AUTONOMIC CONTROLS

Media Control System
Integration Guide for Crestron SystemBuilder

Version 2.5

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Overview

This document describes how to install integrate the Mirage Media Control System (MCS) and Grand Concerto into a Crestron control system installation using SystemBuilder.

For instructions on setting up the MCS, please refer to the Getting Started document included with the MCS installation. You'll find it in the Start menu of the host computer, under Autonomic Controls.

MCS and the associated Crestron module offer a ready-to-use solution for IP control of iTunes, and Media Player playback. The control service allows the Crestron Control System to interactively access the MCS' functionality and will display feedback for those actions.

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Setting up MCS for Crestron Control.

Requirements.

The Media Control System module requires a Crestron 2 series processor. In order to browse music by album cover and see now playing graphics, your touch panel must be capable of displaying dynamic graphics. Visit www.crestron.com to determine which touch panels support this feature.

If your touch panel does not support dynamic graphics, you can still use the MCS module, however, only text information will be available.

Preparation.

Download the Crestron control module from www.autonomic-controls.com/support.htm. The control module downloads with two VT-Pro-e touch-panel layouts for X-Panel at common Crestron touch panel resolutions. These layouts are compatible with any Crestron touch panel which supports dynamic graphics. The pages can be copied directly into your touch panel project.

For your convenience, we have created several specific VT-Pro-e touch panel projects for the more popular Crestron touch panels. These are available as a separate download from our support page.
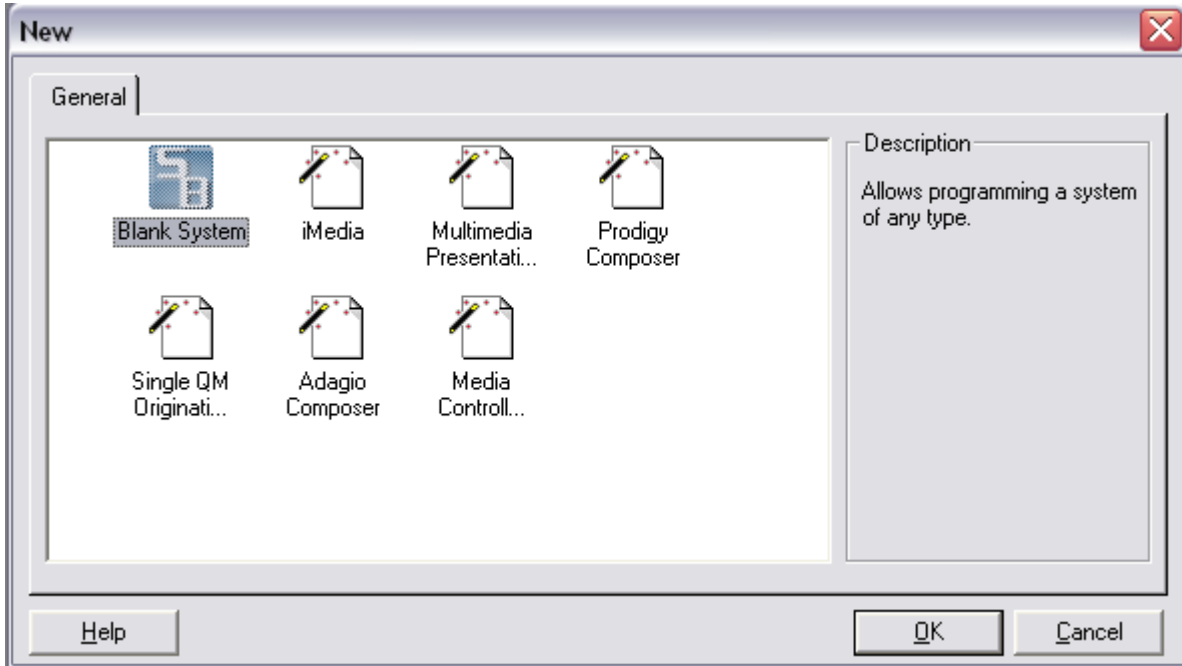
Once you have downloaded the control module and required touch panel files, un-zip the files into a new directory on your hard drive.
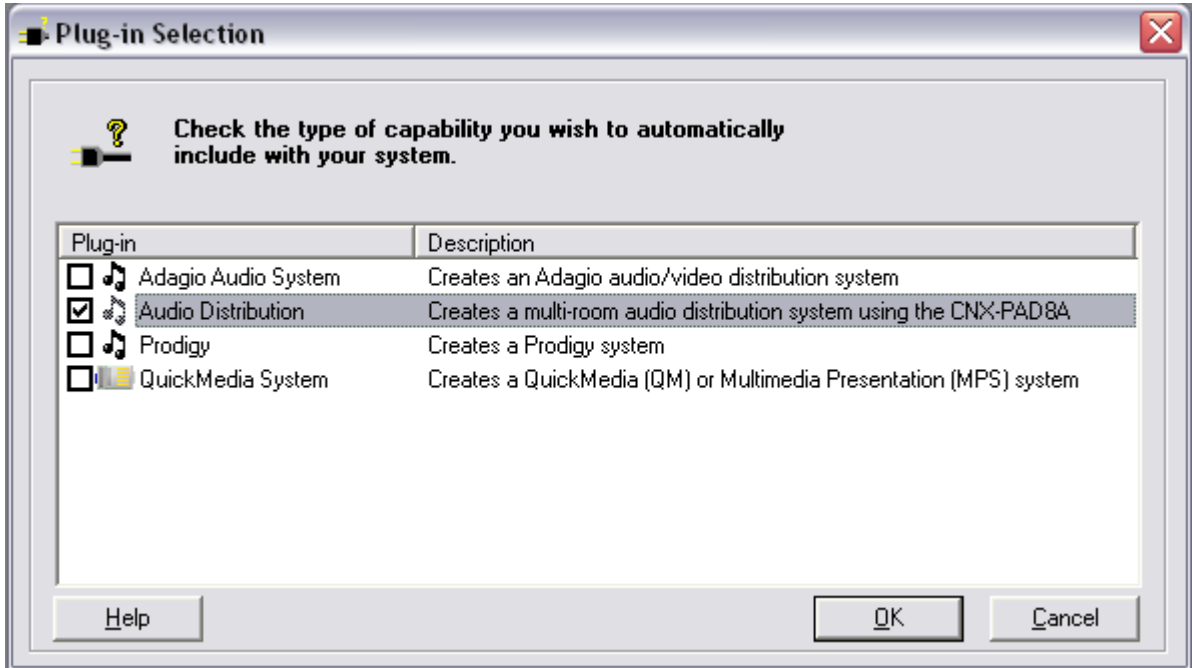
You will find the following files:

