adapt

System Manager 2 Reference Guide v1.02

CONTENTS

INTRODUCTION

System Manager 2 is a Windows based application designed to customize ADAPT software for Crestron home automation systems. A Crestron SIMPL Windows project built with ADAPT modules generates an ADAPT system file on the Crestron processor that contains all of the customizable settings and attributes of the project. Attributes such as properties, connections, and locations for rooms, devices, and interfaces. ADAPT System Manger is primarily a tool for editing, managing, and backing up that file. Additional features include troubleshooting, file loading, and more. ADAPT System Manager works in conjunction with ADAPT modules for SIMPL Windows and will not work with other Crestron software products. System Manager 2 has been revised from the ground up to provide a better user experience and incorporate a new infrastructure that will allow robust future features to be added.

GETTING STARTED

Installing ADAPT System Manager

If you are an ADAPT dealer, you will receive an installation package either through the dealer section of our website, www.pdadapt.com, or delivered directly from a PanTech Design associate. For more details on becoming an ADAPT dealer and acquiring the software, visit our website, send us an email at sales@pdadapt.com, or call us at 817-898-0339.

INSTALLATION

System Requirements

1. System running Atom quad-core processor, 2gb memory, 64gb storage and a monitor with minimum 1280x768 resolution (1920x1080 preferred).
2. Current login is an Administrator level account.
3. Install on Windows 7 or higher with the latest service packs and updates installed.
4. Temporarily suspend anti-virus programs or be prepared to allow/approve any exceptions while installing System Manager.

To install ADAPT System Manager on you PC or Tablet;

1. Locate the setup.exe file and run it (Note: Depending on the configuration version of Windows you might receive a notice that the application is not signed (Figure-A: Windows Protected your PC). This is not a concern so select "Run anyway").

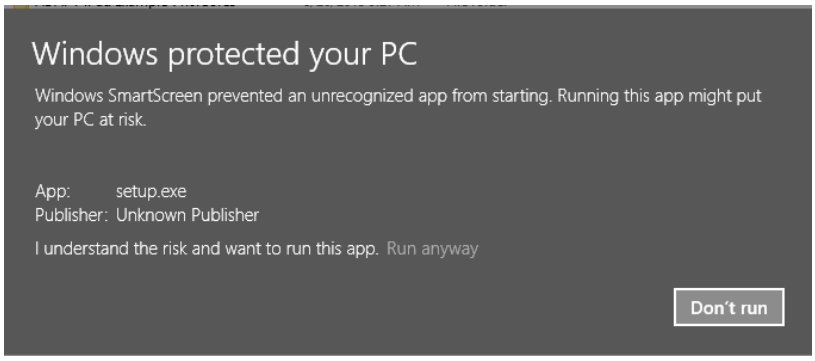


FIGURE A

2. Proceed with the installation following the Setup Wizard (Figure-B: PD ADAPT System Manager Setup Wizard).

FIGURE B

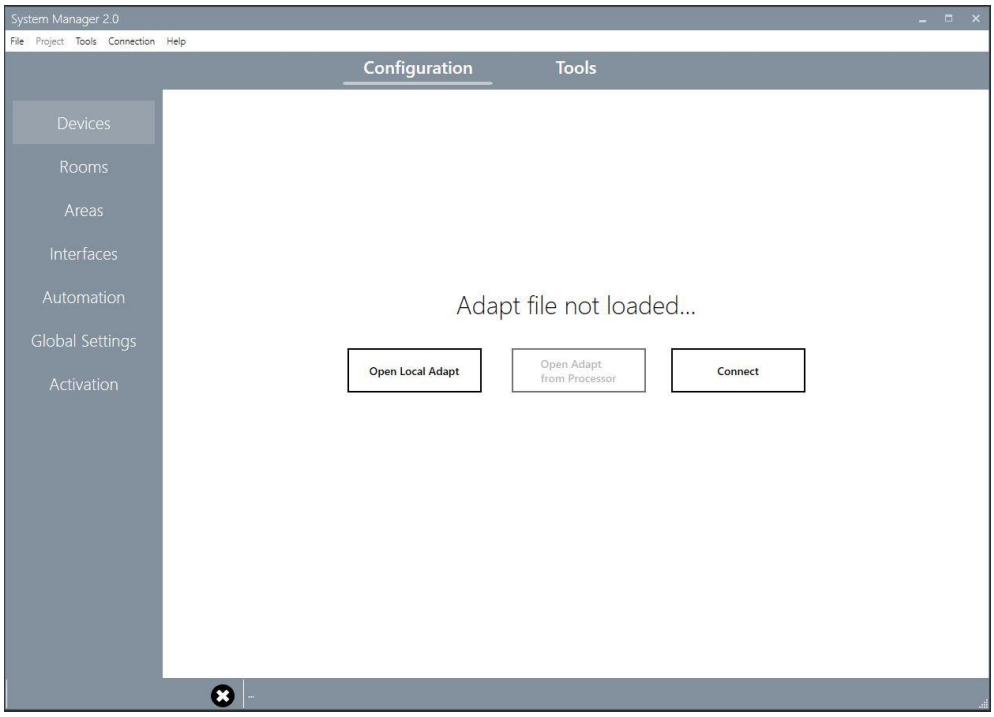
3. After the installation is complete, select the System Manager icon to launch System Manager (Figure-C: Adapt System Manager Icon).

FIGURE C

COMMON FILE TASKS

Start Page

The Start page is the first page you see when you open ADAPT System Manager (Figure-1).



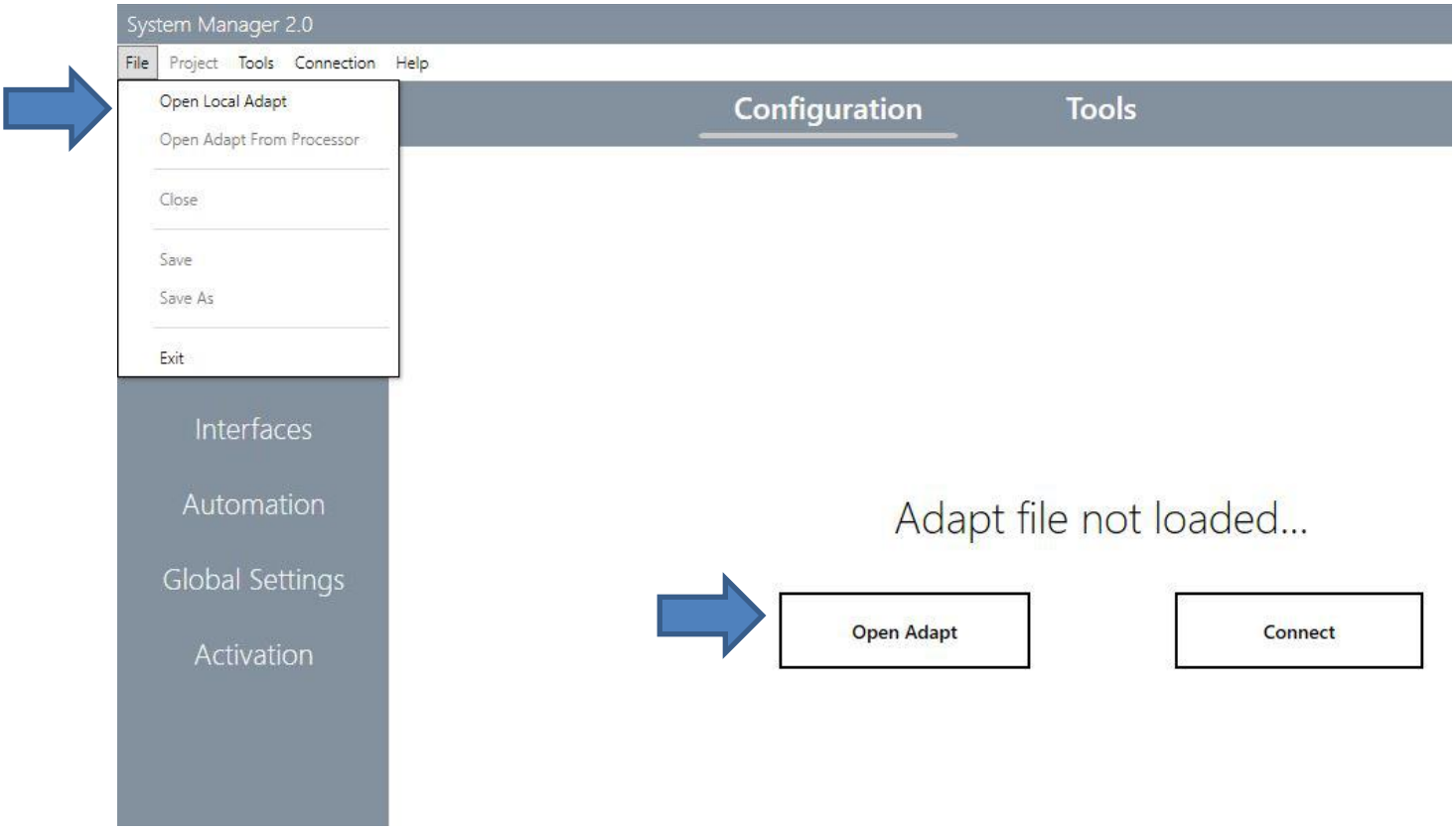
[Figure-1 – Start Page]

At startup, you should see the following quick items:
[Open Adapt] – This will allow you to open a local ADAPT file for editing.
[Connect] – This will open the processor connection console.

Note: You can open and edit files on your local PC and files a Crestron processor. It is important to know that once a system is running, ADAPT will write new data to the *.adapt file during run time. Data such as AV Scenes and Channel Presets. Once the system is running, you always want to retrieve the file from the Crestron processor and not rely on your local file.

Open a Local Adapt file

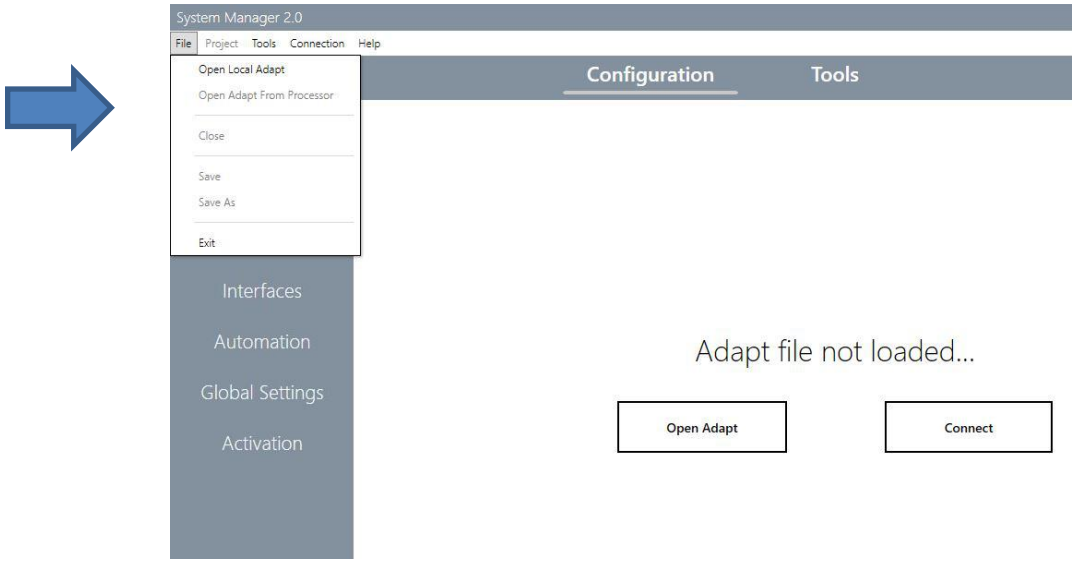
To open an Adapt file already saved on your computer, select [Open Adapt] on the Start page, or select "File/Open Local Adapt" from the top menu (*.adapt file extension), then select [Open] (Figure-2).



[Figure-2 – Opening an Adapt File]

Open an Adapt file from the processor

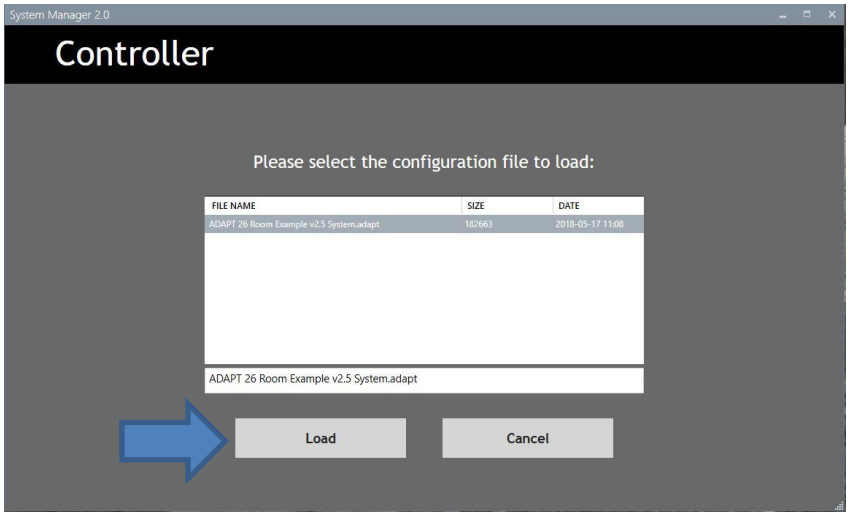
To open an Adapt file on the control processor you first establish an active connection to it in order to retrieve the Adapt file. (See next section on how to "Connect to a Processor"). Select [Open Adapt From Processor] on the "File/Open Adapt From Processor" from the top menu (Figure-3). NOTE: This menu item is only available when connected to a processor.



[Figure-3 – Opening an Adapt File From the Processor]

After selecting "Open Adapt From Processor", the processor will check the NVRAM directory on the processor and present you with a list of Adapt files found on the processor (Typically only one file is displayed. However, if this is your development processor additional files may be displayed, Figure-4).

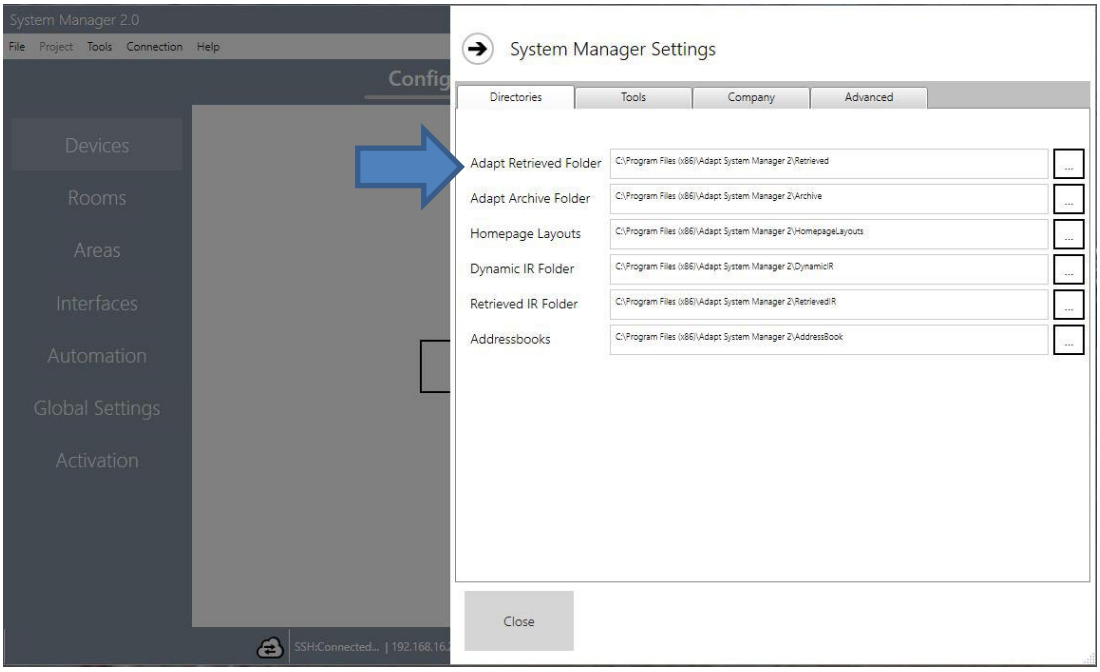
Select the "Load" button, or double-click on the file name. The file will be copied to your local PC.



[Figure-4 – Opening an Adapt File]

Adapt Retrieved Folder

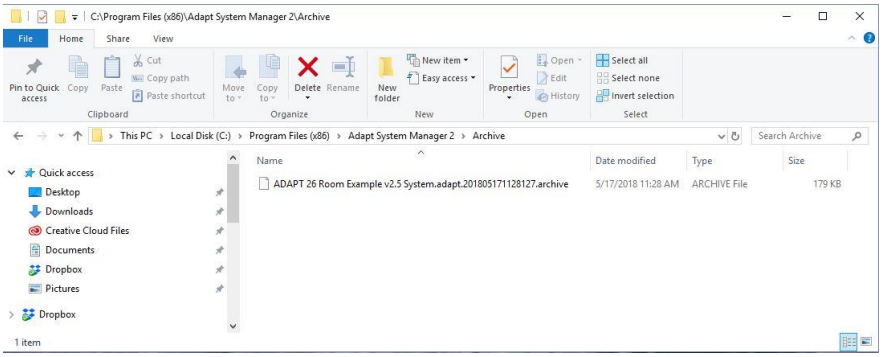
Please note that when the Adapt File is opened from the processor it is copied to the "Adapt Retrieved Folder" (Figure-5). The file path is shown in the "Tools/Settings" on the main menu and then under the Directories Tab in the "Adapt Retrieved Folder" path. In addition, an archive of the file is created in the "Adapt Archive Folder" with a time stamp to serve as a backup in case you need to revert to an earlier version of the Adapt file. NOTE: It is recommended to save your file to your working project directory using "File > Save As".



[Figure-5 – Adapt Retrieved Folder]

Adapt Archive Folder

Figure-6 shows an example of the archived Adapt file in the designated "Adapt Archive Folder". To restore the archive to an Adapt file, simply rename the extension from "archive" to "adapt".

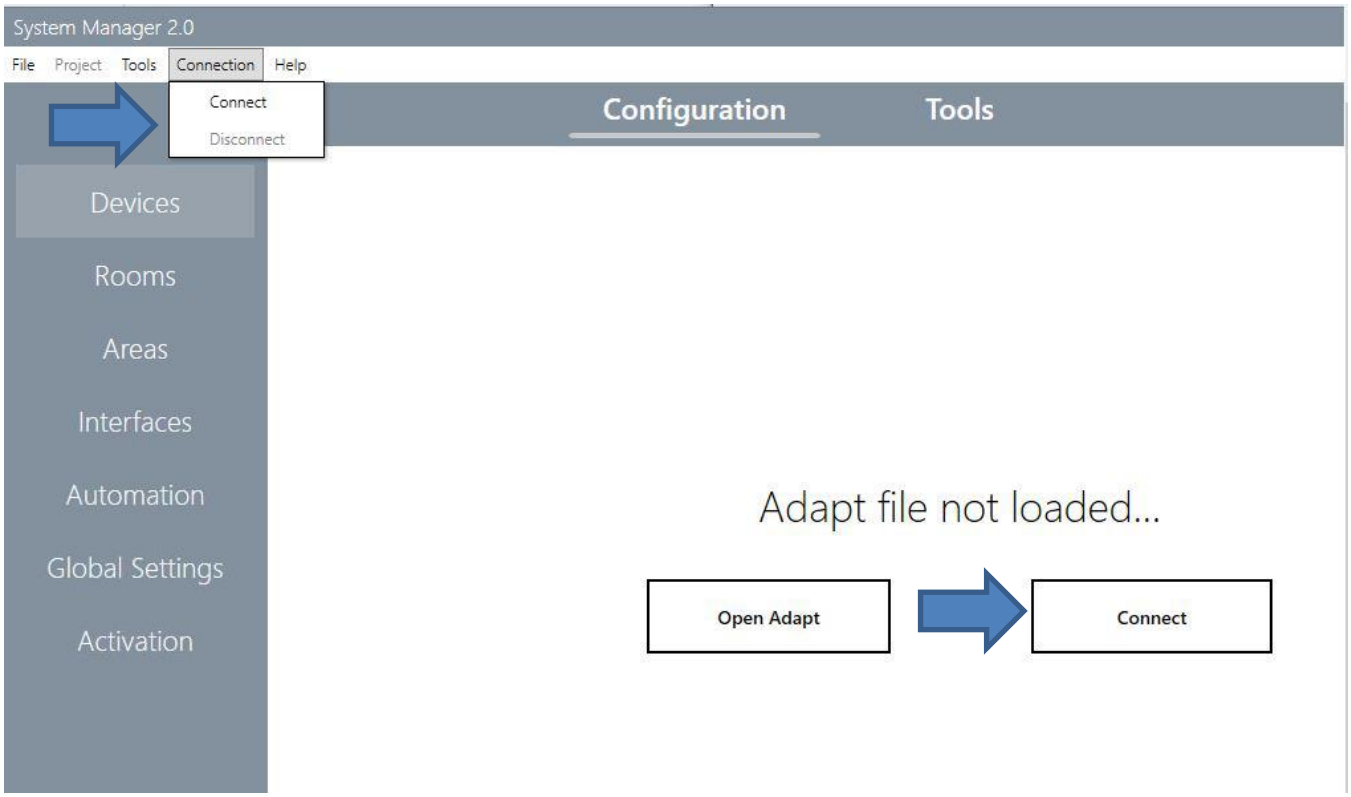


[Figure-6 – Example Archive File]

Connect to a Processor

To open an Adapt file that is located on a control processor you must first connect to it through System Manager in order to download it for editing. In addition, the connection allows for functions such as a live Console connection to the processor, SIMPL program transfer, Dynamic IR file transfer/retrieval and FTP file manager (Found in the "Tools" section of System Manager.

To establish a connection to a processor, select [Connect] on the Start page, or select "Connection/Connect" (Figure-7).



