AUTONOMIC CONTROLS

MEDIA CONTROL SERVER 2.0

Version 2.0	Getting Started Guide

This getting started guide will help you install and configure the Autonomic Controls Media Control Server and Mirage client.

Contents

Media Control Server 2.0

GETTING STARTED GUIDE

OVERVIEW

This document will guide you through the installation of the Media Control Server (MCS), which is the host media control component, and Mirage, a client application you can use to control your media playback from touch screens and remote PC's.

MCS and Mirage offer a ready-to-use solution for IP control of media playback on your Media Center PCs. The control service allows Mirage to interactively access iTunes, Media Player or Windows Media Center and will display feedback for those actions.

In addition to using the Mirage client application, MCS is designed for use with automation and control systems such as those made by AMX, Crestron, and RTI. Autonomic Controls provides control modules for each of these products. For specific information on how to set up MCS for use with these systems, please refer to the documentation included with the specific system module.

MCS resides on a host server running iTunes, Microsoft Media Player, or Microsoft Media Center. The software is licensed per host machine.

Before you begin

Find a suitable place to put your server before you install any software. The location you choose must have an available, wired network connection either to your broadband router or to a switch that is connected to your broadband router.

For the best experience, it is recommended that you purchase new hardware that you can dedicate to running as a media server. We strongly encourage you to purchase from one of the media center PC builders that cater to the CEDIA channel.

System Hardware Requirements

The following table defines the minimum hardware requirements and the recommended hardware for Media Control Server. The minimum hardware requirements define the minimum hardware specification that you need to install MCS. The recommended hardware describes the hardware that you need for a better experience.

Requirement	Minimum	Recommended
CPU	1 GHz Pentium 3 (or equivalent)	Pentium 4, AMD x64, or newer processor
RAM	1 GB	2GB
Hard Drives	70 GB ATA/SATA/SCSI	200 GB ATA/SATA/SCSI
Network Interface Card	10 Mbps Ethernet	100 Mbps or Faster
Serial ports	None	One internal or USB add-on RS-232 port is required if control of a NuVo system is desired.
Sound Card	Stereo DirectSound 8 compatible sound card.	One or more 7.1 channel Direct Sound 8 compatible cards.

TABLE 1- HARDWARE REQUIREMENTS

System Software Requirements

The operating system you choose for your server will determine which Media Control Server features you can use.

Feature	Windows XP or Windows Server 2003	Windows XP Media Center Edition 2005	Windows Home Server	Windows Vista Home	Windows Vista Ultimate or Home Premium[1]
Minimum Service Pack required	SP3	SP3	Power Pack 1	SP1	SP1
Supports Windows Media Player Audio Playback including DRM protected content.[2]	✓	✓	✓	✓	✓
Supports PolyTune™ multiple source playback.[3]	✓	✓	✓	✓	✓
Supports internet streaming of XM radio stations.[4]	✓	✓	✓	✓	✓
Supports iTunes audio playback including music purchased from the iTunes Store.[5]	✓	✓	✓	✓	✓
Supports Control of Media Center Extenders		✓			✓
Supports Videos		✓			✓
Supports Pictures		✓			✓
Supports DVDs		✓			✓
Supports Live and Recorded TV		✓			✓

TABLE 2- SOFTWARE REQUIREMENTS

Additionally, you will need to install iTunes version 7.0 or greater if you plan on iTunes music playback.

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[1] Both 32 and 64 bit versions of this OS are supported.
[2] Windows Media Player 11 required.
[3] Requires one or more 5.1 or 7.1 sound cards.
[4] Requires a separate XM subscription and constant internet connectivity.
[5] iTunes version 7.x required.

SYSTEM SETUP

You should install and configure your hardware as well as all of your prerequisite software before installing Media Control Server. For instance, if you plan on using Windows Media Player for audio playback, make sure that you can playback the sample music that comes pre-installed with your operating system. Likewise, if you choose to use iTunes, or Windows Media Center, make sure that these applications launch, and are able to playback media prior to installing MCS.

MEDIA CONTROL SERVER INSTALLATION

Your media server will need to be connected to the internet during the installation and registration process. Additionally, a constant internet connection is required when running MCS during the 14 day free trial. Once you have registered your media server, by entering your license key, you may remove it from the internet. However, you will probably want to leave it connected to your network so that you can control it via IP.

