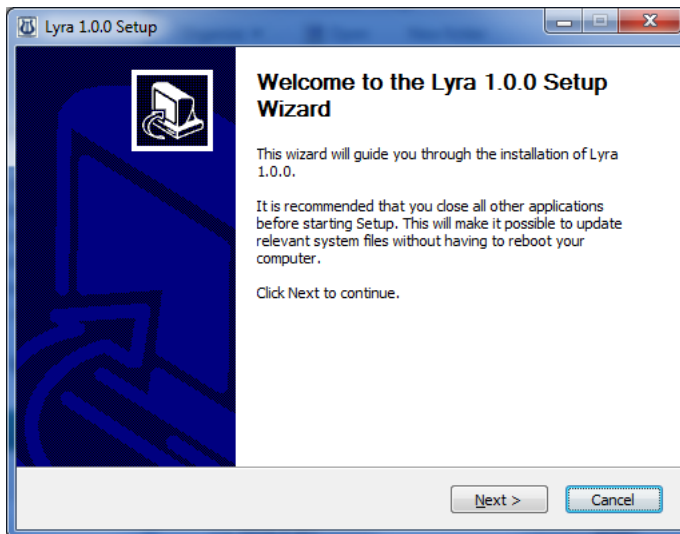# Lyra

## General Help

## Table of Contents

## Program Installation

**Lyra** is only restricted to platforms that support the **Java Resource Engine (JRE) 1.6** an above.   This application comes in two flavours which is either a self-contained **Microsoft Windows** Installer or an independent archive that can be adapted for any other platform.  Both of these items will be outlined below:

### Microsoft Windows Installer

For those making use of a **Microsoft Windows** based operating system such as **Windows XP** or **Windows 7** and have the **Java Resource Engine (JRE) 1.6** or higher installed, an installer can be used to deploy **Lyra** to all users on a workstation. If you do not have the **JRE** installed or have an older variant you can download the latest version from http://www.java.com.

Download the **Lyra-Setup-Current.exe** file from http://www.ethereal-realms.org/lyra.  When complete, you may begin the installation of the application using a user with administrative privileges.  Next, double-click on the application to begin the installation.  You will be presented after initial checksums with the following screen:

Click on the **Next** button to continue.  You can **Cancel** at any time to terminate the installation.
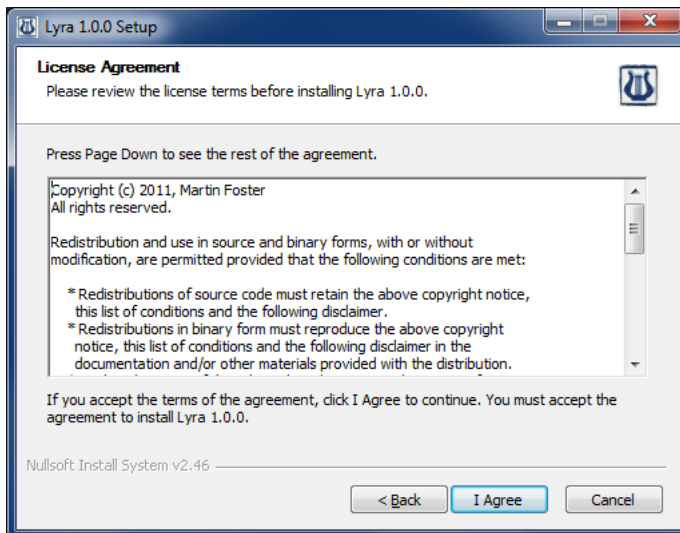
The license agreement is the **Berkeley Software Distribution (BSD)** license attached with **Lyra**.  If so wished, read the license agreement and click on the **I Agree** button to continue.
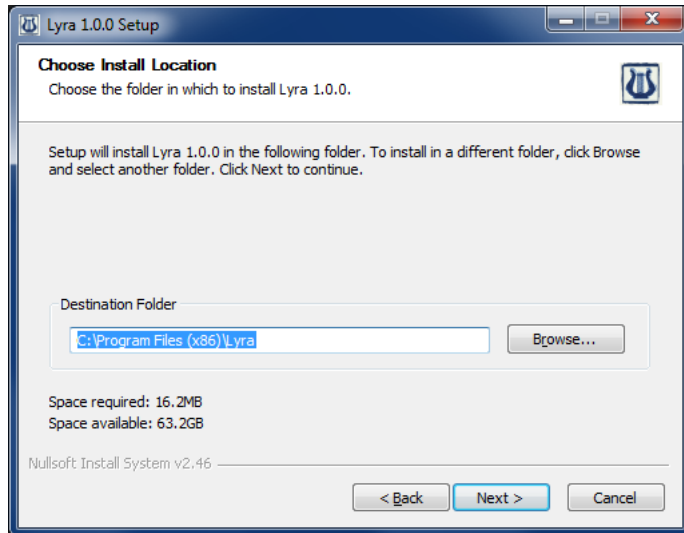
Here you have the option of changing the location on the system where **Lyra** will be installed to. Either change the location or keep the default in place, after which click on the **Next** button.
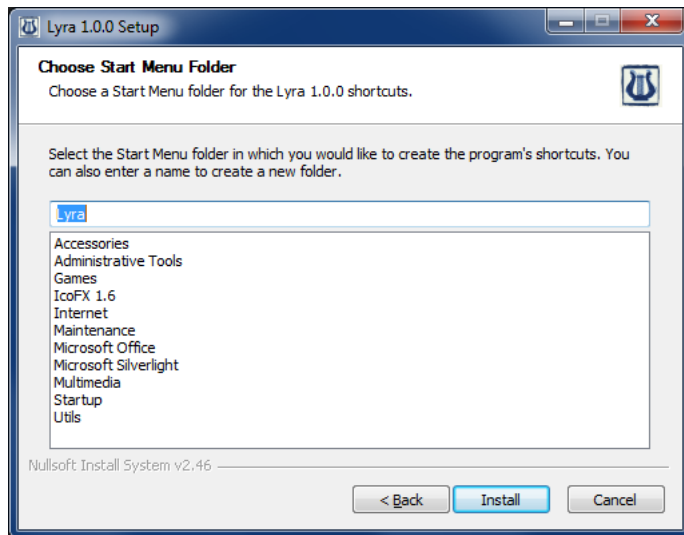


Now you are given the opportunity to change the **Start Menu** location which will contain the **Lyra** shortcuts. Use the default, specify a new folder or select an existing one prior to clicking on the **Install** button in order to continue.
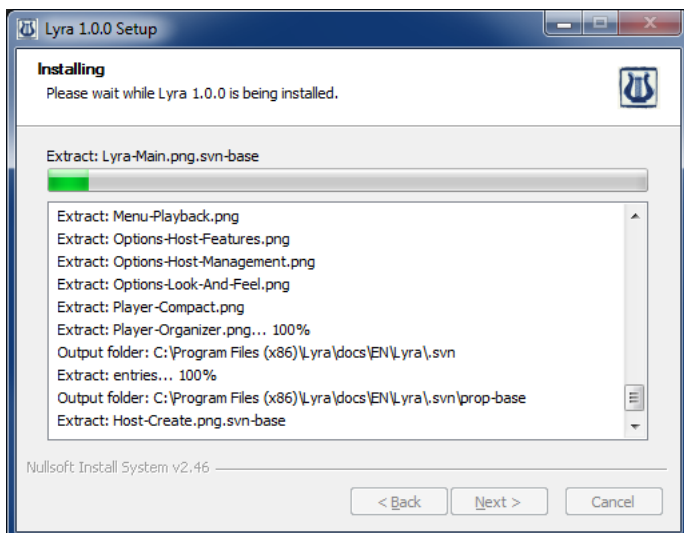