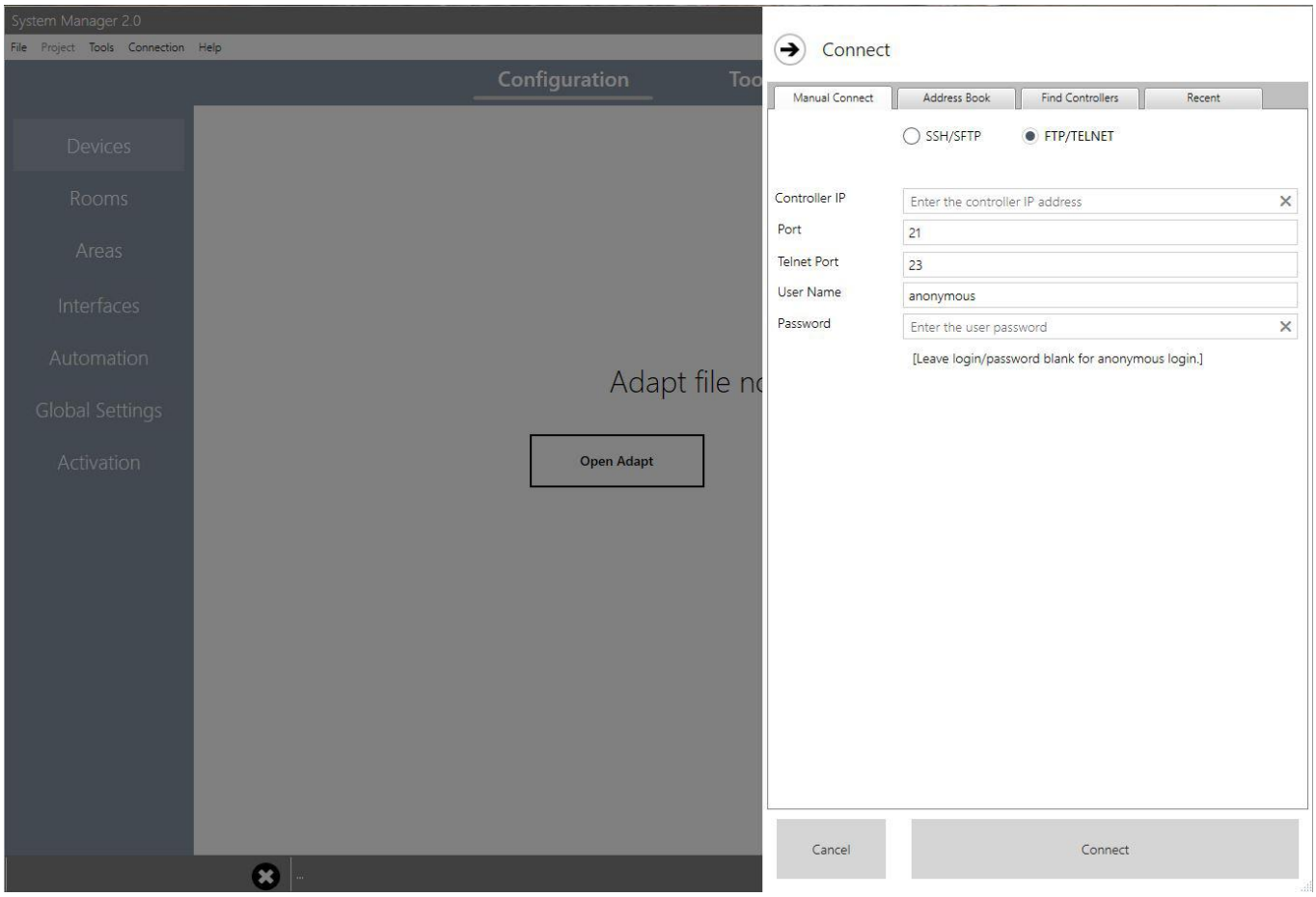
[Figure-7 – Connect to a Processor]

Connecting to a Processor

After selecting "Connect" a connection slide out will appear with 4 connection options;

1. Manual Connect

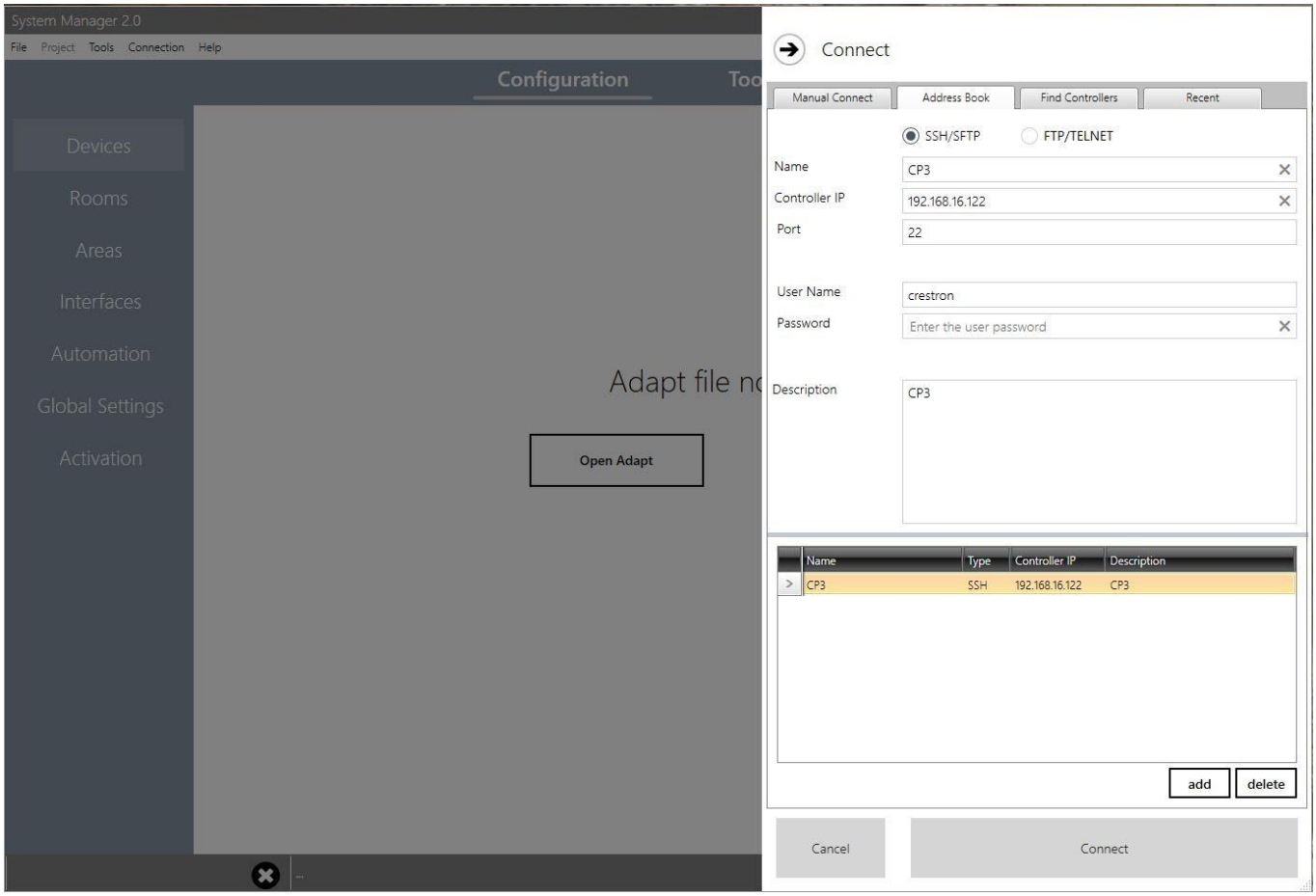
Manual Connect (Figure-8) allow for you to enter the connection information. First choose the connection type (SSH/SFTP or FTP/TELNET) NOTE: It is recommended that all connections be done as "SSH/SFTP" since this connection method is faster and more robust. Second, enter the Controller's IP address into the Controller IP field and the port number into the Port field (The default port number will be entered depending on the connection type selected). Third, enter the User Name and Password (if applicable). Again, the defaults will be automatically entered upon selecting the connection type. Last, select the Connect button to initiate the connection.



[Figure-8 – Manual Connect]

2. Address Book

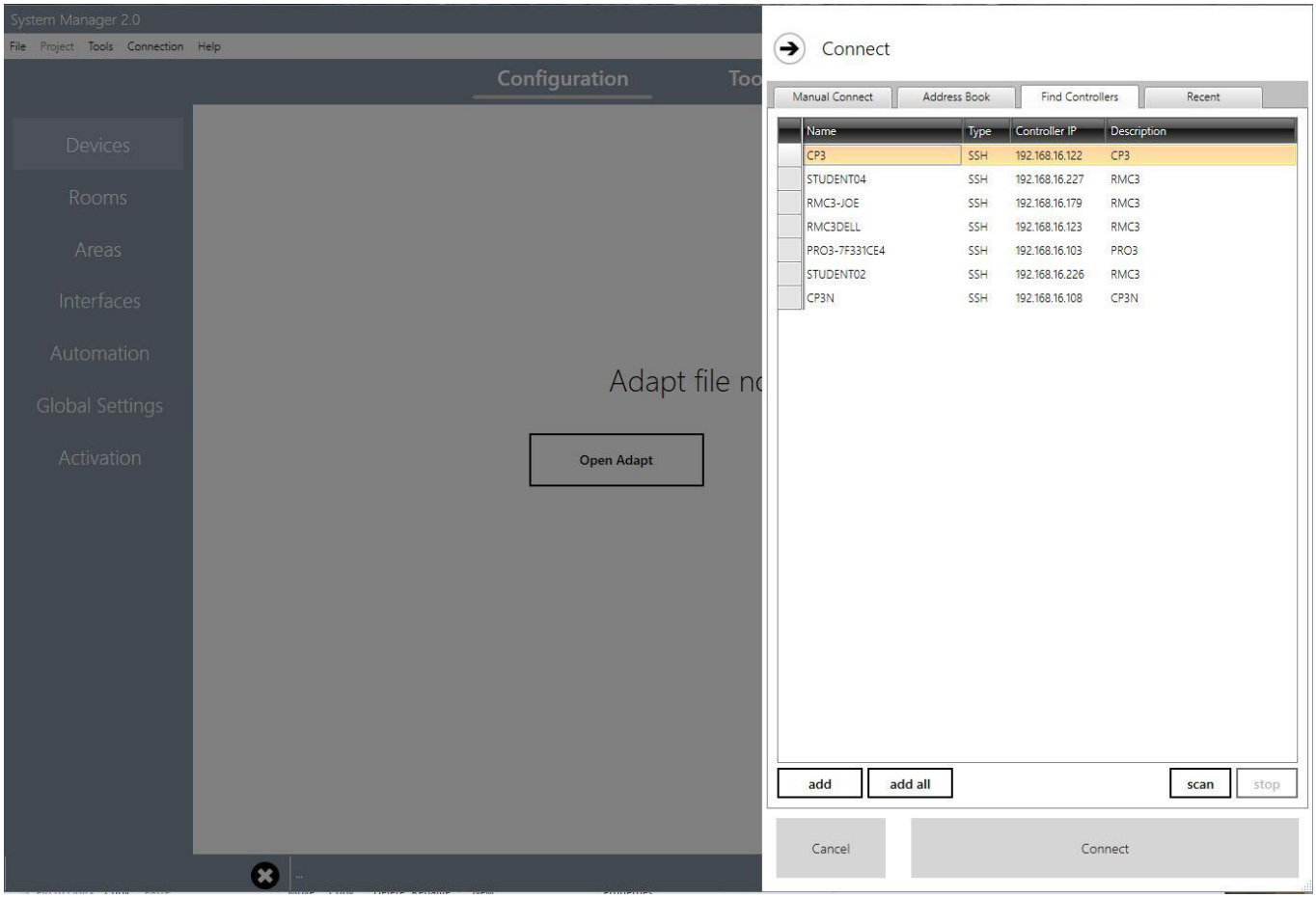
Address Book (Figure-9) allows you to save the connection information. To connect with an address book entry, first select the address book item, then select Connect (Or, just double-click the address book item). To edit the entry, select the item, then change the connection information (Changes are automatically saved).



[Figure-9 – Address Book]

3. Find Controllers

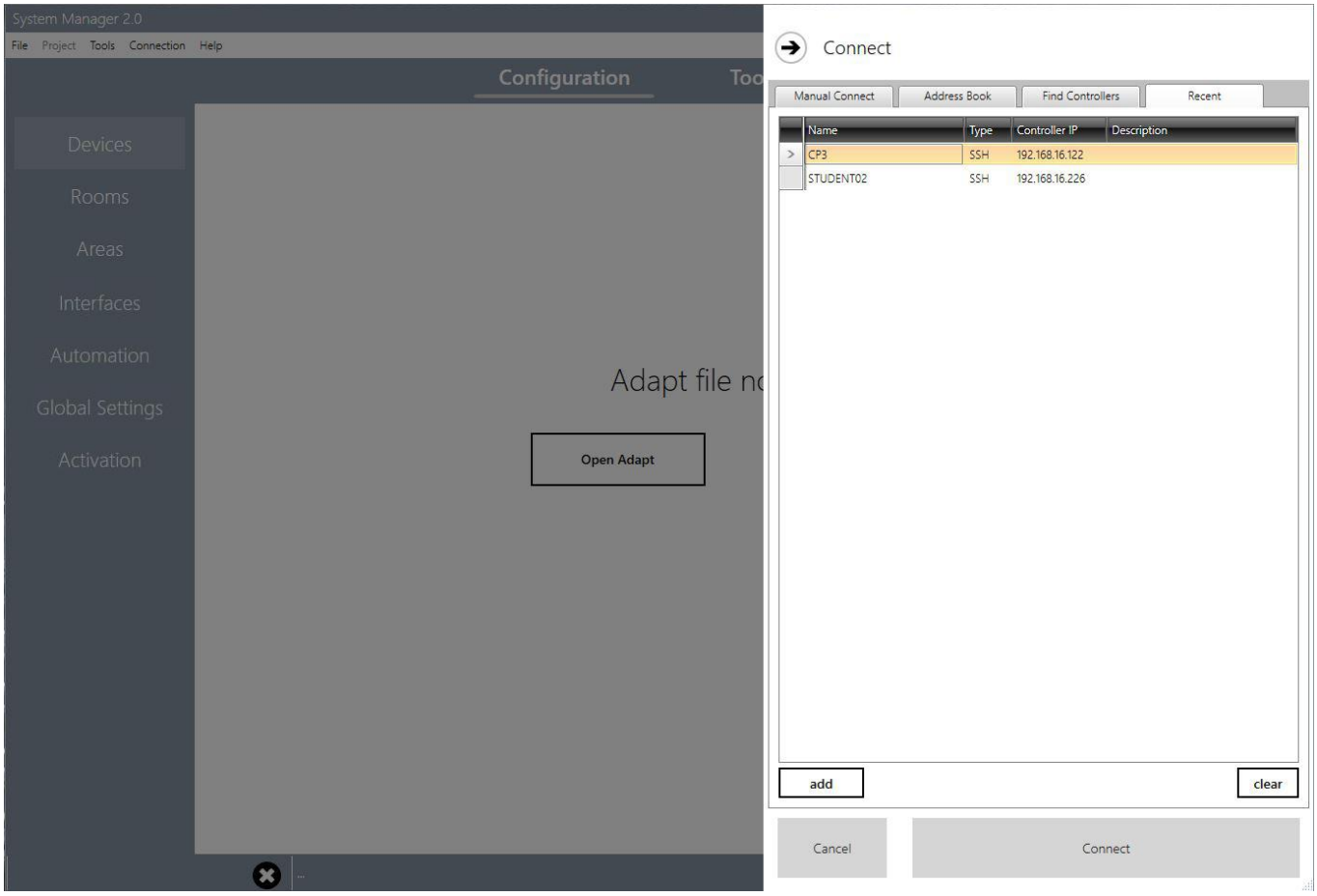
Find Controllers (Figure-10) allows you to auto discover any 3-series control processors connected to the same LAN you to connect to them. First, select the "Scan" button to discover the processors. To connect to a discovered processor, select the item, then select Connect (Or, just double-click the found item). Upon selecting a controller, two additional buttons will appear at the bottom of the connection page "add" and "add you to add the items to your address book which will be saved to your PC.



[Figure-10 – Find Controllers]

4. Recent

When a successful connection has been made, it is added to the recent connections list (whether it was made manually, in the address book or with the Found Controllers, Figure-11). Upon selecting a controller, an additional button will appear at the bottom of the connection page ("add"). This button allows you to add the item to your address book which will be saved to your PC.

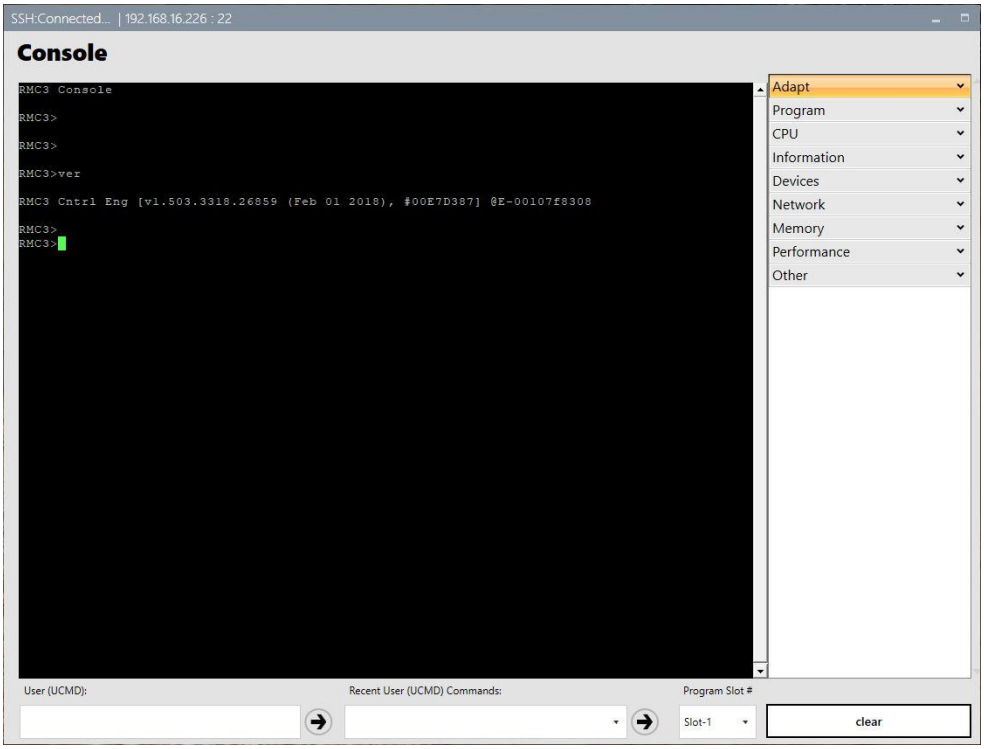


[Figure-11 – Recent]

Connection Process

When you are connecting to a processor, a splash screen will appear showing the connection progress as it establishes a connection. NOTE: It is recommended that all connections be done as "SSH/SFTP" since this is a faster more robust connection method.

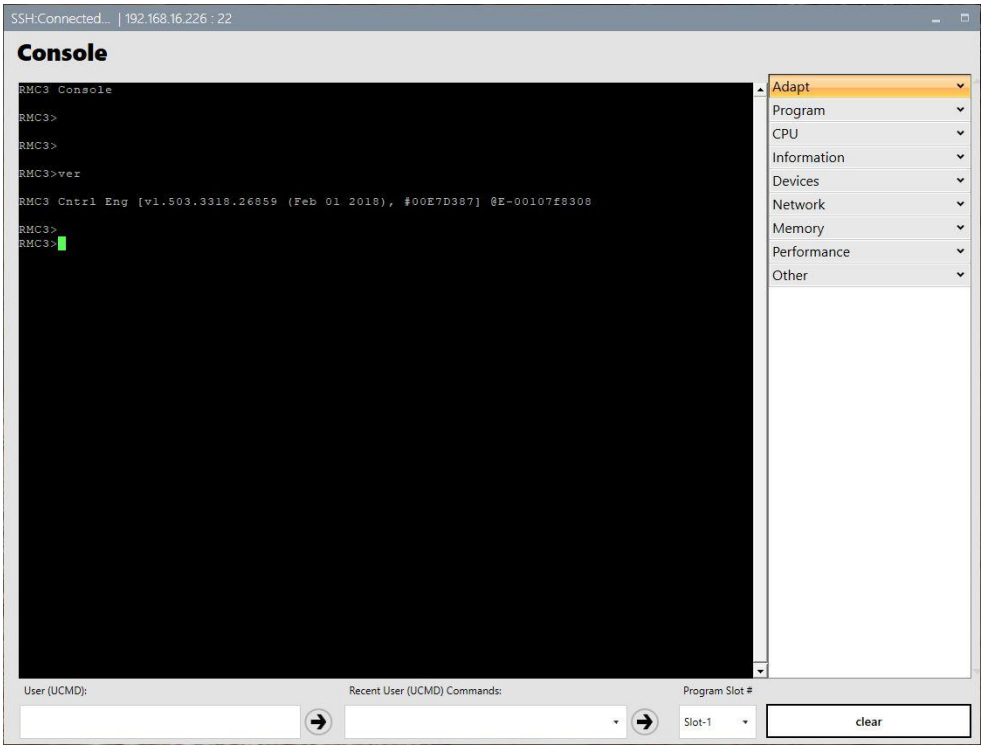
After a successful connection, a new window will be visible on your desktop. This is the terminal console for the connection (Figure-12).



[Figure-12 – Console Window]

The "Console" window has three primary areas (1) the console terminal area (click anywhere in the black area to gain focus), (2) pre-programmed commands in the menus on the right and (3) user command entry area on the bottom which includes a recent user commands area that maintains a list of commands entered so they do not have to be retyped. NOTE: This window can be resized and minimized but cannot be closed. This is due to the importance of keeping this window available to monitor the processor during the Adapt processes. It is recommended to become familiar with the Console and actively monitor the processor when programming and configuring the Adapt file.

After a successful connection, a new window will be visible on your desktop. Thisis the terminal console for the connection (Figure-12).



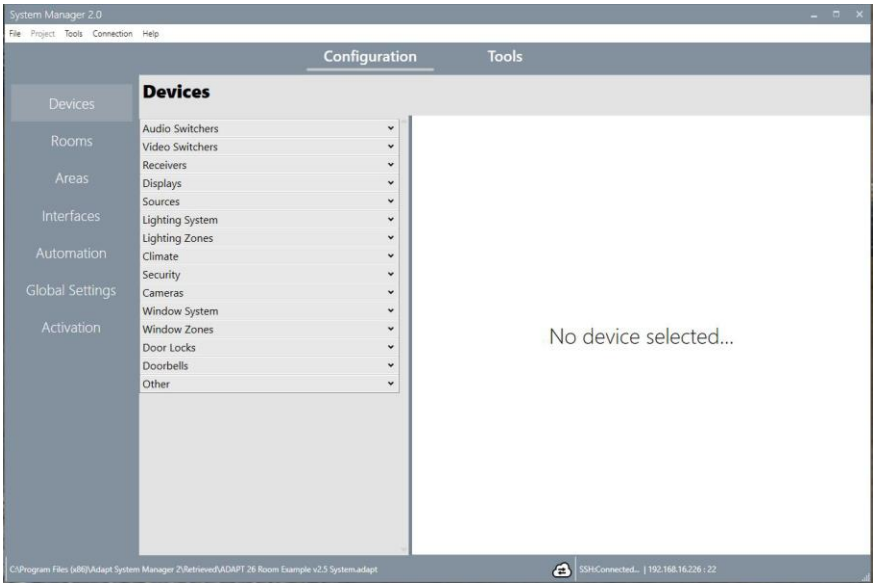
[Figure-12 – Console Window]

SYSTEM CONFIGURATION

Ready to Edit the Adapt File

After successfully opening the Adapt file for editing, it is now time to review the Configuration section of System Manager.

The Configuration area (previously known as System) is project will be customized. Editing devices, rooms, interfaces, and global settings are all accomplished through the various sections in this area. Navigating the sections is simple as selecting the desired section from the menu list at the left side of the screen.



[Figure-13 – Configuration]

The Configuration section consists of six different configuration areas:

1. Devices – Where you edit the devices that have been defined as part of your system.
2. Rooms – Where you define how each room is configured.
3. Areas – This section allows you to group rooms together for control.
4. Interfaces – Where you configure each control interface.
5. Automation – Where you configure automatic functions for the system.
6. Global Settings – For setting up Preset source, Multi-Room sources and Intercom Touch Panels.
7. Activation – Where you enter activation information for your controller.

DEVICES

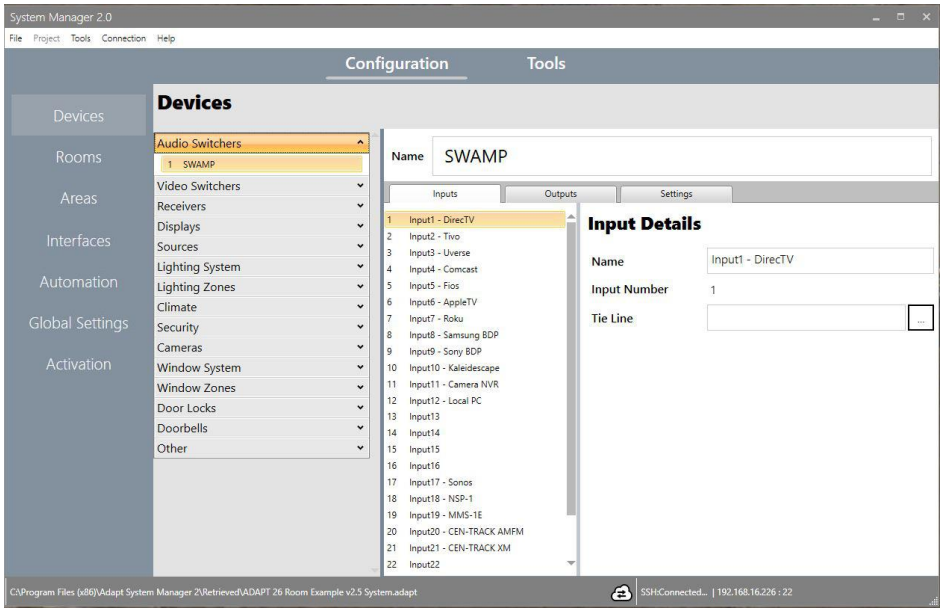
The "Devices" section shows a list of the different device types. Devices are listed under each device type based on what was defined in the SIMPL Windows program. Note that each device will have a unique ID within a device type. For example, the first Audio Switcher listed will be Audio-1. The device ID shown in the Details field reflects this unique ID. This Device ID corresponds to the unique ID assigned to the module in the SIMPL Windows program. In order for the program to make the correct connections to the appropriate IR driver, control module, etc., these IDs must match in the program and the configuration file.