> *"…A CONSTANT INTERNET CONNECTION IS REQUIRED WHEN RUNNING MCS DURING THE 14 DAY FREE TRIAL."*

Now that you're ready, download and save the Media Control Server setup program from the [Autonomic Controls Website](#). Run the setup program and the wizard will take you through the installation process. If you're upgrading from an earlier version of MCS the installation wizard will take care of uninstalling the previous version for you.

Pre-requisites Screen

Media Control Server requires the Microsoft Visual C++ runtime and Microsoft.Net 2.0. The installation wizard will install these for you if required.

It is possible that your computer will require a reboot once the pre-requisites are installed. If that's the case, restart the installation wizard after your computer reboots.
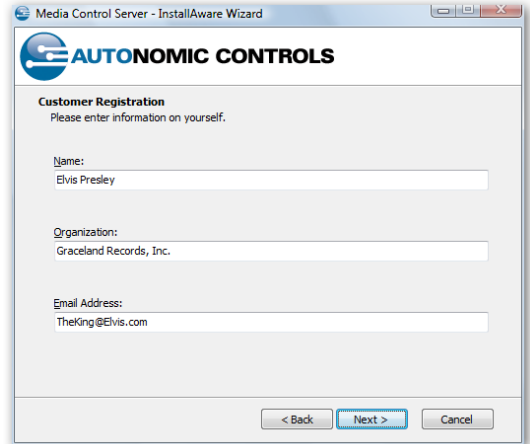

End User License Agreement

Please read and accept the license agreement terms.
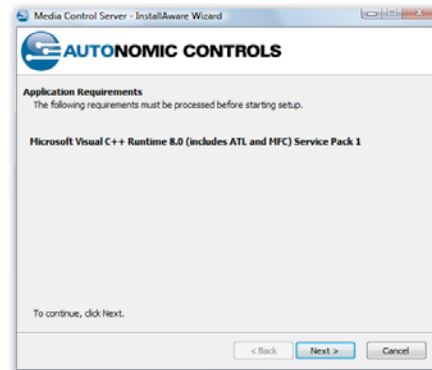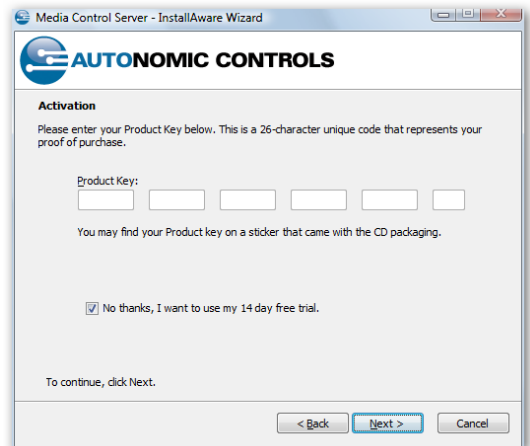
Customer Registration

Enter your name, company name, and email address.
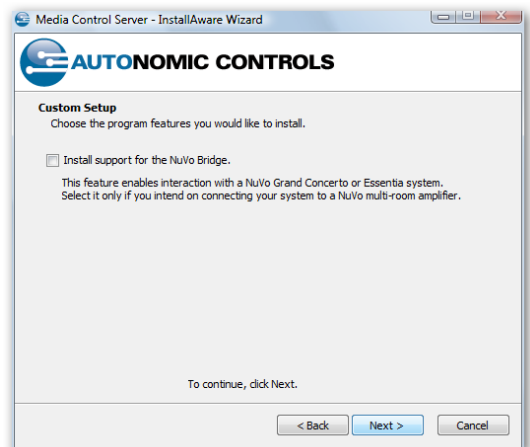
Activation

If you have a license key, enter it here.

You may also choose to take advantage of the 14 day free trial of MCS.

