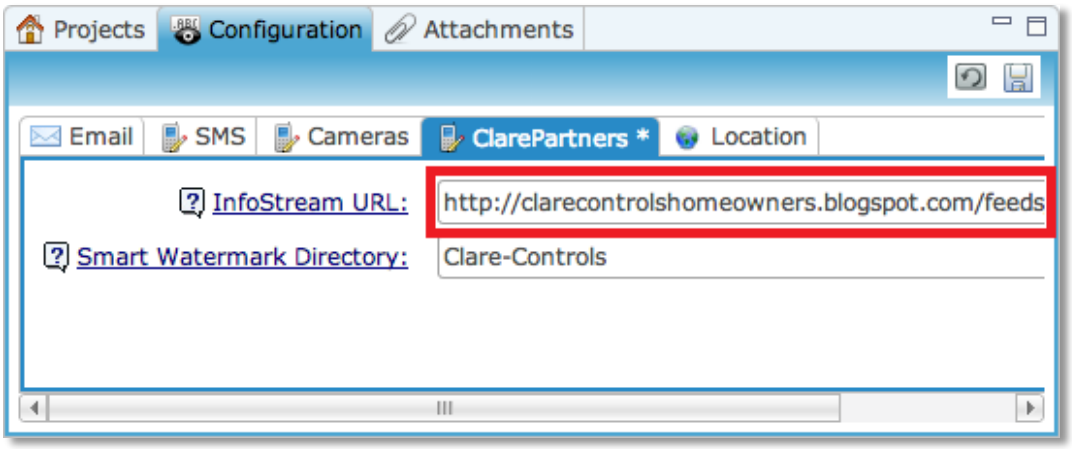
The ClarePartner tab contains the tools that allow you to set up a custom InfoStream for displaying messages on the customer’s mobile device and to add a customized watermark that will appear on that customer’s mobile device.

Customizing InfoStream

Use the ClarePartner tab to set up a custom InfoStream that will replace the default Clare Controls InfoStream.

To setup InfoStream:

1. In the Projects pane, click the Configuration tab, and then click the ClarePartners tab.



2. Enter the InfoStream URL information in **InfoStream URL** field.

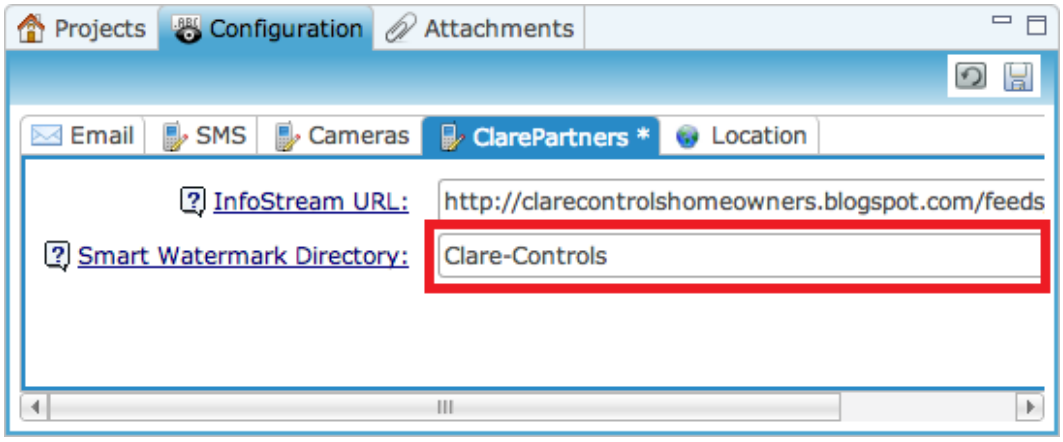
   The information is then displayed on the customer’s mobile device when he or she clicks the Information icon , as shown below.

Smart Watermark

The Smart Watermark feature lets you place a logo on the ClareHome app. You must first forward your company logo to Clare Controls for sizing and you will be notified in which Smart Watermark directory it has been placed. You can then add it to your ClareHome apps.

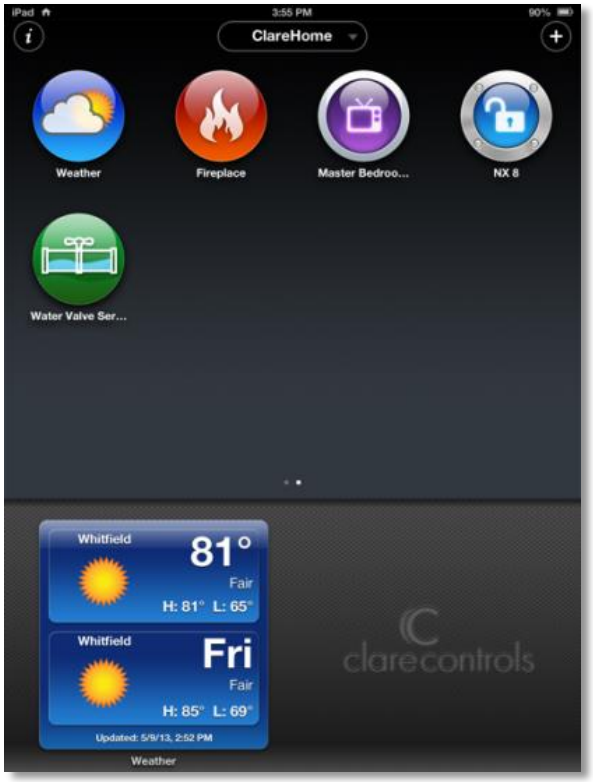
To include your watermark:

1. In the Projects pane, click the Configuration tab, and then click the ClarePartner's tab.



2. Enter your logo name in the Smart Watermark Directory field, as shown above.

Once deployed, your watermark will appear in your customers' ClareHome apps, as shown below.



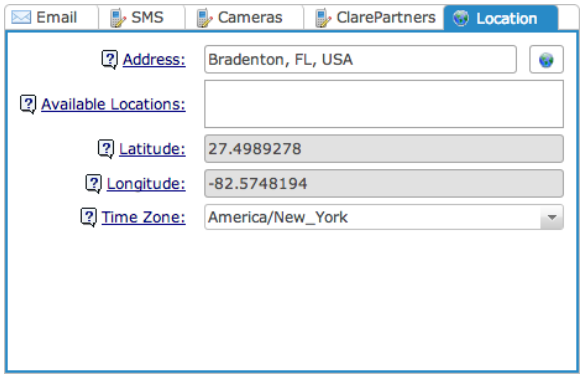
Configuring locations

Use the Locations tab to define a location that will be used in the Weather app that appears on the customer's mobile device.

Note: Configure the location before setting time rules. The rules will be set to a default time zone until changed. The time set will not change with the new location setting. For example, the Universal time 6 pm is not the same as the Mountain time 6 pm.

To configure a location:

1. In the Projects pane, click the Configuration tab, and then click the Locations tab.



2. In the Address field, enter the address of the intended location, and then click the Find Location button .
3. The system identifies the location and prepopulates the Latitude and Longitude fields. If the system cannot find the location, it then displays possible alternate choices in the Available Locations field. Choose an alternate location from this list.
4. In the Time Zone field, select a time zone for your location.

   If your location does not appear in the Time Zone list, choose another city that is in the same time zone.

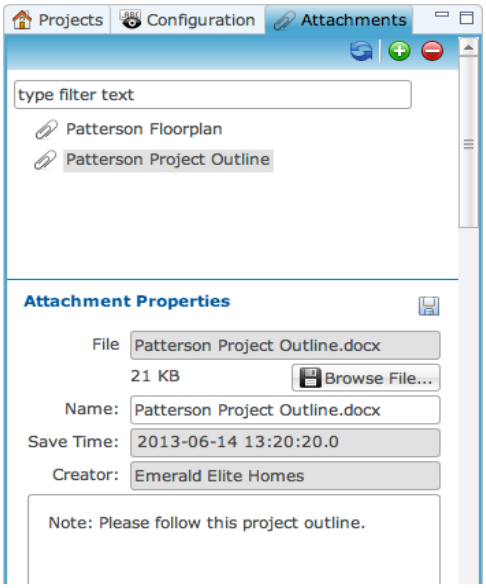
Managing project attachments (optional)

The Attachments tab lets you attach files to any project in Fusion. Files associated with a particular project can be maintained with the project in Fusion for easy access. Project attachments may include Visio drawings, project documents, and project PDFs that can be used to reference document storage.

Note: The attached files are available by everyone who has access to the project.

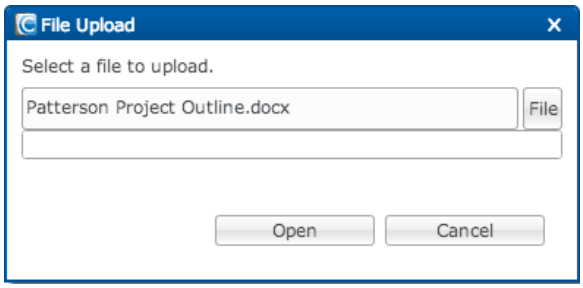
To attach a project:

1. From the Projects pane, click the Attachments tab.



2. Click the Browse File button

.
3. In the File Upload dialog, click the File button to browse to the location of your file, and then click Open.



4. In the Notes field, add any addition information about the attachment.
5. Click the Save button to save the attachment properties.

Chapter 4
Managing Areas

Summary

This chapter defines areas and how to manage them in Fusion. From the Areas tab, you can create and configure areas for your project. Once you create, you can then add devices and services to the areas, if desired.

Prior to configuring the areas for a project, it is important to understand the concept of areas as they are populated in the Clare Controls App customer interface. First, we can answer the question, “Why are areas important?”

- Customers can create summary applets in the Clare Controls App (e.g., lighting summary)
- Visual presentation as well as control (control device located in another area from a different room in the home/office)
- Customers configure the applets to control specific areas (from any areas anywhere - customers can configure applets)
- Powerful for customers

Note: It is considered best practice to define the areas and rooms for a project in Fusion prior to importing lighting files and configuring devices.

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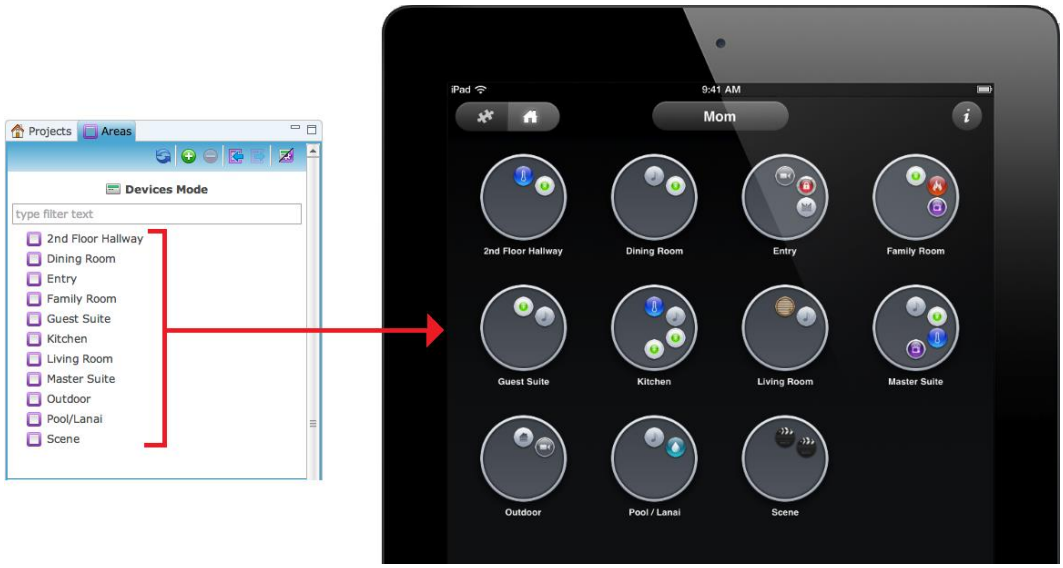
Understanding areas

An area is a location where devices and services are assigned. An area can be a room in the house, the backyard, a garage, or some other location. An area can contain any number of devices and services. For example, an area may be a family room that contains TV and stereo devices and streaming video and audio services.

Areas appear on the customer's mobile device, in the ClareHome base page. An area appears as an icon that represents a system folder containing the services assigned to it. The customer will open the area's system folder and click a service icon to control its services. Figure 10 shows the areas created in Fusion and rendered on the mobile device.

Note: Although you can assign both devices and services to an area in Fusion, only services appear in the area system folders on the ClareHome base page; devices do not. Assigned devices only appear in Fusion and are only there to help you keep track of the physical location of a device at the site.

Figure 10: Areas appearing on a mobile device



Before you begin

Before you begin creating areas, take a moment to plan the areas for your project. Make a list of the rooms and areas in your project and decide which devices and services are going to be installed in those spaces. Next, create all the areas in your list. You do not need to assign any device or service to an area at this time. Later, as you add devices and create services in Fusion, you can quickly assign them to an area. See “Using drag-and-drop” on page 11. Adding devices and services to an area will help you and the installation technician keep track of where those devices and services are located.

When adding areas to a project, don’t create too many areas. It is a common mistake to overpopulate the project with areas, such as creating an area for every room in the house. This is not a best practice for controlling home automation from the Clare Controls App. Only create the areas you need. If there is not a service to control in an area, then don’t include that area in the project.

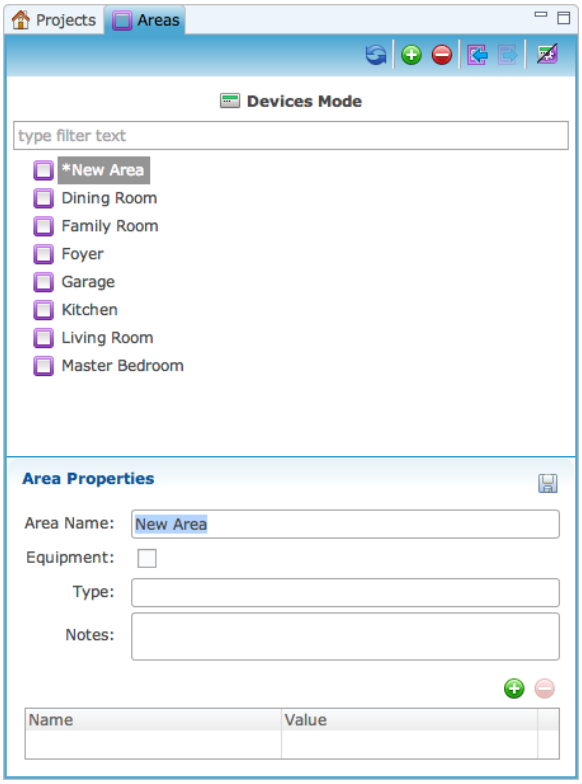
Use the Areas tab to define all the areas in your project. Once you create your areas, you can add devices and create the services in Fusion that you will assign to an area.

Creating new areas

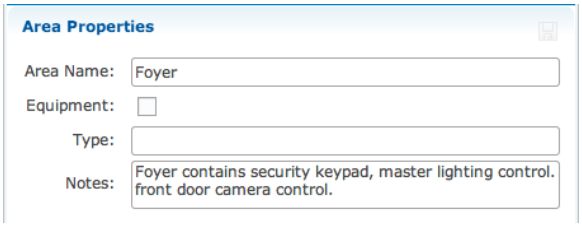
Create an area for each room or space in your project that contains a controlled service.

To add a new area:

1. Click the Areas tab, and then on the toolbar click the New Area button .



2. Go to the Area Properties pane, and then in the Area Name field, enter the name of the area.



3. If the new area is an equipment room, click the Equipment check box.

   Note: Any devices or services that you assign to an area where this check box is selected will not appear on the customer's mobile device.

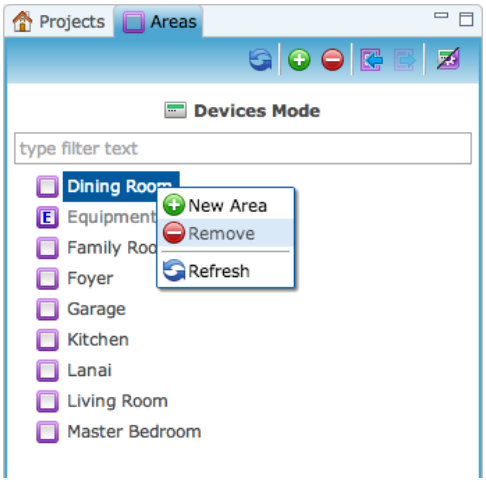
4. In the Type field, enter any equipment type information.
5. In the Notes field, enter any additional information about the area.

6. Click the Save button .

The new area is added to the list. You can assign devices and services to each area.

To delete an area:

1. Right-click the area you want to delete, and then choose Remove.



- or -

Select the area you want to delete, and then on the toolbar click the Remove button .

Toggling between Devices and Services mode

From the Areas pane you can toggle between Devices and Services mode. This will let you see which devices and services are assigned to which areas. When you assign devices to rooms, only those devices will be visible when you are in Devices mode.

Similarly, when you assign services to areas, those services will only be visible when you are in Services mode. To toggle between the two modes from the Areas pane, click the Show Devices/ Show Services button in the Areas tab toolbar. The Devices and Services tabs will switch respectively when you are in Devices mode or Services mode in Areas tab.

Figure 11: Devices mode

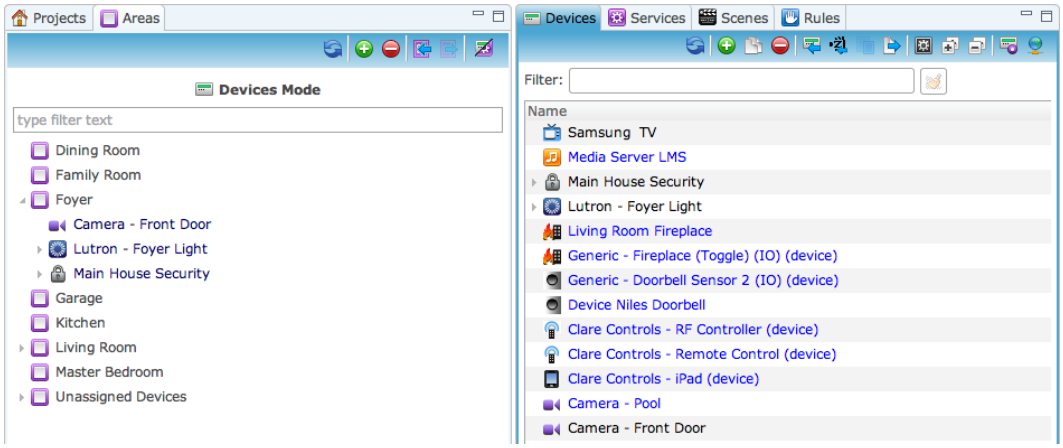
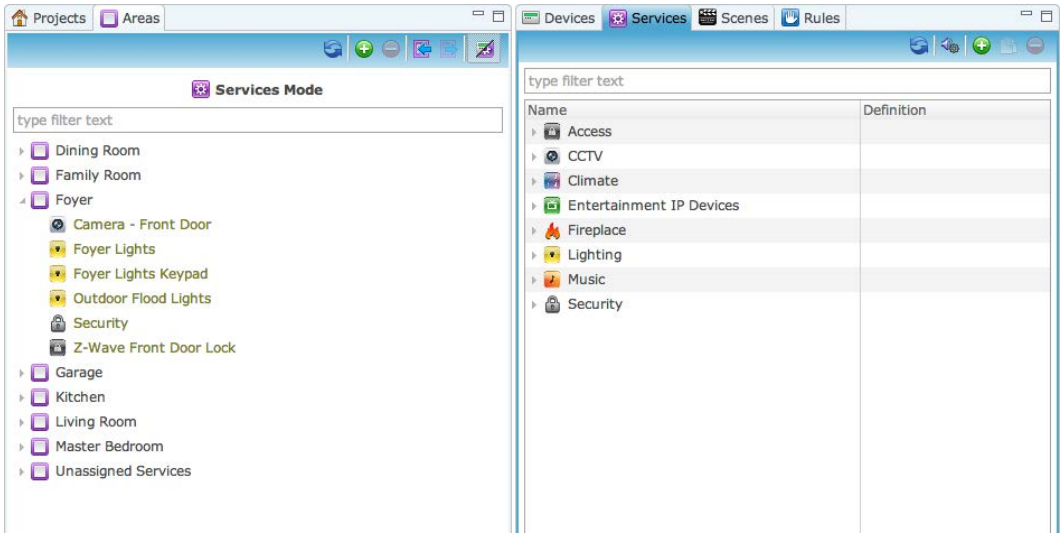


Figure 12: Services mode



Chapter 5
Configuring and Managing Devices

Summary

This chapter explains how to configure devices in Fusion. Multiple device types may be available for configuration and this chapter provides basic instructions for configuring those devices.

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Before you begin

Before you begin configuring and managing devices, review the following.

- Do not use the web browser Refresh or Back buttons while operating in Fusion. Be sure to only navigate from within Fusion.
- When you are configuring a device, do NOT change the device UID in the Details tab for any device. Fusion requires the device UID.

Understanding device types

There are two types of devices in Fusion: simple devices and multi-devices.

Simple devices

Simple devices are devices that operate independent of each other. For example, a CCTV camera and a water valve are simple devices because they operate independent of one another. Other simple devices include: lighting, climate, security, pool, Z-Wave devices, and most devices controlled by a single relay switch.

When you add a simple device to your project, Fusion automatically configures the properties for that device. In most cases, you will only need to enter and save the network address for that device. Exceptions to this are lighting and Z-Wave devices. (See “Configuring simple devices (generic instructions)” on page 39.)

Unlike other simple devices, lighting devices use configuration files created outside of Fusion. You must import these files into Fusion before you can add the lighting device to the system. (See “Configuring lighting devices” on page 125. Z-Wave devices must be added to the Z-Wave network, and then imported into Fusion before being added to a project. (See “Configuring Z-Wave devices” on page 127.) Once you import the lighting or Z-Wave file, the system automatically configures the properties like other simple devices.

Multi-devices

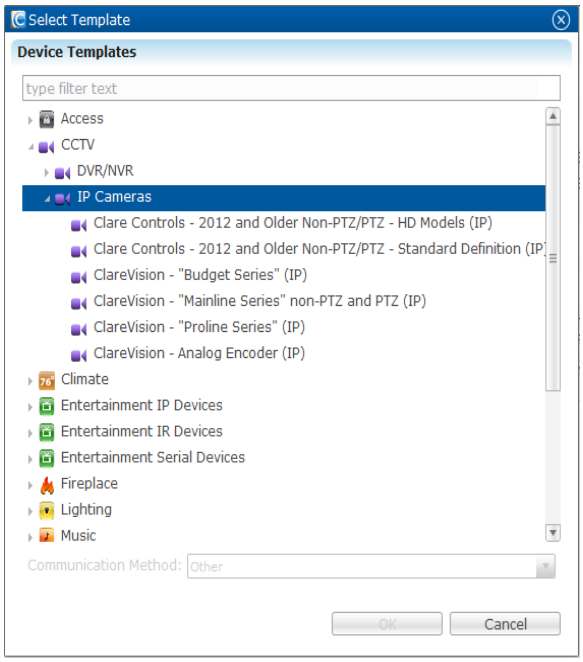
Multi-devices are those devices that operate in combination with other devices. Multi-devices are usually music devices (amplifiers, distributed audio devices (for example, CobraNet), music servers, etc.) and entertainment devices (TVs, satellite tuners, Blu-ray players, gaming devices, etc.). Multi-devices are not configured automatically in Fusion. You must configure and save each device according to your project plan. (See “Chapter 7: Configuring Multi-devices” on page 133.

Understanding device templates

Clare Controls develops, maintains, and updates device templates using the ClareOS Update Service. These templates are available to you in Fusion so that you can configure devices for all your projects.

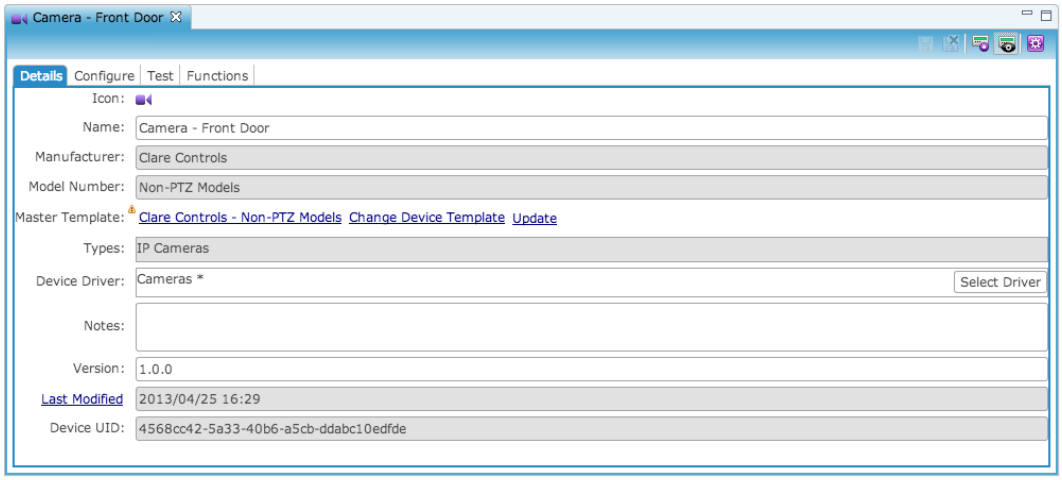
When you add a device to your project, Fusion displays a list of device templates that are grouped by category.

Figure 13: Device templates grouped by category



Selecting a device from the category list opens the template for that device. Figure 14 shows a typical device template.

Figure 14: A typical device template



Device templates contain four tabs.

- Details – Use this tab to name the device in your project, and to identify the manufacturer, model number, master template, and other information, as well as adding notes that may help you later.
- Configure – Use this tab to configure the device's properties, such as network addresses, ports, drivers, passwords, etc.
- Test – Use this tab to test and verify the online status and functions of the device in your project.

  Note: You must deploy your project before testing your device.
- Functions – Use this tab to view details about the functions of each device.

  Note: The Functions tab only displays when you click the Show Advanced Fields button on the toolbar. You cannot edit the functions in this tab.

Configuring simple devices (generic instructions)

This section describes how to configure simple devices (other than lighting, Z-Wave audio and entertainment) in Fusion. Device configurations typically follow the same process. First, you will locate the template for a particular device, and then enter an appropriate name for that device. Next, you will configure the device by entering the network address, network port, possibly the MAC address and, in certain situations, other necessary configuration parameters.

Note: It is a good practice to maintain an inventory by dragging and dropping devices into the areas (rooms) in which they are physically located.

Gather system device information

Before configuring devices in Fusion, your installation technician should have provided you with a list of IP addresses, MAC addresses, and network port numbers for all installed devices. If you are missing an IP address, MAC address, or network port number from the list, you must identify this information before configuring devices.

Having this information readily available will make your configuration process easier and more efficient. It is important to understand that having this information available is what makes remote configuration possible in Fusion.

Additional information you need to gather:

- CH-OS static IP address - configured during ClareHome setup
- Dynamic DNS name or static IP address of the home router - configured during ClareHome setup
- CH-OS UUID for this project - configured during ClareHome setup
- Device IP addresses (network address) - these may have been configured static by a system installer or programmer
- Device port connection numbers (network port) - this is the port number the device is connected to on the system (sometimes default values, such as in situations with Global Cache or other similar devices)
- MAC addresses (if applicable) - typically labeled on devices and device boxes
- Device manufacturer information - typically labeled on devices and device boxes

Selecting, naming, configuring, testing, and identifying the functions of a device

This section provides instructions for selecting and configuring devices in Fusion. Once you understand the basic process behind configuring devices, it will become intuitive as you go through each device category.

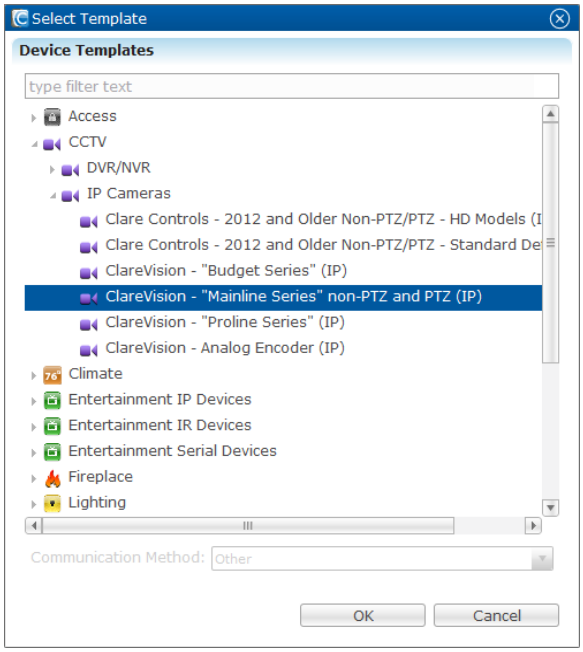
Device tabs:

- Details tab – The Details tab displays the device’s details. On this tab you can name and add notes to the device. Other information is also displayed on the details tab such as: manufacturer, model number, type, template, version, and the last modification date.
- Configure tab – The Configure tab displays options for the device’s configuration. The display and options are dependent on the device.

- Test tab – The Test tab allows you to test a device's connection to the CLIQ.
- Troubleshooting tab – The Troubleshooting tab has a link to the Clare Controls forum and document that are relevant to the device you are using.

To select and name a device:

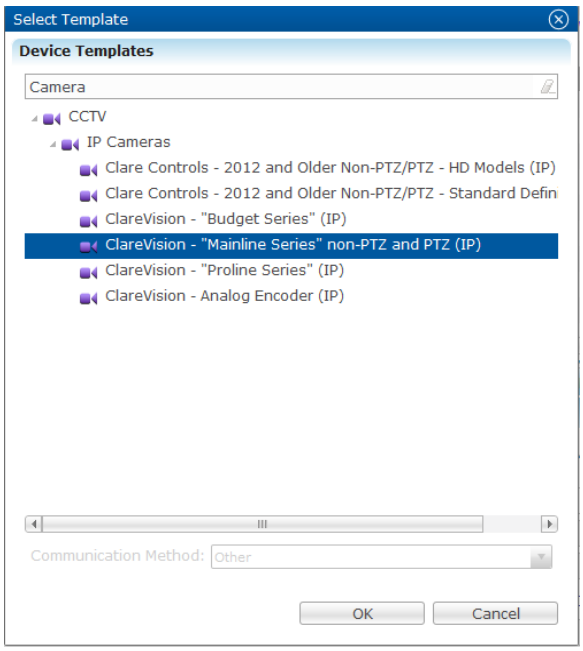
1. Ensure you are in the Project Version view.
2. Click the Devices tab, and then click the New Device button to display the Select Template dialog.



3. Expand a category, and then click the appropriate device template.

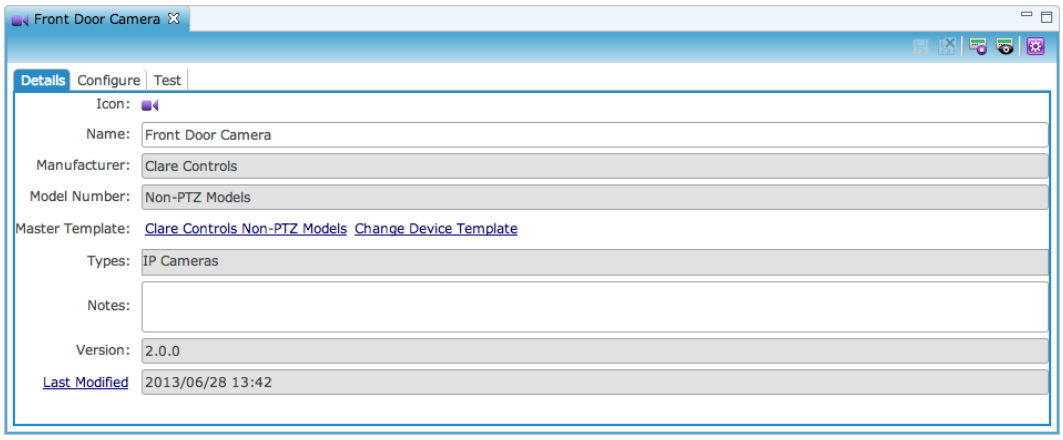
   – or –

   To find a specific Device template, use the filter to enter a keyword to search for devices.



4. Click OK.

   The Details tab displays details for the device you selected.



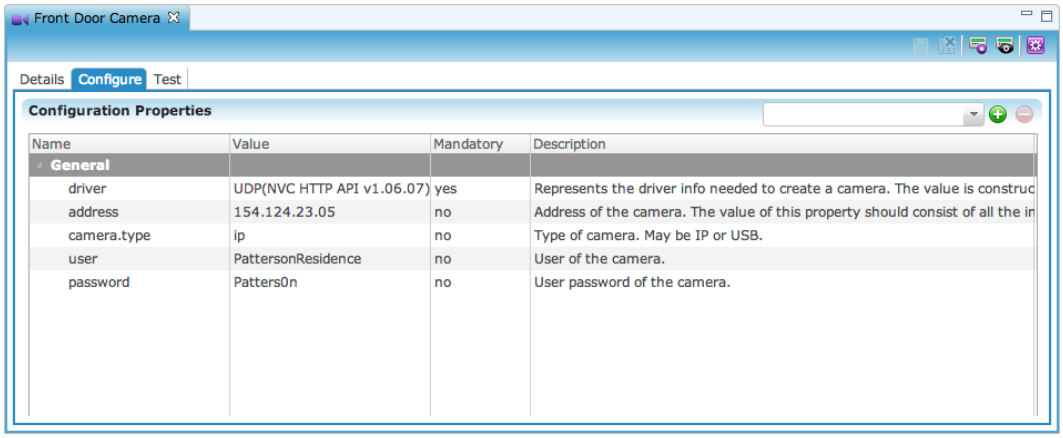
5. In the Name field, enter the name of your device.

   In our example above, we named our camera “Front Door Camera.”

6. In the Model field, enter the model number for the device, if necessary.
7. In the Notes field, enter any information that you want recorded for this device.

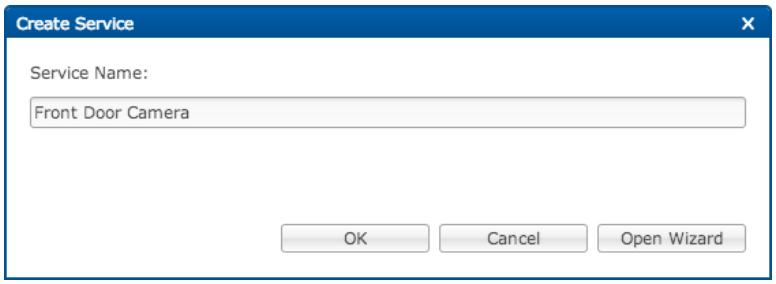
To configure a device:

1. Click the Configuration tab.



2. In the Address field, enter the device's network address (IP address). In other device configurations, you may also need to enter a network port number for the device. When a port number is required, the system displays a field for it.
3. In the Username and Password fields, enter the correct username and password for your device.

   Note: It is important to know the correct username and password. Device user names and passwords are usually factory defaults, but verify this with your installation technician.
4. Click the Save button .
5. The Create Service dialog displays.



Creating a service

A service is an action for the device to take. Many services are automatically created when a device is added and saved. The Create Service dialog displays, clicking OK will auto create a service. Clicking Open Wizard, will let you customize and access the advanced features.

To create a service:

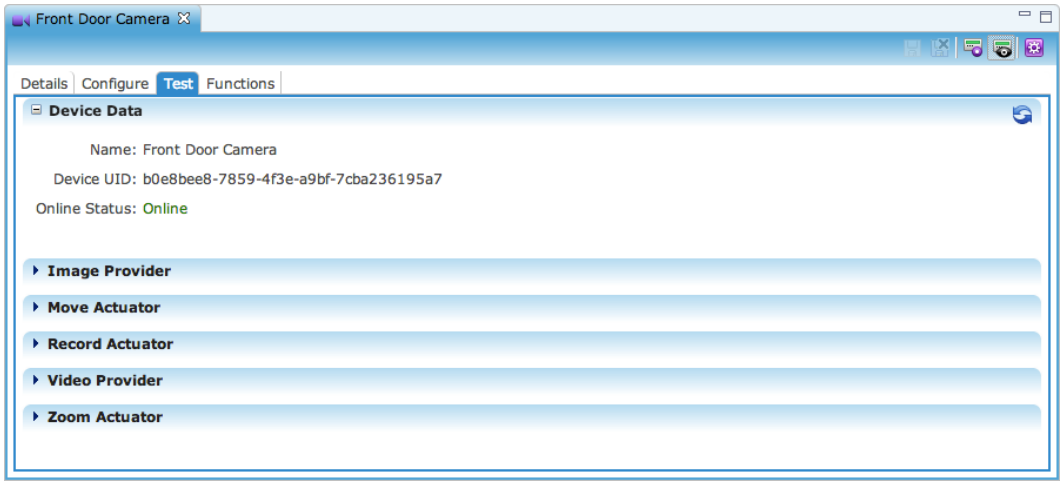
1. From the Create Service dialog, ensure the system already entered the name of the service from the device information. If not, enter it now.
2. Click OK to create the service.

3. (Optional) After you configure the device, drag-and-drop it into the area in which it is physically located.

   Note: Dropping configured devices into areas will not cause them to appear in the Clare Controls App. Only services appear in the Clare Controls App. However, this is a way for you to keep an organized physical inventory in Fusion. If you do not place the device into an area, the system will place it in the “Unassigned Devices” areas.

To test the device:

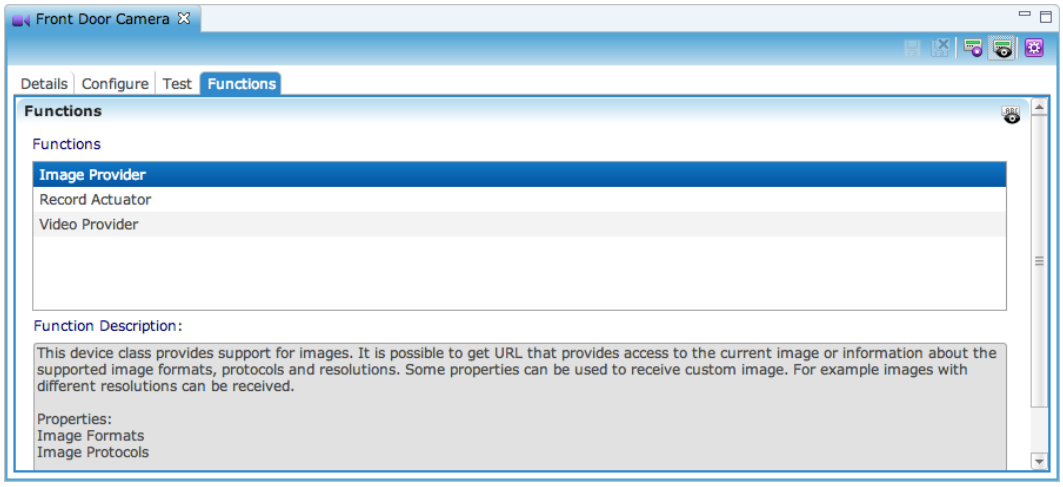
1. Click the Test tab.



2. Verify the online status of the device.
3. If you would like additional information about a function in the device, click the Expand button to expand the function.

To view additional functions:

1. To add to the Functions tab, click the Show Advanced Fields button on the toolbar.
2. Click the Functions tab.



3. Click the Expand button ▶ to display additional information about a particular device function.

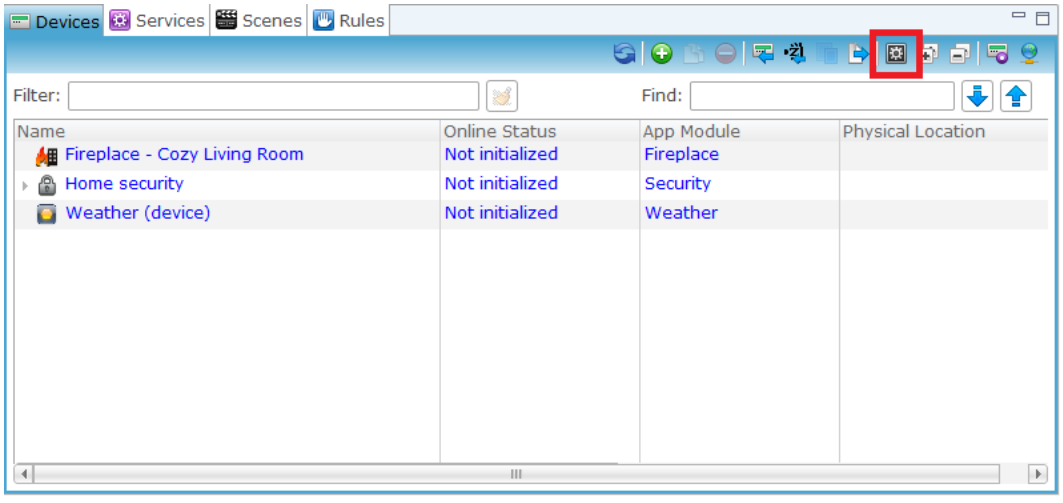
Managing configured devices

Showing devices by application module

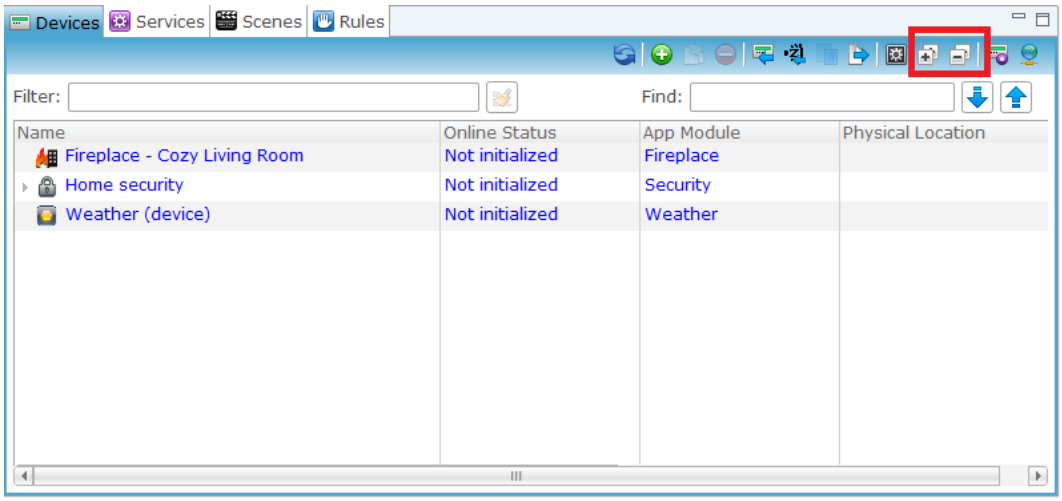
After all the devices for a project are configured, you can choose from a variety of options to filter through devices and to search the device list. For example, it may be necessary in the future to make configuration changes for specific devices. You can easily find the device by searching through the list of configured devices.

To view the devices by the application module:

1. Click the Devices tab.
2. Click on the Show App Modules button ⊡.



3. While showing the device app modules, you can collapse the nodes by clicking on the Collapse Nodes button .
4. After collapsing the device nodes, you can expand the nodes again by clicking on the Expand Nodes button .



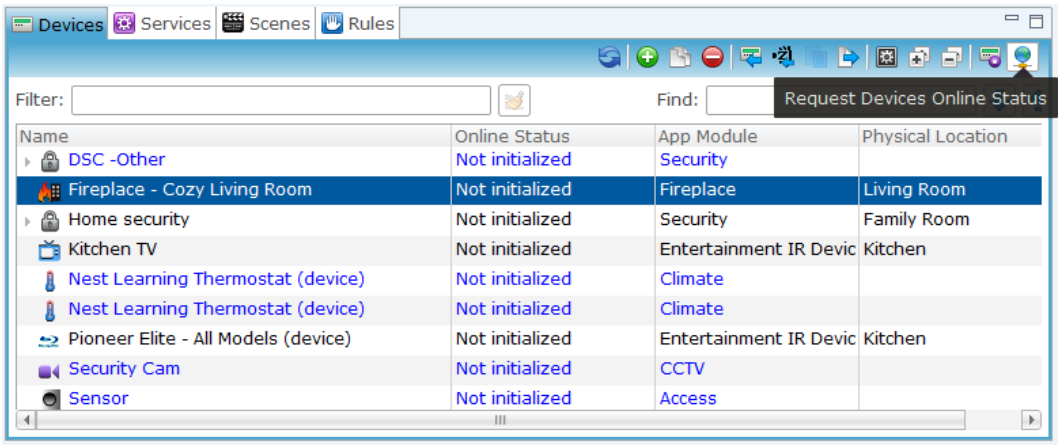
Show a device's online status

From the Devices tab, you can also request any device's online status.

Note: You must deploy your project before displaying the status of your device. See "Deploying projects" on page 196.

To display a device's online status:

1. Click the Devices tab, and then select the device for which you want to know its status.
2. Click the Request Devices Online Status button . (New picture added, but cannot get the online image, not sure how? But I was able to get the button to highlight.)



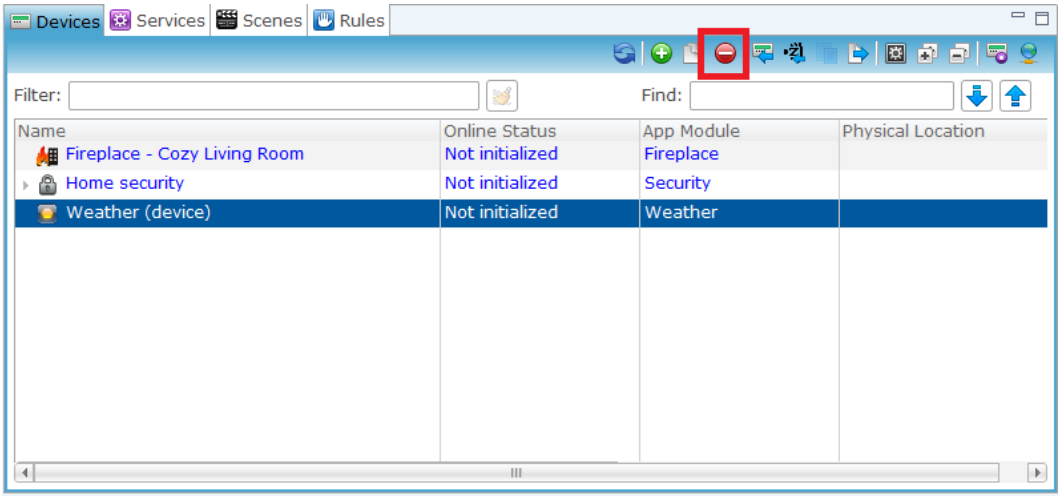
Deleting a device

You can delete devices, as necessary.

Note: If you created a service for the device, you must delete the service before deleting the device. (See “Deleting a service” on page 176.)

To delete a device:

1. Click the Devices tab, and then select the device you want to delete.
2. Click on the Delete Device button .



Cloning a device

When configuring additional devices of the same device type, you can clone any device.

To clone a device:

1. Click the Device tab, and then select the device you want to clone.
2. Click on the Clone Device button .

Figure 15: Clone a device

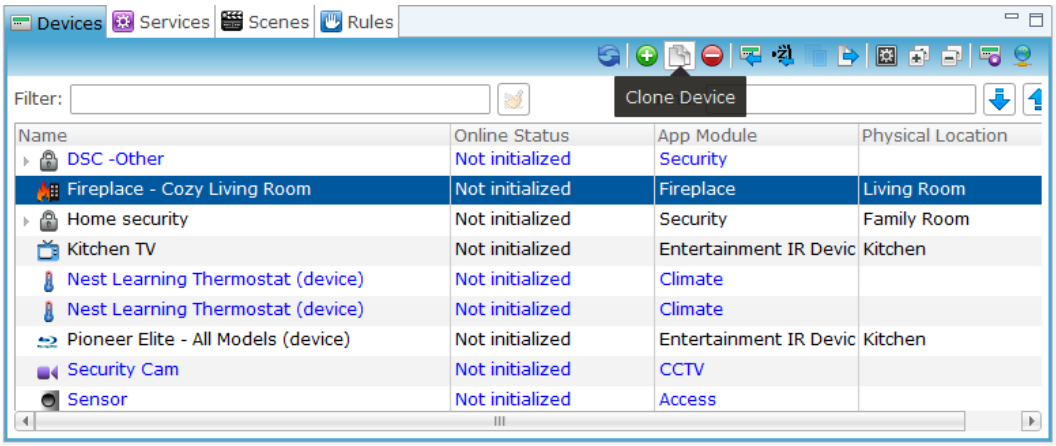
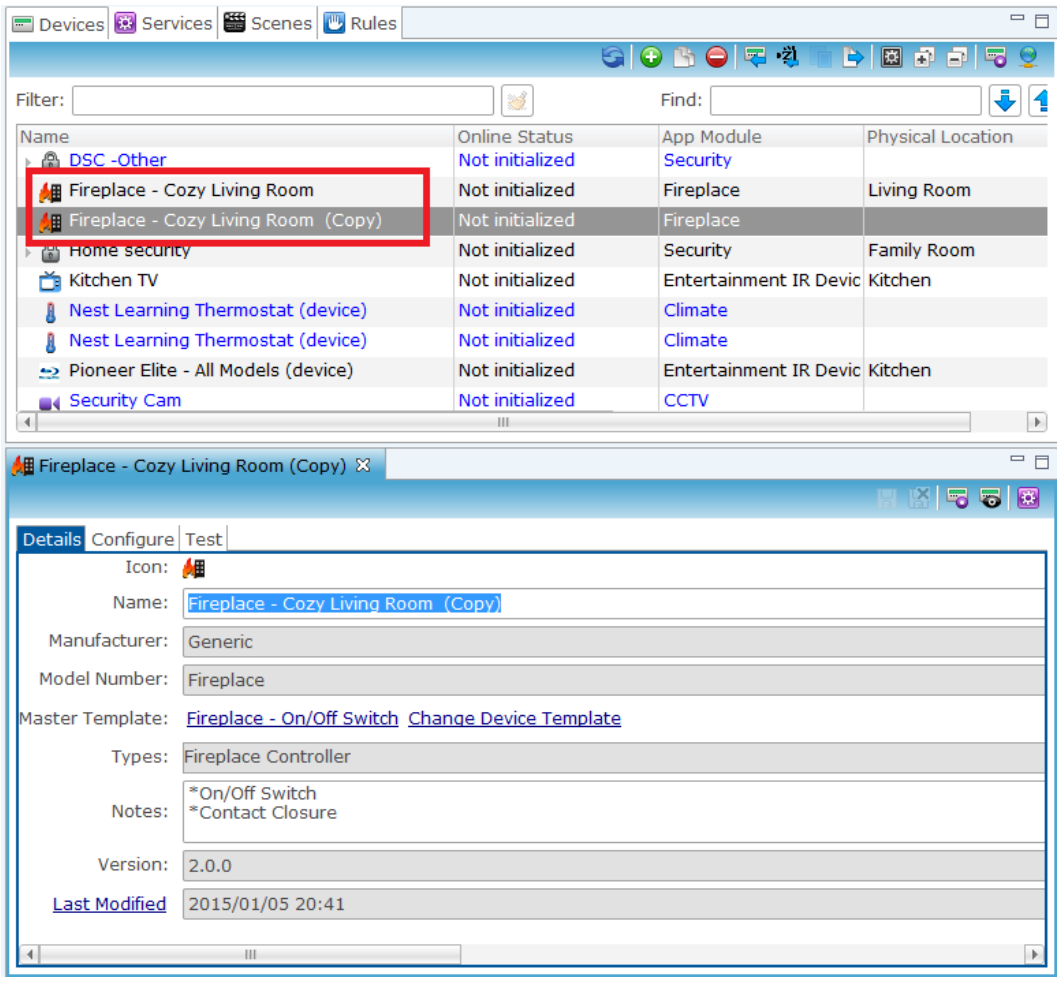


Figure 16: Cloned device



Closing all device configuration editors

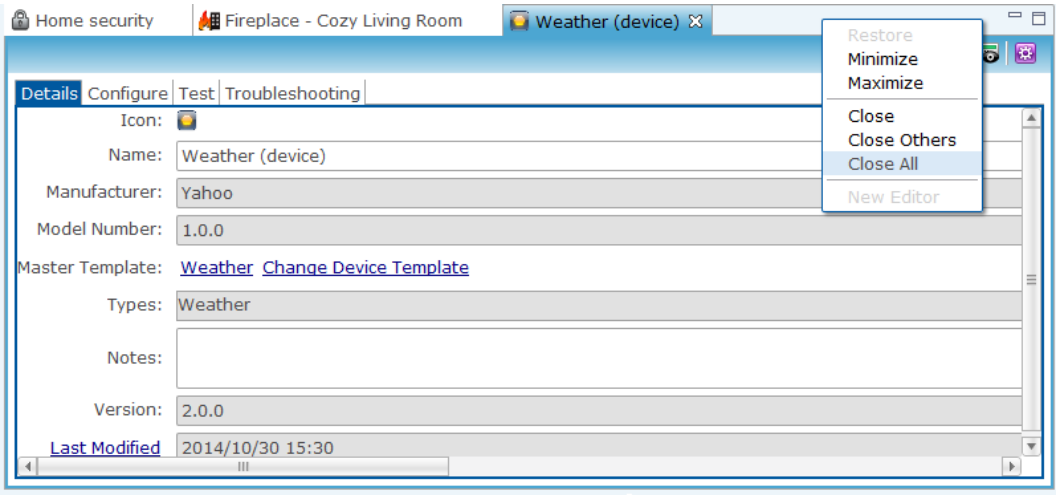
You may have multiple configuration editors open for all your devices while working on a project. If you are finished with all the device configuration editors, you can close them all at the same time.

To close all editors at once:

1. For the open configuration editors for your devices, right-click on the navigation bar.
2. Select Close All.

Note: Other close options include “Close” to close the selected device configuration editor or “Close Others” to close all device configuration editors except for the one you have selected (highlighted).

Figure 17: Option to close all device configuration editors



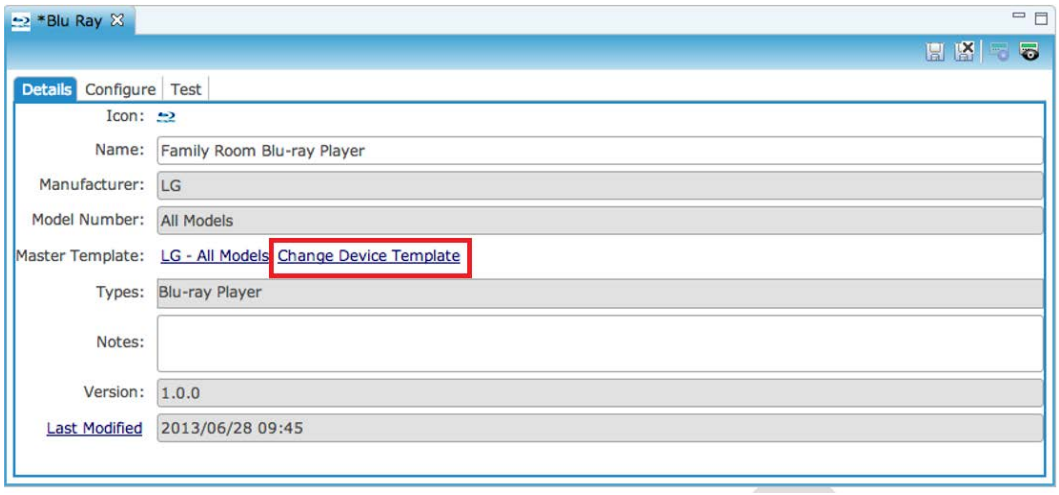
Replace a device template

In some situations, you (or your installation technician) may physically replace one device model for another - for example, you may replace an LG Blu-ray player with a Panasonic Blu-ray player. If the first device was already configured in Fusion, it is necessary to replace the template of the old device with the template for the new device. This section provides instructions for how to replace a device template (already configured) with a different device template.

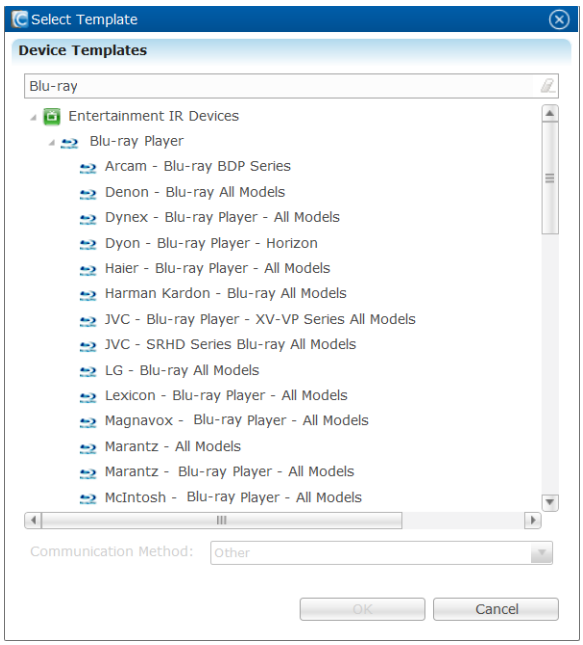
To replace a device template:

1. Open the configured device for which you want to replace the template.

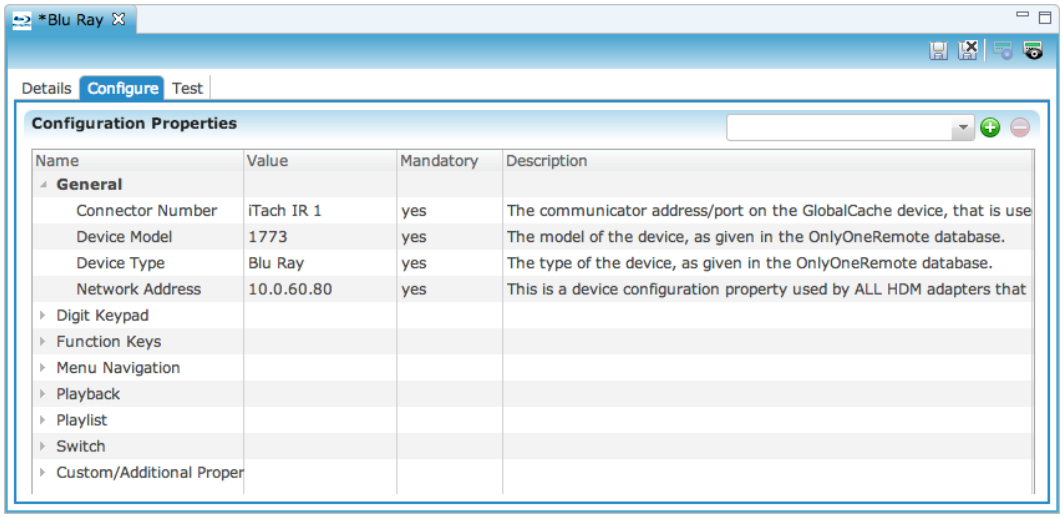
2. From the device configuration editor Details tab, select Change Device Template.



3. From the Select Template dialog box, select the new template.



4. Click OK.
5. Click the Configure tab, and then ensure the configurations are correct.



6. After selecting the configuration, click the Save button .

Integrating CCTV devices

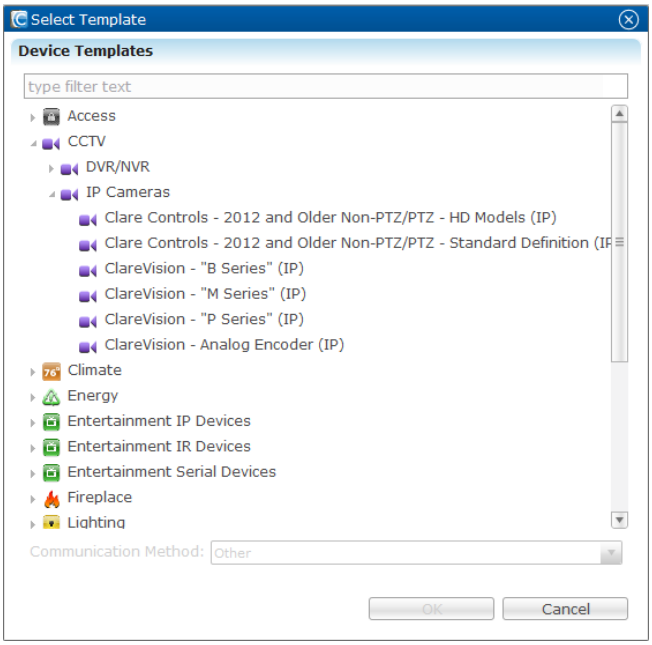
Configuring and managing CCTV devices.

ClareVision IP CCTV camera integration

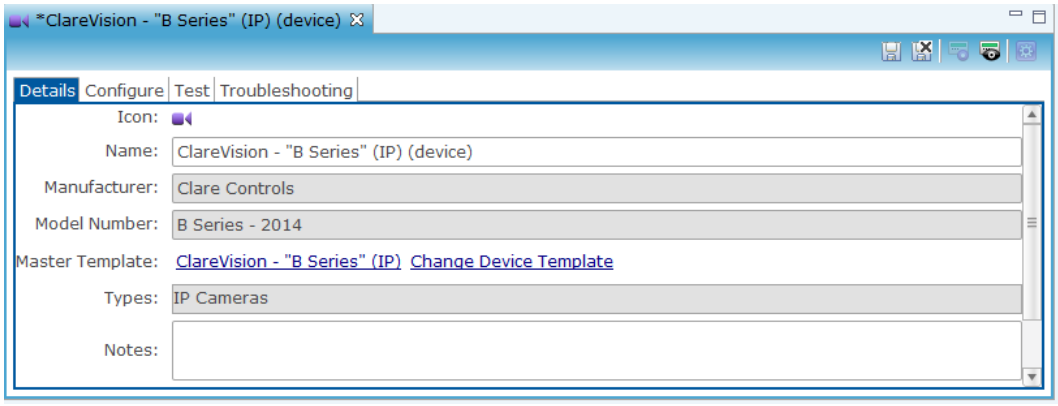
Clare Controls offers its ClareVision line of CCTV cameras. The line includes it's Budget, Mainline, and Proline models. All ClareVision cameras can be connected to an NVR to record streaming video for playback later. The CCTV cameras allow for viewing and monitoring of designated areas. Configuring them in Fusion allows for device interaction.

To add a camera to Fusion:

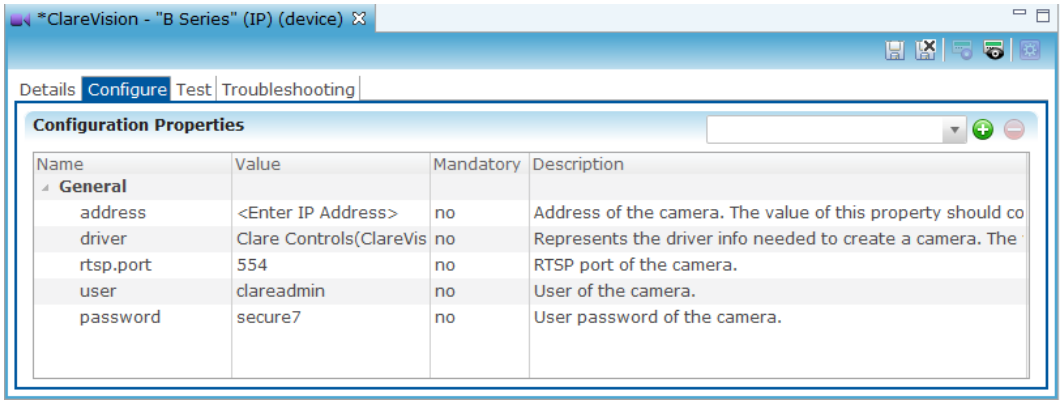
1. Log into Fusion and select your project.
2. Click the Devices tab, and then click the New Device button to display the Select Template dialog.
3. Expand the CCTV drop-down, and then expand the IP Cameras drop-down.



