



Integration Note

Manufacturer:	Logitech
Model Number(s):	Media Server
Core Module Version:	g! 6.1
Comments:	Logitech Media Server 7.7.2 r33893
Document Revision Date:	01/14/2014

OVERVIEW AND SUPPORTED FEATURES

The Logitech Media Server (formerly known as SqueezeServer) is a software application that may run on a Windows, Mac or Linux PC and is used to stream digital music to one or more local network connected Squeezebox players. The Logitech Media Server allows streaming of both local content and streaming internet radio. Local content may be stored on the same PC that is running the Logitech Media Server or on any local network drives, and may stream multiple file formats (including non-DRM iTunes files) to attached players. Internet radio options are available from multiple streaming sources.

The Elan g! system is capable of communicating with the Logitech Media Server to control what is playing on each attached player over a standard network connection, providing full 2-way feedback and control.

Note: This document refers to using the Logitech Media Server installed on a PC or running on the Logitech Squeezebox Touch in a limited mode. If you are using a Fusion Ovation server, please see the Fusion Ovation Integration Note.

THE FOLLOWING PLAYBACK OPTIONS ARE SUPPORTED BY THE LOGITECH MEDIA SERVER:

- Play digital audio over the LAN through the Logitech Media Server to connected Logitech Squeezebox Touch Players with up to 2 Logitech Media Servers and 4 players.
- Logitech Media Server may run on a PC or on the Logitech Squeezebox Touch itself. Note that running Logitech Media Server on the Squeezebox Touch has limitations and is primarily meant for accessing a local USB/SD library and some internet radio without any other local music. See **Logitech Media Server (USB)** for details.
- Play and index digital music stored locally or on network storage.
- Browse local music library by Artist, Album, Genre, Tracks or Playlists.
- The Logitech Media Server supports .MP3, .FLAC, AAC, OGG and .WAV files.
- Stream Internet Radio through Mysqueezebox.com—See **Streaming Radio** section for details.
- Now Playing and Play Queue information including metadata and album art (as available) is presented in the g! Viewer. Note that availability and level of detail of metadata will vary when using Internet Radio.
- Volume control of attached Squeezebox Touch players outputs is available from g!.
- The g! system can control the Logitech Media Server from all thin client interfaces (PC, Elan Touchscreen, Android, iOS), TS2 and HR2. g!OSD navigation is not available.
- Playlists for local music may be created through the g! interface for Logitech Media Server using the Save to Playlist feature in the Play Queue.

Note: this feature is not available on TS2/HR2.

Logitech Media Server favorites may be added and accessed from the g! Viewer. Note that adding favorites is not available from all sections of the g! interface due to limitations in the LMS control protocol. Favorites added in the LMS Web interface will appear in the g! interface.

Note: favorites may not be added on the TS2/HR2 interfaces.

THE FOLLOWING PLAYBACK OPTIONS ARE NOT SUPPORTED BY THE LOGITECH MEDIA SERVER:

- Local and streaming audio provided through the Logitech Media Server is not available through the HC Controllers outputs (HCPlayer).
- Elan supports the control of Logitech Squeezebox Touch when connected as a player to the Logitech Media Server. Other versions of Squeezebox or alternative compatible player devices have not been tested and are not supported.
- Some available streaming services are not supported in the g! interface -- see **Streaming Radio** section for details. Note the list of available services may vary somewhat depending on your Configuration.
- The Logitech Media Server is controlled almost entirely through dynamic data and is not available for translation through the g! Internationalization feature.
- DRM Protected music formats are not supported by the Logitech Media Server.
- Sort and play by Composer, Conductor or Band/Orchestra is not supported. The "My Music" Settings include an option within LMS to place these fields in the Artist tab. If this is enabled odd results will appear in the My Music section. Elan recommends keeping all of these option disabled.
- The Logitech Media Server interface is not accessible on the g! OSD.
- Limited Shuffle and Repeat options. The g! interface only supports 2 modes of shuffle and does not offer repeat functionality.
- More than 2 servers and 4 players in an install is not supported.
- Streaming items within playlists: Adding streaming content (particularly stations) will produce unpredictable results and is not supported.
- Not all items may be saved as Favorites from the g! interface. Notable exclusions are within some streaming servers and with Tracks within Local Music (use Artist etc. instead).
- Laptop or NAS drive hosting Logitech Media Server. Logitech Media Server should be installed on a dedicated PC that is available 24 hours a day, 7 days a week. Check Logitech documentation for minimum PC requirements.
- Any special features or third-party plugins not specifically mentioned as supported in this document should be considered unsupported.