1. **Autonomic Controls MCS SystemBuilder.umc.** This is the primary SystemBuilder module. This file must be placed in your SIMPL user modules directory.
2. **Autonomic Controls MCS v2.5.umc.** This is the Autonomic Controls MCS Crestron control module. This file must be placed in your SIMPL user modules directory.
3. **Autonomic Controls MCS IP Processor v2.5.usp.** This is the Autonomic Controls SIMPL+ module which is responsible for IP communications with the server. This file must be placed in your user SIMPL+ modules directory.
4. **Autonomic Controls Keyboard Controller v2.3.usp.** This module is responsible for keyboard entry to the MCS. This file must be placed in your user SIMPL+ modules directory.
5. **SB Menu Driver v1.1.** This module is responsible for handling SystemBuilder related menu browsing. This file must be placed in your user SIMPL+ modules directory.
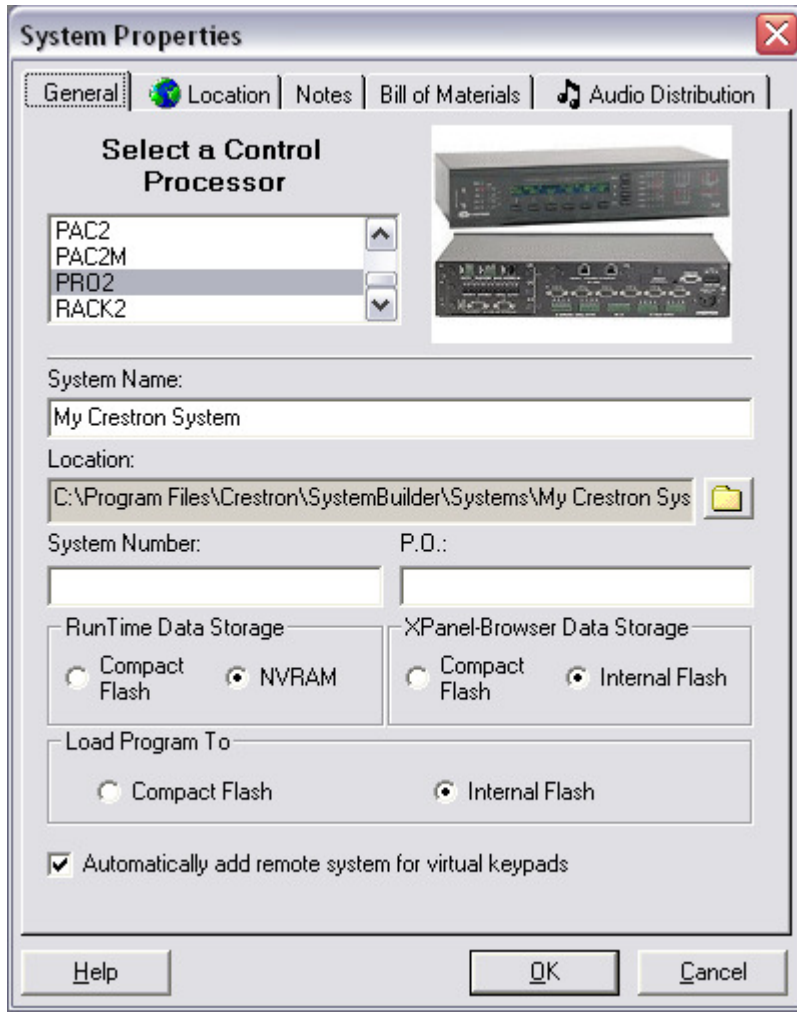
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Adding the MCS to your SystemBuilder