4. Select the series model of the camera from the list, and then click OK.
   The Details tab is displayed.

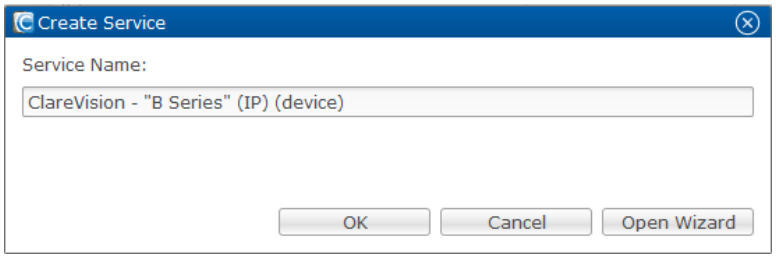


5. Enter the name and notes for the camera, and then click the Configure tab.



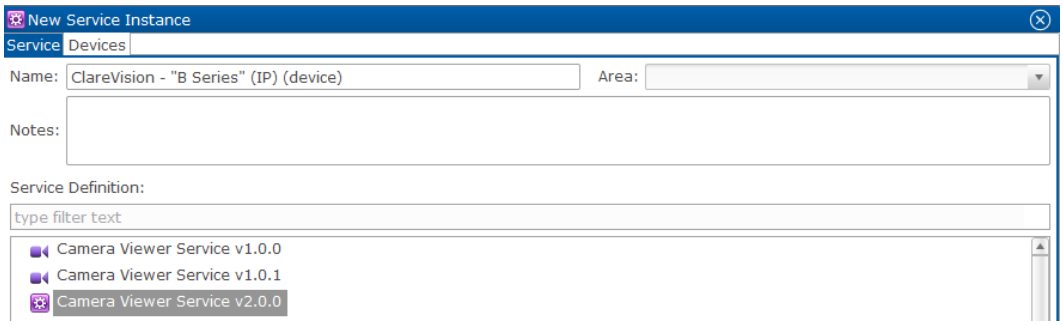
6. Enter the address, driver, rtsp.port, user, and password fields with the appropriate information, and then click Save.

   Note: Clicking Save displays the Create Service dialog.

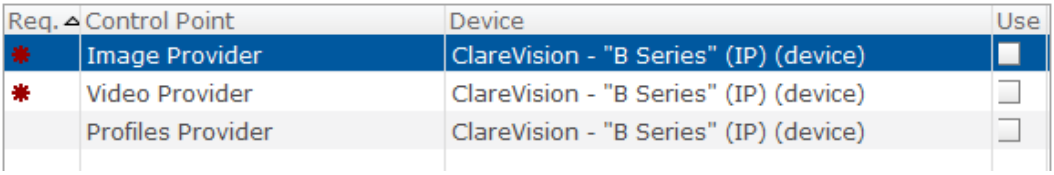


To create a service for the camera:

1. Enter a name In the Create Service dialog that displays, and then click Open Wizard.
2. Click the newest version of the Camera Viewer Service, and then click Next.



3. Fusion displays the New Service Instance Devices tab and auto populates the control points.



Req.	Control Point	Device	Use
*	Image Provider	ClareVision - "B Series" (IP) (device)	☐
*	Video Provider	ClareVision - "B Series" (IP) (device)	☐
	Profiles Provider	ClareVision - "B Series" (IP) (device)	☐

Note: Make sure that the devices are correct. This can be done by selecting the Use box next to the control points. When a device is selected in the left column, and you select the Use box. That device will automatically be selected for that box's control point. Highlight different devices when selecting Use, or manually change them under the device drop-down next to the control points.

4. Click Finish, and then deploy your project.

NVR integration

An NVR (Network Video Recorder) is a piece of surveillance equipment that records video. Currently ClareVision has the 4-channel, 8-channel, 16-channel, 32-channel, and 64-channel NVR models. You add these devices in Fusion to record video streaming from your network cameras.

Connecting the ClareVision NVR to the ClareHome data network

After installation, connect the NVR to the ClareHome data network.

Note: Only a qualified technician should install the NVR.

To connect the ClareVision NVR to ClareHome

1. Attach one end of a Cat 5e or Cat 6 networking cable to the NVR and the other end to your ClareHome network switch.
2. Attach a computer to your ClareHome network, and then configure the NVR settings.

Configuring in Fusion

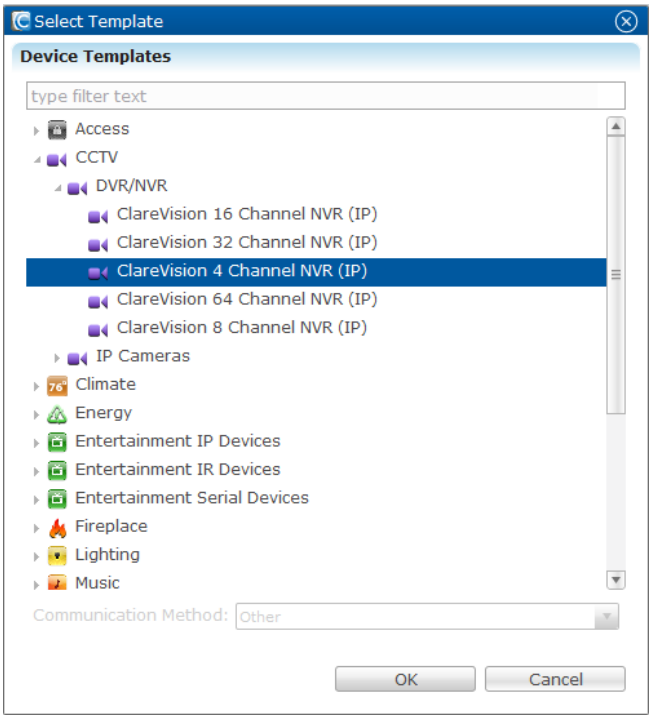
Once the NVR is installed and has been connected to the network, configure it in Fusion.

Notes- add a section for the app access

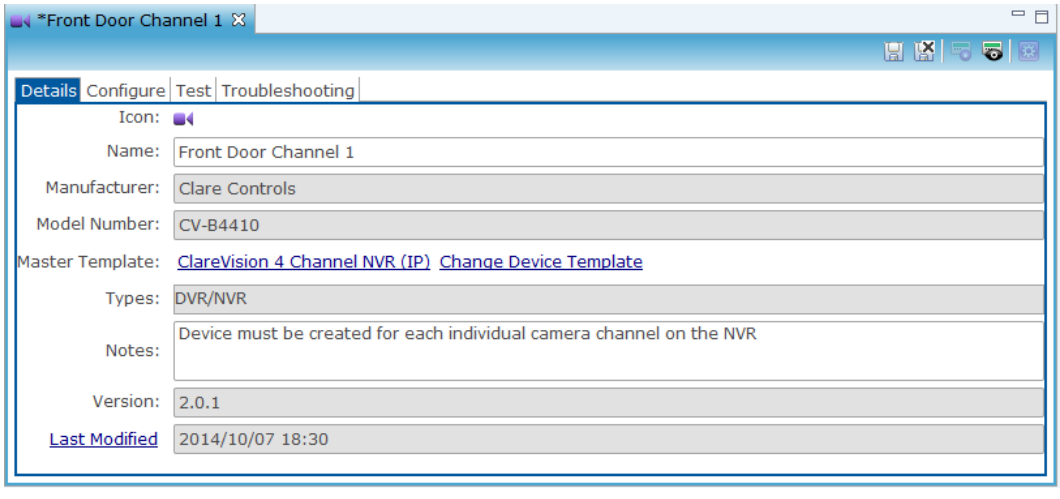
- You will not be able to view playback in the ClareHome App for NVRs added in Fusion. However, you can access playback using the ClareVision App. Log into the NVR using monitor, or access it using the NVR Web App.
- When adding an NVR in Fusion, you must also add each channel. For example, if you add a 4-channel NVR, you must also add all four of its channels, if all four channels are to be viewed.

To add an NVR channel to Fusion:

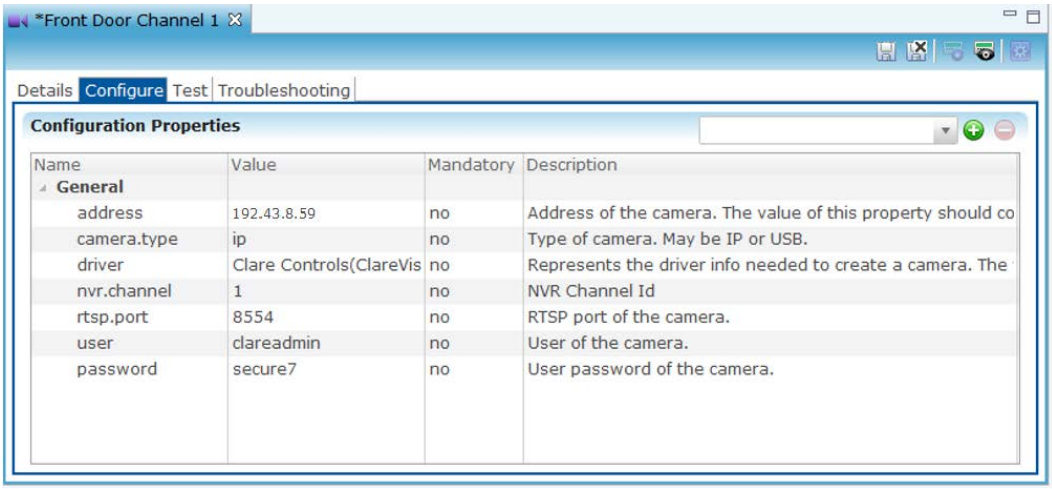
1. Click the Device tab, and then click the New Device button .
2. The Select Template dialog displays. Browse to CCTV > DVR/NVR > ClareVision NVR (IP),and chose a model. Click OK.



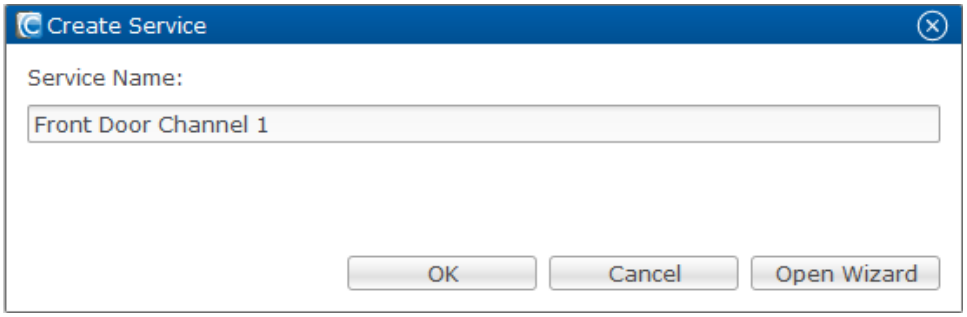
3. In the Details tab, enter a name for the camera channel – for example, Front Door Channel 1. You can also enter notes in this tab.



4. Click the Configure tab.



5. Enter the values in the following fields:
   - In the Address field, enter the device's network IP address.
   - In the nvr.channel field, enter the channel ID number for the camera.
6. Click the Save and Close button .
7. When the Create Service dialog displays, click OK.

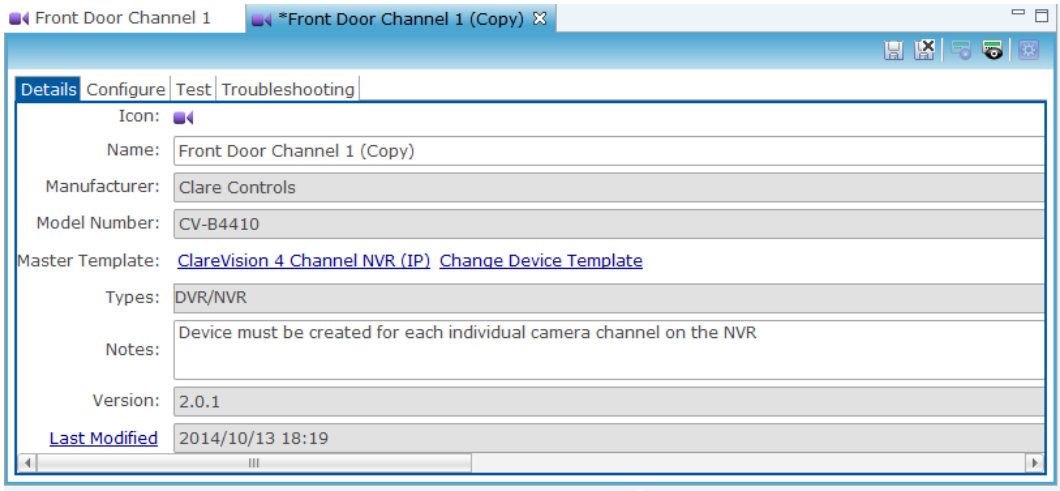


After you have added the initial channel, configure the rest of the channels for the NVR.

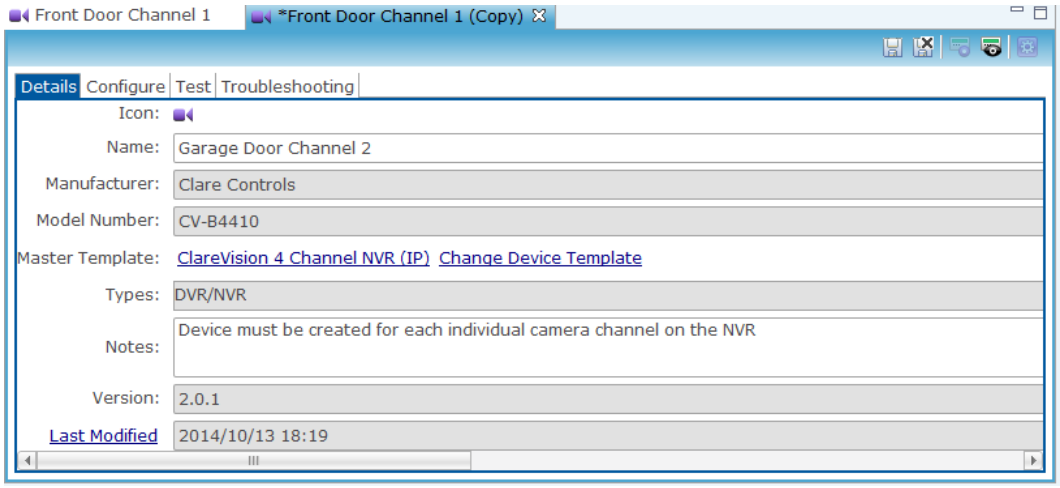
Adding additional channels:

1. Return to the Devices tab and highlight the NVR channel that you just created.
2. Right-click the device, and then click Clone Device.

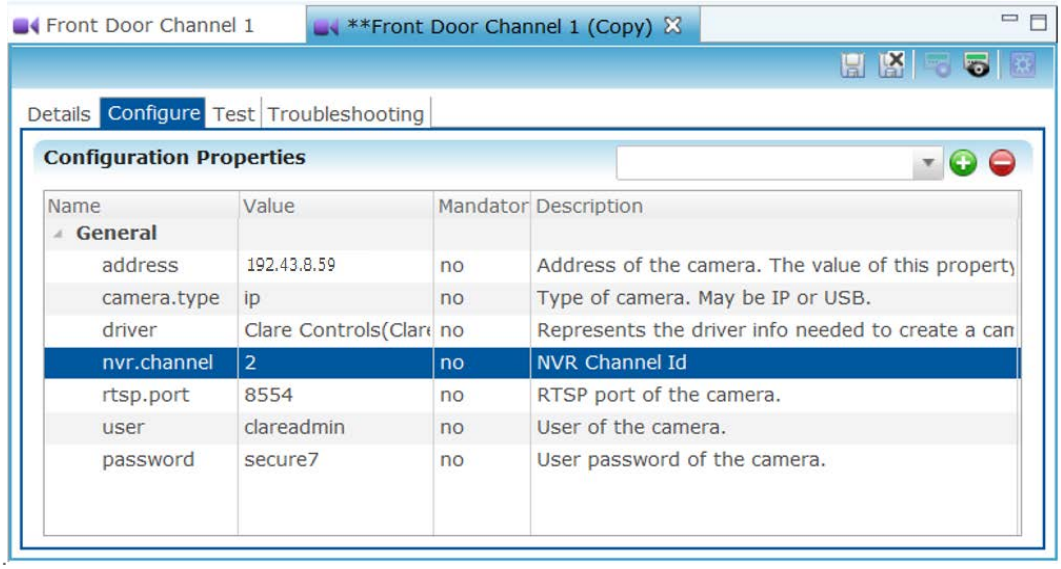
   The copy is displayed in the Details tab.



3. Rename the new channel – for example, Garage Door Channel 2.



4. Click the Configure tab and change the nvr.channel value field to channel ID number 2.



5. Click Save.
6. When the Create Service dialog displays click OK.
7. Repeat steps 1 through 6 for any additional camera/channel in use. For example, if you are adding a 4 cameras/channels to the NVR, repeat 3 times.

Configuring wireless for cameras

Clare Controls offers a 1.3 MP Budget Mini Dome Camera. Not all cameras are compatible with wireless connection.

To connect your mini dome camera for wireless use:

1. Connect the camera to your network with either a powered Ethernet cable, or connect it with an unpowered Ethernet cable and the AC power supply (included).
2. Change the IP settings of your computer to interact with the camera. Be sure to note what was originally in place before making any changes.
   a. Go to Start Menu > Control Panel > Network and Internet > Network Sharing Center.
   b. Click Local Area Connection (or Wireless Network Connection).
   c. In the Local Area Connection Status dialog, click Properties.
   d. Highlight Internet Protocol Version 4 (TCP/IPv4), and then click Properties. Enter the following information:

      IPv4 Address: 192.168.1.245

      Subnet Mask: 255.255.255.0

      IPv4 Gateway: 192.168.1.1
3. In your web browser’s address bar, enter 192.168.1.250.
4. Log in with the User Name: clareadmin and the Password: secure7.
5. Click the Configuration tab (along the top of the window), the Network Tab (on the left side of the window), and then the Wi-Fi tab (below the Configuration tab).
6. From the Wireless list, select your home wireless network.
7. Click the appropriate security mode and encryption type for your network.

   Note: If your network is secured with a key or password, enter that key into the Key 1 field.
8. Click Save.
9. Select the TCP/IP tab (in the same menu as the Wi-Fi tab).
10. In the Select NIC drop-down menu, click wlan.

If applicable insert the IPv4 address, IPV4 subnet mask, and IPv4 default gateway within the range of your wireless network.

11. Click Save.
12. Revert the IP settings of your computer to the original settings (see Step 2).
13. Unplug your camera from the Ethernet cable, and then connect it to the power supply, if it is not already connected.
14. From your web browser, go to the IPv4 address of the camera that you inserted and ensure you have a live stream from your camera.

ClareVision DDNS

The ClareVision DDNS is a free USA-based DDNS service. This service lets you view and monitor the devices in your home from an Apple or Android device.

Access an account

1. On your web browser, type www.myclarevision.com.

2. Login to register an account. If this is a first-time access, the site will prompt you for a domain name before continuing.
3. Select the domain name you want – for example, *yourname.myclarevision.com*. Do not change the myclarevision.com box.

4. Click Request Domain.

Configure the router

To connect to a device to the DDNS, you must configure the router and open the ports. Please see Port forwarding on page 62.

To configure the device:

1. Type the desired device's IP address into your web browser and log on to configure the device.
2. On the menu bar, click Configuration, and then select the DDNS tab and fill in the DDNS information.
3. Ensure the DDNS service is enabled click Enable DDNS.
4. From the DDNS Type drop-down list, select the CVDDNS service.
5. In the Server Address field, enter www.myclarevision.com.
6. In the remaining fields, enter the domain, user name, and password that you have selected, and then click Save.

After configuring the devices, use the ClareVision App to monitor them.

To view the devices:

1. Install the ClareVision app on your Apple or Android device.
2. Log in using the same information that you chose for the myclarevision site.
3. Access the Device Information tab on the menu and select the device you want to configure.
4. Make sure that all of the details in the DDNS tab match the ones entered in the device configuration.

   Note: You must enter a device alias. This is any name that you want for this particular device – for example, Hallway Camera, Benny's Garage, or 32 NVR.
5. Make sure that everything is filled in correctly, and then repeat steps 1 through 4 for each device.

Port forwarding

Port forwarding is the way in which a device is accessed from an external network. It allows remote access of certain device functions by forwarding remote connections to the desired device. Each router has configurable network ports for this purpose. The ports used are specific for each device. Each router is different and the method for port forwarding configuration will vary, refer to the documentation for the router and device being used.

To enable port forwarding for a device:

1. Determine and configure the ports that the device is using.
2. Access and log in to the home router.
3. Open the corresponding ports on the router through the routers internal menus.

Table 2: Standard port numbers

Ports	DDNS	NVRs	Cameras
Server	8000	800	800
HTTP	80	80	80
HTTPS	443	443	443
RTSP	8554	8554	554

Note: ClareVision cameras and NVRs use the same ports. If you have one of each, two NVRs, two cameras, or more than one device, you will need to change the ports on one of them if remote access is desired. Changing the last digit of the port numbers for one of the devices is the easiest method.

Table 3: Multi device port number example

Ports	Camera 1	Camera 2	NVR 1	NVR 2
Server	800	801	802	803
HTTP	80	81	82	83
HTTPS	443	444	445	446
RTSP	554	555	8554	8555

In this example, the router external IP is 72.91.2.194 and the device is going to be NVR 2. To access NVR 2 from an external network, type the IP of the router

followed by: port number. To access the RTSP port of NVR 2, type 72.91.2.194:8555.

Integrating thermostats

Integrating a thermostat in Fusion allows customers to turn on and adjust the cooling and heating functions from their mobile devices, such as iPhone, iPad, or Android smartphone.

Once you have installed the thermostat, add and configure it in Fusion.The following includes directions for integrating various brands of thermostats into Fusion.

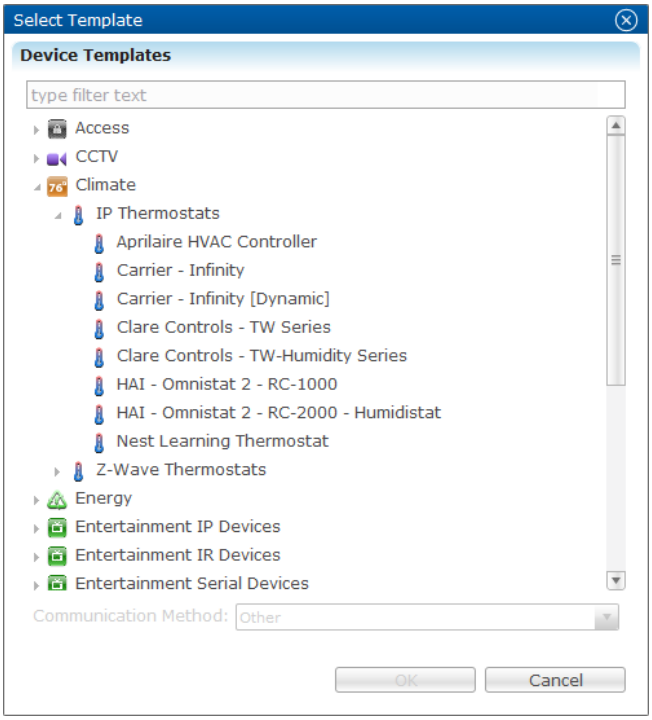
Most common thermostats

This is for integrating the following thermostats: Clare Controls TW Series, Clare Controls TW Humidity Services, HAI Omnistat 2-RC-1000, HAI Omnistat 2-RC-200 Humidistat.

To add and configure a thermostat in Fusion:

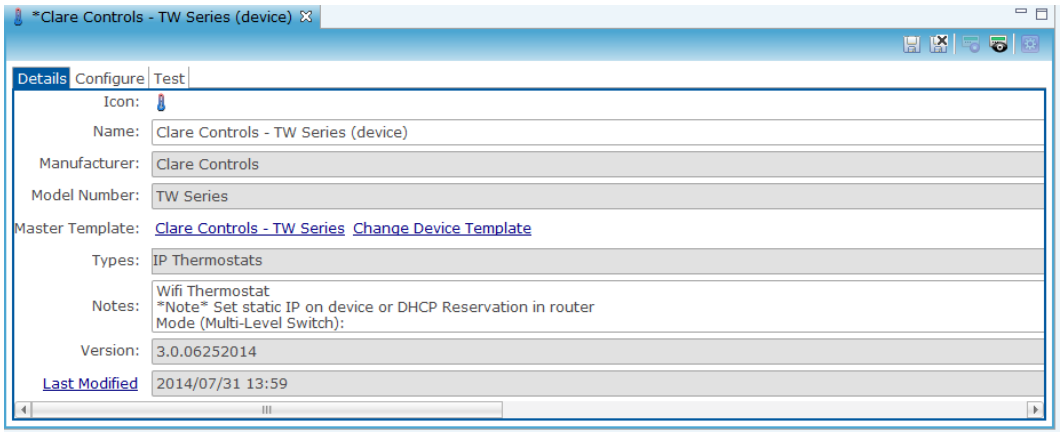
1. Log into Fusion and select your project.
2. Click the Devices tab, and then click the New Device Button.

   This displays the Select Template dialog.
3. Expand the Climate drop-down, and then select IP Thermostat.

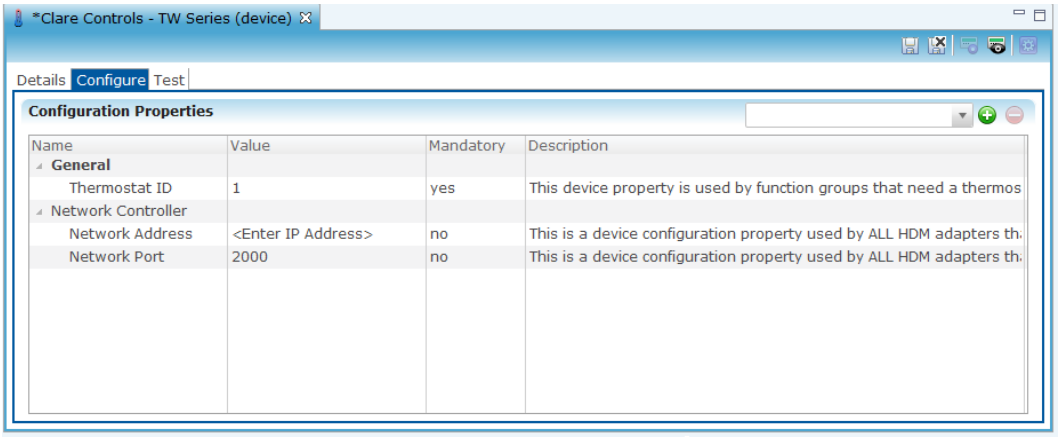


4. Select the brand of thermostat you are using, and then click Next.

   This opens the Details page, name the device and add notes.

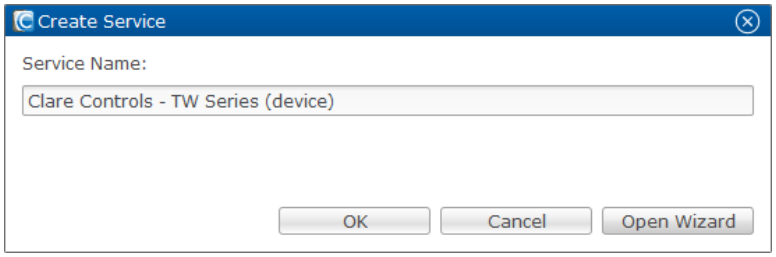


5. Click the Configure tab and in the Thermostat ID, Network Address, and Network Port fields, enter the appropriate values.

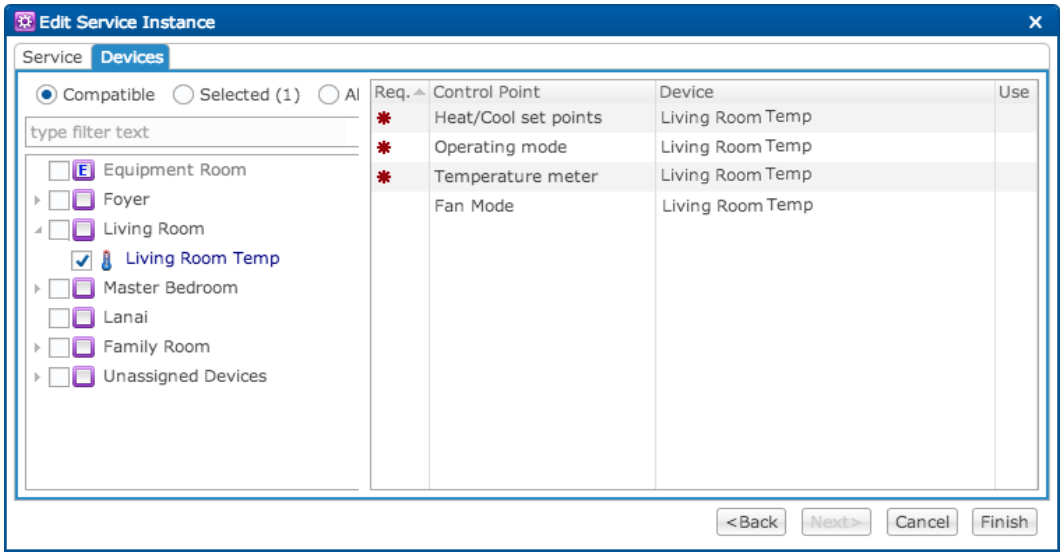


6. Click the Save button .

   Clicking Save opens the Create Service dialog.



7. Click Open Wizard.
8. Select the newest version of the thermostat service, and then click Next.



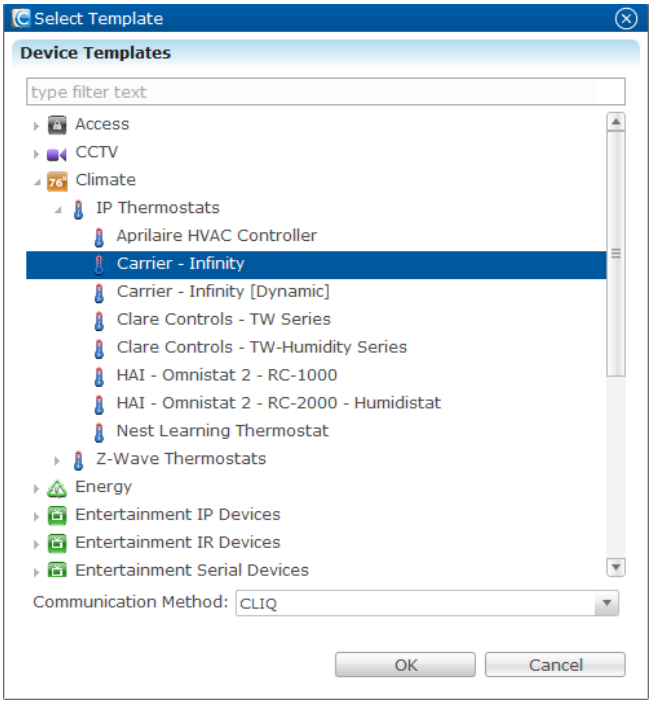
Note: The control points should be auto populated, make sure that they are all selected. Click Finished.

9. Click Save, and then deploy your project.

To add a Carrier Infinity thermostat to Fusion:

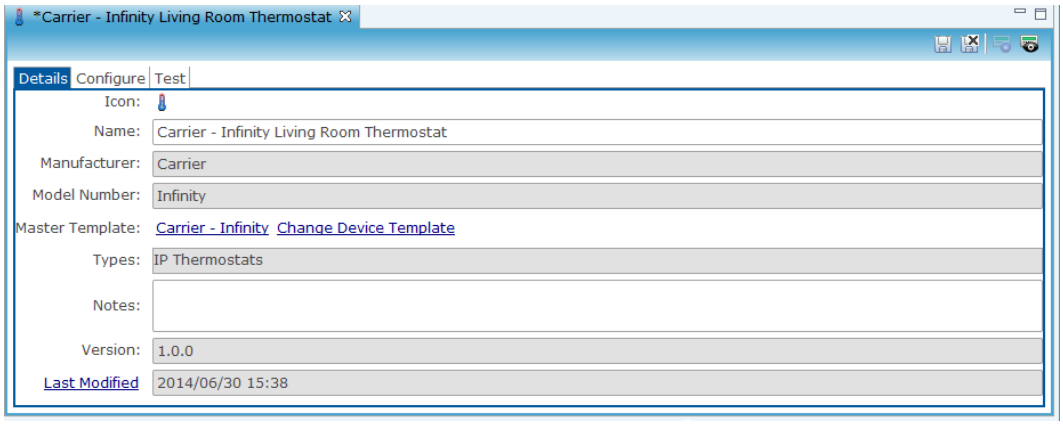
1. Log into Fusion and select your project and project version.
2. Click the Devices tab, and then click the New Device Button .

   The Select Template dialog displays.

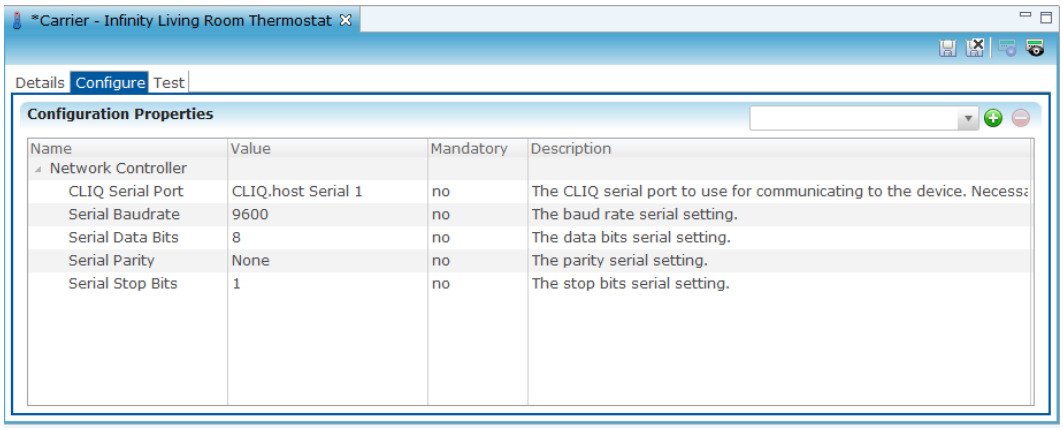


3. Select Climate > IP Thermostats > Carrier Infinity, and then click Next.

   The Details tab displays. You can name the device or add notes on this tab.



4. Click the Configure tab, and then fill in the CLIQ Serial Port field with the corresponding port on the CLIQ device.



5. Click Save.

   Note: Zones will automatically be created for the thermostat. In the Devices tab, locate the thermostat you just added. Click to expand the thermostat to view the zones available for that device. You may add new zones or delete them based on need. To avoid confusion, we recommend that you do not add more zones than you need.

To configure a Service for the thermostat:

1. Click the Services tab, and then click the New Services Instance button . See Figure 18.

   – or –

   Open one of the thermostat zones, and then click the New Service Instance button . See Figure 19.

Figure 18: Creating a service from the Service tab

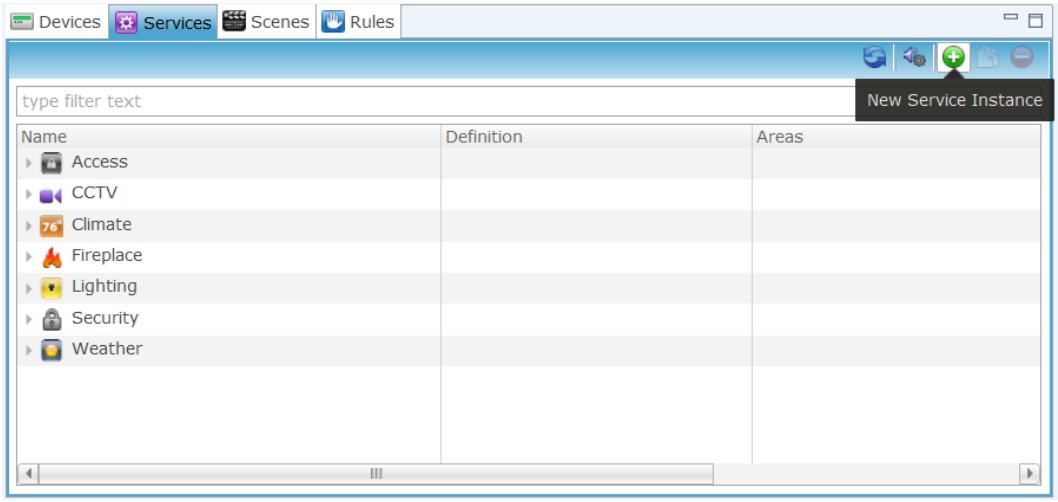
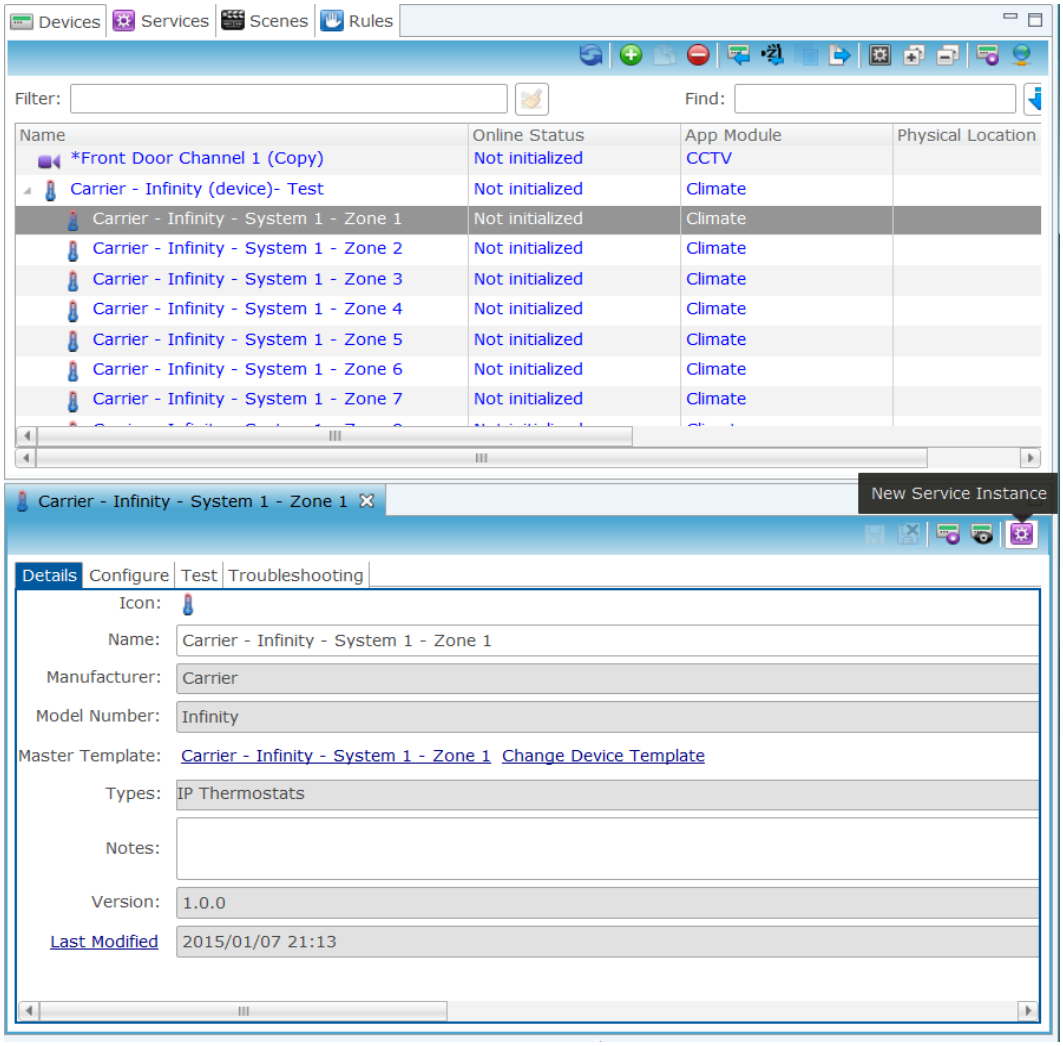
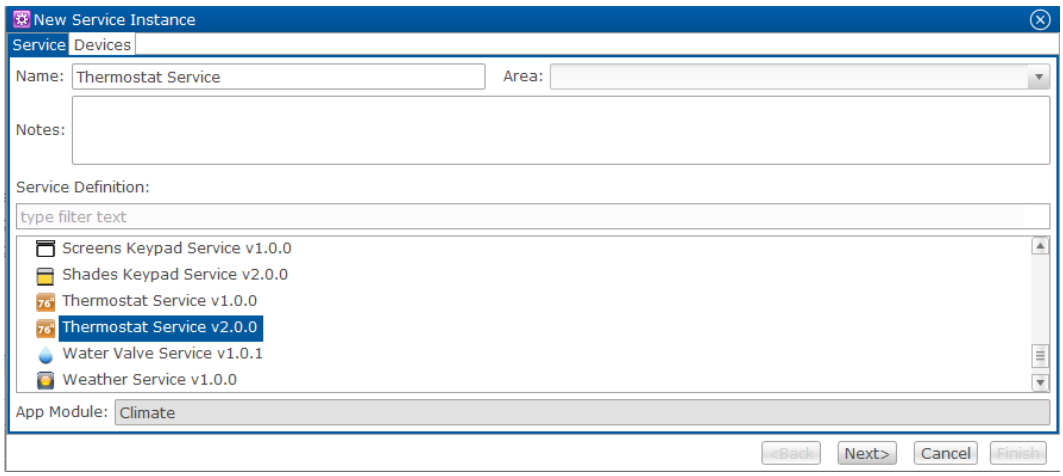


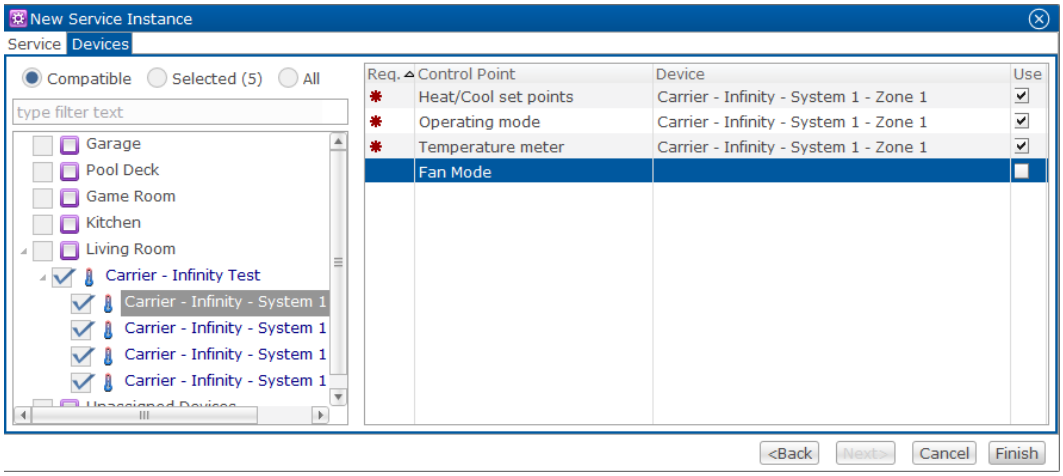
Figure 19: Creating a service from the zone



2. Select the newest version of the Thermostat Service available, and then click Next.



3. In the left column, select the area to which you have assigned the thermostat, see “Using drag-and-drop,” on page 11. If you have not assigned it to an area select the Unassigned Devices drop-down.
4. Select the drop-down for the thermostat you are using, and then select all of the zones you want to be able to adjust.
5. In the right column under Device, select a zone and enable it for each control point that you want for that zone.

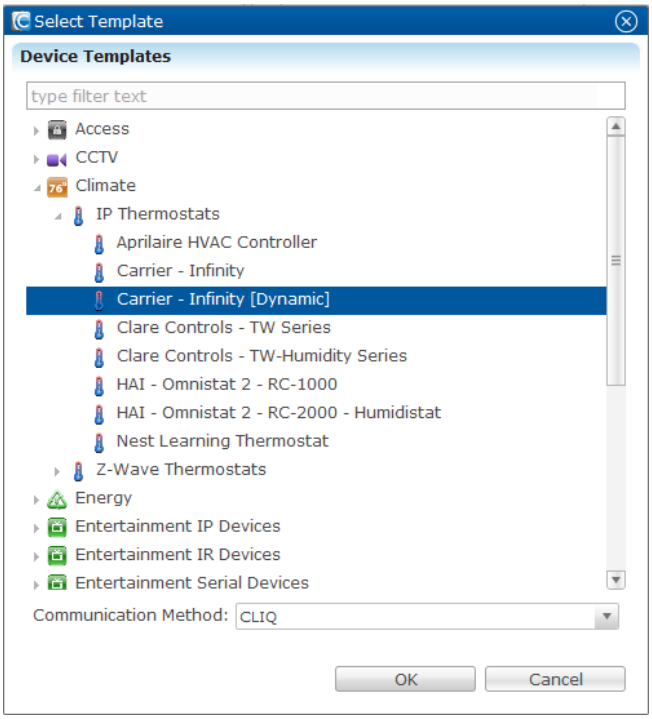


6. Repeat step 5 for each zone that you want to configure.
7. Click Save, and then deploy your project.

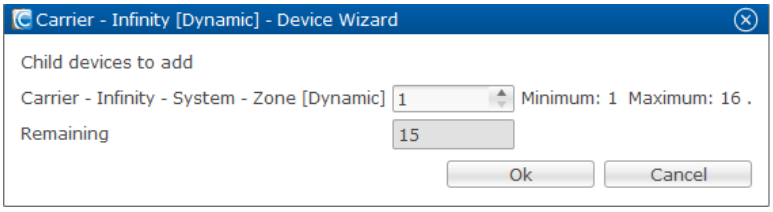
To configure a Carrier Infinity [Dynamic] thermostat in Fusion:

1. Log in to Fusion and select your project.
2. Click the Devices tab, and then click the New Device Button .

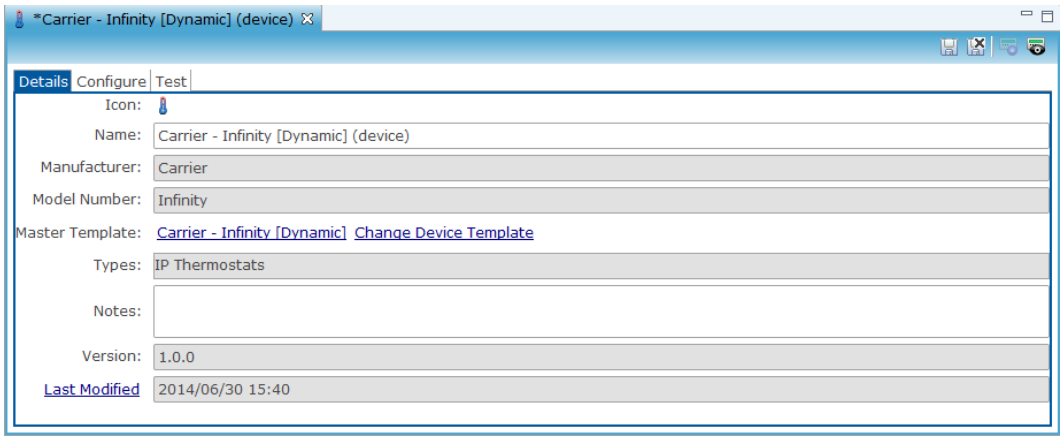
   The Select Template dialog displays.
3. Expand the Climate drop-down, and then select IP Thermostat.



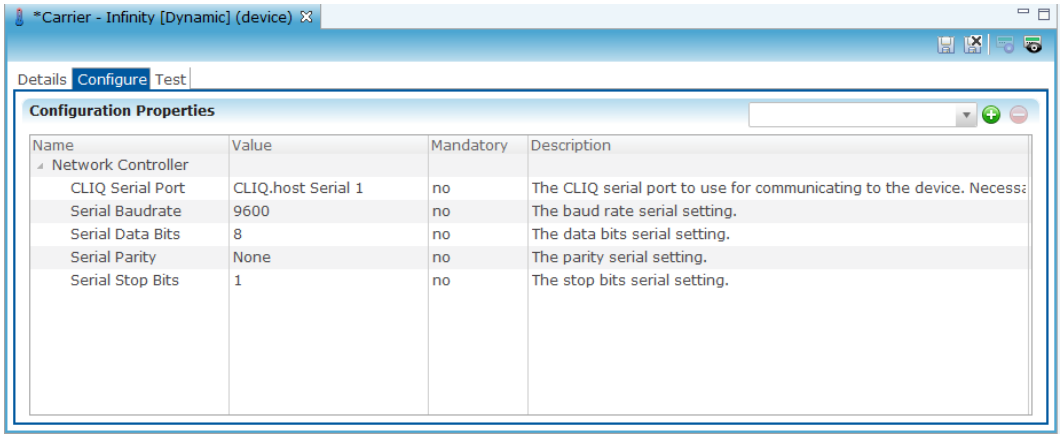
4. Select Carrier-Infinity [Dynamic], and then click OK. This opens the Device Wizard dialog.



5. Set the number of zones you want, and then click OK. The wizard closes and displays the Details tab, name the thermostat and add notes.



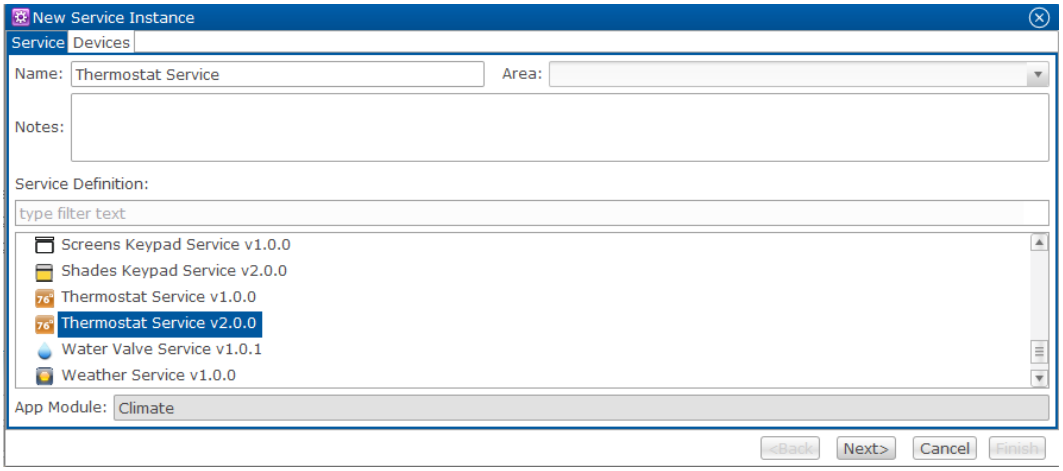
6. Click Configure tab and fill out the Configuration Properties panel.



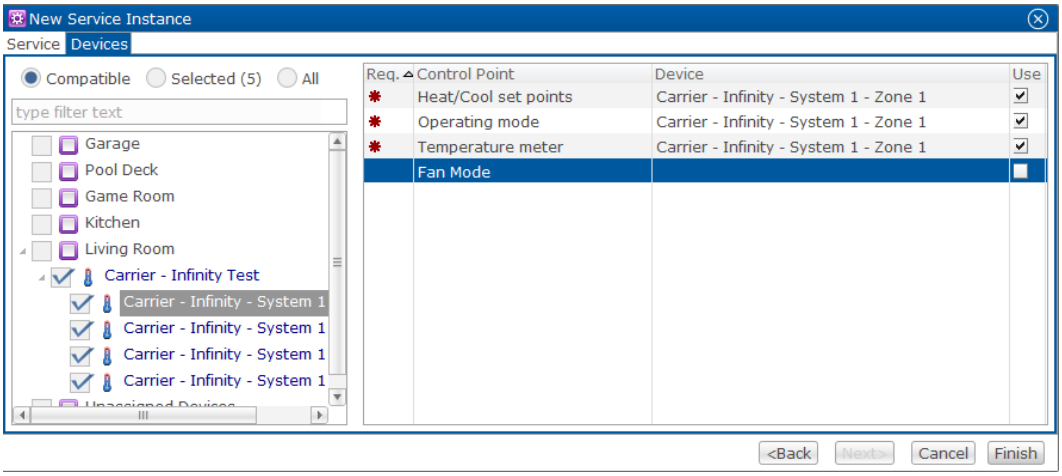
7. Click Save.

To configure a service for the thermostat:

1. Click the Services tab, and then click the New Services Instance button .
2. Select the newest version of the thermostat service available, and then click Next.



3. In the left column, select the area to which you have assigned the thermostat. If you have not assigned it to an area, select the Unassigned Devices drop-down.
4. Select the drop-down for the thermostat you are using, and then select all zones.
5. In the right column under Device, select a zone and enable it for each control point that you want for that zone.



6. Repeat step 5 for each zone you want to configure.
7. Click Save and then deploy your project.

Connection the Nest thermostat to ClareHome

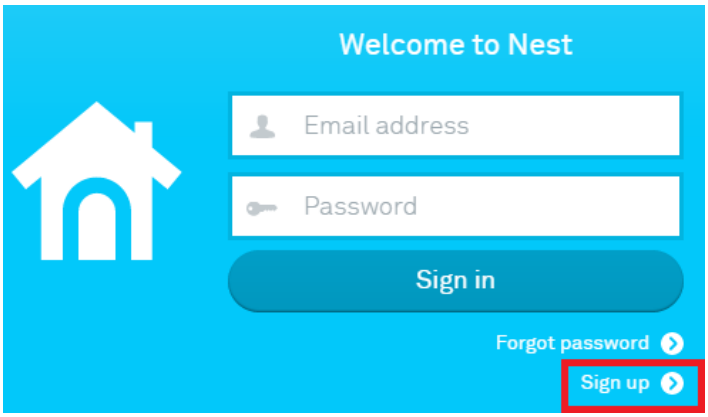
The Nest thermostat is a smart thermostat that connects directly to the Cloud using Wi-Fi.

Creating a Nest account

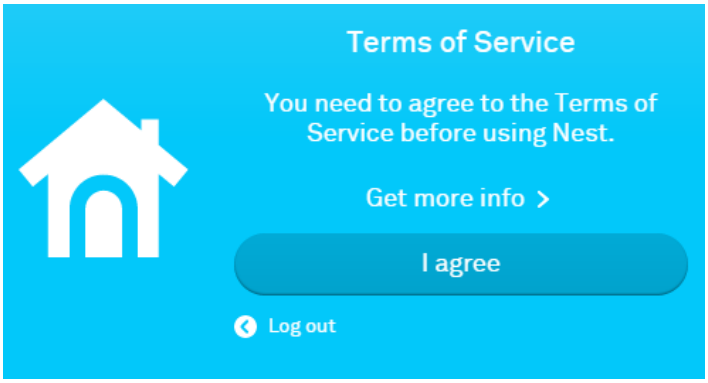
After installation, create a Nest account, or log onto your customer's existing account. You will need to obtain an Access Token and save it.

To create a Nest account:

1. From your browser, access https://home.nest.com, and then click Sign up.

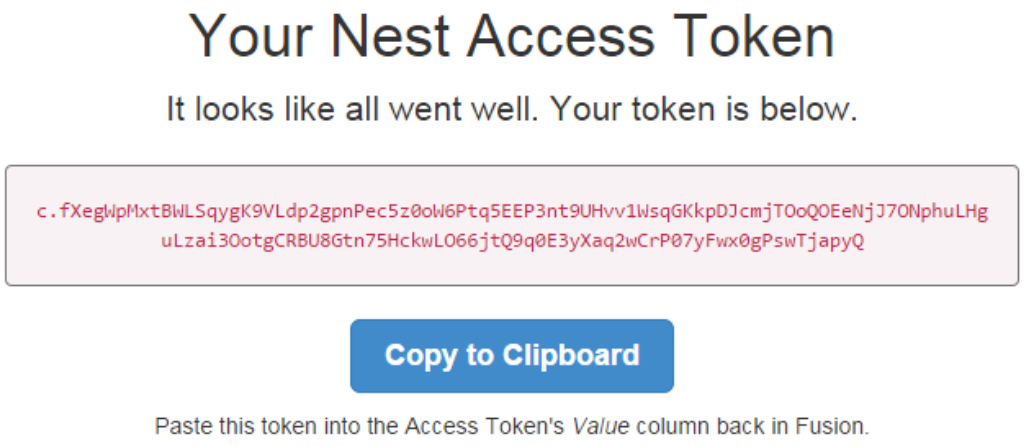


2. Enter an email address and password, and then click Sign up. If your customer has an existing Nest account, log in using their credentials.
3. Access the email account used. If you are using a web browser, open the email in a new tab. Respond to the verification email.
4. In your browser, return to the Nest tab. The Terms of Service page displays. Click I agree.



To obtain a Nest access token:

1. Browse to the Clare Controls Nest website https://www.clarecontrols.com/nest/. The Works with Nest page displays.
2. Click Continue to display the Nest Access Token page.



3. Copy this token by clicking the Copy to Clipboard button.

   Notes

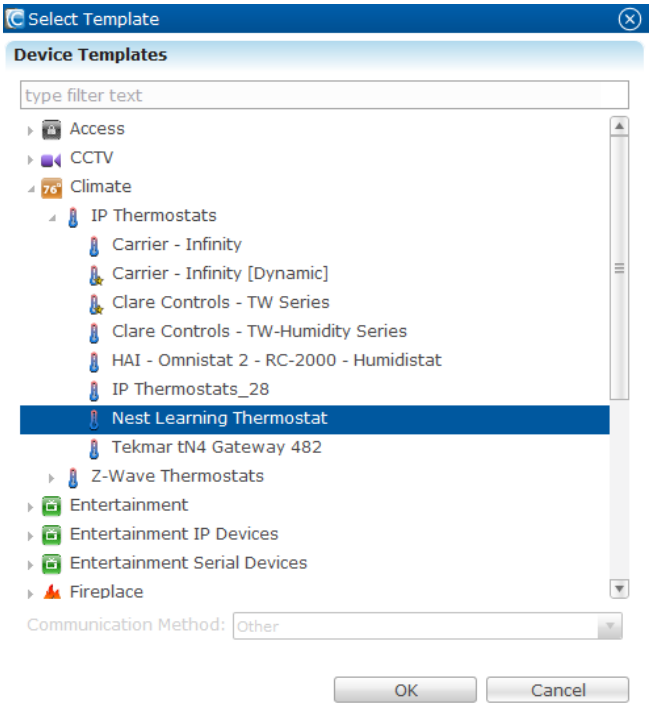
   - This token will be used for all thermostats in the home.
   - The token has a rate limit. The server can log out the customer, if certain connection limits are reached. This will only affect remote control of the thermostat, it will still be functional at the home. This should not be a concern, as the thermostat learns the customer's settings and will adjust accordingly.

Configuring in Fusion

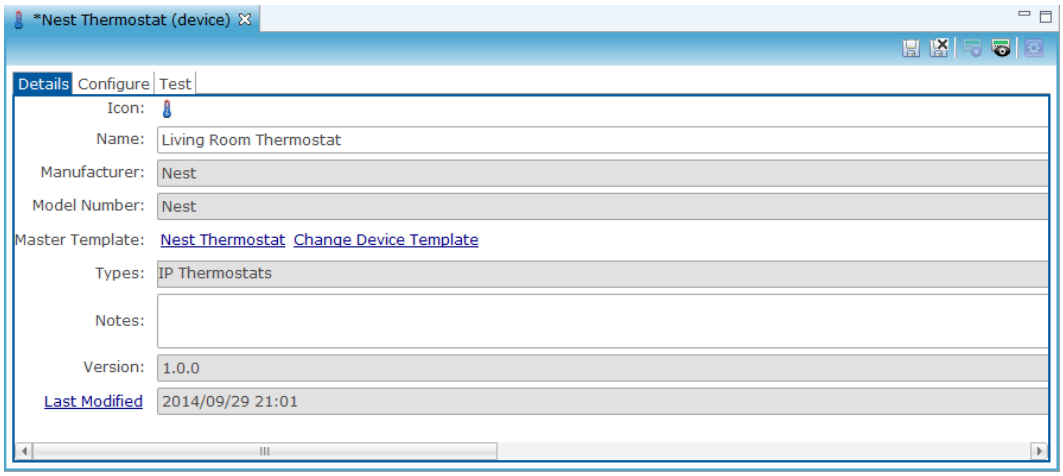
Once you have obtained the Nest Access Token, configure the Nest thermostat in Fusion.

To add a Nest device in Fusion:

1. Click the Devices tab, and then click the New Device button to display the Select Template dialog.
2. Expand the Climate folder, and navigate to the Nest thermostat, Climate > IP Thermostats > Nest Learning Thermostat. Click OK.

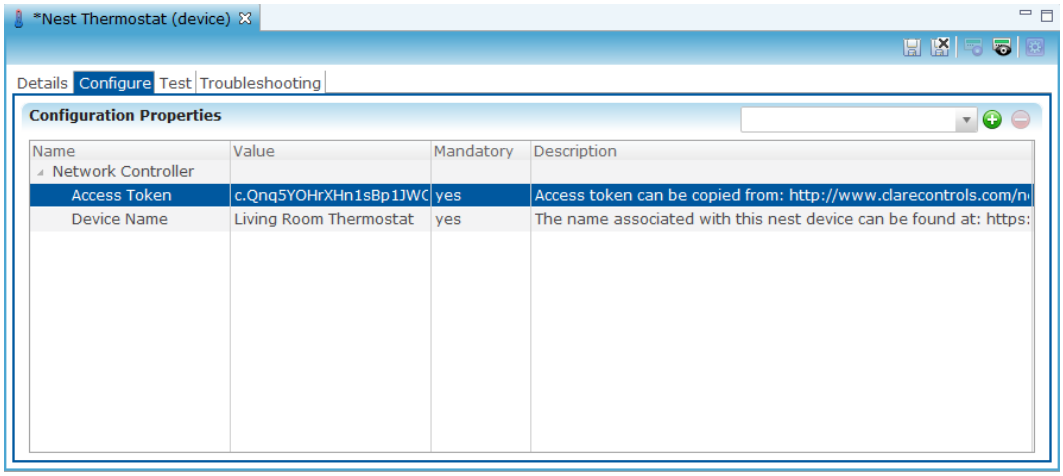


3. Name the thermostat and add notes.

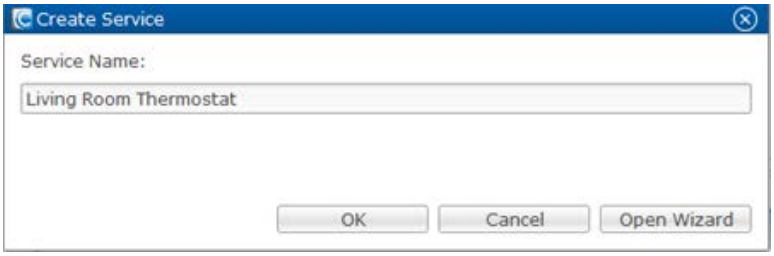


Note: The thermostat name must match the name entered when registering the device on Nest.

4. Click the Configuration tab.



5. Enter values in the following fields:
   - In the Access Token field, click inside the Value area, and then paste the token that you copied to your clipboard earlier.
   - In the Device Name field, enter the same name that you assigned to the Nest thermostat in the Details tab.
   - In the Thermostat ID field, enter the thermostat number associated with that Nest thermostat.
6. Click the Save button . The Create Service dialog displays. Click OK, and the service is automatically created for you.



Note: You can select Open Wizard to select or change the controls points as needed.

7. Be sure to deploy your project.

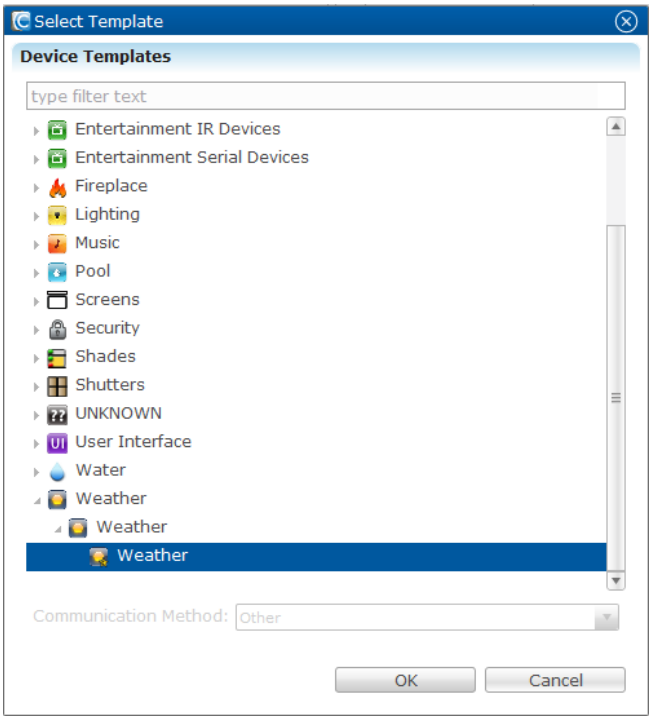
   Multiple Nest thermostats can be created in Fusion for the same home. Go through this process for each additional Nest thermostat.