IMPORTANT! The ELAN driver is written to integrate the Logitech Media Server version indicated at the top of this document. Any future software changes by Logitech may impact integration. It is recommended to use only the version listed in this document for full compatibility.

Any feature not specifically noted as supported should be assumed to be unsupported.

INSTALLATION OVERVIEW – LOCAL PC

1. Download the Logitech Media Server software. It is available online free of charge: <http://www.mysqueezebox.com/download>
2. Install the Logitech Media Server software on the desired local computer according to Logitech instructions.
3. Configure the Logitech Media Server software including the mysqueezebox.com account (required for streaming services). See **LMS Configuration** for details.
4. Install the Squeezebox(s) at the desired location, and pull power and Cat5 as needed.
5. Connect the Squeezebox player(s) electrically to the home network and then configure the Squeezebox. See **Squeezebox Configuration**.
6. Test standalone function of device for playing local and streaming content as desired.
7. Integrate the Logitech Media Server into the **g!** system and test proper operation. This step is outlined in **g! Configuration Details**.

INSTALLATION OVERVIEW – USB

1. Install the Squeezebox(s) at the desired location, and pull power and Cat5 as needed.
2. Connect the Squeezebox player(s) electrically to the home network and then configure the Squeezebox. See **Squeezebox Configuration**.
3. Configure the Logitech Media Server software including the mysqueezebox.com account (required for streaming services). See **LMS Configuration** for details.
4. Attach the USB (or SD card) device to the Squeezebox Touch and complete the setup to run the LMS on the Squeezebox Touch.
5. Test standalone function of device for playing local and streaming content as desired.
6. Integrate the Logitech Media Server into the **g!** system and test proper operation. This step is outlined in **g! Configuration Details**.

ADDING AN AUDIO ZONE

Adding the LMS will create source(s) in the **g!** system, but it will not create an audio zone, which is an important distinction, because only audio zones appear in the Viewer interface.

To get an audio zone in the viewer interface, you must add an **Audio Zone Controller**.


For whole house audio systems, this will be a device like the ELAN S8.6, for example. Refer to the Integration Note for the zone controller you plan to use for more information.

To get a single listening zone, refer to the **Generic Single Zone Controller** Integration Note for more information.

LMS CONFIGURATION

Running Logitech Media Server on a Local PC:

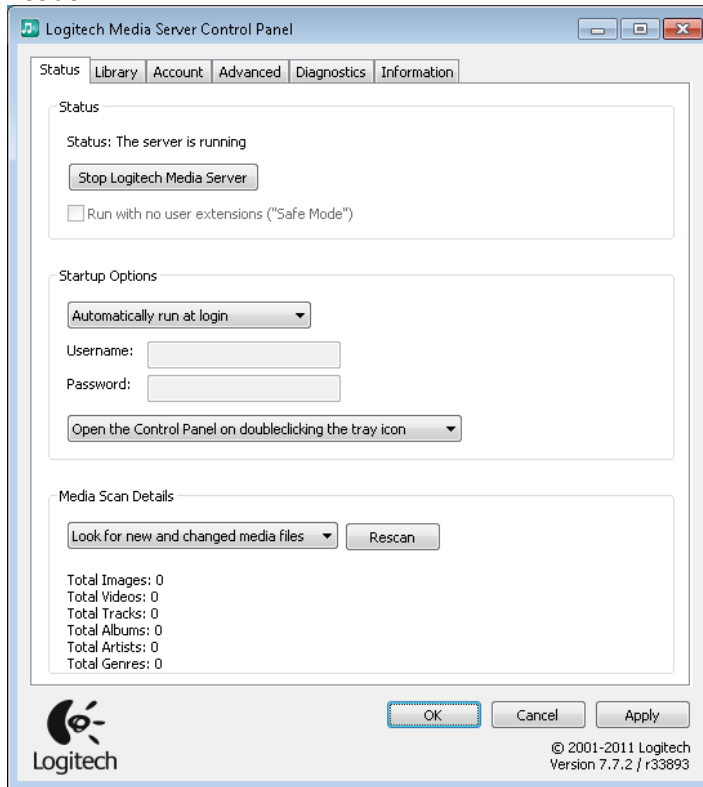
The desired setup type for a full featured install is to run Logitech Media Server on a local PC. This allows you to listen to all local music libraries including iTunes, as well as stream internet radio content from multiple attached players. This method is required for availability of all supported Streaming radio sources in **g!**.