Custom options

Select support for the NuVo bridge only if you plan on connecting your computer to a NuVo Grand Concerto or Essentia system. You can always add this feature later, if you change your mind, by re-running the installation wizard.
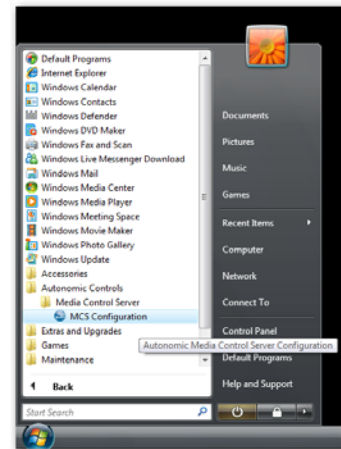
Completing Installation

Your media server will need to reboot when installation is finished. Please reboot before continuing to the configuration step.
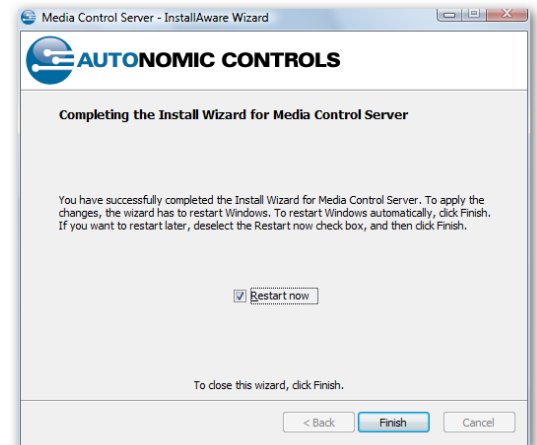
MEDIA CONTROL SERVER CONFIGURATION

## Start the configuration application

The MCS configuration application is located on the start menu under Autonomic Controls.

General MCS Settings

The general MCS settings area (outlined) allows for the following configuration:

- Log Files – Allows you to enable logging and upload log files to the Autonomic Controls Support Team. Remember that while logging, MCS will consume hard drive space, and perform slightly slower. Upload log files only at the directive of Autonomic support.
- Network control port – Defaults to 5004 – You should only need to change this setting if you are running another piece of software that is using port 5004.
- Serial Control – Allows you to configure RS-232 control and pass thru. This is detailed below.
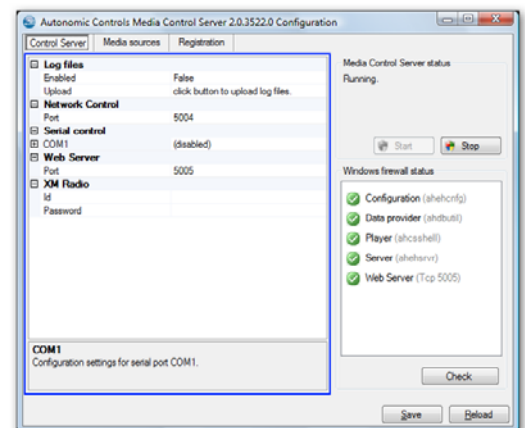
- Web server port – Defaults to 5005 – similar to the Network control port above, but for the MCS built-in web server.
- XM Radio – Requires an XM enabled license – Enter your XM user id and password to enable XM radio streaming over the internet.

Serial Control

Each RS-232 port on your computer may be configured separately.

Any of them can be configured to control MCS from a serial enabled control system (such as HAI).

The advanced "Pass thru port" setting allows you to bridge RS-232 and IP traffic on your network.
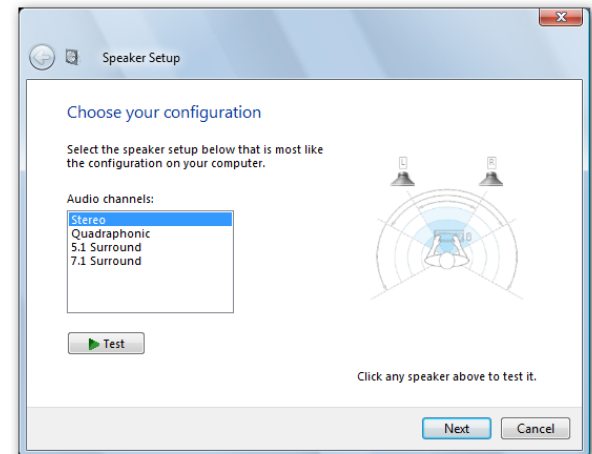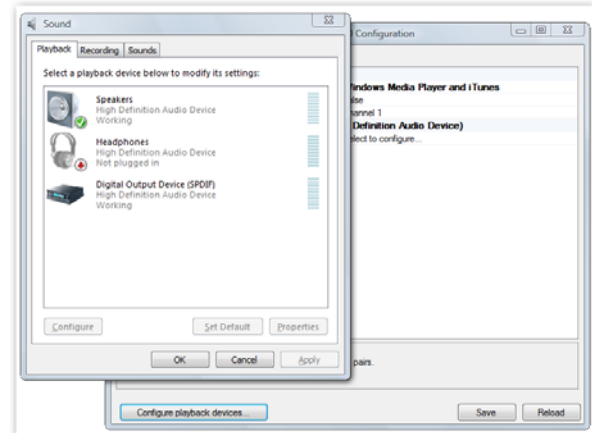
Media Sources