To modify a device, select the device type from the "Devices" list to expand then select the individual device. Under the details area, you can rename the device by updating the Name field then selecting [Apply].

While you cannot delete a device in System Manager, a device can be in the project and not exposed on user interfaces simply by not assigning it to a room or by removing it from the Allowed Sources list under Rooms or the Navigation Items list under Interfaces. If you do want to delete a device from a project completely, it must be done in the SIMPL Windows program.

A **Tie Line** is defined when the input of a switcher is connected to the output of another switcher. A switcher is any device that has multiple inputs with a variable output. For example, an output on a video switcher connects to the input of a video display. Both devices are technically switchers because they have different inputs and the output sends or displays whichever input is selected. To define this connection, we must add a Tie Line to the target input on the video display that points it to the correct output on the video switcher. To expand this example, we could add an AV receiver between the video switcher and the video display. To connect the correct signal flow, define a Tie Line on the input of the video display to the output of the AV receiver then define another Tie Line on the input of the AV receiver to the output of the video switcher. Tie Lines are not needed when defining the fixed output of a switcher, such as a loop output, to the input of another switcher. For example, assume you have two audio switchers that are cascaded. Typically, in the physical installation, there would be static connections for each input on the first switcher to the inputs of the next switcher. With a C2N-AMP6X100, the loop outs on the first switcher are connected to the inputs of the second switcher. Tie Lines are not the appropriate method for defining these connections. Instead, the output of each source device should be connected to the corresponding input of each switcher. See Sources for more details. With a Sonnex system, the SWAMP-24X8 and connected expanders are considered one switcher with 24 inputs and as many outputs as there are expanders.

AUDIO SWITCHERS

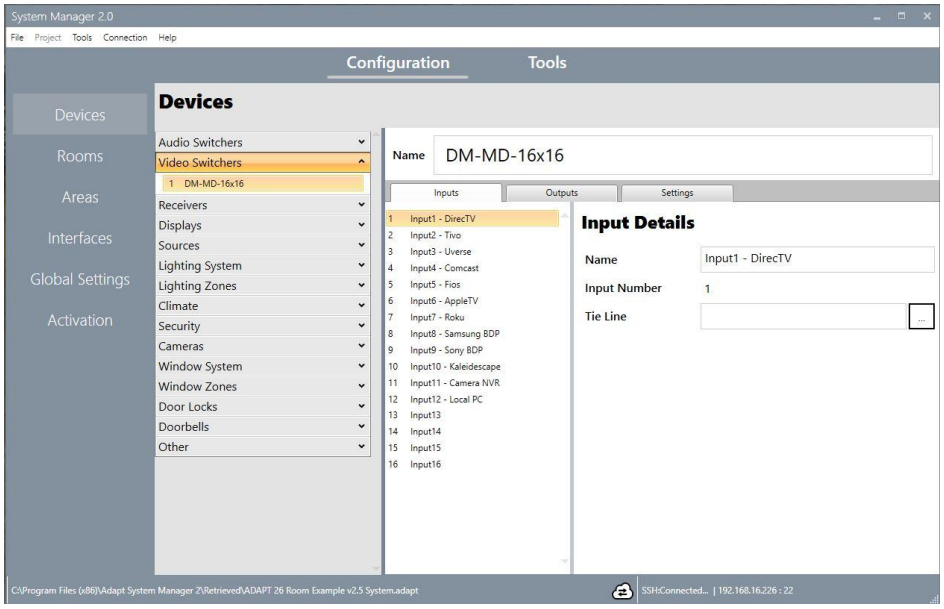


Inputs: The Inputs tab shows a list of the inputs for the device. To change an input name, update the corresponding field and select the "Save" icon in the Input Details area. To define a Tie Line, select the ellipsis […] button, then in the console window that opens, select the corresponding device and output then select [Apply].

Outputs: The Outputs tab shows a list of the outputs for the device. To change an output name, update the corresponding field and select the "Save" icon in the Output Details area.

Settings: **(**No settings available.)

VIDEO SWITCHERS



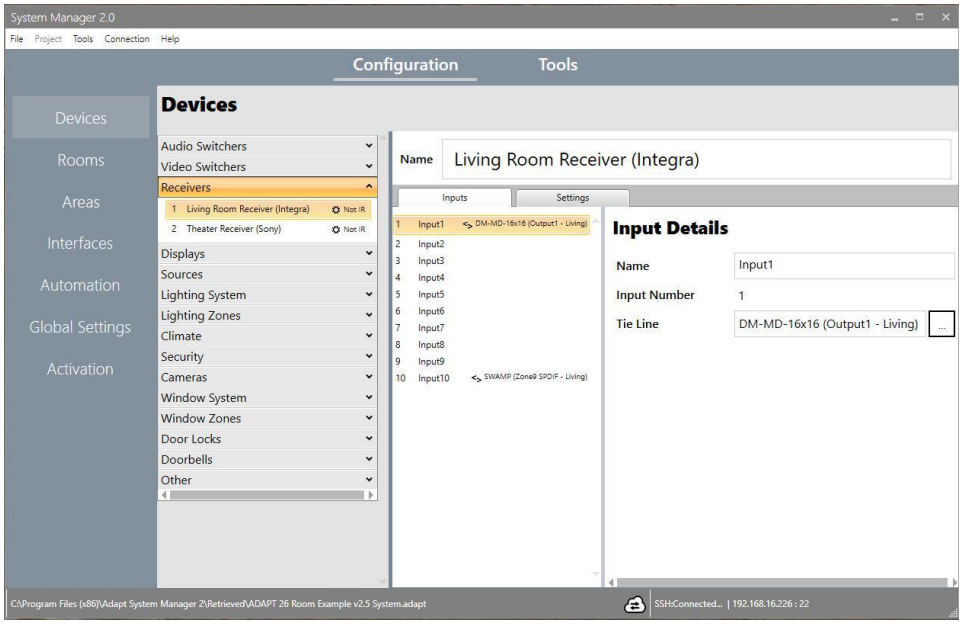
Inputs: The "Inputs" tab shows a list of the inputs for the device. To change an input name, update the corresponding field and select the "Save" icon in the Input Details area. To define a Tie Line, select the ellipsis […] button, then in the console window that opens, select the corresponding device and output then select [Apply].

Outputs: The "Outputs" tab shows a list of the outputs for the device. To change an output name, update the corresponding field and select the "Save" icon in the Output Details area.

Settings: **(**No settings available.)

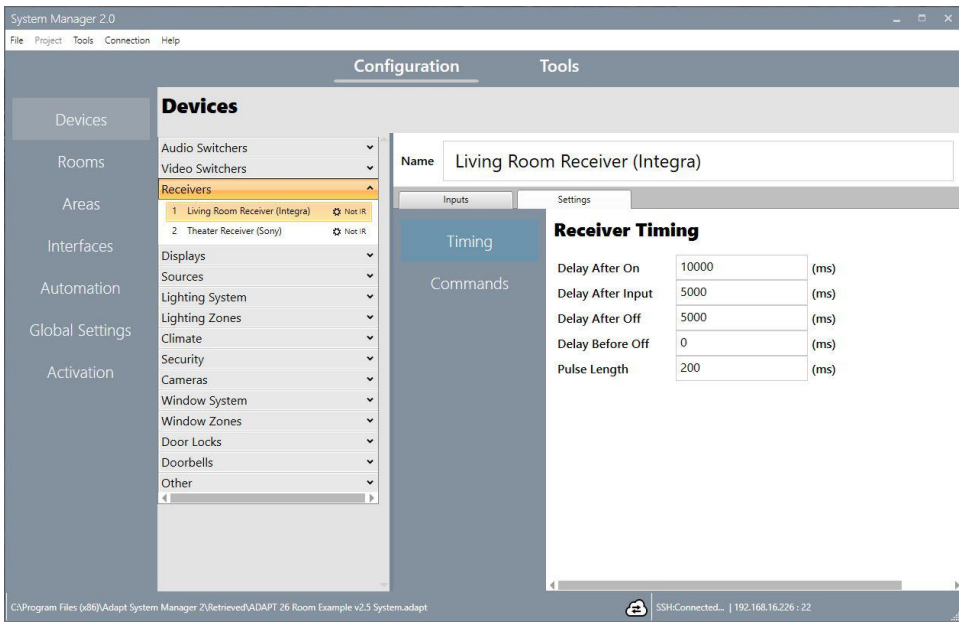
AV RECEIVERS

Inputs: The "Inputs" tab shows a list of the inputs for the device. To change an input name, update the corresponding field and select the "Save" icon in the "Input Details" field. To define a Tie Line, select the ellipsis […] button, then in the console window that opens, select the corresponding device and output then select [Apply]. Note that if multiple Tie Lines are defined on different input on a Receiver, the lower numbered input takes precedence. Take the example of a satellite box that has an audio destination defined on an Audio Switcher, and a video destination defined on a Video Switcher. If Input 1 on the Receiver is defined as a Tie Line coming from an output on the Audio Switcher, and Input 2 is defined as a Tie Line coming from the Video Switcher, whenever that source is selected, the Receiver will switch to Input 1 which may be undesirable. It is recommended that you always define video tie lines on lower numbered inputs than audio tie lines.



Settings: Under the settings tab, you can modify Timing and Commands.

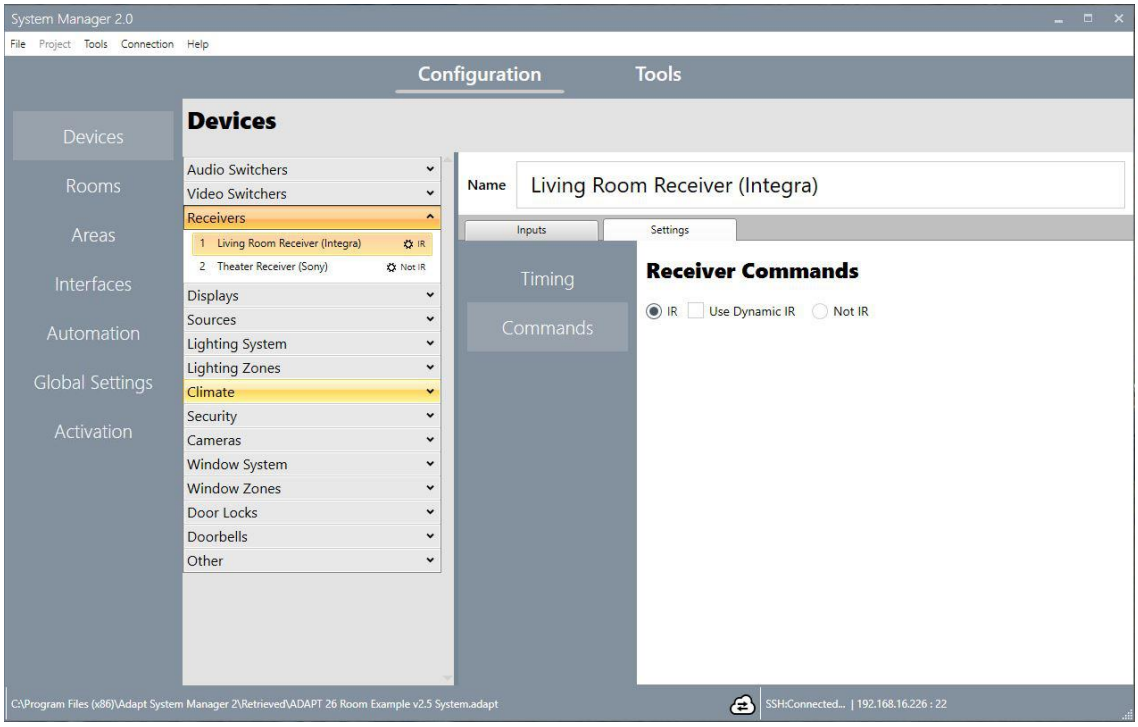
- **Timing** is the delay a device requires to perform an action before it will respond to a new command. For example, when an AV Receiver powers on, there is typically a short period of time before the device will respond to any other commands. This section enables you to define that delay time for common events. Times are defined in milliseconds (1,000ms = 1 second).



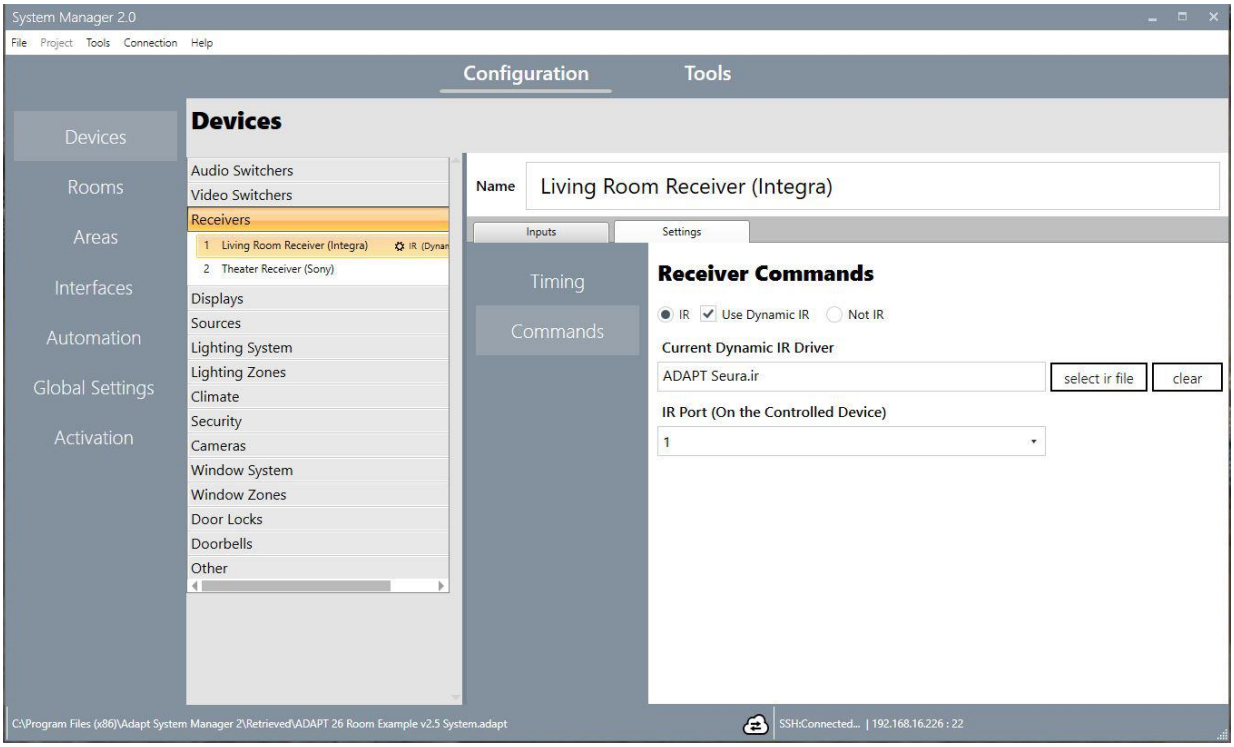
- **Delay After On**: This will delay any other commands for the defined amount of time after the device powers on from a power off state.
- **Delay After Input**: This will delay any other commands for the defined amount of time after an input command is sent.
- **Delay After Off**: This will delay any other commands for the defined amount of time after the device powers off.
- **Delay Before Off**: This defines a delay if power sequencing needs to occur. This delay is initiated when a room is powered off and will delay the power off command to the device for the defined amount of time.
- **Pulse Length**: This defines the duration of pulsed commands to the device.

Commands define the IR or serial control. With IR control, it is assumed that there will be no way to send the device to a specific volume level.

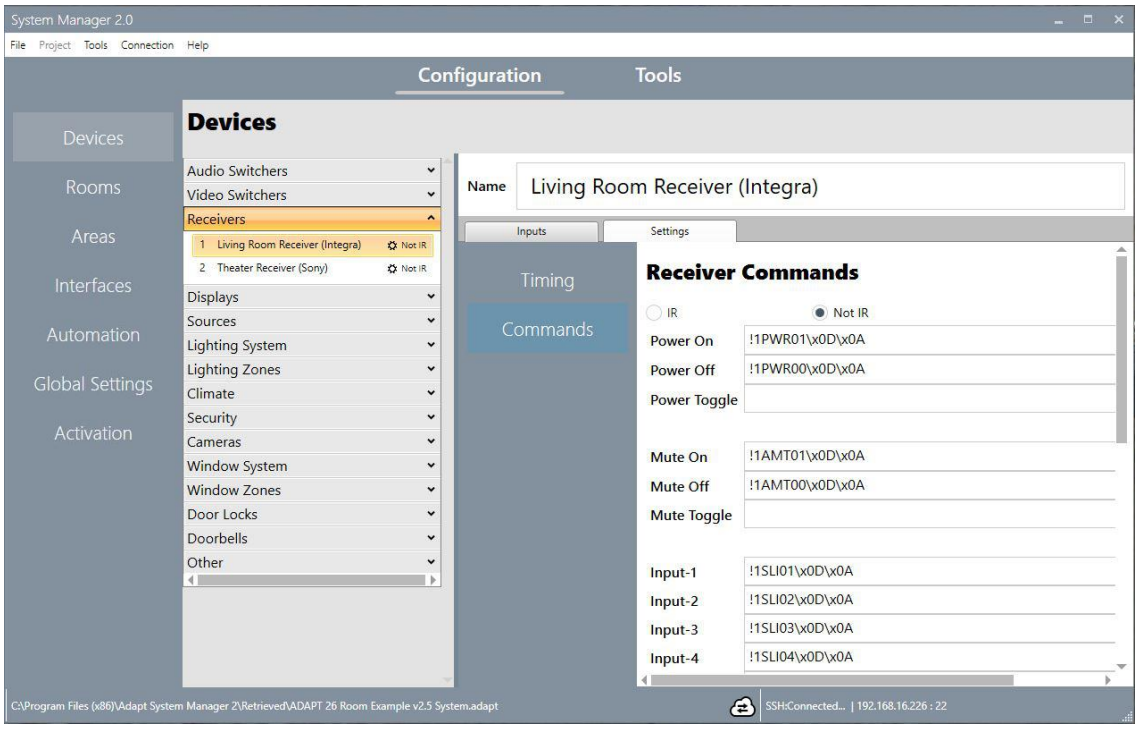
- **IR**: Select this for IR control. IR commands are defined with IR drivers in SIMPL Windows. Note that an AV Receiver that only uses IR is not recommended. The volume feedback on user interfaces will always display 0%. With IR control, it is assumed that there will be no way to send the device to a specific volume level.



- **Use Dynamic IR**: Select this for Dynamic IR control. Dynamic IR makes programming AV Receivers easier, and can save quite a bit of time during commissioning and troubleshooting by removing the requirement of hard-coding the IR driver into the SIMPL Windows program. Instead the program uses a Packet Transmission Device Extender on the IR port that the device is connected to, and the IR driver (.ir file) is loaded directly to the processor at run-time – allowing you to swap, update and test drivers without re-compiling or even resetting the program. Upon selecting Use Dynamic IR, the Driver file and Port selection fields appear. Click the Select IR File button to browse for an IR driver. System Manager will make a copy of the selected file in the install directory (default is \Program Files (x86)\Adapt – System Manager\DynamicIR) for use with the Dynamic IR File Transfer Tool (see here for details on transferring IR drivers using System Manager). Select the port number the device is connected to from the IR Port drop-down list. See the ADAPT Reference Guide.pdf for information on Dynamic IR and how to make .ir files compatible with ADAPT.



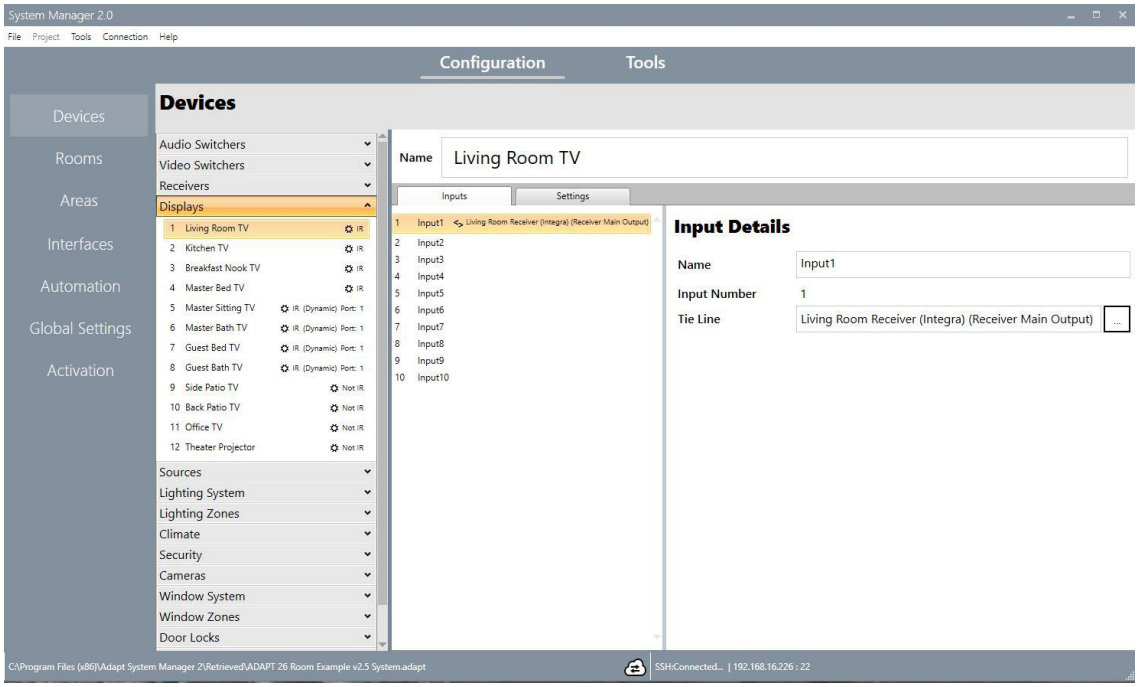
- **Not IR**: Select this for serial control. When Use Command Strings is selected, options for adding string commands will appear. The Device Control Commands section provides fields to enter serial control string commands for common functions of AV Receiver and Display devices. Functions include power, volume, mute, and input. In the fields provided, enter the full serial string to be sent to the controlled device as prescribed by the device manufacturer. The escape sequence for hexadecimal notation is "\x", just like in SIMPL Windows. In order to be able to use the Volume Commands section, the protocol of the device must not require a checksum, and be able to send commands of the form: [Header][Volume Level][Footer] (where Volume Level is a contiguous range of signed integers). If the protocol is more complicated, it is recommended to use a device module in SIMPL Windows to at least handle the sending of volume commands.



Note: For devices which need checksum calculations for volume controls, the ADAPT file cannot accommodate this and volume will need to be handled in a different manner such as a custom control module.