Weather

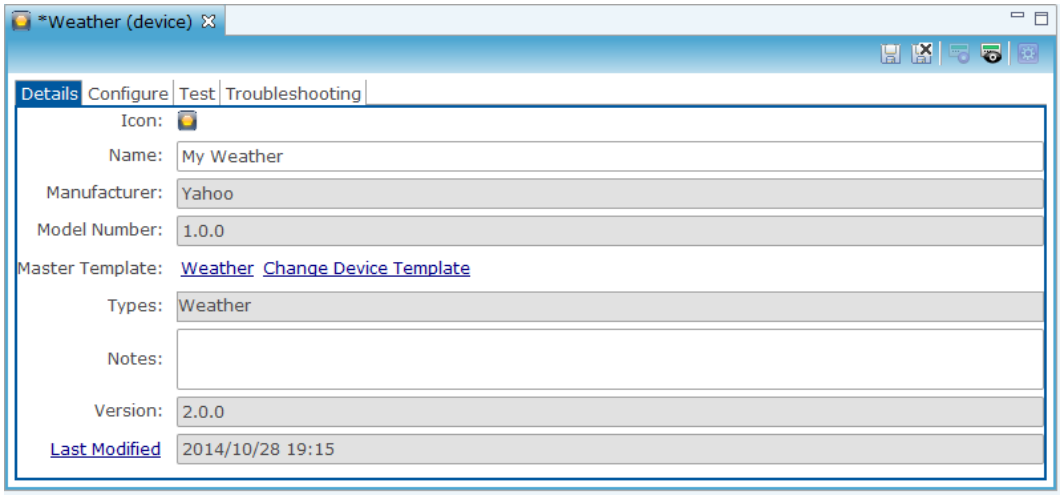
The weather tool is unique to the Clare Controls App. Once configuring the weather settings, the user is able to see the weather at their set home location remotely.

To configure weather in Fusion:

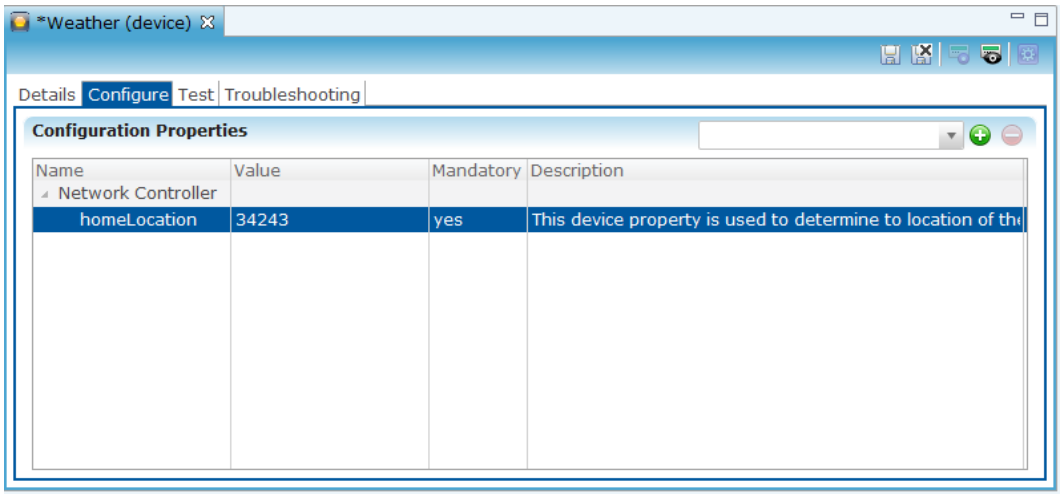
1. Log into Fusion and select your project.
2. Click the Devices tab, and then click the New Device Button . This displays the Select Template dialog.
3. Browse to Weather > Weather > Weather, and then click OK.



4. Enter a name and notes on the Details tab.

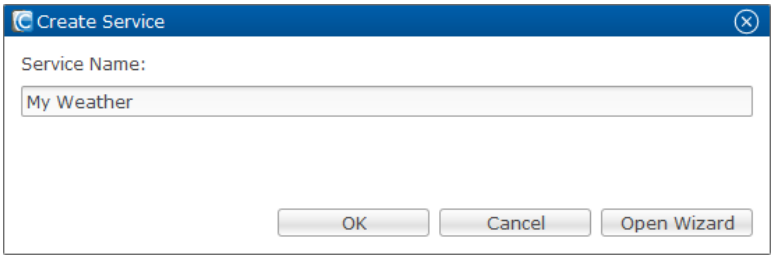


5. Click Configure tab. In the homeLocation's value field, enter the home's ZIP Code.

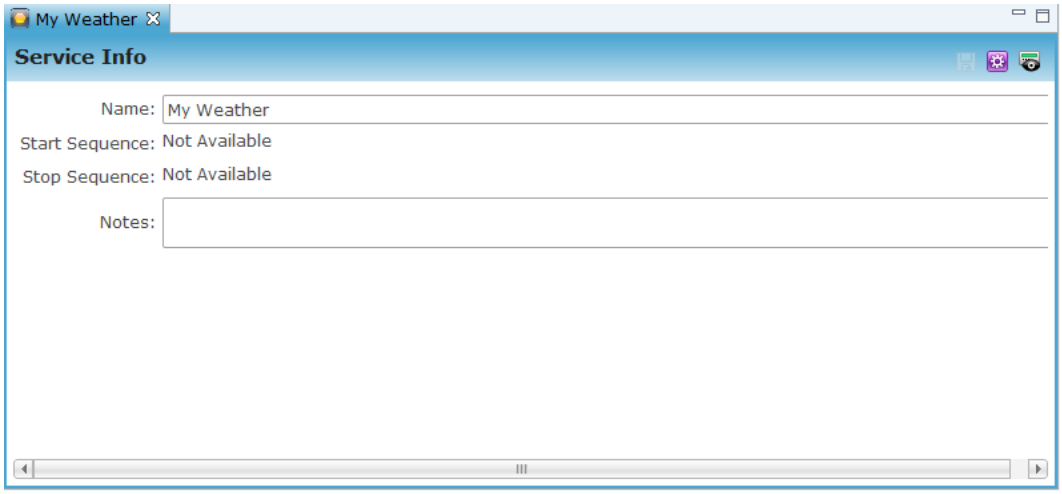


6. Click the Save button .

   This displays the Create Service dialog.



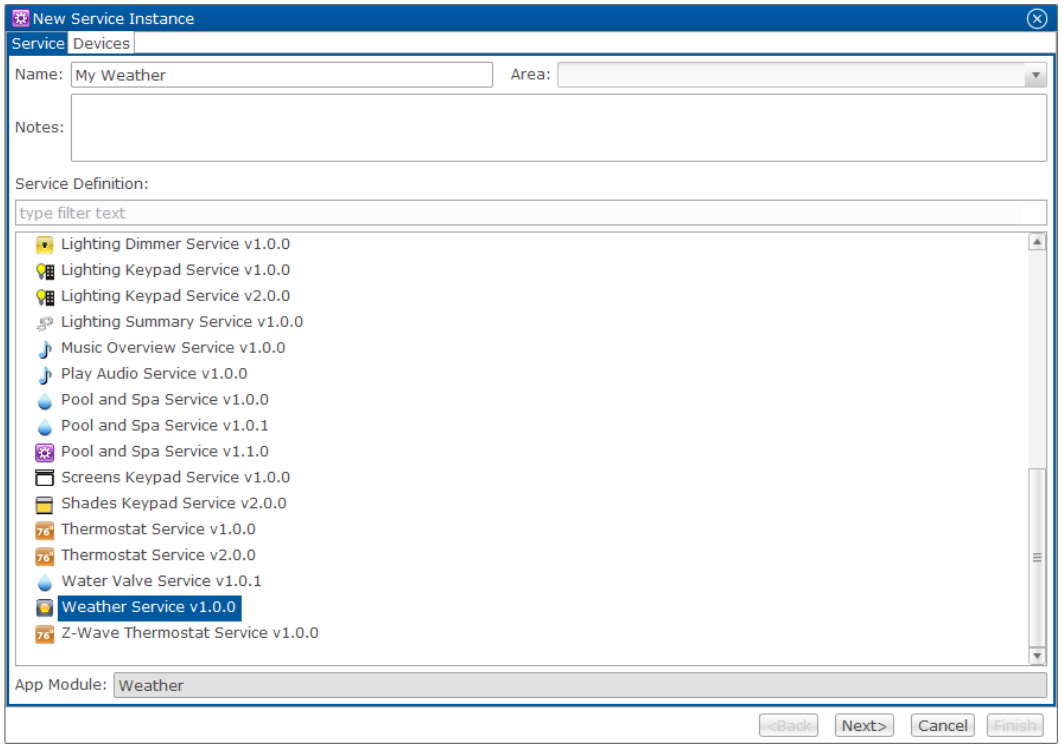
7. Click OK and the weather service is automatically created for you.



Note: Click Open Wizard to select the weather device being used.

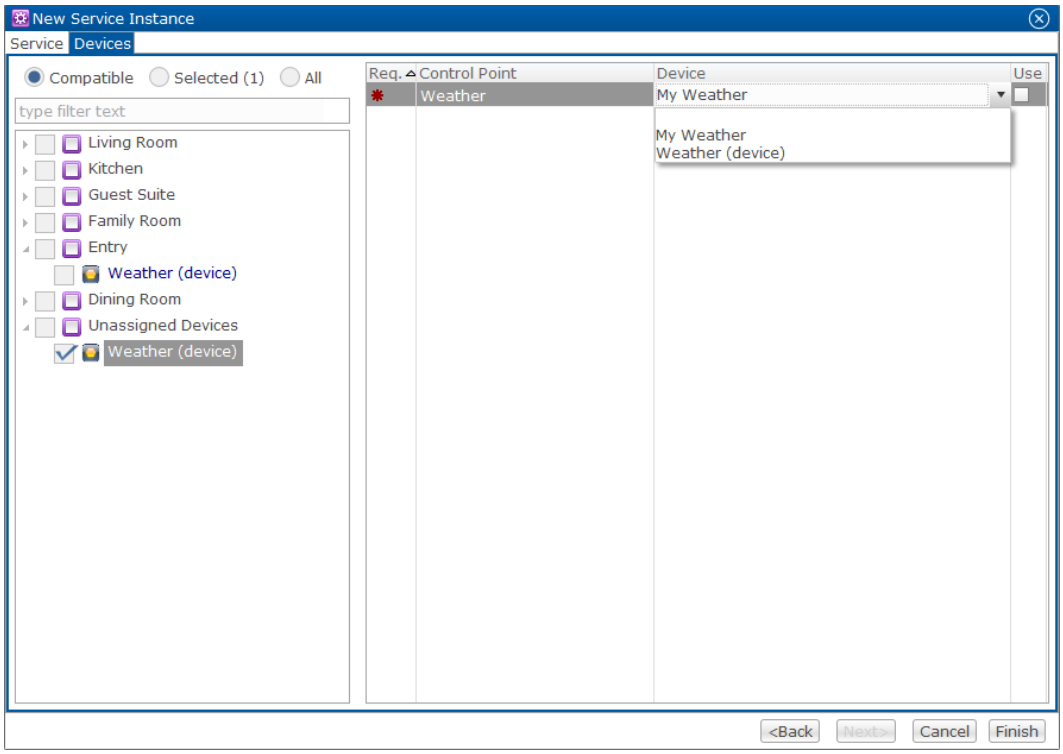
To configure advanced weather settings:

1. Click Open Wizard and the Services tab of the New Service Instance dialog displays.



2. Select the newest weather service option, and then click Next>.

   The Devices tab of the New Service Instance dialog displays.



3. On the left side of the dialog, select the device.
4. On the right side of the dialog, expand the Device drop-down menu and select the device you want to be used.
5. Click Finish.

Connecting a CLIQ Controller

The CLIQ Controller provides all of the device management services, supports all Clare user interface services, and acts as the gateway to the ClareCloud for system updates. It is the brain and acts as a go between for all of the devices in the network.

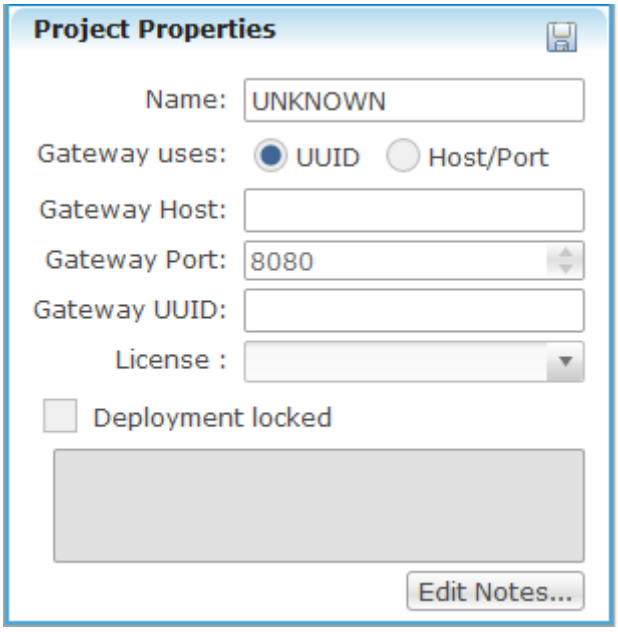
Connecting a CLIQ Controller in Fusion

Before trying to connect your CLIQ Controller make sure that you have access to Fusion.

To connect the CLIQ controller in Fusion:

1. Create a new project by clicking the New Project button , or you can select an existing project.

2. Enter the UUID in the Gateway UUID field. This field is on the left side of the screen, in the Project Properties section.



Note: The UUID can be found on the CLIQ device, CLIQ Controller box, and documentation included.

3. Continue configuring your project, and when complete, be sure to deploy it.

Attaching a doorbell to a CLIQ device

Connecting a doorbell in Fusion allows custom scenes when pressing the doorbell button. The custom scenes can include sounds, cameras, any device connection can be used within Fusion.

Doorbell installation

Before you begin, ensure that you have the following items:

- CLIQ controller
- Doorbell
- Doorbell button
- Contact closure wire, or equivalent

Install the doorbell and then program it in Fusion.

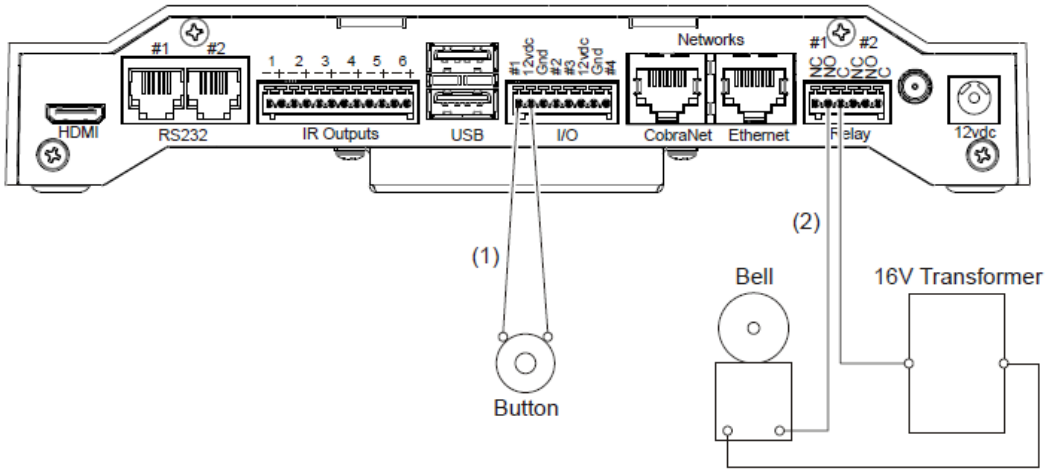
To install the doorbell:

1. Install the doorbell according to manufacturer instructions.
2. Run the contact closure wires from the doorbell button to the CLIQ device, connect one wire to an IO port on the back of the CLIQ (e.g., port ...1), and then the other to its adjacent 12 VDC port. See Figure 20, item 1.

   Notes

   - Some wires may not be exposed. If necessary, cut and strip the ends for exposure.
   - When wiring devices, ports 1 and 2 share the same 12 VDC power and ground, and ports 3 and 4 share the same power and ground.
3. Run the wires from the bell to the power supply and CLIQ device. Connect the wire from the bell to NO (normally open). Connect the wire from the transformer to C (common). See Figure 20, item 2.

Figure 20: Doorbell wiring for the CLIQ



(1) Button wiring to the CLIQ

(2) Bell wiring to the CLIQ

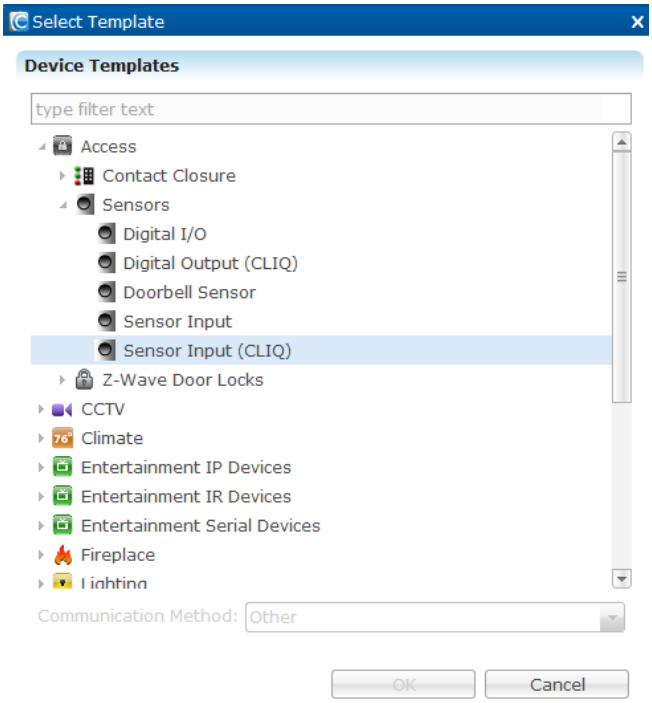
Configuring the doorbell in Fusion

Add the doorbell to Fusion. You will need to configure the doorbell button and the bell for doorbell operation.

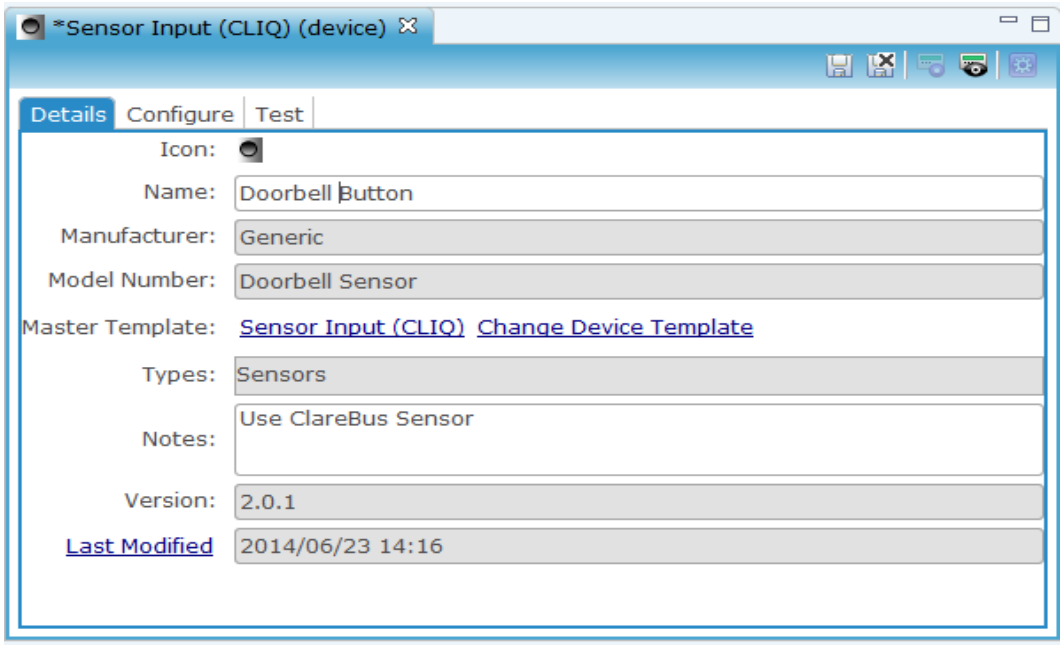
Configuring the button in Fusion:

1. Log into Fusion, and then open your project.
2. Click the Devices tab, and then click the New Device icon

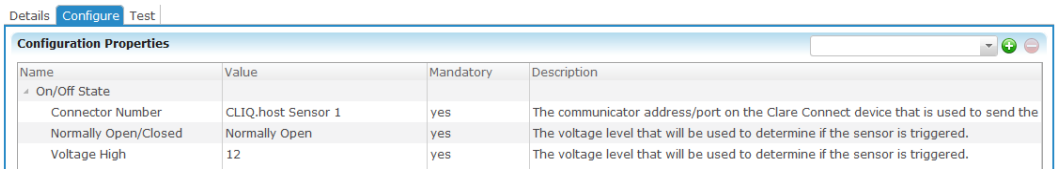
The Select Template dialog displays.



3. Browse to Access > Sensors > Sensor Input (CLIQ), and then click OK.
4. In the Details tab's Name field, enter a name for your doorbell button – for example, Doorbell Button.



5. Click the Configure tab, and then expand the On/Off State property. Select the connector number and voltage from the drop-down fields in the Configure tab. The selections should match the connector you are using, and the voltage should be that of the device you are connecting (12, 24, or 5).

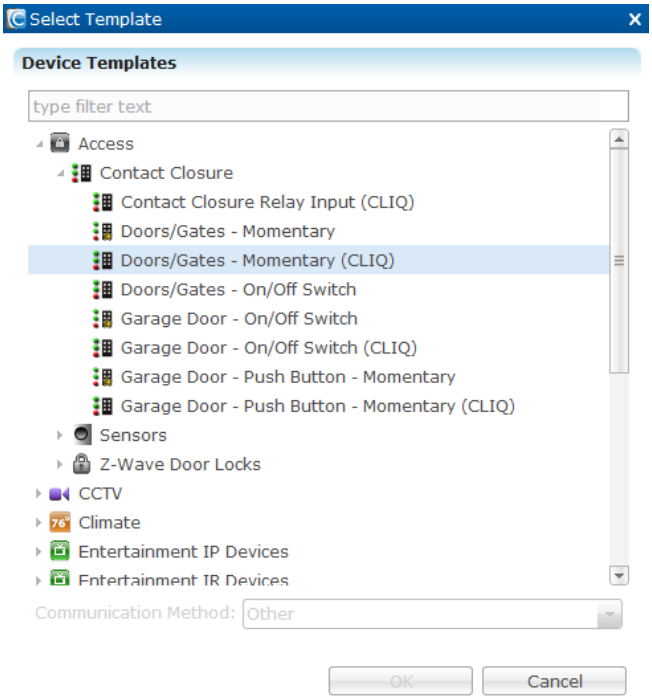


6. Click .

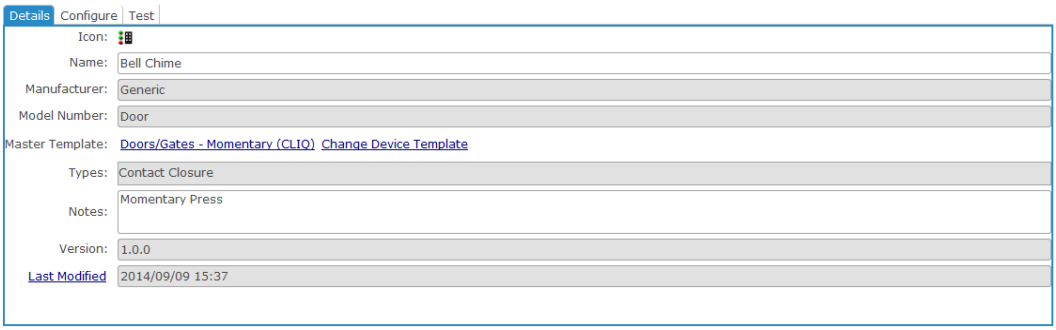
   Note: This automatically creates a service for the device.

Configuring the bell in Fusion:

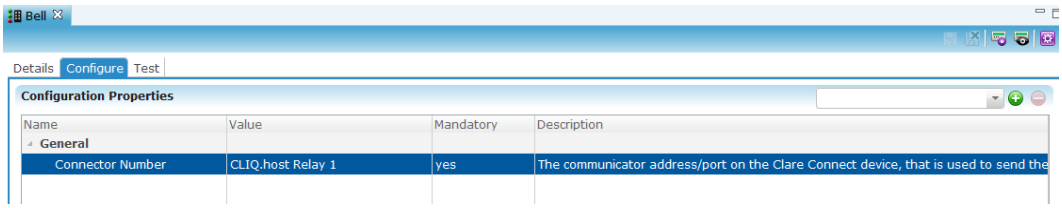
1. Click the Devices tab, and then click the New Device icon The Select Template dialog displays.
2. Browse to Access > Contact Closure > Doors/Gates-Momentary (CLIQ), and then click OK.



3. In the Details tab's Name field, enter a name for the bell.



4. Click the Configure tab, and then select the connector number that corresponds to the bell.



5. Click Save.

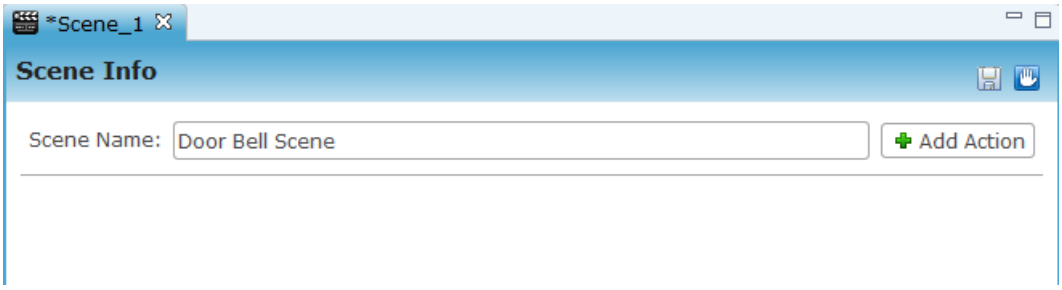
   Note: This automatically creates a service for the device.

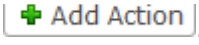
Creating a scene

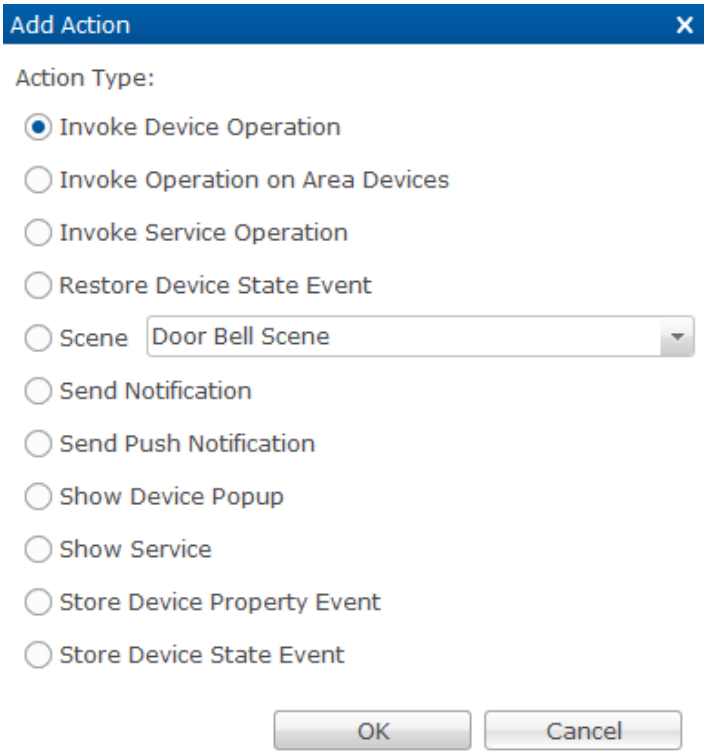
Once the devices have been configured in Fusion, create a scene. In this scene, pressing the doorbell will ring and turn on the front door camera.

To create the scene:

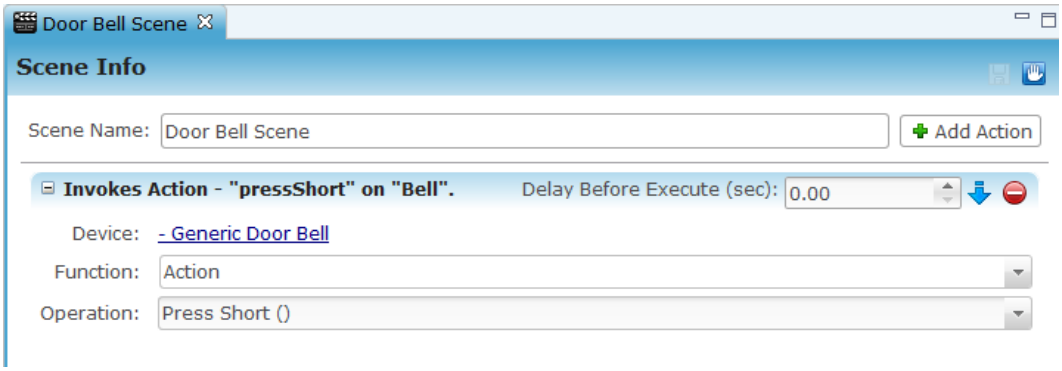
1. Click the Scenes tab, and then click the New Scene button .
2. The Scene Info field displays. In the Scene Name field, enter a name for the scene – for example, Door Bell Scene.



3. Click the Add Action button  . The Add Action dialog displays.
4. Select Invoke Device Operation, and then click OK.



5. Configure the Scene Info field, as shown below.

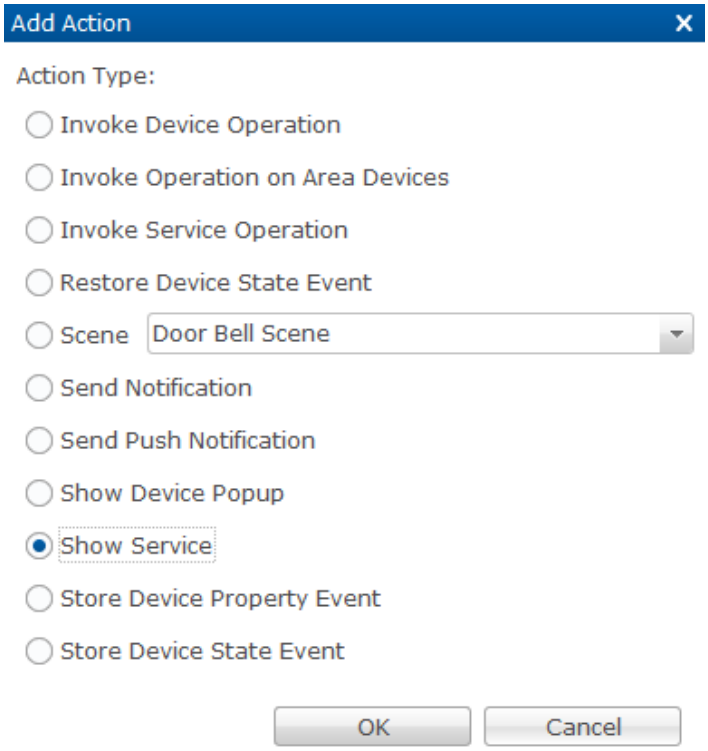


- Click the hyperlink to select the device wanted, in this case the bell.

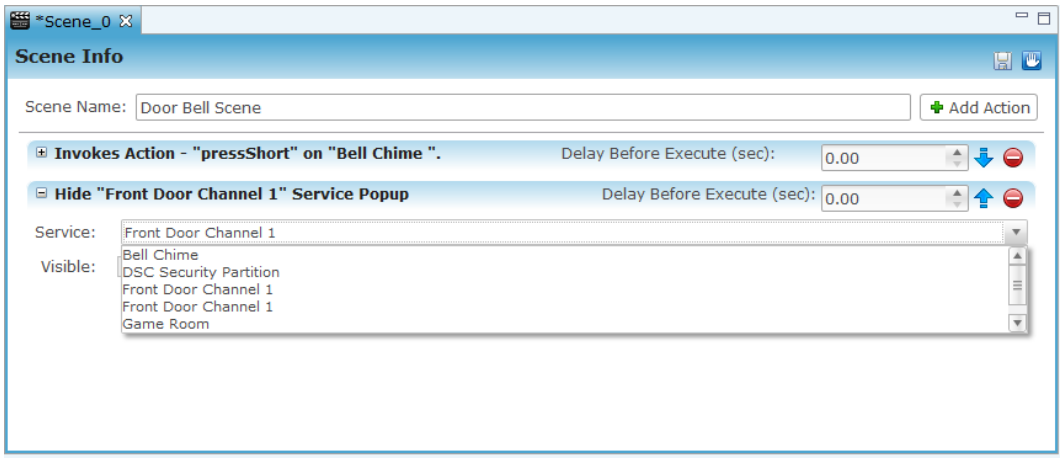
Note: The Device field will display the text “Generic Door Bell”, it will not display the name you assigned to the bell.

- Function: Action
- Operation: Press Short

6. Click Add Action to display the Add Action dialog.
7. Select Show Service, and then click OK.



8. Select the camera you want shown from the service dropdown list, and then make sure that the Visible checkbox Visible: is selected.



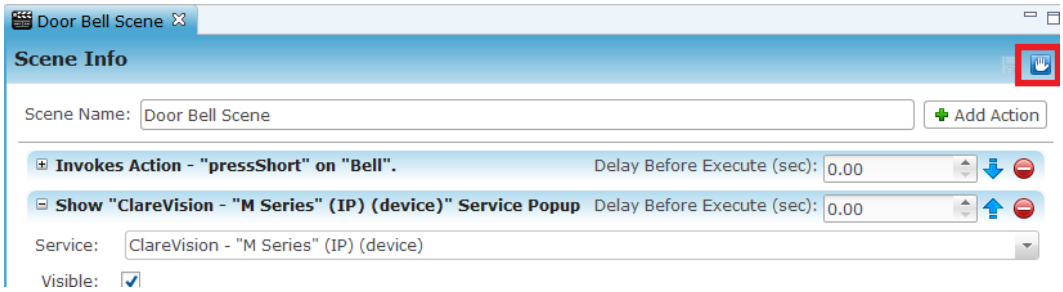
9. Click Save.

Creating a rule

Create the rule after configuring the scene. Once the doorbell button is pushed, the rule takes effect. If the button is pressed, the bell will ring and the front door camera will turn on.

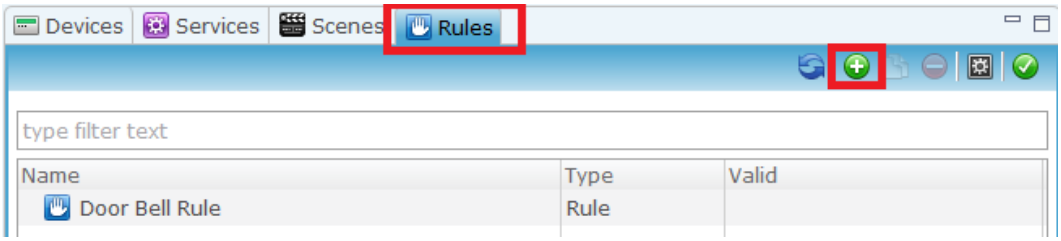
To create a rule:

1. Click the Create Rule button in the Scene Info field.



– or –

Click the Rules tab and click the New Rule button.

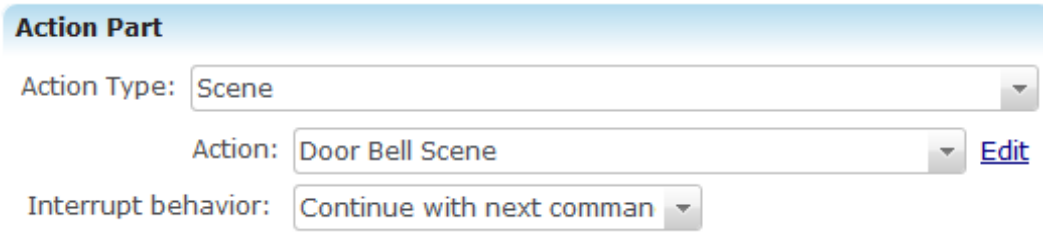


2. Name the rule, and be sure to select the Enabled check box ☑ Enabled.
3. Configure the Event Part fields, as listed below.

- In the Event Type field select Device Property Value Event from the drop-down list.
- Click the hyperlink displayed in the Device field to select the doorbell button.

  Note: The Device field will display the text “Generic Doorbell Sensor Button”, it will not display the name you assigned to the button.
- Function: On/Off State
- Property: State
- Constraint: =
- Value: Detected

4. The Action Part fields are directly below the Event Type field. Configure the Action Part fields as follows:



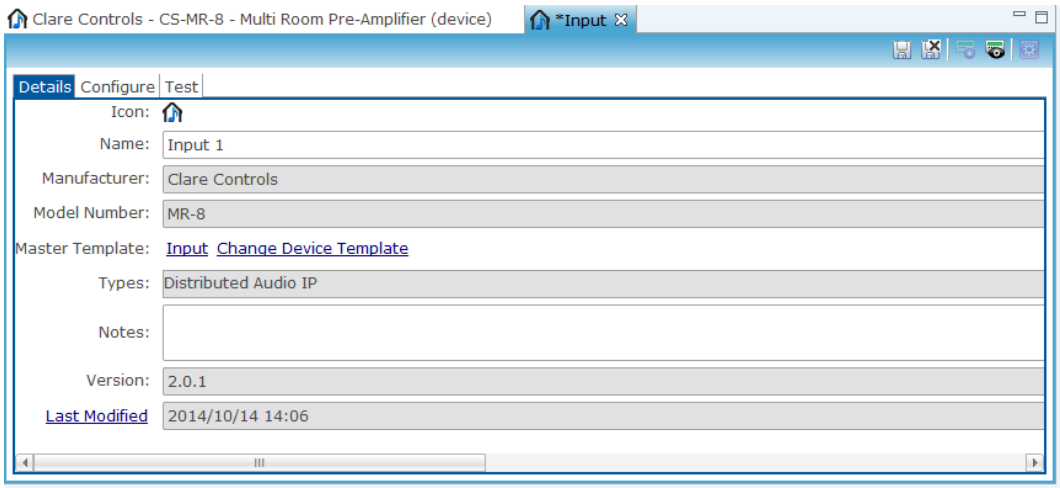
- Action Type: Scene
- Action: Door Bell Scene – for example, in ours the bell rings and the camera activates
- Interrupt behavior: Continue with next command

5. Click **Save**.
6. Deploy your project.

Where should this go?

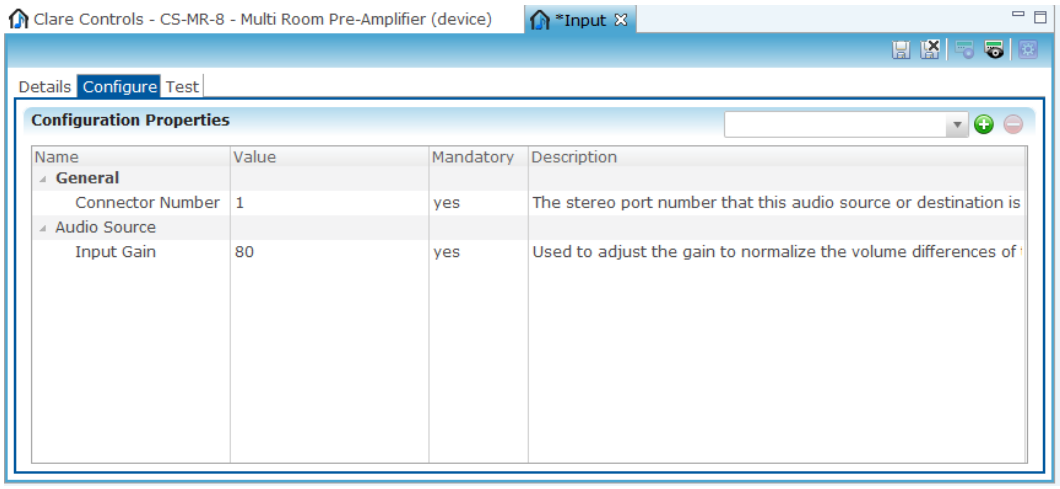
Configuring a connector number for all inputs and outputs

After renaming inputs and outputs, enter a connector number for them in the Connector Number field.



To enter a connector number:

1. Go to the Configuration tab and click the Connector Number field to open each input and output.



2. Enter the port number for which that input/output is connected to the CS-MR-8.

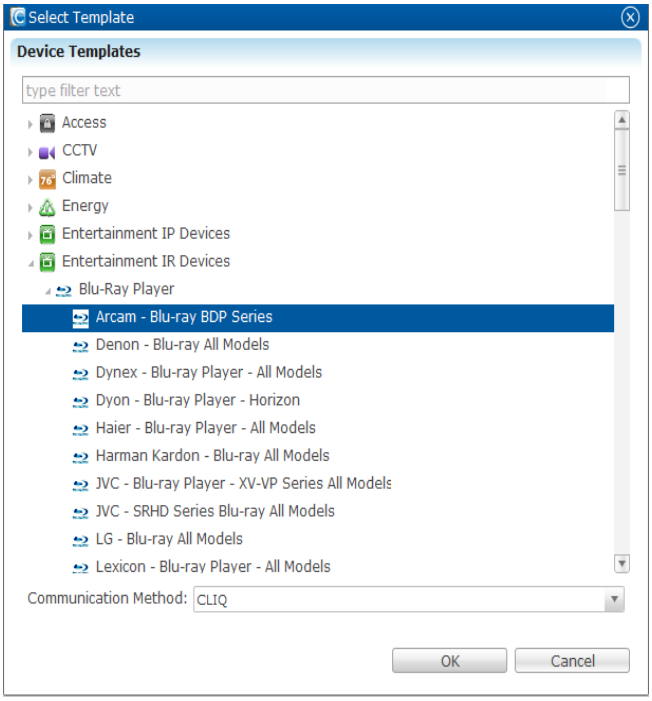
Configuring Entertainment Devices

Configuring entertainment sources

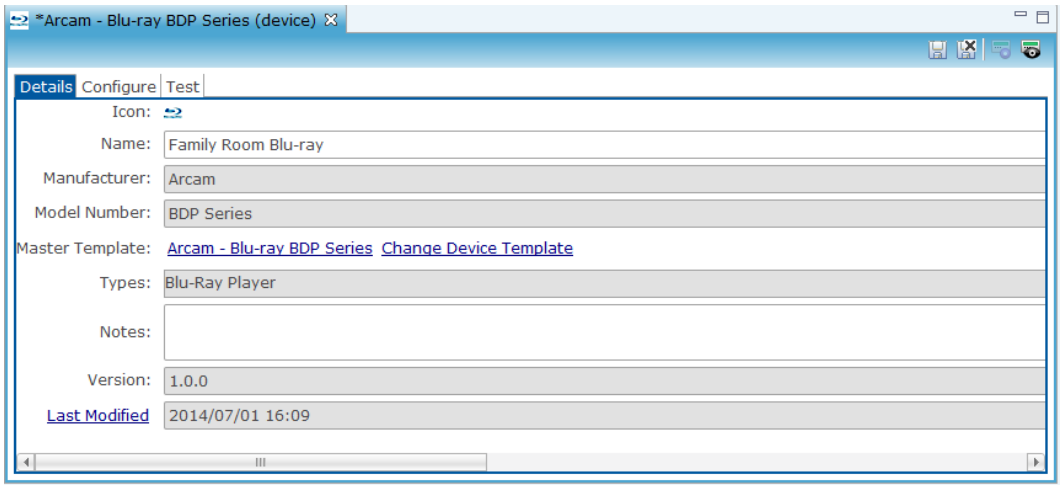
Entertainment sources include: DirecTV, Blu-ray, DVD players, and so on. Follow the instructions in this section to configure the entertainment source devices.

To configure an entertainment source:

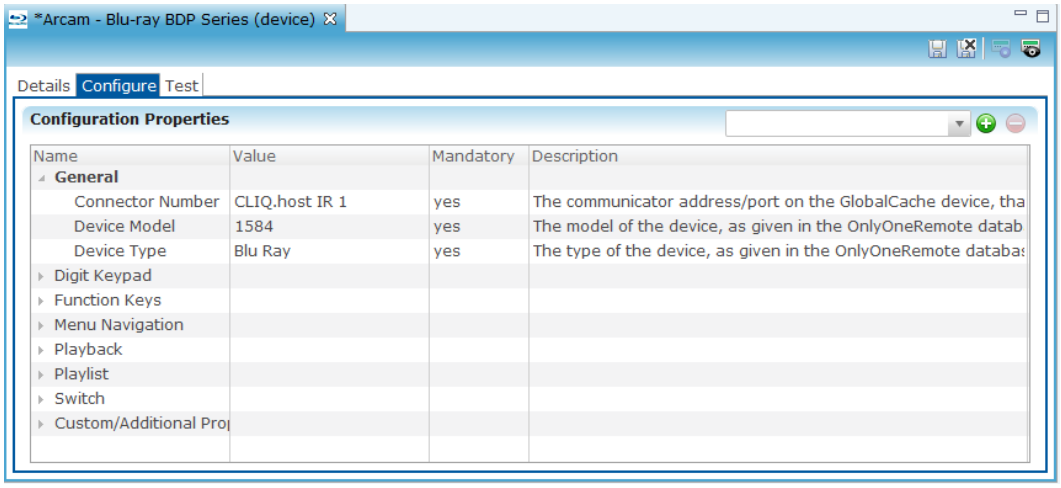
1. From the Devices tab, click the New Device button on the toolbar .
2. From the Device Templates dialog, select the drop-down for Entertainment IR Devices.



3. Expand Entertainment Source, expand Blu-Ray Player, and then select the appropriate model.
4. Click OK.
5. Click the Details tab, and then rename the device, as appropriate.



6. Click the Configure tab, and then in the Network Address field, enter the appropriate network address.



7. In the Connector Number field, select the appropriate connector number from the drop-down list.

   Note: The connector number is the port at which the Blu-ray player is connected on the ClareHome Connects or other IR/serial device.

8. Ensure the Device Model and the Device Type field values are correct, and then click the Save button.

CC-EBR-500 RF antenna

The CC-EBR-500 is a narrow brand RF antenna for Universal Remote Control RF controllers. It gives you the ability to install multiple units for an extended operating range, ignoring unneeded signals. The CC-EBR-500 devices can be used together to create more coverage, if necessary.

Note: Models herein and their appearance are subject to change without any prior notice.

Installation

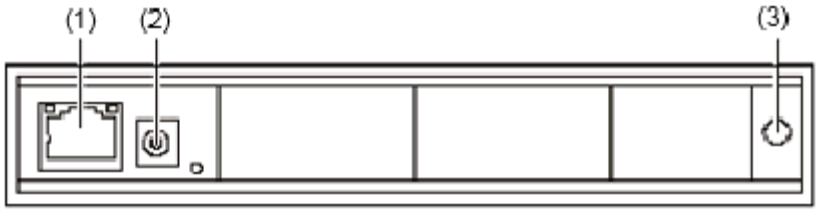
Connect the CC-EBR-500 as instructed below.

Note: If you have a PoE switch, use PoE to power the CC-EBR-500 device. If you do not have PoE, you can use the power supply included to power the device.

To connect the CC-EBR-500:

1. Connect one end of an RJ45 cable to the Ethernet port on the back of the CC-EBR-500 device, and then attach the other end to your ClareHome network. See Figure 21, item 1.
2. If you did not connect the Ethernet cable to a PoE switch, then connect the power supply unit to the power port on the back of the CC-EBR-500. See Figure 21, item 2.

Figure 21: CC-EBR-500 rear connections



(1) RJ45 (Ethernet) network cable.

(2) Power supply connection.

(3) Antenna connection (antenna not shown).

3. Ensure the lights on the device turn on. If none of the lights turn on, there is no power.

Set IP address to static

You must change the CC-EBR-500 device from DHCP to static. After setting the IP address to static, ensure you record this information and give this IP address to your system programmer.

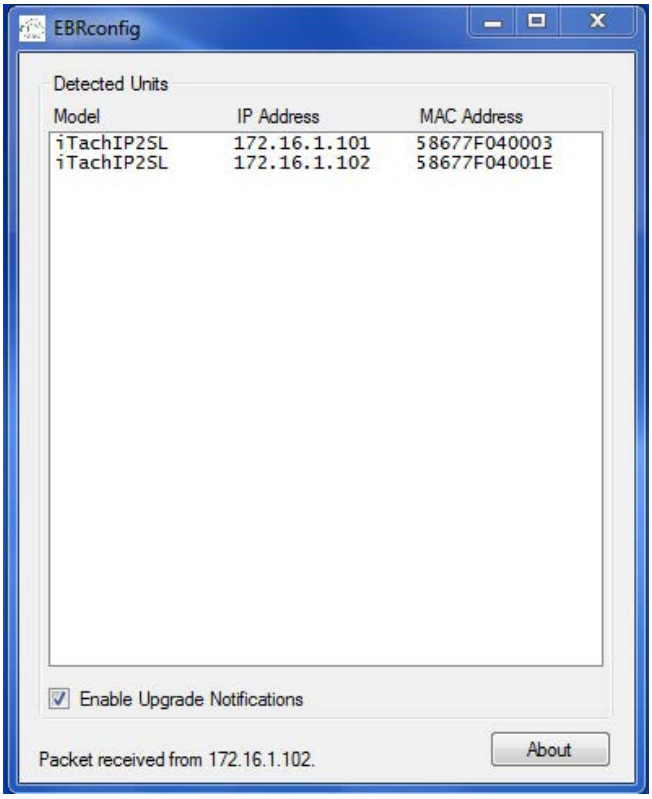
Notes

- When setting the CC-EBR-500 IP address from DHCP to static, you must be on the same network as the switch to which the CC-EBR-500 device is connected.

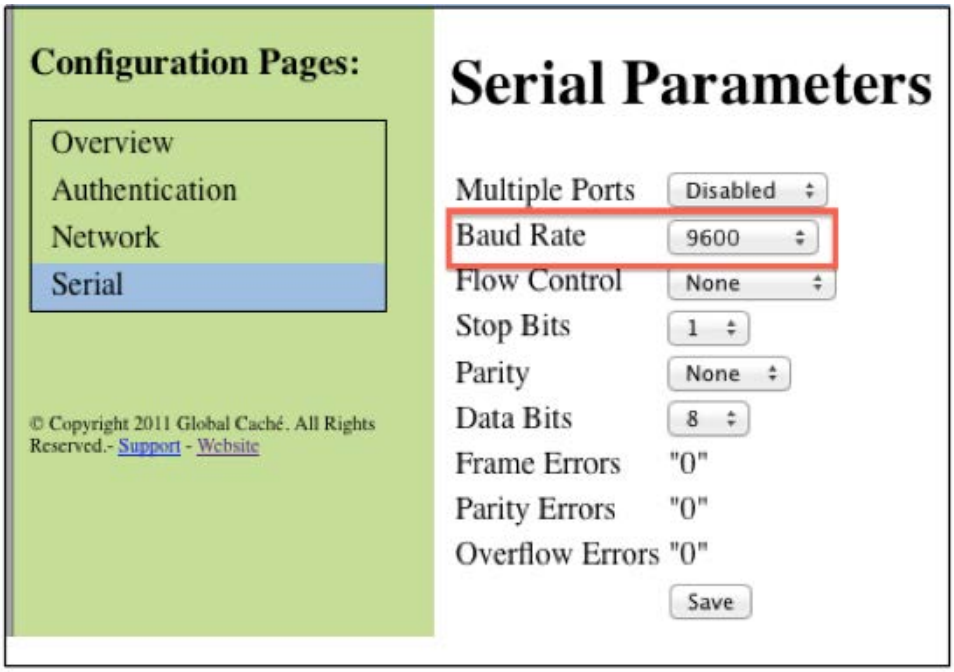
- You must use a Windows computer to run the EBRConfig Tool to change the IP address to static.

To change the device from DHCP to static:

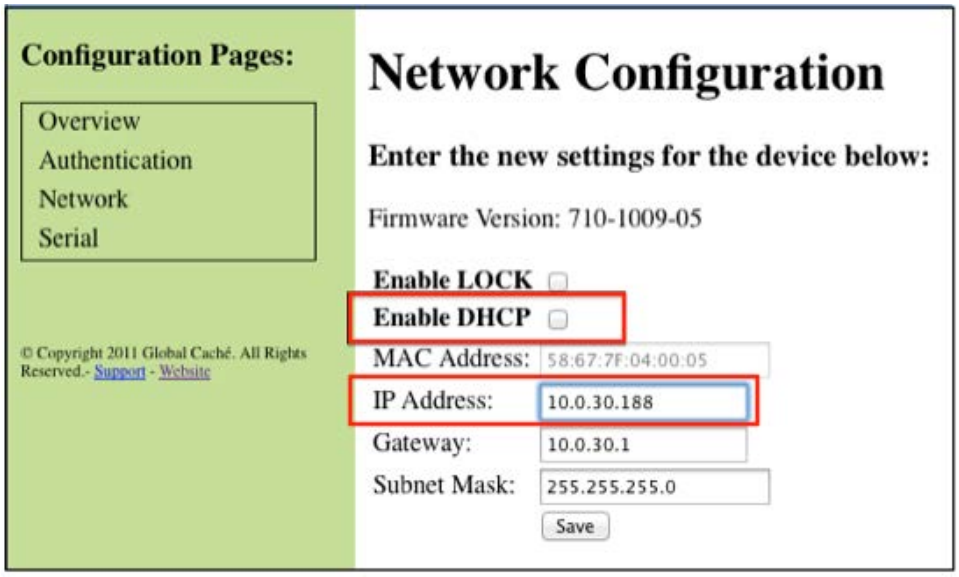
1. Connect your Windows laptop to the same switch as the CC-EBR-500 via RJ45, or use a wireless connection on the same subnet as the switch.
2. From www.clarecontrols.com, download and run the EBRConfig program.
3. Locate the IP address for the CC-EBR-500 device, which will appear as “iTachIP2SL.”



4. Copy this IP address and paste it in the URL of your web browser, and then press Enter.
5. From the Configuration Pages menu, click Serial.



6. Ensure the baud rate is set to 9600 and all other Serial information is correct.
7. From the Configuration Pages menu, click Network.



8. From the Network Configuration screen, clear the “Enable DHCP” checkbox.
9. Change the IP address, as necessary, and record this new static IP address for future use.
10. Click Save.

Avoiding electromagnetic interference

To avoid electromagnetic interference, follow the recommendations below to help minimize the amount of interference you will receive with your RF receiver.

- Be aware of any EMI (Electromagnetic Interference) devices in the area, such as computers, video equipment, digital processors, lighting dimmers, any large AC source, lighting ballasts, or motors.
- Ensure that you separate the RF receiver from the identified EMI sources. Positioning the RF receiver too close to any of these EMI devices may cause significant RF noise.
- Do not place the RF receiver behind a television.
- Install the RF gateway in an open area or shelf with a clear line of sight.
- Do not place the RF gateway at a low height, near walls, metal objects, or metal enclosures.
- Avoid installing RF gateways in equipment racks or electrical closets.
- If installing in a rack, mount the RF receiver on top of the rack not inside the rack.
- Position the RF gateway horizontally with the antenna parallel to the ground.
- Do not position the antenna downward.

If you are still having interference issues, do the following to troubleshoot the installation.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the RF receiver.
- Connect the device to an outlet/circuit that is different from the outlet or circuit to which the RF receiver is connected.

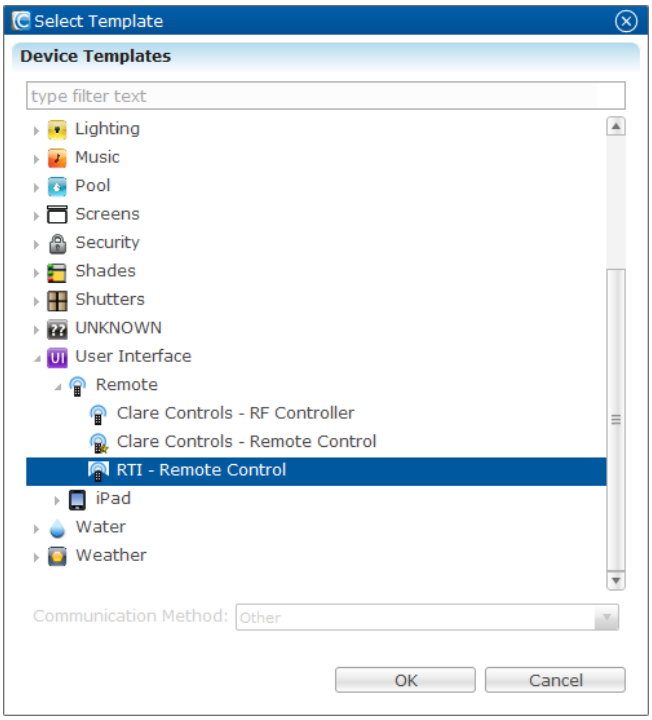
Note: If you have a Wi-Spy device, use it when performing your wireless site survey for a project. Wi-Spy devices can help you to detect interference coming from 2.4 GHz cordless phones, baby monitors, and microwaves.

RTI integration

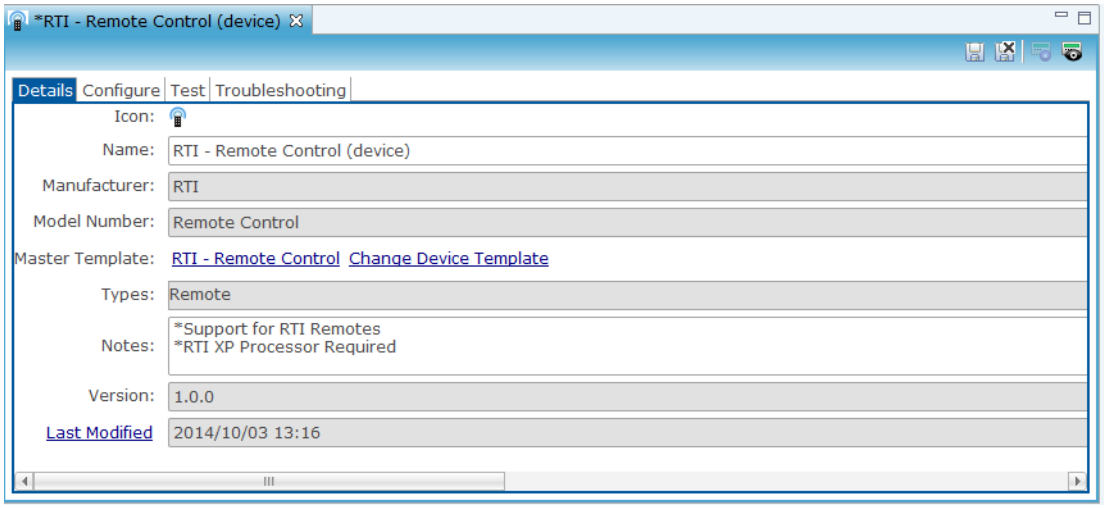
The RTI driver lets you integrate Remote Technologies, Inc.'s remote controls devices in your ClareHome System. Fusion allows RTI devices to be seamlessly integrated, without having to individually program each button. This can control all entertainment devices configured in Fusion.

To add an RTI remote control in Fusion:

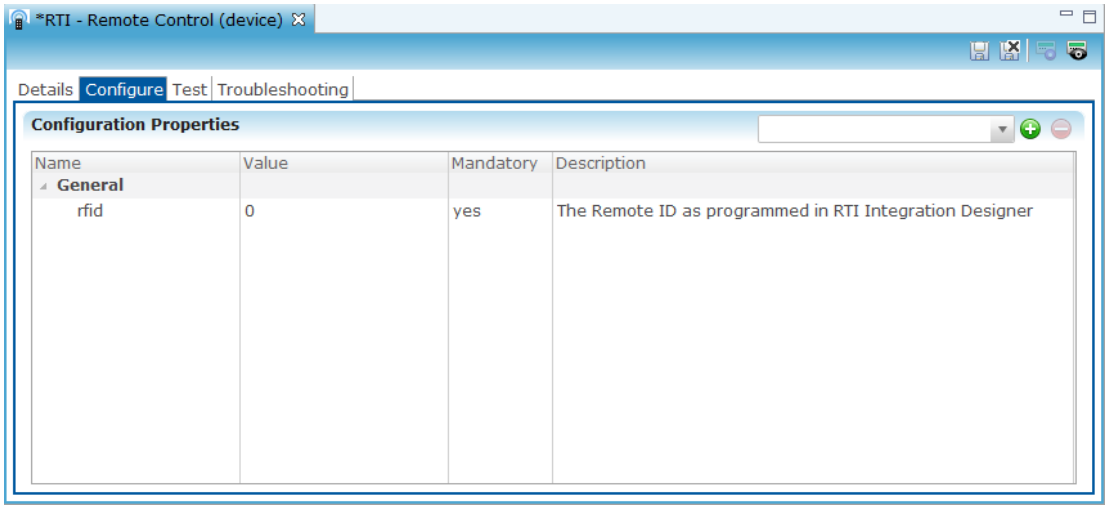
1. Log in Fusion and select your project.
2. Click the Devices tab, and then click the New Device button to display the Select Template dialog.



3. Expand the User Interface drop-down, expand the Remote drop-down, and then select RTI-Remote Control.
4. Click OK.
5. In the Details tab, name and add notes for the remote, and then click Configure.



6. Select the remote's ID number from the Value drop-down, and then click Save.



7. Repeat steps 2 through 6 for each RTI remote you are adding.
8. Click Save, and then deploy your project.

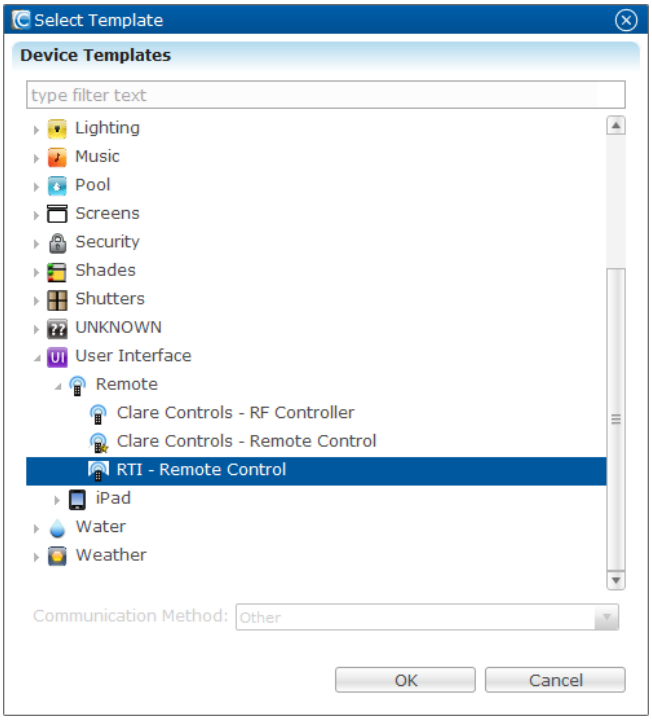
RTI integration

The RTI driver lets you integrate Remote Technologies, Inc.'s remote controls devices in your ClareHome System. Fusion allows RTI devices to be seamlessly integrated, without having to individually program each button. This can control all entertainment devices configured in Fusion.