A progress meter will appear and a list all of the operations necessary to install **Lyra**. Once the file operations have been completed you will be able to click on the **Next** button to finalize the installer.
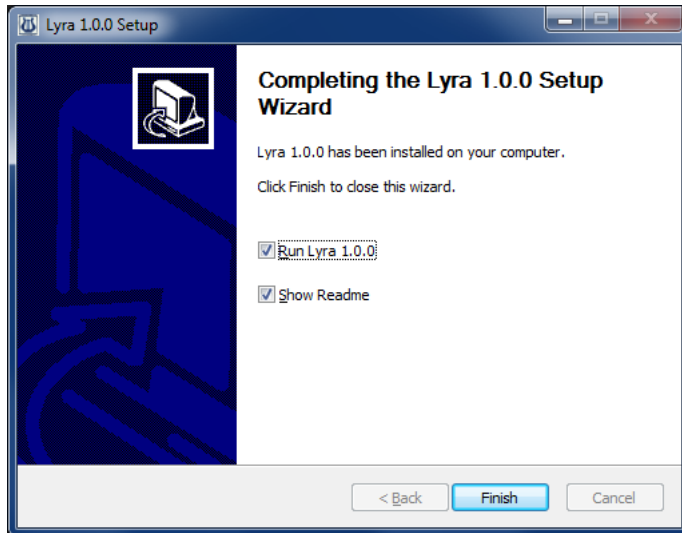
At this point you have the option of launching **Lyra** and the associated **Readme** (this document). Select as desired and click on the **Finish** button in order to exit the newly completed installation.

## Alternate Platforms

Detailed instructions for alternate platforms are not available as they are for the **Windows Platform** due to the lack of tailored installers for those platforms. However as is the case with **Microsoft Windows** it is necessary to have the **Java Resource Engine (JRE) 1.6** or higher for use with **Lyra**. If you do not have the appropriate version you can download and install the newest version from http://www.java.com.

Download the **Lyra-Setup-Current.zip** archive from http://www.ethereal-realms.org/lyra. After the download has been completed, extract the files to the desired location. All of the necessary components and required sub-directories will be located within the archive. In order to execute the application you can either execute the **Java Virtual Machine** directly or in some operations systems such as **Microsoft Windows** or **MacOS X** you can double-click on the **lyra.jar** file located within your chosen path.

For those calling the **Java Virtual Machine** directly you can use a command similar to the following:

```
> java -jar lyra.jar
```

The above will work for most operating systems, assuming that the search paths are valid for **Java**. This command can also be placed into shortcuts in order to access the application from most **Graphical User Interfaces (GUI)**. It is important to note that the **lyra.jar** file should not be moved away from the supporting directory structure as doing so can result in a loss of icons, language files and source databases required for new users.

## Program Usage

**Lyra** has very few windows and dialogs due to the design and the nature of the application itself.  The primary interface for this application is a **Player/Organiser** model, this should permit:

- The rapid addition of songs into the queue;
- Management of playlists;
- Control of host options; and
- Display of the current playback status.

