Using Control4® with CasaTunes

Introduction

Control4, a popular home automation system, can be used to control CasaTunes whole house music systems and streamers.

CasaTunes provides out-of-the-box support for Control4, including support for SDDP discovery and support for the latest Media Server Proxy (MSP) protocol.

The CasaTunes drivers for Control4 support all CasaTunes CT systems, legacy CasaTunes XLi/e based systems, and CasaTunes systems configured for use with third party audio matrix switches, like those from Audio Authority, ChannelVision, HAI/Leviton, Nuvo, Russound, RTI, and SpeakerCraft.

In addition, you can configure your CasaTunes CT music server to operate as a multi-stream music player. In this mode, you can use your CasaTunes streamer with any other Control4 supported AV switches, whether these are from Control4, or from other vendors whose switches are supported by Control4.

This approach provides installers with maximum flexibility, allowing installers to install a complete CasaTunes solution, or if working in a retrofit situation, it allows installers to add the powerful CasaTunes multi-stream music player to existing installations.

Integration is provided via several Control4 drivers. The **CasaTunes AV Switch** driver (CT_AVSwitch.c4i) controls the CasaTunes software or hardware matrix switch (depending on the CasaTunes hardware installed), allows switching any input to any output, powering a room on or off, and controlling the room volume.

The **CasaTunes MSP Player** driver (CT-MSP-PlayerX.c4z) allows you to stream disc based music, Internet radio and other Internet based music services. You can configure as many CasaTunes MSP Players as you have CasaTunes Media Player sources (as shown in CasaSetup in the Sources tab). For example, a CT-3 music server offers 3 streams, a CT-4+ music server offers 5 streams, etc. The CasaTunes MSP Player driver implements the latest Control4 MSP Proxy.

Features and Benefits

The CasaTunes solution for Control4 adds many significant new capabilities to a Control4 installation, including:

- Allows you to play and listen to different music in each room
- CasaTunes offers a wide selection of music, including disc based music, networked music Internet radio and music services
- Allows you to transparently stream music from any App on one or more iOS devices to any CasaTunes room, unleashing endless music and access to unique music Apps
- Included with your CasaTunes music server is disc storage to store your music collection
- You can quickly play, create and manage your CasaTunes Playlists
- You can wakeup and sleep to your favorite tunes
- Allows you to control CasaTunes from Control4 touch panels, remotes, browser and Apps, as well as control CasaTunes using the native CasaTunes Apps for iOS and Android
- Supports wired, wireless or both wired and wireless speakers, the perfect combination for new and retrofit installations

Prerequisites

- The Control4 drivers require Control4 version 2.7 or later
- Control4 Composer 2.7 or later
- CasaTunes version 5.00.150720 or later

Installation

These steps assume you have already installed your CasaTunes system and it is properly setup and is running.

Download the Control4 drivers for CasaTunes

Download the CasaTunes drivers for Control4 on to the PC you use with Composer to configure your Control4 installation. The Control4 drivers for CasaTunes are available from the downloads page on the CasaTunes web site. This page can be found at:

http://www.casatunes.com/downloads

Unzip and copy the drivers in to your Control4 Drivers folder. Start Composer, and if you installed the drivers correctly, Composer will automatically discover the CasaTunes components installed using SDDP.

To install the CasaTunes AV Switch and MSP Player drivers:

- CasaTunes supports the Control4 SDDP protocol, simplifying setup and configuration. SDDP allows your CasaTunes devices to be automatically discovered and their IP network address to be automatically resolved. SDDP automatically downloads the CasaTunes drivers from the Control4 online driver database
- To use the SDDP capability, select the discovered tab in the Control4 Composer application. The Discovered tab displays all the discovered CasaTunes devices that are available. There will be an entry for the CasaTunes AV Switch as well as an entry for each CasaTunes MSP Player

- In Composer, select the room where you would like to install the CasaTunes AV switch and double click on the discovered CasaTunes AV Switch. It will automatically add the AV switch to the selected room. You can rename the switch if desired.
- Now add each CasaTunes MSP Player (Type: Media Service) to the project.
- Once you have added the CasaTunes AV switch and players, you will notice in the Properties tab for each driver the IP address has been automatically configured for you, and the CasaTunes Status property for each driver should show it is now **connected**

Connecting the outputs of the AV Switch to the various rooms (or other devices)

- In Composer, select **Connections** and select the CasaTunes AV Switch
- Connect each configured Room in the Room Control section. Connect the **AUDIO_SELECTION** and **AUDIO_VOLUME** connections with the **Audio EndPoint 1** and **Audio Volume 1** in the room.
- If you are feeding a pre-amplified output from CasaTunes to an AUDIO_IN connection on another device, then select the appropriate **Audio Out x** from the Audio/Video Outputs section and connect it to the input of the device.
- To simplify setup and ensure you connect the outputs of your AV Switch to the correct rooms, you should jot down the list of rooms configured in CasaSetup. These Rooms are listed in the order they are connected to the AV Switch.

Connecting the output of each Player to the correct input of your AV Switch

In Composer, select **System Design** and select the player to configure. The **Source ID** property specifies the number of the **Audio In** connection on the AV Switch you should connect this player to.

Now switch to the **Connections** and for each Player connect the AUDIO_OUT for the player to the appropriate input on the AV Switch.