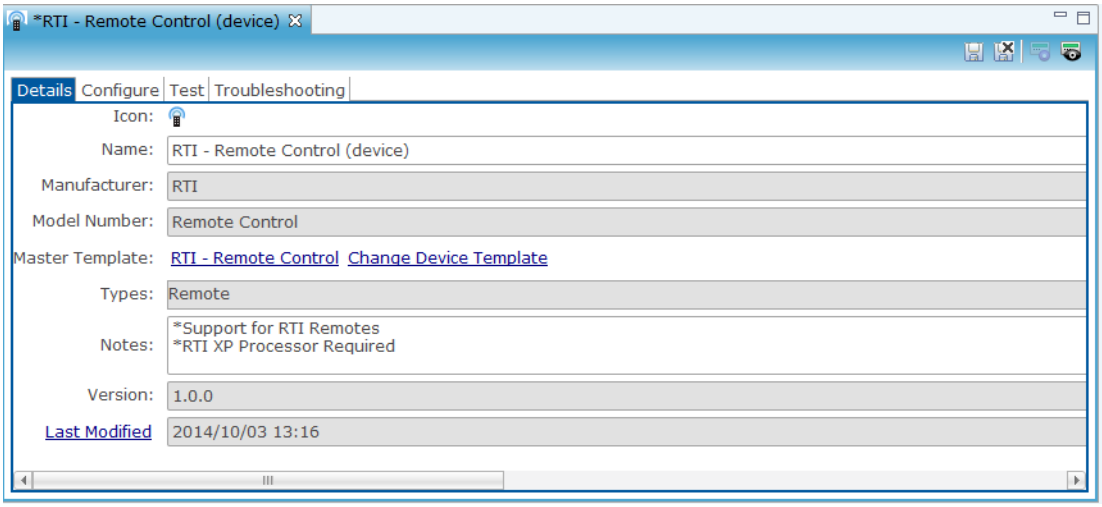
To add an RTI remote control in Fusion:

1. Log in Fusion and select your project.

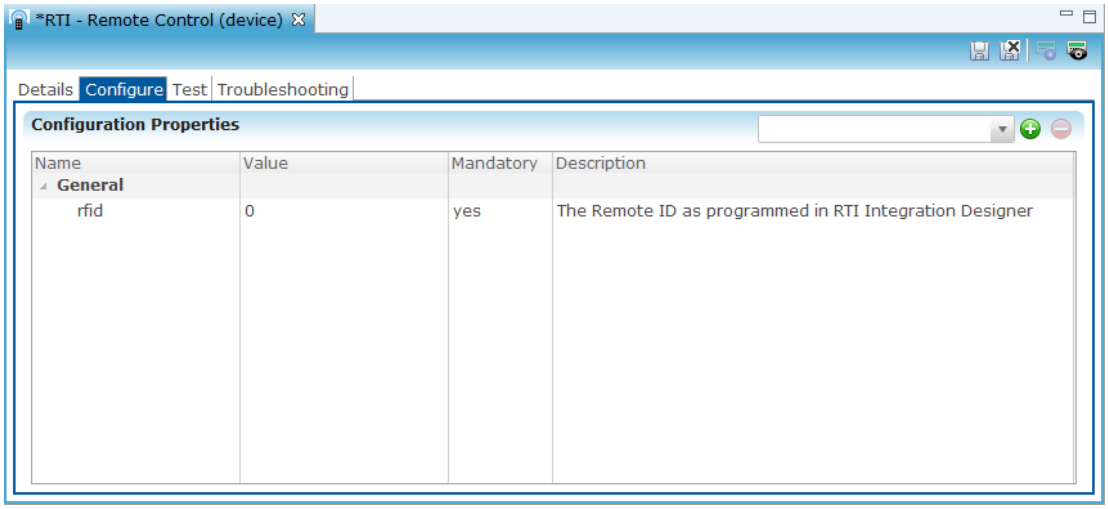
2. Click the Devices tab, and then click the New Device button to display the Select Template dialog.



3. Expand the User Interface drop-down, expand the Remote drop-down, and then select RTI-Remote Control.
4. Click OK.
5. In the Details tab, name and add notes for the remote, and then click Configure.



6. Select the remote's ID number from the Value drop-down, and then click Save.



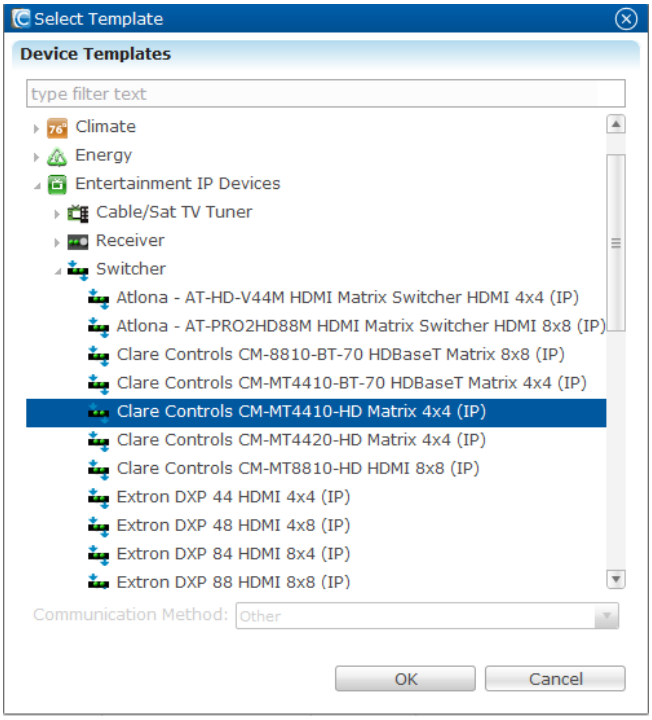
7. Repeat steps 2 through 6 for each RTI remote you are adding.
8. Click Save, and then deploy your project.

Switcher integration

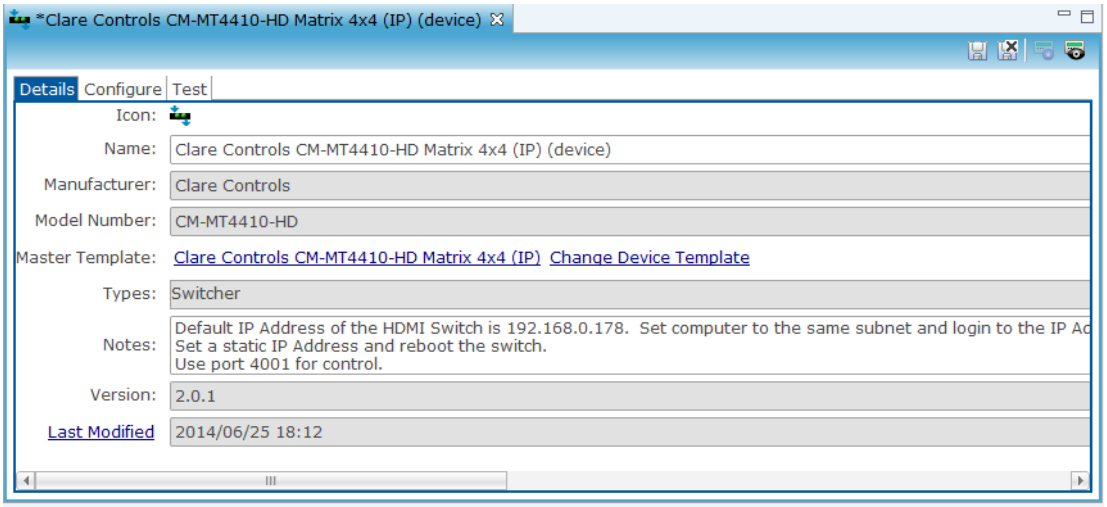
A switcher is a device that selects or combines different audio and visual signals. Configuration in Fusion allows the user to select an audio or video stream source to be routed to another destination. For example, a Blu-ray stream to an HDTV.

To add an RTI remote control in Fusion:

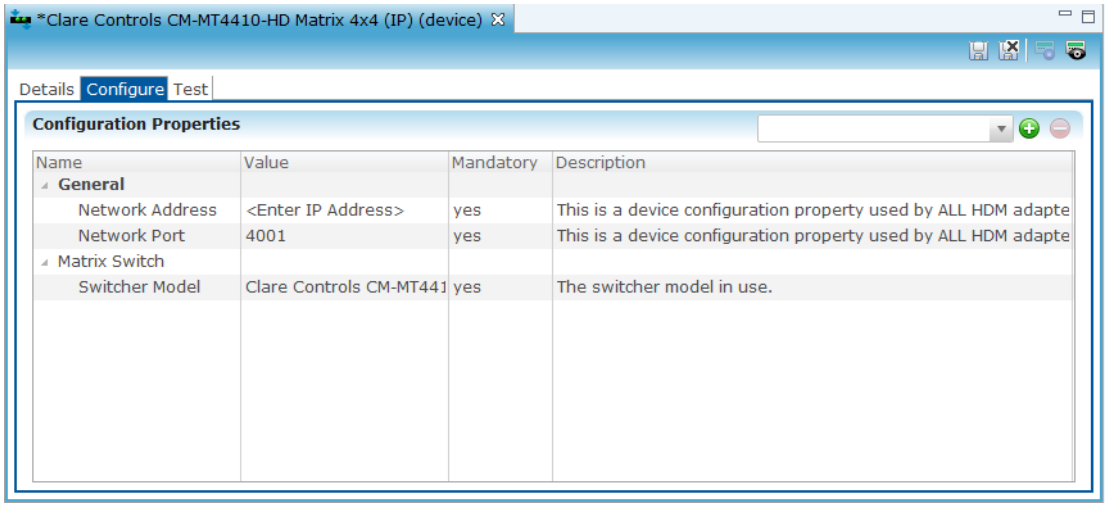
1. Log into Fusion and select your project.
2. Click the Devices tab, and then click the New Device button to display the Select Template dialog.



3. Expand the Entertainment IP Devices drop-down, and then expand the Switcher drop-down.
4. Select the switch that you are using, and then click OK.
5. The Details tab is displayed. Add a name and notes for the device, and then click Configure.

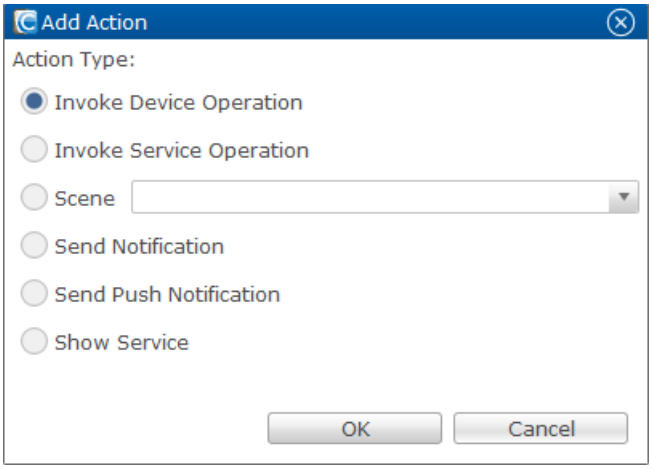


6. Fill in the Network Address and Network Port fields accordingly, and then click Save.

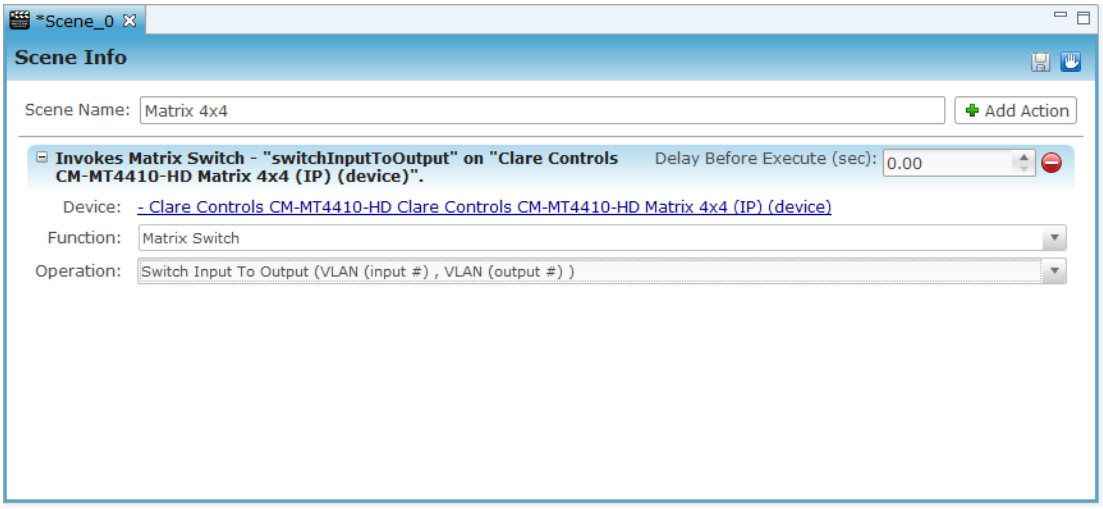


Creating a scene for the device:

1. Click the Scenes tab, and then click the New Scene button .
2. Name the scene, and then click Add Action Add Action to display the Add Action dialog.
3. Select Invoke Device Operation, and then click OK.



4. Configure the Invoke Device Operation field as follows.



- Device- Click the hyperlink, and then select switch you created.
- Function- Choose matrix switch from the drop-down.

5. Operation- Choose Switch Input to Output from the drop-down.
6. The Arguments dialog displays after configuration. Enter the VLAN number (input) and the associated port number of the switch (output), and then select the check box.

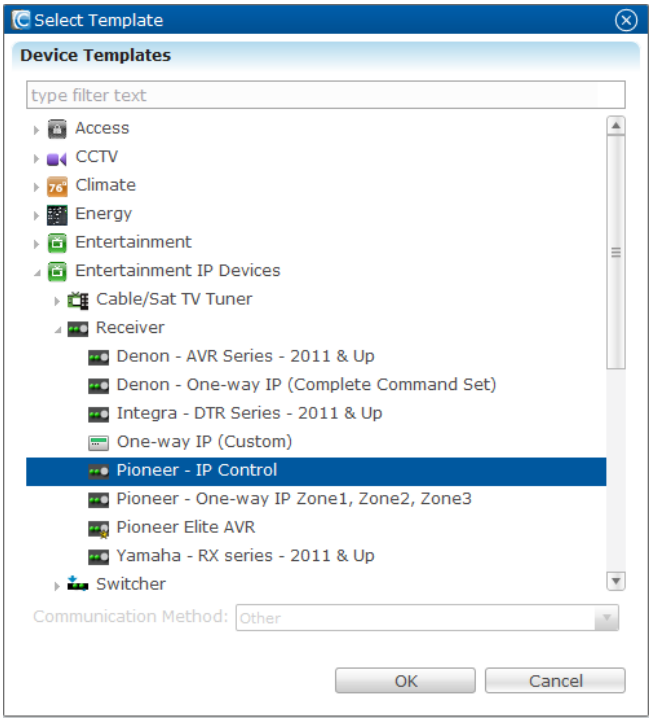
7. Click Save, and then deploy your project.

Receiver integration

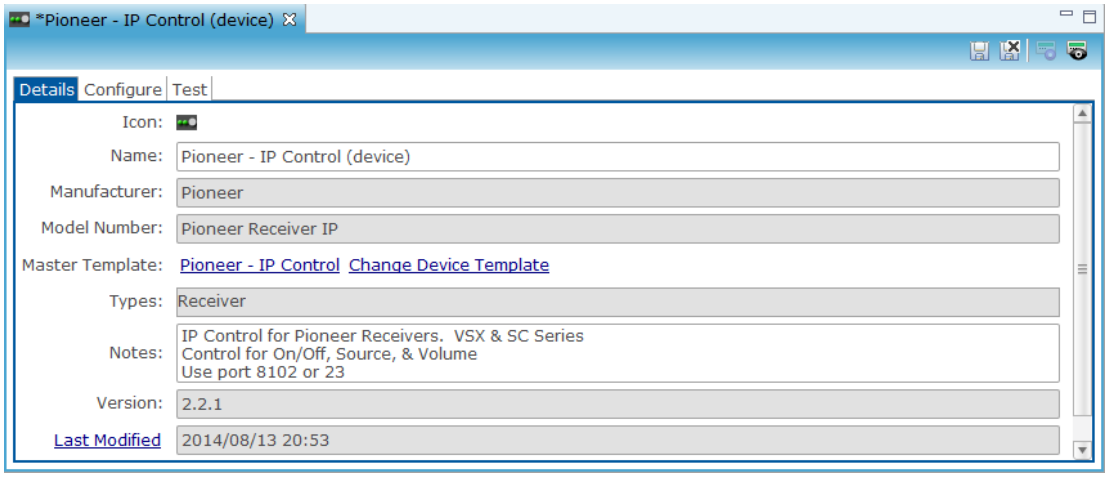
A receiver is a device that accepts signals sent from the switcher. Configuration in Fusion allows the user to select a media source, volume, IP and Serial control.

To add a receiver in Fusion:

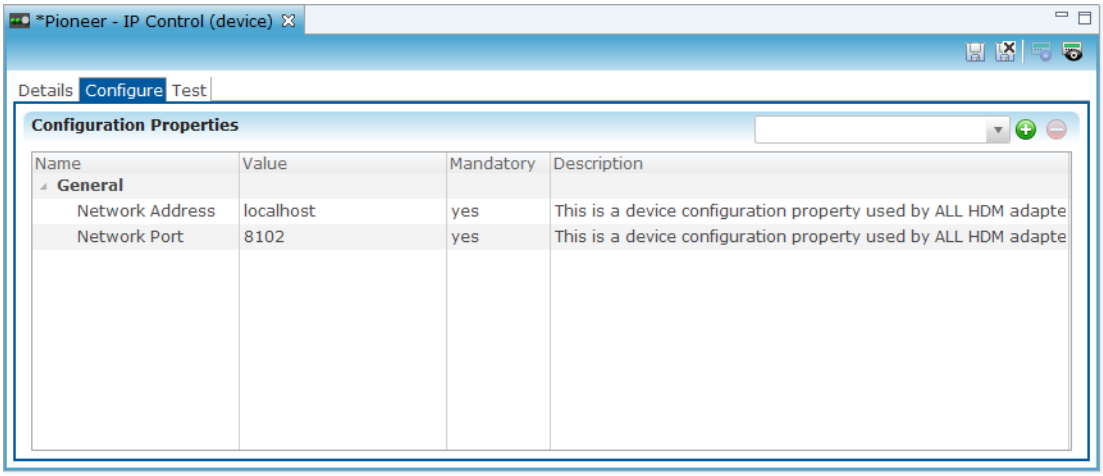
1. Log in Fusion and select your project.
2. Click the Devices tab, and then click the New Device button to display the Select Template dialog.



3. Expand the Entertainment IP Devices drop-down, and then expand the Receiver drop-down.
4. Select your receiver type, and then click OK.
5. The Details tab displays. Enter the Name and Notes fields appropriately, and then click the Configure tab.



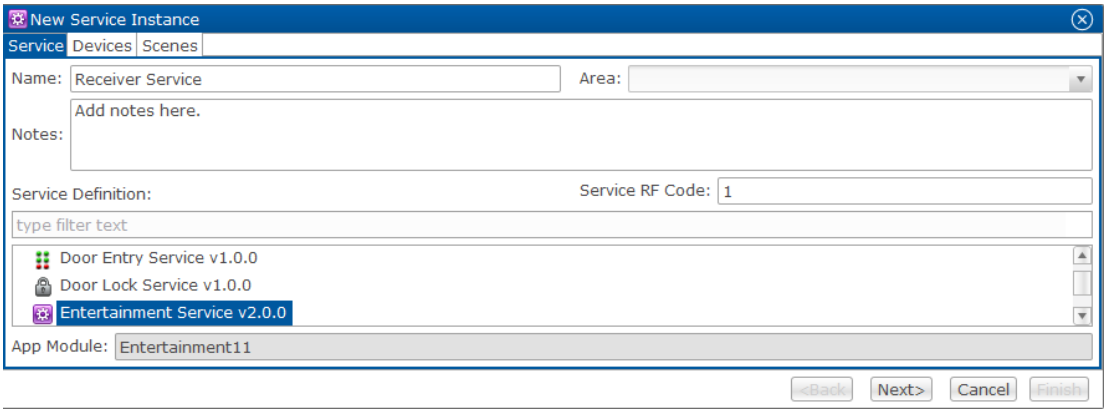
6. Enter the required information, CLIQ Serial Port, Serial Baud rate, Serial Data Bits, Media Source, and Surround Mode fields. Click Save.



To create a service for the receiver:

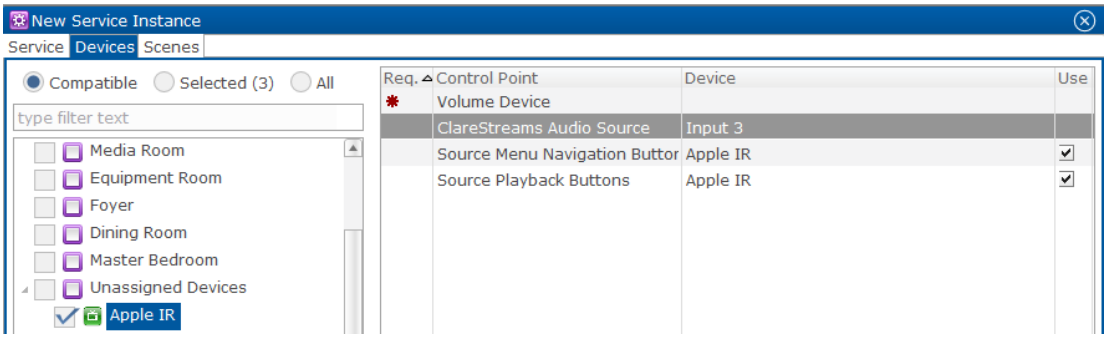
1. Click the Services tab, and then click New Service Instance button .

   The New Service Instance dialog displays.



2. Enter the Name and Notes fields appropriately, and then click the newest version of the Entertainment Service.
3. Click Next.

   The Devices tab is displayed.



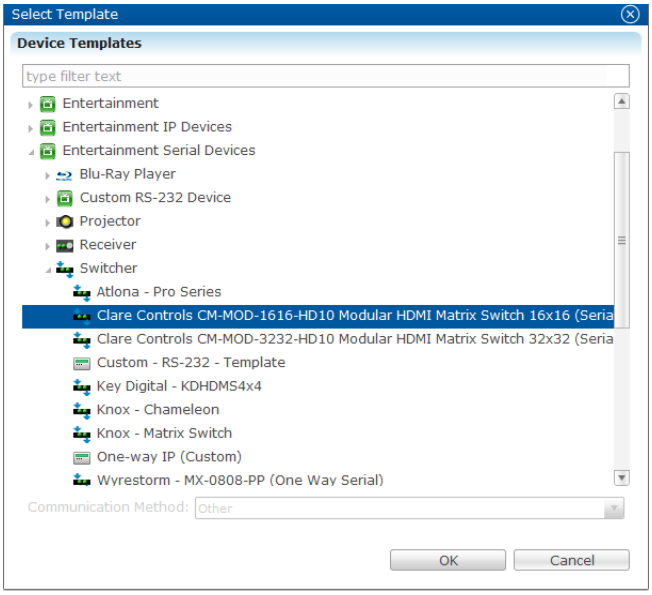
4. Select the device in the left column, and on the right select the control points you want for that device. Make sure to select the boxes in the Use column for each point used.
5. Click Finish, or Next to add a scene
6. Click Save, and then deploy your project.

HDMI integration

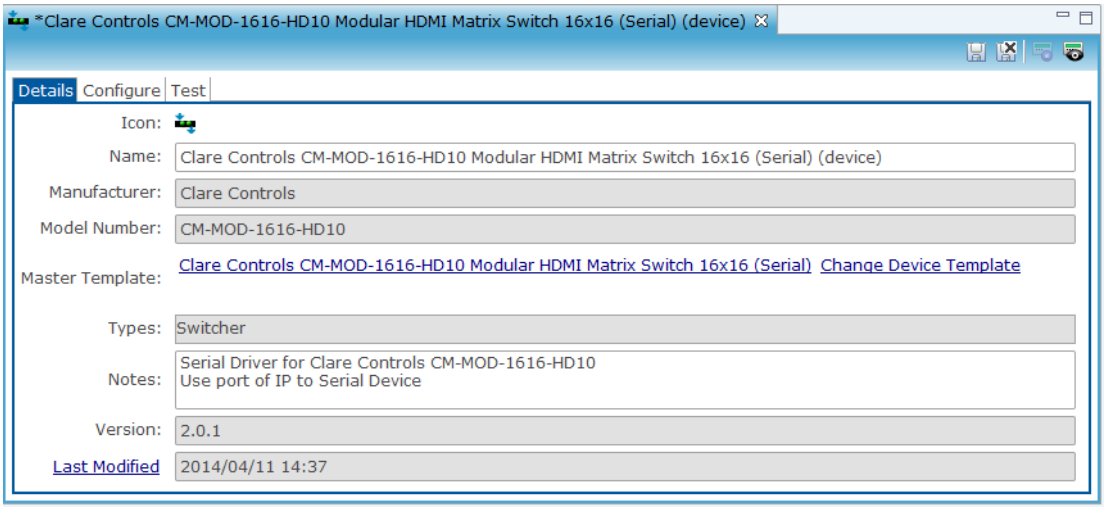
You can integrate the ClareHome HDMI devices to a ClareHome control system so that your customers can send commands to the receiver from their mobile devices, such as iPhones or iPads. Once you have installed your HDMI device, add and configure it in Fusion.

To configure the HDMI device in Fusion:

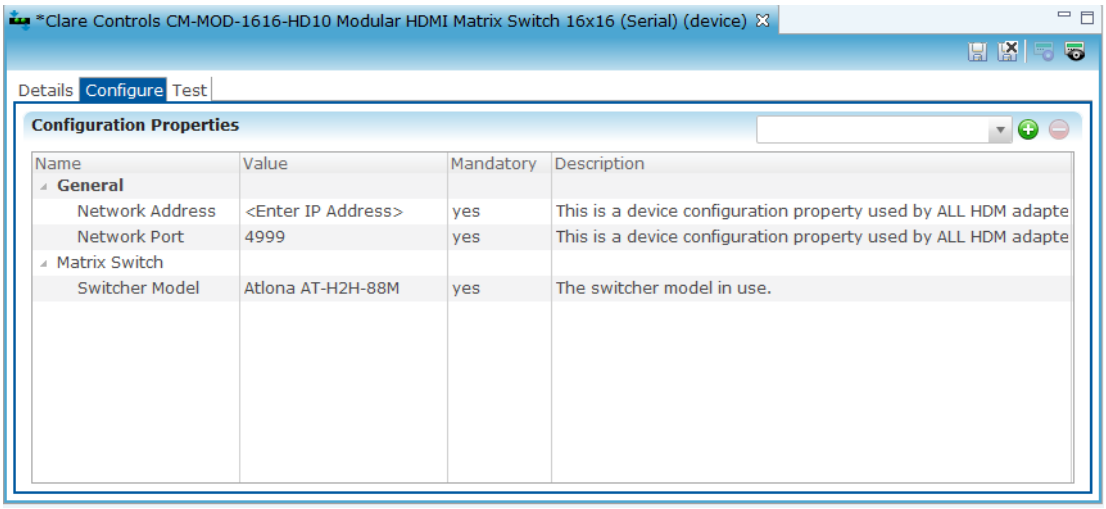
1. Log into fusion and select your project.
2. Click the Devices tab, and then click the New Device button .
3. This displays the Select template window.



4. Expand the drop-down on the Entertainment folder for the type of device you are connecting (IP, IR, or Serial), and then expand the Switcher drop-down.
5. Select your device from the list, and then click OK. The Details tab displays.



6. In the Name field, enter a name for your device. In the Notes field, enter any additional information about this device.
7. Click Configure. Fill in the appropriate information in the following fields: CLIQ Serial Port, Serial Baud rate, and Serial Data Bits.



8. Click Save, and then deploy your project.

Configuring pools and spas

Jandy Aqualink

The Handy Aqualink is a high-performance system that lets you control Jandy pools and spas. Connecting and configuring in Fusion allows you to adjust and monitor your pool and spa settings from your iOS devices your Android smartphone.

To connect the Jandy Aqualink to the ClareHome Data Network:

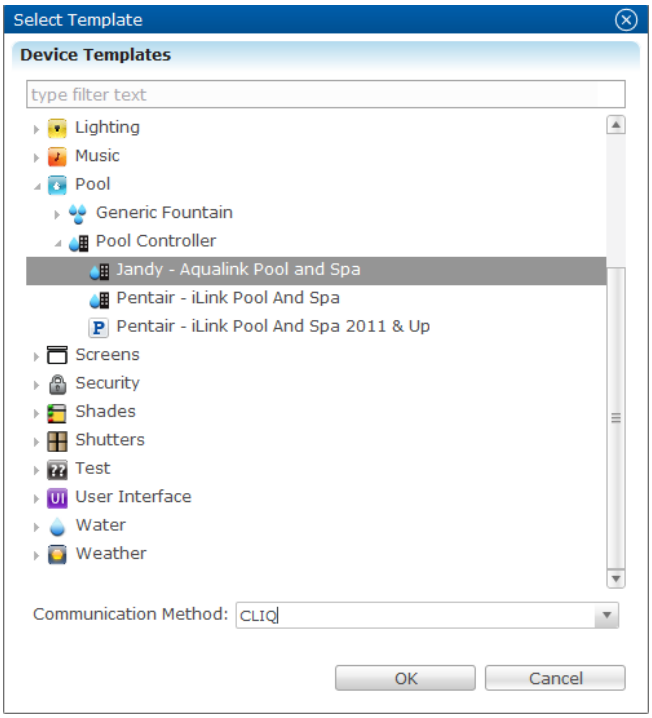
1. Attach one end of a Cat 5 networking cable to a port on the ClareHome data network, and then attach the other end of the cable to RJ-45 jack on the IP-to-Serial device.
2. Attach the one end of an RS-232 cable to the IP-to-Serial device, and then attach the other end to the Jandy Aqualink device.

To connect the Jandy Aqualink directly to a CLIQ controller:

Attach the RJ12 end of an RJ12-to-DB9 connector cable (included with your CLIQ controller) to the RS-232 port on the CLIQ controller, and then attach the DB9 end of the cable to the serial port on the Jandy Aqualink.

To add a Jandy Aqualink device in Fusion:

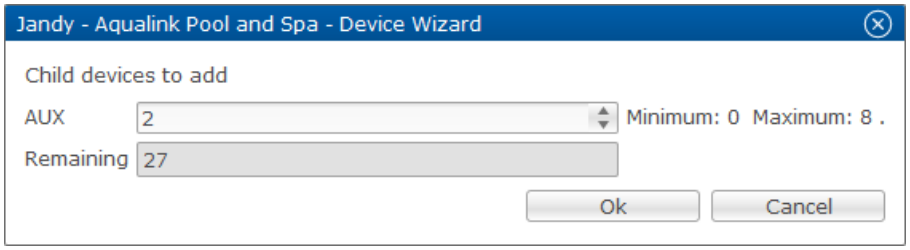
1. Click the Devices tab, and then click the New Device button to display the Select Template dialog.



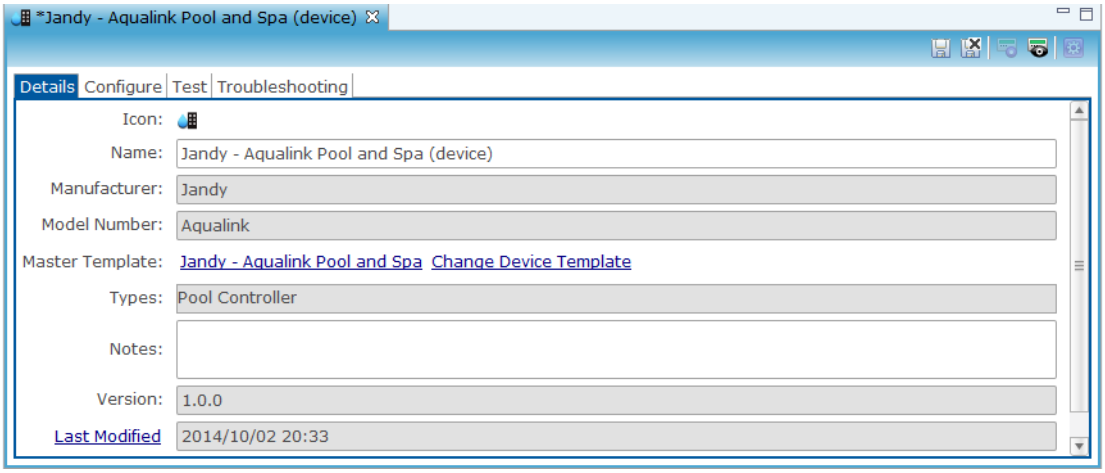
2. Expand the Pool folder, and then expand the Pool Controller, and select Jandy – Aqualink Pool and Spa from the list. Click OK.

   Note: If you are connecting to the ClareHome network, choose Other from the Communication Method drop-down list. Or, if you are connecting directly to a CLIQ controller, choose CLIQ from the drop-down list.

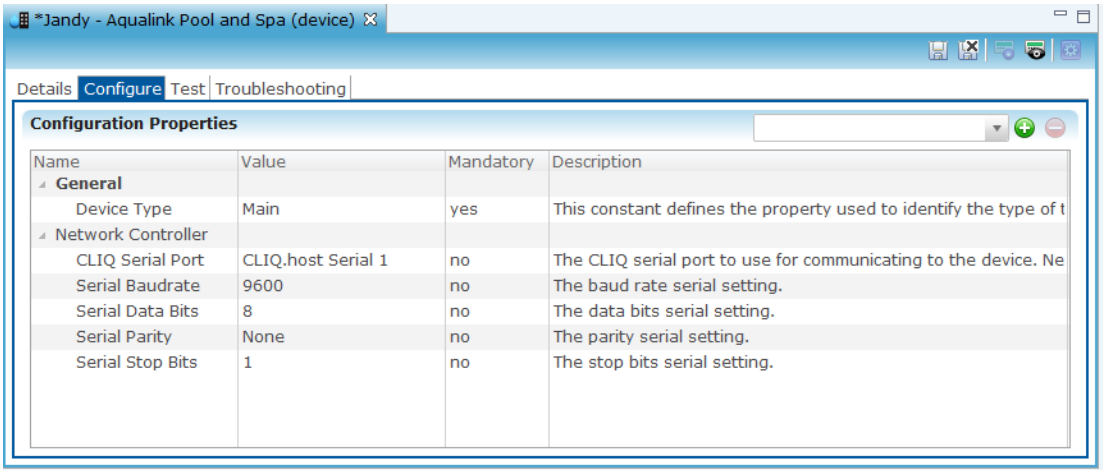
3. In the Device Wizard, enter the number of devices that you are adding to your project, and then click OK.



4. In the Details tab's Name field, enter a name for your Jandy Aqualink device.



5. Click the Configuration tab.



6. In the Network Port field, enter port number for the IP-to-Serial device that connects the Jandy Aqualink device with the ClareHome data network.

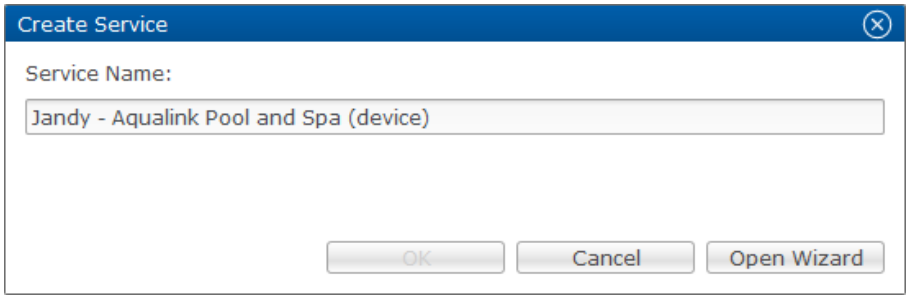
   Note: Check the documentation that came with the device to determine the proper network port number.

   – or –

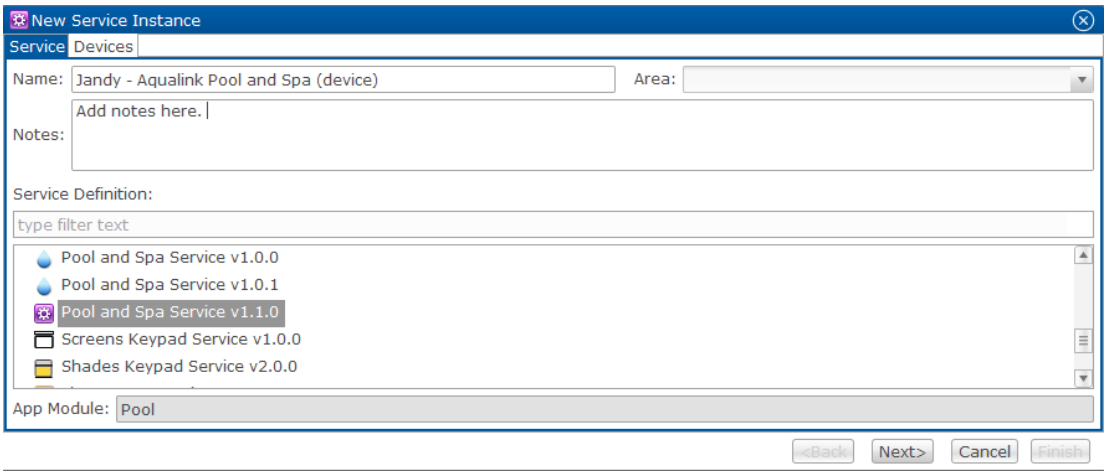
   If you are connecting to a CLIQ controller serial port, select a port from the drop-down list in CLIQ Serial Port Value field.

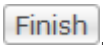
7. Click the Save button .

   This displays the Create Service dialog.



8. Name the service, and then click Open Wizard.



9. Fusion displays the Edit Service Instance Devices tab and auto-populates the control points for the Jandy Aqualink device.
10. Click Finish  .
11. Be sure to deploy your project.

Pentair iLink

The Pentair iLink is a high-performance system that lets you controls Pentair iLink pools and spas. Connecting and configuring in Fusion allows you to adjust and monitor your pool and spa settings from your iOS devices your Android smartphone.

To connect the Pentair iLink to the ClareHome data network:

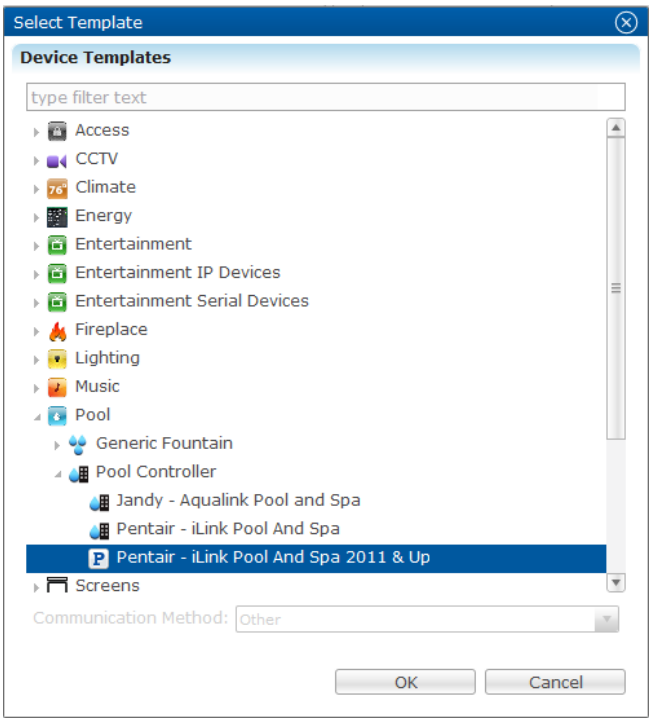
1. Attach one end of a Cat 5 networking cable to a port on the ClareHome data network, and then attach the other end of the cable to RJ-45 jack on the IP-to-Serial device.
2. Attach the one end of an RS-232 cable to the IP-to-Serial device, and then attach the other end to the Pentair iLink device.

To connect the Pentair iLink directly to a CLIQ controller:

Attach the RJ12 end of an RJ12-to-DB9 connector cable (included with your CLIQ controller) to the RS-232 port on the CLIQ controller, and then attach the DB9 end of the cable to the serial port on the Pentair iLink.

To add a Pentair iLink device in Fusion:

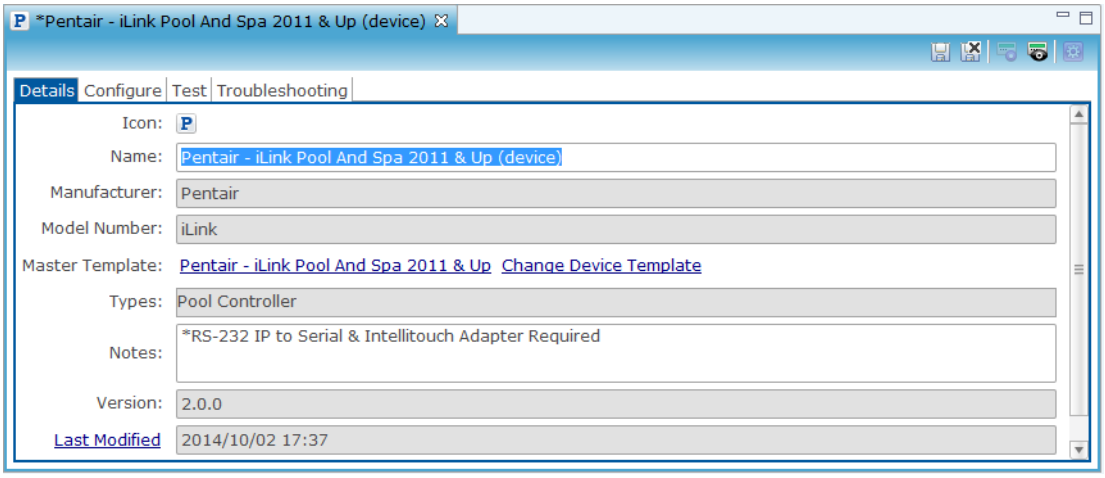
1. Click the Devices tab, and then click the New Device button to display the Select Template dialog.



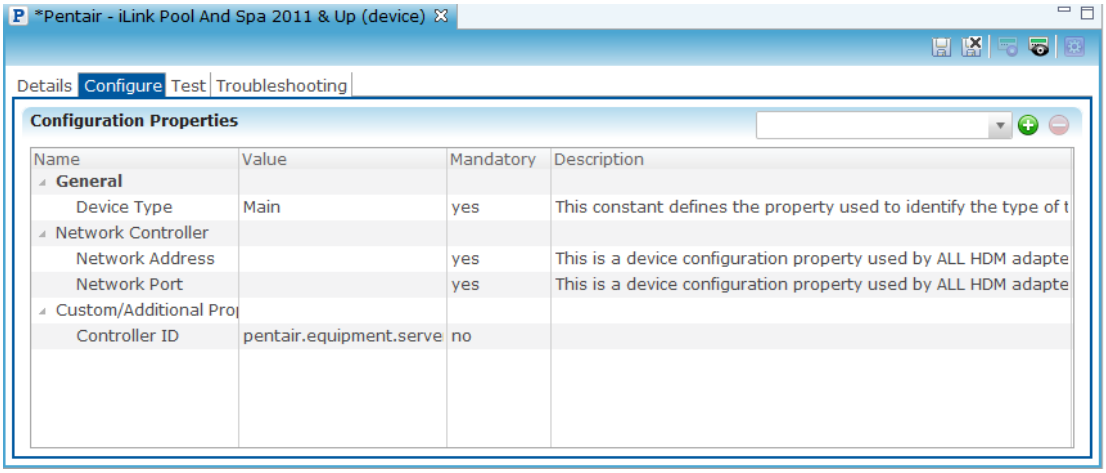
2. Expand the Pool folder, then expand the Pool Controller folder, and then select Pentair iLink – Pool and Spa from the list. Click OK.

   Note: If you are connecting to the ClareHome network, choose Other from the Communication Method drop-down list. Or, if you are connecting directly to a CLIQ controller, choose CLIQ from the drop-down list.

3. In the Details tab's Name field, enter a name for your Pentair iLink device.



4. Click the Configuration tab.



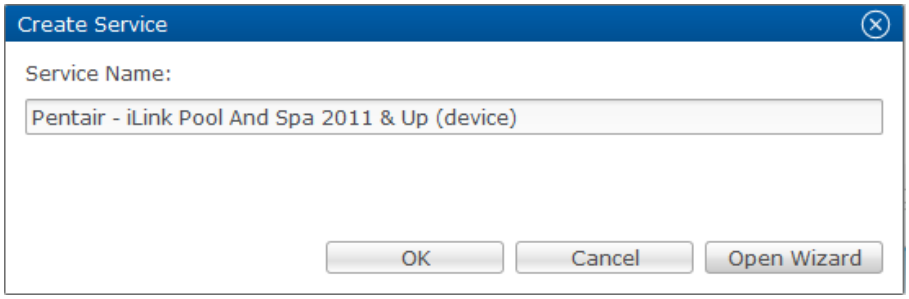
5. In the Network Port field, enter port number for the IP-to-Serial device that connects the Pentair iLink device with the ClareHome data network.

   Note: Check the documentation that came with the device to determine the proper network port number.

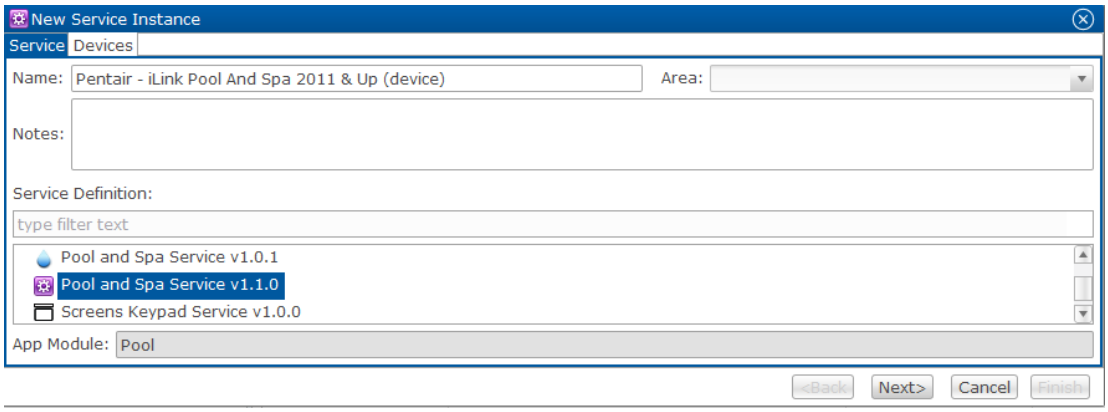
   – or –

   If you are connecting to a CLIQ controller serial port, select a port from the drop-down list in CLIQ Serial Port Value field, as shown below.

6. Click the Save button. The Create Service dialog displays.



7. Click Open Wizard to display the New Service Instance dialog.



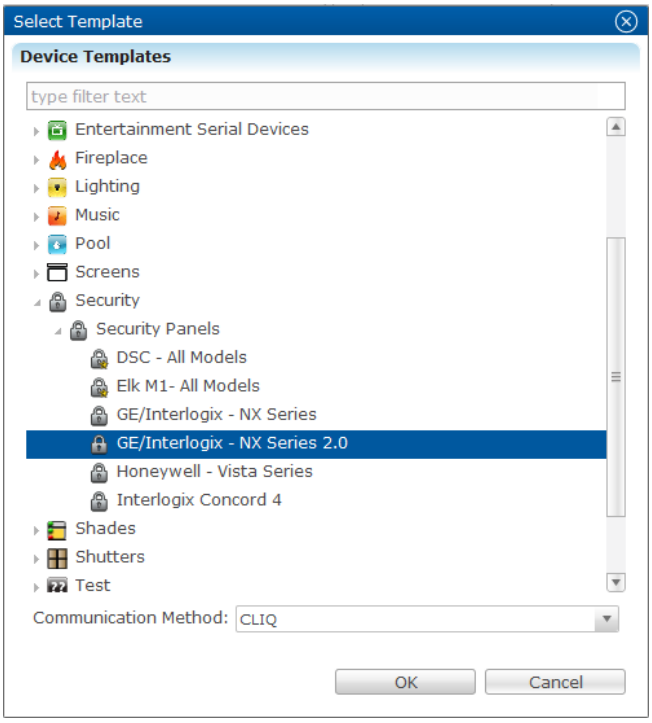
8. Ensure the Pool and Spa Service is selected, and then click Next.
9. Fusion displays the New Service Instance Devices tab and auto-populates the control points for the Pentair iLink device.
10. Click Finish Finish.
11. Be sure to deploy your project.

Security panel configuration

Security and alarm system controls allow users to set and monitor their home through the ClareHome system. Connecting the security system in Fusion allows the user access to the security controls from their iPhone, iPad, or Android smartphone.

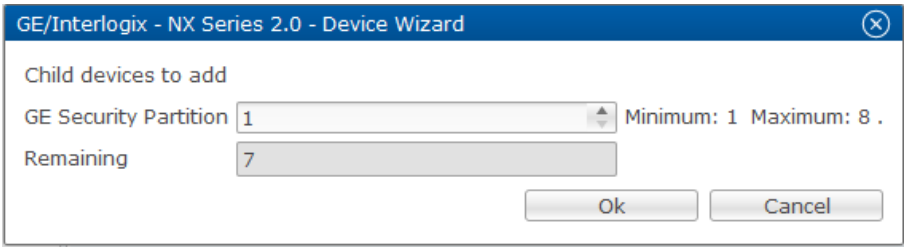
To add a security panel to Fusion:

1. Log into Fusion and select your project.
2. Click the Devices tab, and then click the New Device button to display the Select Template dialog.



3. Expand the Security folder, and then expand Security Panels.
4. Select your security device from the list, and then click OK.

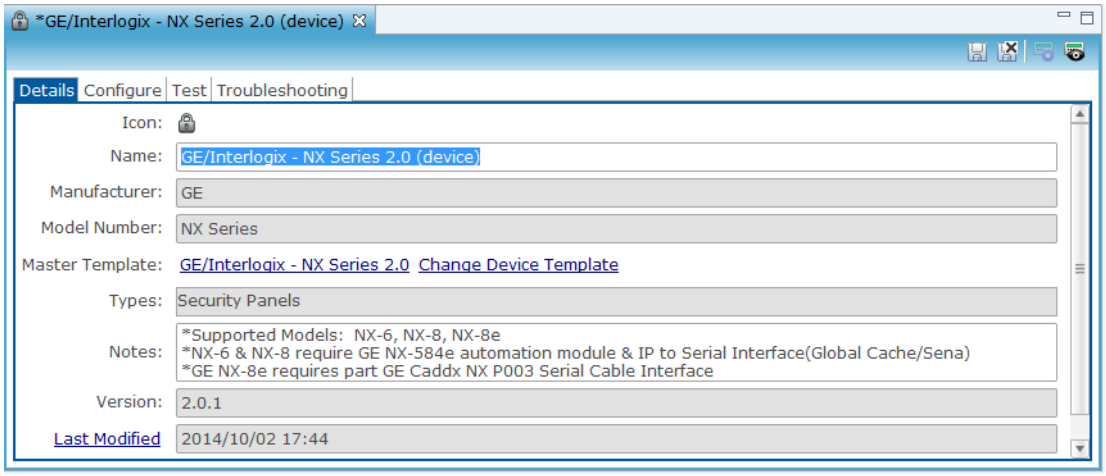
   The Device Wizard displays.



5. In the Device Wizard, enter the number of partitions you want to add in the Security Partition field. There is an eight partition maximum.

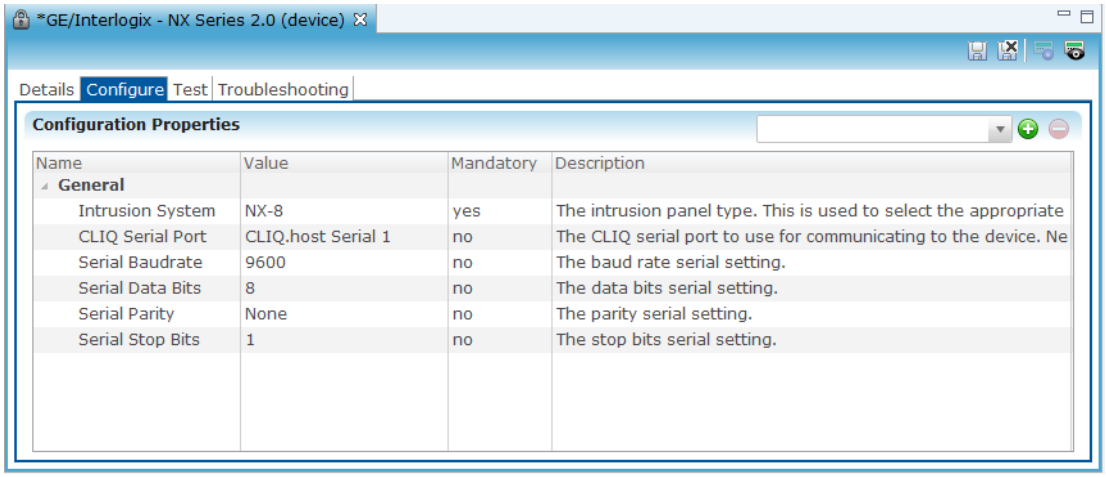
   Note: ClareHome only supports one partition in Vista panels.
6. Click OK.

   The Details tab displays.



7. Enter a name for the security panel, and then click the Configure tab.

   Note: The name you choose will appear on the customer's ClareHome UI.



8. Verify that the information auto populated in the Configuration tabs are correct. Enter any missing or incorrect data in the appropriate fields, and then click the Save button .

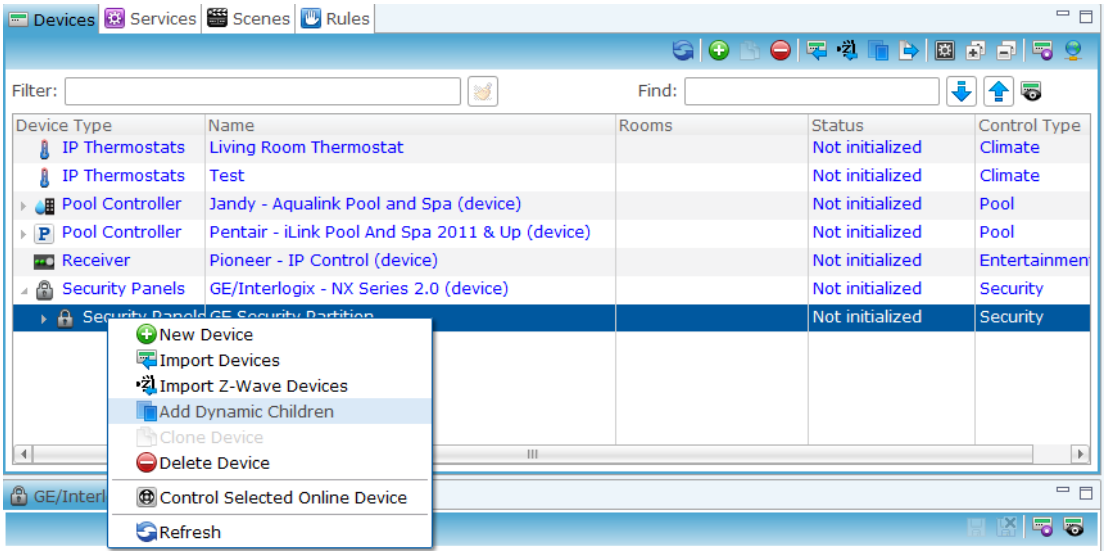
To add zones to a partition:

After you have created the partition you must add zones to it. When creating zones, be sure to enter a unique number. Do not duplicate the numbers.

Note: When numbering zones, be sure to enter different values in all partitions. Duplicating zone numbers, even between partitions, will cause the system to work improperly when deployed. In our example, we numbered our zones 1 – 5 in Partition 1 and zones 6 – 8 in Partition 2.

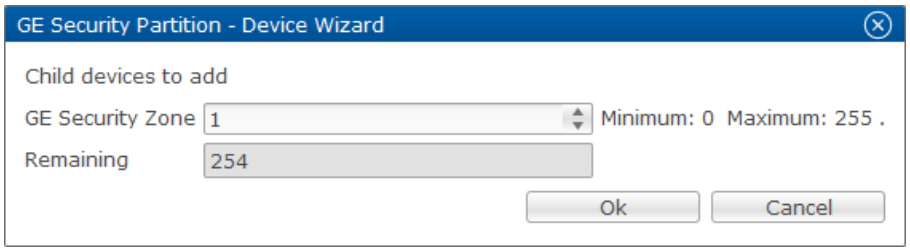
To add zones to a partition:

1. Return to the Devices tab, and then right-click the partition.

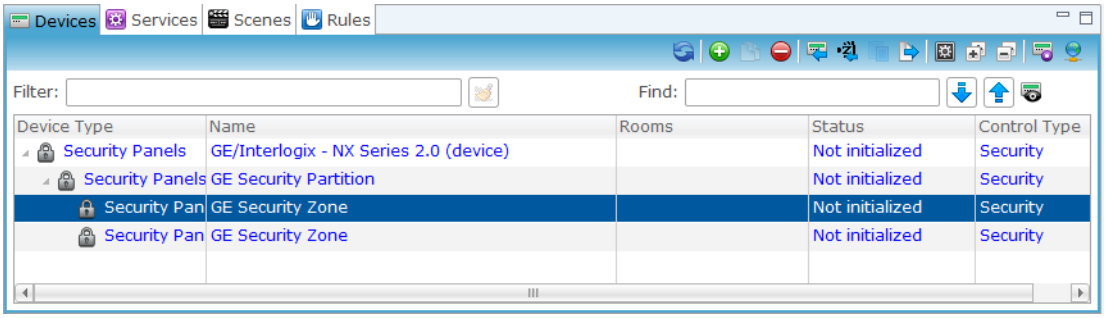


2. Select Add Dynamic Children, and then enter the number of zones you want to add.

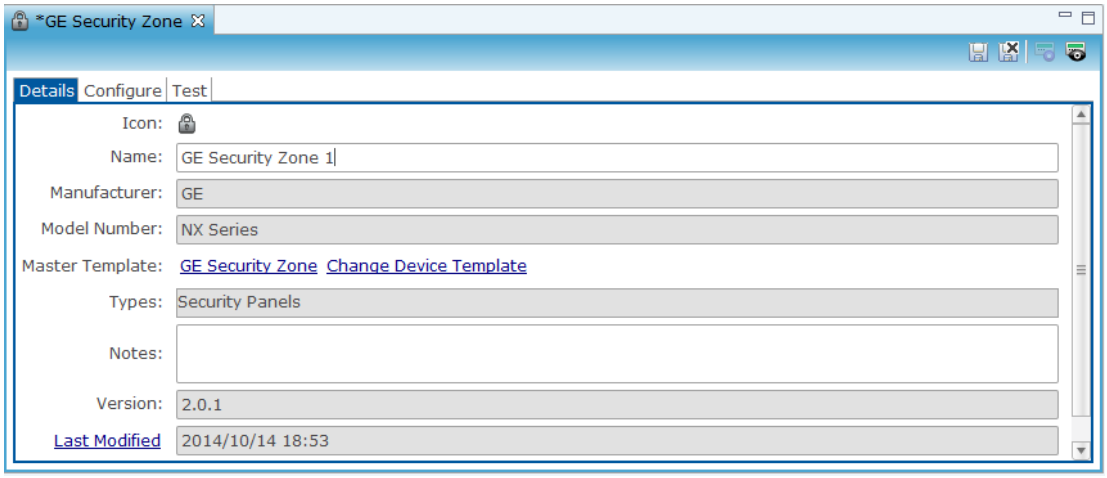
   Note: Fusion automatically adds 1 zone. If you want 4 total zones, add 3.



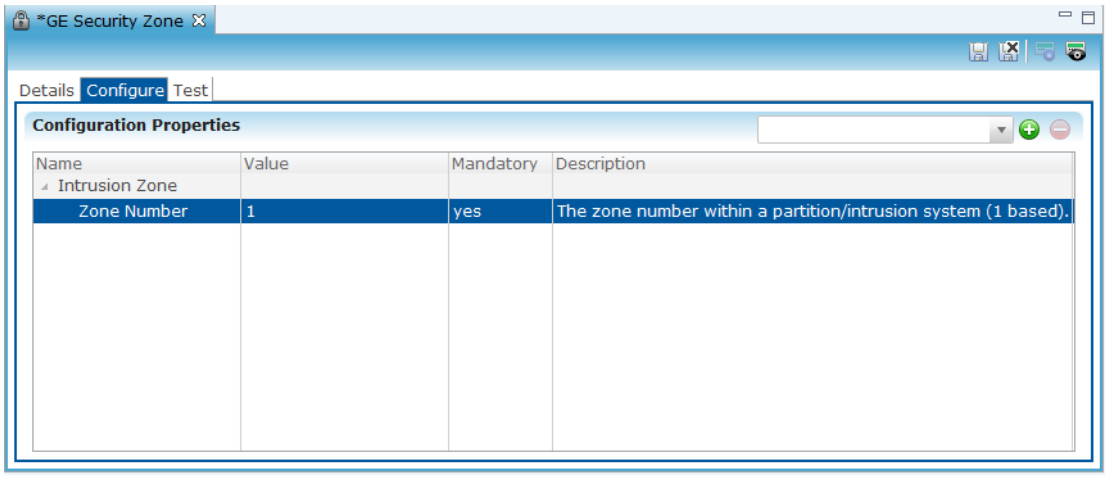
3. Return to the Device tab, and then click the drop-down for the security device.



4. Click the zone you want to configure. In the Details tab fill in the Name and Notes fields.



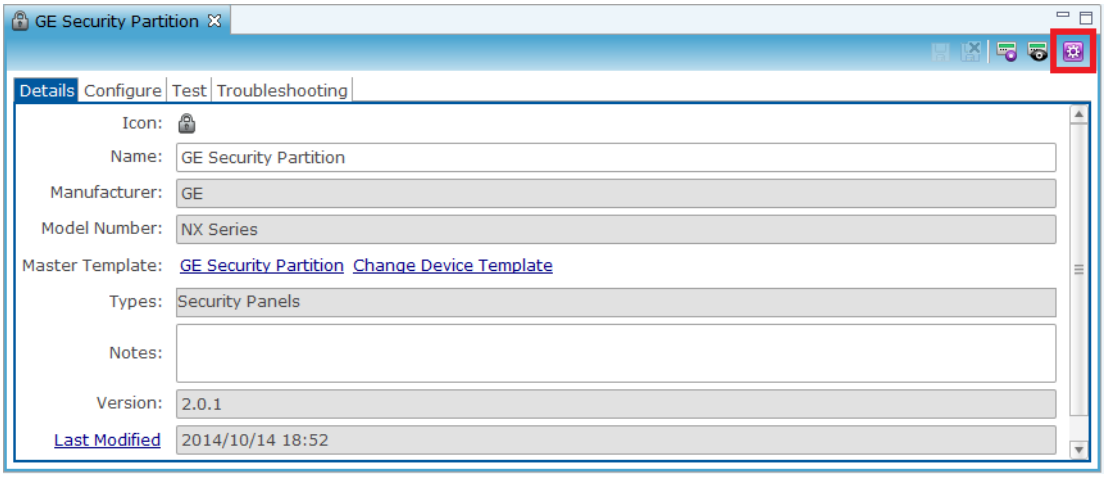
5. Click the Configure tab to enter a number in the Zone Number value field, and then click Save.



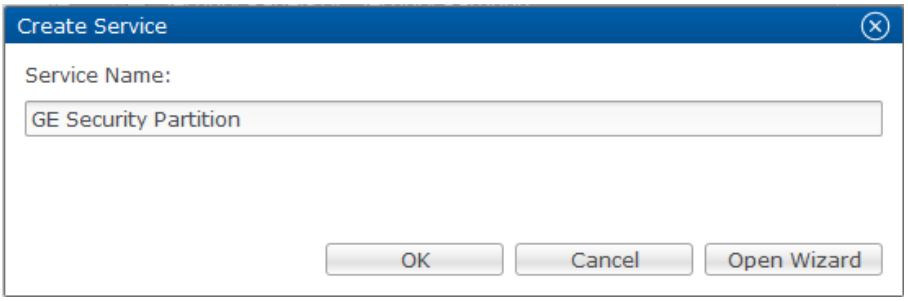
6. Repeat steps 3 through 5 for each zone in the partition.

To create a service for the partition:

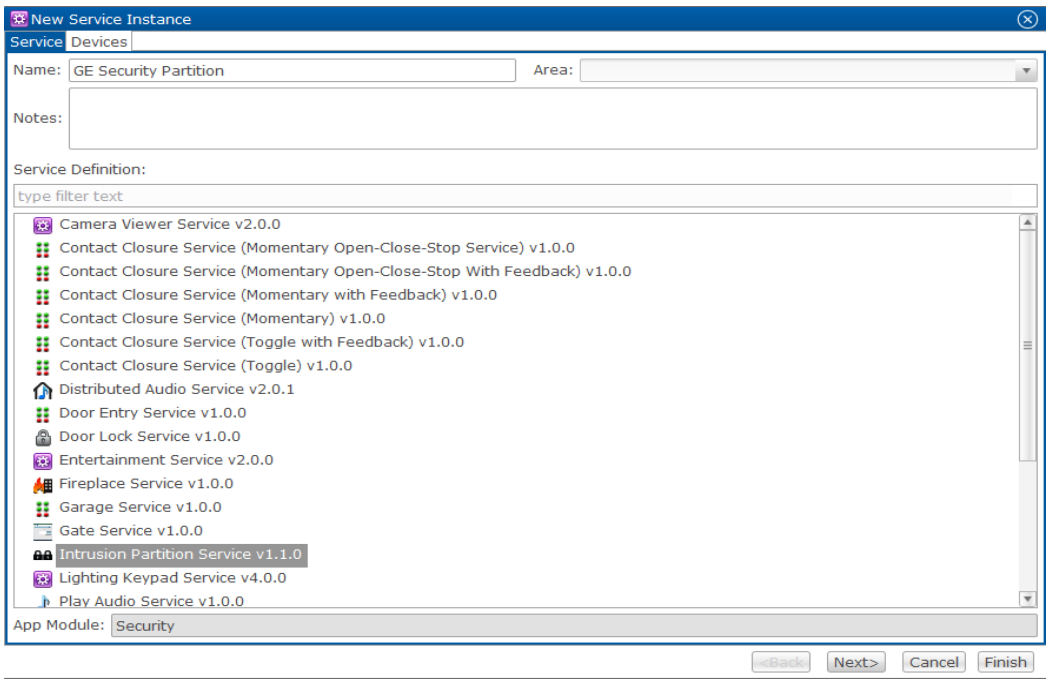
1. Click the partition to view the Details tab, and then click the New Service Instance button to display the Create Service dialog.