A sample display of a **Player/Organiser** with all elements displayed can be seen as follows:
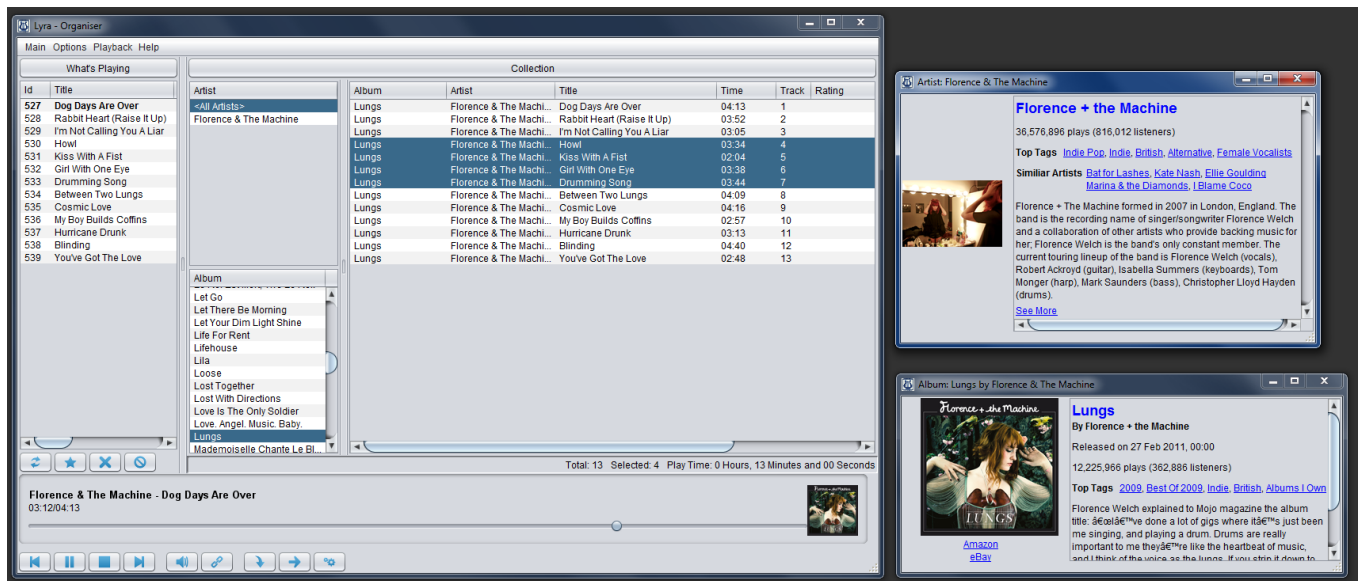


This window is separated into major areas as follows:

- Playlist Group
    - Playlists
    - 'What's Playing' Current Playlist
- Collection Group
    - Filter Group
        - Artist Listing
        - Album Listing
        - Genre Listing
    - Song Display
- Player Component
- Menu Component

## Playlist Group

The playlist group allows users to manage the **What's Playing** current playlist and manage the stored playlists within the application.

|  |  |
|---|---|
| **What's Playing** | Part of the **Music Player Daemon** protocol and represents songs that are queued for playing.  Songs or playlists that have been added will appear in this area and be played by the host according to current playback settings. |

⮂          This will shuffle the playlist.

★          This will save the playlist, by first prompting the user for the information shown below.  Please note that **Last.fm** option to **Save copy on Last.fm** is not always visible based on your integration with the service.
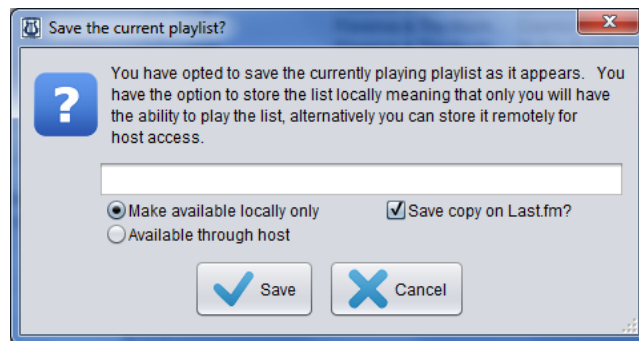


✖          This will remove selected songs from the playlist.

🚫          This will clear our all items from the playlist.

| | |
|---|---|
| **Playlists** | Playlists are displayed in a tree list which permits the user to access **Local**, **Remote** and **Smart Playlists**.   In the case of the first two types, the contents of those lists will be appended to the **What's Playing** current playlist.

Local Playlists contain a song listing within the application only, which restricts it use to the local user only.

**Remote Playlists** contain a song listing and is stored on the host and can be accessed and modified by anyone depending on the privileges assigned by the host.

**Smart Playlists** are generated by the application and are unique for every user. This is based on the music library information, user habits and the rating of songs. |

✖   This will remove the selected playlist from the host or **Lyra** itself as necessary.  This operation will have no effect on the **Smart** playlists since they are generated automatically.

## Collection Group

The collection group contains a complete listing of all library information.  This information can be used to add songs onto the queue for play.  This group is separated into two core sections.

| | |
|---|---|
| **Filter Group** | The filter group displays summaries of the songs based on the following elements, **Artists**, **Albums** and **Genres**.  When a user selects an elements from these summaries, the song listing will be trimmed down to reflect the selection.