Open SystemBuilder and create a new project.

Select Blank system for the purposes of the sample. Select the Audio Distribution plugin:

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Plug-in Selection

Check the type of capability you wish to automatically include with your system.

| Plug-in	Description
☐ ♪ Adagio Audio System	Creates an Adagio audio/video distribution system
☑ ♪ Audio Distribution	Creates a multi-room audio distribution system using the CNX-PAD8A
☐ ♪ Prodigy	Creates a Prodigy system
☐ QuickMedia System	Creates a QuickMedia (QM) or Multimedia Presentation (MPS) system

Help   OK   Cancel

Choose your processor and enter a name for the system. Check any other appropriate settings.
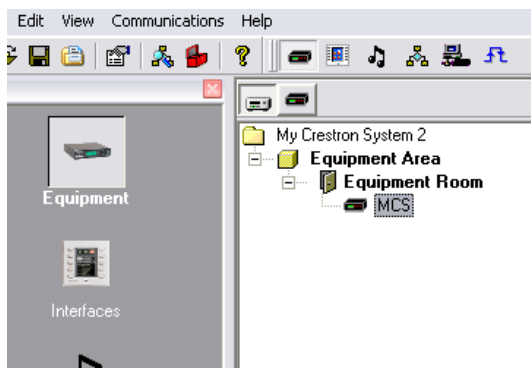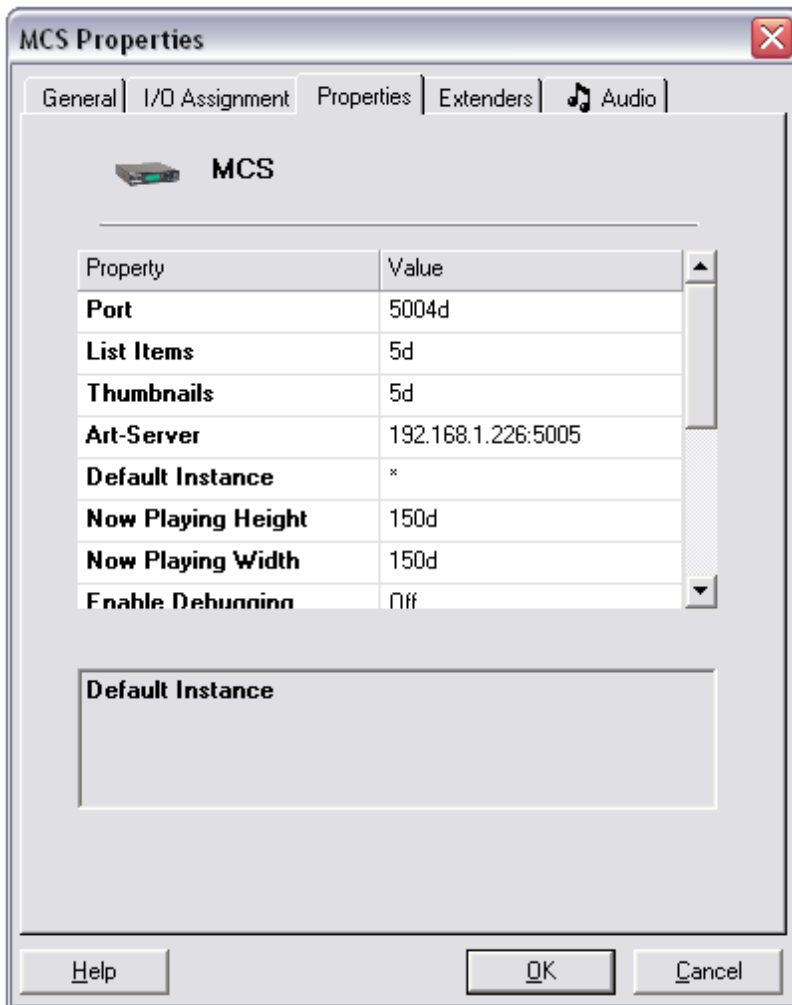
Add the MCS module from your User Database. If needed, SystemBuilder will prompt you to add a C2ENET-1 or C2ENET-2 card.