2. Name the service in the Service Name field, and then click Open Wizard to view the Services dialog.

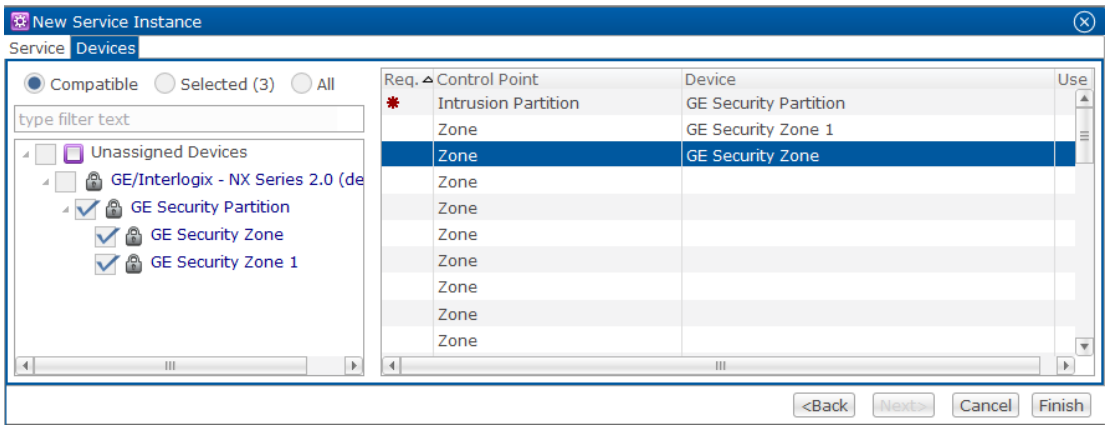


3. Select Intrusion Partition Service, and then click Next to view the Devices tab.



4. Fusion automatically selects the partition, zones, and also the control points.

   Note: The partitions can be changed by clicking the Edit Service Instance button.



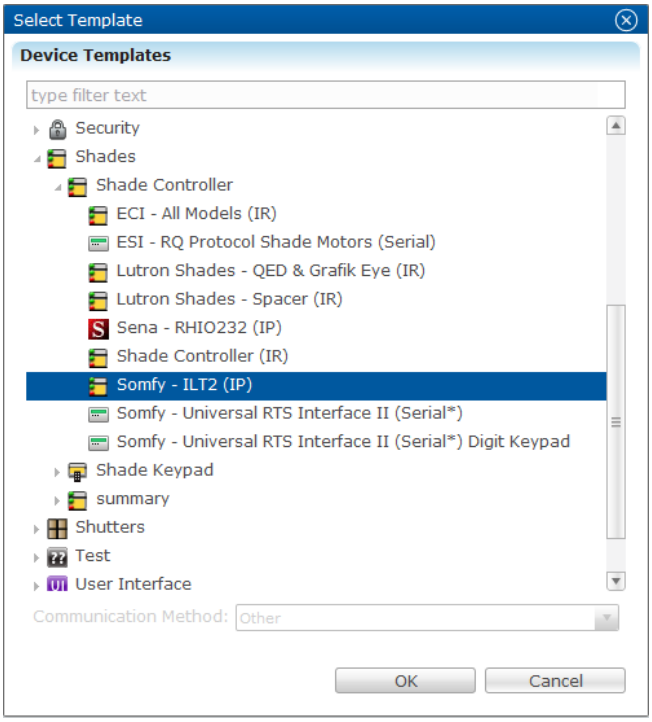
5. Click Finish.
6. Click Save, and then deploy your project.

Shade motor integration

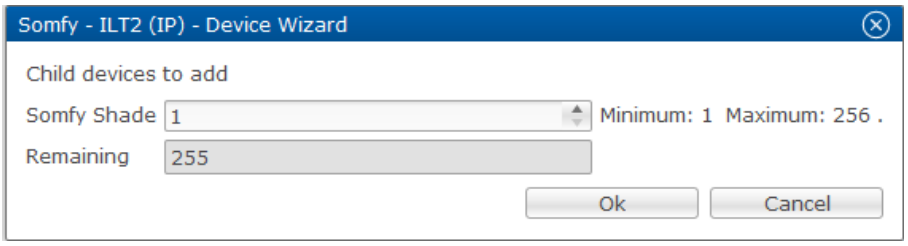
Shade motor controls allow users to control their motorized shades through the ClareHome system. Connecting the shade motors in Fusion allows the user access to the shade controls from their iPhone, iPad, or Android smartphone.

To add the shade motor to Fusion:

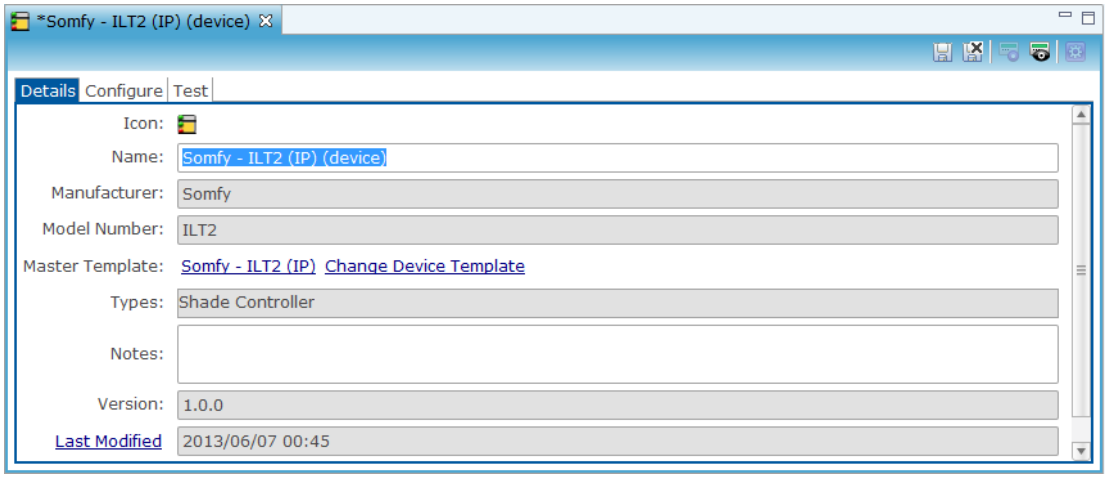
1. Log into Fusion and select your project.
2. Click the Devices tab, and then click the New Device button to display the Select Template dialog.



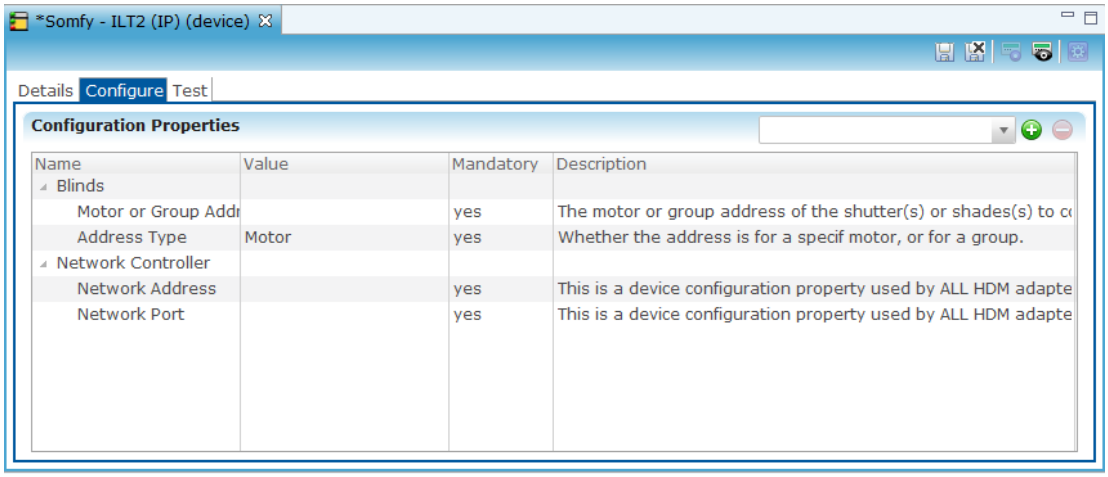
3. Expand the Shades drop-down, expand Shade Controller, select the shade model you are using, and then click OK.
4. The Device Wizard displays. Enter the number of shade motors you are adding, and then click OK.



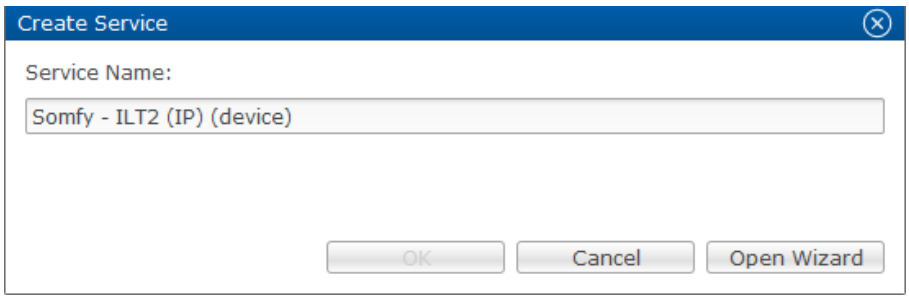
5. The Details tab is displayed, enter a name and notes, and then click Configure.



6. Fill in the Configuration Properties, and then click Save.



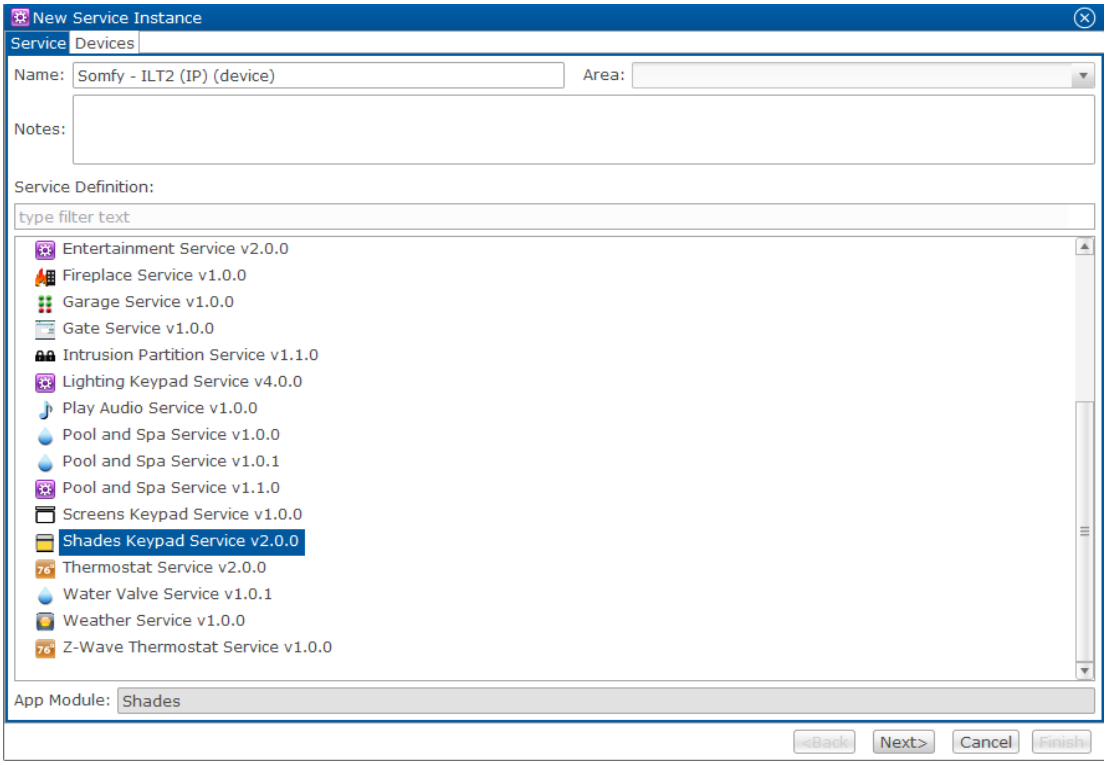
The Create Service dialog displays



To create the shade service:

1. Name the service in the displayed dialog, and then click Open Wizard.

   The New Service Instance dialog will display.



2. Select Shades Keypad Service, and then click Next.
3. The Edit Service Instance tab is displayed and auto populates the control points. Verify that they are correct, and then click Finish.
4. Repeat steps 1 through 3 for each shade motor.
5. Click Save, and then deploy your project.

Integrating third-party devices

Clare Controls supports a wide variety of third party devices in its Fusion library database. Clare Controls supports, IP, serial, Z-Wave, and IR devices.

For a list of compatible devices please see the *Fusion Library Product Bulletin* (Doc ID 361).

Chapter 6
Configuring Lighting and Z-Wave Devices

Summary

Lighting devices and Z-Wave devices that are similar to other simple devices. However, unlike the other simple devices, you must import them into Fusion before adding them to your project. Use the instructions in this chapter to import lighting files and Z-Wave devices.

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- Adding Z-Wave devices...128
- Importing your Z-Wave devices into ClareHome...130
- Removing devices from your Z-Wave network...131
- Resetting the Z-Wave controller...131

Configuring lighting devices

A lighting architect will create lighting files for a specific project. These files can include all of the lighting keypads, which have been set to designated areas or specific rooms in the home or office, depending on the project.

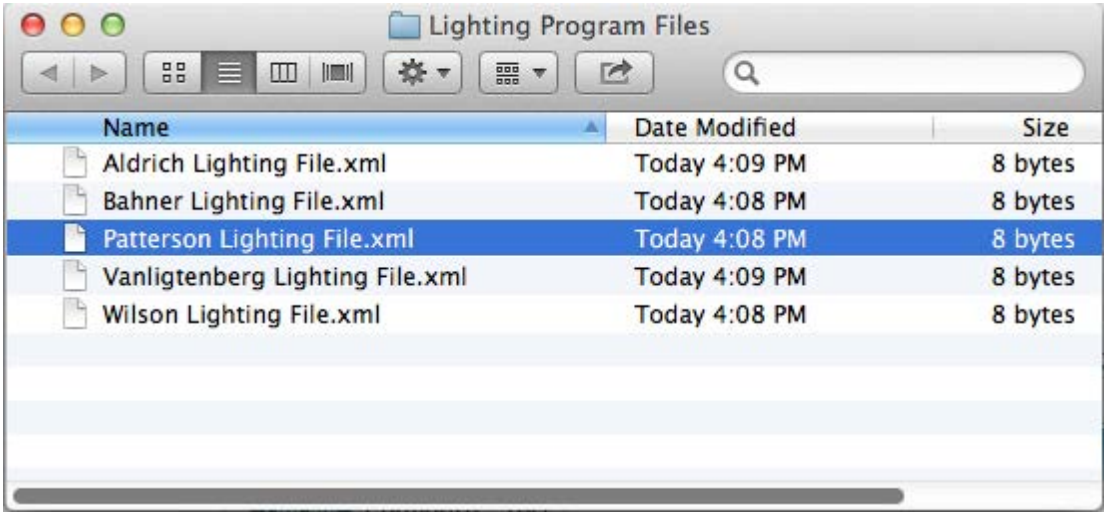
Note: Lighting files may contain shade and shutter controls, or climate controls, depending on the scope of the project and the lighting manufacturer. The lighting file may contain default rooms for the house, some lighting files may also include the climate configuration.

Import the lighting file for a project and configure the lighting devices for areas as appropriate. Please note that you have the option to construct the areas prior to importing the lighting file, or you may use the areas as they are imported along with the lighting file for your individual project. There is one Import Devices button for importing any file type into a project. This Import Devices button is located on the Devices tab toolbar.

Note: If you delete a keypad from the Devices tab, the keypad is permanently deleted from Fusion. The only way to retrieve a keypad after deletion is to re-import the entire lighting file.

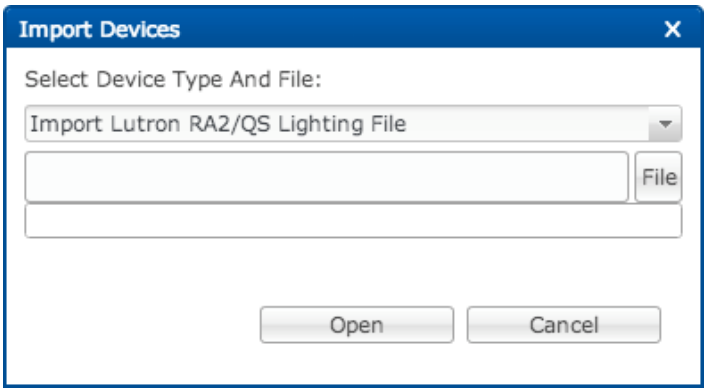
To import the lighting file into Fusion:

1. In the Devices tab, click the Import Devices button on the toolbar.
2. From the Select Device File dialog, click File to locate your lighting file.



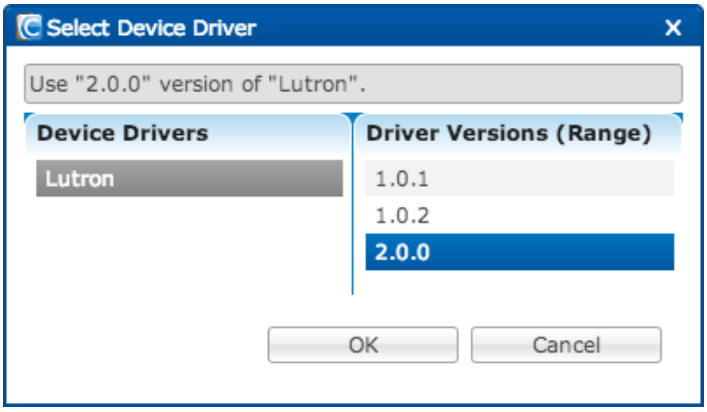
3. Locate the lighting file on your computer and click the Open button.
4. From the Select Device File or dialog, click the Open button.

   The Area Management tab appears with the default lighting file rooms, and the Lighting Program devices appear in the Devices pane.

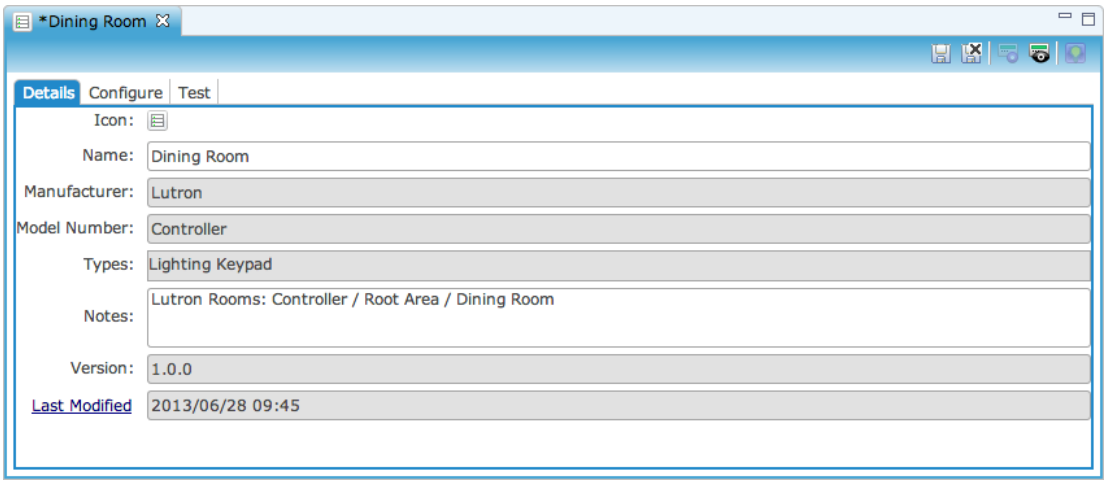


5. After importing the lighting file, you may be asked to select the appropriate device driver. Select the latest driver version and click the OK button.

   Note: In the event it is necessary to rename any lighting devices, you can rename the keypads, as necessary, from the Devices pane.



6. Double-click the Controller button to open the configuration editor for the controller.
7. From the Details tab, the manufacturer is already populated. Enter the model number in the ‘Model Number’ field (for example “RadioRA2”) and any other necessary information.



8. From the Configure tab, enter the Network Address for the Lighting Controller.
9. Enter the Username and Password for the lighting controller file (refer to manufacturer instructions or the technician who created the lighting file).
10. Click the Save button .

Configuring Z-Wave devices

ClareHome incorporates Z-Wave's mesh network. This consists of a control device and a controlled device. You can add additional devices (and controllers) to your ClareHome Z-Wave network any time. The ClareHome controller is a self-powered, Z-Wave USB adapter that plugs directly into the back of your ClareHome CH-OS controller. It controls your Z-Wave network.

You must add a device into the Z-Wave network before the Z-Wave controller can manage it. The process to add a device is also known as "pairing". You can achieve pairing by using ClareHome's Fusion configuration tool to place the controller in Add mode. Then, by pressing a sequence of buttons on the device, you can begin pairing it to your Z-Wave network. You can also remove a device from your Z-Wave network using a similar process.

Repeat the pairing process for each device in your network. As you pair devices, your Z-Wave controller learns the signal strength between those devices. Place each device in its intended final location before adding it to the system.

Depending on your Z-Wave network and device locations, the signal strength between your devices may vary. You can increase the signal strength to your devices by installing a repeater. A repeater (P/N CH-Z-RPTR) is a device that receives Z-Wave signals, amplifies them, and then rebroadcasts them to your Z-

Wave network to boost its range and signal quality. Simply plug a repeater into an electrical outlet at your location in those areas where signal strength is weak.

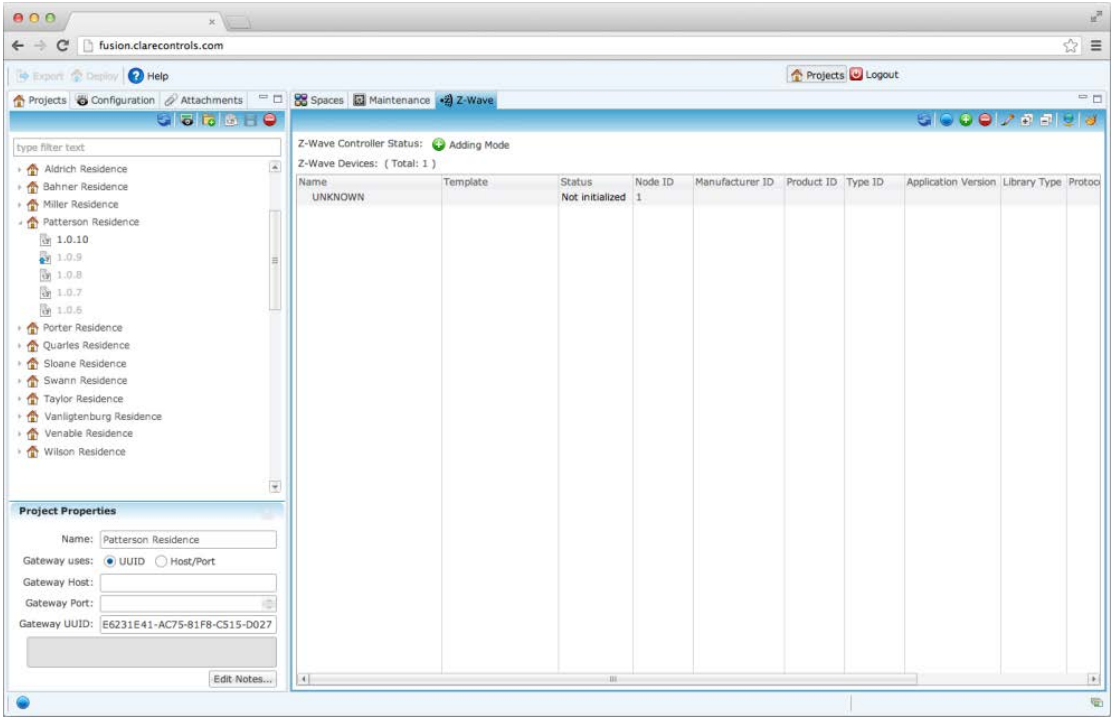
Adding Z-Wave devices

Adding Z-Wave devices to your ClareHome system requires a Z-Wave controller, a Z-Wave device, and Fusion. If you are running Fusion from a location separate from your installation site, we recommend that you coordinate the installation with the on-site technician. The process requires that you work in tandem with the technician.

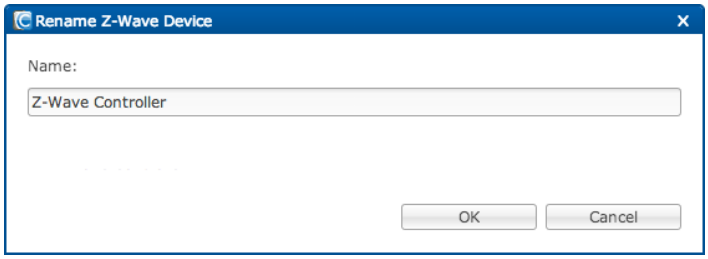
After adding all the Z-Wave devices to your network, you will need to import them into the ClareHome system. Importing them in ClareHome will allow your customers to control the devices from their iPhones and iPads.

To add a Z-Wave controller:

1. Plug the Z-Wave controller (Z-Stick) into a USB port on the back of your CH-OS controller.
2. In Fusion's Project level, click your project name to select it, and then click the Z-Wave tab.
3. Click the Refresh button . Fusion displays the Z-Wave controller in the list as "UNKNOWN."



4. In the Name field, click UNKNOWN to highlight it, and then click the Rename button to display the Rename Z-Wave Device dialog.



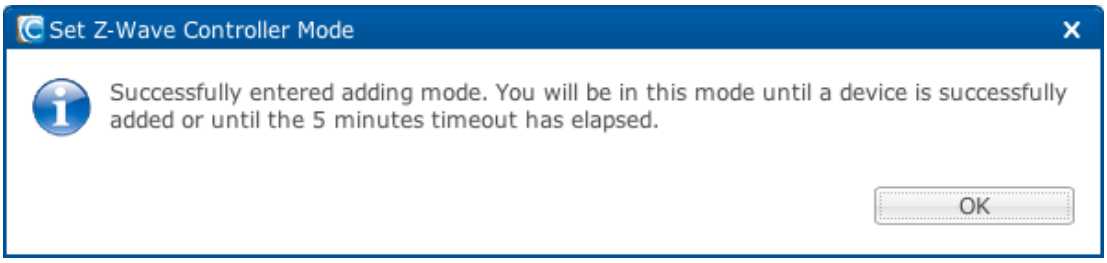
5. Enter a name for your Z-Wave controller, and then click OK.

   Note: We recommend that you preface all names you enter with “Z-Wave.” This will help you later when locating these devices in your Devices tab. Fusion updates the list with the new name.

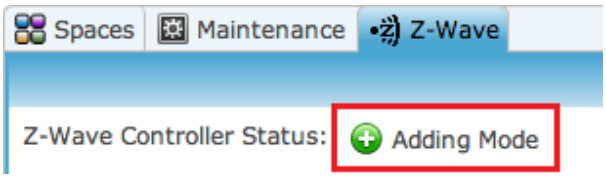
To add a Z-Wave device:

Note: We recommend that you add only one Z-Wave device to your network at a time. Adding more than one device at a time may slow the pairing process, or may cause a device to pair improperly.

1. In Fusion, click the Adding mode button on the Z-Wave toolbar to display the Adding mode dialog.



2. Click OK. The Z-Wave Controller Status changes to show that you are in Adding mode.



3. Go to the device that you are adding to your Z-Wave network, press the Program button on the device, and then observe its status light to ensure it blinks.

   Note: Each Z-Wave device type pairs with the Z-Wave controller differently. Refer to the manufacturer’s installation instructions that came with your Z-

Wave device and follow its steps when adding the device to your Z-Wave network. Be sure to review the blink sequence section.

4. Wait a few minutes to give the controller and the device time to pair, and then on the Fusion toolbar click the Refresh button

   Note: When adding a secured device, such as a door lock, wait several minutes before clicking Refresh. Some door locks take up to five minutes to pair.

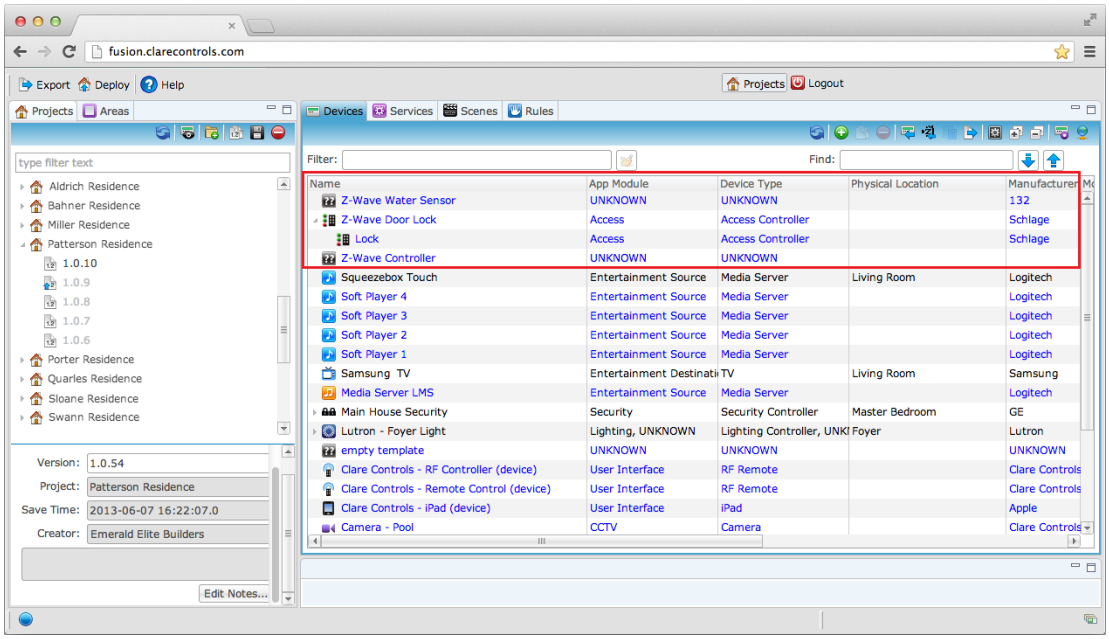
5. If desired, click the Rename button and rename the device so that you can easily identify it in your network.
6. Click OK.
7. Repeat these steps for each device you are adding to your Z-Wave network.

Importing your Z-Wave devices into ClareHome

Once you have added all the devices to your Z-Wave network, import them into your ClareHome system. The ClareHome system automatically creates a device and service for each Z-Wave device imported.

To import Z-Wave devices:

1. At Fusion's Devices level, click the Devices tab, and then click the Import button on the toolbar. Fusion displays the imported devices in the list.



2. Click the Deploy button to deploy your device.

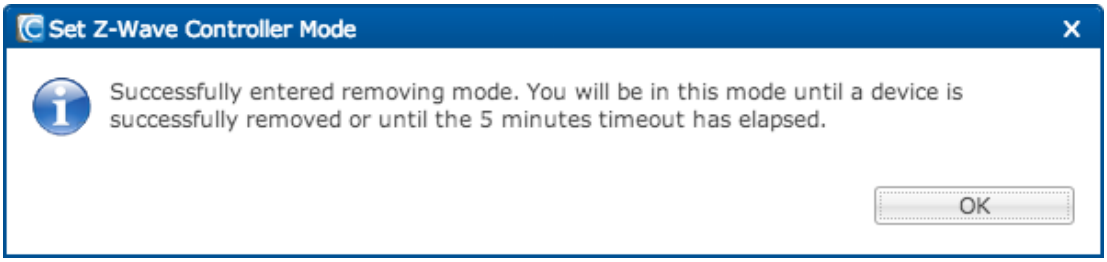
Once you have deployed your project, you are ready to add them to the customer's Clare Controls App device. Do this by editing the Spaces tab, as described earlier in this chapter.

Removing devices from your Z-Wave network

When reconfiguring or upgrading your ClareHome system, you may need to remove a device from your Z-Wave network.

To remove a Z-Wave device:

1. In Fusion, click the Removing mode button on the Z-Wave toolbar to display the Remove mode dialog.



2. Click OK.

   Note: The Z-Wave Controller Status changes to show that you are in Removing mode.

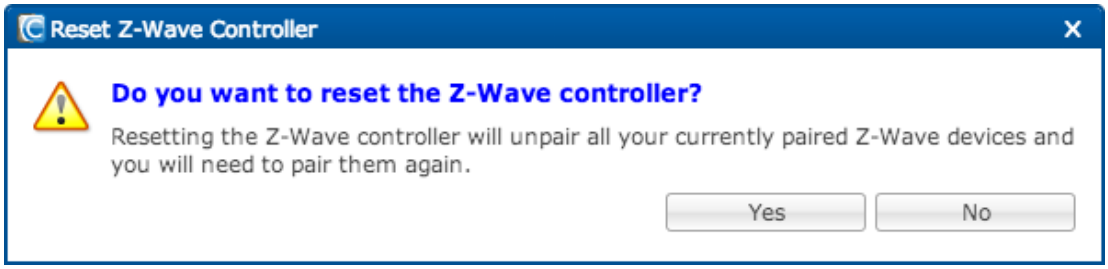
3. Go to the device that you are removing from your Z-Wave network, and then press its Program button.
4. When the Z-Wave Controller Status indicator returns to Normal Mode , the device is removed from the Z-Wave network.

Resetting the Z-Wave controller

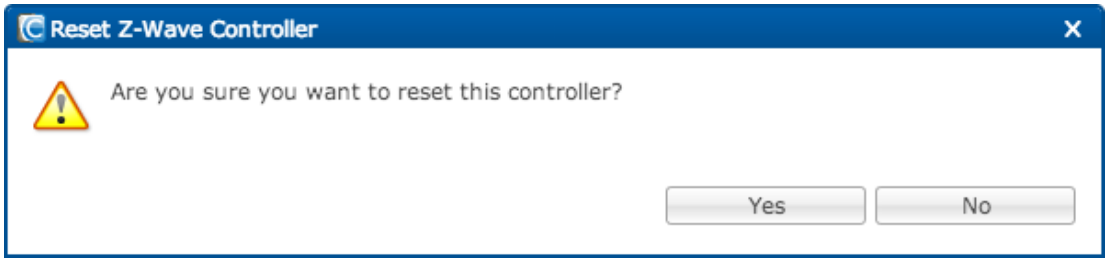
You may choose to reset the Z-Wave controller in your ClareHome system – for example, when installing a Z-Wave controller that was previously installed in another network, or when reconfiguring your existing network. Resetting the controller unpairs all paired devices and clears them from the controller's memory. Use Fusion to quickly reset your Z-Wave controller.

To reset the Z-Wave controller:

1. In Fusion, click the Reset button on the Z-Wave toolbar. A confirmation dialog displays.



2. Click Yes to continue with the reset.



3. Click Yes to verify your reset.

Chapter 7
Configuring Multi-devices

Summary

Multi-devices are those devices that work in combination with other another. These devices are used in audio configurations and entertainment configurations.

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Audio configuration

You can configure audio devices so the user can control the Audio App Module from the Clare Controls App. Here, we'll use the following example devices to describe audio configuration.

- Squeezebox server
- CS-MR-8 multi-room audio
- CS-RE-1 room expanders

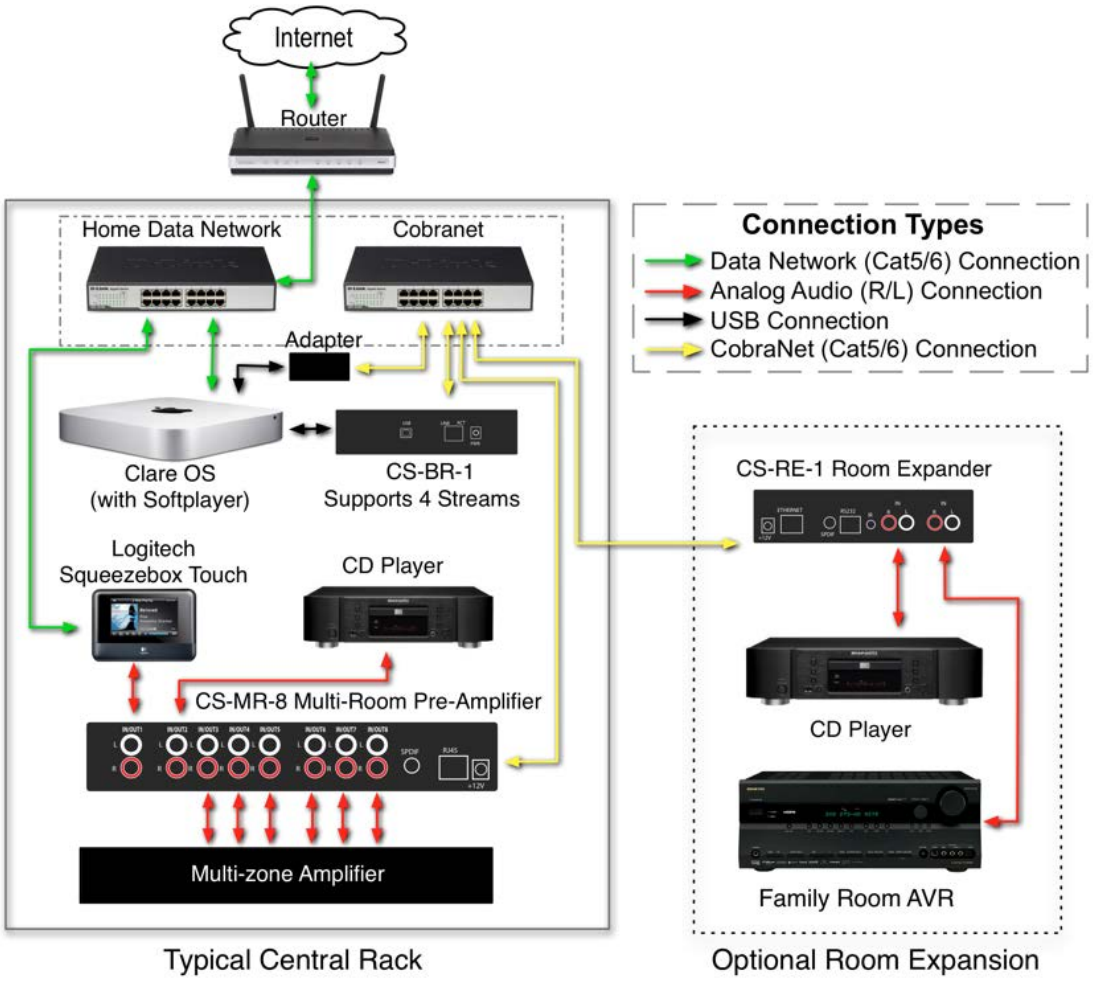
You may also configure CD or DVD players, etc. Follow the instructions in this section to configure audio devices.

Note: The ClareHome distributed audio solution only supports paid audio accounts for Squeezebox software players (software player running on the CH-OS controller).

Value of ClareHome Audio Solution - CobraNet over Ethernet

CobraNet is the underlying technology in the ClareHome audio solution. The CS-MR-8 preamplifier takes input sources, converts them, and sends them to the amplifier. The server then tells CobraNet what actions to take over SNMP. Uncompressed audio comes in through the CS-MR-8 and comes out uncompressed. Once it is on the ClareHome network, the audio is never compressed, which provides a loss-less solution.

Figure 22: Diagram showing CobraNet solution



Why audio resides on a separate dedicated network

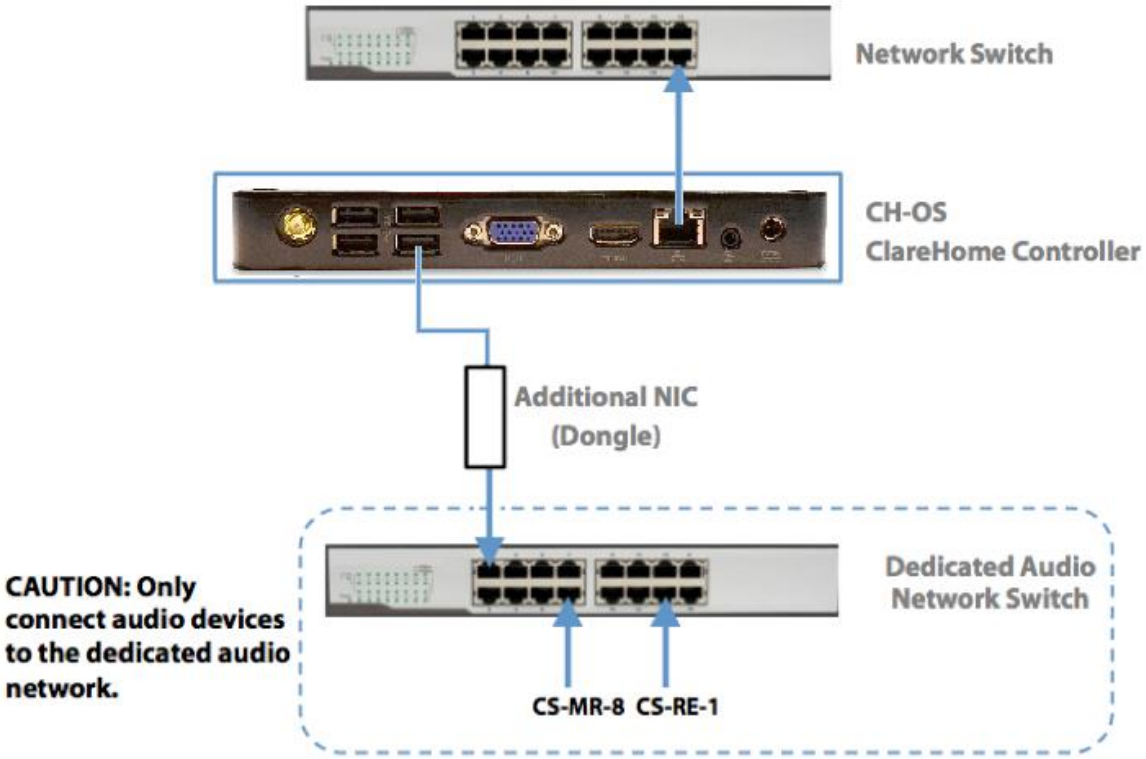
Note: Audio devices must be on a separate dedicated network in the ClareHome system. The data transmission on the network causes the devices to talk back and forth, and there will be no latency of this communication on a dedicated network.

During initial ClareHome system setup, you should have configured a separate dedicated network for audio. Streaming audio must be on a dedicated network for the following reasons.

1. Audio control commands are sent to the CH-OS controller from the Clare Controls App or based upon rules and triggers which interpret the request and send SNMP commands to the CS-MR-8 / CS-RE-1 devices.

2. These audio control commands configure the preamp output settings (volume, base, and treble) as well as switching the audio source.
3. The data transmission on the network causes the devices to talk back and forth, and there will be no latency of this communication on a dedicated network.
4. The devices chat at a lower level on the OSI stack MAC layer, therefore, they need to be on a dedicated network.

Figure 23: Diagram showing audio on dedicated network

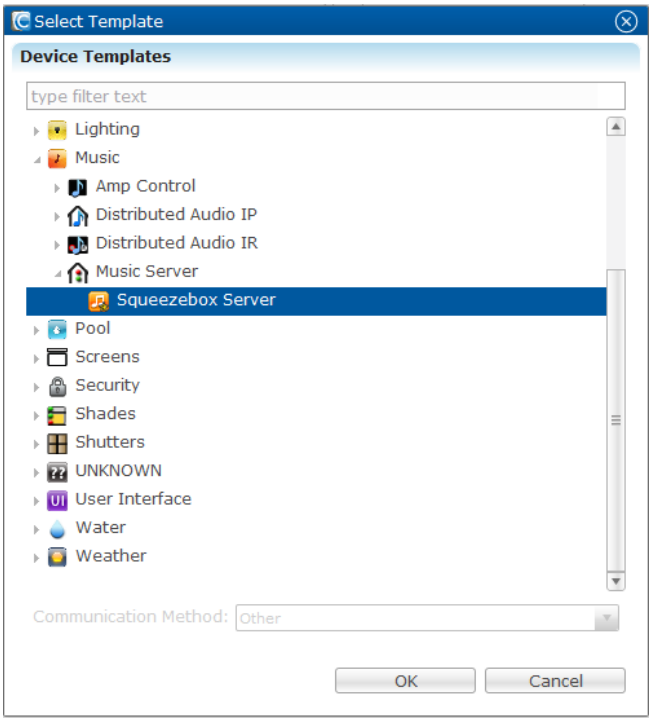


Configuring a Squeezebox server

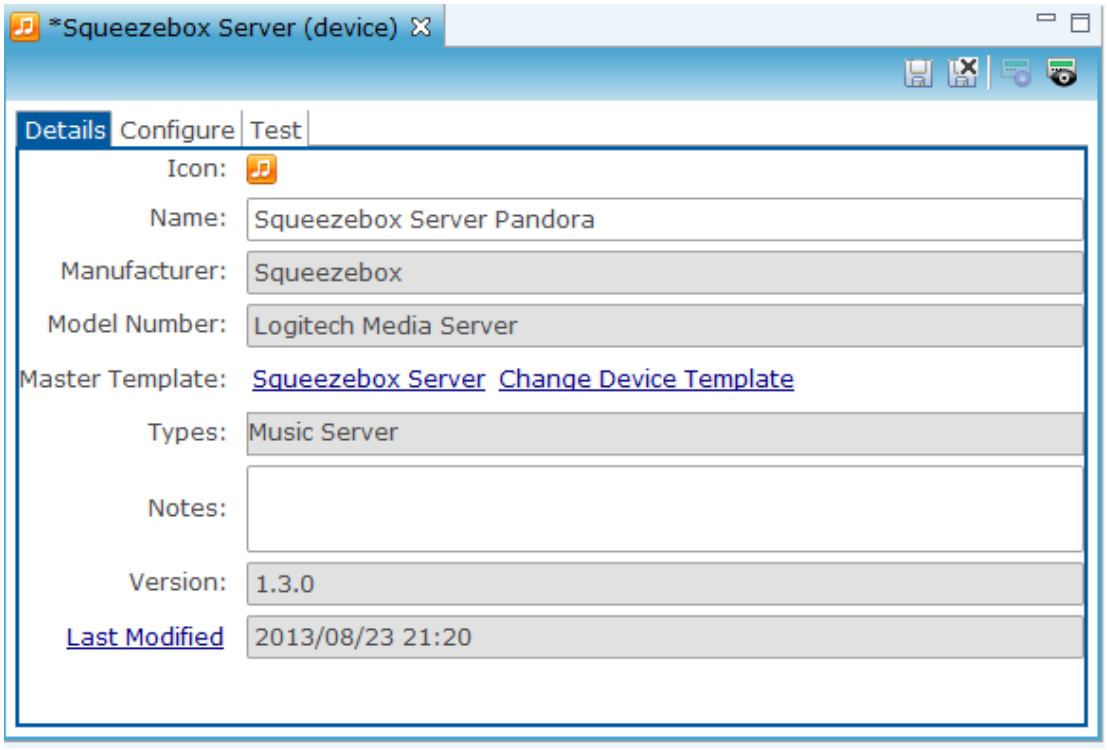
A Squeezebox server (media server) must be configured and deployed prior to configuring any Squeezebox Touch Players. The Squeezebox server remains as an unassigned device after configuration, therefore, it is not necessary to assign it to any area within the project.

To configure a Squeezebox server:

1. From the Devices pane, click the New Device button on the toolbar .
2. From the Device Templates window, select the drop-down for Music.

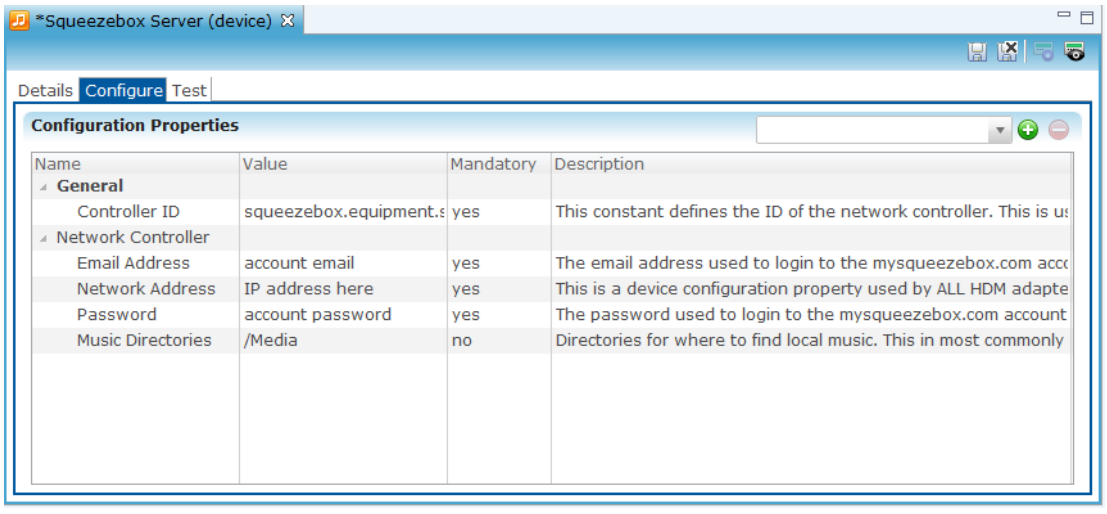


3. From the Music drop-down, open the Music Server drop-down and select the Squeezebox Server.
4. Click OK.
5. From the Squeezebox Server tab, enter an appropriate name for the server.



Note: This media server will not appear in the Clare Controls App.

6. From the Squeezebox Server tab, enter the network address, which is the same as the static IP address of the ClareHome host controller (CH-OS).



7. After configuring the network address, click the Save button.
8. Deploy this version of the project (with the configured Squeezebox server) prior to configuring the Squeezebox players.

Configure Clare Controls Multi-Room audio device (CS-MR-8)

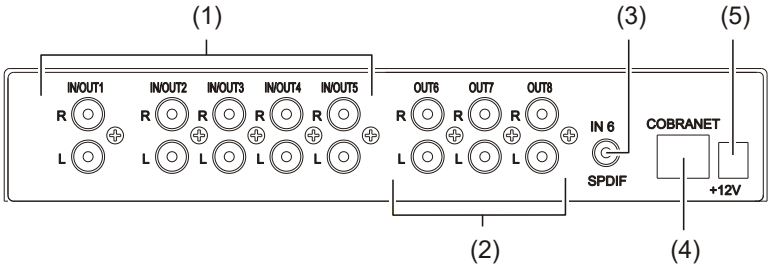
After configuring the Squeezebox Server, it is necessary to configure the Clare Controls Multi-Room (CS-MR-8) audio device. The CS-MR-8 audio distribution preamplifier is a cost-effective solution for distributing audio over Ethernet in a multi-zone audio application using the CobraNet-based architecture.

Understanding the CS-MR-8 device connections

It is important to understand how input and output ports are configured on the back of the CS-MR-8 device. The CS-MR-8 is the rack I/O audio switch and cannot have more than five inputs.

Your installation technician should have given you several pieces of information, including which input ports are connected to which players and which output ports are connected to which speakers (speakers in specific areas).

Figure 24: Connections on back of CS-MR-8



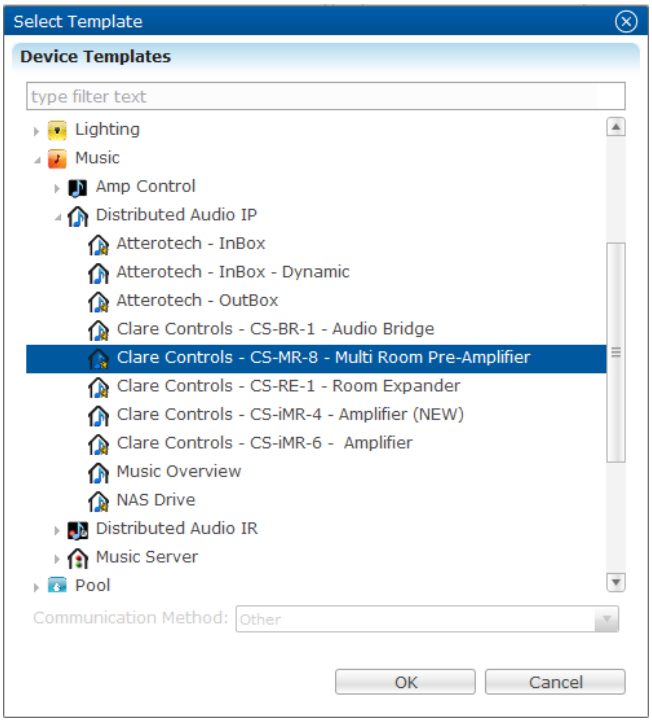
(1) Input or Output ports
(2) Output ports only
(3) Digital audio input SPDIF port
(4) Ethernet port for CobraNet
(5) Power jack

Configuring the CS-MR-8

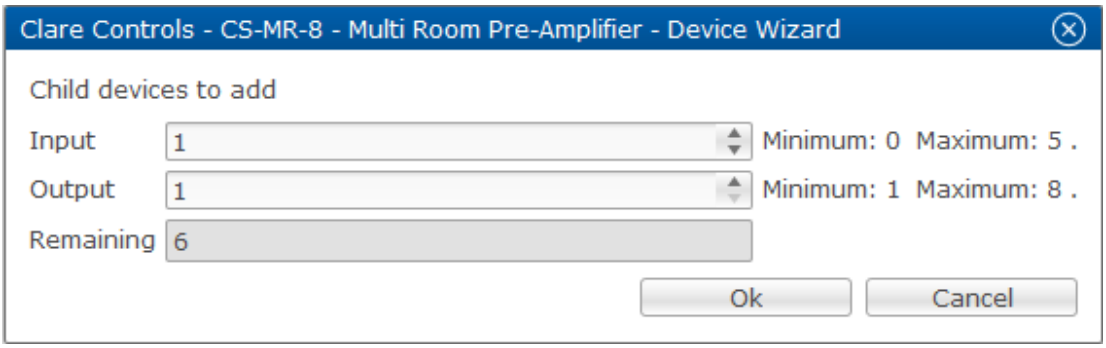
The CS-MR-8 audio distribution preamplifier distributes audio over Ethernet in a multi-zone audio application using the CobraNet-based architecture. The CS-MR-8 is the rack I/O audio switch and cannot have more than five inputs.

To configure the CS-MR-8:

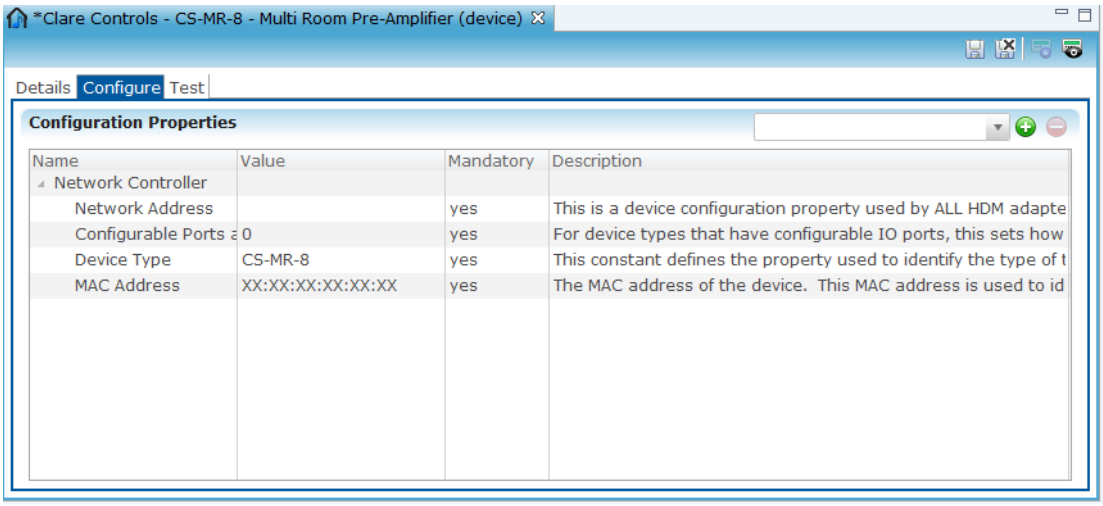
1. From the Devices tab, click the New Device button on the toolbar .
2. From the Device Templates window, select the drop-down for Music.



3. From the Music drop-down, open the Distributed Audio drop-down and select Clare Controls - MR-8 - Multi Room Pre-amplifier.
4. Click OK.
5. From the Clare Controls - Multi Room Pre-amplifier Device Wizard, enter the number of Inputs and Outputs connected to the CS-MR-8 (Clare Controls - Multi Room Audio) device in the 'In' and 'Out' fields, and then click the OK button.



6. From the device configuration Details tab, enter a name, as appropriate, for the Clare Controls Multi-Room Audio device in the Name field.
7. Click the CS-MR-8 Configure tab, and then enter the Network Address (IP Address of the device) in the Network Address field. This IP address will automatically become static after deployment.



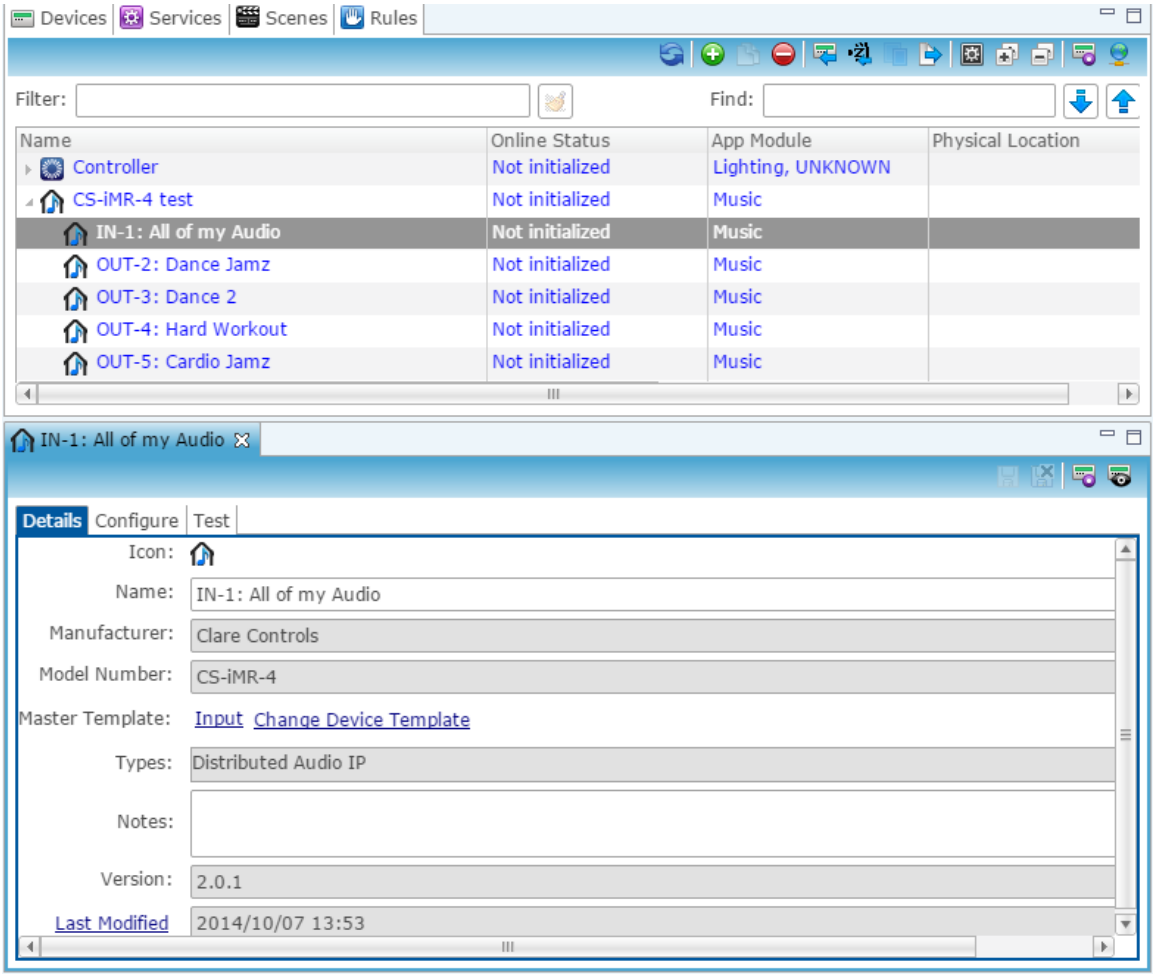
Note: After you deploy the project, the CH-OS will manage the IP addresses you assign to Multi Room Audio devices.

8. From the Configurable Ports as Inputs field, enter the number of Inputs connected to the CS-MR-8 (if this value did not automatically populate).
9. From the Device Type field, select CS-MR-8 as the device type. The other options for this field include configurations for a bridge, room expander, in box and out box.
10. From the MAC Address field, enter the MAC address (labeled on the device).
11. Click the Save button .

Rename inputs

After saving the multi-room audio device configuration, the system automatically creates the inputs and outputs in the Devices tab based on how many inputs and outputs you specified in the Device Wizard. Rename the inputs, as appropriate – for example, “Stream 1” and “Stream 2”.

Figure 25: Rename inputs for a multi-room audio device



Rename outputs

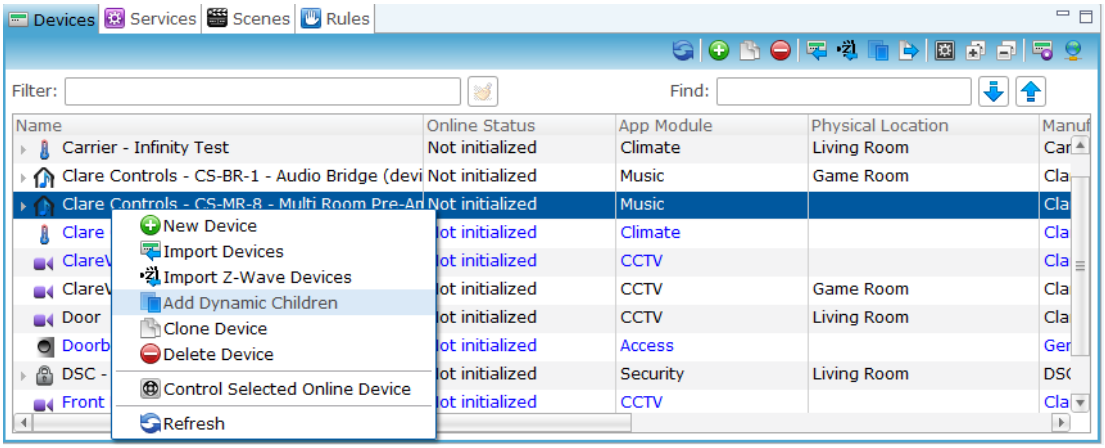
After renaming the inputs, it is necessary to rename the outputs as associated with the speaker location in specific rooms. A good practice is to rename the outputs based on the speaker locations (Example: “Living Room Speakers” or “Kitchen Speakers”.