When a user double-clicks on the one of the selections, the filter will be used to insert those elements into the queue.  This permits a user to add in an entire album, artist, genre or even a combination of the three.

When a user types in an alphanumeric [*A-Z0-9*] key while focused on a selection **Lyra** will attempt to make a match.  The first keystroke will match the first character of the elements in that selection while the second will work on the combination of the first two and so forth.  If the combination returns no results, or a user has pressed on the **Escape Key** the search criteria will be reset. |

**Song Display**    Contains a listing of all songs in the library by default or will produce a truncated list when selections are made in the **Filter Group**.   Double-clicking on a single song or a selection will cause the song(s) to be added to the queue.

The **Song Display** provides the ability for the user to rate the songs within their library.  Highly rated songs will appear in the **Smart Playlists** for selection and can as a result provide a quick way to play your favourite songs.  To rate a song, click on the rating column and select the desired rating by clicking on the star level, a sample editor can be seen below:

The stars fill out as you move your cursor over the symbols.  In order to have a rating of zero (0) stars click on the open circle at the beginning or click on the second star as shown above to rate the song as a two (2) star song.

**Note:**  Song ratings are unique to your installation and will not be carried between computers.   These are not part of the **Music Player Daemon (MPD)** protocol.

## Player Component

The player component has two major sections which is the display area containing playback information and a series of buttons/toggles that control playback operations.  To control playback operations the following features exist:

Changes playback to the song previous to the currently playing song based on the **What's Playing** list.  If there are no songs previous to this one this action will be ignored.

The play/pause combination changes based on current playback.  When music is not currently playing, this button will start playback at the first song in the **What's Playing** list.  Alternatively this action it will **Pause** playback.

Will **Stop** the playback of the currently playing song and if the user subsequently presses on the **Play** button playback will resume at the same point.

Will shift the playback to the next song based on the current song.  If there are no songs queued for playback next this action will be ignored.

When clicked, these buttons will permit the user to change the volume level at the host.  Based on host settings changes may take several seconds to take effect due to buffering.

When clicked, the user can select a change in the cross-over between songs.  An increase in selected number of seconds will cause more overlap between the songs, while a drop in the number will result in the opposite.

|  |  |
|---|---|
| ↘/↻ | When toggled the user will switch between straight through playback of the **What's Playing** list or instead will randomly play the list. |
| →/↻ | When toggled will trigger a change in the way a host handles reaching the end of the **What's Playing** list.  By default the host will stop playback, however when toggled playback will be looped. |
| ⚙/⚙ | Permits the users to play a singular song only or play in order all of the song in the **What's Playing** list.  When this is combined with the **Loop** button and single play the user can opt to loop over one song only. |

## Album Art Display

Album art is a component of the **Last.fm** integration and is used to display album art covers when playing songs.  When songs change, the album art will be fetched from the service, cached and displayed.
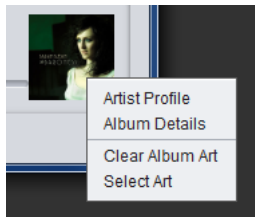


The primary interface as it appears above is composed of an image that will normally be of the album cover art matching the artist and album combination.  In cases where the album cannot be located, **Lyra** will attempt fetch an image of the artist(s) themselves.

When a user clicks on the extracted image, a popup menu will appear granting the user the following options:

**Artist Profile**      The artist profile provides information that has been compiled from the **Last.fm** service.  Information can vary in scope, but provide some basic information such as the name, number of plays, similar artists, popular sorting tags and a biographical entry on the artist.

**Album Details**

Provides a similar interface to the artist profile with the exception that the information contained therein is restricted to the specific album.  Information available is the date of release, buy links, play counts, top tags and a blurb on the release.



**Clear Album Art**

Provides the ability for a user to remove the album art and replace it with a blanked template.  The reason we revert to a template is primarily to prevent **Lyra** from requesting the information every time the song is played prompting the re-creation of the album art.