Right click and choose properties on the MCS module. In the general tab, make sure Add Panel Pages is checked and select AAS.

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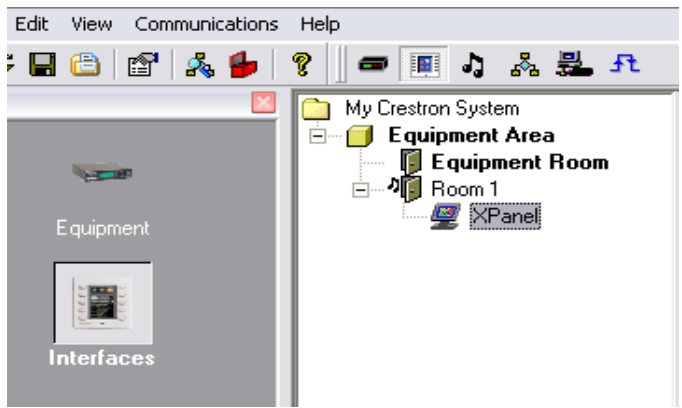© Copyright 2010 Autonomic Controls, Inc
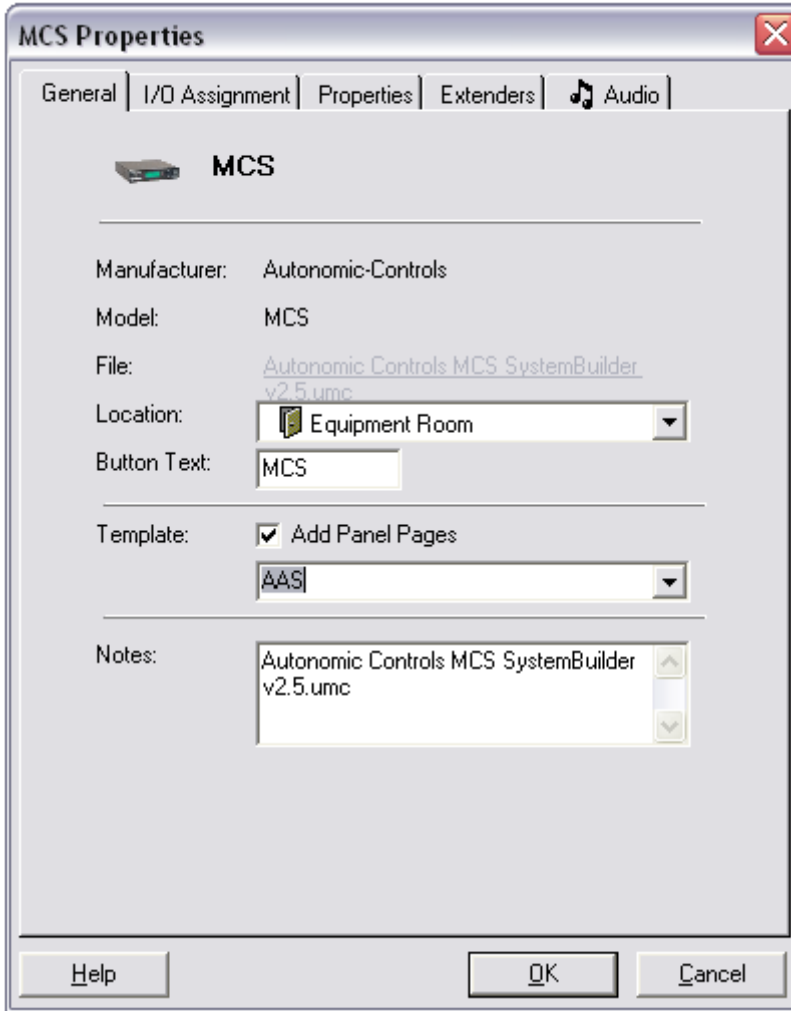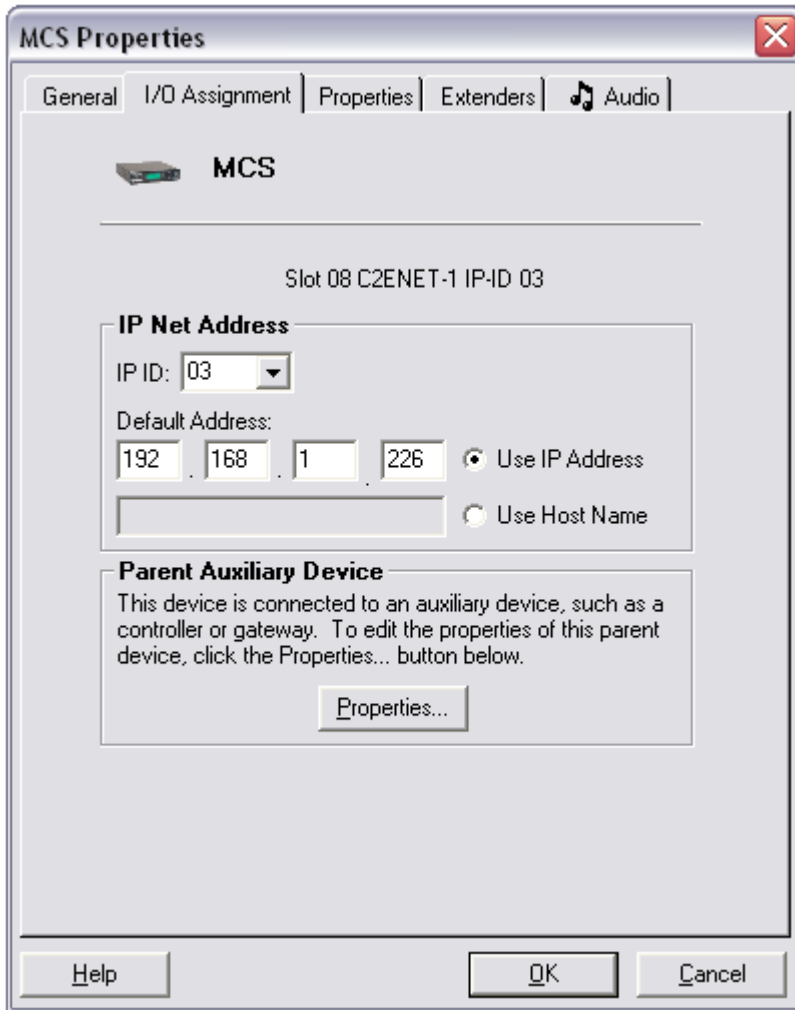
Input the static IP address of the MCS server into the I/O Assignment properties.

Select the Properties tab and input the art server, default instance and Port if not default.

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Select the Audio tab and assign the MCS to a audio distribution input.