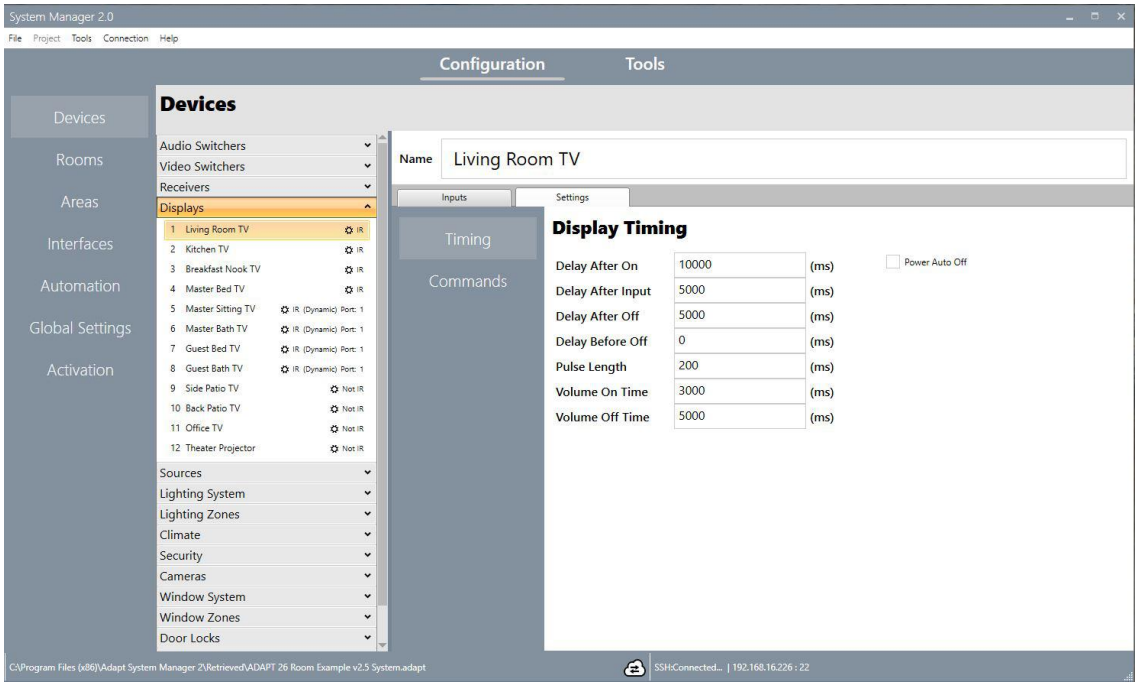
DISPLAYS

Inputs: The Inputs tab shows a list of the inputs for the device. To change an input name, update the corresponding field and select the "Save" icon in the Input Details field. To define a Tie Line, select the ellipsis […] button then, in the console window, select the corresponding device and output then select [Apply].



Settings: Under the settings tab, you can modify Timing and Commands.

- **Timing** is the delay a device requires to perform an action before it will respond to a new command. For example, when an AV Receiver powers on, there is typically a short period of time before the device will respond to any other commands. This section enables you to define that delay time for common events. Times are defined in milliseconds (1,000ms = 1 second).

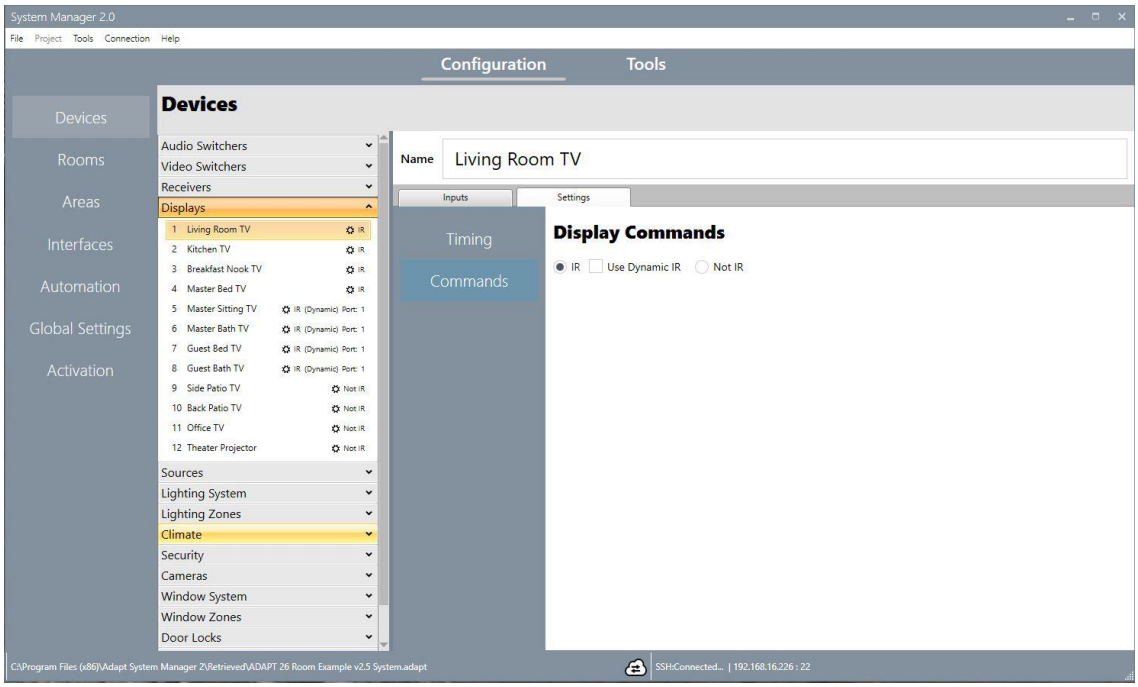


- **Delay After On**: This will delay any other commands for the defined amount of time after the device powers on from a power off state.
- **Delay After Input**: This will delay any other commands for the defined amount of time after an input command is sent.
- **Delay After Off**: This will delay any other commands for the defined amount of time after the device powers off.
- **Delay Before Off**: This defines a delay if power sequencing needs to occur. This delay is initiated when a room is powered off and will delay the power off command to the device for the defined amount of time.
- **Pulse Length**: This defines the duration of pulsed commands to the device.
- **Volume On Time**: This defines the volume up ramp time when a source is selected that uses display volume. This only occurs when switching from a source that uses head end audio. Whether or not a source uses display volume is set in Settings in Rooms.
- **Volume Off Time**: This defines the volume down ramp time when a source is selected that does not use display volume. This only occurs when switching from a source that uses display volume. Whether or not a source uses display volume is set in Settings in Rooms.

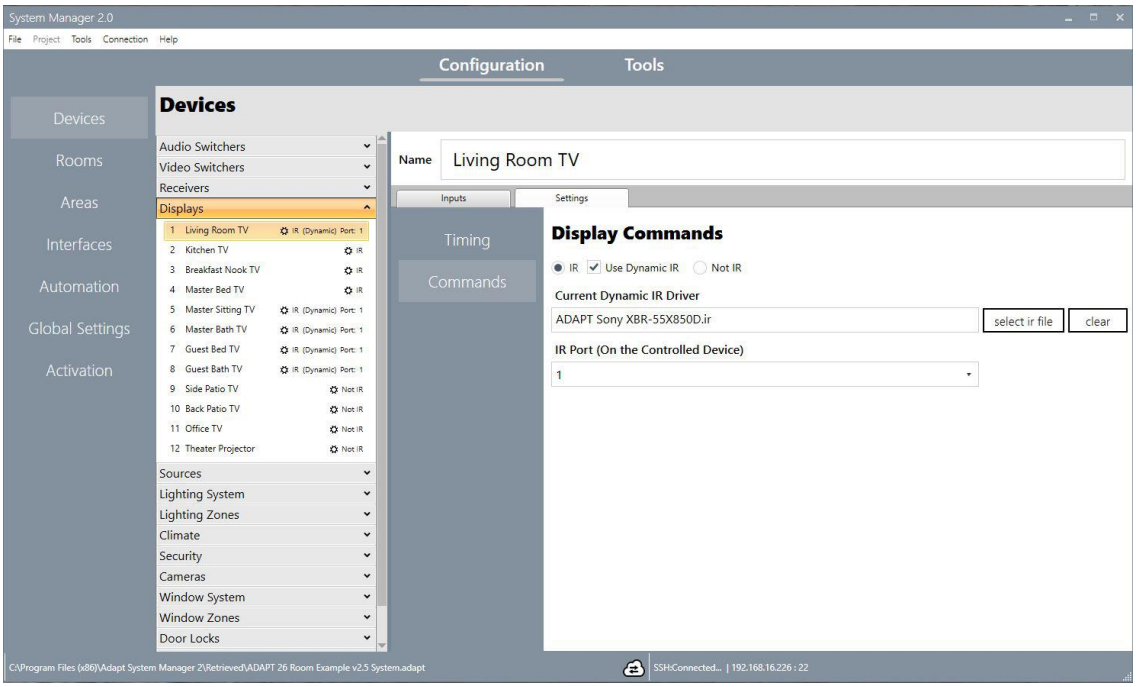
- **Auto Power Off**: Checking this box forces the display to turn off when the Room is told to switch to an audio-only source (or more specifically, a source that the display is not capable of switching to).

Commands define the IR or serial control. With IR control, it is assumed that there will be no way to send the device to a specific volume level.

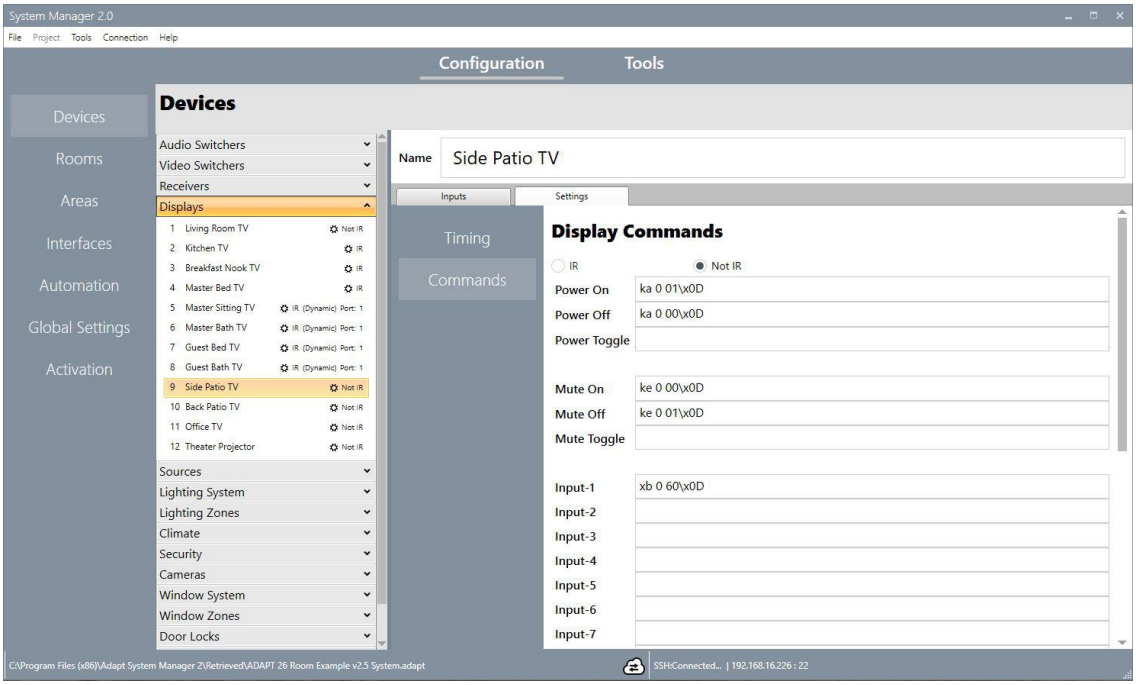
- **IR**: Select this for IR control. IR commands are defined with IR drivers in SIMPL Windows. Note that if volume control of a Display is required, it is not recommended to select one that can only be controlled via IR. The volume feedback on user interfaces will always display 0%.



- **Use Dynamic IR**: Select this for Dynamic IR Control. See the explanation for AV Receivers here. Displays and AV Receivers function identically when it comes to Dynamic IR.

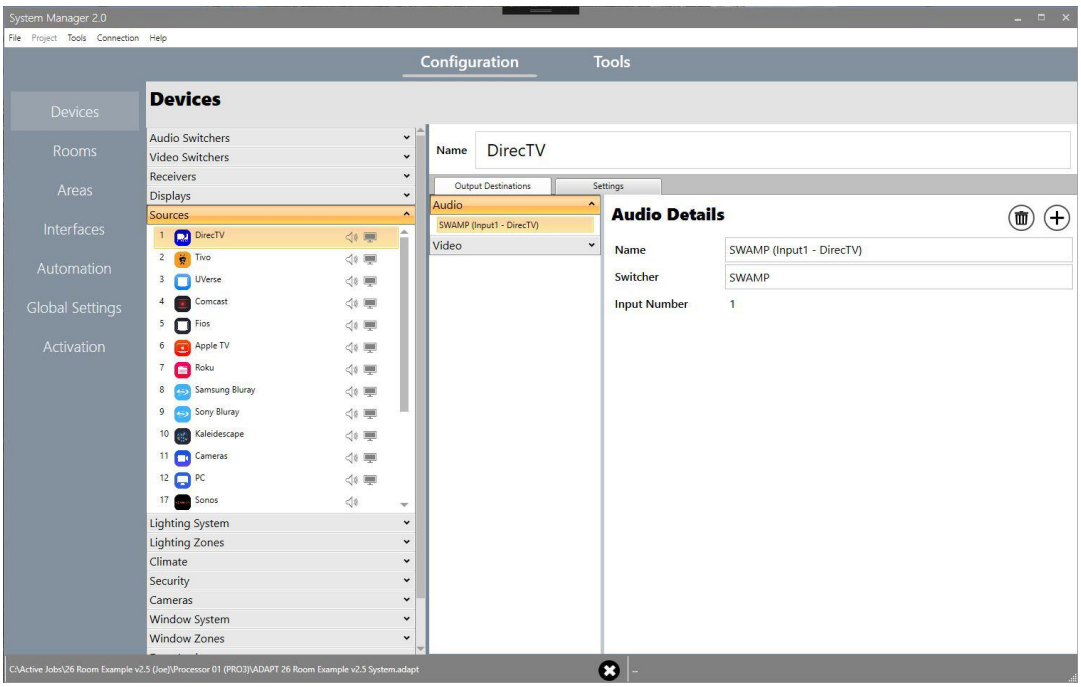


- **Not IR**: Select this for serial control if a device control module is not being used in SIMPL Windows. When Use Command Strings is selected, options for adding string commands will appear. The Device Control Commands section provides fields to enter serial control string commands for common functions of AV Receiver and Display devices. Functions include power, volume, and input. In the fields provided, enter the full serial string to be sent to the controlled device as prescribed by the device manufacturer. The escape sequence for hexadecimal notation is "\x", just like in SIMPL Windows. In order to be able to use the Volume Commands section, the protocol of the device must not require a checksum and be able to send commands of the form: [Header][Volume Level][Footer] (where Volume Level is a contiguous range of signed integers). If the protocol is more complicated, it is recommended to use a device module in SIMPL Windows to at least handle the sending of volume commands.



SOURCES

Inputs: Define the source connections to switchers, displays, and other audio and video end points.



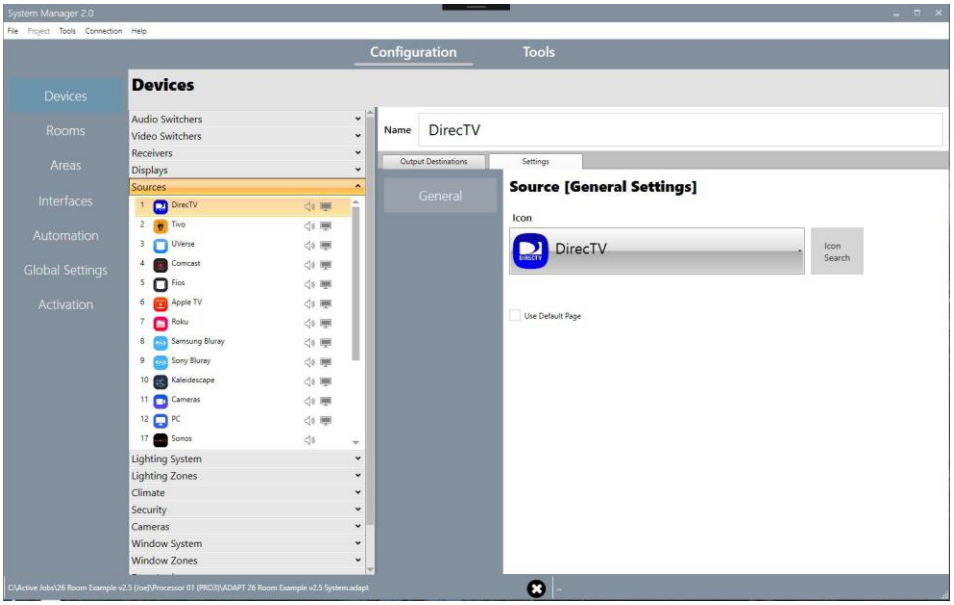
- **Audio:** To add an audio output destination, select [Audio] from the Source Output Destination list then select the "Plus" icon. The Console window opens will displays all the audio destinations available in the project. Select the device type, then the specific device, then select the target input. Select add to save. Select the "Trash Can" icon to delete an output destination. Note: If the project has multiple audio switchers that are cascaded, add audio output destinations for all switchers.

- **Video:** To add a video output destination, select [Video] from the Source Output Destination list then select the "Plus" icon. The Console window that opens will display all the video destinations available in the project. Select the device type, then the specific device, then select the target input. Select add to save. Select the "Trash Can" icon to delete an output destination. Note: If the project has multiple video switchers that are cascaded, add video output destinations for all switchers.

Note: ADAPT supports up to 36 sources.

In ADAPT, video connections are assumed to carry audio. This is important when connecting sources to an AV Receiver. It is not necessary to connect the same source for both audio and video to the same AV Receiver. If the source has video, only the video destination should be defined on the Receiver.

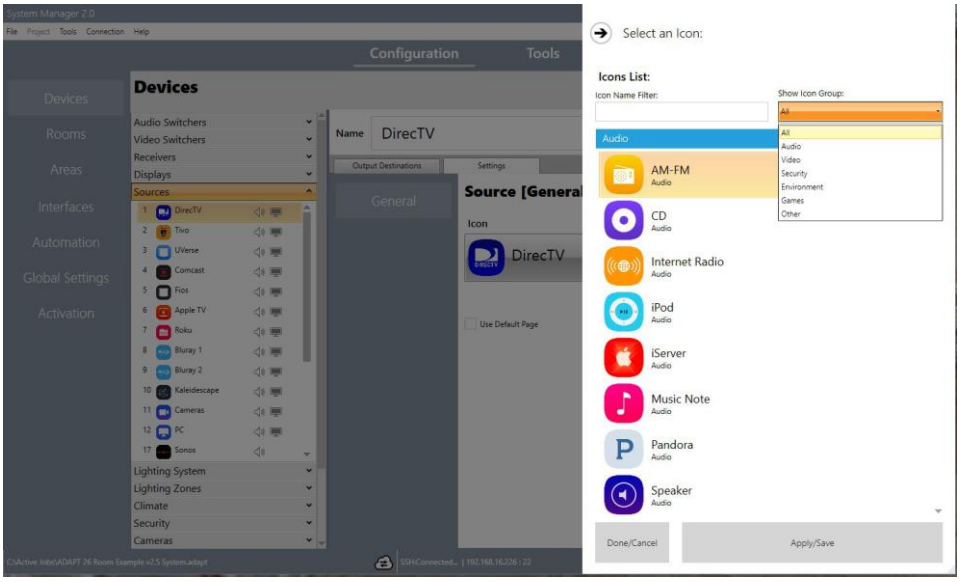
Settings: Under the settings tab, you can set the source icon that will be displayed on touch panel interfaces and set the device default page preference.



- **Icon:** Under Source [General Settings], select the Icon drop down menu then choose the icon that will be displayed for the selected source.

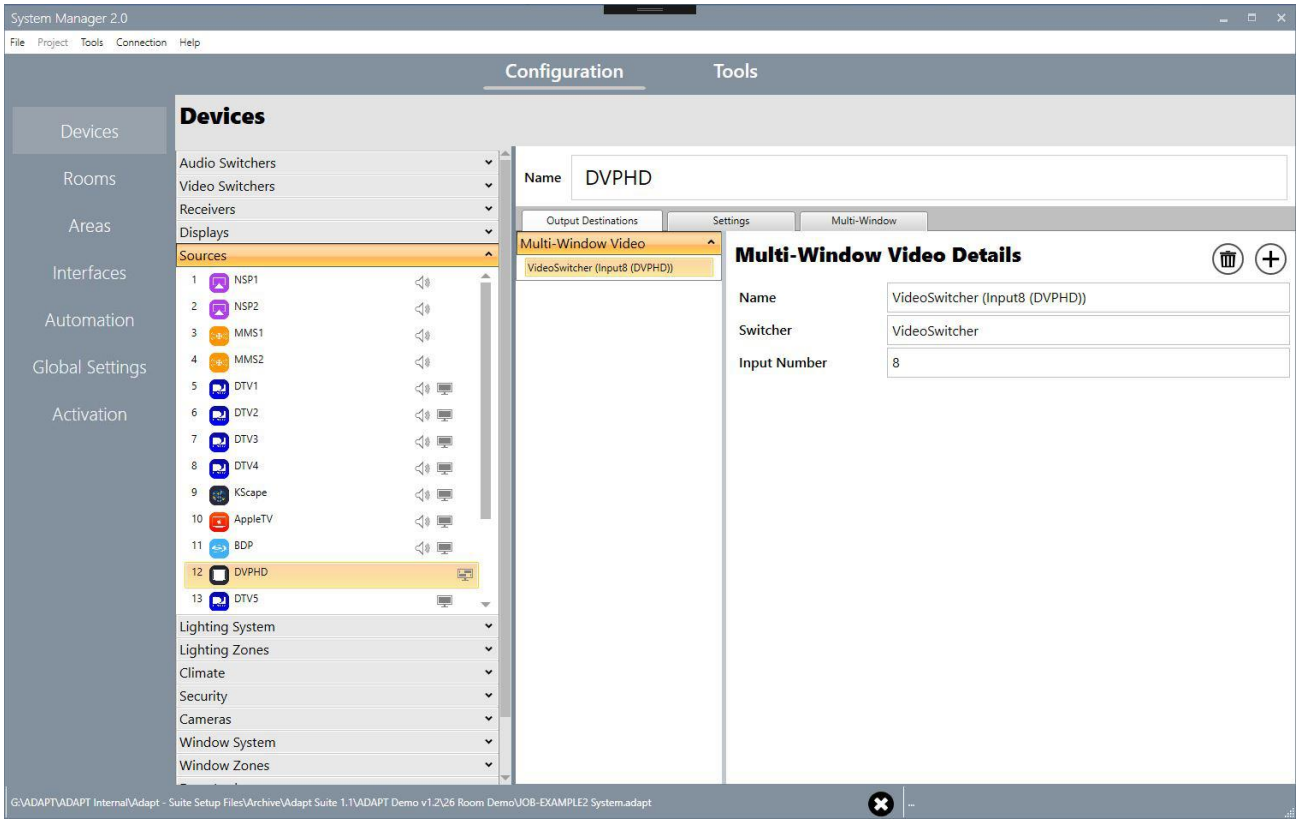
- **Use Default Page:** By default, when a device is selected, the last used control page for the device will be displayed. Check this box to have the main control page for the device displayed when the device is selected, regardless of the last used page.

- **Icon Search:** Presents a slide-out panel that gives you icon group searching and filtering to help narrow down choices for icon selection.