The media sources tab of the MCS configuration application allows you to associate media to sound cards. Each sound card on your computer has its own section. The Default sound card is always listed first.

- Media Source – choose between Windows Media Center[6, 7] and Windows Media Player / iTunes[8].
- Split into multiple channels – set this to true to enable PolyTune™ multi-channel playback on this sound card.
- Source Name – Enter a friendly name for referring to this source.
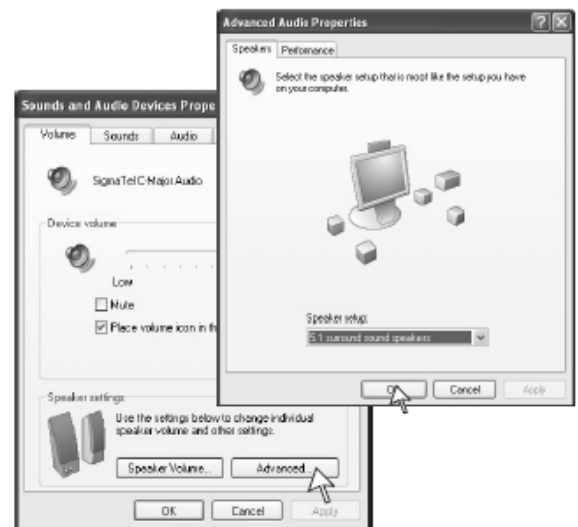

Microsoft Vista Speaker Setup

Configuring playback devices

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[6] Windows Media Center is only supported under certain operating systen

[7] Windows Media Center is designed to consume an entire sound card for DVDs.

[8] iTunes version 7.x must be installed prior to configuration.

Windows XP Speaker Setup

Each sound card in your computer should be configured for the proper number of channels.

The Configure Playback Devices button at the bottom of the Media Sources tab will open an Audio Devices Properties window. The actual appearance of this window will vary depending on the manufacturer of the PC sound card being used.

The "Advanced Speaker Settings" window will let you establish the type of card within a drop-down menu. **This is an important step. The output choice you make needs to match the number of sources you intend to setup for PolyTune™.**

For example, if you have a 5.1 surround card in your server PC, but you intend on using only two of the three available outputs, you should select quadraphonic within Advanced Speaker Settings. This will establish two independent stereo audio streams for PolyTune™.

If you intend on using all three of the available audio outputs on the 5.1 surround card, select 5.1 within the "Advanced Speaker Settings".

Similarly, a 7.1 surround card would represent four stereo audio streams.

Note that many surround audio cards require an audio cable to be plugged into at least one output before any information appears in the "Media Sources" tab. It is recommended that you plug in your audio cables prior to configuring MCS.

Once you have selected the appropriate number of outputs, return to the "Media Sources" tab. When this is complete, two new columns will appear; Channels and the number of channels discovered. For example, if you are configuring a 5.1 surround card, you will see **(Three found)**. Each channel listed in this column can be given a specific name, (i.e. PC Music A or PC A), to match the appropriate output. The names entered here will appear as the zone names within the Zones menu in Mirage.
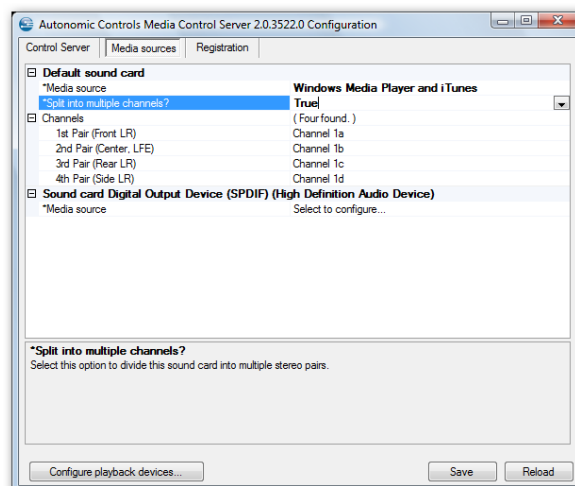
Registration

You may enter your license key information on the registration page.