1. Setup the PC that will run the LMS software. It is strongly recommended the PC meet the following criteria:
 - PC has adequate hardware to meet LMS software requirements and sufficient storage for all media that will be stored locally. Note a network connection is required and hardwired Ethernet is strongly recommended for speed and reliability.
 - PC will be available and powered on 24 hours a day, 7 days a week, 365 days a year. The PC should be always on for reliable access to media. It is recommended power saving features are disabled to ensure reliable access.
 - PC should be dedicated to running LMS and not be a general use computer.
 - Wired Ethernet is strongly recommended for speed and reliability.
 - A static IP is desired for reliable connections. Elan recommends setting the IP of the first server to 192.168.0.60, the second to 192.168.0.61, and so on.
2. Download the Logitech Media Server software. It is available online free of charge: <http://www.mysqueezebox.com/download>
3. Install the Logitech Media Server software on the desired local computer according to Logitech instructions.
4. Once the LMS software is running, find the icon in the system tray , right click it, and then choose "Open Control Panel".
5. Check basic settings are appropriate on the Status Tab:
 - The server is running
 - Startup Options are set to Automatically Run at login or Startup.

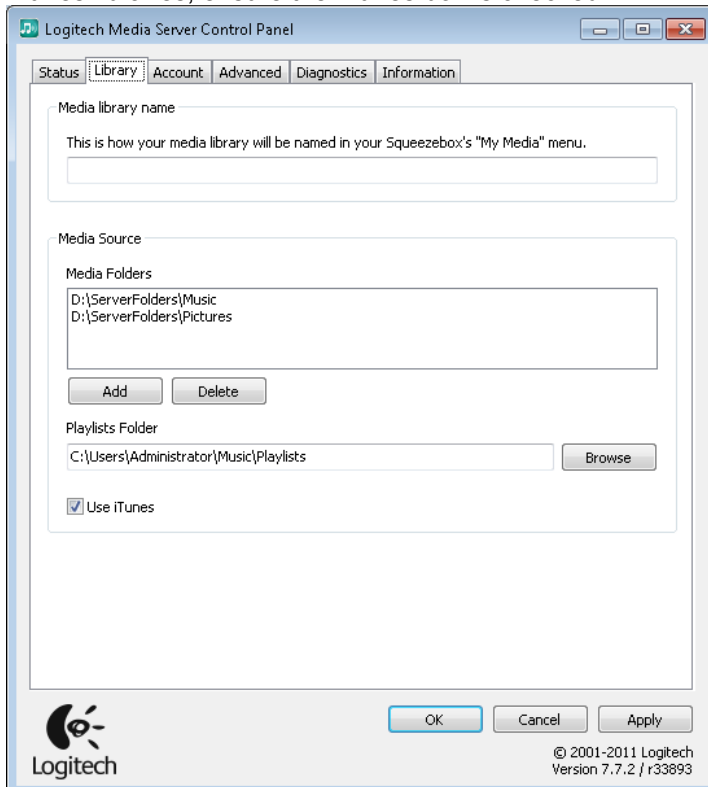
Note: Startup may be preferred as this will ensure the system logs in and starts running without user intervention. If this setting is used, you must provide a username and password for the computer.

 - Media Scan Details is recommended to use the default setting: Look for new and changed media files.

