# CasaTunes FAQ

## How does CasaTunes work?

The CasaTunes application consists of two components, the CasaTunes Media Server and the CasaTunes Web Service. The CasaTunes Web Service is responsible for interfacing with the user, sending user requests to the CasaTunes Media Server, and displaying feedback to the user. The Media Server is responsible for playing the selected music and communicating with the multi-room music system and keypads.

## CasaTunes Media Server

The CasaTunes Media Server runs as a Windows Service. Windows Services run in the background, and are for the most part, transparent to the user. You can stop and start the CasaTunes Media Server using the Services applet located in the Administrative Tasks folder (located in the Control Panel). The CasaTunes Media Server is automatically started when the installation completes, and then every time the computer is powered on.

The CasaTunes Media Server communicates directly with CasaTunes XL hardware and via RS232 for other multi-room music systems. The CasaTunes XL hardware must be installed on the Media Server PC. The serial port can either be located on your Media Server PC, on a Barix Exstreamer, or using some other networked serial port that appears as just another serial port to the PC.

When using the CasaTunes XL hardware, the music comes from the PC, called “internal” sources or from external sources, such as tuners, as described below. When CasaTunes plays music through the XL hardware, the matrix switch in the hardware routes the music from a source to an output. The output then goes to an amplifier and on to the speakers in a room. With the CasaTunes XLi hardware, up to four different internal sources and one external source can be routed to up to six different rooms. The matrix switch is completely non-blocking, which means that any source can be routed to any room or more than one room. At the same time, another room, or rooms, can listen to another source. All five sources can be used at the same time. The XLe hardware has five internal sources and four external sources and the outputs can be expanded from twelve rooms in the standard configuration to as many as 48 rooms. If the external sources are not being used with external devices and the computer has a high quality sound card or on-board audio output, the outputs of the sound card and/or on-board audio can be cabled into the external source inputs. CasaTunes can then be easily configured to control these audio sources just like the five built-in internal sources. To the user they will look exactly the same.

If you are using NuVo or Russound hardware to play music through your multi-room music system, connect one or more stereo outputs from your Media Server PC to the source inputs on your music system. The number of stereo outputs you can connect is only limited by the number of stereo outputs available on your Media Center PC and the number of source inputs available on your multi-room music system. Both Russound and NuVo systems currently support up to six sources. You can use multiple sound cards or sound cards that have more than one stereo output. For example, M-Audio provides several sound cards and solutions that support 2, 3 and even 5 stereo outputs. CasaTunes can take 5.1 and 7.1 sound cards and automatically turn them into 3 stereo sources or 4 stereo sources respectively. When selecting a sound card make sure it includes DirectSound driver support. Another option is to use one or more Barix Exstreamers. These devices are networked music

players and contain one stereo output each. You can locate these with your multi-room music system and use the built-in serial port on the Exstreamer to control your music system.

If you are using one or more tuners, you should keep in mind that each tuner will require an input source on your music system. The Russound and NuVo external tuners are dual-tuner units, and each will require two input sources. The built-in tuner on the Russound CAM series includes a single tuner unit. This also reduces the number of source inputs available for use with the Media Server. For example, if the multi-room music system supports a total of six sources, and you have a dual-tuner in your setup, you can connect, at most, 4 stereo outputs to your music system. Also be aware that if you have more than one NuVo tuners, you will need an additional serial port for each tuner. Russound tuners are accessed via the Russound RNET bus and do not require a separate serial port.

CasaTunes supports multiple linked multi-room music systems. You can link up to six Russound CAV 6.6 units and two Nuvo Concerto units. If you have more than one multi-room music system you do not require any additional serial ports, since both the current Russound and Nuvo units use a single serial port and communicate between the linked units using their own proprietary buses.

The CasaTunes Media Server records any unexpected condition in the Application Event Log. To access the Event Log, use the Event Viewer applet located in the Administrative Tasks Folder (located in the Control Panel).

Hardware configuration information is saved in a file called 'Config.xml'. On Windows XP, this file is typically found in %SystemDrive%\Documents and Settings\All Users\CasaTools\CasaTunes\2.0.0.0". On Vista this file is typically found in "%SystemDrive%\Program Data\CasaTools\CasaTunes\2.0.0.0". You should not edit this file directly or it may become corrupt in which case you will have to re-run the Setup Wizard. Whenever you run the Setup Wizard and change the configuration this file is automatically updated.

The CasaTunes Media Server is built using Microsoft's .Net 2.0 Framework.

## CasaTunes Web Service

The CasaTunes Web Service runs as an ASP.NET application. It is hosted in Microsoft Internet Information Server (IIS). The application makes heavy use of Microsoft AJAX ASP.NET to provide a better user response. The CasaTunes Web Service communicates with the CasaTunes Media Service via .Net Remoting using an HTTP transport.