If you have an installation key file (.AHIK) from Autonomic Controls you may click the open button to load the license key.

Alternatively you may enter the 26 character key in the space provided.

Don't forget to click the "install key" button to register your license key.

Removing your license

At some time, you may want to move your license to another computer. You can use the "Remove license" link to uninstall your license key.
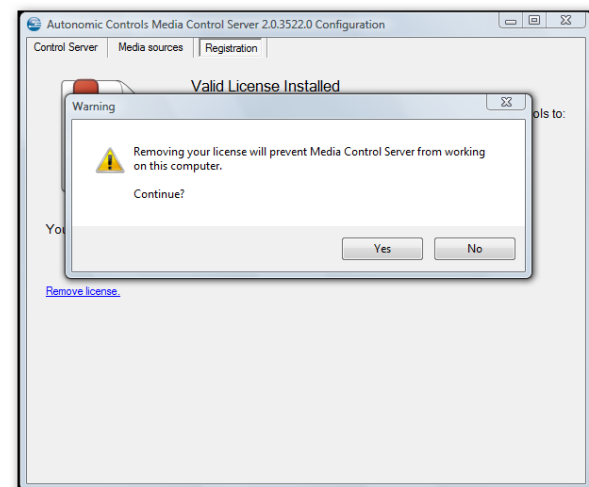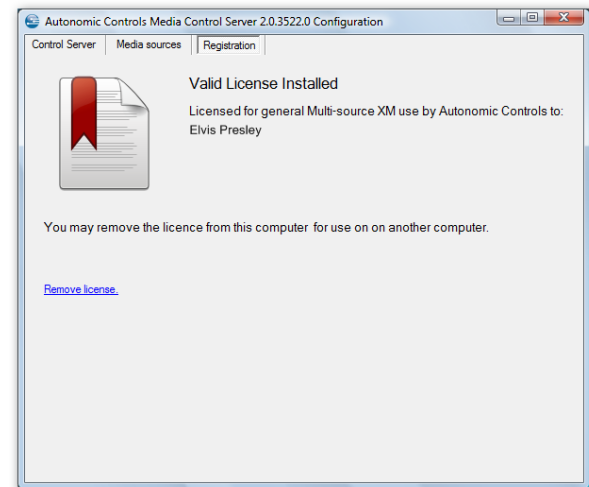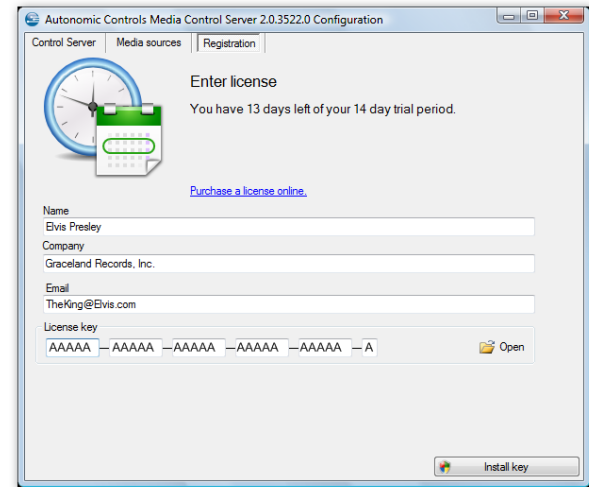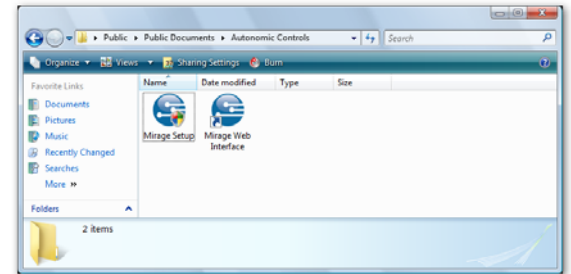
MIRAGE INSTALLATION

Overview

Once the Media Control Server is setup and running on your Media server, you can use the Mirage client application to control it.