Configuring additional inputs and outputs for multi-room audio devices

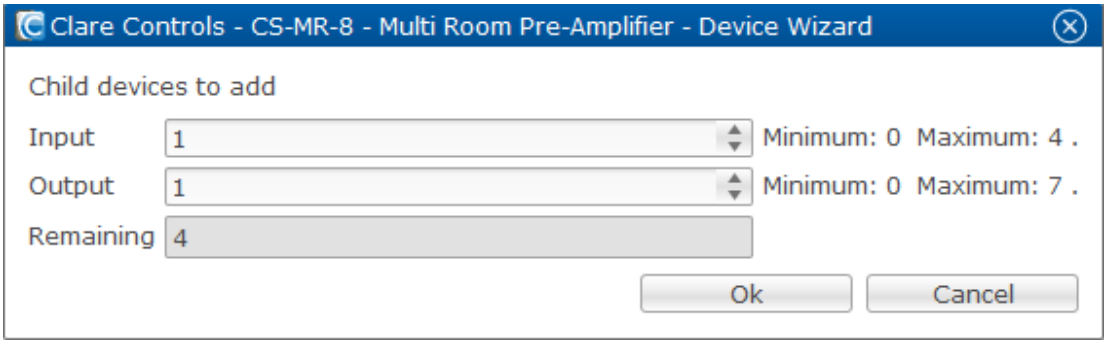
After you have your multi-room audio devices (CS-MR-8) configured, it may be necessary to configure additional inputs or outputs. If so, follow the instructions below to configure additional inputs or outputs for Multi Room Audio devices.

To configure additional inputs or outputs for multi-room audio devices:

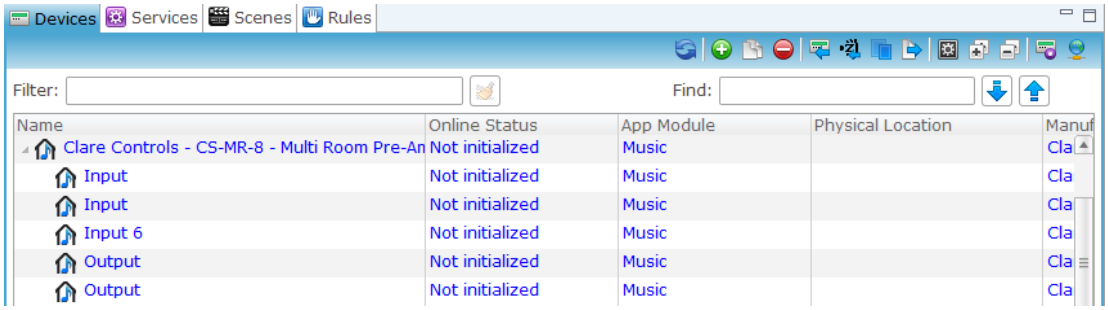
1. From the Devices pane, right-click on the multi-room audio device.



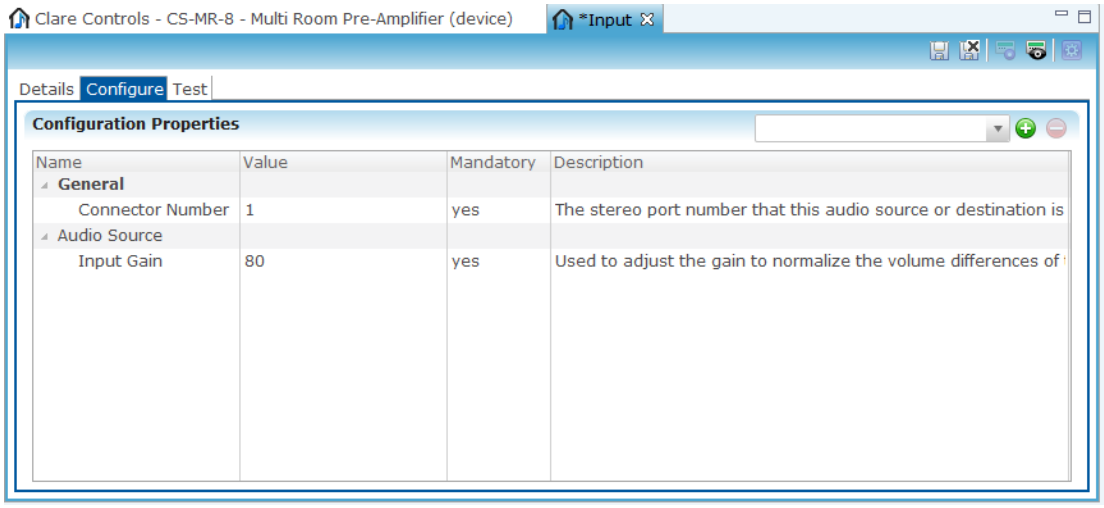
2. From the menu, select Add Dynamic Children.
3. From the Clare Controls - Multi Room Pre-amplifier - MR-8 (IP) - Device Wizard, click the Input, and then enter the number of additional inputs that need to be configured. In the Output, enter the number of additional outputs that need to be configured.



4. Click OK.
5. The new child device will appear under multi-room audio with a default name of “In” or “Out.” Rename the input or output, as appropriate.



6. From the Configure tab, click the Connector Number field, and then enter the connector number.



7. Click the Save button.

Configure room expanders (CS-RE-1)

The CobraNet Streams Room Expander (CS-RE-1) preamplifier is a compact and affordable solution for incorporating additional rooms into the ClareHome multi-room audio solution. The purpose of the CS-RE-1 room expander is to add input and output to an area without speakers.

The room expander connects to the Ethernet jack anywhere on the network. Then, the customer can plug in a pair of powered speakers or an input device not built into the system. The output gets assigned to the same area in which you configured the room expander.

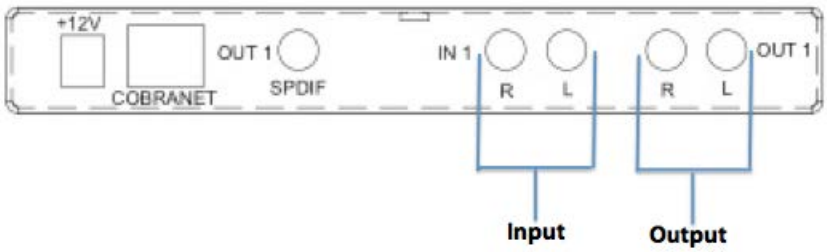
Understanding the CS-RE-1 device connections

It is important to understand how the input and output ports are configured on the back of the CS-RE-1 device. Your installation technician should have given you

several pieces of information, including which input and output ports are connected to which speakers (speakers located in specific areas).

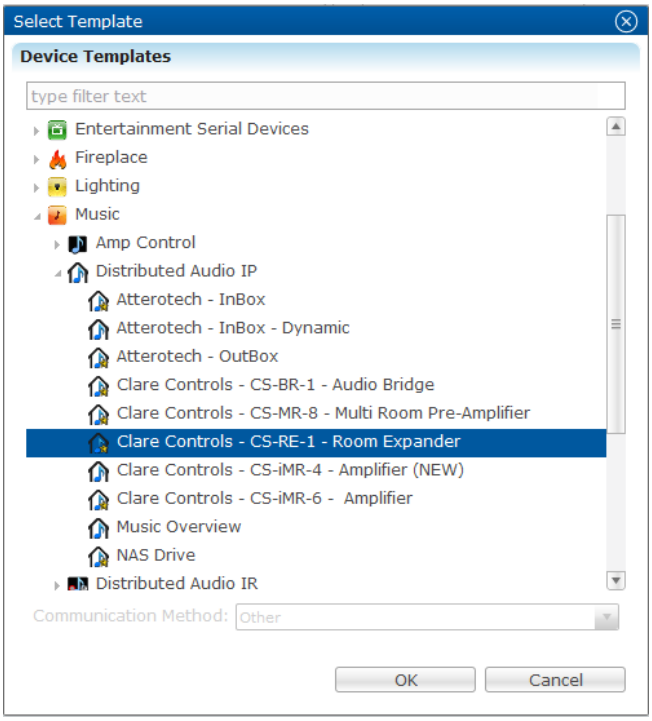
The ports on a room expander are default one input and one output. This will allow the customer to play a device that is not already built into the system.

Figure 26: CS-RE-1 connections



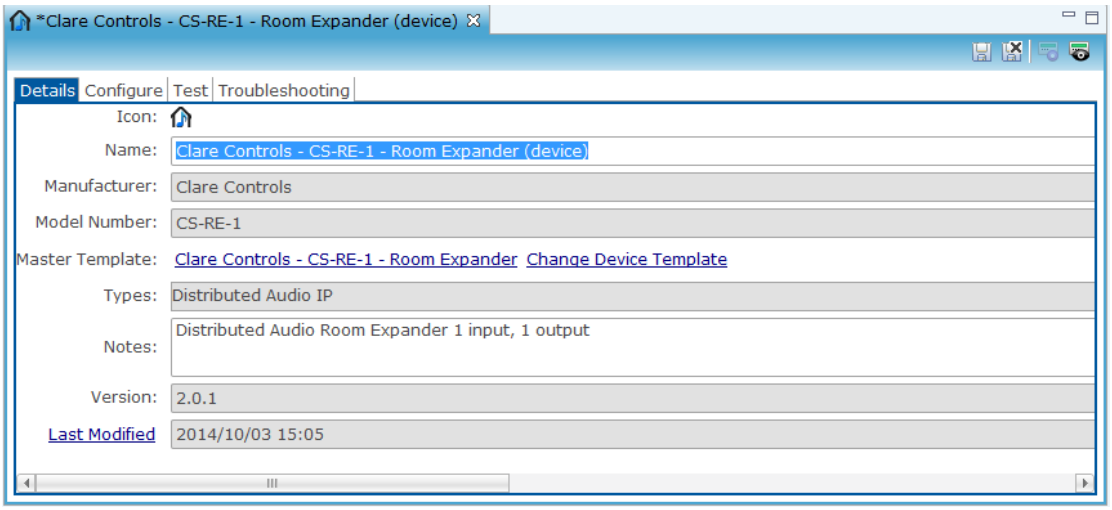
To configure the CS-RE-1 device connections:

1. From the Devices pane, click the New Device button on the toolbar.
2. From the Device Templates window, select the drop-down for Music.

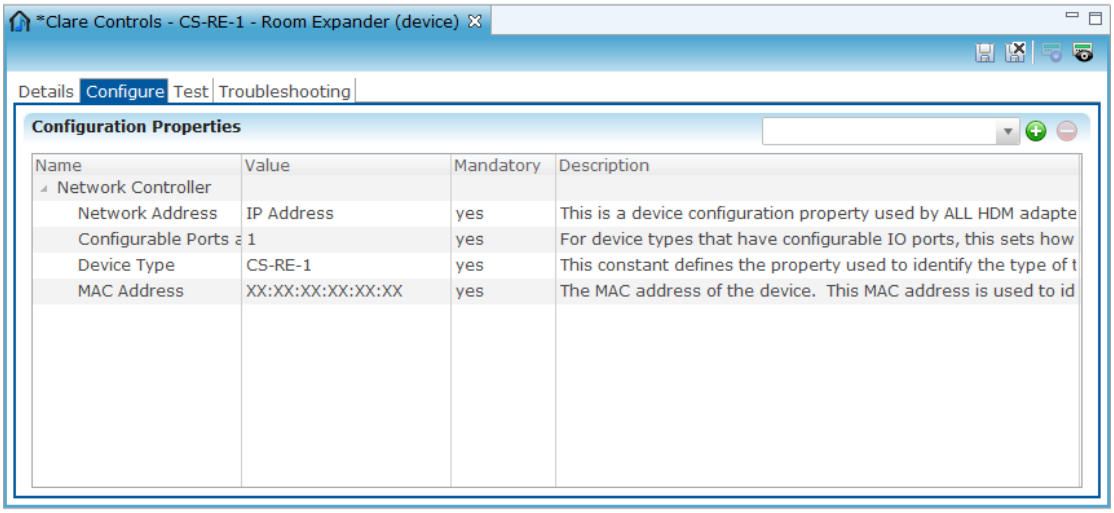


3. From the Music drop-down, open the Distributed Audio drop-down and select Clare Controls - Room Expander - CS-RE-1 (IP).
4. Click OK.

5. Click the Details tab for the room expander, and then in the Name field, enter an appropriate name.



6. Click the Configure tab for the room expander, and then in the Network Address field, enter the network address. This network address is a device configuration property used by all HDM adaptors that need to connect to a network host.



Note: The IP address you assign to the Multi Room Audio device will automatically become static after you deploy the project through a process running on the CH-OS.

7. In the Configurable Ports as Inputs field, ensure the value is “1.

Note: There is only one input on the CS-RE-1 room expander.

8. In the Device Type field, ensure CS-RE-1 is selected from the drop-down.

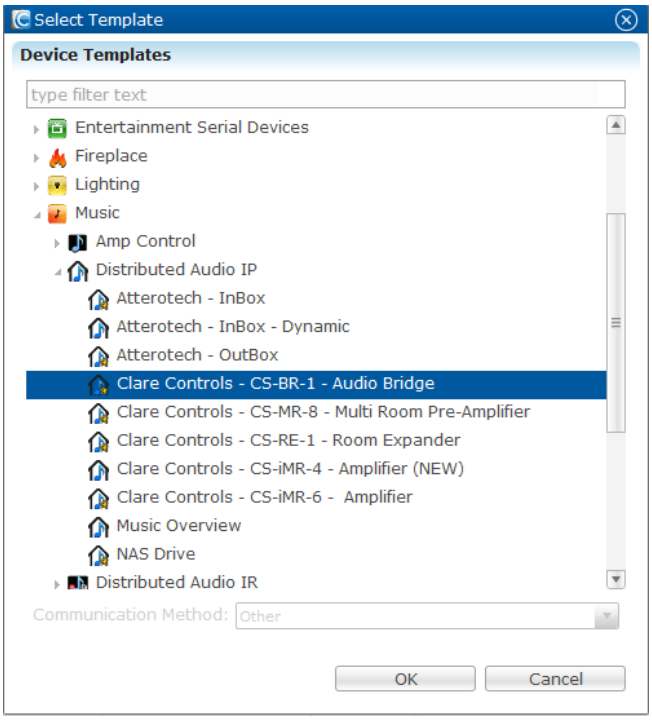
9. In the MAC Address field, enter the MAC address for the room expander (labeled on device).
10. Click the Save button. After configuring the room expander device, ensure that you rename the input and output, as appropriate.

Configure Streams Audio Bridges (CS-BR-1)

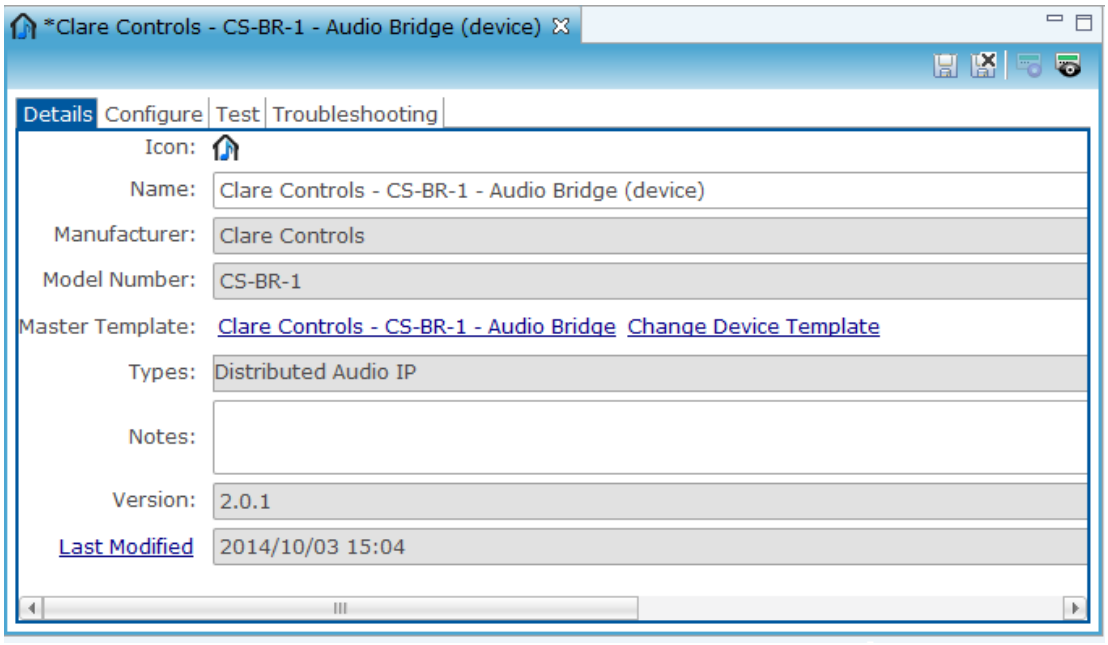
This section describes how to configure a CS-BR-1 in Fusion. The streams bridge is a cost-effective, general-purpose solution for direct integration of PC audio sources into the ClareHome solution by leveraging a CobraNet-based architecture. The streams bridge appears to the PC as a USB sound card and can be configured for eight channels of audio in various input and output modes.

To configure a CS-BR-1 streams audio bridge:

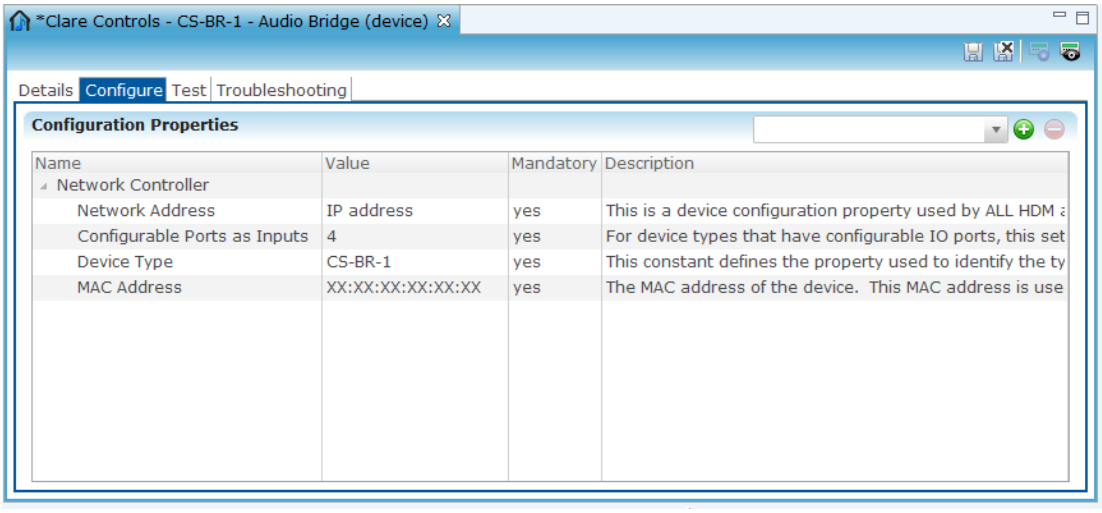
1. From the Device Templates dialog, select the drop-down for Music.



2. From the Music drop-down, open the Distributed Audio drop-down and select CS-BR-1.
3. Click OK.
4. From the Details tab for the CS-BR-1, rename the device, as appropriate.



5. Click the Configuration tab for the CS-BR-1, and then the network address in the Network Address field.



Note: The IP address you assign to the multi-room audio device will automatically become static after you deploy the project through a process running on the CH-OS.

6. In the Configurable Ports as Inputs field, ensure “4” is the value.

   Note: There are four configurable ports available on a CS-BR-1.

7. In the Device Type field, ensure CS-BR-1 is selected from the drop-down.
8. In the MAC Address field, enter the MAC address for the audio bridge device (labeled on the device).

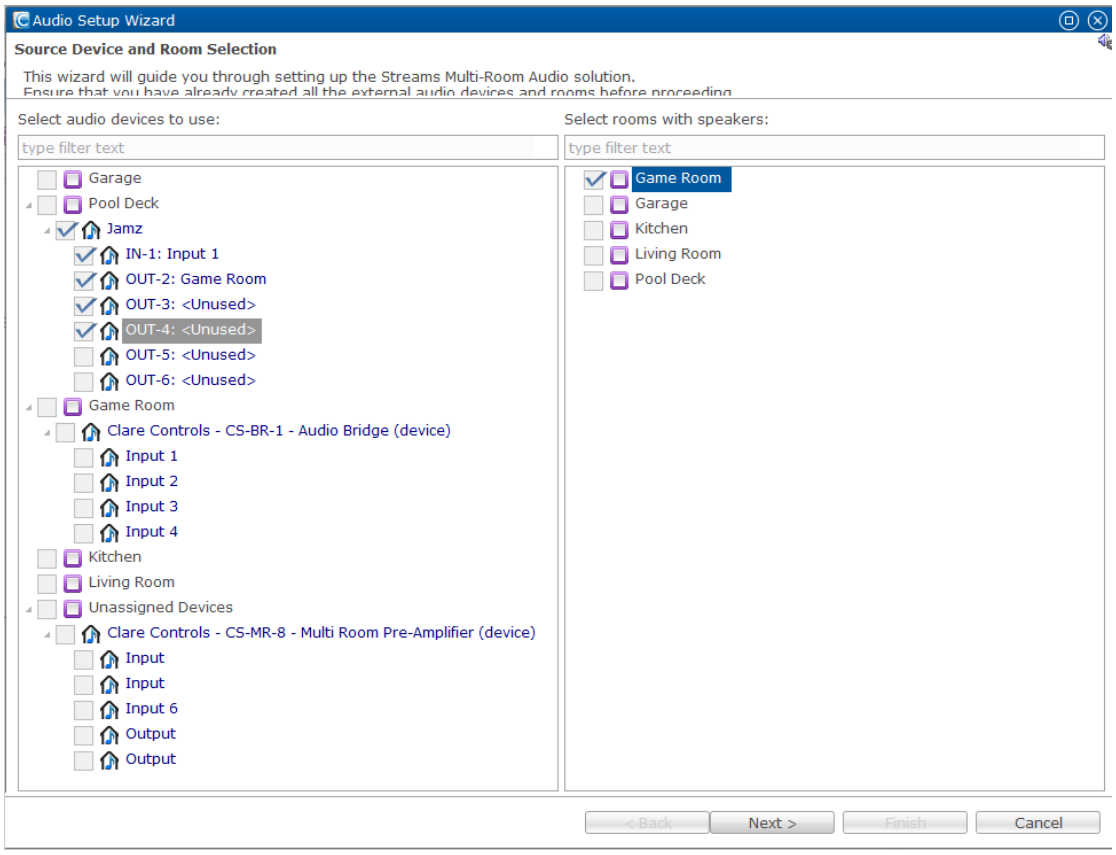
9. Click the Save button. After saving the CS-BR-1 device configuration, the system automatically creates the In boxes.
10. Rename the inputs, as appropriate, for your system.

Configuring the CS-iMR

The ClareHome Streams Integrated Multi-Room Amplifier (CS-iMR) is an audio management device. It uses CobraNet technology to stream digital audio. The CS-iMR comes in four- or six-zone models, each at either 25W or 50W per channel amplification.

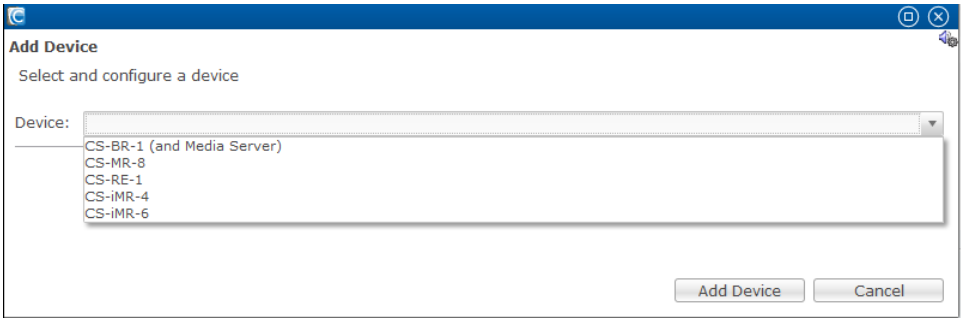
To configure the CS-iMR in Fusion:

1. Log into Fusion and select your project.
2. Click the Services tab, and then click the Open Audio Setup Wizard button .
3. In the left column select the audio devices, and in the right column select the speaker zones you want to use. Click Next.



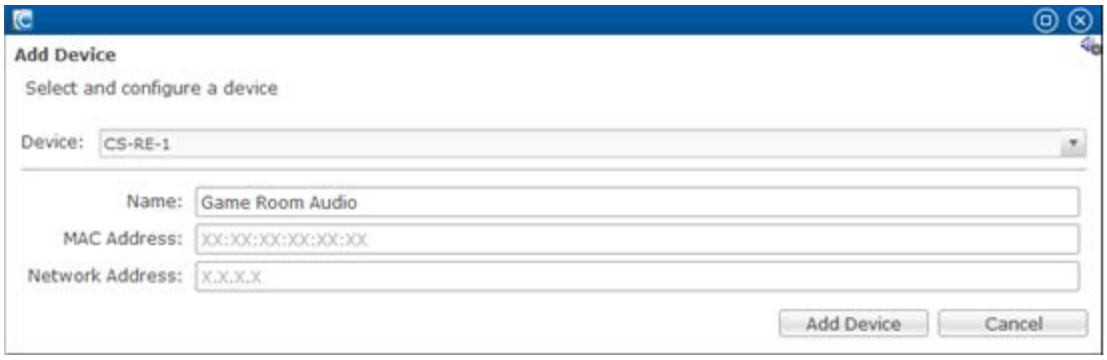
The Configure Devices page will be displayed.

4. Click Add, and then select the device you are adding in the drop-down menu.

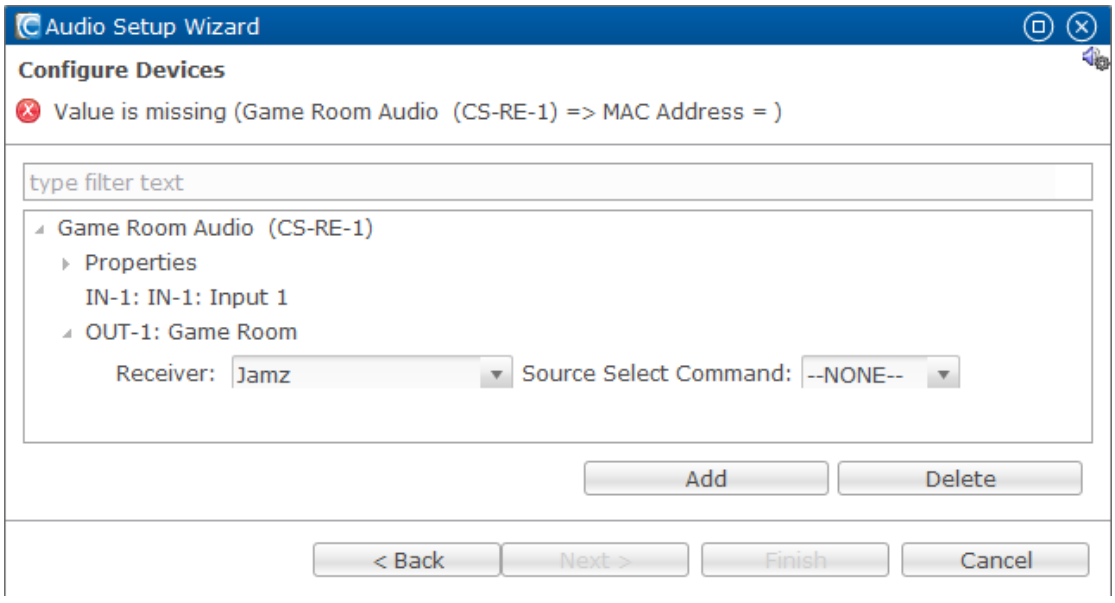


This displays the In and Out ports, MAC Address, and Network Address fields if the iMR was selected.

If another source was selected, different fields will be available, enter the appropriate information in these fields.



5. Click Add Device. Click to expand the device. This will show the different IN and OUT ports available.



6. Double click the text fields that say NONE, customize them. Enter the room and name the service will appear as - for example, the Gym will display Workout Tunes.

   Note: The IN and OUT fields can be expanded to show a receiver option, customize this if you want a different source as the receiver.

7. Click Next and review the information displayed, and then click Finish.

Entertainment configuration

This section provides instructions for configuring entertainment devices in Fusion. Some entertainment devices require other configurations outside of Fusion and we will address them in their respective sections of this document.

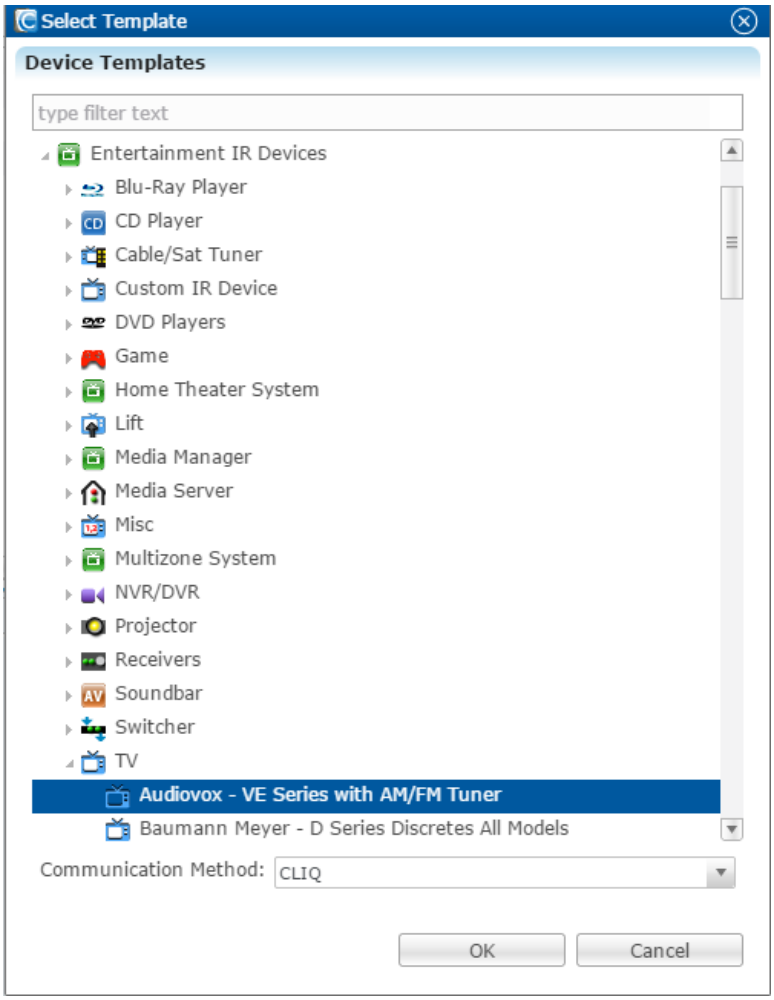
There are two groups of entertainment devices to configure: devices and sources. This section provides instructions for both types of configuration.

Configuring TVs and entertainment devices

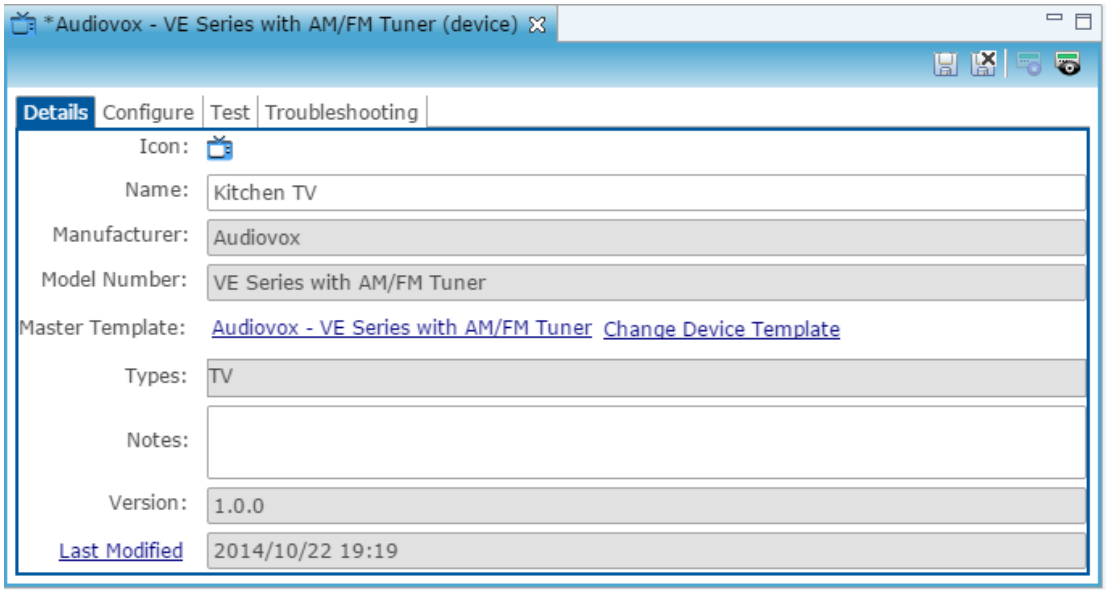
You can configure different TV models in Fusion. Follow the instructions in this section to configure security devices in Fusion.

To configure entertainment devices:

1. From the Devices tab, click the New Device button on the toolbar.
2. From the Device Templates dialog, select the drop-down for Entertainment IR Devices.
3. Open the TV drop-down and select the appropriate TV model.
4. Click OK.



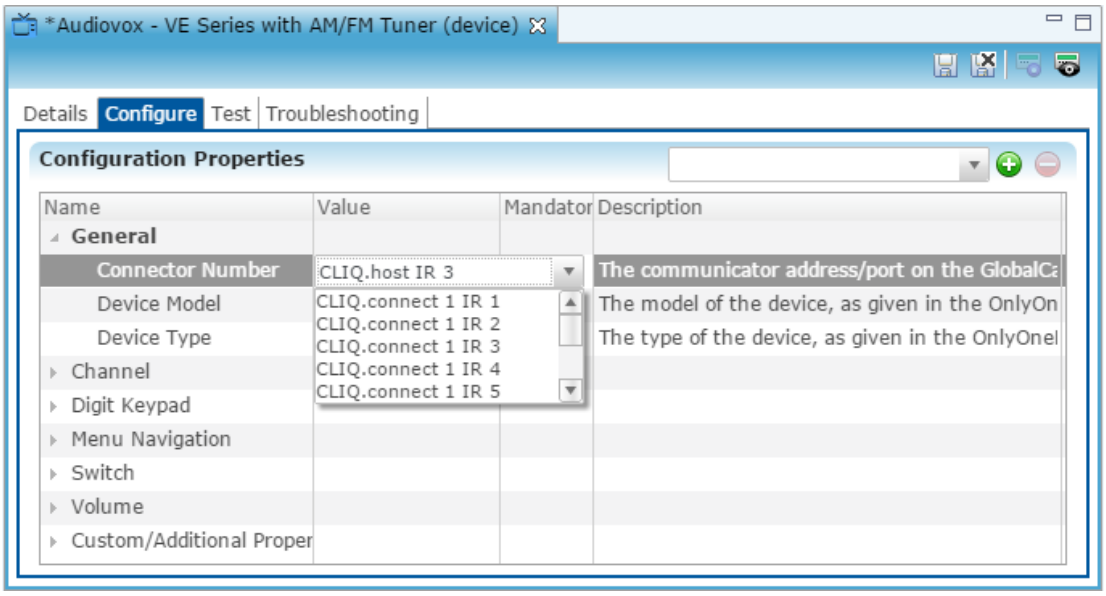
5. Click the Details tab, and then rename the TV, as appropriate.



6. Click the device Configure tab, and then in the Network Address field, enter the network address.
7. In the Connector Number field, select the appropriate Connector Number from the dropdown list.

   The connector number is the port where the TV is connected on the ClareHome Connects or other IR/serial device.
8. Ensure the Device Model and Device Type field values are correct.
9. Click the Save button .

Figure 27: Enter settings in Configure tab

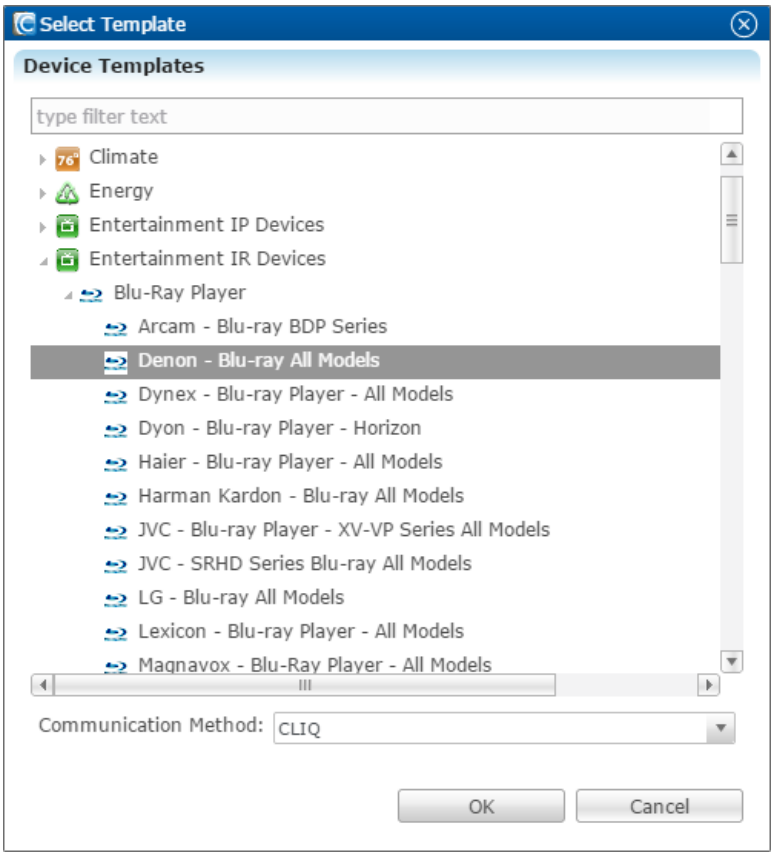


Configuring entertainment sources

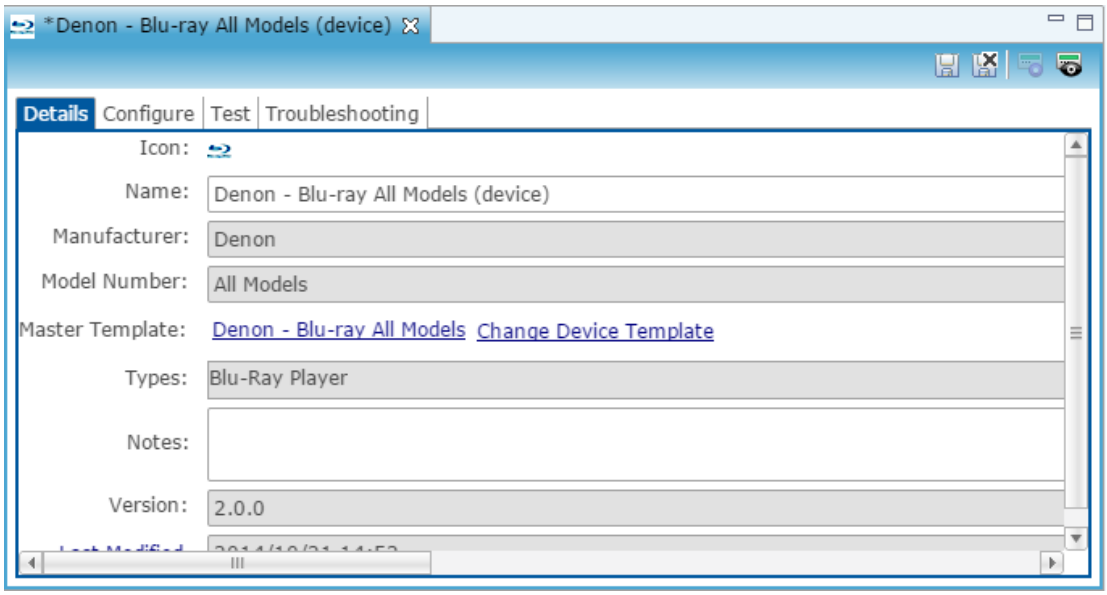
This section provides instructions for configuring entertainment source devices. Entertainment sources include: DirecTV, Blu-ray, DVD players, and so on. Follow the instructions in this section to configure entertainment source devices.

To configure an entertainment source:

1. From the Devices tab, click the New Device button on the toolbar.
2. From the Device Templates dialog, select the Entertainment IR Devices.
3. Expand the Entertainment Devices, expand device type, and then select the appropriate model.
4. Click OK.



5. Click the Details tab, and then rename the device, as appropriate.

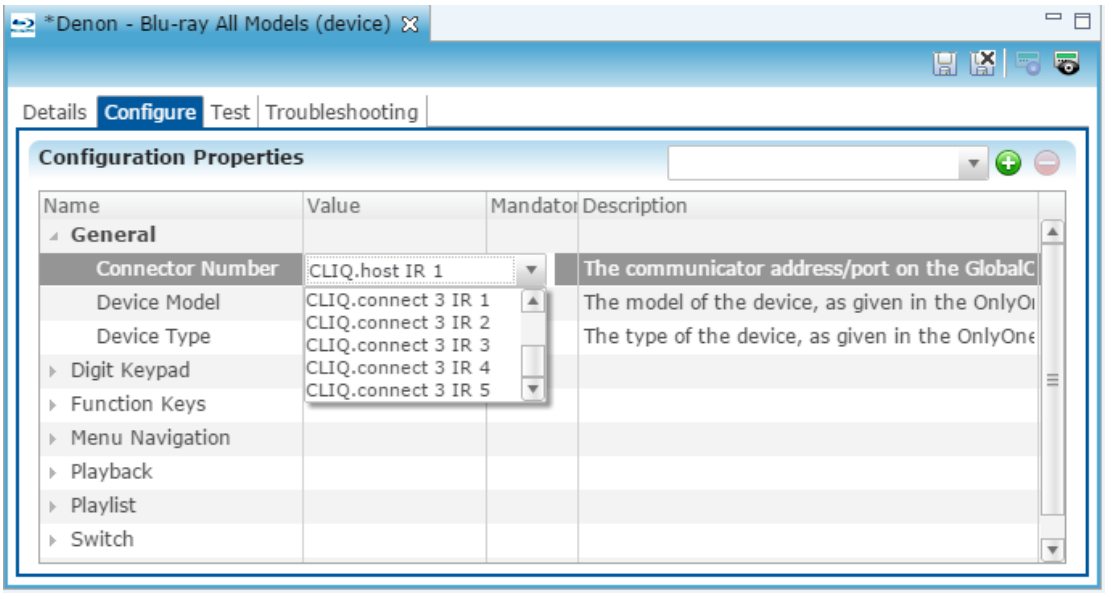


6. Click the Configure tab, and then in the Network Address field, enter the appropriate network address.
7. In the Connector Number field, select the appropriate connector number from the drop-down list.

The connector number is the port at which the device is connected on the ClareHome Connects or other IR/serial device.

8. Ensure the Device Model and Device Type field values are correct.
9. Click the Save button .

Figure 28: Edit Entertainment Source Configure tab



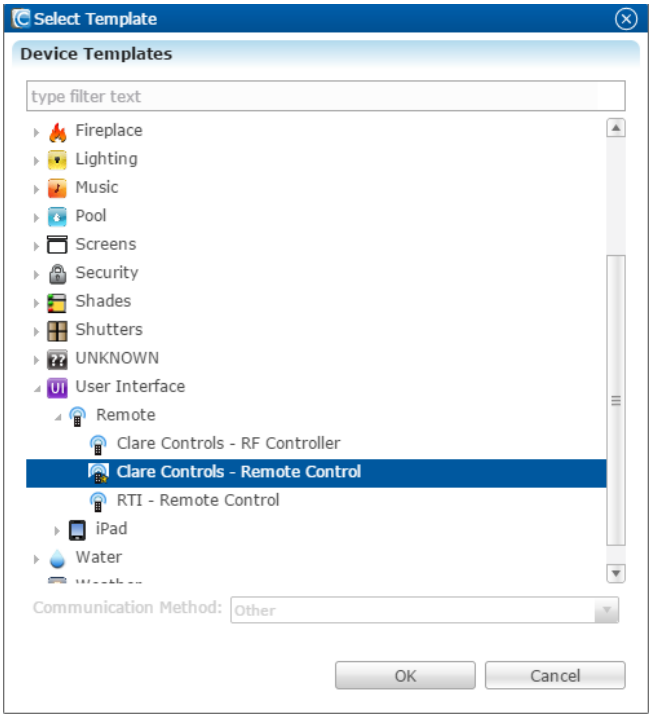
Configuring RC controllers in Fusion

After configuring the entertainment TV devices, you can configure the RC controllers. You only need to configure an RC controller for each ClareHome Connects device you have configured. (This configuration is not according to the number of RF remotes.) Follow the instructions in this section to configure RC controllers.

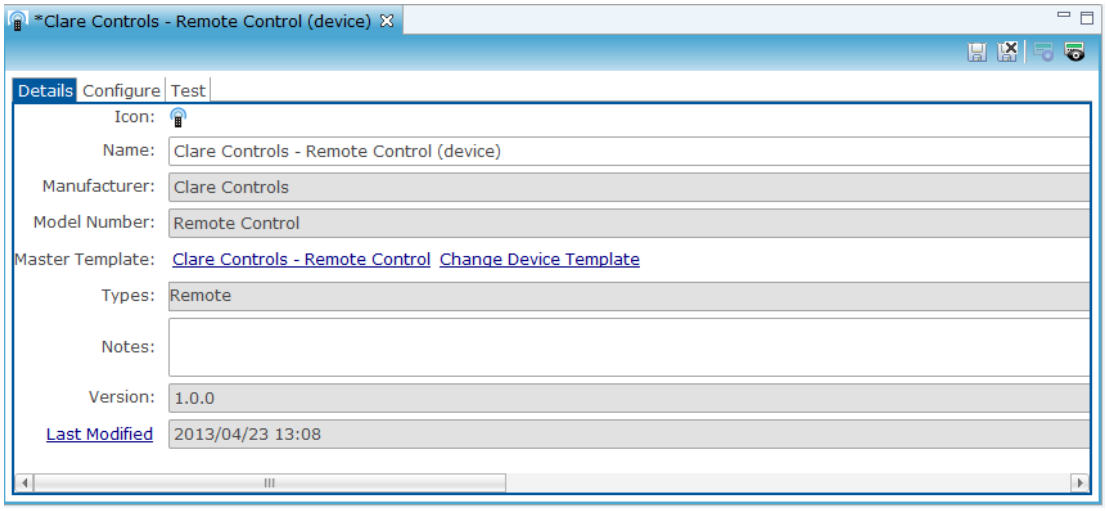
Note: It is not necessary to drag-and-drop RC controllers into rooms within the project. RC controllers will not appear in the customer interface in the Clare Controls App. It is only necessary to configure RC controllers in Fusion for each ClareHome Connects device.

To configure RC controllers:

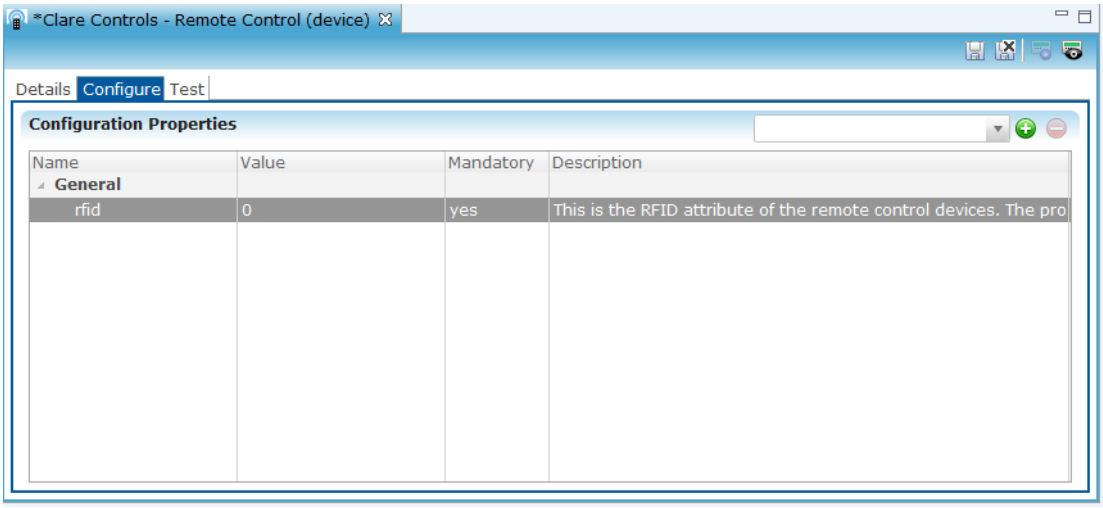
1. Click the **Devices** tab, and then click the New Device button on the toolbar .
2. In the Device Templates dialog, expand User Interface, Remote, and then select Clare Controls - Remote Control.



3. Click OK.
4. Click the Details tab, and then in the Name field, enter an appropriate name for the controller. You may indicate the Equipment Room as the location for the device. This name will not be visible in the Clare Controls App.



5. Click the Configure tab, and then enter the rfid value, this value remains the same as the information populated from the device template. It is not necessary to change the rfid.



6. Click the Save button .

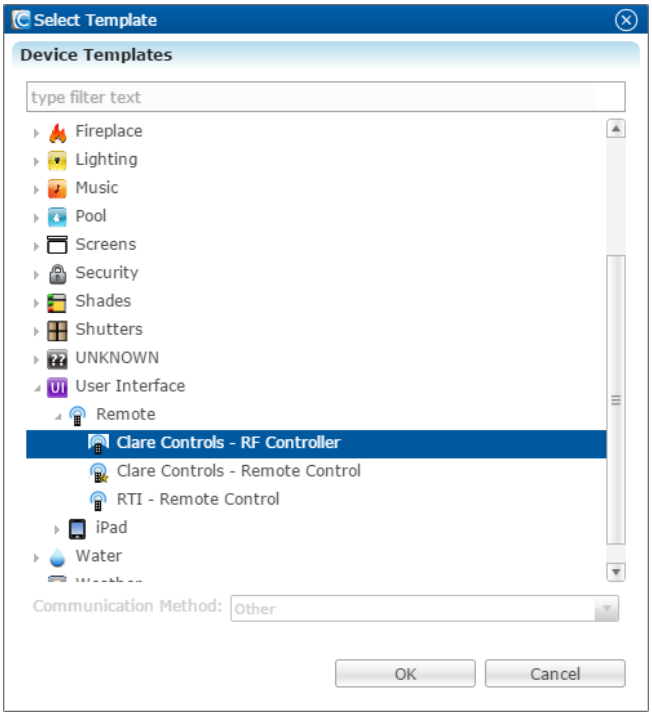
Configure RF remotes

The RF remote supported by ClareHome configuration is the CH-WR-1 remote. It is necessary to program this remote within its own programming software, followed by configuring the remote in Fusion.

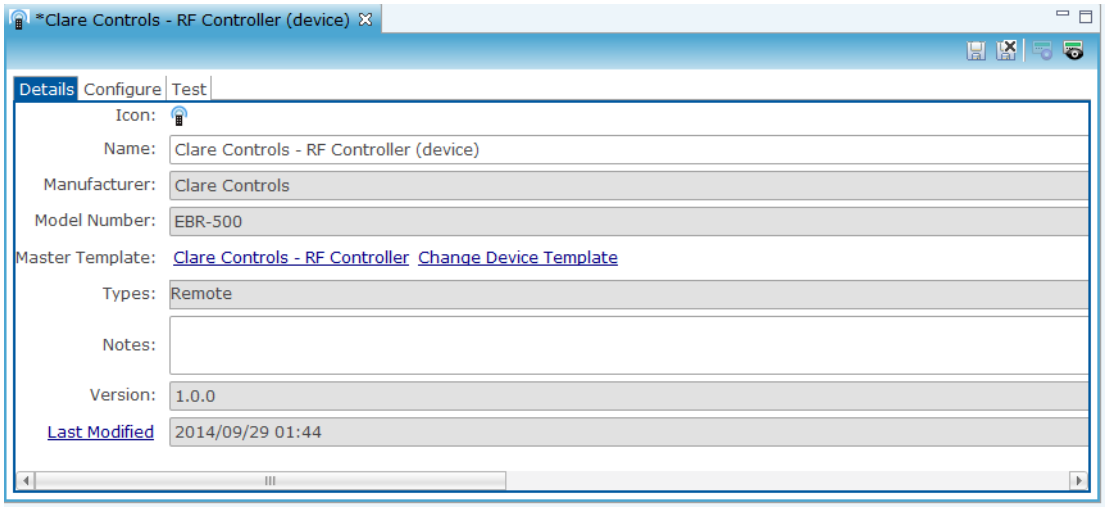
After configuring the RF remote in the remote programming software, follow the instructions in this section to configure each remote in Fusion.

To configure the RF remote in Fusion:

1. Ensure that you are at the project version level.
2. Click the Devices tab, and then click the New Device button on the toolbar .
3. In the Device Template dialog, select the User Interface drop-down, Remote, and then select the Clare Controls - RF Controller template.

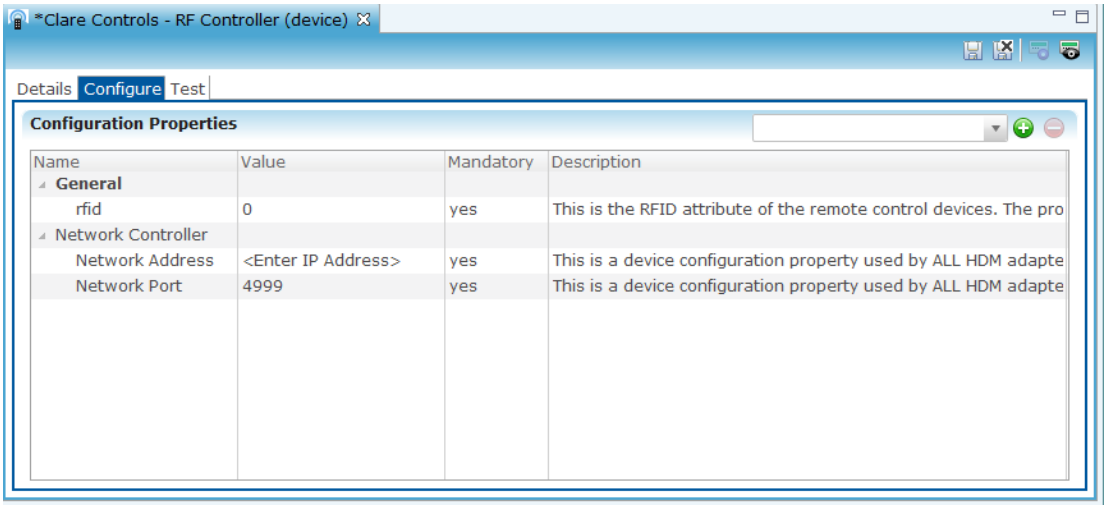


4. Click OK.
5. Click the Details tab for the RF remote control device, and then in the Name field, enter a name for the device.



Note: It is a good practice to name the remote by associating it with the room location for the remote as shown in the example below.

6. Click the Configure tab, and then enter the network address of the associated ClareHome Connects device – for example, the static IP address of the (CC-EBR-500 device).



Note: The default network port for the controller is “4999.” Ensure this is the value for the network port.

7. Click the Save button .

Chapter 8
Managing Services

Summary

In this chapter we describe the concept of services and how you configure services in Fusion. This includes how to use the Audio Wizard to quickly configure various audio components and services.

The system automatically generates some services and others you create manually. Use the Services tab to configure a service that will tell the device how the customer wants to control that device. An example of a service is “watch cable television.”

Services combine devices and rules. It is important to understand that only services will render in the Clare Controls App for the customer to control devices in the system.

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- Services vs. devices - what renders in the Clare Controls App...162
- Understanding control points with services...163
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Services concept

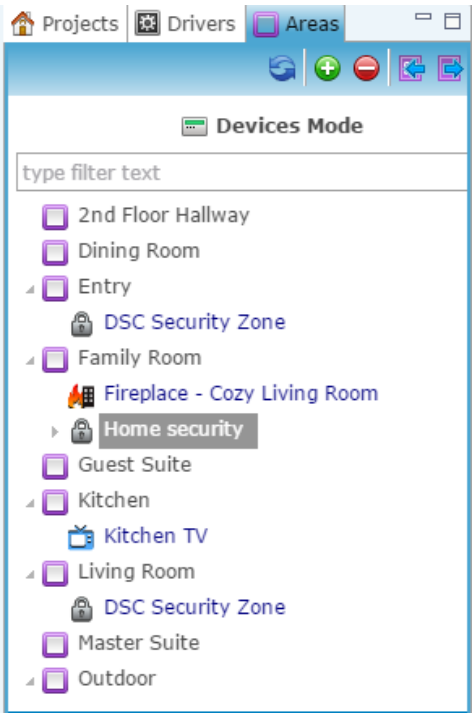
A service is the part of the ClareHome system controls how a device functions in the user interface. Some services control only one device – for example, the Camera Viewer Service controls one CCTV camera. Other services control multiple devices – for example, the Entertainment Service may control the functions of a TV, IR remote, and Blu-ray player, while the Distributed Audio Service may control receivers, multi-room audio devices, and streaming audio services.

Services vs. devices - what renders in the Clare Controls App

You (the dealer and integrator) can only see devices that you assign to the areas within Fusion. (Devices do not appear on the customer's mobile device.) The purpose of seeing devices in these areas is to help you to keep a physical inventory of devices for a particular project. If you do not assign your devices to areas, the system will place them in the Unassigned Devices area.

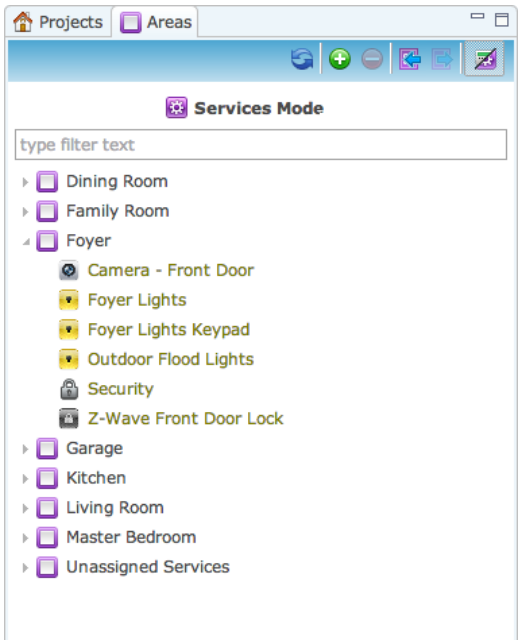
Note: To maintain inventory, it is good practice to assign devices to the areas (rooms) in they are physically located.

Figure 29: Devices as they appear in Fusion



In the Areas tab, you can toggle the Show Services and Show Devices button to see the services that were created and assigned to areas and rooms in the home.

Figure 30: Services as they appear in Fusion



Understanding control points with services

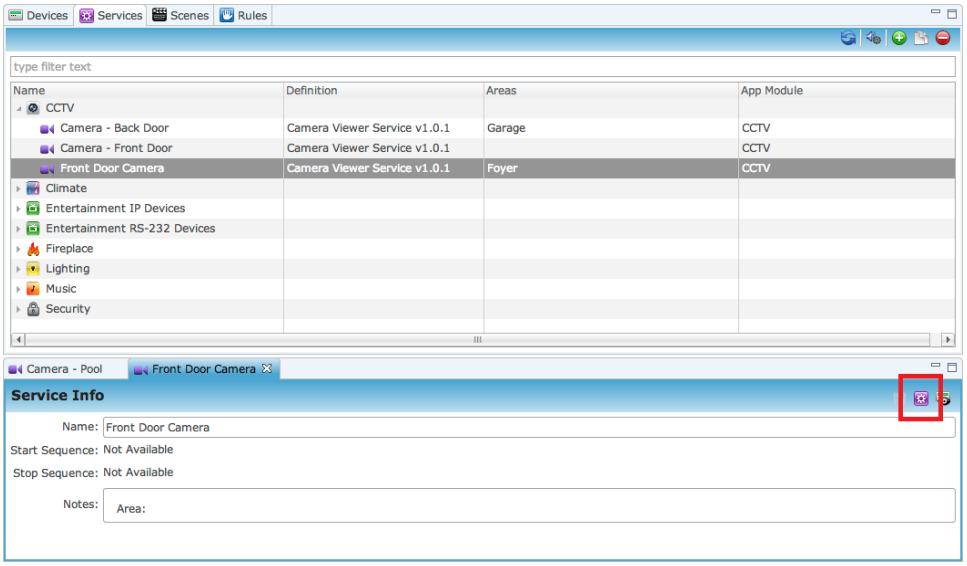
The control points in a service let you define the capabilities of that service. Control points are derived from the device template and display the function groups that can be applied to an individual device – for example, a binary switch.

When creating services, the system indicates required control points for a particular service by marking them with a red asterisk (*), as shown in the figure below. Also, the system will display error messages in red on the bottom of the screen. The system will not advance to the next screen until you resolve all the errors.

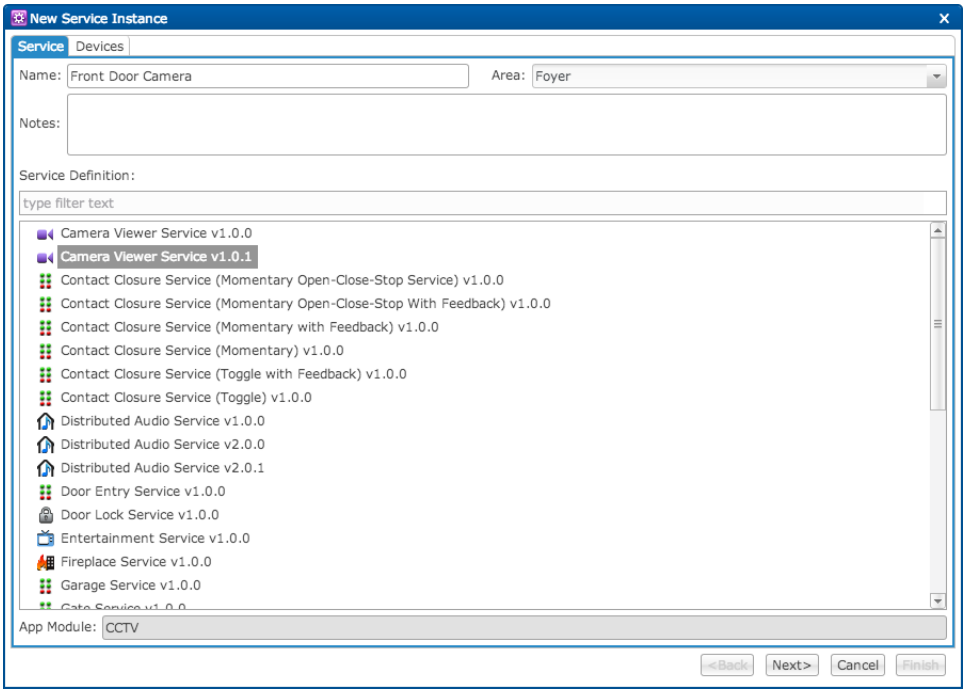
To display control points:

1. Double-click on the service you would like to configure – for example, Front Door Camera.

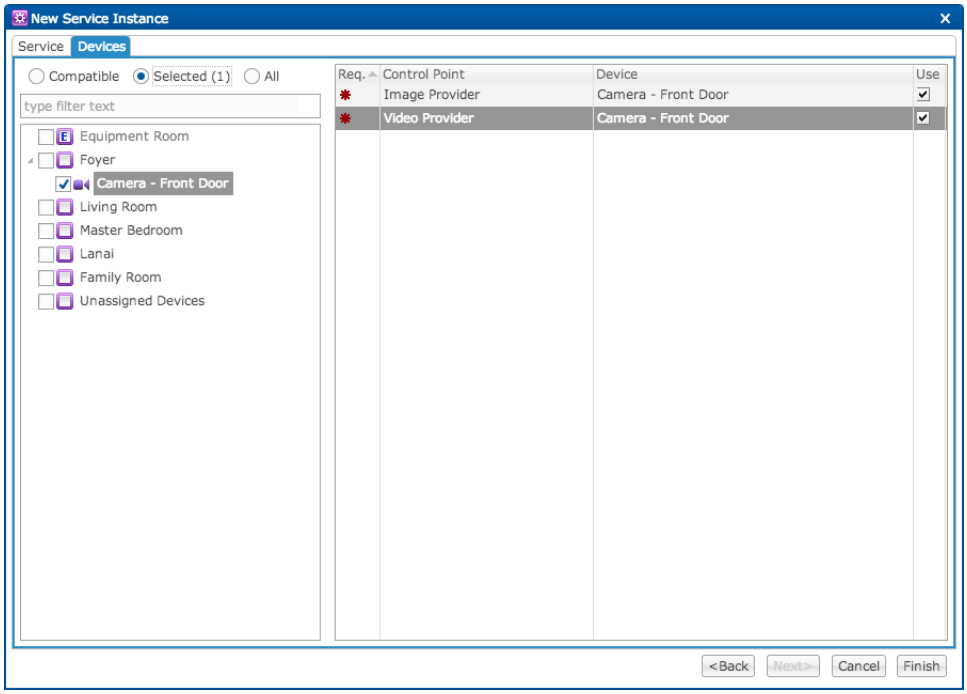
   The system displays the device you requested on the bottom right portion of the screen.