**Select Art**

Enables a user to select an album art cover that they may have gotten from alternate sources.  For example, the user may have album art extracted from **Windows Media Player** and simply needs to select the files in order to introduce them into **Lyra**.

## Menu Component

The menu bar provides quick key controls, unique and sometimes even duplicate features where necessary.  There are four components to the menu.

### Main Menu

The main menu contains various elements that do not commonly fit in the other menus available for the application.
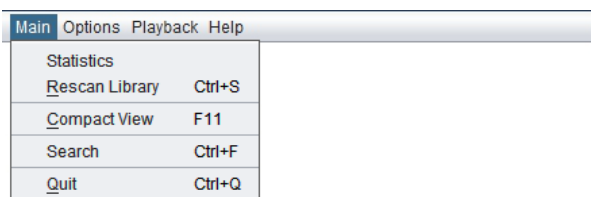


**Statistics**

Opens up a dialog providing statistics from the host itself as well as a list of allowed and disabled commands for use.  This can be a useful debugging tool when trying to determine which features may not be supported.

**Rescan Library [*CTRL-S*]**

Prompts the host to rescan the database looking for new or removed songs.  If there are changes, **Lyra** will then begin a process of synchronizing the song library with the host.

**Compact View [*F11*]**  Provides the user with a smaller, compact player only which permits basic playback controls and information display as shown below:
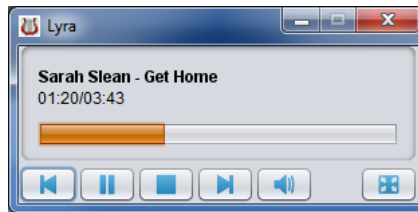


**Search [*CTRL-F*]**  Provides the user with a tool bar providing the ability to perform a keyword based search through the song database using various fields displayed in **Lyra**.  The basic functionality is based on the standard **Structured Query Language** (**SQL**) commands that are inherent to the database engine we are using.  In order to expand the functionality of search function we can make use of the following characters:

**%**    Matches all zero or more characters prior to the keyword; and

**_**    Matches any one character at that point.

For example, searching for '*Tiesto*' may not yield results due to the special character that is found in library entries.  We can search for '*Ti_sto*' which will match any entry with or without the special character located anywhere within the field.  Additionally, searching for the '*%Ti_sto*' pattern matches entries that end in our search term and thus displays results such as '*Tiësto*' and '*DJ Tiësto*' to appear.
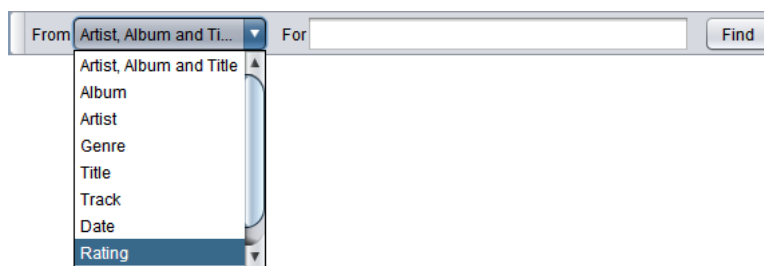


The search tool bar allows us to select fields with which we want to search through.  By default the **Artist, Album and Title** selection is made by default enabling a user to search through all three fields simultaneously.  If the user selects a search based on **rating**, the tool bar will be changed as shown below:



Since ratings are based on stars, we can search using a consistent interface resulting in a more intuitive interface.
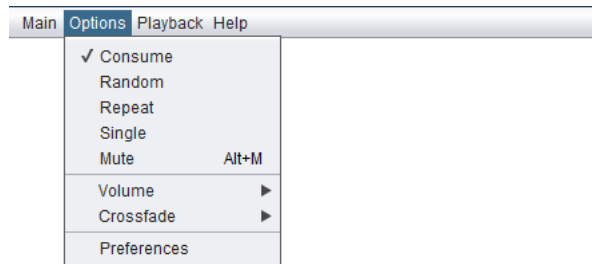
| | |
|---|---|
| **Quit [*CTRL-Q*]** | Exits the application after disconnecting from the host, database and saving state information for next use. |

