Integration Note

Manufacturer: Fusion Research

Model Number(s): Ovation Series
OMS0, OMS1, OMS2, OMS3

Core Module Version: g! 6.0 and above

Comments: Ovation Software 2.1; Fusion Version 13.8.20.0

Document Revision Date: 12/3/2013

Note: This document refers to using the Fusion Ovation server. If you are using a Logitech Media Server with attached Squeezebox Players, please see the Logitech Media Server Integration Note.

OVERVIEW AND SUPPORTED FEATURES

The Fusion Ovation is a combined server and player product that is compatible with the Logitech Media Server/Squeezebox API. The Ovation Server allows streaming of both local content and streaming internet radio. Local content may be stored on the Ovation (depending on model) and may play multiple file formats from included audio outputs. Internet radio options are available from multiple streaming sources.

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

Bear in mind that Elan’s driver is written to compatible with the Logitech Media Server open source API, and the Ovation is developed to be compatible with this same standard, but it is not a Logitech product.

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

- Control of the Logitech Media Server (Squeezenet) compatible server and players integrated in the Fusion Research Ovation product through the standard Logitech Media Server driver.
- Play digital audio from local or streaming internet sources through the Ovation Server and its internal audio outputs. Note that each audio output will appear as its own Player (aka Squeezebox).
- Play and index digital music stored locally or on a network drive, also including iTunes libraries.
- Browse local music library by Artist, Album, Genre, Tracks or Playlists.
- 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.
- The g! driver supports a maximum of 2 Logitech Media Servers and 4 players. The Fusion Research Ovation product is one server with 1-4 players, depending on model.
- The g! system can control the Logitech Media Server from all thin client interfaces (PC, Elan Touchscreen, Android, iOS), TS2 and HR2. g!

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).
• Some available streaming services are not supported in the g! interface -- see **Streaming Radio** section for details. Note the list of available services for the Ovation server is different from the standard supported LMS list.

• Volume control of attached Squeezenet players (Ovation outputs) is not available from g!, and all units should be connected to a g! controllable media zone if you wish to control volume from the g! system.

• 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. Note: these options appear in standard LMS but were not present in the prototype Ovation unit.

• More than 2 servers and 4 players in an install is not supported.

• The Ovation product supports some features beyond what is normally available within LMS, such as FLAC/MP3 mirroring and potentially auto-syncing files from other sources. These features have not been evaluated by Elan, and Elan makes no claims over their support or is not responsible for any odd behavior caused by their use.

• The Ovation product makes no mention of connecting Logitech Squeezebox devices to it as additional players, and such integration is untested and unsupported by Elan.

• Any special features or third-party plugins not specifically mentioned as supported in this document should be considered unsupported.

**Important! The ELAN driver was tested to integrate the version indicated at the top of this document. Any future software changes by Fusion Research may impact integration. Use of other versions may negatively impact integration.**

Any feature not specifically noted as supported should be assumed to be unsupported.
**INSTALLATION OVERVIEW – LOCAL PC**

1. Install the Fusion Research Ovation product at the head end, and pull power, network and audio cabling as appropriate.

2. Configure the Ovation product basic settings through the installer interface. See Ovation Setup for details.

3. Configure the Logitech Media Server software including the mysqueezebox.com account (required for streaming services). See LMS Configuration for details.

4. Test standalone function of device for playing local and streaming content as desired.

5. 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.
OVATION SETUP

The following section details basic Ovation configuration as a standalone product. These steps are required prior to integrating the Ovation with the g! system.

**Note:** these steps assume a factory fresh unit and were developed using a prototype. Some differences may exist if your unit has been previously configured or if your unit is a final shipping product or has newer software than the prototype Elan used for development.

1. Install the Ovation product electrically per Fusion Research documentation. The unit should have power, network and audio cables wired appropriately prior to powering it on.
2. The Ovation product is headless and all configuration is done through a local computer with a web browser. To complete configuration, connect a computer to the same LAN as the Ovation.
3. Open a Web Browser (such as FireFox or IE) and type in [http://fusionmusic:4742](http://fusionmusic:4742) to connect to the Ovation System Configurator page. If this does not work, enter your Fusions IP address and port number, for example 192.168.1.60:4742. This IP address can be found in your router.
4. From the Home Page, check the Software Version listed. Note Elan tested the version at the top of this document and if your version is newer, some differences may exist.
5. Click the Network tile at the top of the screen to enter Network Configuration.
6. Set the Network Configuration for the unit to a static IP compatible with your network. Elan recommends setting the IP of the first server to 192.168.0.60, the second to 192.168.0.61, and so on. See the screenshot for typical settings below. Note multiple DNS servers are optional.
7.

8. Click Apply & Reboot when done, and wait for the server to reboot.
9. Re-connect to the server at [http://fusionmusic:4742](http://fusionmusic:4742) once it has completed rebooting, and select the System tile. Correct the time zone for your area and click Submit when finished.

10. Click the Player(s) tile to enter the Configure Player section.
11. Name the Players as desired and un-check the “Soft Vol” option if it is not already done. Note that this will set the Audio Output to Fixed. The glSystem does not support controlling the volume on the outputs when they are set to variable. Click Submit when finished.
LMS CONFIGURATION

STREAMING RADIO CONFIGURATION

To setup Streaming Internet Radio, you must first configure a Squeezebox account at
http://mysqueezebox.com (formerly http://squeezenet.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. Enter the mysqueezebox.com account info on the Ovation’s LMS server page:
   a. Enter the Fusion Research LMS page by opening a web browser page to
      http://fusionmusic:9000
   b. The standard LMS Player control page is displayed. To enter Settings, find the Settings
      option in the lower right corner of the page and click it. A new window opens
      automatically.
   c. Click the mysqueezebox.com tab.
   d. Enter the desired mysqueezebox.com account info and click Apply.
4. Test Streaming Music service through the Players. This may be easily done by returning to the
   LMS Player webpage as depicted in step 3a.
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.

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

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!.**
- **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.
**g! CONFIGURATION DETAILS**

The following table provides settings used in the g! 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.

<table>
<thead>
<tr>
<th>Devices</th>
<th>Variable Name</th>
<th>Setting</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Devices</td>
<td>Name</td>
<td><code>&lt;User Defined&gt;</code> (Default: New Device)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Type</td>
<td>Ethernet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication Type</td>
<td>Logitech Media Server</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Location</td>
<td><code>&lt;User Defined&gt;</code> (Not Required)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Settings</td>
<td><code>&lt;Select&gt;</code></td>
<td>See Note 1</td>
</tr>
<tr>
<td></td>
<td>IP Address/Comm Port</td>
<td><code>&lt;User Defined&gt;</code></td>
<td>See Note 1</td>
</tr>
<tr>
<td>Media Players</td>
<td>Name</td>
<td><code>&lt;User Defined&gt;</code> (Default: Player Name)</td>
<td>Auto-detected when linked to LMS.</td>
</tr>
<tr>
<td>&lt;Audio Zone Controllers&gt;</td>
<td>Add an Audio Zone Controller: refer to the Integration Note for your particular zone controller. (See Note 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Viewer: Media Player : My Services</td>
<td>Manage Services</td>
<td><code>&lt;Select&gt;</code></td>
<td>Click on the box to select each service you wish to appear in g! for each player</td>
</tr>
</tbody>
</table>

**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.
3. For standard whole-house audio zone controllers, refer to the Integration Note for the particular system.
4. 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.
   - 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.