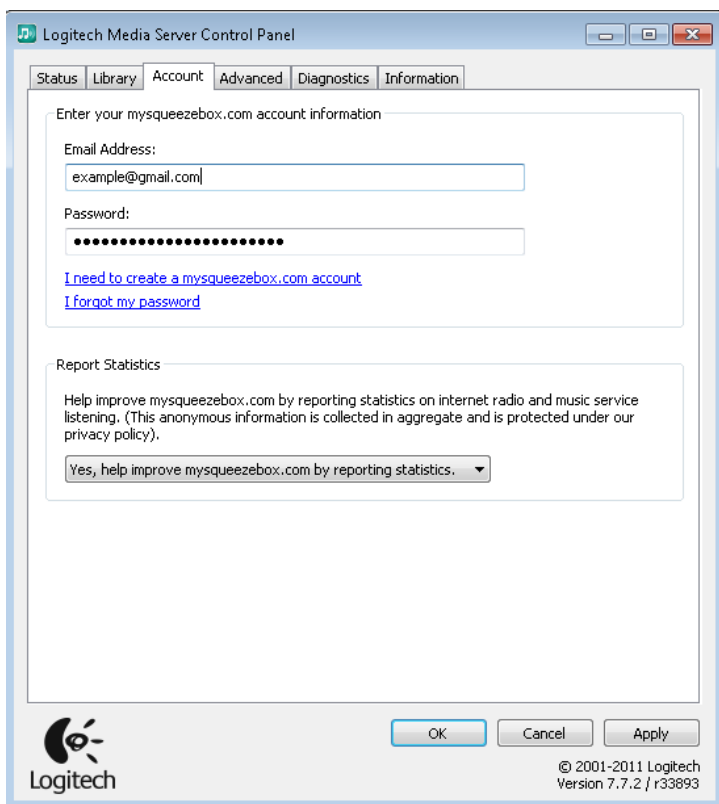
- Check the LMS Version in the bottom right corner matches the version in this document header.



6. Click the Library Tab to add your local music folders. Note you may add both local and network shares, but all network shares should be available 24 hours a day, 7 days a week for reliable access. Devices such as laptops that may leave the house are not recommended as media sources! If using iTunes libraries, ensure the iTunes box is checked.



7. Click the Account Tab and enter your mysqueezebox.com information. If you have not yet created a mysqueezebox.com account, create one and enter your login information in the server. See Streaming Radio Configuration for account creation details.



Running Logitech Media Server on the Squeezebox Touch (USB):

The Logitech Squeezebox Touch supports running the Media Server directly on the Squeezebox. This allows a standalone Squeezebox to access mysqueezebox.com streaming features as well as local media provided via USB or SD card. In this mode, only local USB/SD media and streaming content (such as Pandora) is available. Note that not all streaming services are available when using this method.

USB/SD Setup

1. Begin by plugging in the Squeezebox and performing basic configuration as described in the Squeezebox Configuration section through Step 8.
2. Once the Squeezebox has been updated and associated with your mysqueezebox.com account, you are ready to proceed.
3. Connect the desired local media device to the Squeezebox Touch. Typically this will be a USB stick or SD card.

Note: Only one method may be used at a time. The Squeezebox Touch will not use media from a SD card and USB stick at the same time. In addition, the USB slot does only supports storage devices and does not allow the connection of devices such as iPhones or MP3 Players. See the *Logitech Squeezebox Touch Features Guide* for full details.

4. Upon connection of the USB/SD device, the Squeezebox should automatically display messages about "Attaching Device" followed by "Starting Squeezebox Server". If the server does not start automatically, you may select the USB device from the Main Menu and choose to Start Server manually.
5. When the processes are complete, tap the left arrow button to return to the Home Menu.
6. Go to My Music > Switch Library and select the name of the Squeezebox Touch from available Library choices.

7. A message about “Connecting” will appear. Once this message has cleared, you may check My Music for the correct content population.
8. Once all steps are complete and the Squeezebox Touch is running the server and showing local music, you may proceed to configure the device in g!.

IMPORTANT! Always use the Eject function before removing any USB/SD device from the Squeezebox Touch to avoid data corruption.

STREAMING RADIO CONFIGURATION

To setup Streaming Internet Radio, you must first configure a Squeezebox account at <http://mysqueezebox.com> (formerly <http://squeezenetwork.com>) and associate the desired streaming radio service(s) with the account. Options available may or may not require accounts or paid subscriptions, and setup requires use of existing credentials or requires the creation of a new account. See Logitech for full details.