You can choose to run Mirage in a web browser, or you can install the Mirage application locally on any machine you wish to use as a control point.

To make this process easier, the MCS installation placed two icons in the Shared Documents folder (or the Public folder on Vista machines) of the host PCs.

Running Mirage in a Web Browser

The MCS service can host a session of Mirage directly in your web browser. To access Mirage this way, you can browse to the Shared Documents (or Public) folder of any of the host PCs which you installed the server on. Once there, in a folder called Autonomic Controls, you will find a shortcut to the Mirage Web interface. Double clicking this icon will open the application in your browser window.
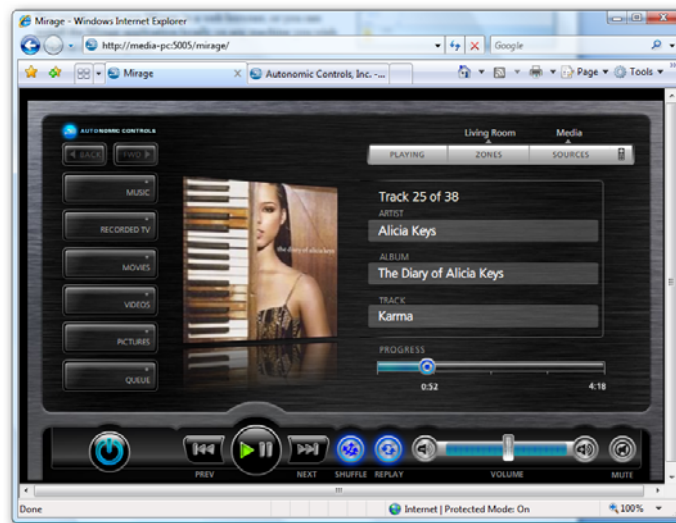
An alternate method of running Mirage in a browser is to type the address directly into Internet Explorer.

The syntax is: http://**servername**:5005/Mirage/

Replacing **servername** with the name of your host Media Center PC. Also, the port designation of 5005 assumes that you did not change the default web server port (see General MCS Settings on page 7).

Running the Mirage Client Application

You also have the option of installing Mirage as a local application. This is the preferred method for running Mirage on a touch screen device or UMPC because the installed client application is capable of running in full screen mode.

There are two ways to access the Mirage installation file. (MirageSetup.exe)

1. Using your LAN, you can browse to the Mirage Setup application in the MCS server's Shared Documents (or Public) folder.

2. You can type the following into any web browser on the network.

   http://**servername**:5005/mirage/mirageSetup.exe

   Again, replacing **servername** with the name of the host PC.

When the Mirage client installation is complete, a shortcut will be created on the local PC under the Start Menu, in a folder called Autonomic Controls / Mirage.