Create a new room and add an Xpanel or other interface to the room.
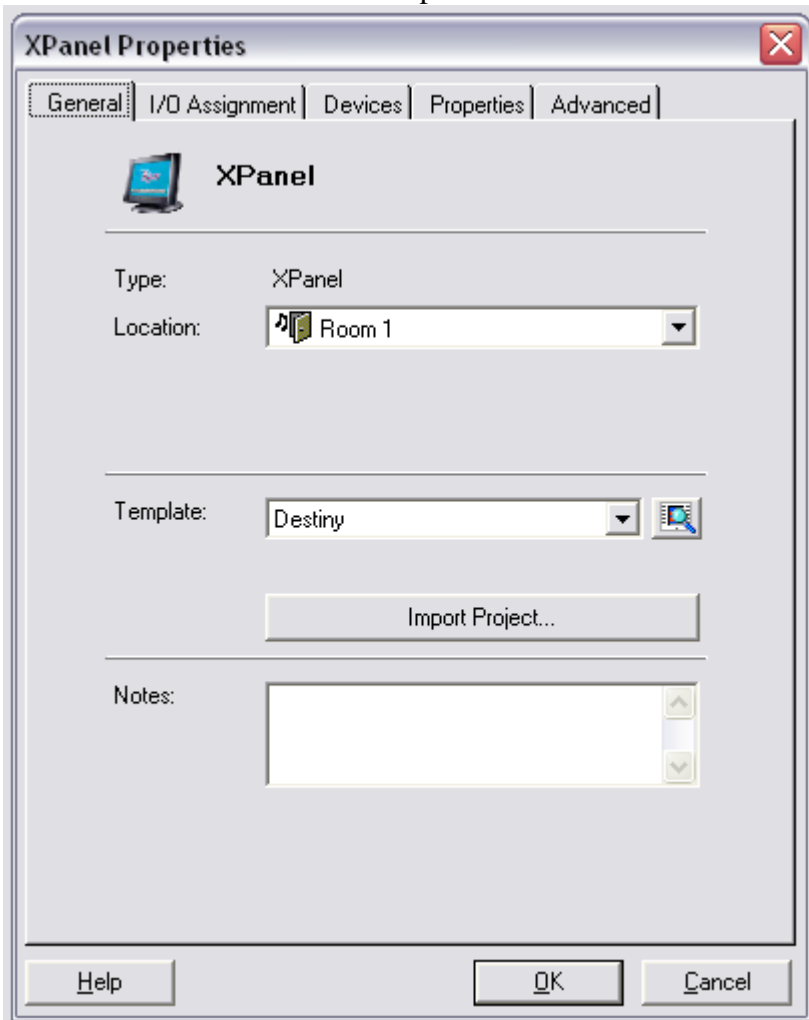
In the Xpanel properties, make sure the Template you are using is set to Destiny. Complete the IP information in I/O assignment and make sure the MCS module is selected as a controlled device.

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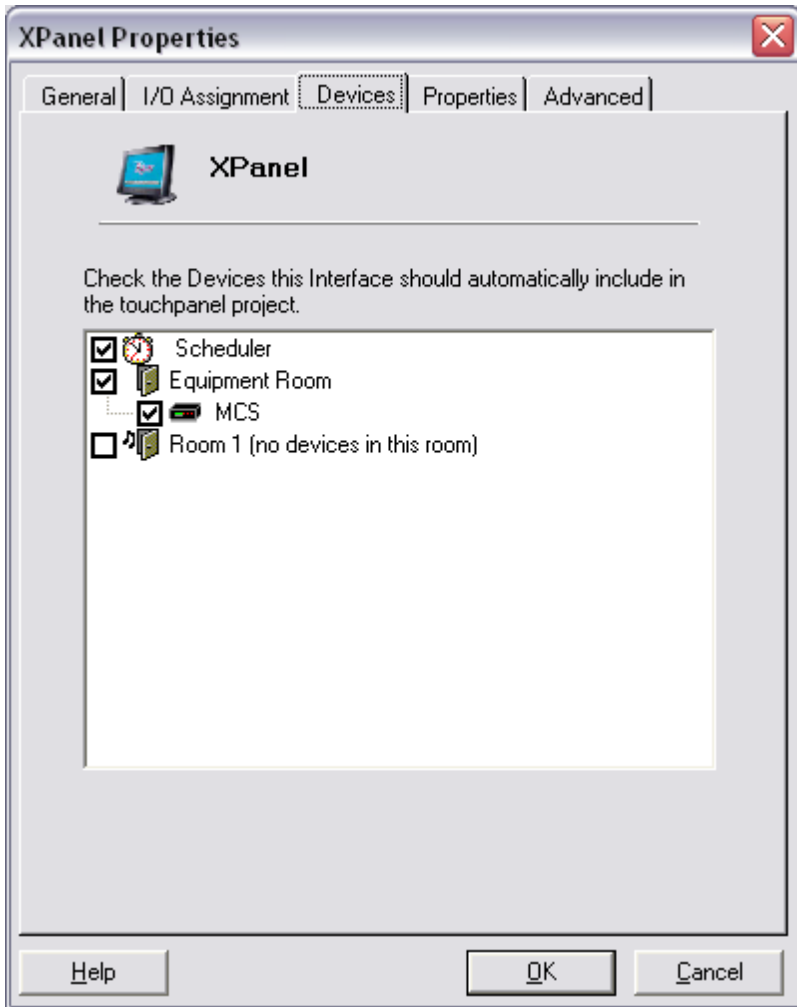
Go to the Programming Section and build the Project for the interface. Once built, find the MCS folder and select the <Main Page>.