2. Click the Edit Service Instance button on the toolbar.



3. Select the service definition, and then click Next.



4. In the right pane, click the device, and then in the left pane, click the Use check boxes for each control point needed.

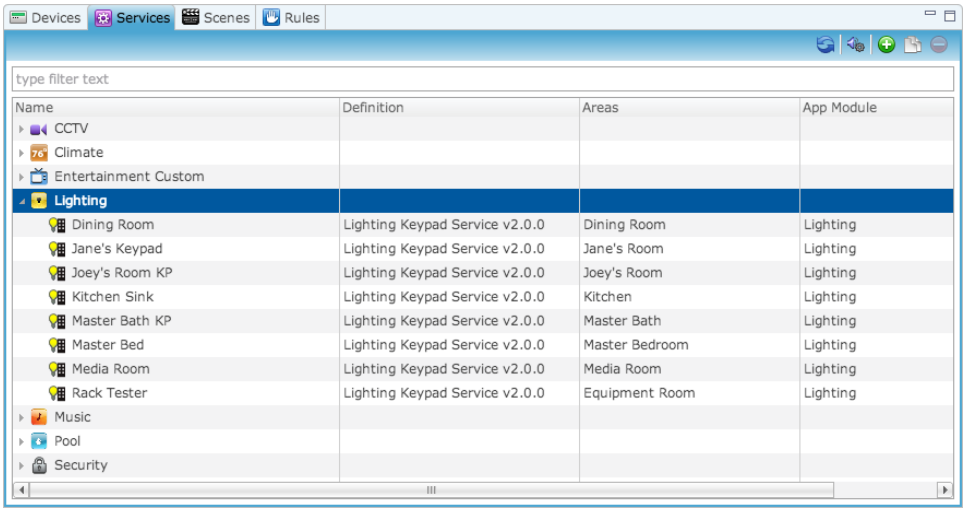
Lighting keypad services

After you import the lighting file into a project, the system automatically creates the lighting keypad services. The lighting file may have automatically generated areas for the project. However, if you created your own areas, you can assign the services to your custom areas using the drag-and-drop feature.

This section provides instructions for creating virtual keypads and for configuring lighting summaries.

To view a lighting keypad service:

1. From the project, import the lighting file.
2. Click on the Services tab to view all the lighting keypad services the system automatically created. If any climate devices (HVAC) were included in the lighting file, then the system automatically created those services as well.



Adding a smart icon indicator for a lighting service

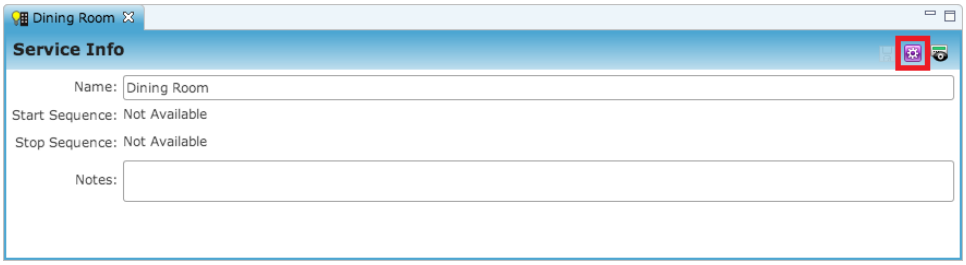
When configuring a customer's lighting, consider adding a smart icon indicator to your project. A smart icon displays on the customer's mobile device and indicates the status (on or off) of a light in a particular area. You can choose any light to be your smart icon; however, a button on your lighting keypad must control the light you choose. Once deployed, the smart icon turns green to indicate when the light on and turns gray to indicate the light is off.

Note: If you have more than one light controlled by a button on your keypad, you may want to have your lighting designer create a master button that detects a load change on any lighting circuit in the room. Assign the master button to be the smart icon indicator so that any light turned on from the keypad will illuminate the smart icon on the customer's mobile device.

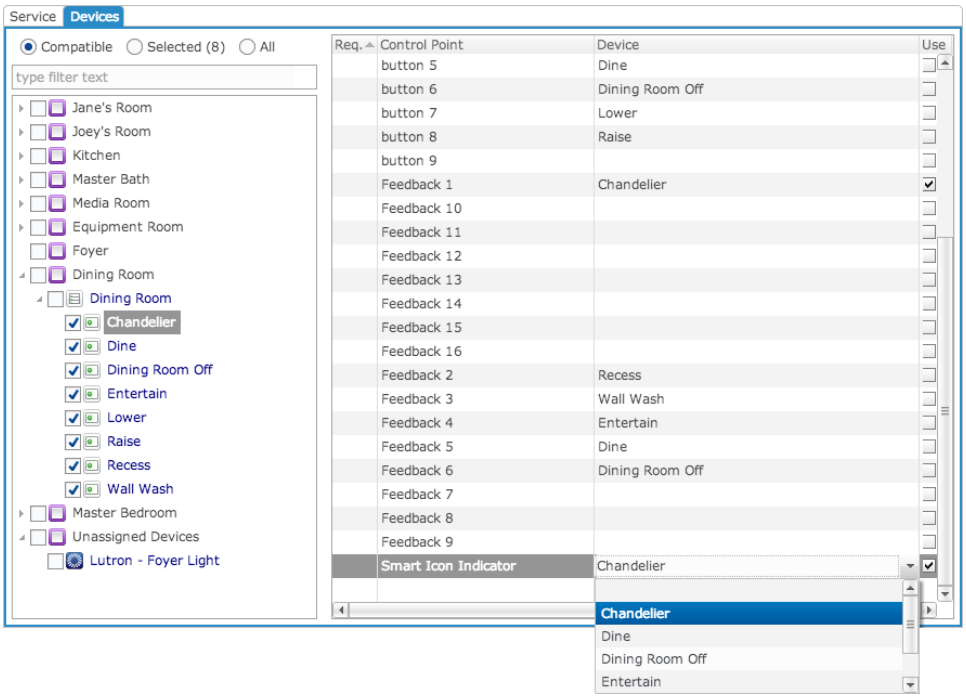
To add a smart icon indicator:

1. On the Services tab, double-click the keypad service you want.

   Fusion displays the Service Info tab for that service.



2. Click the Edit Service Instance button to display the Service Instance dialog.



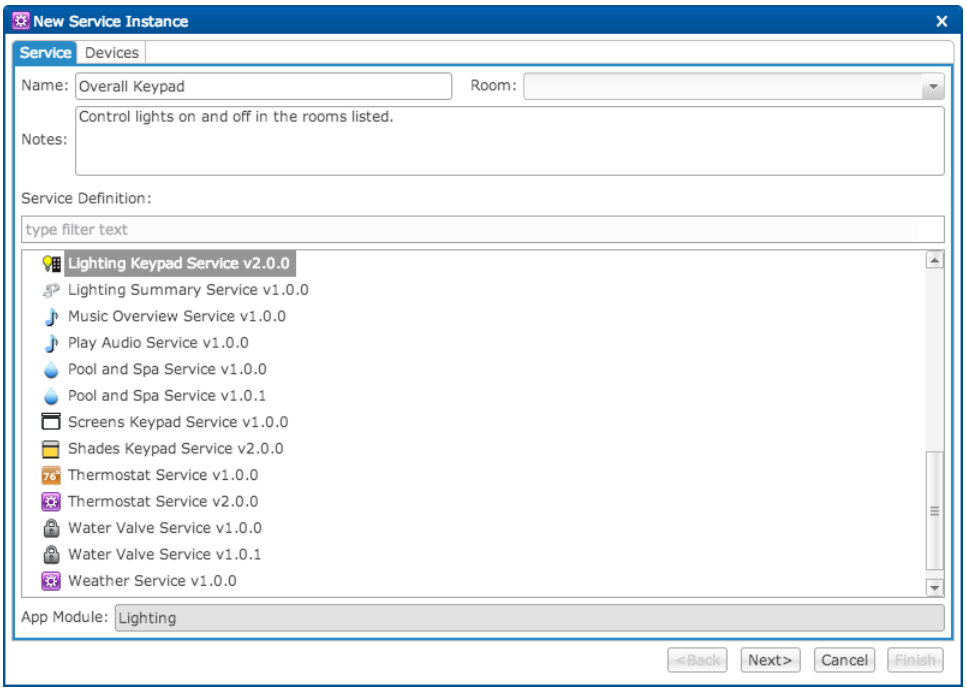
3. In the right pane, scroll down to display the Smart Icon Indicator control point.
4. Click inside the Device field for the Smart Icon Indicator to display the drop-down list, and then select the button you want to trigger the smart icon.
5. Click Finish.

Creating virtual lighting keypad services

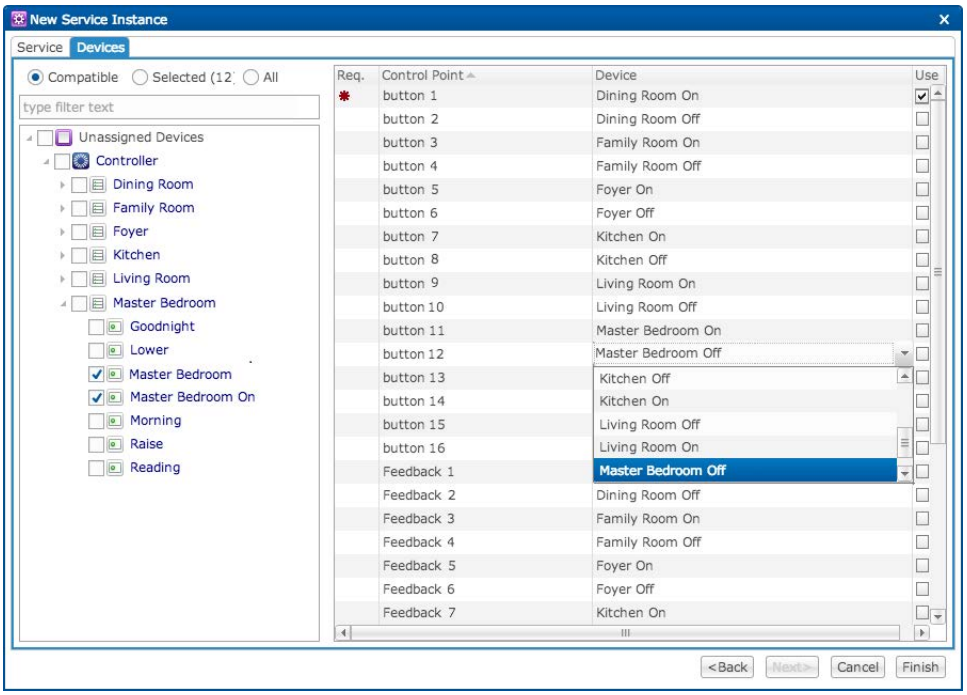
Note: When using the Lighting service, you can create up to sixteen buttons on a virtual keypad that will be available in the Clare Controls App. The buttons you assign to the virtual keypad can be any combination of buttons from any keypad configured in your system. Follow the instructions below to create a virtual lighting keypad for your customer.

To create a lighting service and make it available in the Clare Controls App:

1. Click the Services tab, and then click the New Service Instance button to display the New Service Instance dialog.



2. In the Name field, enter an appropriate name for the keypad.
3. In the Notes field, enter any additional information about your virtual keypad.
4. In the Service Definition area, select Lighting Keypad Service.
5. Click Next to display the devices.



6. On the left side of the dialog, expand each keypad and select the buttons you want to include in your virtual keypad.

   The buttons you select will appear in the drop-down lists for each button and feedback on the right side of the dialog.

7. On the right side of the dialog, click in the line containing the button you want to define to display the drop-down arrow.

8. Click the arrow and choose a virtual button from the drop-down list.

   The buttons that appear in this drop-down list are the buttons you selected earlier on the left side of the dialog.

9. Repeat steps 7 and 8 for each button you want to define.

10. If you would like to add a smart icon, scroll down to display the Smart Icon Indicator control point, click the Device field to display the drop-down list, and then select the button you want to trigger the smart icon.

11. Click Finish.

You can now assign the virtual keypad to the customer's mobile device. See "Managing spaces" on page 199.

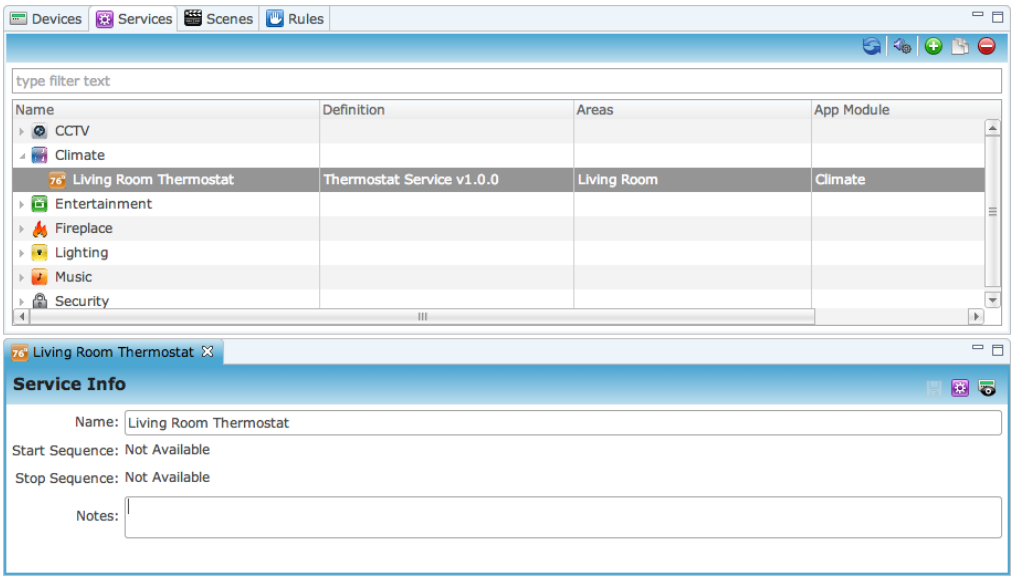
Creating climate services

This section provides instructions for creating climate services.

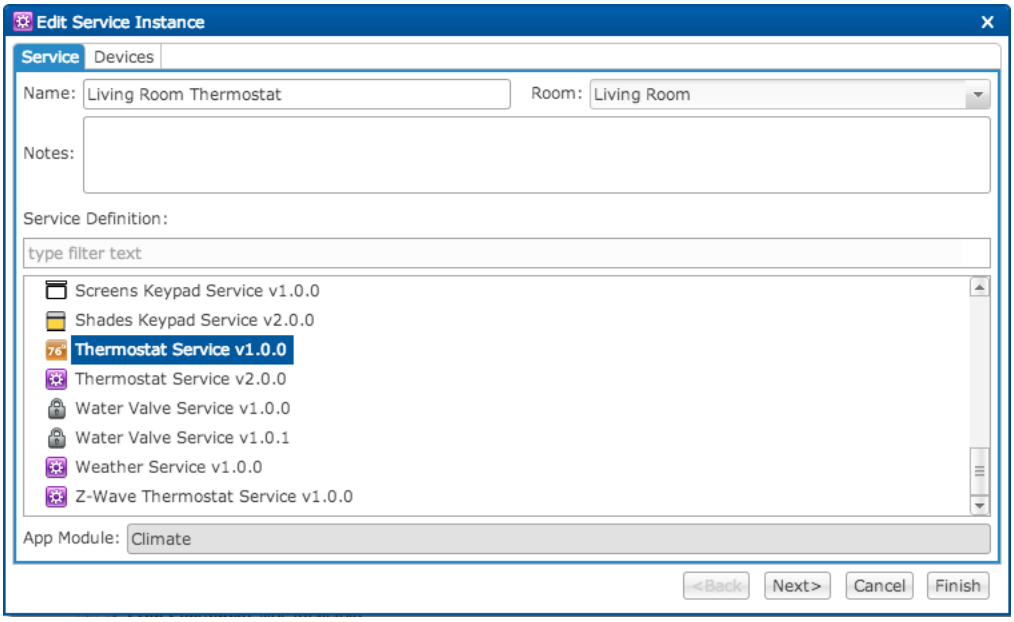
Note: This service configuration section is only applicable if your climate (HVAC) configuration did not import with the lighting file – for example, a Lutron lighting file. If the HVAC did import with the lighting file, then the system automatically created any necessary climate services.

To create a climate service:

1. Open the configuration editor for your climate HVAC device.

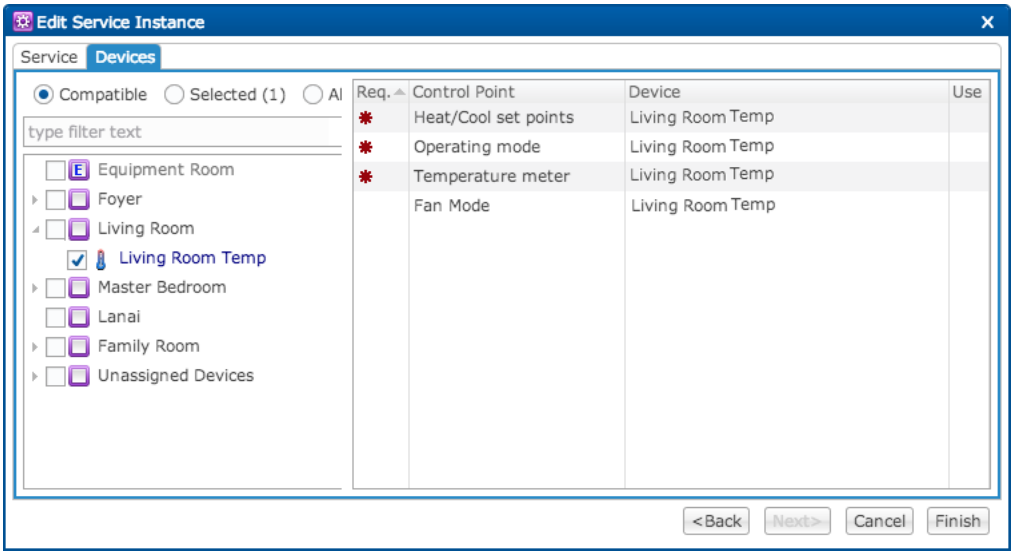


2. Click the Services tab, and then click on the Edit Service Instance button .



3. In the Name field, rename the service, as appropriate,
4. In the Notes field, enter any additional notes for this service.
5. Click Next.

   Note: The system automatically selects the control points to include for the climate service.

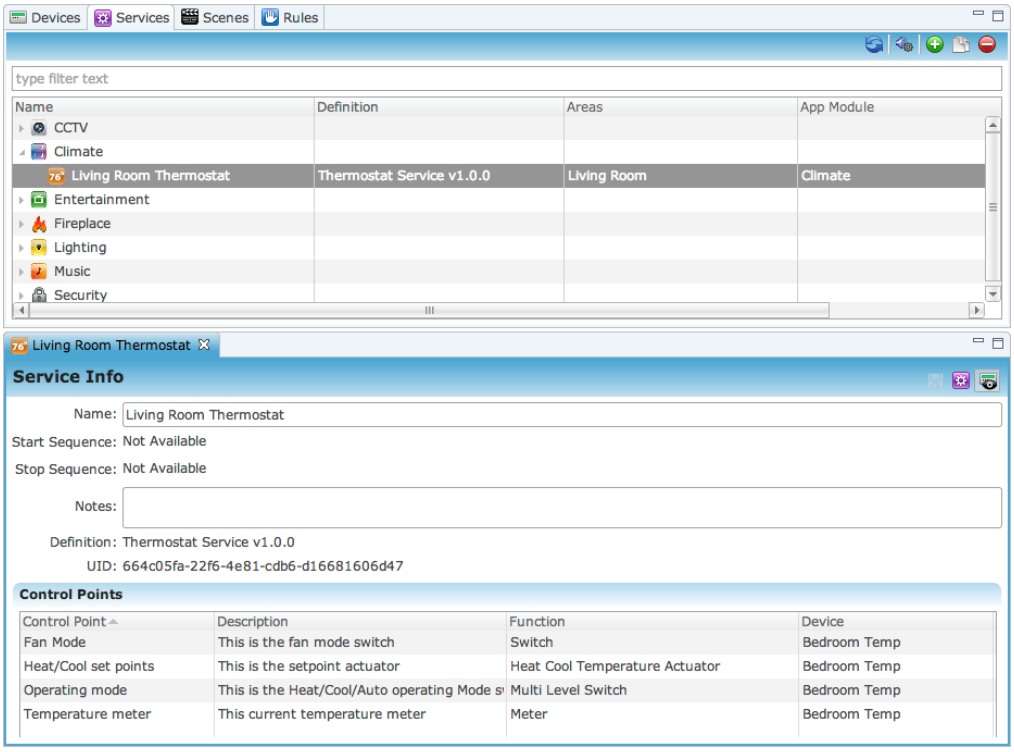


6. On the left side of the dialog, expand area containing the climate control, and then select it.

   The control you select will appear in the drop-down lists on the right side of the dialog.

7. On the right side of the dialog, click in the line for the control point, and then select the control from the drop-down list.
8. Repeat step 7 for each required control point.
9. Click Finish.
10. Review the information and ensure the climate service is correctly configured.

Figure 31: Review service information

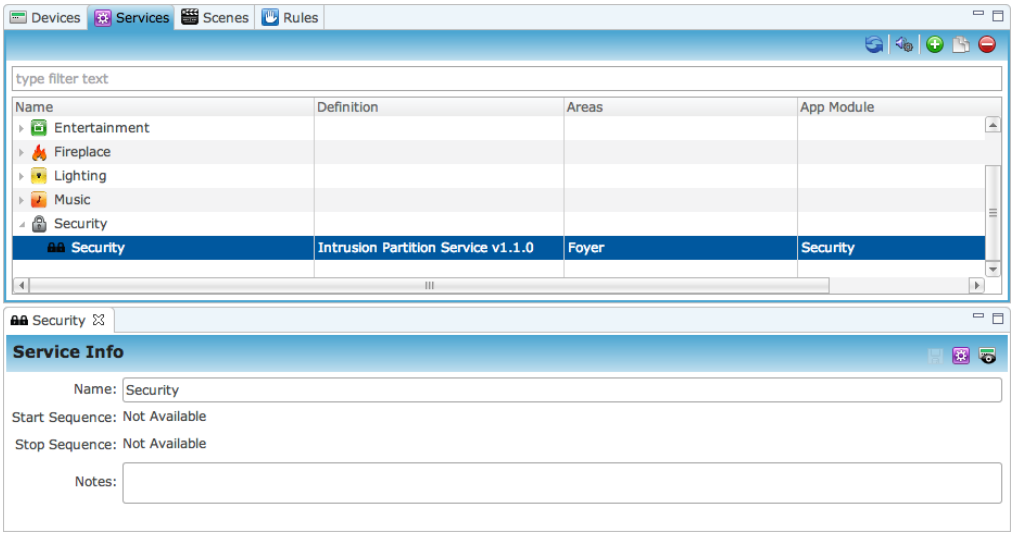


Creating security services

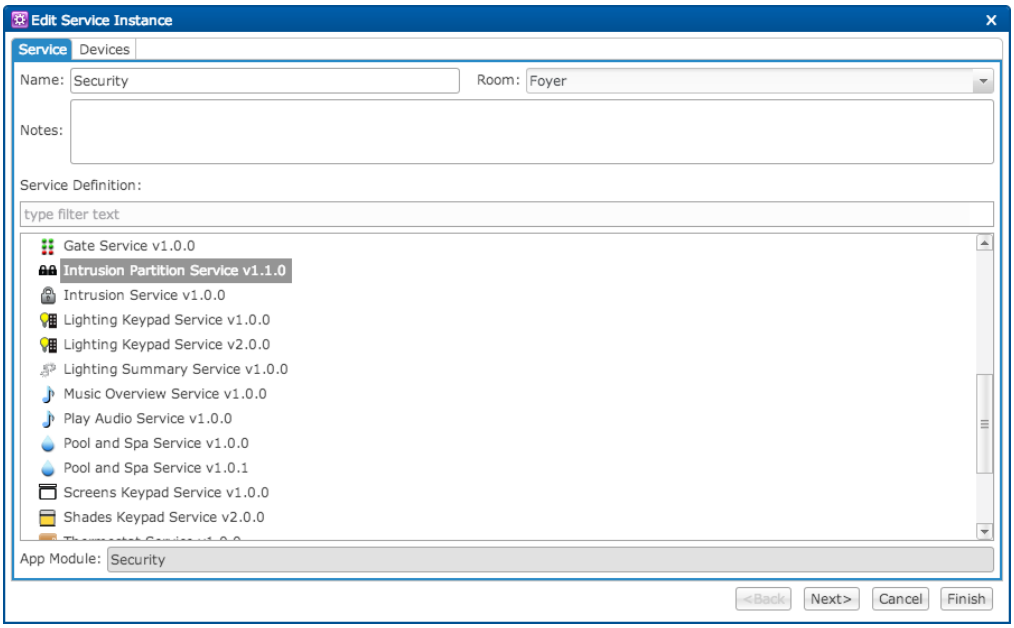
This section provides instructions for creating security services.

To create a security service:

1. Open the configuration editor for your security device.

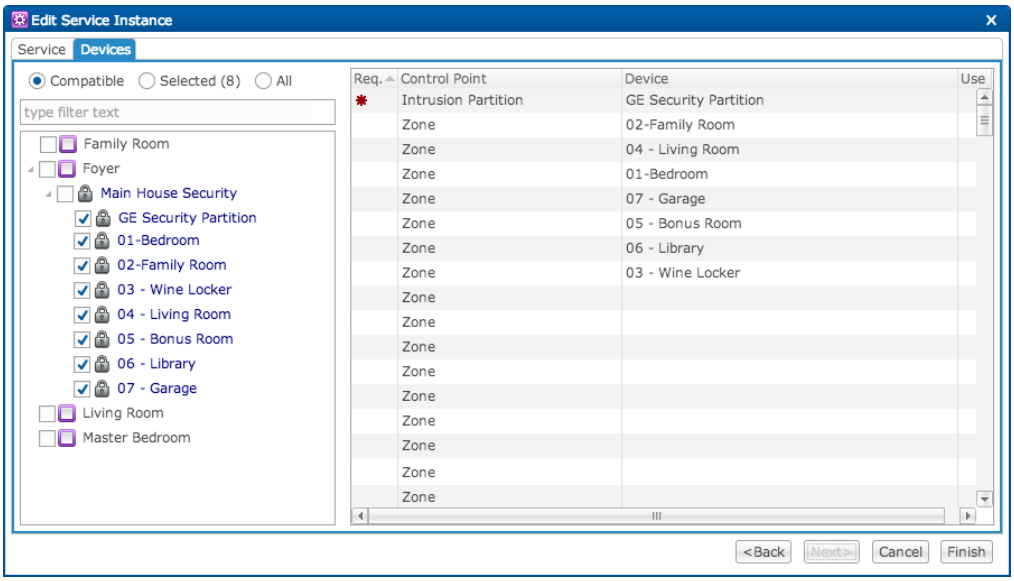


2. Click the Services tab, and then click on the Edit Service Instance button to display the Edit Service Instance dialog.



3. In the Name field, rename the service, as appropriate,
4. In the Notes field, enter any additional notes for this service.
5. Click Next.

   Note: The system automatically selects the control points to include for the climate service.

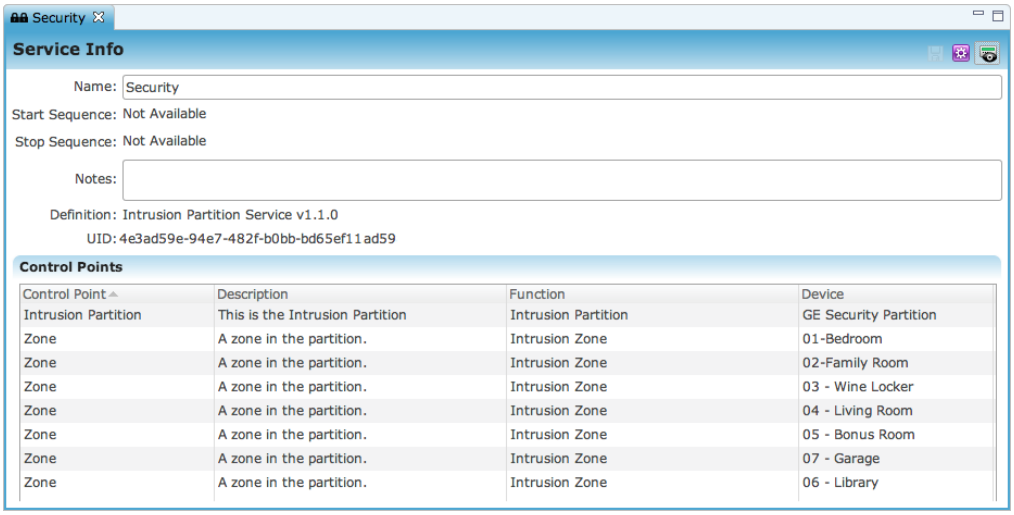


6. On the left side of the dialog, expand the area containing security, and then select it.

The control you select will appear in the drop-down lists on the right side of the dialog.

7. On the right side of the dialog, click in the line for security, and then select the control from the drop-down list.
8. Repeat step 7 for each required control point.
9. Click Finish.
10. Review the information and ensure security is correctly configured.

Figure 32: Review service information



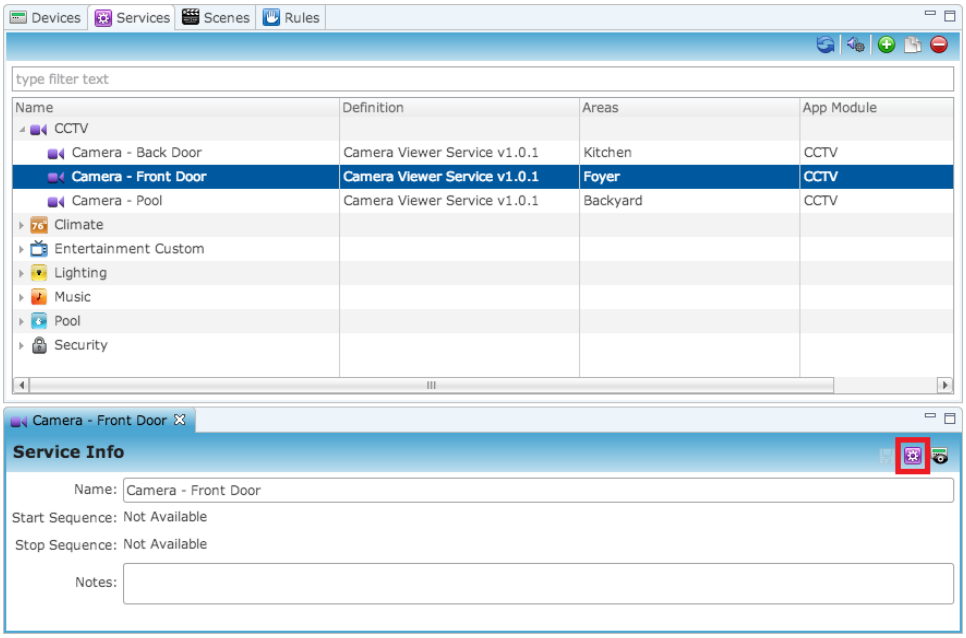
Creating CCTV services

This section provides instructions for creating CCTV Services.

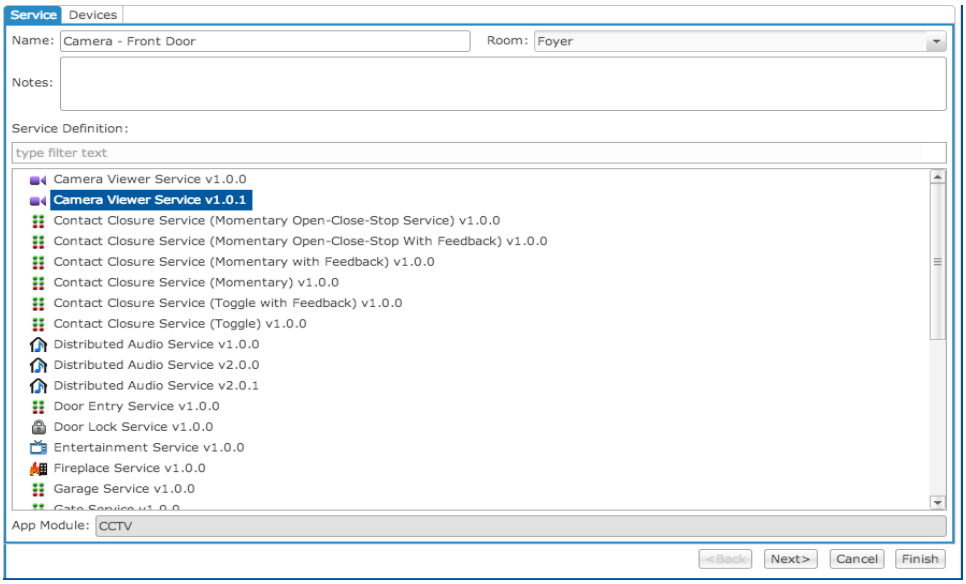
Note: ClareHome and Fusion do not support USB cameras.

To create a CCTV service:

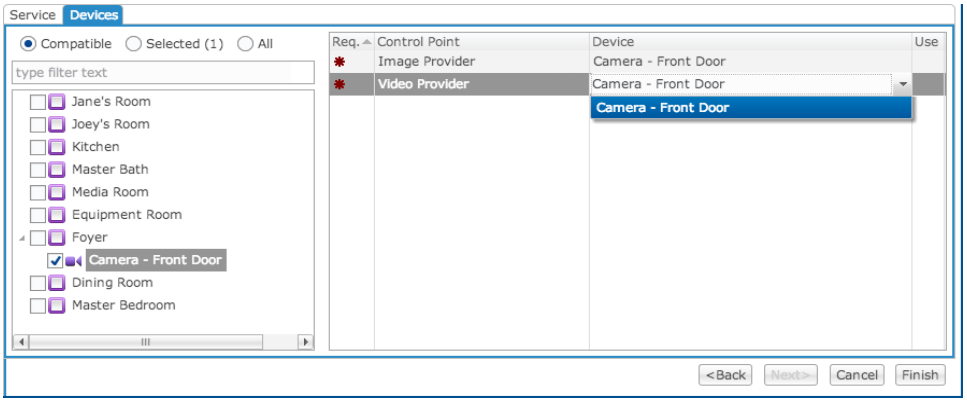
1. Open the configuration editor for your CCTV device.



2. From the Services tab, click on the New Service Instance button to display the Create Service Instance dialog.



3. In the Name field, enter a name for the service, if you have not already named it.
4. In the Notes field, enter any additional notes for the service.
5. In the Service Definition area, ensure that the correct service definition is selected for your device, and then click Next.
6. In the Devices screen, the service automatically selected the correct control points for that service.



7. In the left pane, expand the tree and click the appropriate service (e.g., Camera - Front Door).
8. In the right pane, click in the Image Provider control point Device field, and then select the device from the drop-down list.
9. Repeat this process for the Video Provider field.
10. Click Finish.

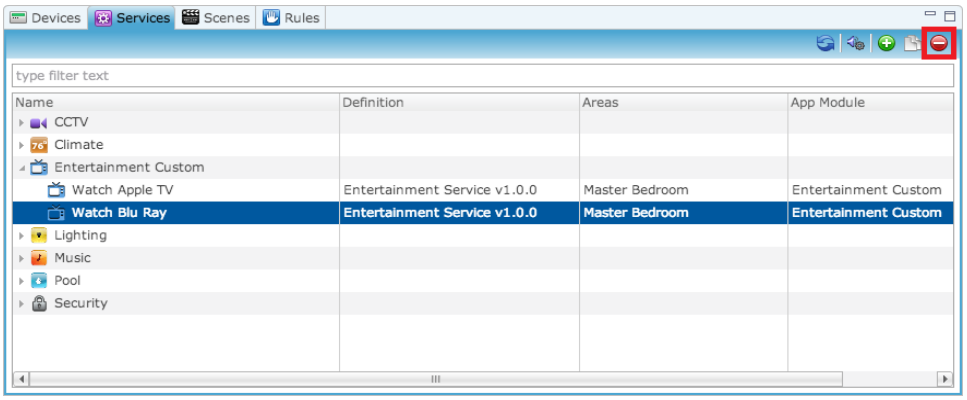
    The first CCTV service has been created.
11. Click the Show Advanced Fields button , and then review the information to ensure the CCTV service is correctly configured.

Deleting a service

You can delete services, as necessary.

To delete a service:

1. Click the Services tab, and then highlight the service you want to delete.
2. Click on the Delete Service button .



Chapter 9
Managing Scenes and Rules

Summary

This section explains the events and conditions and the actions and commands in the system and how they relate when you create scenes and rules.

- Scenes are a collection of rules.
- Rules define individual actions and commands within a scene and the event and condition in which a scene will occur.

A rule links an event and condition to an action or command. The rule identifies events affecting its conditions. When such an event occurs, the rule executes the command.

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Understanding events and actions in the system

All event types in the system (UI event, time of day event, weekly recurring event, remote control condition, etc.) are conditions that can trigger associated actions and commands.

A command is an executable, pre-defined action that has a type and ID. Scenes and rules in the system (configured in Fusion) associate specific actions and commands along with those events.

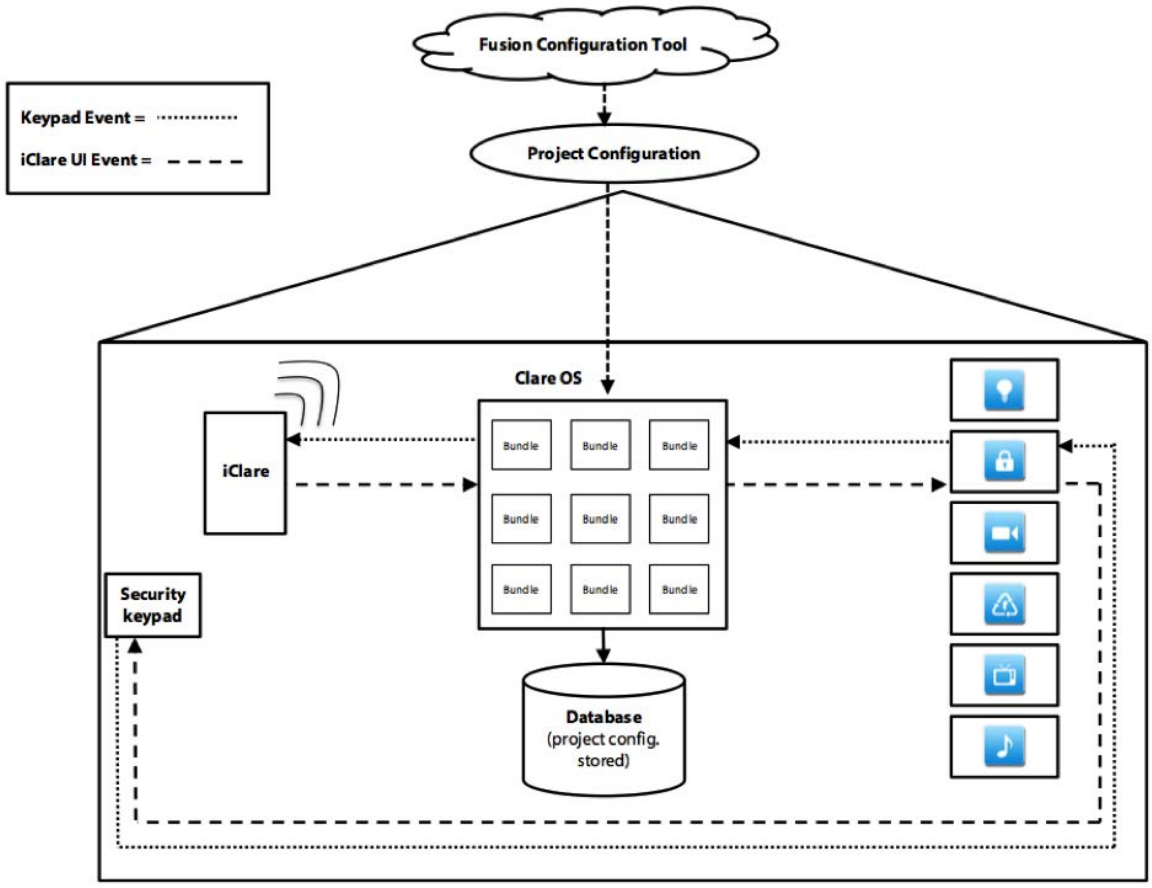
You can configure scenes and rules in Fusion based on specific events and conditions and the needs of your customer. Events can come from multiple trigger points. The following can be events that trigger actions in the ClareHome system.

- UI event in the Clare Controls App
- Key press on a security keypad
- Scheduled event for a certain time of the day/week/month

In the diagram in Figure 33, we can see one trigger is arming the security system via the physical keypad, which tells ClareHome the security system is armed and renders this in the Clare Controls App.

We also show the opposite trigger in which the customer arms the security system from the Clare Controls App. This arms the security system and renders on the physical keypad as armed.

Figure 33: Events/conditions trigger actions and commands diagram



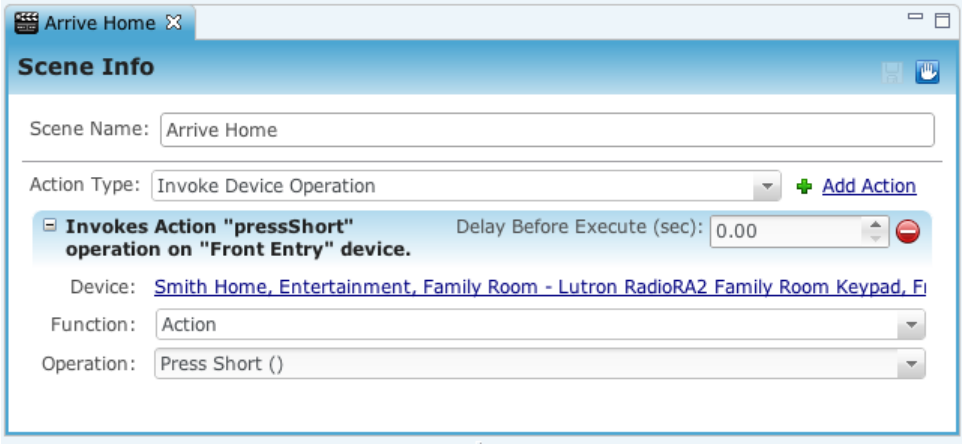
Creating and managing scenes

Before a scene can become active, you must create a rule for it. Scenes will not operate without rules.

Note: During device configuration, you may have assigned devices to logical locations on the Areas tab. These devices will not render in the Clare Controls App. Only services render in the Clare Controls App, but are available for use when creating scenes.

To create a scene:

1. Click the Scenes tab, and then click the New Scene button .



2. In the Scene Name field, enter a name for the scene and any tags.
3. In the Action Type field, select on the following options from the drop-down list.

   Device-Related Action

   - Set Device Property - This is setting a property that is directly setting a variable (an example is Discreet Value Volume = 80%).
   - Invoke Device Operation - This invokes Device Class Objects (function groups from a device's template).

   Zone/Area-Related Actions

   - Set Property to Area Devices - This is all properties within a particular area.
   - Invoke Operation on Area Devices: This causes the operation to occur on all devices within a selected Area(s). You may select one or more Areas for this Action Type.

   Notification Commands

   - Dispatch Notification Event - This action type is for Notifications.
   - Send Notification - This action will send a Notification to devices configured in the Notification Rules tab.
   - Scene - This action type plays out a Scene as configured in your associated Rule.
4. To the right of the Action Type field, click Add Action .
5. From the Add Action properties, select a Device or drag-and-drop a device from the Areas pane.

   Devices in the Areas pane only appear in Fusion (such as for the purpose of creating Scenes) and DO NOT render in the Clare Controls App.

6. From the Function drop-down list, select a function for the device action.

   The Function options vary depending on the Action Type you select. For example, if you select the Send Device Property action type, and the device is a keypad, then the function options include Pulse Short or Pulse Long.

7. Select an operation for the device action. Choose from the following options:
   - Press: This operation is a long press and hold.
   - Pulse Short: This operation selects and enables a scene. This is similar to pressing a keypad button and immediately releasing it.
   - Pulse Long: This operation is an extended press for devices such as screens or shades. This operation is released by adding the release operation to the scene (refer to the bullet point below describing the release operation).
   - Release: This is the release from the pulse long operation.

8. Select how long (in seconds) you want the scene to delay, if any, before it executes in the Delay Before Execute (sec): field.

9. Click the Save button .

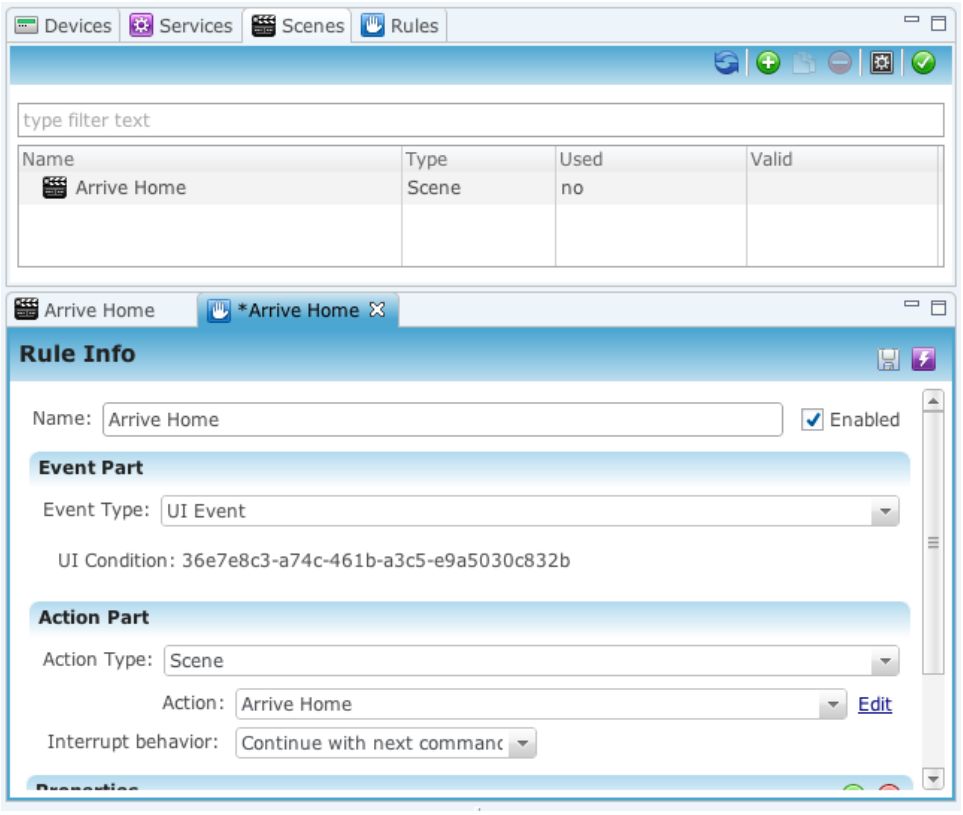
After creating/saving your scene, you can create a rule directly from that scene (automatically linked to that scene) by clicking the Create Rule button . Continue with the following section to learn about Rules.

Creating and managing rules

Create rules that associate specific actions and commands for events.

To create a rule:

1. Click on the Rules tab, and then click the New Rule button .



2. In the Name field, enter a name for the rule – for example, “Arrive Home.”
3. In the Event Type field, select an event type from the dropdown list. See “Event Types” below.
4. From the Action Part section of the Rule Info, select the action type from the drop-down list. The action type is the same setting as the associated scene action type.
5. Select the action from the drop-down list. The action options are completely dependent for the chosen action type. (Refer to step above for the action type.)
6. Click the Save button.
7. Test the rule by deploying the project and clicking on the Test Rule button .

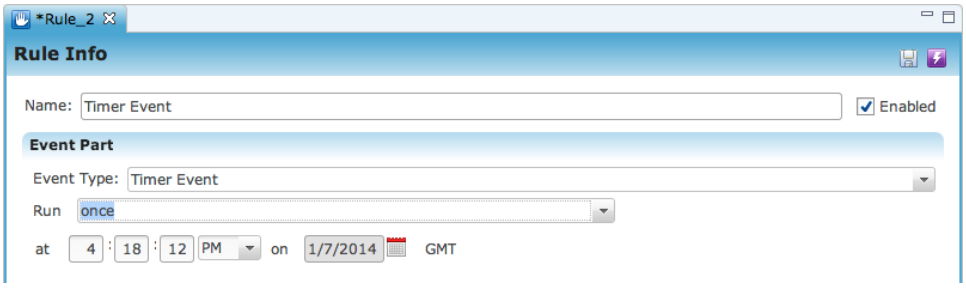
Event Types

- **Device Property Value Event:** This is the value of the device property.
- **Logic Event:** Logic events are based on a combined set of logical circumstances that you build for the customer in the configuration. The following example describes a logic event: “If my refrigerator breaks AND my dishwasher breaks AND I am at work OR I am on vacation, THEN send me an SMS” (mobile text message).
- **Remote Control Condition:** The remote control condition extracts the trigger codes from the URC Complete Control remote programming software. You would have already programmed your RF remote prior to using this event type in a rule.
- **Status Event:** This is based on the status of a device. The following example describes a status event: “If my Crestron lights report DISCONNECT, THEN I want to receive an email about this event.” In this example, the customer will receive this an email notification.
- **UI Event:** This event is based on customer input selection in the Clare Controls App. If the customer selects a scene from the Clare Controls App, the associated event will occur. A UI event is usually associated with the following device operations: Press, Pulse Short, Pulse Long and Release (for a description of device operations, see previous page).
- **Timer Event:** This event is based on the date, day of week, time, and continues to run forever, stop at a specified date and time, or activate a fixed number of times.

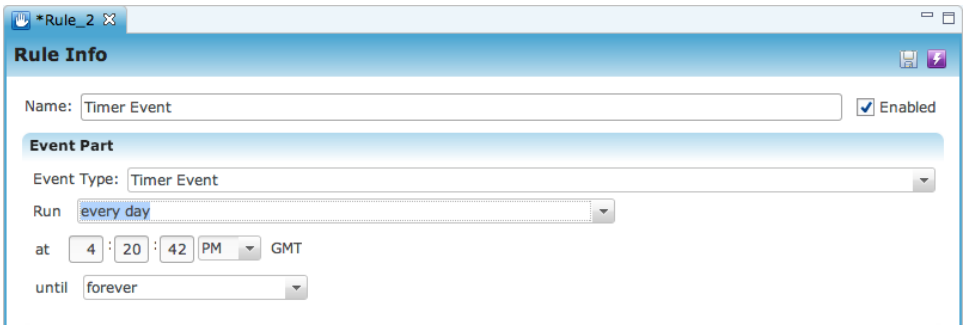
Timer Events

Create rules to trigger events based on the date and time.

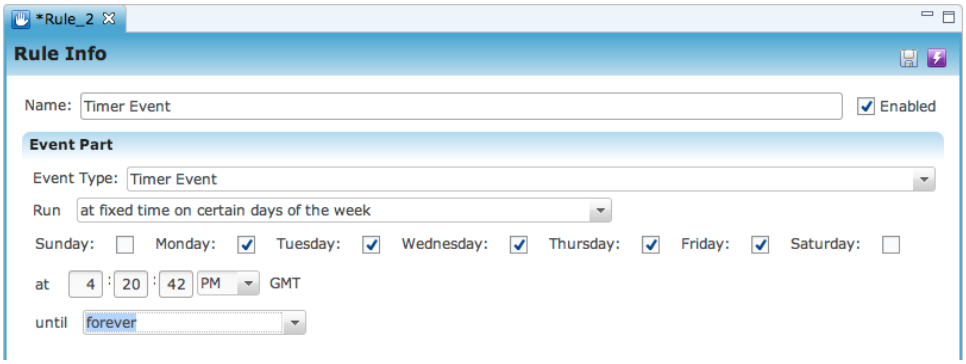
- **Run once** - Activates only once, at a specified time and date.



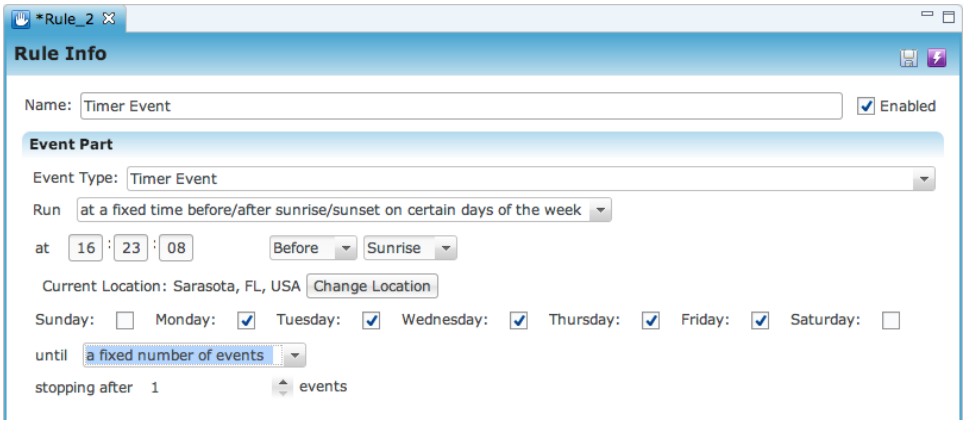
- **Run everyday -** Activates everyday at a specified time. The time may continue to run forever, stop at a specified time and date, or activate a fixed number of times.



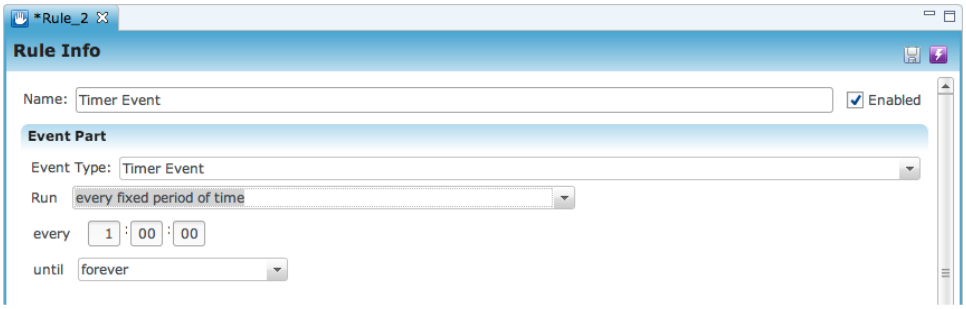
- **Run at a fixed time on certain days of the week -** Activates on select days of the week at the specified time. The timer may continue to run forever, stop at a specified date and time, or activate a fixed number of times.



- **Run at a fixed time before/after sunrise/sunset on certain days of the week -** Activates on select days of the week at a fixed offset before or after sunrise or sunset. The timer may continue to run forever, stop at a specified time and date, or activate for a fixed number of times.



- **Run every fixed period of time -** Activates at every fixed time interval. The timer may continue to run forever, stop at a specified time and date, or activate for a fixed number of times.



Change Location

All timers are based on the location and time zone set for your project. If you have not set a location and time zone for your project, the timers default to GMT.

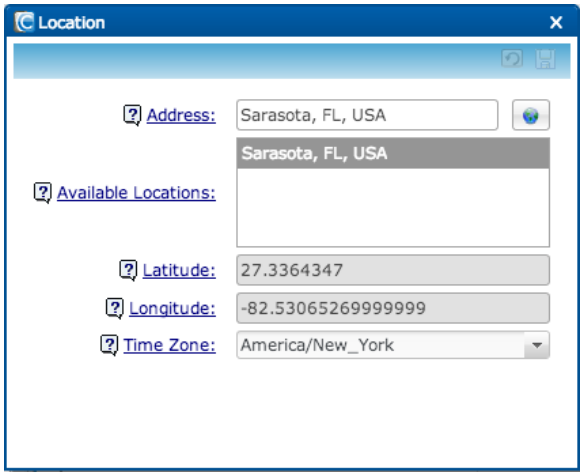
To set a location and time zone:

1. Go to the Location tab (Configure > Location), and then enter the address and time zone for your project.

   – or –

   If prompted, click the Change Location button, and then in the Location dialog, enter the address and time zone.

   Note: You will only be prompted to set a location if you choose “Run at a fixed time before/after sunrise/sunset on certain days of the week.”



Common sample scenes and rules

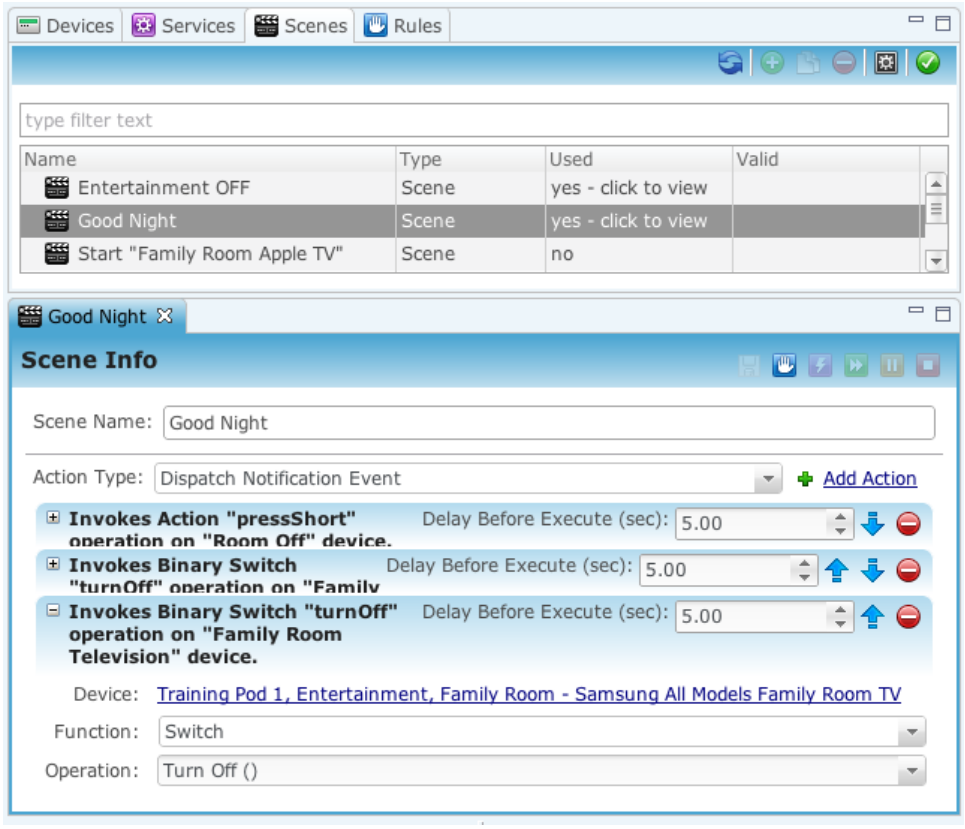
This section provides common samples of Scenes and Rules. Some of these may be helpful to you in determining what Scenes/Rules may be necessary for a project.

Sample Goodnight scene

A Goodnight scene may use the following settings. Our example is a UI scene in which the customer must touch the Scene button in the Clare Controls App to activate the scene. However, you may also configure this scene on a schedule or based on some other parameter, as appropriate.

- Scene name - Goodnight
- First action type - invoke device operation
    - Device - lighting off button
    - Function - action
    - Operation - pulse short
- Second action type - invoke device operation
    - Device - multi-room audio speakers
    - Function - audio destination
    - Operation - disconnect audio source

Figure 34: Sample Goodnight scene



Sample Goodnight rule

A Goodnight rule may use the following settings. As stated before, this sample Goodnight scene and rule is triggered by a UI event, that is, the customer must select this event from the Clare Controls App.

You may choose to trigger such a scene by a remote control condition or based on a schedule. Our rule is connected to the Goodnight scene, as you can see in the settings below.

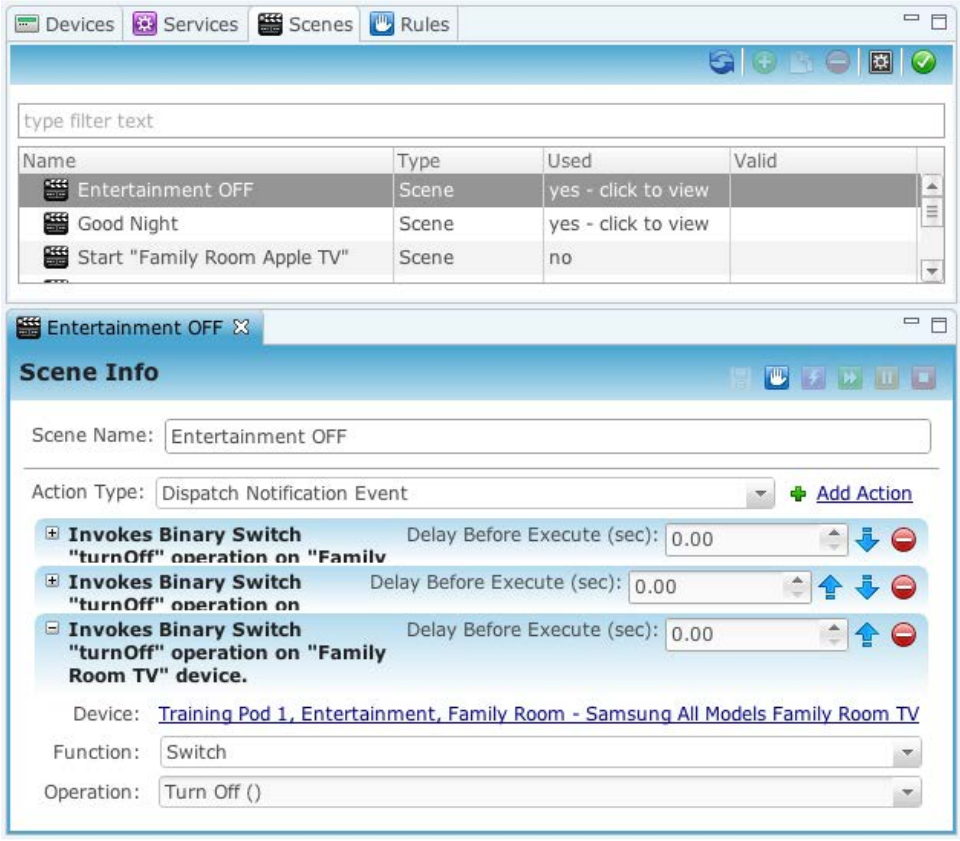
- Rule Name - Goodnight
- Event Type - UI Event
- Action Type - Scene
- Action - Goodnight
- Interrupt behavior - continue with next command

Sample Entertain scene

This section describes settings for a sample Entertain Scene.

- Scene Name - Entertain
- First Action Type - Invoke Device Operation
    - Device - Lighting keypad (Entertain)
    - Function - Action
    - Operation - Pulse short
- Second Action Type - Invoke Device Operation
    - Device - Squeezebox Player
    - Function - Playback
    - Operation - Play
- Third Action Type - Invoke Device Operation
    - Device - multi-room audio Speakers
    - Function - Audio Destination
    - Operation - Connect Audio Source

Figure 35: Sample Entertain scene

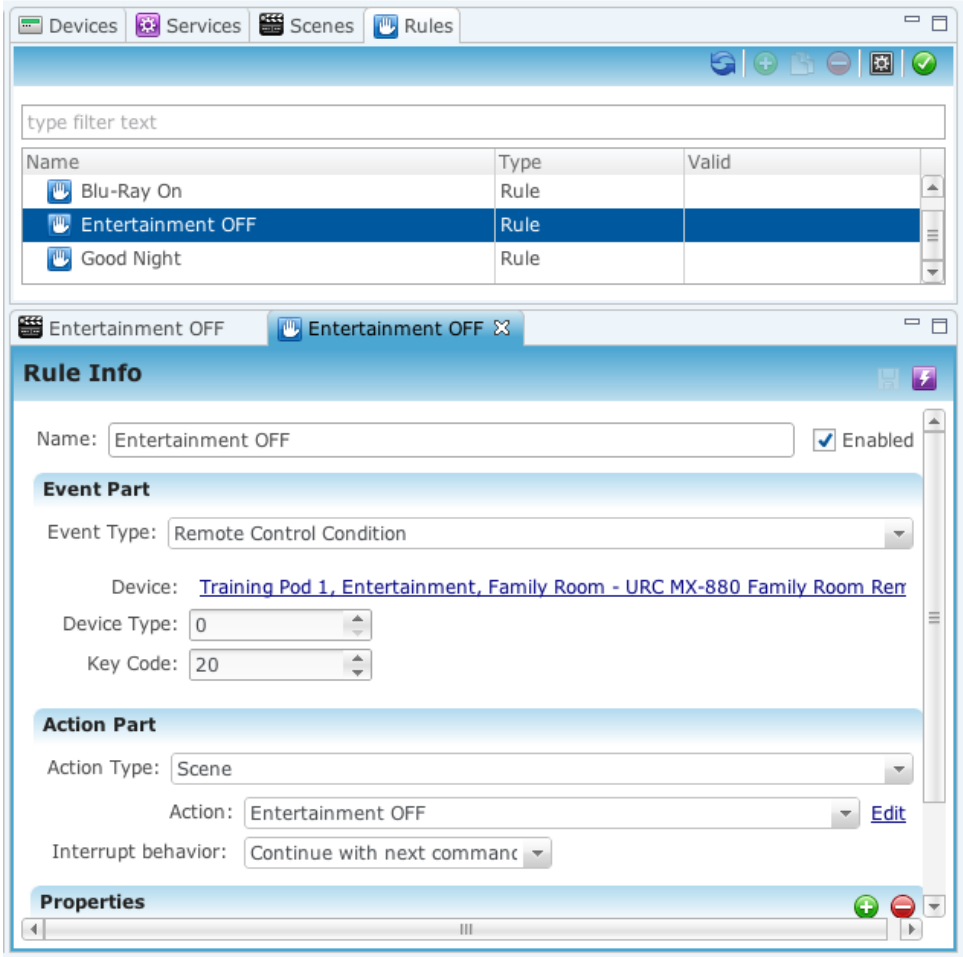


Sample Entertain rule

This section describes settings for a sample Entertain rule.