CONFIGURING MIRAGE

To access the setup screen in Mirage, press and hold the blue Autonomic Orb at the upper left hand side of the screen.
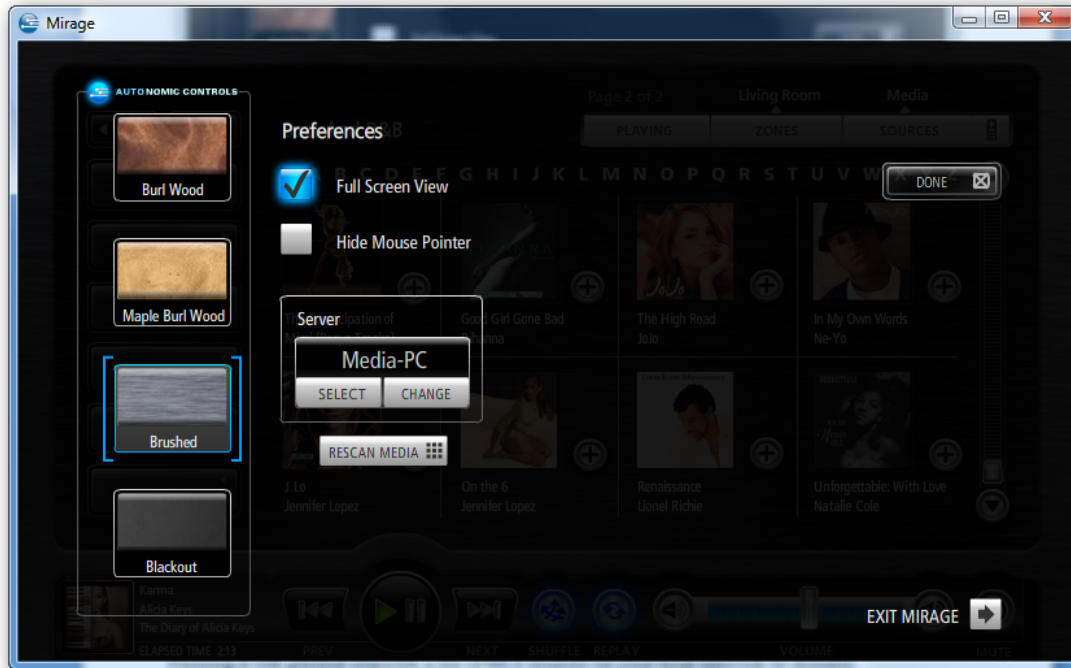
Skin Selection

Select your favorite skin from the ones provided.

Hiding the Mouse Pointer

If you are running Mirage on a touch panel display, you will get a better user experience by hiding the mouse pointer. Check this option box to hide the mouse pointer. This setting will be saved between Mirage sessions on the same computer.

Displaying Mirage in Full Screen Mode

Checking this option will cause Mirage to display in full screen mode, without a title bar or frame. This is useful when using Mirage on a dedicated touch panel display or UMPC. This setting will be saved between Mirage sessions on the same computer.

Server Connection

This section allows you to change the source that Mirage is controlling.

The **Select...** button will appear only when you are running Mirage as a local application (not in the browser), and when you already have a connection established with a Media Control Server. Pressing it will present you with a list of MCS sources on your local network or domain.

You can then connect and control a different source simply by selecting its name on the list.

The "**Change...**" button will always be available, and can be used to connect to MCS by IP address or name (even a machine running at a remote location). Clicking the button will present an input screen which you can use to specify the IP address or machine name of the server to which you would like to connect.

If you have changed the server's control port (see General MCS Settings on page 7), you can specify the port by typing the server IP address or name and then the port, separated by a single space. i.e. LivingRoom 50010 *or* 192.168.1.15 5010.

Exit

If you are running Mirage as a local client (not in a web browser), the Exit button will be available, and you can use it to close the Mirage application.

USING MIRAGE – OPERATION

Now Playing Screen

The now playing screen may be accessed by pressing the Playing button along the top of the screen, or by touching the Now Playing art icon on the lower left of most of Mirage's other screens. The Now Playing screen will also open after a few minutes o f inactivity.
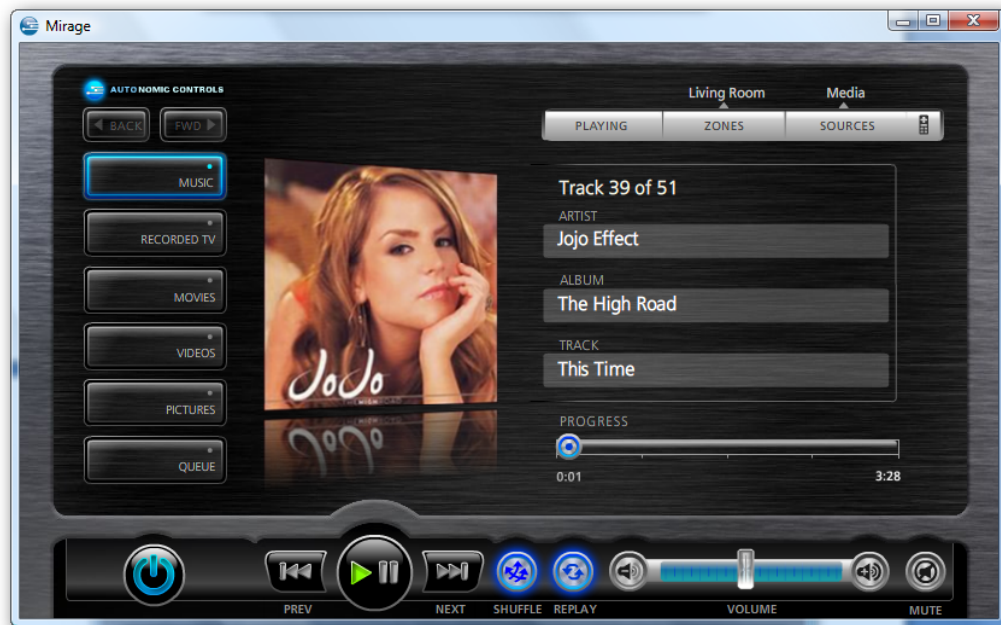
When in the Now Playing screen, a control strip with transport controls will open on the bottom of the screen. If a music album or movie is playing on the Now Playing screen, touching the cover art will open that items detail page.