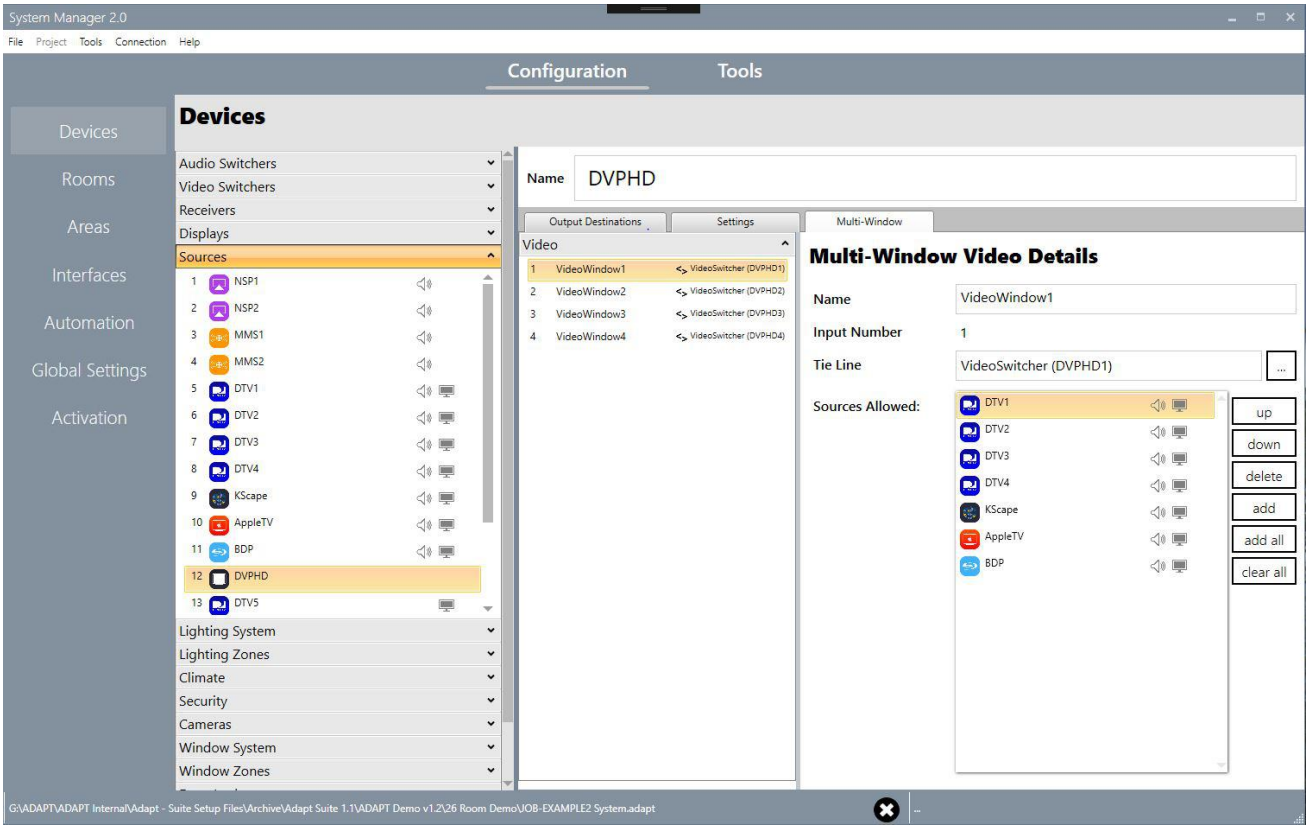


MULTI-WINDOW SOURCES

Multi-Window Video: Define the source connection to the input location of the Multi-Window source. NOTE: The Multi-Window tabs will not appear unless the source selected is a Multi-Window source.



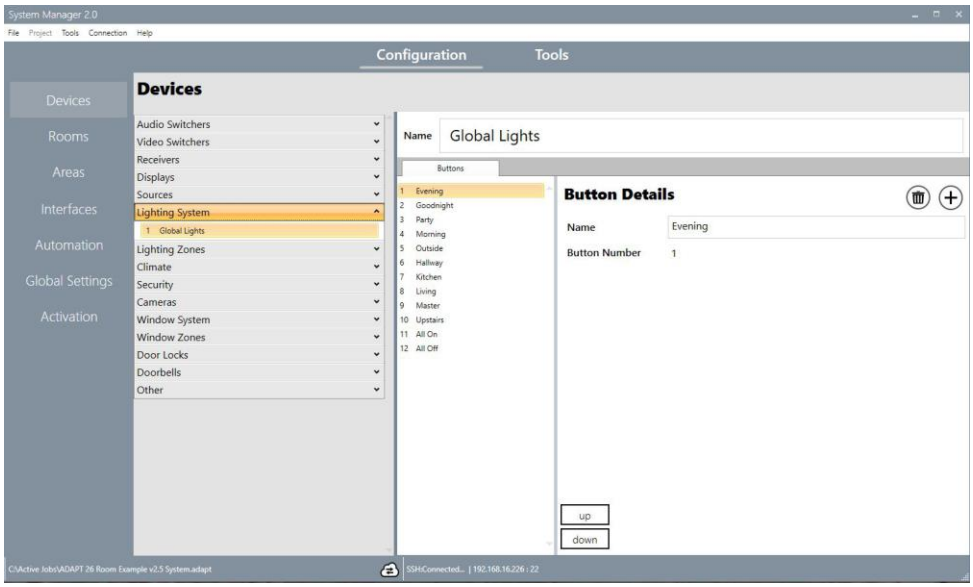
- **Video:** To edit a video window, select [Video] from the Multi-Window list. You can now edit the Tie Line, and the Sources Allowed that are associate with the widow. You can also rearrange the order of the sources and Add/Remove sources as needed.



LIGHTING SYSTEM

A Lighting System is a connection to a lighting control system such as a Crestron D3Pro, Pyng, or other system. Think of a Lighting System in System Manager as a D3Pro Virtual Keypad for Global Scenes. You can add buttons to a Lighting System that represent button presses on the Virtual Keypad. Functionality for each button will be defined in the SIMPL Windows and/or lighting program.

Lighting System buttons will display in the Global lighting area of user interfaces.



Buttons: Under the Buttons tab, you can add, delete, and modify buttons.

To add a Button, select the "Plus" icon then enter the Button Name and select [Add] in the console window that opens. To change the button name, update the corresponding field and select the "Save" icon in the Button Details field. To delete a Button, select the "Trash Can" icon. Up to 12 buttons per lighting system are supported.

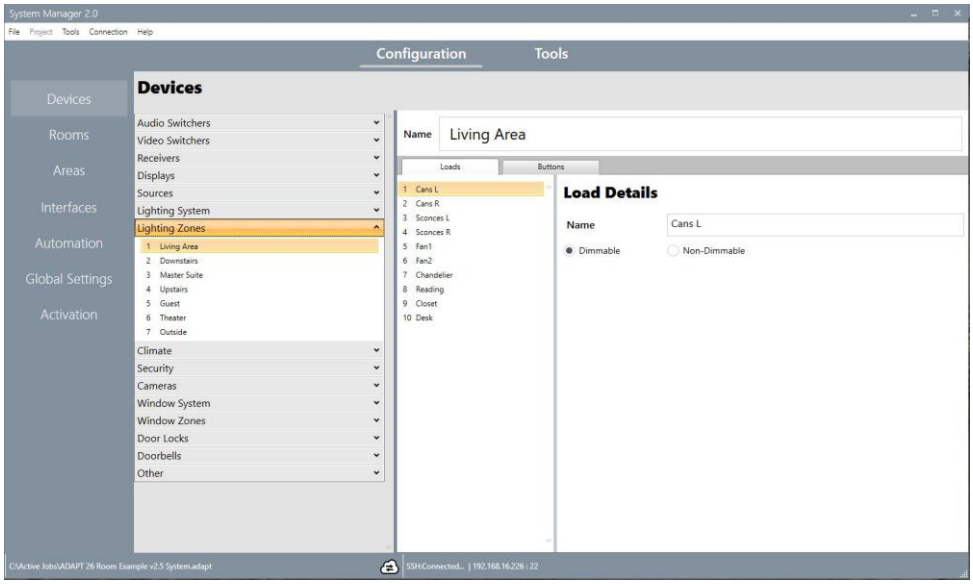
Note: ADAPT supports one lighting system.

LIGHTING ZONES

Lighting Zones are connections to a separate lighting control system such as a Crestron D3Pro, Pyng, or other system. Think of each Lighting Zone as a D3Pro Virtual Keypad for Local Room Scenes. You can add buttons to each Lighting Zone that represent button presses on the Virtual Keypad. Functionality for each button will be defined in the SIMPL Windows and/or lighting program.

Lighting Zone buttons will display in the Local lighting area of user interfaces.

Loads: Under the Loads tab, you can modify loads by changing their name and their load type. NOTE: The number of loads that appear in the list are based on the number of loads defined in your SIMPL Windows program.



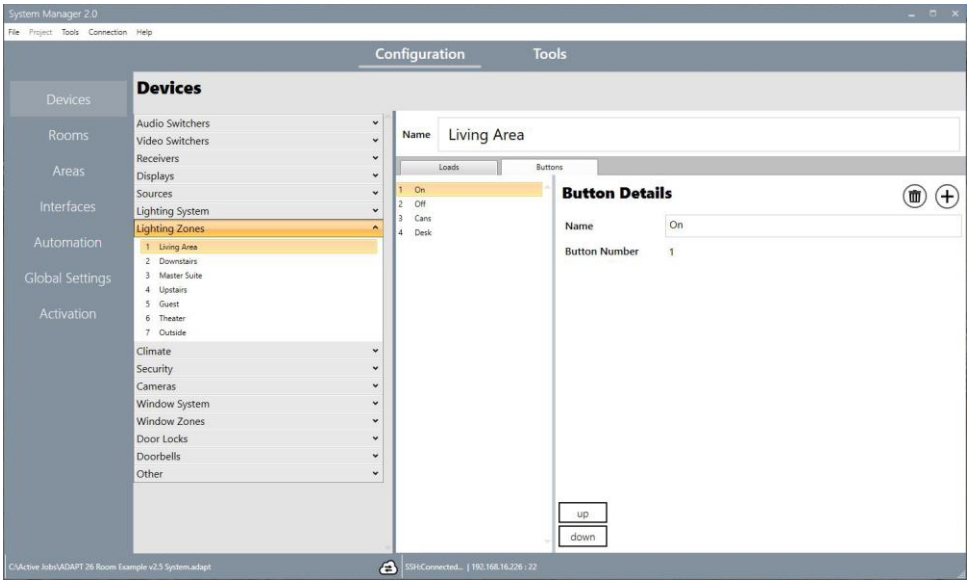
- **Dimmable**: The load is dimmable and the ramp buttons will appear on the interfaces.

- **Non-Dimmable**: The load is non- dimmable and the ramp buttons will NOT appear on the interfaces only On and Off buttons.

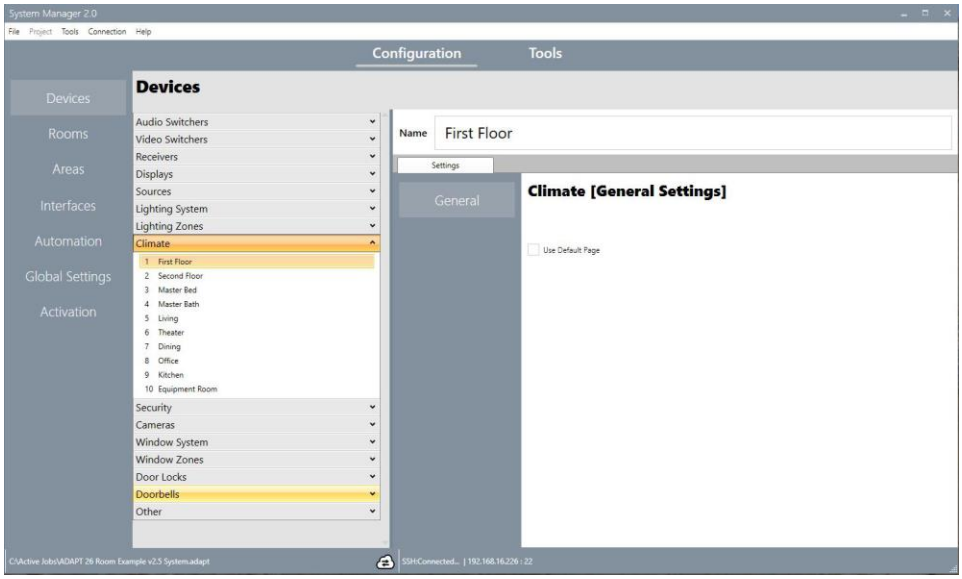
Buttons: Under the Buttons tab, you can add, delete, and modify buttons.

To add a Button, select the "Plus" icon then enter the Button Name and select [Add] in the console window that opens. To change the button name, update the corresponding field and select the "Save" icon in the Button Details field. To delete a Button, select the "Trash Can" icon. Up to 12 buttons per lighting zone are supported.

Note: ADAPT supports up to 50 lighting zones with up to 10 loads per zone.



CLIMATE

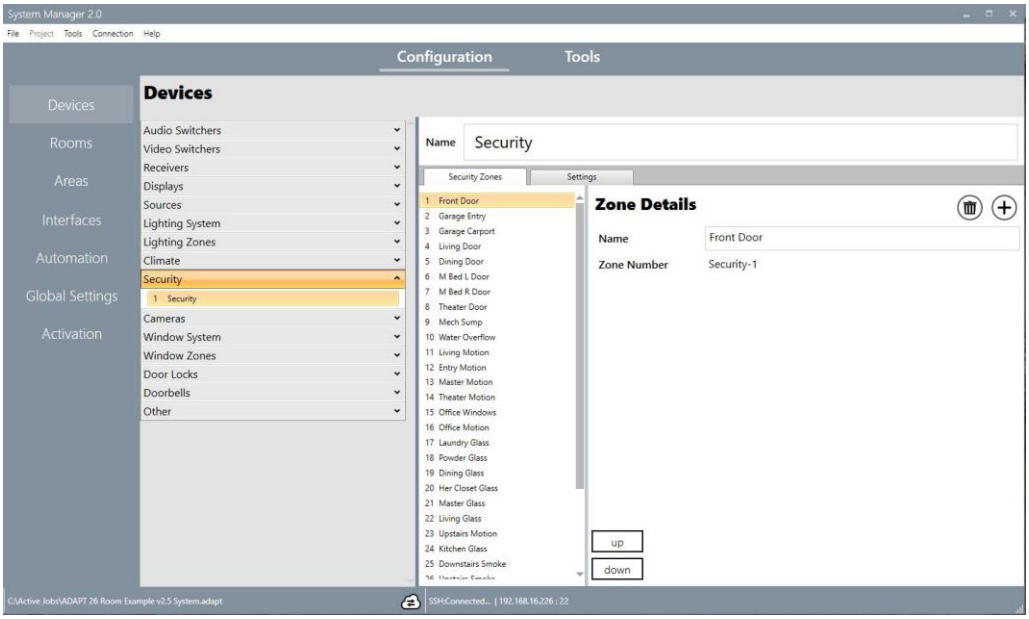


Settings: Under the settings tab, you can set the device default page preference.

- **Use Default Page:** By default, when a device is selected, the last used control page for the device will be displayed. Check this box to have the default control page for the device displayed when the device is selected.

Note: ADAPT supports up to 50 thermostats.

SECURITY

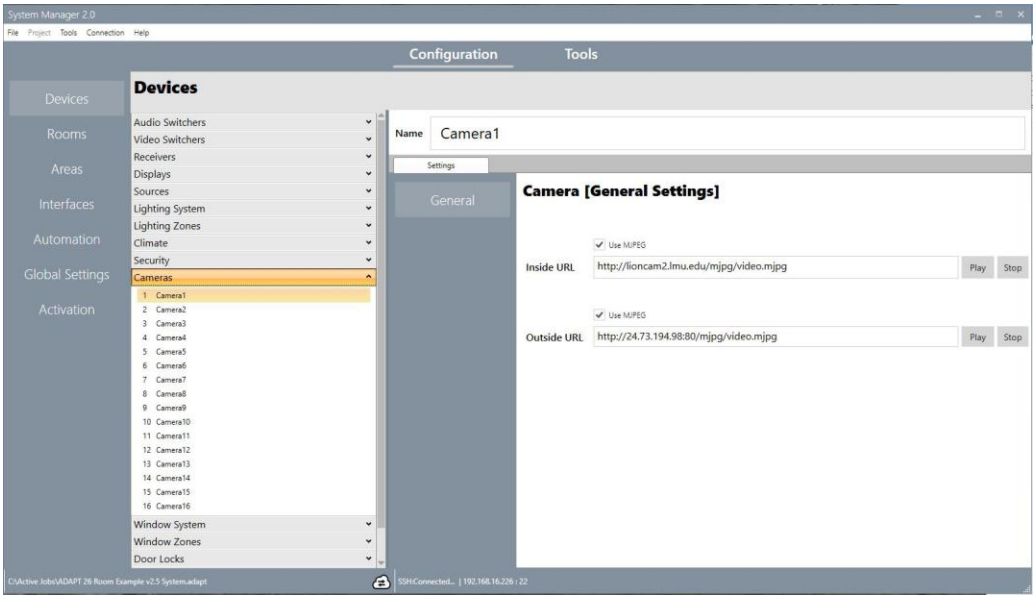


Settings: (No settings available)

- **Security Zones:** To change the Security Zone name, update the corresponding field and select the "Save" icon in the Zone Details field. Up to 50 security zones are supported.

Note: ADAPT supports one security system.

CAMERAS



Settings: Under the Settings tab, you can define the camera stream URL for displaying streaming video on touch panels.

- **Camera URL Paths:** Define the URL for intranet camera streaming in the Inside URL field and check Use MJPEG to specify MJPEG streaming format. Define the URL for internet camera streaming in the Outside URL field and check Use MJPEG to specify MJPEG streaming format. Leaving Use MJPEG unchecked will set the camera stream to be H.264.

Note: ADAPT supports up to cameras.

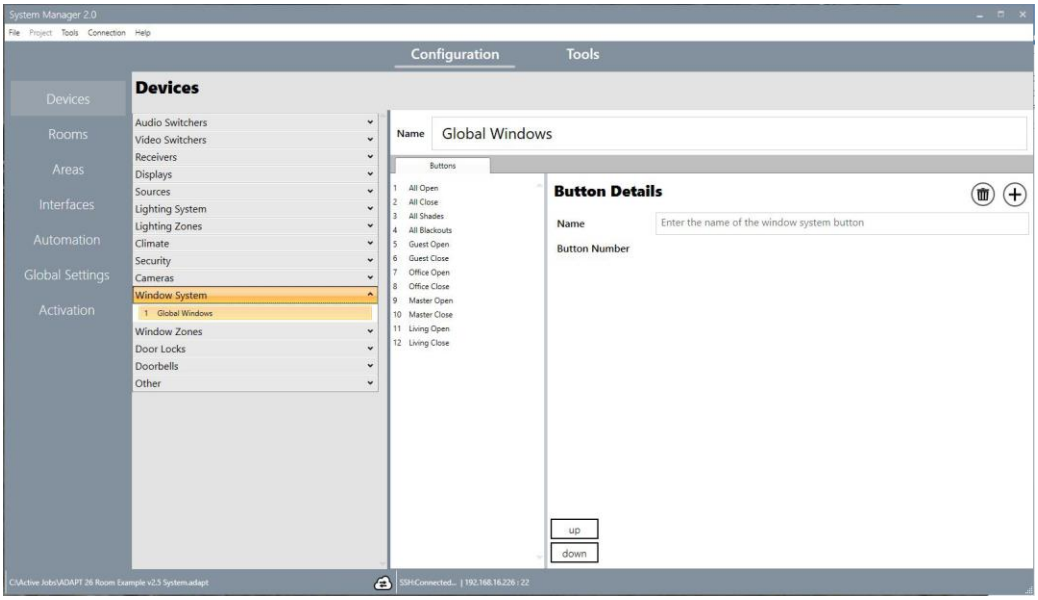
- **Video Play/Stop:** System Manager supports the ability to stream the entered URL to aid in ensuring the string is working in a pop-up window (Figure-14). NOTE: You must be connected to the local network where the camera is located and format the stream in accordance with the camera's manufacturer. Use the Play/Stop buttons to show and hide the preview window.

[Figure-14 – Video URL Preview Window]

WINDOW SYSTEM

A Window System is a connection to a shade control system such as a Crestron D3Pro, Pyng, or other system. Think of a Window System in System Manager as a D3Pro Virtual Keypad for Global Scenes. You can add buttons to each Window System that represent button presses on the Virtual Keypad. Functionality for each button will be defined in the SIMPL Windows and/or shade control program.

Window System buttons will display in the Global Windows area of user interfaces.



Buttons: Under the Buttons tab, you can add, delete, and modify buttons.

To add a Button, select the "Plus" icon then enter the Button Name and select [Add] in the console window that opens. To change the button name, update the corresponding field and select the "Save" icon in the Button Details field. To delete a Button, select the "Trash Can" icon. Up to 12 buttons per window system are supported.

Note: ADAPT supports one window system.

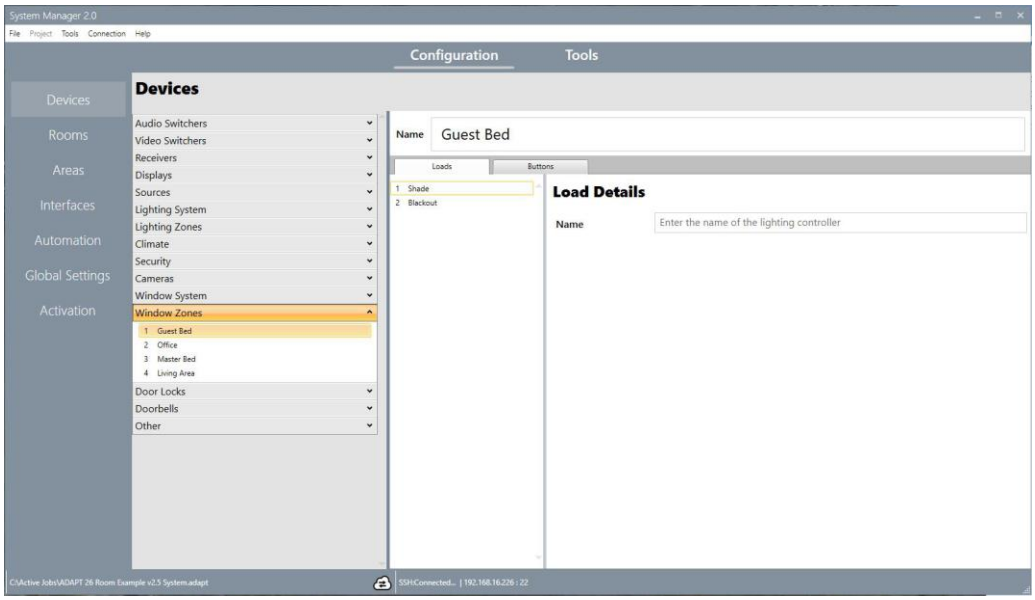
WINDOWS ZONES

Window Zones are connections to a separate shade control system such as a Crestron D3Pro, Pyng, or other system. Think of each Window Zone as a D3Pro Virtual Keypad for Local Room Scenes. You can add buttons to each Window Zone that represent button presses on the Virtual Keypad. Functionality for each button will be defined in the SIMPL Windows and/or shade control program.

Window Zone buttons will display in the Local windows area of user interfaces.

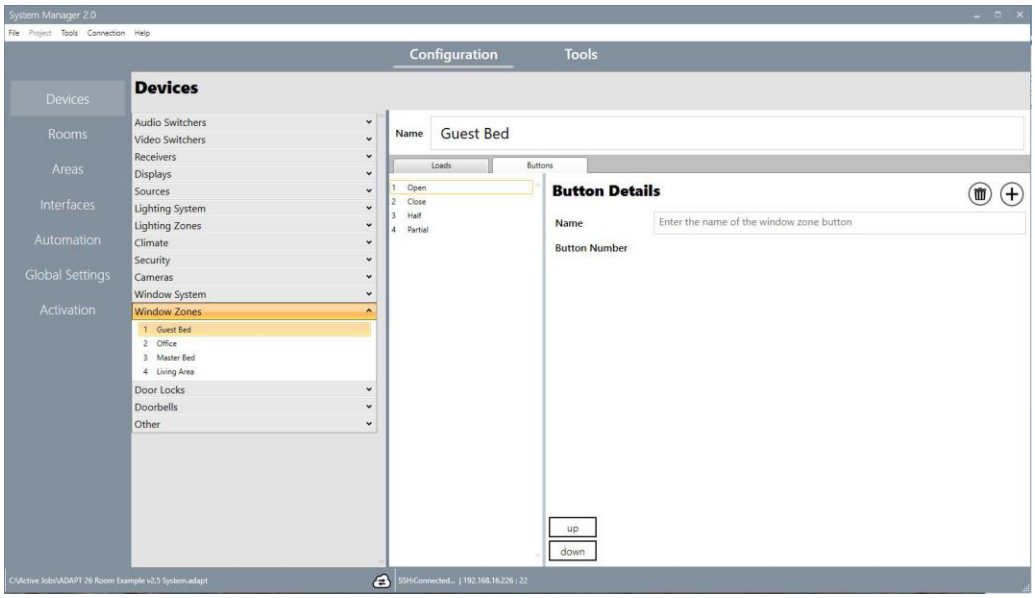
Loads: Under the Loads tab, you can modify loads by changing their name and their load Type. NOTE: The number of loads that appear in the list are based on the number of loads defined in your program.

Note: ADAPT supports up to window zones with up to 10 loads per zone.