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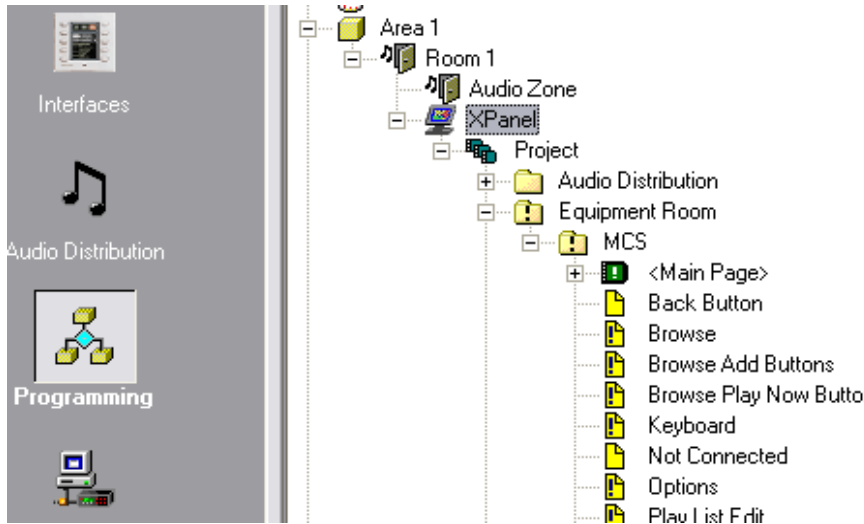
Go to the programming pane, below. Select the Shown tab, add a programming step and select MCS->Start Use. Select the Hidden tab, add a programming step and select MPS->End Use. This will initiate and close the TCP/IP connection.
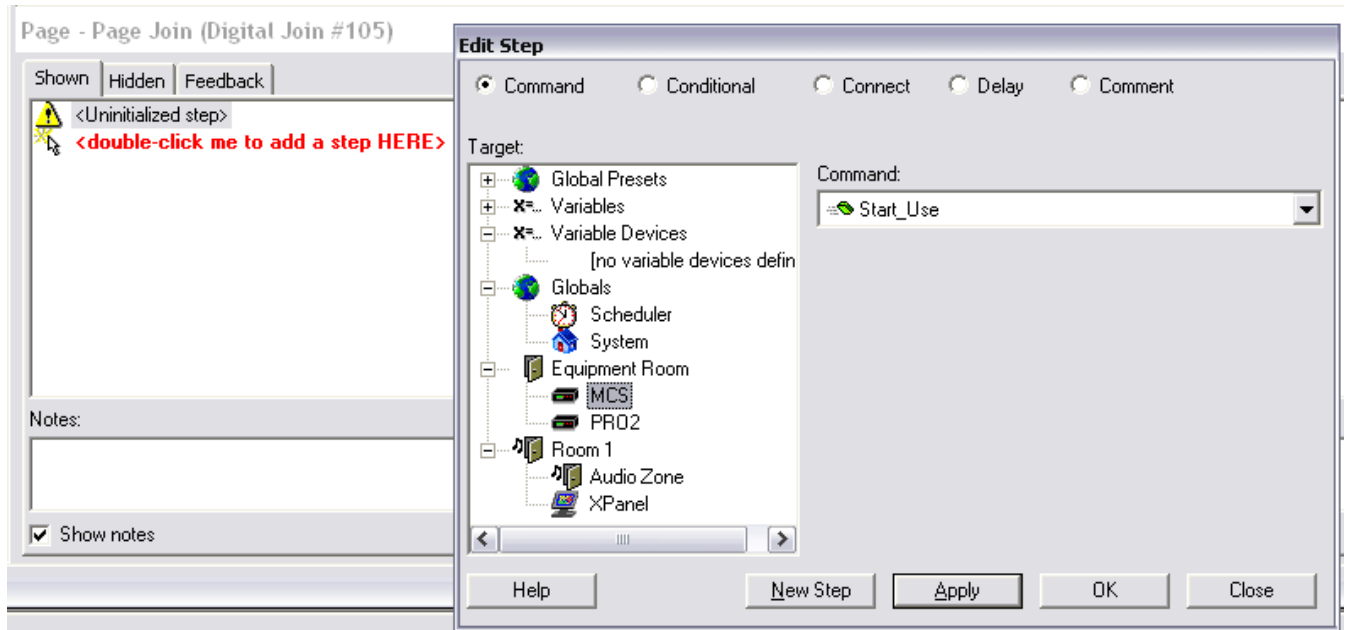
Build and upload the project.