For more help, check out the following [How to Setup CasaTunes with Control4 video](). (https://www.youtube.com/watch?v=Mhwtc659k8Q)

Once you have completed your configuration make sure you backup your project and update all the Directors and Navigators.

Configuring your CasaTunes music server as a streamer

You can configure your CasaTunes music server as a streamer which allows it to work with other 3rd party AV switches that are supported by Control4. **This option is only available on CasaTunes CT Systems.**

To configure your CasaTunes music server as a streamer:

- Select the Controllers menu option in CasaSetup
- Select Advanced Settings
- Check the option **Configure music server as a multi-stream player?**
- Select Save

CasaTunes AV Switch Advanced Settings

External Inputs

The CasaTunes AV Switch supports one or more external inputs on the CasaTunes music server depending on your CasaTunes model. You can use these external inputs to feed third party audio or other music sources. The External sources are presented in the same order as they are in CasaSetup.

For example, suppose you wanted to feed the output of your home controller into CasaTunes. To configure this, follow these steps:

- Physically connect the **Audio Out** output on your home controller to the External Input 1 connector on your CasaTunes music server
- Using Composer, connect **Ext Input 1** on your CasaTunes AV Switch to the **AUDIO OUT** on your home controller

Now when you select to listen to music from your home controller in a CasaTunes room, it will automatically switch the room to the associated external input

Wireless Speakers and Room Groups

The CasaTunes AV Switch introduces **Var Audio Out x** and **Var Room x** connections to support playing to wireless speakers and CasaTunes room groups. These Variable Audio Out/Rooms require you configure the connection as well as the "Var Room x Name" Property in Composer.

For example. Suppose you want to add a wireless speaker called **WIRELESS1** in CasaSetup to the area called Pool in your Composer Project. To configure this:

- Select the CasaTunes AV Switch
- Switch to the Connections view
- Connect **Var Room 1** to the pool room (area)
- Switch to the System Design view
- Set the property **Var Room 1 Name** to **WIRELESS1**

Controlling your CasaTunes system using Control4

Please view the following video on [How to control CasaTunes using Control4](https://www.youtube.com/watch?v=xvREA5R3Usk). (https://www.youtube.com/watch?v=xvREA5R3Usk)

Scheduling Music

You can schedule Control4 to wake up to music, by scheduling a CasaTunes Playlist or a playlist from a specific Music Service.

In this example, we will create a **Daily** scheduler event that will play the **Easy Listening** playlist using **Player1** every morning in the **Master Bedroom** at 8:00 am.

We start by creating a Schedule Event:

- Select **Agents** in Composer
- Select the **Scheduler** Agent
- Click Scheduler **Add…**
- Fill out the Scheduler form and name it **Daily**

Next, configure the Playlist to play on Player1:

- Select **Programming** in Composer
- In the **Device Events** list select **Scheduler**
- Select the **Daily** Schedule Event we just created
- In the Actions Window, select the **Equipment Room** and select **Player1**
- In the Player1 Specific Actions, select **Device Specific Commands**
- Select **Select Playlist** from the pull down
- Click on the "**...**" button to browse the available Playlists to play
- Navigate the list and select the **Easy Listening** Playlist to play
- Double click or drag the Player1 Actions to the Script window

The final step is to select the room to play the Playlist using Player1:

- In the Actions Window, select the **Master Bedroom** and select **Player1**
- Select the **Select an audio device** option
- Select **Equipment Room -> Player1** from the pull down
- Double click or drag the **Master Bedroom** Actions to the Script window
- Test your script by clicking on the **Execute** button in the Script window

Please view the following video on [How to wake up to music using CasaTunes and Control4](https://www.youtube.com/watch?v=FggcRsWuYnk). (https://www.youtube.com/watch?v=FggcRsWuYnk)

Known Limitations

1. None

Appendix A - Composer Properties

The following properties are displayed in Composer in the Properties tab for the CT_AVSwitch.c4i driver:

- **IP Address (Read Only)** - IP Address used to connect to the CasaTunes AV Switch
- **Port (Read Only)** -TCP Port number used to connect to the CasaTunes AV Switch
- **CasaTunes Status (Read Only)** - Specifies whether the driver is connected/disconnected to/from the CasaTunes music server
- **Version (Read Only)** - The release date of the CasaTunes AV Switch Proxy driver
- **Polling Interval** - Specifies how frequently (in seconds) the driver polls CasaTunes
- **Debug Mode** - Specifies where to display Debug information (None/Print/Log/Print and Log)
- **Debug Level** - Specifies type of information to log
- **Volume Ramp Delay in Milliseconds** - Specifies how long to wait before ramping the volume up or down
- **Var Room 1 .. 5 Name** - Allows you to assign wireless speakers and room groups as variable rooms

The following properties are displayed in Composer in the Properties tab for the CT-MSP-PlayerXX.c4z drivers:

- **Port (Read Only)** -TCP Port number used to connect to the CasaTunes music server
- **CasaTunes Status (Read Only)** - Specifies whether the driver is connected/disconnected to/from the CasaTunes music server
- **Version (Read Only)** - The release date of the CasaTunes MSP Proxy driver
- **Polling Interval** - Specifies how frequently (in seconds) the driver polls CasaTunes
- **Debug Mode** - Specifies where to display Debug information (None/Print/Log/Print and Log)
- **Source ID (Read Only)** - Specifies the CasaTunes Source ID assigned to this MSP Proxy driver