- Rule Name - Entertain
- Event Type - UI Event
- Action Type - Scene
- Action - Entertain
- Interrupt behavior - continue with next command

Figure 36: Sample Entertain rule



Configuring notifications using scenes and rules

You must configure a scene and a rule to send email or SMS notifications to a customer.

Configure notification scene

You must create a scene for your push notification or email notification. Earlier in this chapter, we covered scenes and rules on a basic level. This section describes how to create a scene specifically for push and email notifications.

To create a scene for push and email notifications:

1. Click the Rules Management tab.
2. Click the Scenes tab, and then select the New Scene button .
3. In the Scene Name field, enter the scene name and any tags.

4. In the Action Type field, select Set Device Property from the drop-down list.
5. To the right of the Action Type field, click on the Add Action button .
6. Follow the appropriate instructions below based on whether you are configuring an SMS notification or an email notification.

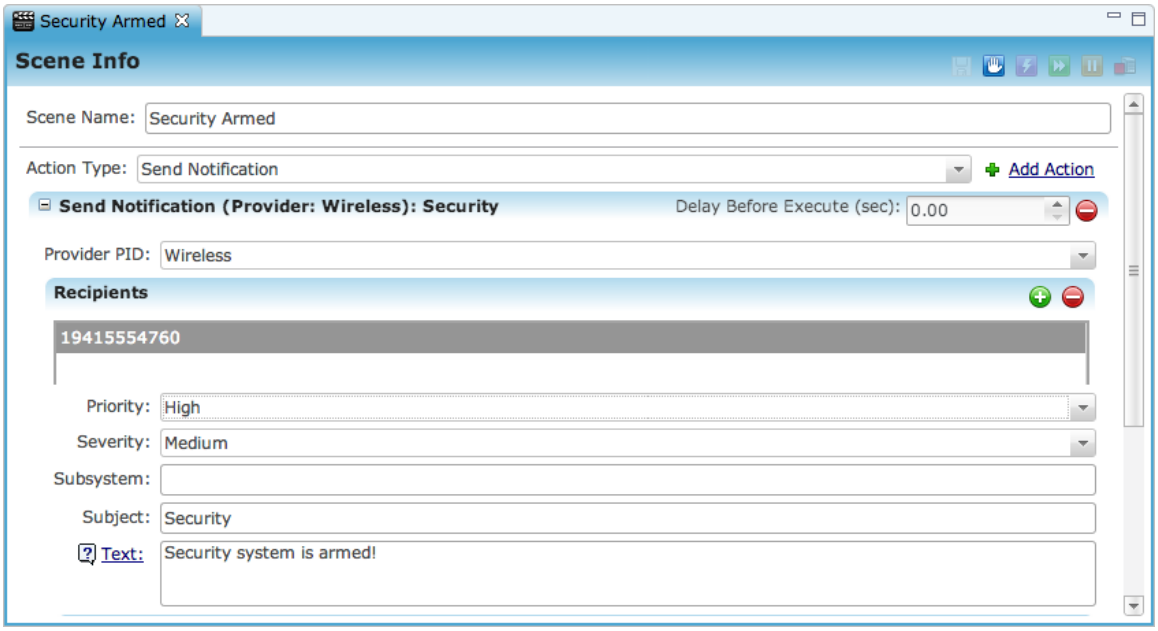
   SMS notification:

   a. Open the Send Notification (Provider: Wireless): Security action type section.
   b. In the Provider PID field, select Wireless from the drop-down list.
   c. In the Recipients section, click the Add Recipients button .
   d. Enter the phone number for the person(s) receiving SMS notifications. Include the Country code when entering phone numbers.
   e. In the Priority and Severity fields, set the levels as appropriate for the notification. (This step is optional.)
   f. In the Subject field, enter an appropriate subject title.
   g. In the Text field, enter the body of the SMS message.

      This body text should be brief and explanatory.

   h. Click the Save button .

Figure 37: Configure wireless notification scene



Email notification:

a. Open the Send Notification (Provider: Mail): Security action type section.

b. In the Provider PID field, select Mail from the drop-down list.

c. In the Recipients section, click on the Add Recipients button .

d. Enter the email address for the person(s) receiving email notifications.

e. In the Priority and Severity fields, set levels as appropriate for the notification. (This step is optional.)

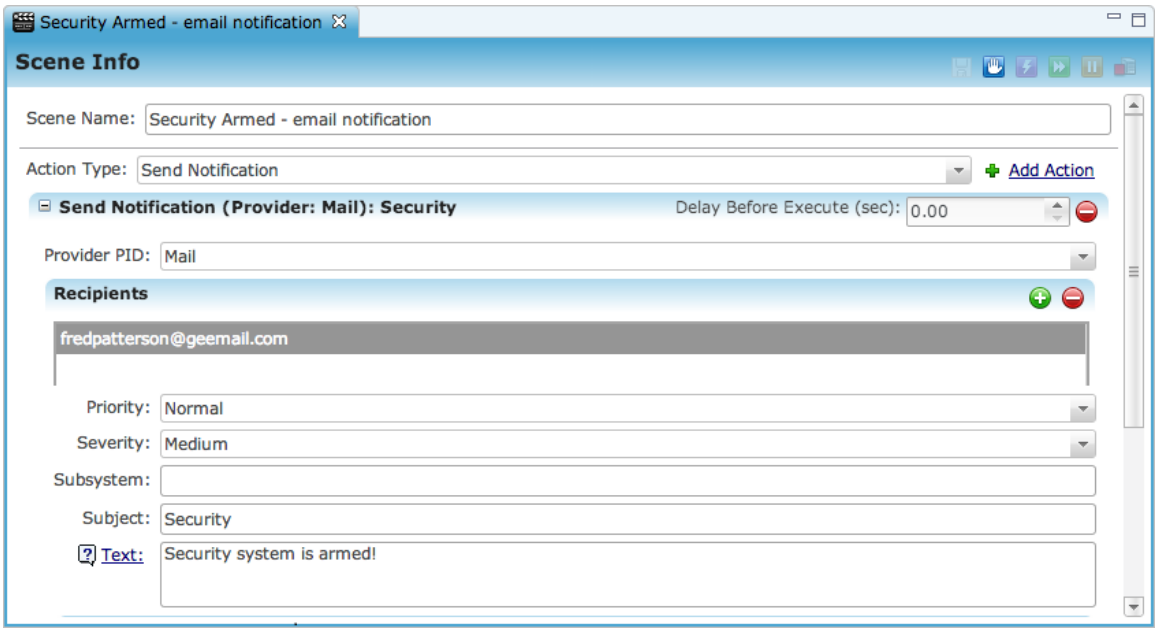
f. In the Subject field, enter an appropriate subject title.

g. In the Text field, enter the body of the email message.

   The email body text should be brief and explanatory.

h. Click the Save button .

Figure 38: Configure email notification scene



Configure a push notification rule

You must have a rule associated with your notification scene. Earlier in this chapter, we covered rules and scenes on a basic level.

This section describes how to create a rule specifically for SMS and email notifications.

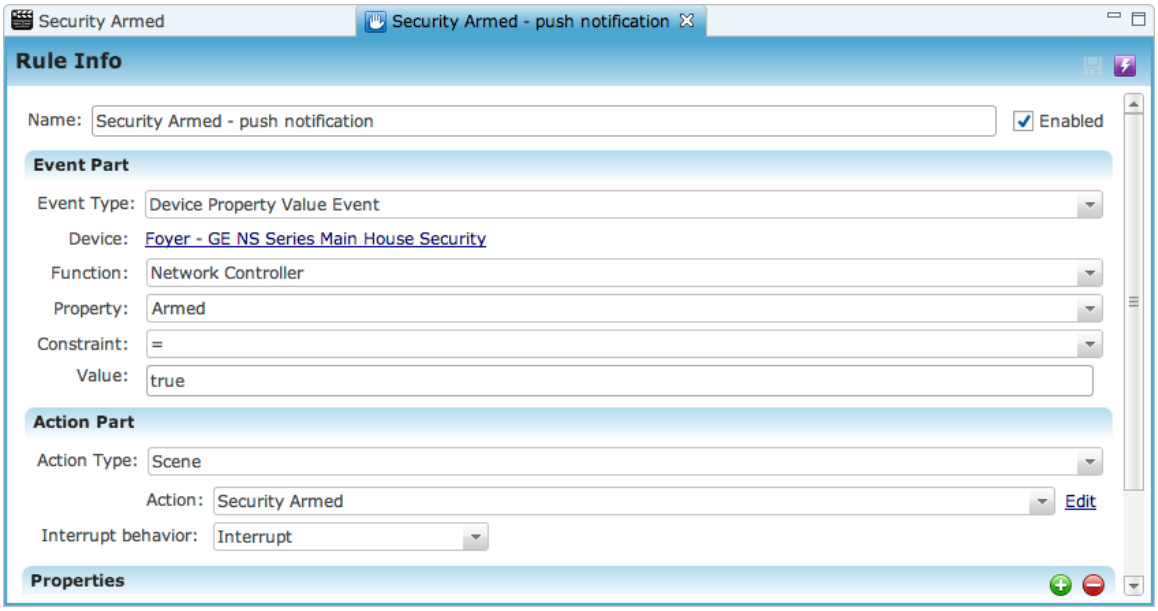
The following shows an example of a notification rule. In this example we notify the customer when their security system is armed.

To create a push notification rule:

1. Click Rules tab.
2. Click the New Rule button .
3. In the Name field, enter a name for the rule and any tags.
4. In the Event Type field, select Device Property Value Event from the drop-down list.
5. In the Function field, select the function associated with the event type from the drop-down list.
6. In the Action Type field, select Scene from the drop-down list.
7. In Action field, select Security Armed from the drop-down list.
8. Click the Save button .

After creating your rule, you can test the scene.

Figure 39: Configure notification rule



Chapter 10
Managing the System

Summary

This chapter provides instructions for managing your system. It teaches you how to deploy your projects. It also defines your role as a Fusion user and those support technicians who install and maintain devices in the customer's home. Finally, it reviews ClareAssure and how you can use it to monitor the health of your customer's devices.

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Deploying projects

When you deploy a project to the gateway, the new configuration renders to the Clare Controls App within a matter of seconds.

Saving and deploying a project

Be sure you have saved all your configuration changes before deploying your project. Deploying your project to the gateway sends the updated configuration information to the customer's Clare Controls App, which is accessible from all approved devices.

Follow the instructions below to deploy the current project version to the home gateway.

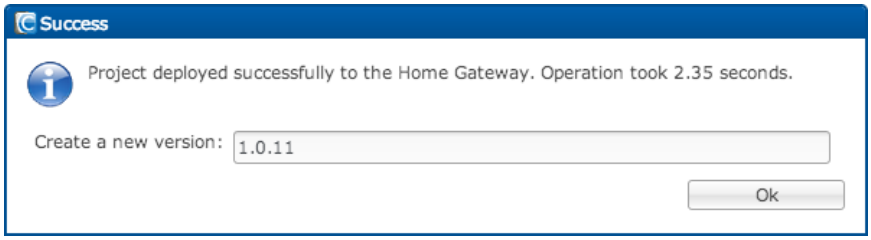
Note: If it is necessary to roll back to a previous project version, you can select the appropriate project version and deploy to the gateway.

To deploy a project:

1. Ensure you are at the project version level.
2. Click the Deploy button

.

   The button is located in the toolbar above the Projects tab.
3. The Success dialog box appears indicating the system will automatically create a new project version in Fusion.



4. Click OK.

Note: When you deploy the project to the gateway, the system automatically creates a new project version. We recommend you create a new project version when making major changes and always keep a detailed record of project notes for each version in the Notes section in the Project Properties pane.

Testing version deployment

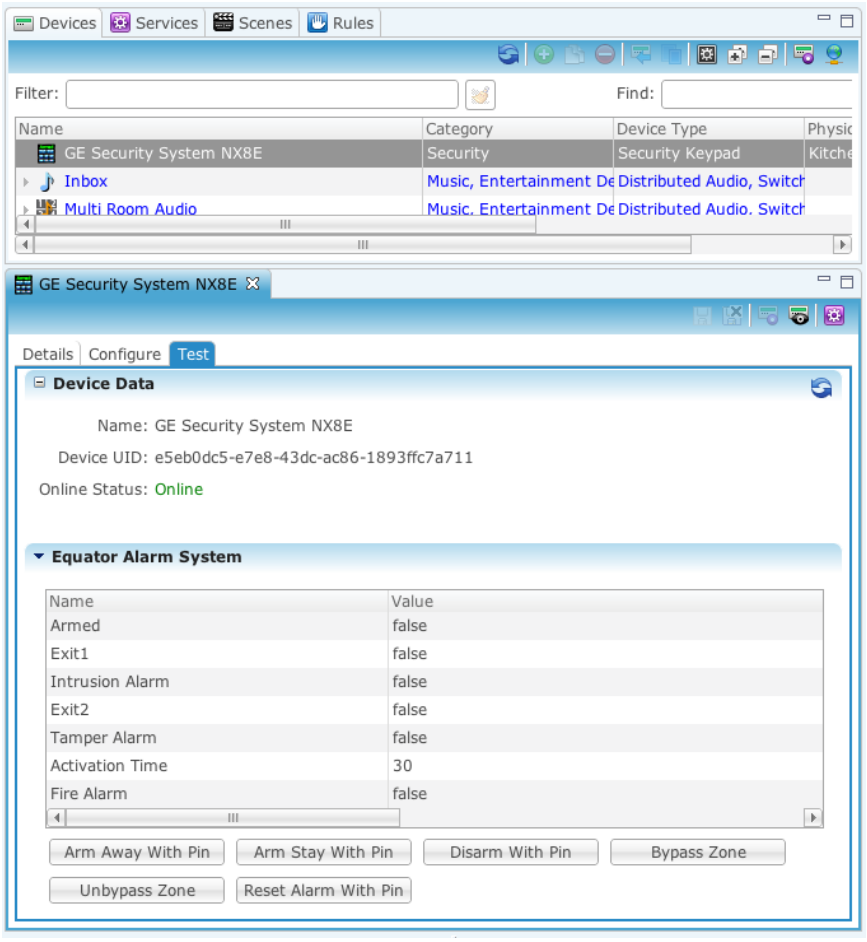
After deploying the project to the gateway, you can test the configured devices. This test tool, within each device's configuration editor, gives you the ability to test the system remotely. Your installation technician may be on site while you test different devices, ensuring each configuration is correct.

Note: You cannot test devices from Fusion until after you deploy the project.

When testing the configured devices, we recommend that you test the devices from Fusion and also test the devices from the Clare Controls App.

To test a device:

1. In the Devices tab, click the device you want to test to open its configuration editor.
2. Click the Test tab.



3. Test the device, as appropriate, and ensure the correct configuration.

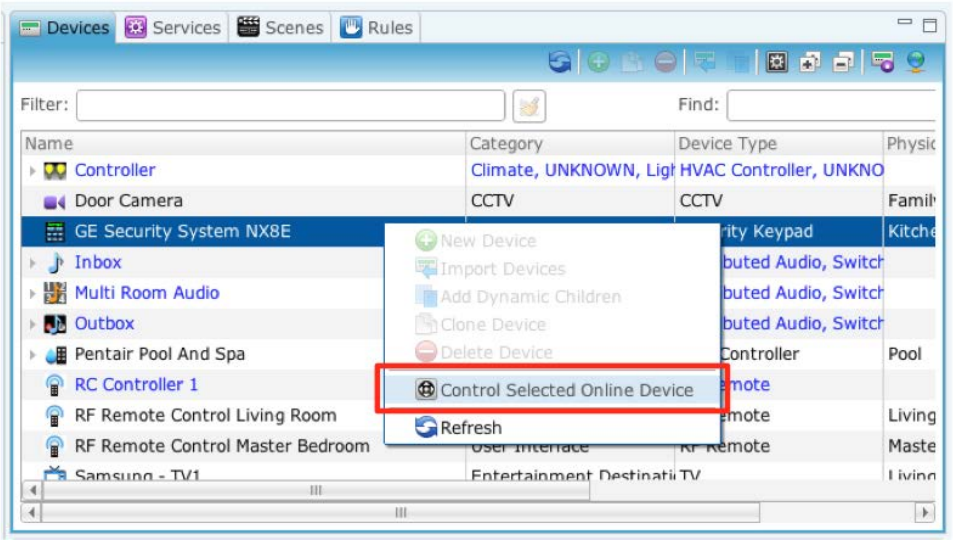
Controlling a selected online device from Fusion

From the Device Management tab, you can control configured devices that have an online status from Fusion.

Note: To control an online device from Fusion, you must deploy the project after configuring the device.

To control a selected online device:

1. Click the Device Management tab, and then select the configured device you want to control.
2. Right-click on the device you want to control, and then select Control Selected Online Device.



Exporting a project version as a Zip file

You can export project versions and save them as zip files on your computer. This may or may not be necessary depending on your organization's process for saving configured projects. Follow the instructions in this section to export a project version.

To export a project version:

1. Ensure that you are at the project version view level.
2. Click the Export Version button Export.

   The option to save the exported project version appears.
3. Click Save File to save the file to an appropriate location on your computer.

Clare Controls App application overview

Note: Refer to the *Clare Controls App Operator Guide* for instructions on using the Clare Controls App.

Clare Controls App is the user interface of the ClareHome system that runs on a mobile device (iPhone, iPad, Android), or your customer's favorite web browser.

- Customers control the customer experience
- Configure schedules for lighting scenes, thermostats, and more
- Configure notifications and alerts via SMS and email for home events of interest – for example, arm and disarm security system and set the wine cellar temperature thresholds
- Local or remote, Clare Controls App gives customers complete control
- Multiple residences are supported from one simple to use interface

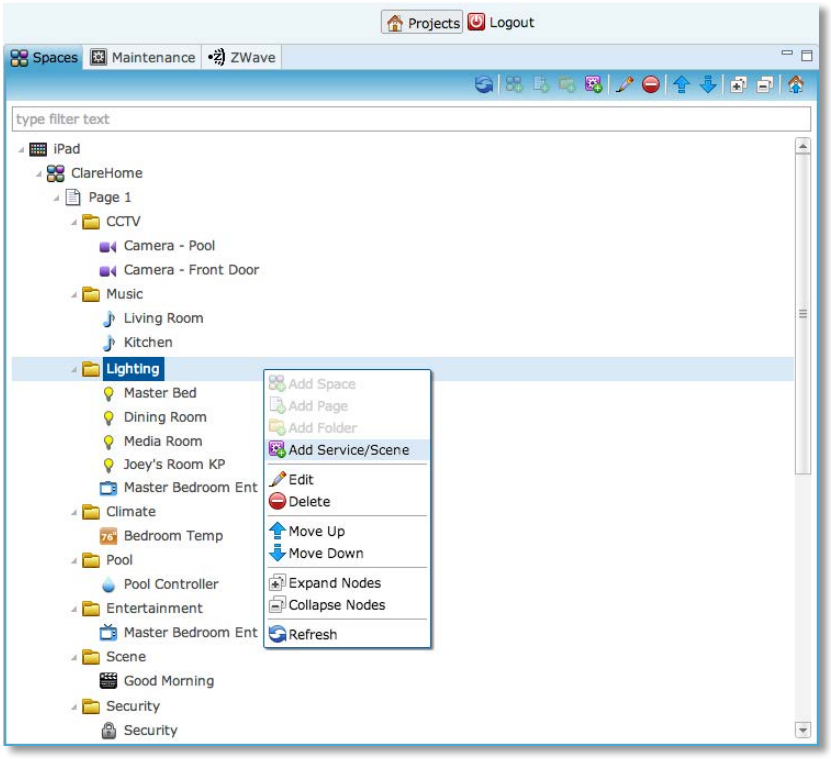
Managing spaces

You can edit the spaces your customers created on their mobile devices. Where once you could only view those spaces in Fusion, you can now add to or modify them. Simply click the project icon you want to edit, and then use the tree view to display the applications included on all the pages. At any level in the tree, you can right-click and add or delete a space, page, folder, or service/scene, depending on the level. Once you click the Upload icon, your customer's mobile device updates automatically with the new configuration.

To add spaces, pages, or folders:

1. At the Project level, click the Spaces tab.
2. Click the Refresh button .
3. Click the mobile device icon, depending on where you want to add spaces, and then expand the node levels.
4. Click the level where you want to add a node, and then right-click and choose an add option for that level.

   Note: Only the options available for that level are active. All others are dimmed.



5. Enter the name of your new node in the dialog box, and then click OK.
6. The newly named space is added to the list.

To add a service or scene:

1. At the page or folder level, click Add Service/Scene to display the Services dialog.

2. From the Services dialog box, click the Rooms tab or the App Modules tab if you want to add all the devices for a particular room or for a specific module.

Note: Clicking an area to select it, automatically selects all the modules assigned to that room. Likewise, clicking a module in the App Modules tab selects all the modules in that group.

To upload the space to the mobile device:

1. Upload your newly created spaces to your mobile device, and then click the Upload button .

   Note: This process could take several minutes. This process it not the same as deploying a project. You will still need to deploy your project.

To delete a space, page, folder, service or scene:

1. Right-click the node you want to delete, and then select the Delete button .

   Note: If this node has children, all children will be deleted also.

To edit the name for Spaces, Pages, and Folders:

1. Right-click the node icon that you want to rename and click Edit.
2. In the Edit dialog, enter the new name, and then click OK.

To move an App node up or down:

1. Click the app node to highlight it.
2. On toolbar, click the up and down arrows to move an app up or down the list .

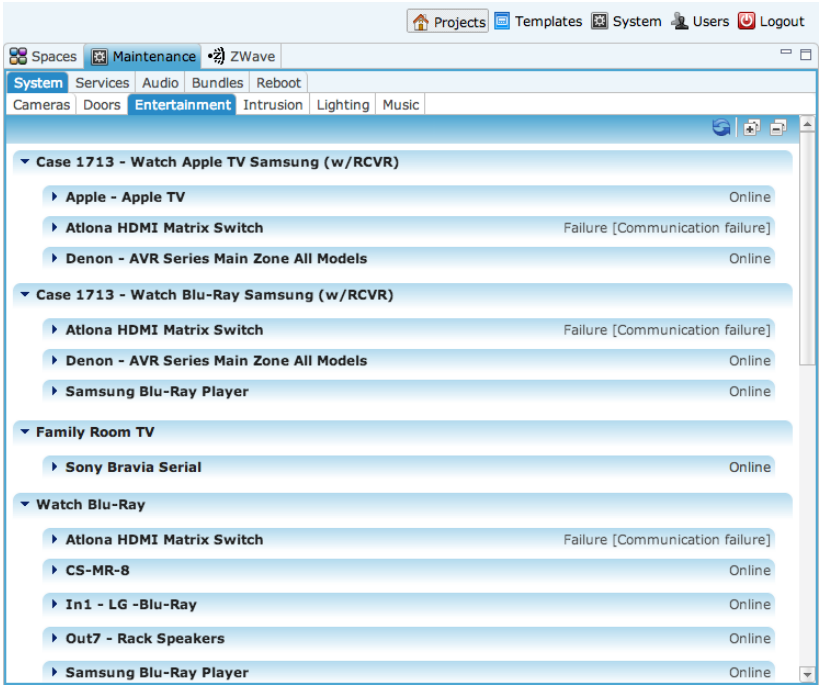
Using the Maintenance feature

The Maintenance feature adds increased system monitoring features to the ClareHome server so that you and the support team can identify system problems faster. Use this feature to quickly check the status of your customer's ClareHome devices right from Fusion.

To view devices using the Maintenance tabs:

1. Log into Fusion, and at the Project level, click the Maintenance tab.

   Fusion displays a series of tabs from which to choose. These tabs include: System, Services, Audio, Bundles, and Reboot. The System tab includes six additional sub-tabs that include: Camera, Doors, Entertainment, Intrusion, Lighting, and Music.



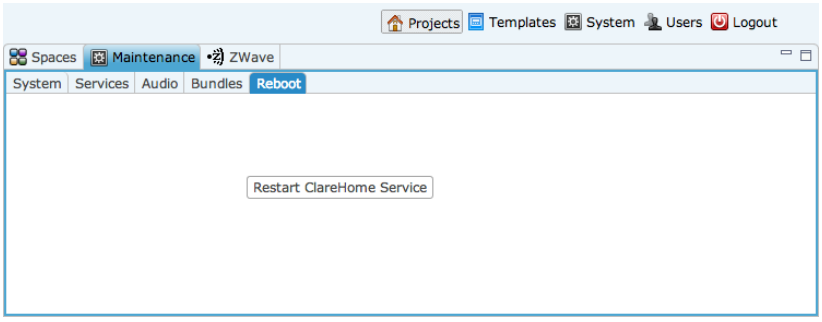
2. Click a tab to display the devices configured for the selected project and their current status, as shown above.

Rebooting ClareHome

The Reboot feature will let you restart the ClareHome framework from within Fusion. Use this feature to reset your ClareHome controller prior to setup, or whenever necessary.

To reboot the system:

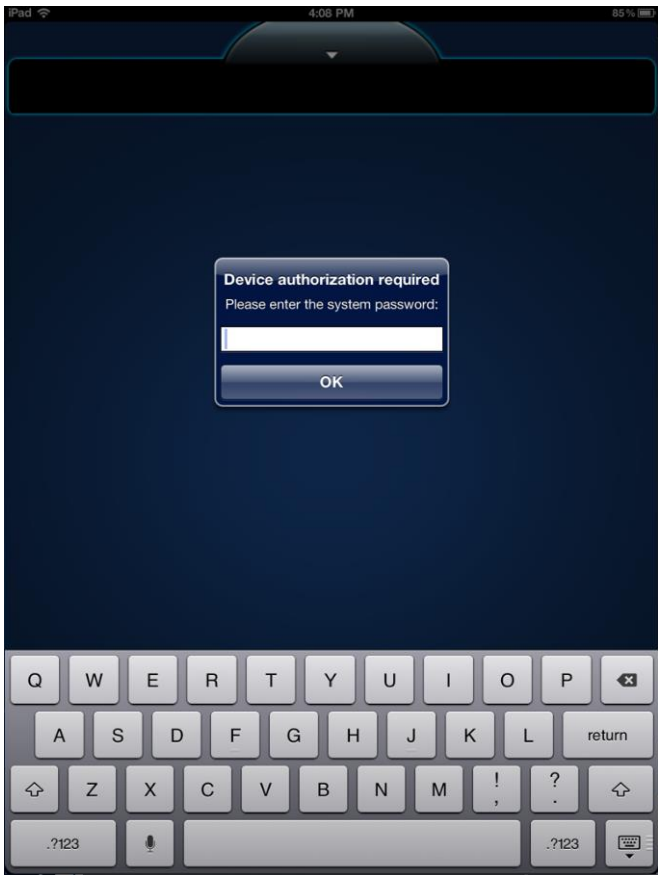
1. At your Project level, click the Maintenance tab, and then click Reboot.
2. Click Restart ClareHome Service.



How to configure a system password

The system password is an optional security feature that is configurable in Fusion, and is available to your customers through ClareHome.

The first time the end customers connect, the system will prompt them to enter a system password. This system password screen authorizes access for the mobile device and will appear only once.



Mobile device secure password screen

First, discuss this new security feature with your customers to determine whether or not they would like to use it for their home system. The feature secures mobile device access to ClareHome.

Next, follow the steps in this section to easily configure the system password for the customer.

Choosing not to use the system password

If your customers decide they do not want to use this new security feature for their system, you do not need to do anything. When the system prompts your customer to enter a value in the ‘security Password’ field, simply instruct them to do the following.

To turn off the system password:

1. Enter any character or number
2. Click OK.

This password prompt screen will not appear again on their Clare Controls App customer interface.

Using the system password

If your customer decides they would like to take advantage of this new security feature and enable it by having you set up a ‘System Password’, you will need to modify their project file configuration in Fusion and redeploy it.

To set up and enable a system password for your customer:

1. Ensure you are in the Project view.
2. Open your customer’s project file.
3. Clone the project version before configuring any changes. See “Cloning project versions” on 18.

To create a project clone version:

1. From the Project Version view, right-click in the Devices pane and either select New Device or click on the New Device button in the upper toolbar.
2. From the Device Templates pane, click on the User Interface category drop-down.
3. From the template drop-down, click on the mobile device drop-down.
4. Then, select the mobile device button .
5. Click the OK button at the bottom of the pane.
6. From the device configuration Details tab, enter “Secured iPad” or another appropriate name for the device in the Name field.
7. If desired, you may enter any notes in the Notes field.

To configure the mobile device:

1. Click the Configure tab.
2. From the Configure tab, enter the value the customer wants to use for their system's password in the 'Value' field.

   Note: The customer password may contain any combination of letters and/or numbers and the 'Value' field is case sensitive. There is no minimum length for the value in this field, but ensure your customer has selected a password they can remember easily.
3. Click the Save button .
4. Redeploy your project to the Home Gateway from the Project pane by ensuring you are in the correct version perspective and locating the toolbar in the upper left corner of the screen.
5. From the upper left-toolbar, select the Deploy button Deploy.

At this point, the customer must enter the correct password (the one you set up for them to use) to gain access to their system. If the customer enters an incorrect password in this field, the system continues to redisplay the password screen until the correct password is entered.

Repeat these steps for each additional mobile device password.

Note: If customers enter an incorrect password, they will not be able to gain access to their system. If they forget their password, they need to contact you to obtain the correct password that you set up for their system.

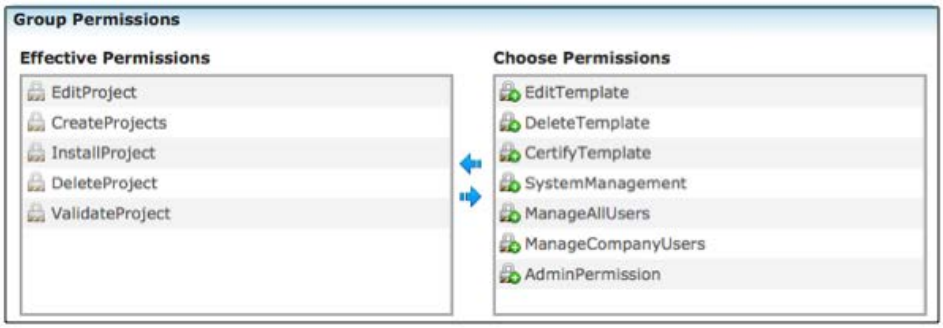
User roles in Fusion

The following defines the credentials within Fusion as Clare Controls manages all user permissions. By default, there are different role levels available for you as a dealer/integrator. The default hierarchy of roles follows the order described below. Please coordinate user assignments with your Clare Controls support technician.

Programmers

A Programmer is the person(s) in your organization responsible for configuring the ClareHome system. This programmer may work closely with the service technician to understand how the system is customized in Fusion.

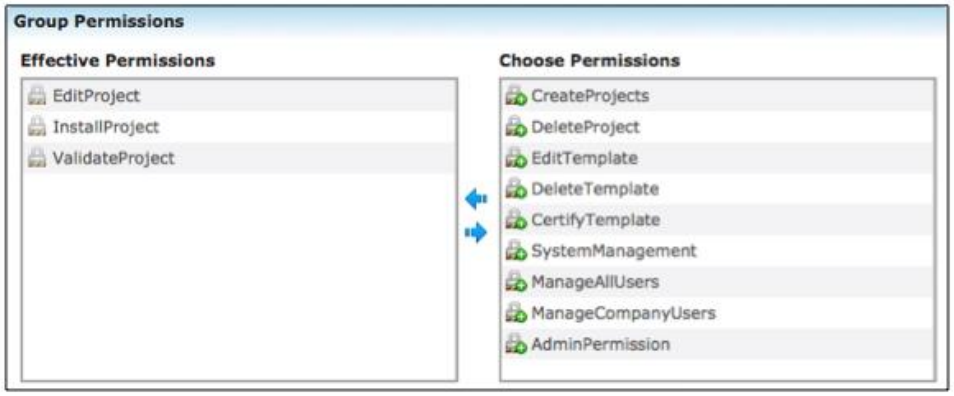
Figure 40: Programmer's default permissions



Service technicians

A Service technician is typically the technical support person(s) in your organization. This person manages and resolves any issues with the system, and has direct contact with the customer.

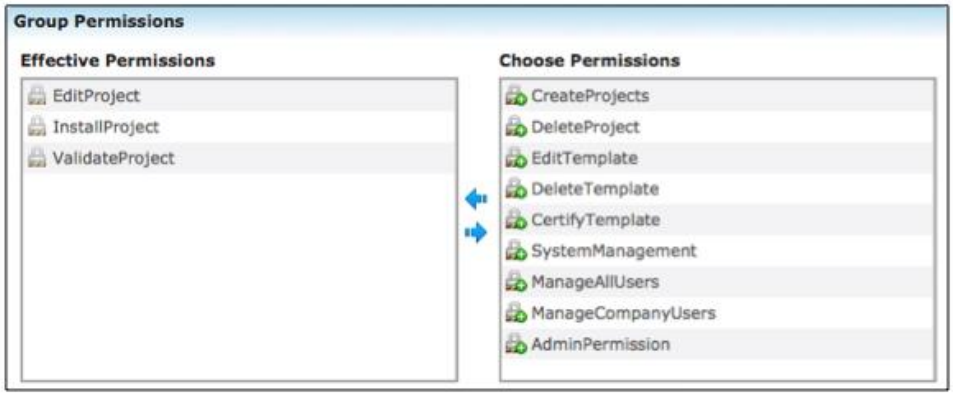
Figure 41: Service technician's default permissions



Installation technicians

An Installation Technician installs the system and manages system setup at the home site.

Figure 42: Installation technician's default permissions



Monitoring systems with ClareAssure

Presenting ClareAssure

ClareAssure is physically connected and initially configured by Clare Controls through a variety of available service packs.

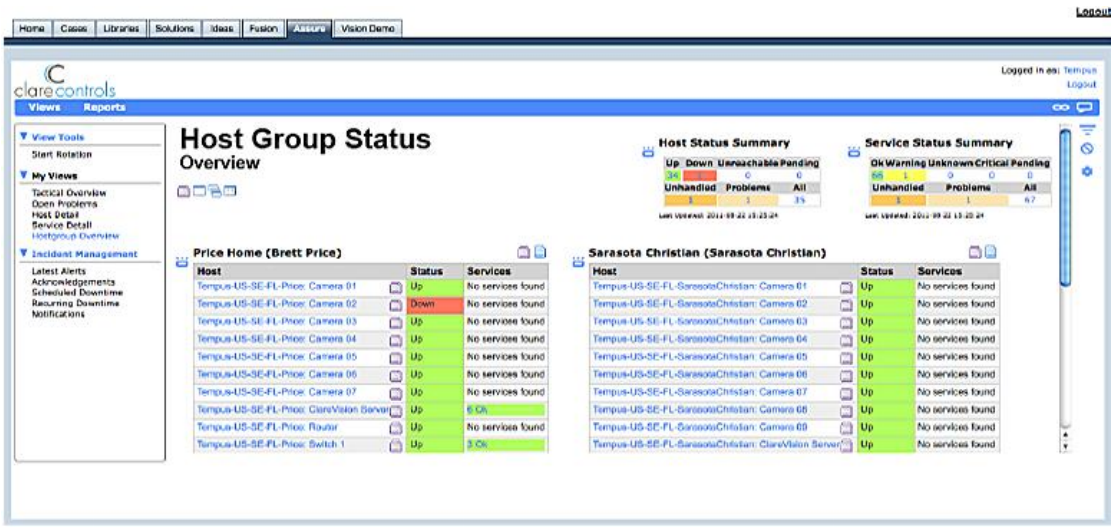
ClareAssure is a secure, cloud-based network monitoring solution. It allows dealers to proactively troubleshoot and service luxury residential electronic systems. It equips you (the dealer) with continuous visibility into the health of your customer's home electronics. This includes the following.

- network, servers, routers
- various IP devices
- ClareVision IP Video Surveillance solution
- ClareHome and the systems it manages, and more

To make it work, a secured network appliance is placed locally in the home. It gathers status and performance information and forwards it to the ClareAssure cloud. It is in the cloud that you have the ability to check the health of your customer's home electronics. ClareAssure does the following.

- Continuously monitors the operational condition of home electronics
- Lets you diagnose problems before the customer realizes there is an issue
- Service technicians can identify and troubleshoot problems from the cloud, eliminating the amount of time spent in the home on service calls

Figure 43: ClareAssure monitoring solution within ClareCloud



ClareAssure monitoring views

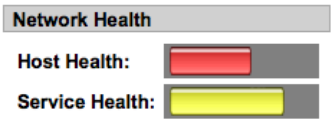
From the My Views drop-down in your View menu, the following five screens are available primarily for monitoring purposes: Tactical Overview, Open Problems, Host Detail, Service Detail and Host Group Overview. This section describes each of these five monitoring screens.

Tactical Overview window

The tactical overview provides a summary of host devices, service devices and monitoring features.

- Network Health status bars: The Network Health status bars (shown above and to the right of the Hosts table) show an overview of system host health and service health. These status bars calculate an average status of all hosts and all services.

Figure 44: Network health

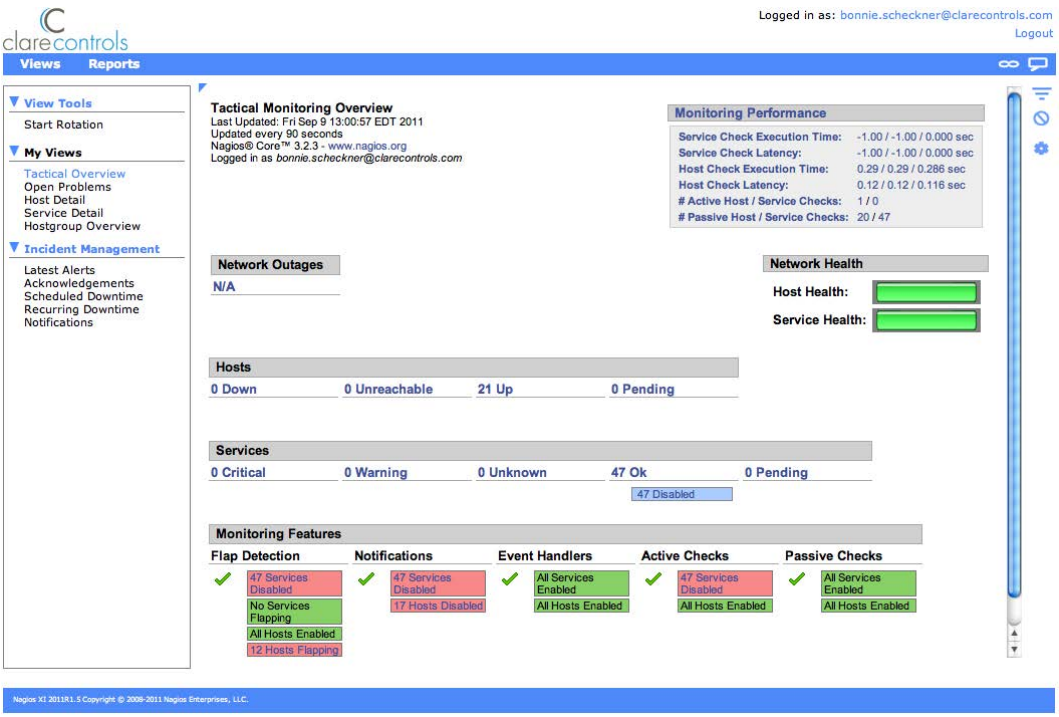


- **Host table**: The Hosts table status displays how many of your system's hosts are: Down, Unreachable, and Up or Pending. If one of your hosts is pending, the reason is probably because it was recently installed and configured in the system. A Host status displays "Unreachable" if the host goes down, because the host's service devices become unreachable.

- **Services table**: The Services table displays how many of your system's services are: Critical, Warning, Unknown, OK or Pending. ClareAssure generally performs a passive check on system services. This means ClareAssure does not display a state change unless a service device reported a status change to ClareAssure.
- **Monitoring Features table**: The Monitoring Features table shows: Flap Detection, Notifications, Event Handlers, Active Checks and Passive Checks.

  Note: Flap detection shows when a service or host changes state too frequently.

Figure 45: Tactical Overview window



Open Problems window

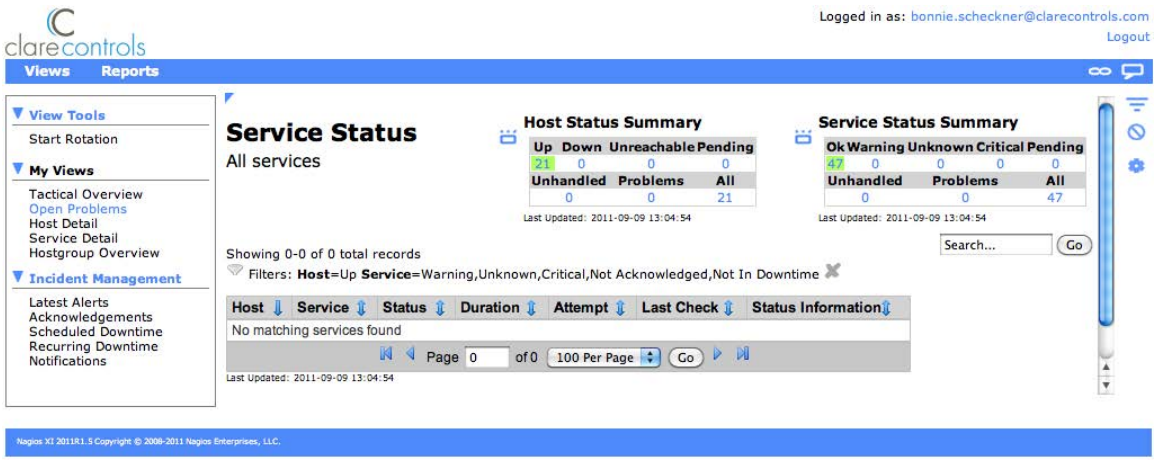
The Open Problems window provides a summary of any open host or service problems on your system. The summary tables in the top-right corner of the window include similar status features as described in Tactical Overview.

If the status displays "Unhandled" for any hosts or services, it indicates the number of open problems that have not yet been acknowledged. The Service Status (Open Problems) table includes the information described below.

An open problem includes any issue with a host or service device that has not yet been acknowledged. Once a technician acknowledges the issue, it will no longer appear as an open problem.

- **Host**: The name of the host device with an open problem. You can click on the Service Details button next to any host name to see the Service Detail window for that host.
- **Service**: The name of the service device with an open problem. The service device is associated with a host name from the first column.
- **Status**: The host or service device status. Status conventions are the same as described in the Tactical Overview. The status depends on whether the open problem is associated with a host device or service device.
- **Duration**: The time the host or service device has been in the current state.
- **Attempt**: The number of attempts to read information from the Log file for that host or service device. The maximum number of attempts is three.
- **Last Check**: The last known time of a passive check. This is the last time ClareAssure received a status update from the host or service device.
- **Status Information**: A summary of the information sent to ClareAssure from the host or service device. The host and/or service device sends its name, status and status information to ClareAssure.

Figure 46: Open Problems window

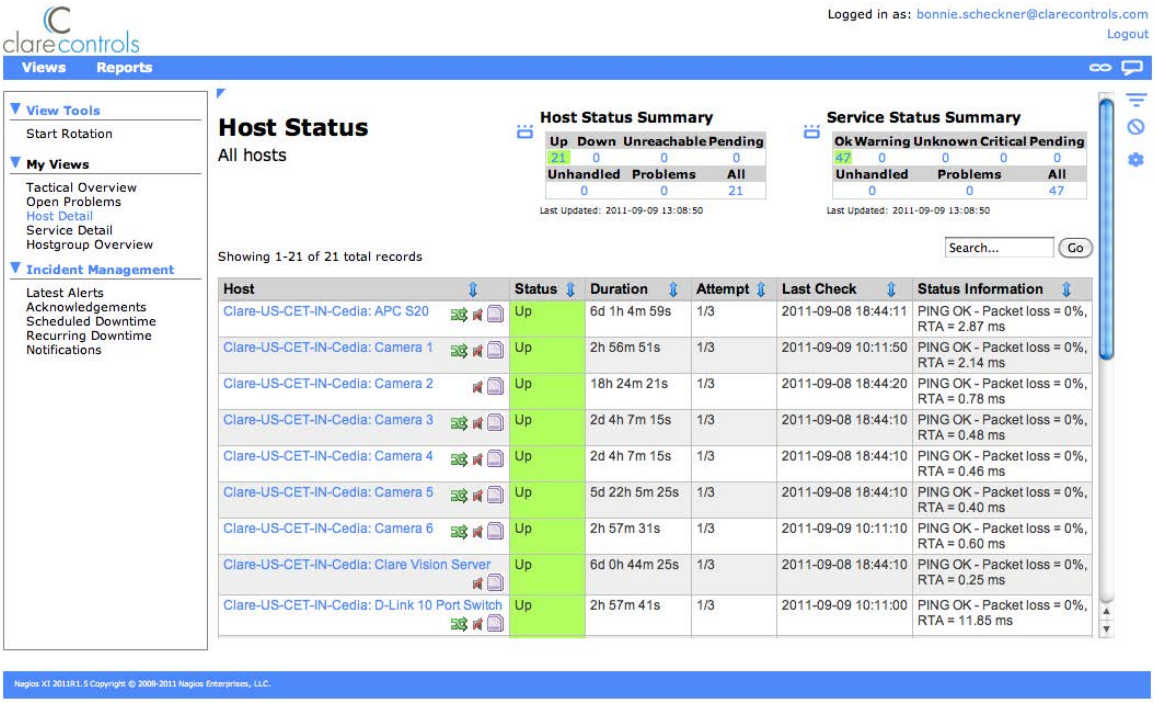


Host Detail window

The Host Detail window provides a status summary for each individual host device in your system. The descriptions below provide information about the Host Status table. This table provides information about all the hosts in your system.

You can click on the Service Details button next to any host name to see the Service Details window for that host.

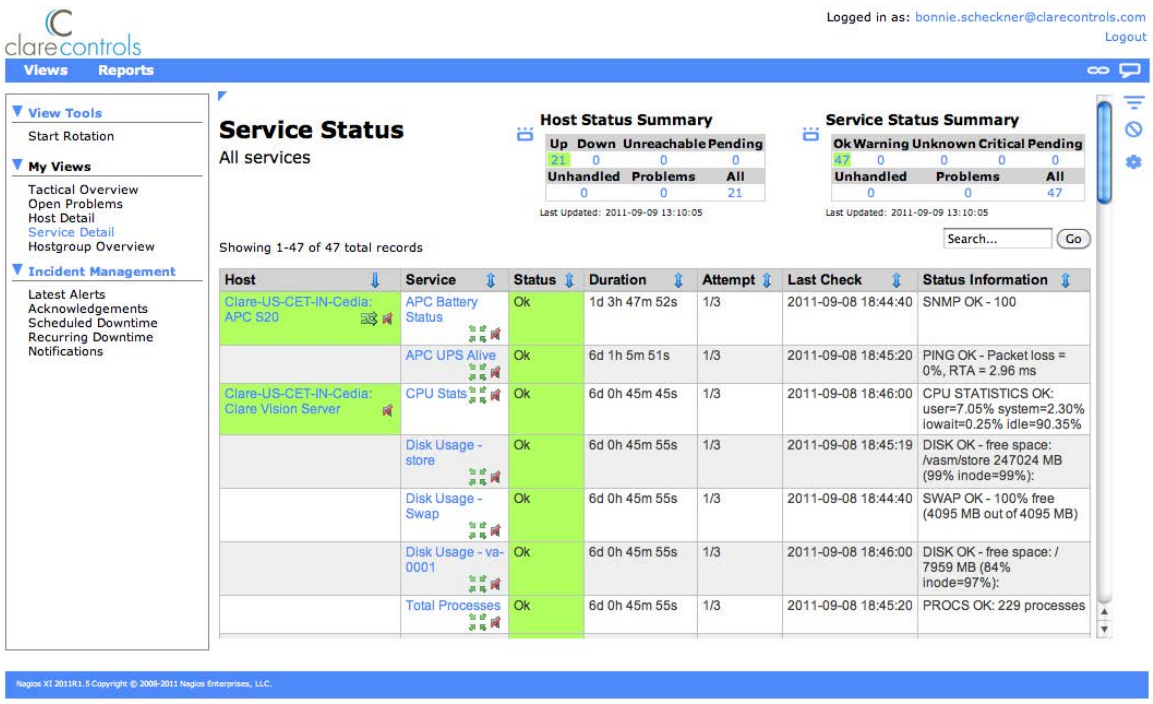
Figure 47: Host Detail window



Service Detail window

The Service Detail window provides a status summary for each individual service device in your system. The descriptions below provide information about the Service Status table. This table provides information about all the services in your system.

Figure 48: Service Detail window



Hostgroup Overview window

The Hostgroup Overview window provides a status summary of hosts grouped by sites. Each table is grouped by individual home sites and includes status summaries for each host device at that site. Each table also includes a status summary for all service devices at that home site.

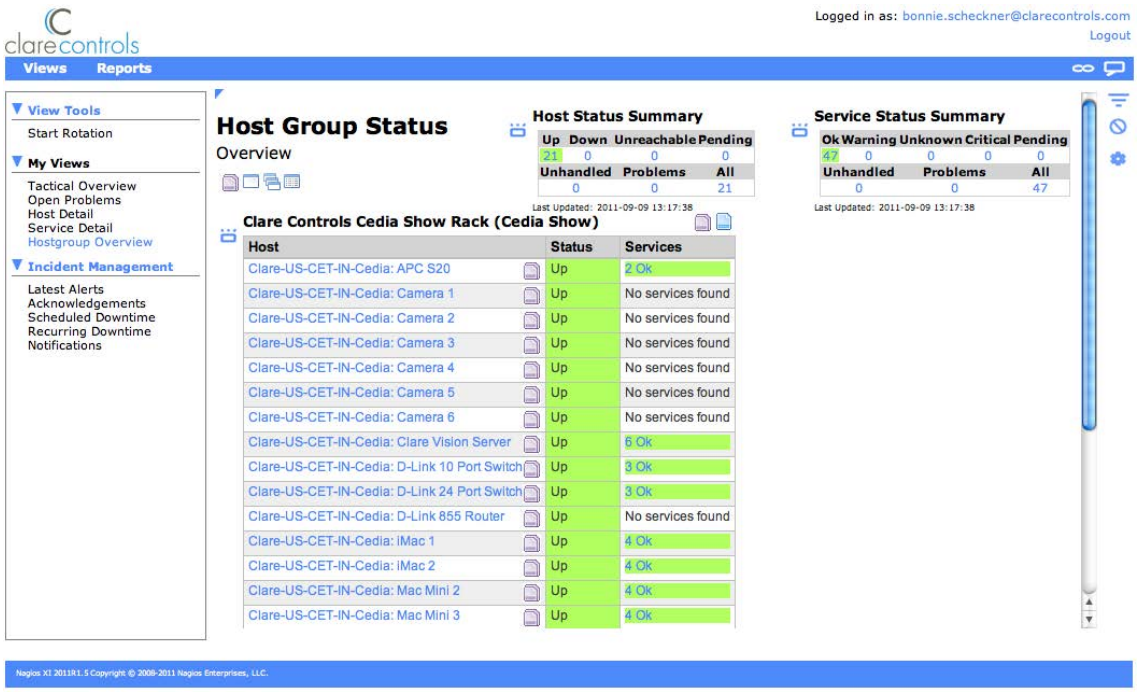
You can click on the Service Details button next to any host name to see the Service Details screen for that host. Each Host Group Status table is grouped by site (each individual house is a site and each one has an individual Host Group Status table).

- **Host**: The host name and Service Details button. Clicking on the Service Details button opens the Service Details window for services associated with that host.
- **Status**: The status of each host device from the first column. Status descriptions in this column follow the same conventions described in the

Tactical Overview. The host status will display as one of the following: Down, Unreachable, Up or Pending.

- **Services**: The number of services associated with the host in the first column and the status of those services. The Services status will display as one of the following: Critical, Warning, Unknown, OK or Pending.

Figure 49: Hostgroup Overview window



Chapter 11
Troubleshooting

Summary

This chapter explains basic system troubleshooting for ClareHome and Fusion. Troubleshooting includes:

- Identifying issues
- Attempting to resolve issues
- Understanding system event logs

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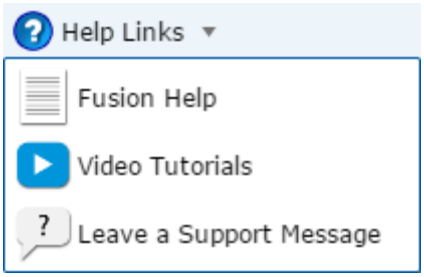
Accessing help in Fusion

This section describes how to access various forms of help from within Fusion. You can do one of the following.

- access a help manual
- link to the Clare Controls website for additional product information
- link to a live chat with Clare Controls technical support
    - From Fusion, click the Help button Help from the upper-left toolbar.
    - From the Help window, click on the appropriate option to get the help you require.

Figure 50: Access Fusion Help



Device configuration troubleshooting - identifying the issue

You may have deployed a project and tested newly configured devices and now you are experiencing device operation issues. Following the tips in this troubleshooting section may resolve the problem.

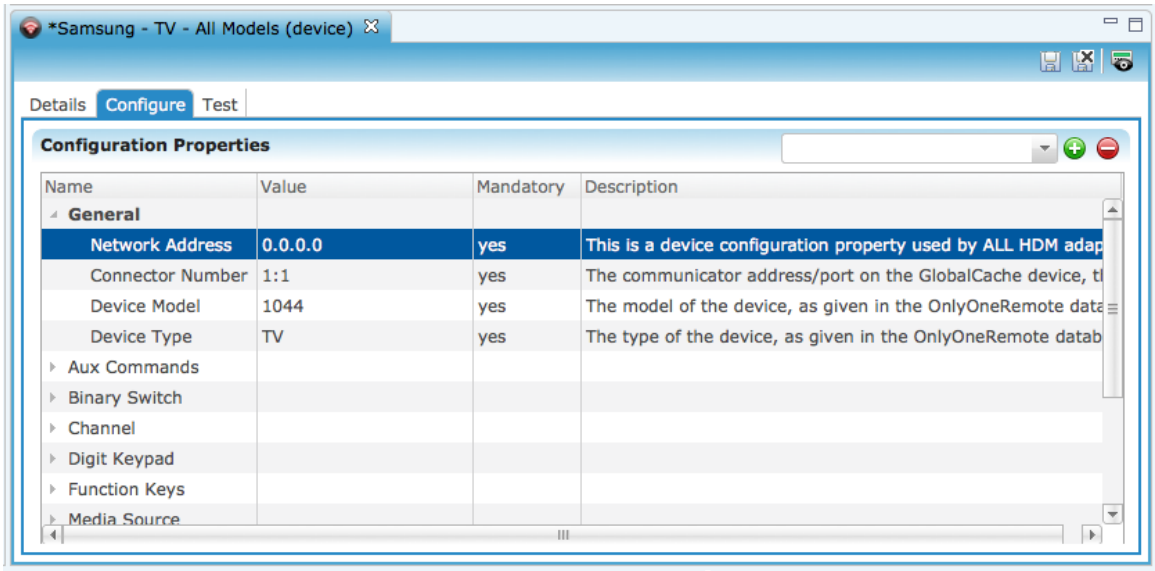
Step 1: Checking device settings in Fusion

The first step in troubleshooting nonoperational devices is to check the device settings in Fusion to ensure the device was configured and saved correctly.

To check the device settings:

1. Click the Configuration Tool Device Management tab, and then open the configuration editor for the nonoperational device.
2. Click the Configure tab, and then ensure the network address and network port are correct.

3. If these settings were not saved, enter the correct information, and then press Enter after each field.
4. Click the Save button for the device configuration.
5. Click the Deploy button Deploy to deploy and test the device and ensure operation.

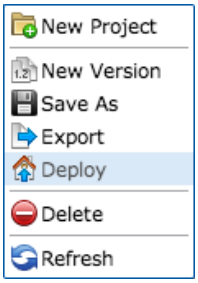


Step 2: Deploying a previous project version

If the devices you most recently configured in the current project version are not operational during the testing phase, you can attempt to use the previous project version deployment. This will help determine if the problem was due to incorrect configuration in the current project version.

To deploy a previous version:

1. Ensure you are at the project version level.
2. In the Projects tab, right-click the previous project version and then select Deploy Version to Gateway.



3. Test the devices from the Configuration Tool and from Clare Controls App. If the devices are operational, you can conclude the devices configured in the higher version were not configured correctly.

System event logs

The Logs button appears in the lower-left corner of the Fusion window. This button changes, depending on the health of the system. Clicking the Logs button opens an event log, which details all events in the system.

The Logs button changes color based on system health. A blue button indicates the system is in a normal state. Red indicates a warning. Yellow indicates caution.

To access the system event log:

1. In the lower-left corner of Fusion, click the Log button .
2. Filter through the events by typing keywords in the “type filter text” field.

Global Cache

A Global Cache is a device that ensures proper communication with other devices integrated into the ClareHome system. The cache connects devices (serial, IR, or contact closure) to your network by relaying information.

Clare Controls IPv4 mapping

Use this document as a guide for IPv4 organization. As an integrator, it is important to know which IP addresses are going to which devices.

This chart suggests an easy way to keep track of them, having a standard structure for all projects to follow.

The chart lists what type of device it is, and it gives a range of numbers for the last octet of the IP address of each device.

Notes

- You can use any IPv4 scheme you choose, simply change the last octet to match the chart below.
- CobraNet needs to be on a separate network.
- Not all of these devices will possess an IP address if connected directly to a CLIQ module.
- DHCP range will be 10.X.X.100-200.

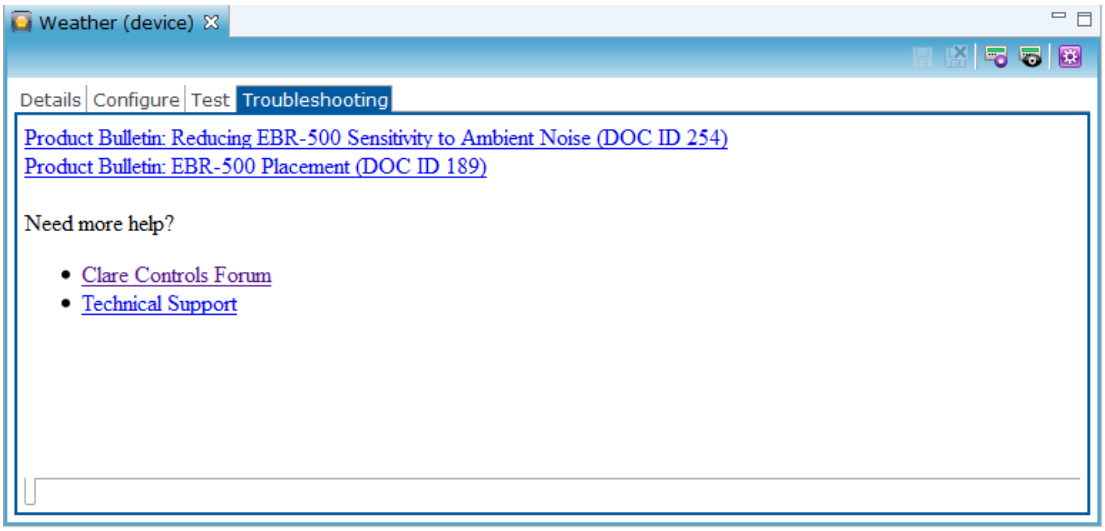
Table 4: Clare Controls IPv4 mapping

Device category	Type of device	Port	IPv4 starting octet
Router	Router		X.X.X.1
Switches	Misc.		X.X.X.2-10
Entertainment IP	IP		X.X.X.10-29
Entertainment IR	IR		X.X.X.30-39
Entertainment RS-232	RS-232		X.X.X.40-49
Climate	IP thermostats		X.X.X.50-59
Lighting	IP		X.X.X.60-69
Access/screen/shades	Contact closure		X.X.X.70-79
Security	IP/RS-232		X.X.X.90-95
Media/NAS	IP		X.X.X.96-98
Clare OS	IP		X.X.X.99
CCTV	IP		X.X.X.230-250
CobraNet devices	IP		172.30.100.x

Troubleshooting Tab

Fusion now features a new Troubleshooting tab that displays current information about devices. This information includes links to product bulletins, tech notes and release notes, videos, and other pertinent information that will help you when adding a device to your Fusion project.

To view the Troubleshooting tab, simply add a device to your Fusion project. The tab displays in the Edit pane for that device. Click the tab to display its links, as shown below.



Note: The Troubleshooting tab will only appear on the new templates in ClareHome v3.1. This tab will not appear on already configured devices.

Appendix A
Guidelines for Creating Lighting Files (Crestron)

Tasks in the Configuration Tool are more efficient when you consider the following suggestions before creating a Crestron lighting program.

- RSD file Reference IDs - The RSD file uses reference IDs located on each button's programming page. By default, the buttons on ClareCloud keypads will not be generated without the reference name. This is the same reference name for the button used by any integrated Crestron processor. Do not abbreviate reference IDs. This is information is imported literally.
- Room Consistency - Maintain consistency within rooms and naming conventions. Inconsistencies are more obvious on a single mobile device rather than on physical keypads. Do not abbreviate room names. Attempt to match client expectations for room names.
- Program Virtual Global Summary Keypads - Program virtual keypads that are global summary keypads and reference them from ClareCloud. You can locate your virtual global summary keypads anywhere in D3Pro – for example, a room called "Global". From ClareCloud, you can generate the keypad service in any room, and you do not need to logically place the keypad in each room from Crestron.
- Lighting Summary Applet "Room Off" Button - From ClareCloud, the lighting summary applet points to an individual button in each room. As a result, each room needs a button that signifies the room is "off" when you are configuring the Crestron lighting program. The lighting summary applet displays the room name, a graphical indication when the button is off and a lack of indication when the button is on (inverted). Striking that row in ClareCloud presses the referenced button in the Crestron lighting system.

- ClareCloud Built-in Timers - ClareCloud has timers built into the rule system. These timers are accessible from ClareCloud and are easier to deploy than Crestron timers. You may choose to avoid configuring timers within Crestron and simply use the ClareCloud built-in timers.
- Future Availability of Timers in ClareCloud - Future releases of Fusion in ClareCloud has timers built into individual keypad applets..
- Cloned Keypad Buttons in Crestron - Cloned keypad buttons in Crestron do not have reference names; therefore, their names do not appear in the RSD file.

Virtual Keypad Layout - It is common for system programmers to use and clone virtual keypads. If you choose this method, tagging the actual virtual keypad (not the cloned keypad) causes it to appear in the RSD file. Virtual keypads do not physically appear in a Crestron lighting system; therefore, it is common for system programmers to overlook the necessity to layout the virtual keypads for customer use. To minimize your effort in ClareCloud, consider the arrangement of buttons on the virtual keypad. By default, virtual keypads (not physically evident in a Crestron lighting system) will display exactly as they are laid out in D3Pro, once imported by ClareCloud. The buttons in ClareCloud are laid out in order from left to right.