Queue Screen

Touching or clicking on the Queue button will open the Queue Screen. This button is only available when playing back music. It will open a list of music which is queued up by the source.

Touching any of the items in the queue will cause playback to immediately jump to that item.

Touching the delete button will cause the selected item to be removed from the media queue. It does not delete the media from your computer.

Clear Queue – This button will clear the entire media queue.

Browsing Music

Pressing the Music button on the left side of Mirage will let you browse and queue up music on your Media server.

You can browse your music collection by Albums, Artists, Genres, or Playlists. Touching any of these items will open another screen arranged according to your selection.

Touching any of the album groups or covers will cause Mirage to drill down into your selection until you arrive at an album page.

You can use the alpha strip at the top of the page to quickly jump around your media library.

Pressing the add key at any level will cause the entire artist, album, genre, or playlist to be added to the current queue.

TIP: If you want to play the item immediately, press and _hold_ this button – Mirage will add the item to the queue and begin play back right away.

Recorded TV[9]

Mirage allows you to browse the television programs that are recorded and saved on your Media Center PC.

You can browse television programs by title, genre, ratings, date recorded, and stations.

Once the television program thumbnails are displayed, you can either press the video thumbnail to begin playback.

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[9] Requires Windows Media Center

Browsing Movies

Mirage allows you to browse DVDs located on a firewire DVD Changer, *(such as the [Sony VGP-XL1B](#) or the [Niveus Ice Vault)](#)* attached to your Media Center PC. It will also display movies stored using the popular My Movies 2.0 Media Center Add-In. If you've configured Media Center to manage DVD's on your hard drive, Mirage will allow you to browse these files as well (for more information, see **DVDs in Media Center**)

You can browse movies by Title, Genre, Rating, Year of Production, and People.

Clicking on a movie cover will open the movie details page with a listing of the movies chapters. Touching these list items will cause Media Center to immediately jump to that chapter.

Note: Chapters are not supported by My Movies 2.0

Pressing the **Synopsis** button will open the movie's synopsis information showing information like the actors, director, and a description of the movie.

You can go back to the chapters list by pressing the **Chapters** button.

Browsing Videos

You can use Mirage to browse and playback the videos on your Media Center PC.

Mirage will show folders and videos that are located in the directories you have instructed Media Center to search for these items. Clicking on a folder will open that folder and display it's contents.

Clicking on the video thumbnail will cause the video to begin playback.

Browsing Pictures

You can use Mirage to browse the photos on your Media Center PC and to begin picture slideshows on your main display.

Mirage will show folders and pictures that are located in the directories you have instructed Media Center to search for these items. Clicking on a folder will open that folder and display it's contents.

Pressing the play button at any level will begin a slideshow on your main display of all the pictures in the folder (including sub-folders, if Media Center is configured accordingly).

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.

Some of the remote control buttons do not function.

You may be running a Crestron X-Panel project or Mirage on the Media PC.

Certain one-way commands on the MCS controls (or home) page, as well as volume and mute feedback require that Windows Media Center (WMC) is the focused window.

Since WMC will not have focus while you are operating the X-Panel project or Mirage on the same PC, those commands will not work in this configuration. Most media browsing commands will work fine in this configuration however and so it is acceptable to test this way.

In actual practice, MCS client applications are intended to be operated from remote devices while WMC is running full screen. These commands will work properly when operating the interface from a remote device.