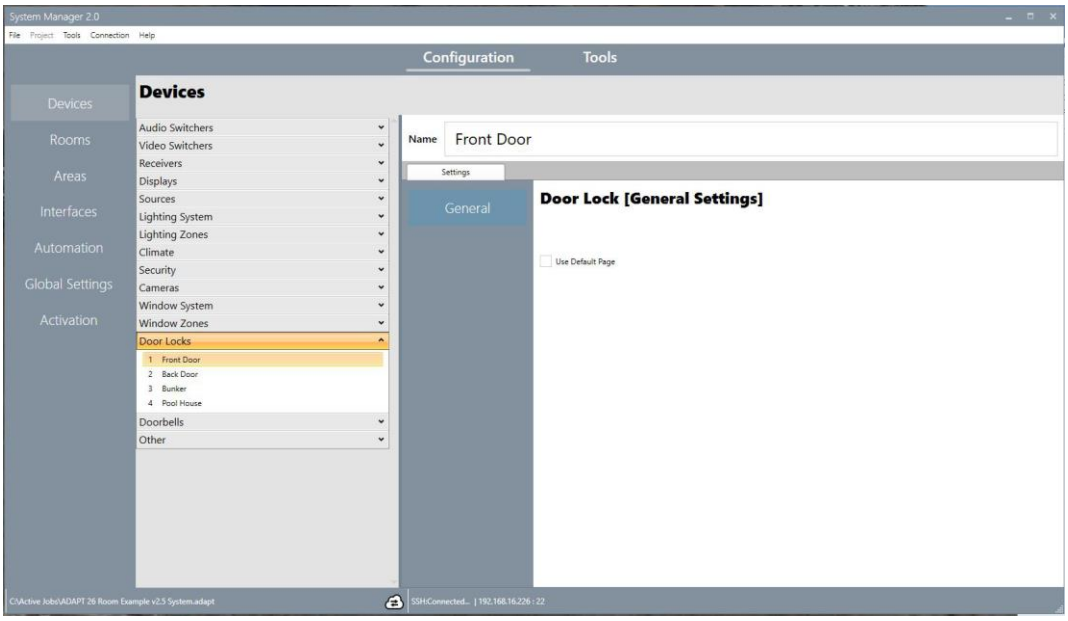
Buttons: Under the Buttons tab, you can add, delete, and modify buttons.

To add a Button, select the "Plus" icon then enter the Button Name and select [Add] in the console window that opens. To change the button name, update the corresponding field and select the "Save" icon in the Button Details field. To delete a Button, select the "Trash Can" icon. Up to 12 buttons per window zone are supported.



DOOR LOCKS

Door Locks control electronic door lock systems supported by Crestron such as Yale.



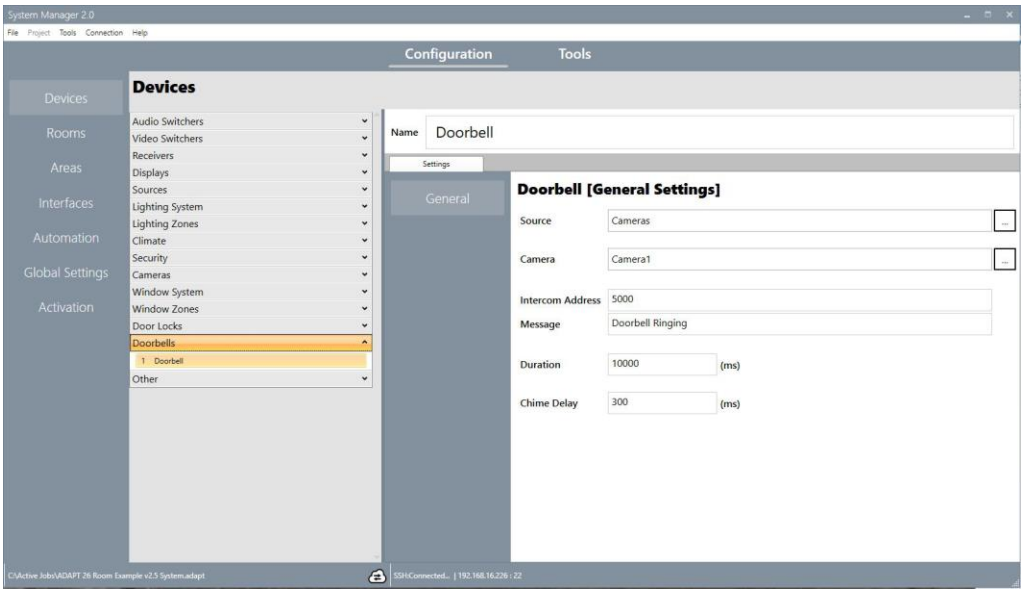
Settings: Under the settings tab, you can set the device default page preference.

- **Use Default Page:** By default, when a device is selected, the last used control page for the device will be displayed. Check this box to have the default control page for the device displayed when the device is selected.

Note: ADAPT supports up to 20 door locks.

DOORBELLS

Doorbells are logical events that can affect Rooms and Touch Panels. They require a trigger event such as a relay closure from a doorbell button. They can utilize an AV source to play through the whole house AV system. They can also have a Camera and Door Station Intercom Address associated to them. When a doorbell event is triggered, all Touch Panels and Rooms that have been assigned the doorbell will perform the actions defined in their configuration. For whole house AV, all rooms that the doorbell has been added to can interrupt their current AV source, switch to the defined doorbell source (both audio and video), set the volume, and play audio from the source for the defined amount of time. The source should be a device that can be triggered to play a pre-recorded sound or a source playing continuous audio. In System Manager, you may define which source is associated with a doorbell event but the trigger event and any device commands to play sounds are defined in the SIMPL Windows program. For Touch Panels that have the Doorbell assigned to them, they can flip to the Doorbell page, play a selectable chime sound, display the associated Camera stream, and display Answer/Reject buttons for Door Station Intercom.



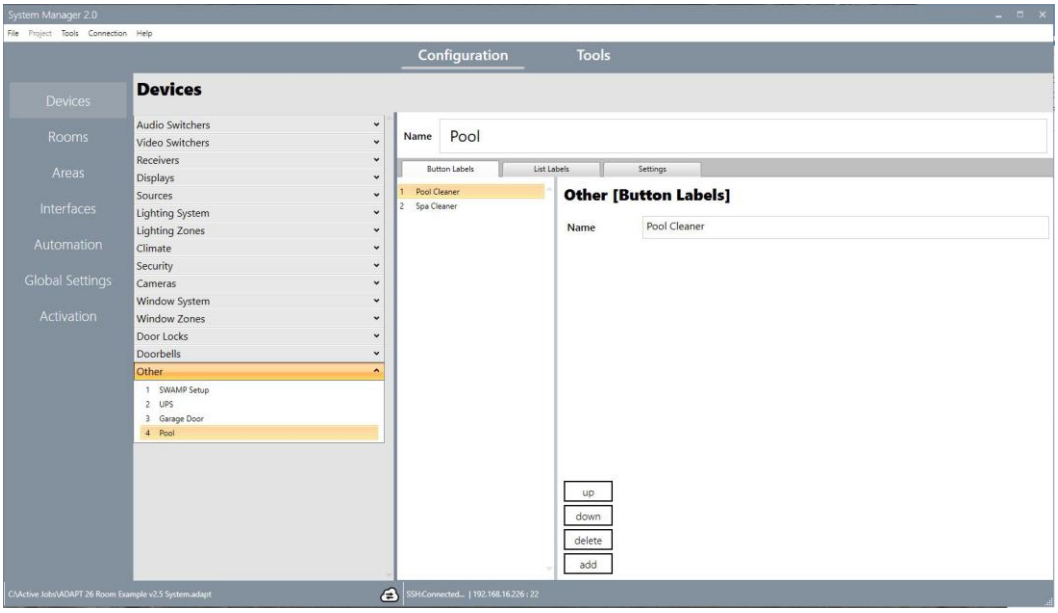
General Settings: Under the Settings tab, you can set the Doorbell General Settings.

- **Source:** To assign an audio source, select the ellipsis […] button next to the Source field and select the source from the console window that opens.
- **Camera:** To assign a Camera, select the ellipsis […] button next to the Camera field and select the Camera from the console window that opens.
- **Intercom Address:** To assign an intercom, enter the URL for the address to associate with the Doorbell.
- **Message:** To define the message that will appear on touch panels during a Doorbell event, update the Message field.

- **Duration:** This defines how long the doorbell event will be active, and how long rooms will stay on the audio source before returning to the previous state.
- **Chime Delay:** This defines the delay before the sound will start playing. This is intended to allow the audio switcher time to change inputs and set volume before the doorbell sound starts playing. Times are defined in milliseconds (1,000ms = 1 second).

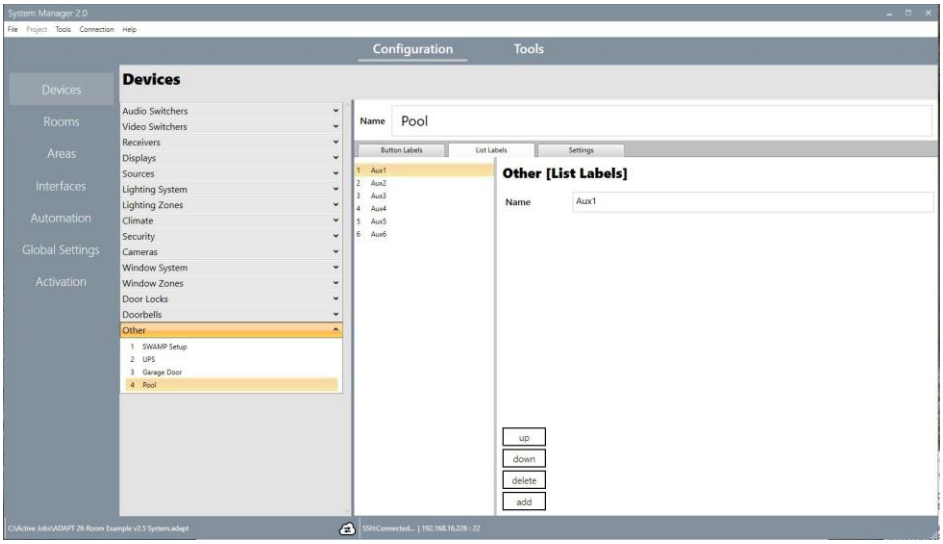
OTHER

Button Labels: Button Labels are used to hold text that will appear on touch panels. They are useful in situations where the text on control buttons may change during the commissioning of a project. The Button Label fields allow you to change text without having to edit the VTPro-e project. To add buttons, select [Add] then enter the button name and select [Add] in the console window that opens. To modify button names, update the Name field then select the "Save" icon. To reorder the buttons, select [Up] or [Down].

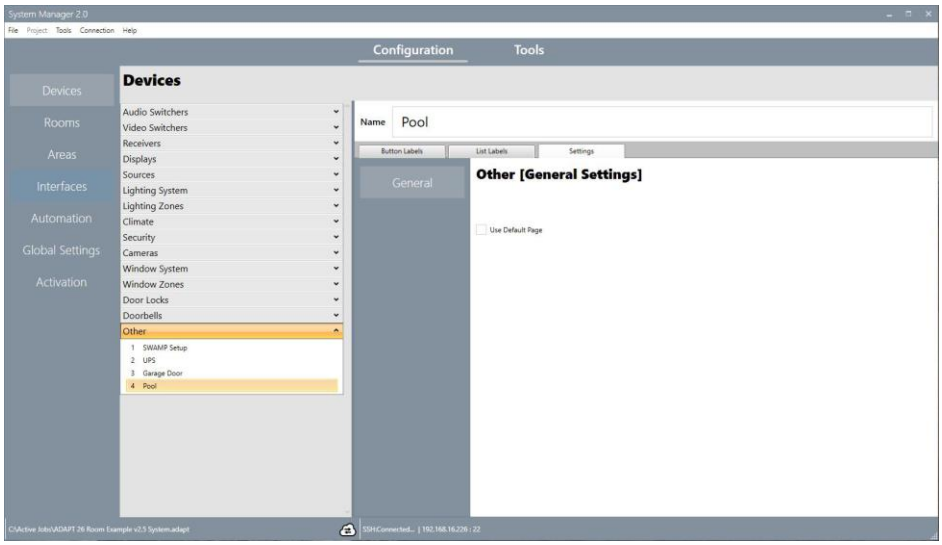


List Labels: List Labels are used to hold text that will appear on touch panels. They are useful in situations where the text in a controls list may change during the commissioning of a project. The List Label fields allow you to change text without having to edit the VTPro-e project. To add list items, select [Add] then enter the list item name and select [Add] in the console window that opens. To modify list item names, update the Name field then select the "Save" icon. To reorder the list items, select [Up] or [Down].

Note: ADAPT supports up to 36 other devices.



Settings: Under the settings tab, you can set the device default page preference.



- **Use Default Page:** By default, when a device is selected, the last used control page for the device will be displayed. Check this box to have the default control page for the device displayed when the device is selected.

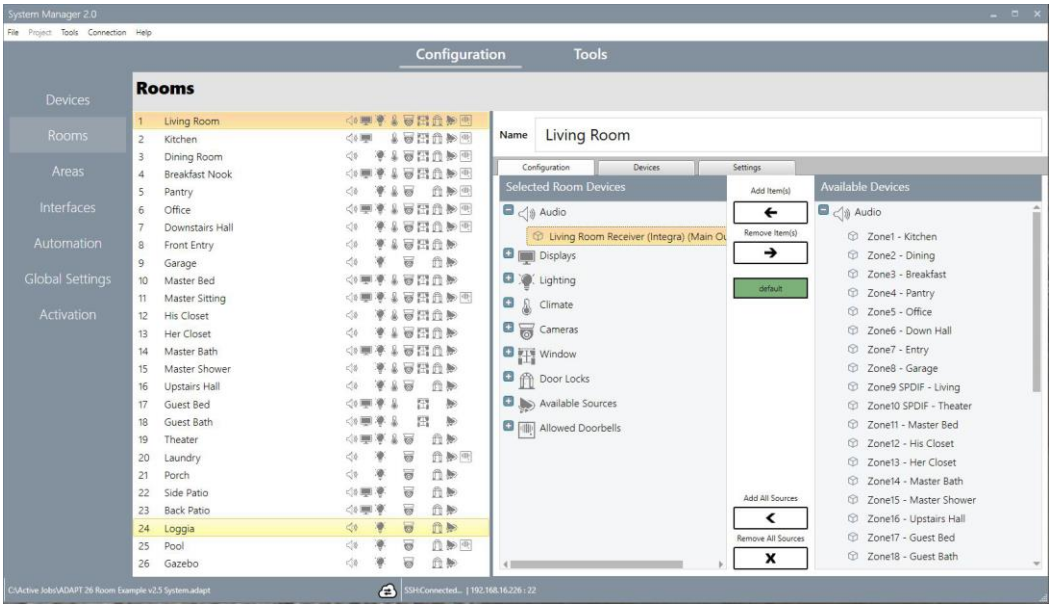
ROOMS

The Rooms section allows you to add and modify Rooms. A Room is simply an area in a project where devices can be grouped into a unique, controllable space. In Rooms, you will connect a Room to outputs from the audio switchers, define displays, and add devices to the room. This will determine how a Room is controlled.

To modify a Room, select the Room from the list, then select the individual device. Under the details area, you can rename the device by updating the Name field.

While you cannot delete a room in System Manager, a room can be in the project and not exposed on user interfaces simply by not assigning any outputs or devices to the room and removing the room from Room Lists under Interfaces.

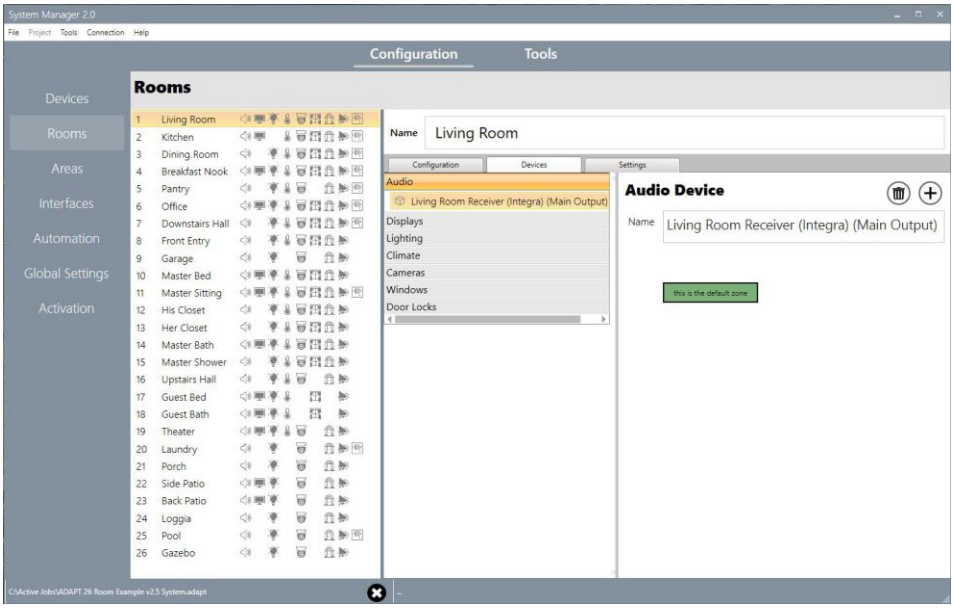
System Manager 2 introduces a Configuration tab to allow you to easily see your configuration and make editing faster in a data driven assignment tree.



There are two sides to the tree, "Selected Room Devices" which are already assigned to the room and "Available Devices" that can be added to the room. To Add an Available Device to the room simply double-click on it or select it and then click on the "Add Item(s)" button. NOTE: Several items can be selected using the Ctrl + Click and then click on the "Add Item(s)" button. To remove an item from the room simply double-click on it or select it and then click on the "Remove Item(s)" button.

In the "Rooms" list there is an icon assigned for each device type that has been added to allow you to quickly see what has been assign to each room. There are additional right mouse-click context menus to allow for quick copy and paste of room configurations from one to another to save time.

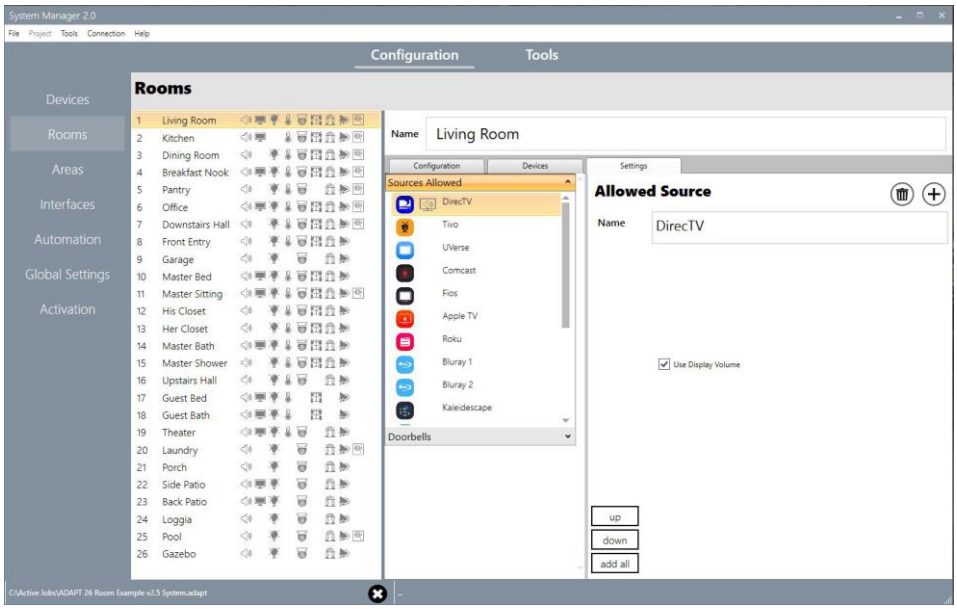
Devices: Under the Devices tab, you can add devices to the Room such as audio zones, lighting, TSTATS or any other devices that has need defined as part of the system. Adding devices to a room defines which devices can be controlled from a user interface in that room.



- **Audio Zones**: To add audio to a room, select the "Plus" icon then select an audio switcher output or an AV receiver from the Audio Zones list and then select [Add] in the console window that opens. If there are multiple audio zones in a room, [This is the Default Zone] sets the default zone for the room. Note that AV receivers are included in this list.
- **Displays**: To add a display to a room, select the "Plus" icon then select a display from the Displays list and then select [Add] in the console window that opens. If there are multiple displays in a room, [This is the Default Display] sets the default display for the room.
- **Lighting**: To add a lighting zone to a room, select the "Plus" icon then select a lighting zone from the Lighting list and then select [Add] in the console window that opens. Only one Lighting Zone is allowed per Room.
- **Climate**: To add a thermostat to a room, select the "Plus" icon then select a thermostat from the Climate list and then select [Add] in the console window that opens. Only one thermostat is allowed per Room.
- **Security**: To add security to a room, select the "Plus" icon then select a security system from the Security list and then select [Add] in the console window that opens. If there are multiple security systems in a room, [This is the Default Zone] sets the default security system for the room.
- **Cameras**: To add a camera to a room, select the "Plus" icon then select a camera from the Cameras list and then select [Add] in the console window that opens. If there are multiple cameras in a room, [This is the Default Camera] sets the default camera for the room.

- **Door Locks**: To add a door lock to a room, select the "Plus" icon then select a door lock from the Door Locks list and then select [Add] in the console window that opens. If there are multiple door locks in a room, [This is the Default Door] sets the default door lock for the room.
- **Doorbells**: To add a doorbell to a room, select the "Plus" icon then select a doorbell from the Doorbells list and then select [Add] in the console window that opens.

Settings: Under the Settings tab, you can define which sources are available in each room and define doorbell settings for the room.



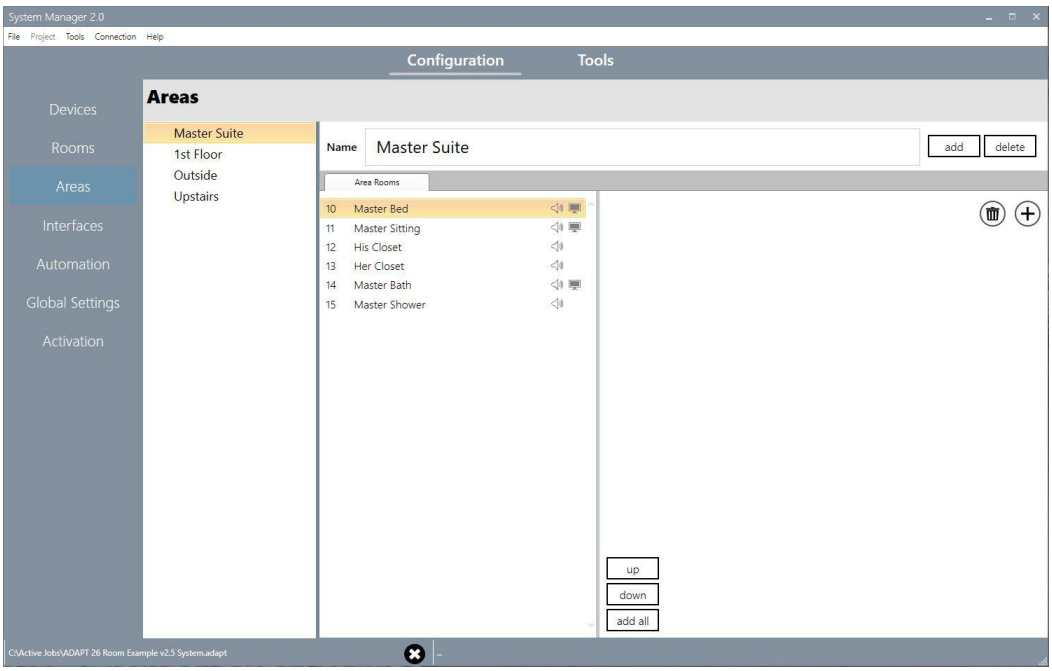
- **Sources Allowed:** To remove a source from a room, select the source then select the "Trash Can" icon. To add a source to a room, select the "Plus" icon, select the source and select [Add] in the console window that opens. To reorder how the sources appear on user interfaces, select a source and then select [Up] or [Down] to move the source up or down in the list. To have a source use display volume instead of head end audio, select [Use Display Volume]. Be sure that when selecting this option that the Room actually has a Display defined.
- **Doorbells:** To have the display in a room power on during a doorbell event, select [Include Video]. To have a room's AV receiver or display power on during a doorbell event, select [Power On if Off] – ***this is typically not recommended due to the length of time it takes these devices to completely power on***. By default, a doorbell event will only play audio in a room if it is already on. [Volume] sets the audio volume level for a room during a doorbell event.