1. Open a browser, navigate to mysqueezebox.com and login to your account.
2. Add the desired App to mysqueezebox.com
 - a. Click App Gallery and select desired Streaming service App
 - b. Click install App
 - c. Enter account info if needed. Note this step may require you follow links present on the mysqueezebox.com App page to create free or paid accounts.
3. Ensure the account information has been entered in your Media Server settings or Squeezeplayer (USB) as appropriate.
4. Test Streaming Music service through the Squeeze player.

STREAMING RADIO AVAILABILITY

Refer to the below chart which details what Streaming Radio Services are supported and have been tested for integration with g!, and special notes on their features. It is important to additionally note that some services are not available depending on the type of server configuration you are using.

Service	Notes	PC LMS	USB LMS	Fusion Ovation LMS	g! support	g! Beta - Untested. Use at own risk	g! Unsupported - Do Not Use
LastFM	Paid account required. Custom Internet Radio.	x	x	x	x		
MOG	MOG "Primo" subscription required. Music on Demand and Custom Internet Radio.	x	x	x	x		
MP3Tunes	Free or Paid account. Music on Demand.	x	x		x		
Pandora	Paid account. Custom Internet Radio.	x	x	x	x		
Rhapsody	Paid account required. Music on Demand.	x	x		x		
SHOUTcast	Free. No account needed.	x		x	x		
SiriusXM Internet Radio	Paid account required.	x	x	x	x		
Slacker Radio	Free or Paid account. Note slacker will only play on one player at a time. Custom Internet Radio.	x	x	x	x		
Spotify	Paid "Premium" account required. Music on Demand.	x	x		x		
TuneIn Radio	Free account required. Note the built in "Internet Radio" option utilizes TuneIn and requires no account setup.	x		x	x		
Internet Radio	Built in service installed by default. Powered by TuneIn.	x	x	x	x		
Absolute Radio UK	Free Internet Radio.	x		x		x	
Accu Radio	Free Internet Radio.	x		x		x	
BBC	Free Internet Radio.	x		x		x	
CBC	Free Internet Radio.	x		x		x	
CBS Radio	Free Internet Radio.	x		x		x	
Classical.com	Paid account required. Music on Demand.	x	x	x		x	
Live Music Archive	Free Live Music recording library. Music on Demand.	x	x			x	
Live365	Free Internet Radio.	x	x	x		x	
Orange Liveradio	Free Internet Radio.	x	x	x		x	
RadioFeeds UK & Ireland	Free Internet Radio.					x	
radioio	Free Internet Radio.	x				x	
Radionomy	Free Internet Radio.	x		x		x	
SKY.FM	Free Internet Radio.	x		x		x	
SomaFM	Free Internet Radio.	x				x	
Amazon CD Store	Music Storefront.						x
Digitally Imported	Free Internet Radio.						x
Facebook	Free Social Network.						x
Flickr	Free picture site.						x
Podcasts	Podcast player.						x
Sounds & Effects	Free looping sounds and effects.						x
Napster	Now part of Rhapsody.						x

The following issues have been observed when integrating Mysqueezebox.com Streaming Services:

- Rhapsody: Options for Instant Playlist appear and are non-functional. The issue is present in standalone Squeezebox as well and is not a g! issue. No bad behavior has been observed but these options are not functional.
- Rhapsody: When browsing music that is already in your library, the option exists to add the music to your library. This does not cause any bad behavior and the behavior is consistent in both g! and the Squeezebox.
- Some services such as MOG and Rhapsody allow you to drill down to the track level. At the track level there are options to look at the tracks "On Pandora/Rhapsody/LastFM (etc.)" or "Look up on Amazon", or "Share on Facebook (etc.)". None of these options are supported and their use is not recommended.
- Slacker Favorites must be configured externally before any content will appear in this area in g!.
- Slacker Radio was only functional on one-player at a time in testing. Additional attempts to stream will display a message indicating the Slacker account is already active on another player.

- Some services provide links to descriptions that are not optimized for viewing within the g! Viewer. Examining descriptions, reviews or similar items is not recommended.
- MP3Tunes SmartPlay mixes were not functional in testing.
- Note that with all streaming services, there are variations on what sort of meta-data, play queue and album art is provided. It should be expected that what info is available will vary based on both the service and the type of stream you are listening to.
- Note that all streaming services will provide the g! Viewer with meta-data and artwork with a slight delay. This is normal behavior.