The MCS Parameters:

Port – The TCP/IP port used for communication with the Music Port Server. Default is 5004d.

ListItems – This tells the module how many list items appear in your VT-Pro project. If you modify the included interface files, set this parameter to the number of text list items in your project. This value does not need to be changed for the sample program.

Thumbnails **–** This parameter specifies how many thumbnails appear in your VT-Pro project. If you modify the included interface files, set this parameter to the number of thumbnail list items in your project. This value does not need to be changed for the sample program.

Art-Server **–** This is the full address and port number of the Autonomic Controls web server which is responsible for serving album art to the touch panel. By default this value is 5005, but it is also configurable in the server configuration tool.

It should be set to the IP address of your server, a colon (:), and then the art port, (default 5005).

Default Instance **–** Each default instance parameter should have the MCS source name entered as a parameter. Using an asterisk ('*') indicates that the default instance is the first instance configured in the MCS Configuration software.

Now Playing Art Height and Width **–** Input the height and width in pixels for your now playing art graphic. For best results, these values should match the height and width of the dynamic graphic object in VT-Pro.

Enable Debugging **–** Set to On to see verbose activity messages in Text Console or Simpl Debugger. Defaults to Off.

Troubleshooting

Cannot establish a connection with the Media Control Server.

- Check Server Status in configuration application (step 1). Stop and restart server if necessary. Refer to Autonomic Controls if the server will not report "Running" or if the problem persists after reboot.
- Check Licensing Status – rule out expired demo. Validate full time connection to the internet if running in demo mode.
- Check Firewall status. Determine if the PC has third party firewall software such as Norton Antivirus. May need to manually make port exceptions in those cases.
- Insure Control Server Port matches Port setting in TCP/IP connection on the processor.
- Validate connection on local host and remote network PC using telnet to rule out networking problem. Ping the Crestron Processor from the host to insure connectivity between them.
- Insure IP Table is properly populated on the Crestron.

No Album Art is displayed.

- Check the Art Server parameter in the Autonomic Controls MCS symbol in SIMPL. Make sure the parameter is in the format IPADDRESS:PORT where the IP address matches the host computer and the port matches the Web Server port setting in the MCS configuration application.
- Check Firewall status in the MCS configuration application. Determine if the PC has third party firewall software such as Norton Antivirus. If so, you may need to manually make port exceptions in those cases.
- Establish a baseline with the Sample VT Pro-e file. Validate that the analog and dynamic art joins have not changed on the thumbnail objects on the VT Pro pages.
- Isolate the problem by typing **http://[host_name]:5005/getart** into a browser window. (Replace host-name with the server's host name or IP address). If album art for the currently playing media is displayed in the browser, use the Crestron debugger to determine what URL the **MCE-Now-Playing-Art$** signal is using.

Objects not automatically programmed.

Using the default Destiny template for the AAS, nearly all functionality of the MCS will be pre-programmed when building the program. However, there are some elements that are either not supported by our module that exist in the template or not implemented in the same way. These elements will need to be manually added in the Programming section of SystemBuilder. Below is a overview of such elements.

Now Playing page:
- Next Up: Not supported by our module
- Track number information: Change to a serial field and tie to MCS track output serial.
- Selection: Not supported
- Duration: Change to an serial field and tie to MCS track duration output.
- Genre: Not used as Metadata by MCS.

Queue:
- In Queue: Not supported.

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