Note: ADAPT supports up to 50 rooms.

AREAS

The Areas section allows you to add and modify Areas. An Area is simply a collection of Rooms can be grouped into a unique, controllable Area.

To modify an Area, select the Area from the list, then add, remove or reorder the list of Room. Under the details area, you can rename the Area by updating the Name field.

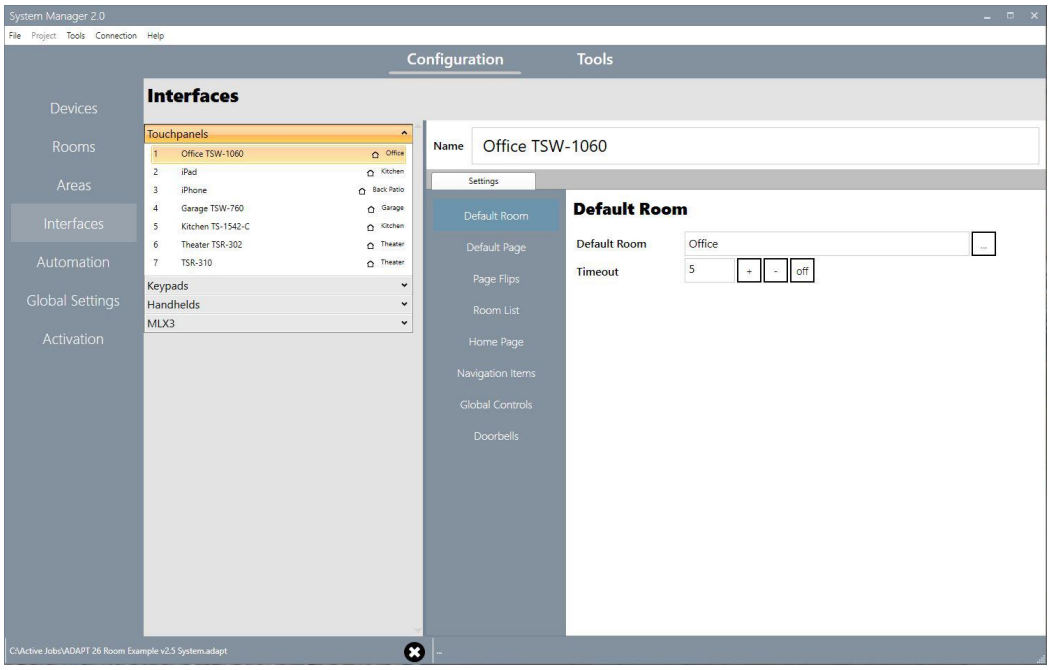


INTERFACES

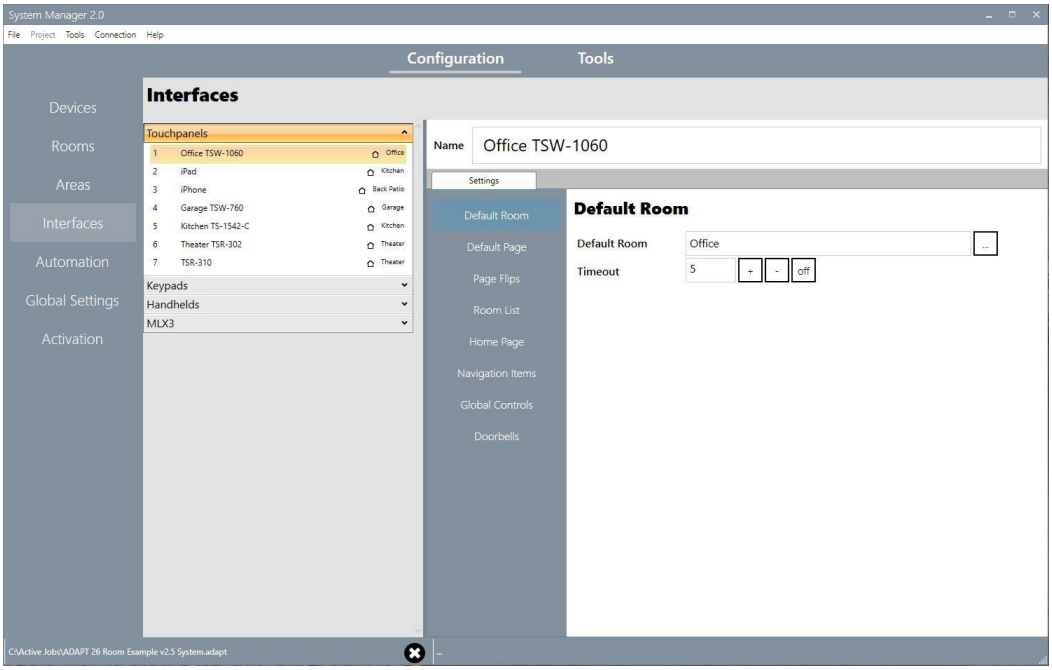
The Interfaces section allows you to modify individual touch panels, remotes, and keypads. In this section you will define the location of each interface, which devices and other rooms each interface can control, and the way each interface behaves.

To modify an Interface, select the Interface type from the list, then select the individual Interface. Under the details area, you can rename the Interface by updating the Name field.

While you cannot delete an interface in System Manager, an interface can be in the project and not exposed to the end user by simply not loading it to hardware.



TOUCH PANELS



Panel Type: Select the touch panel type from the [Panel Type] drop down menu.

Settings: Define settings for the individual touch panel.

- **Default Room:** The default room defines which room the touch panel will connect to after startup and will revert to when the time out expires. To set the default room for the touch panel, select the ellipsis […] button, then select the room. Set the default room time out by selecting [+] or [-] to adjust to the desired amount of time (minutes). Select [Off] or a time out of 0 to disable the default room time out.
- **Default Home Page:** The default home page defines which page the touch panel will revert to when the time out expires. To set the default home page for the touch panel, select the ellipsis […] button, then select the page. Set the default home page time out by selecting [+] or [-] to adjust to the desired amount of time (minutes). Select [Off] or a time out of 0 to disable the default home page time out.
- **Page Flips:** Select [On Source Selection] to have the touch panel go to the source control page when a source is selected for the current room as opposed to it staying on the page where the source was selected from. Select [On Room Off] to have the touch panel go to the home page when the current room is powered off.
- **Room List:** Room list defines which rooms can be controlled from the touch panel. To delete a room from the touch panel, select the room in the list then select [Delete]. To add a room to a touch panel, select the room from the list then select [Add]. To reorder how the rooms appear on

the touch panel, select a room and then select [Up] or [Down] to move the room up or down in the list.

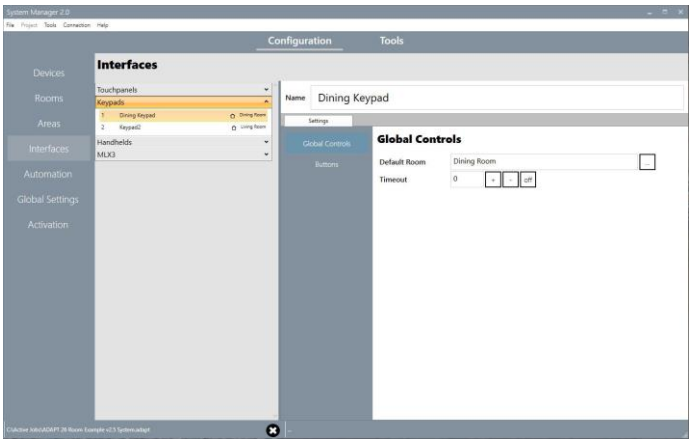
- **Home Page:** The home page title defines the text field at the top of the home page on the touch panel. To change this, update the [Home Page Title] field, then select the "Save" icon to save the changes. The home page layout defines the general layout and which quick controls and widgets will appear on the home page of the touch panel. To change, select the layout from the [Home Page Layouts] list, then select the "Save" icon to save the changes. For smaller interfaces such as the TSR-302 or iPhone/Android app, home pages are all the same and should not be changed.
- **Navigation Items:** Navigation items define the items in the scrolling list that typically reside at the bottom of the home page on the touch panel. Navigation items have two types: (1) Control and (2) Page Flip. To add an item to the touch panel's navigation list, click [Add] at the bottom of the screen. In the dialog box, choose between the [Control] and [Page Flip] radio buttons at the top. Control items force the touch panel to go to the controls of a device when selected. There are two ways to define a Control item: (1) [Based on Room] and (2) [Direct Device]. The radio buttons at the bottom define this behavior. Items that are "Based on Room are somewhat dynamic Items only appear if the current room that the touch panel is controlling is assigned the type of device selected. For instance, if Lights is selected as the item and there is no Lighting Zone defined for the current room, the Lights item will not appear in the list. Direct Device items force the touch panel to directly page flip to the selected device's controls. Only Source Devices and Other Devices appear in the selection list when this option is selected. If a Source Device is defined as a Direct Device item in the navigation list, the current room will perform a source select. With items that are defined as a Page Flip, the touch panel will simply flip to the selected page. It is typically not desired to force page flips to Lights, Climate, Security, Cameras, Windows, Doors, and Other Devices. These pages are automatically shown when the corresponding device is selected. To delete an item from the navigation list, select the item in the list then select [Delete]. To reorder how the items appear on the touch panel, select an item and then select [Up] or [Down] to move the item up or down in the list. Change the name of the item in the list by updating the [Name] field and assign an icon by selecting from the [Icon] drop down menu. Select the "Save" icon to save changes after they are made.
- **Global Controls:** Allowed Global Controls defines whether or not global controls are available from this touch panel for the listed systems. The Navigation [Roaming] option defines whether or not a touch panel is allowed to control rooms other than its Default Room.
- **Doorbells:** Doorbells defines how the touch panel will behave during a doorbell event. Select [Add], then select the doorbell and the page that you want the touch panel to go to, then select [Add]. [Doorbell Activation Page] defines which device page the touch panel will go to during a doorbell event. [Chime] defines which sound the touch panel will play during a doorbell event. Sounds are built into the touch panel and are only available on supported touch panels such as the TSW series.

Note: If you elect to use your own homepage layouts, you can change the graphics which appear within System Manager by replacing the .jpg file with your custom file in the "C:\Program Files (x86)\Adapt - System Manager\HomepageLayouts" directory (Path is based on where you install it). The folder location can be changed by selecting "Tools/Settings" from the main menu.

KEYPADS

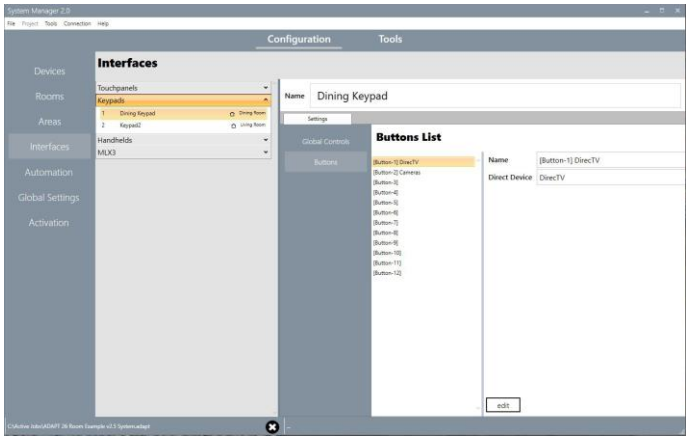
Settings: Define settings for the individual keypad.

Global Controls: Define the default room and timeout.



- **Default Room:** The default room defines which room the keypad will connect to after startup, and will revert to when the time out expires. To set the default room for the keypad, select the ellipsis […] button and then select the room. Set the default room time out by selecting [+] or [-] to adjust to the desired amount of time (minutes). Select [Off] or a time out of 0 to disable the default room time out.

Device Management: Define devices that are associated with the Keypads buttons and how it behaves.

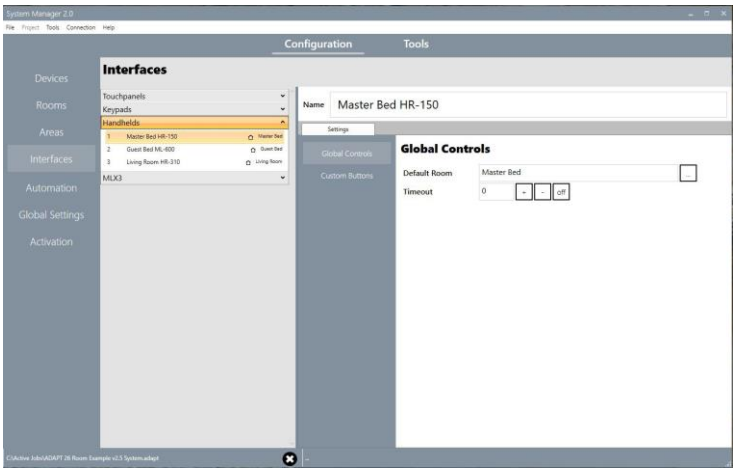


- **Buttons:** The button assignment associates a source in the system to a button on the keypad. To modify a button, select the defined button and use the Edit button to define the associated source (or select "none" if the button is being used for logic other than source selection or not being used).

HANDHELDS

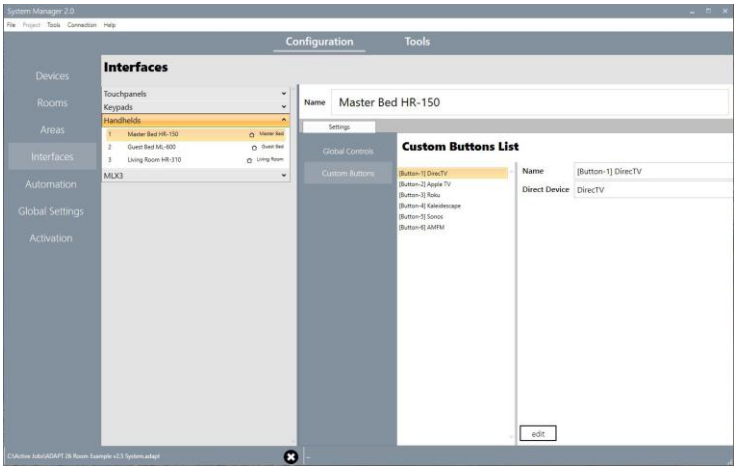
Settings: Define settings for the individual handheld.

Global Controls: Define the default room and timeout.



- **Default Room:** The default room defines which room the handheld will connect to after startup and will revert to when the time out expires. To set the default room for the touch screen handheld remote, select the ellipsis […] button, then select the room. Set the default room time out by selecting [+] or [-] to adjust to the desired amount of time (minutes). Select [Off] or a time out of 0 to disable the default room time out.

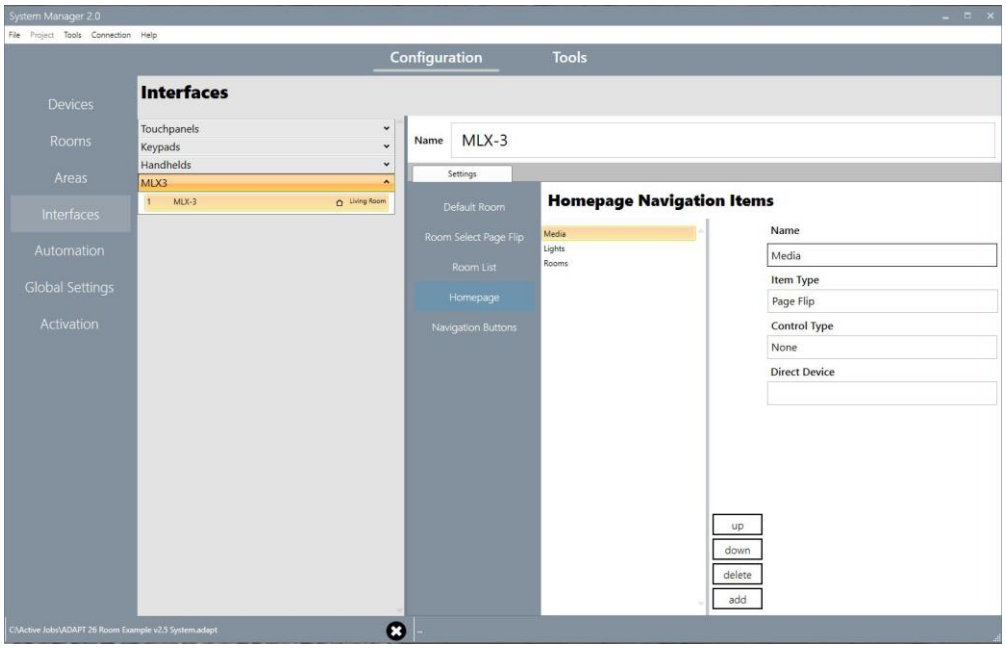
Device Management: Define devices that appear on the Handhelds and how it behaves.



- **Custom Buttons:** The buttons are for associating a source in the system to a hard button on the remote. To modify a button, select the defined hard key and use the Edit button to define the associated source (or select "none" if the button is being used for logic other than source selection or not being used).

MLX3

To modify an MLX3, select [MLX3s] from the interfaces list to expand then select the individual MLX3.



Settings: Define settings for the individual MLX3.

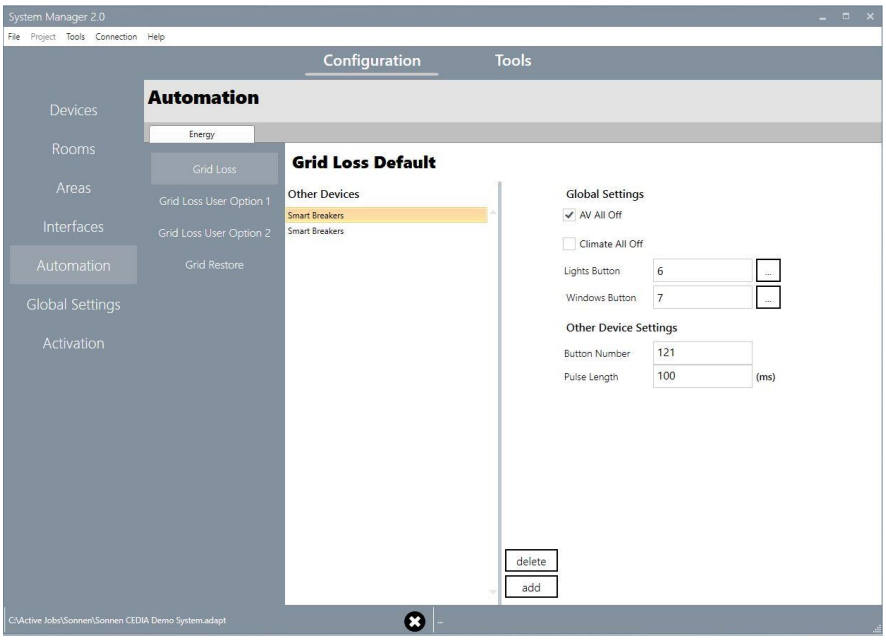
- **Default Room:** The default room defines which room the MLX3 will connect to after startup and will revert to when the time out expires. To set the default room for the MLX3, select the ellipsis […] button, then select the room. Set the default room time out by selecting [+] or [-] to adjust to the desired amount of time (minutes). Select [Off] or a time out of 0 to disable the default room time out.
- **Room Select Page Flip:** The [Room Select Page Flip] defines which page the MLX3 will go to when a room is selected from the room list. To set the page flip for the MLX3, select the ellipsis […] button, then select the page.
- **Room List:** Room list defines which rooms can be controlled from the MLX3. To delete a room from the MLX3, select the room in the list then select [Delete]. To add a room to the MLX3, select the room from the list then select [Add]. To reorder how the rooms appear on the MLX3, select a room and then select [Up] or [Down] to move the room up or down in the list.

Device Management: Define devices that appear on the MLX-3 and how it behaves.

- **Homepage:** Home Page List Items function much like Navigation Items in Touch Panels. They define the items in the Scrolling List on the Home Page. Home Page Items have two types: (1) Control and (2) Page Flip. To add an item to the Home Page List, click [Add] at the bottom of the screen. In the dialog box, choose between the [Control] and [Page Flip] radio buttons at the top. Control items force the MLX3 to flip to the controls of a device when selected. There are two ways to define a Control item: (1) [Based on Room] and (2) [Direct Device]. The radio buttons at the bottom define this behavior. Items that are based on room are somewhat dynamic They only appear if the current room that the MLX3 is controlling is assigned the type of device selected. Direct Device items force the MLX3 to directly flip to the device controls selected. Only Source devices and Other Devices appear in the selection list then this option is selected. If a Source Device is defined as a Direct Device item in the Home Page List, the current room will perform a source select. With items that are defined as a Page Flip, the MLX3 will simply flip to the selected page. To delete an item from the Home Page List, select the item in the list then select [Delete]. To reorder how the items appear on the MLX3, select an item and then select [Up] or [Down] to move the item up or down in the list. Change the name of the item in the list by updating the [Name] field. Select the "Save" icon to save changes after they are made.
- **Navigation Hardkeys:** The Navigation hard keys represent the Media, Lights, and Crestron Swirl buttons on the MLX3. These buttons function much like Home Page List Items. They can be defined as a Control or Page Flip item. See above for a description of how to define the behavior of these buttons.
- **List Pages:** List pages allow you to define any special pages that are defined in your VTPro-e project for the MLX3. To add a new list page, select [Add] and fill in the name of the page in the top field, and the page number assigned in VTPro-e in the bottom field. Once the list page is created, you can add items to it much like the Home Page List. See above for a description of how to define the behavior of the items on the list page.

AUTOMATION

The Automation section allows you to setup automation features that have been added to the Adapt program.



Energy: Energy automation.

- **Grid Loss:** Action assignment based on a Grid Loss condition.
- **Grid Loss User Option 1:** Action assignment based on a User Option 1 condition.
- **Grid Loss User Option 2:** Action assignment based on a User Option 2 condition.
- **Grid Restore:** Action assignment based on a Grid Restore condition.

Each Energy automation option has a Global Settings section that consist of;

- **AV All Off:** When enabled the selected energy condition occurs, an AV All Off will be issued to the control system and turn all of the rooms in the system off.

- **Climate All Off:** When enabled the selected energy condition occurs, a Climate Off will be issued to the control system and turn all of the Thermostats in the system off.

Lights Button: Allows you to select a Global Lighting Scene to execute when the selected energy condition occurs. To define a Global Lighting Scene, select the ellipsis […] button, then in the console window that opens, select the corresponding device and output then select [Apply] or [None] to remove this action.

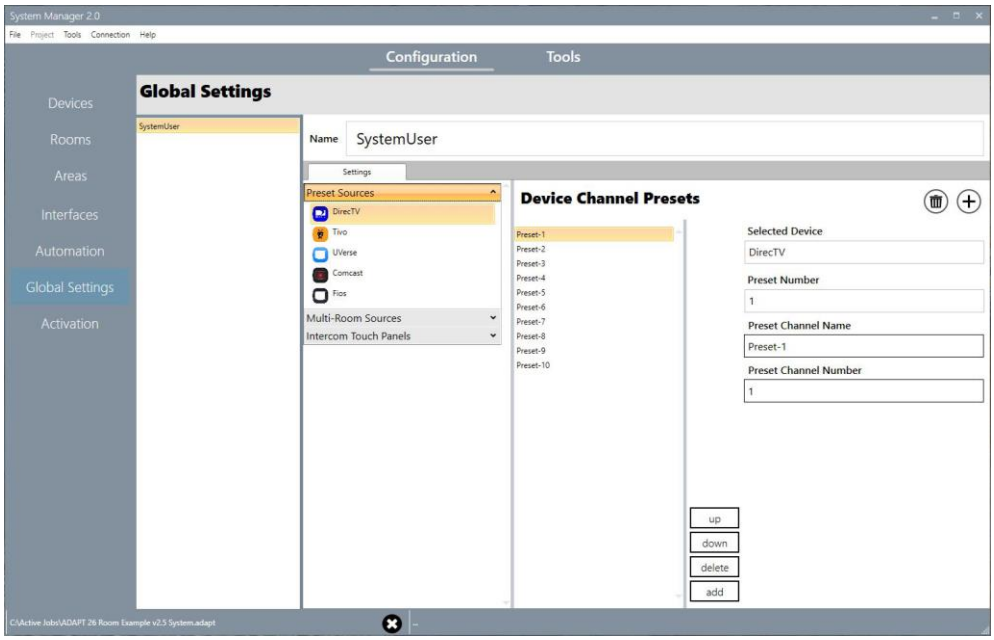
- **Windows Button:** Allows you to select a Global Windows Scene to execute when the selected energy condition occurs. To define a Global Windows Scene, select the ellipsis […] button, then in the console window that opens, select the corresponding device and output then select [Apply] or [None] to remove this action.