SQUEEZEBOX CONFIGURATION

IMPORTANT NOTES:

The Squeezebox Touch is configured using its display based menu system.

ELAN strongly recommends using the hard-wired Ethernet connection to the Squeezebox instead of a wireless connection.

Only configure one Squeezebox at a time. If you have multiple Squeezebox's in an installation, disconnect power to all but one, then configure that one. Once configuration of the first is complete, power up the second, complete the second, and so forth.

INITIAL SETUP

Note: This process assumes you have a brand new Squeezebox Touch. If your unit is not brand new or has been previously installed, some of the steps below will not be necessary.

1. Plug in the power cable: The device will boot, and you will be prompted for your language selection.
2. You will then be prompted to set up your network. Select "Continue".
3. Select the appropriate Region from the list.
4. At the prompt, select whether the unit will use Ethernet or a Wireless connection to the network (Ethernet is strongly recommended). The Squeezebox will then connect to your network.
5. After the unit connects, you will be asked to register. Log in to the mysqueezebox.com account used with Logitech Media Server to proceed.
6. The unit will proceed to connect to mysqueezebox.com and prompt for approval to update software. Allow the update to proceed to obtain the latest available firmware. Depending on the Internet connection, it should take between 5 to 10 minutes to download the update, then an additional minute or two to update the firmware on the unit. The unit will reboot.
7. When the Squeezebox restarts, you will be presented with the main menu.
8. From the main menu, select Settings->Home Menu, and enable the Switch Library option.
9. If using USB mode, return to the **LMS Configuration (USB)** section. If using a local PC running Logitech Media Server, continue to step 10.
10. From the Main Menu, choose Music Library and scroll down to Switch Library.
11. Select the Logitech Media Server as the Library. Note that the name typically matches the network name of the PC the LMS software is installed on.

g! CONFIGURATION DETAILS

The following table provides settings used in the HomeLogic Configurator when connecting to a Squeezebox. Please refer to the Configurator Reference Guide for more details.

In the table below:

- “<User Defined>”, etc. Type in the desired name for the item.
- “<Auto Detect>”, etc. The system will auto detect this variable.

Devices	Variable Name	Setting	Comments
Communication Devices	Name	<User Defined> (Default: New Device)	
	Type	Ethernet	
	Communication Type	Logitech Media Server	
	Location	<User Defined> (Not Required)	
	Settings	<Select>	See Note 1
	IP Address/Comm Port	<User Defined>	See Note 1
Media Players	Name	<User Defined> (Default: <i>Player Name</i>)	Auto-detected when linked to LMS.
<Audio Zone Controllers>	Add an Audio Zone Controller: refer to the Integration Note for your particular zone controller. (See Note 2)		
Viewer: Media Player : My Services	Manage Services	<Select>	Click on the box to select each service you wish to appear in g! for each player
Notes:			
1. Wait ~5 seconds after adding the Communication Device for auto detection. Use Settings to alter the detected server if more than 1 are present on network.			
2. You must add an Audio Zone Controller to get a tab in the Viewer interface.			
For standard whole-house audio zone controllers, refer to the Integration Note for the particular system.			
For a single zone where the Squeezebox is connected to a basic amp, refer to the Single Zone Audio Integration Note.			

COMMON MISTAKES

1. Not completing proper programming of the Squeezebox. The Squeezebox should be configured according to the instructions above.
2. Not adding an Audio Zone Controller to the system. Audio Zones appear in the Viewer interface: until you add an Audio Zone, you will not see the Squeezebox in the Viewer interface. Use the Single Zone Audio for a stand-alone audio zone where the Squeezebox is driving speakers with a stand-alone amplifier.
3. Not adding Streaming Services properly. To use streaming radio, you must have the following:
 - Mysqueezebox.com account configured.
 - Apps installed on mysqueezebox.com (App Gallery/My Apps) for all desired services.
 - All necessary login information for streaming accounts setup in mysqueezebox.com
 - Mysqueezebox.com account associated with LMS.
 - Mysqueezebox.com account associated with Players.
 - Latest firmware on all Players.
 - Services added within My Services>Manage Services in the g! Viewer.
4. Adding MP3 players. A new "Media Player" device will auto-populate once you have correctly added the Logitech Media Server Communication Device and it has connected to the server.