Each Energy automation option also has an Other Devices List that consist of;

- **Other Devices:** This is a list of associated Other devices that when the energy condition occurs, the associated button number of the Other device will pulse (at the defined Pulse Length). The button number can only be between 121 and 420. You can use the "add" and "delete" buttons to modify the associated other devices list. Note: You can have multiple of the same Other device in the list in order to execute multiple button actions if desired.

AUTOMATION

The Global Settings section allows you to setup Channel Presets and define which sources will appear in the Multi-Room source list. Note: Channel presets can be set by the end user on a touch panel.



Settings: Define settings for Preset Sources and Multi-Room Sources.

- **Preset Sources:** Define channel presets for sources with numeric channel preset capabilities. Select a source from the Preset Sources List. To add a preset to a source, select [Add], then enter the Preset Name and Channel Number in the console window that opens, then select [Add] to save. (Hint: Put a period [.] at the end of the channel number to issue an "Enter" command.) To delete a preset, select the preset in the list then select [Delete].To reorder how the appear on the touch interface, select a preset and then select [Up] or [Down] to move the preset up or down in the list.

  Note: ADAPT supports up to 50 channel presets.
- **Multi-Room Sources:** Within multi-room control on touch panels, there is an option to select multiple rooms and assign a source to all the selected rooms at the same time, or to share the current room's source with other rooms. In order for this to work properly the selected source must be available to all the rooms in the multi-room list. In this selection any source that is not physically available to all rooms should be removed from the list. Also, sources that the end user does not want to be accessed from all rooms should be removed as well. To remove a source, select a source from the list, then select the "Trash Can" icon. To add a source, select the "Plus" icon, then select the source from the console window that opens, and then select [Add] to save.

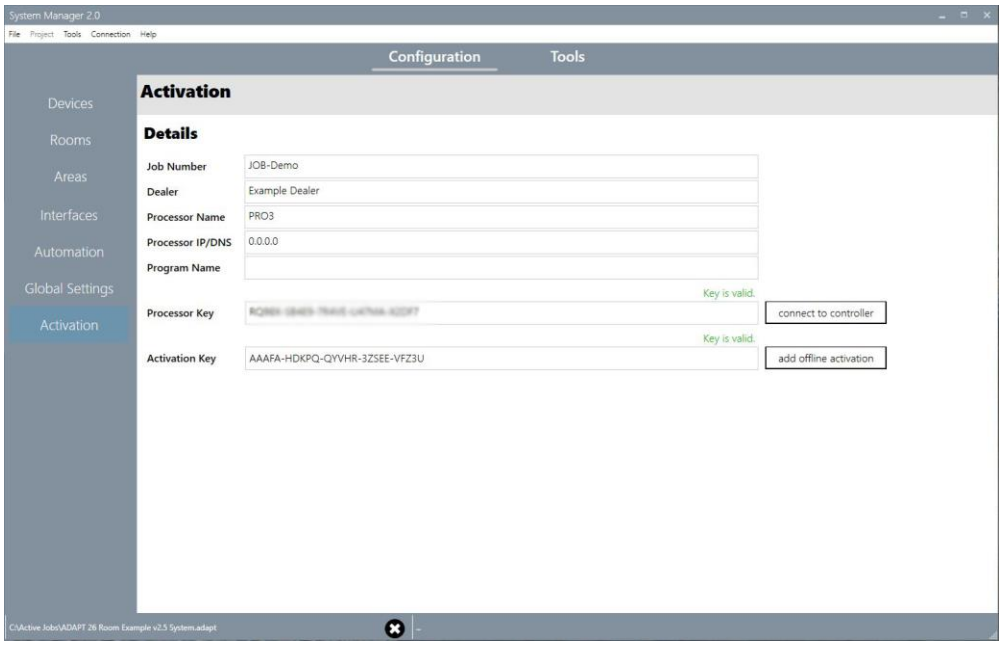
To reorder how the sources appear on the touch interface, select a source and then select [Up] or [Down] to move the source up or down in the list. Select [Add All] to quickly add all sources in the system to the Multi-Room Source list.

- **Intercom Touch Panels:** Define the touch panels in the system that allow SIP Intercom abilities. This list will be used to allow communications between all of the panels that are defined.

Note: Since GLOBAL SETTINGS can be changed by the end user through a touch panel interface (presets), it is recommended that you always open and save the latest ADAPT file from the processor before editing these items to ensure data is not lost.

ACTIVATION

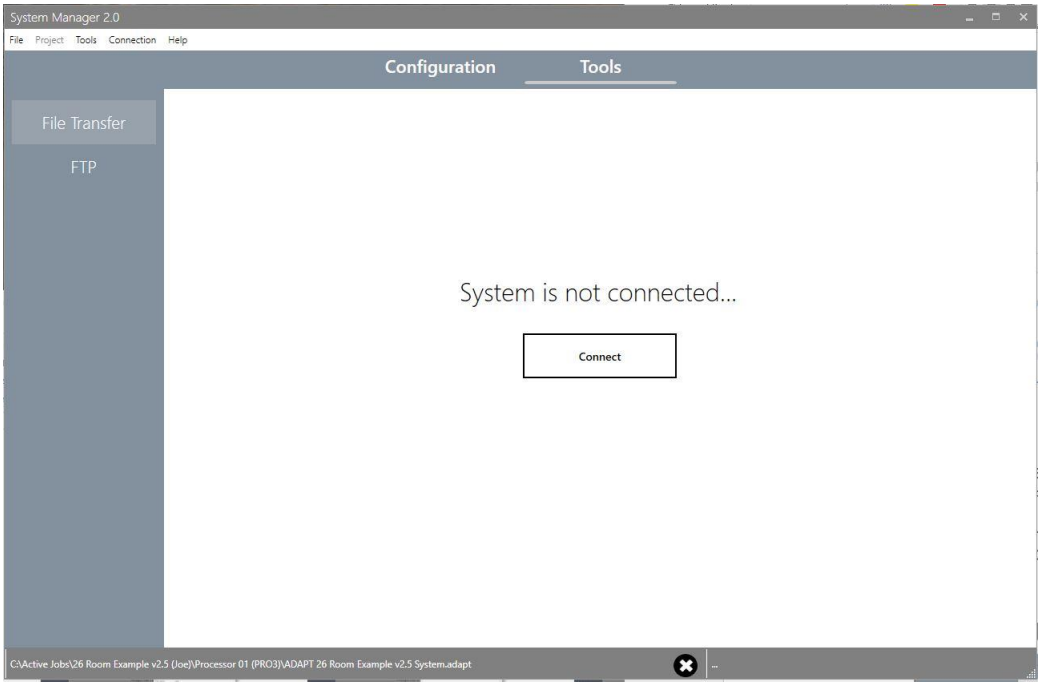
The Activation page is a details placeholder for basic information for the project including the Processor Key and Activation Key for the project (Keys are obtained from PanTech Design).



Note: ADAPT activation will automatically add the "Activation Key" to the ADAPT file after it successfully activates through an internet connection. If the processor does not have an internet connection, you can contact PanTech Design and obtain an activation to do this manually. It is recommended that you retrieve the ADAPT file from the processor after an activation and store it with you project files.

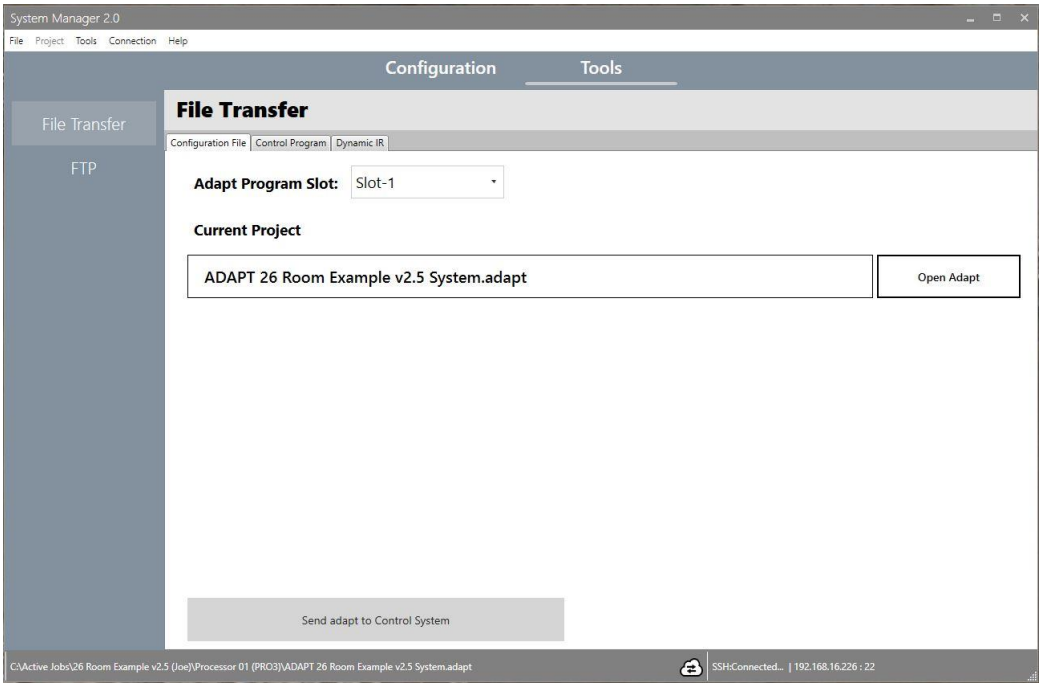
TOOLS

System Manager includes a set of tools to assist with the programming of ADAPT systems. The tools include the ability to transfer/receive ADAPT files, send Crestron SIMPL Windows programs, a 2-way console window for communicating with the control processor, a one-way diagnostics console with common commands for troubleshooting assistance and an FTP client for manual file send/receive to the control processor.



If System Manager is not connected to a processor, then there will be a splash screen indicating this with a button "Connect" to allow you to make a connection. See earlier section on how to make connections to a processor.

FILE TRANSFER



You must be connected to a processor for the File Transfer tabs to appear.

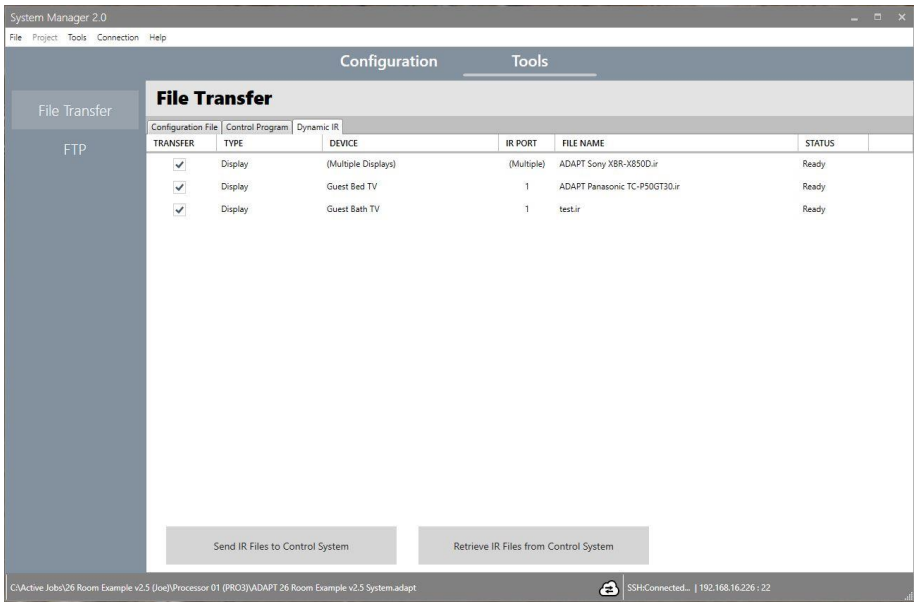
Configuration File: Sends the ADAPT configuration file.

- **Open Project:** If a project has not been loaded, this button allows you to load a local project from your current file system. If you need to load the ADAPT file from the control processor, then use the operations available in the File menu.
- **Send Adapt to Control System:** After a project has been loaded, this button automatically transfers the configuration file and sends the commands necessary for the system to load and apply any changes that has been made.

Control Program: Sends the SIMPL Windows program to the control processor.

- **Current Program Slot:** This drop-down selection box allows you to select the target program slot on the control processor for sending a SIMPL Windows program. (NOTE: This should always be set to "Program-1" unless specifically directed to by technical support).
- **Open Program:** Use this button to load the .lpz compiled SIMPL Windows program file.
- **Send to Control System:** After a SIMPL Windows program has been loaded, this button automatically transfers the program file, restarts the program and sends the commands necessary for the system to load and apply any changes that has been made.

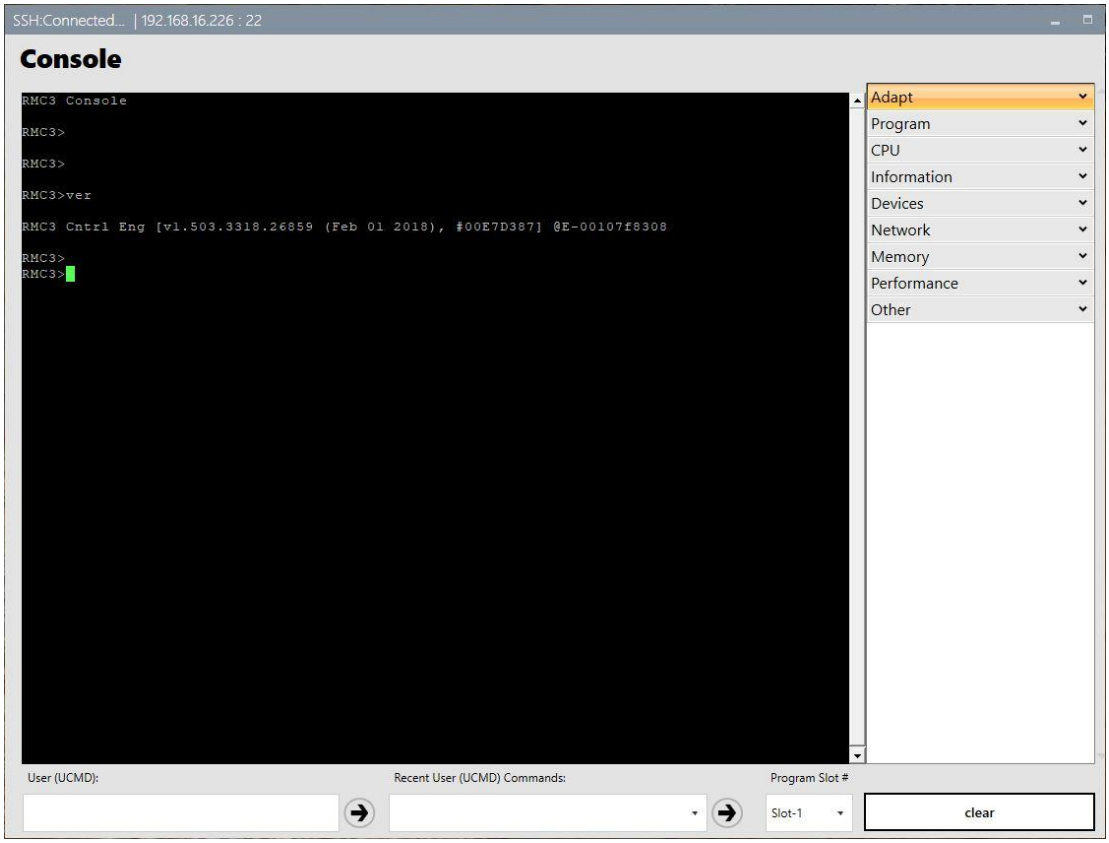
Dynamic IR: Transfer IR drivers defined for Displays and AV Receivers to the control processor. A list of File Names and their associated Device and Port appears. The Status column will show Not Found" if a file cannot be located in the \ {Install Adapt – System Manager\DynamicIR folder.



- **TRANSFER:** Check-box for including the file when the Send button is pressed
- **Send IR Files Control System:** This button sends all files marked in the Transfer column to the \NVRAM\IrDrivers folder on the processor.
- **Retrieve IR Files from Control System:** This button will download all or the IR files found in the \NVRAM\IrDrivers folder on the processor and copy them to System Managers IR folder location.

Note: We recommend working from the System Manager Dynamic IR directory when saving and editing .ir files (default is \Program Files (x86)\Adapt – System Manager\DynamicIR). All files that are transferred using this Tool reside in this folder. When you select a driver for a Display or AV Receiver from a different directory, a copy is made to this folder. However, if you edit the driver from the original location, you must re-select it from the Device page in order to have System Manager re-copy the updated file to the Dynamic IR directory. The folder location can be changed by selecting "Tools/Settings" from the main menu.

CONSOLE

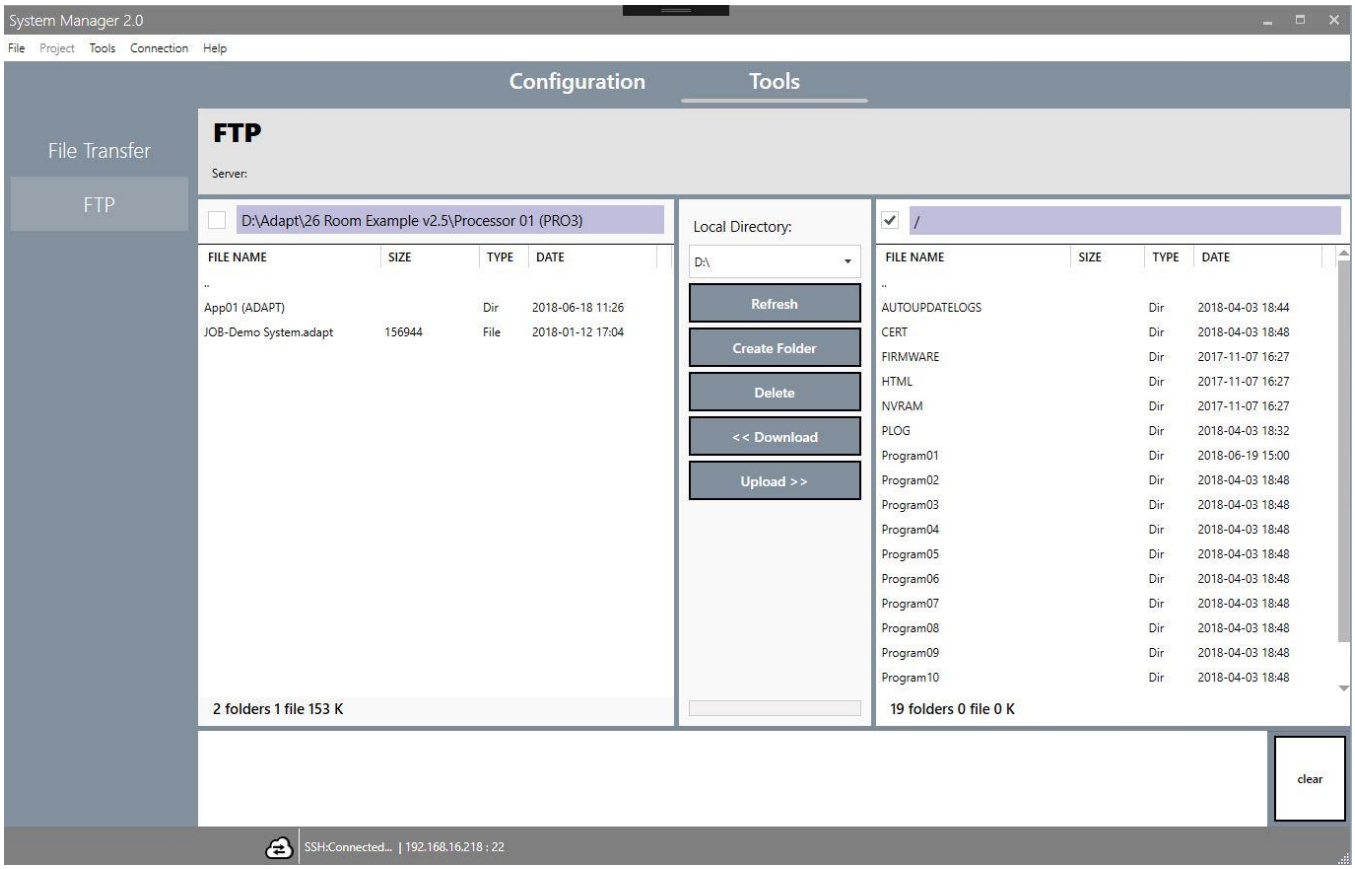


Command Window: 2-way console connection to connected control system.

- **Quick Commands:** Series of commonly used commands (Note: As System Manager evolves, the commands available in this area will be changed to provide the most common commands you will typically use).
- **User:** Send user commands without the need to use the "ucmd" container.
- **Program Slot:** This drop-down selection box allows you to select the target program slot on the control processor for sending the console commands.
- **Clear:** Clears the Command Window.
- **"Setup Gear":** Takes you to the console layout screen to allow you to change the colors, fonts and text size for the Command Window and Diagnostics console.

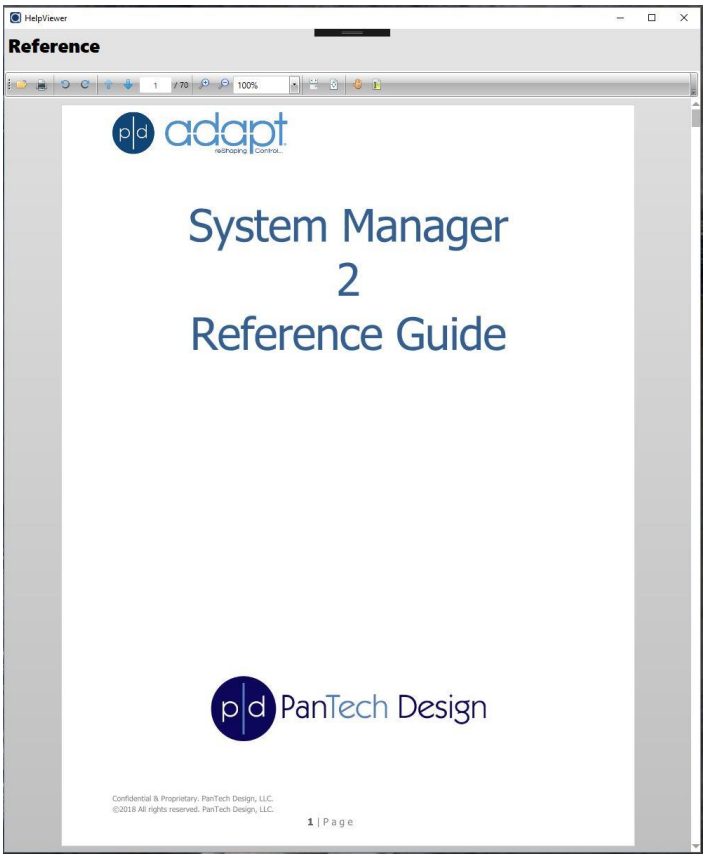
FTP

FTP: Simple FTP client to allow the Download/Upload of files from your computer to the connected control system. This should only be used when performing maintenance or for advanced file management on the target control system. All file operations for ADAPT have been automated and can be found in the [Tools] and [File Transfer] section of System Manager.



HELP

System Manager includes a help page which provides a reference guide [This guide] and some additional tools to assist you remotely and automate sending PanTech Design the adapt file you are working on if support is needed.



System Manager Reference: This guide.

Additional Help is located in the Main Menu "Help" items drop down;

Get Support: A live internet connection (if connected) to remote support desktop sharing application. This can be used to offer live assistance in troubleshooting System Manager ADAPT issues.

Adapt Forum: A live internet connection (if connected) to link to the https://forum.pdadapt.com/ location where you can get the latest updates and converse with the community of Adapt programmers for help and guidance.

Send Adapt to Support: Allows you to quickly send your open ADAPT file, and additional attachments, to PanTech Design for review and assistance.

INDEX