## Options Menu

The following options can either be enabled or disabled as shown in the example above with a checkbox.  When enabled the option will become active and affect playback operations.



| | |
|---|---|
| **Consume** | This option will cause a song that has been played through or skipped to be removed from the **What's Playing** list. |
| **Random** | Will trigger the random play of elements within the **What's Playing** list.  This differs from **Shuffle** as in this operation will take place between every song play, instead of just once as is the case with **Shuffle**. |
| **Repeat** | Repeats the playback of songs in the **What's Playing** list.  When this option is used in conjunction with **Single** the playback will repeat a singular song. |
| **Single** | Instead of playing the entire **What's Playing** list, this mode will play only a singular song.  When this option is used in conjunction with **Repeat** the playback will repeat a singular song. |
| **Mute [*Alt-M*]** | Mutes the volume of the host, when toggled this will revert back to the last known value. |
| **Volume** | When clicked, a window will appear that permits the user to change the volume level at the host.   Based on selected features on the host this may take place several seconds after the user has actually made the change. |
| **Crossfade** | When clicked, the user can affect change in the cross-over between songs.  An increase in selected number of seconds will cause more overlap between the songs, while a drop in the number will result in the opposite. |
| **Preferences** | Opens up a new dialog which allows for program configuration and options.  Please refer to the section entitled **Program Configuration and Options** for more details. |

## Playback Menu

This menu provides duplicate functions available through the Player and **What's Playing** components and exists primarily for keyboard shortcuts.
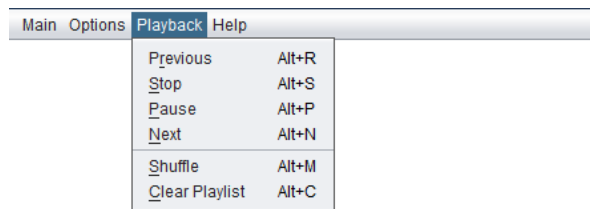
**Previous [*ALT-R*]**     Changes playback to the song previous to the currently playing song based on the **What's Playing** list.  If there are no songs previous to this one then this action will be ignored.

**Pause/Play [*ALT-P*]**     The **Pause/Play** combination changes based on current playback.  When music is not currently playing this button will start playback at the first song in the **What's Playing** list, alternatively it will **Pause** playback.

**Stop [*ALT-S*]**     Will stop the playback of the currently playing song and if the user subsequently presses on the **Play** button playback will resume at the start of the same song.

**Next [*ALT-N*]**     Will shift the playback to the next song based on the current song in the **What's Playing**.   If there are no songs queued for playback next this action will be ignored.

**Shuffle [*ALT-F*]**     This will shuffle the **What's Playing** playlist.

**Clear Playlist [*ALT-C*]**     Will clear out all items from the **What's Playing** playlist.

### Help Menu

This menu displays various help documents built-in with the application itself.   All of these documents are in fact **Portable Document Format (PDF)** formatted documents and can be viewed directly if so desired.
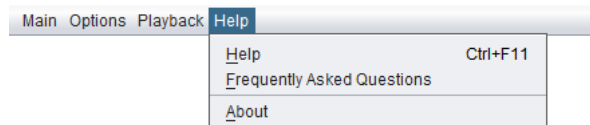


**Help**     Displays this document.

**Frequently Asked Questions**     Displays a series of **Frequently Asked Questions** on topics that normally fall outside the purview of this document.

**About**     Displays licensing and information about the application.

## Compact Player Mode

The **Compact Player** is an alternate view to the **Player/Organiser** which is displayed by default.  As the name implies, this variant takes up a much smaller footprint and provide basic playback display and controls.  It is important to note that you cannot manage the **What's Playing** list or the **Song Library** from this view and will have to revert in order to do so.

The **Compact Player** saves its state information as you move back and forth.  What this means for the user is that positioning the player to the desired position once will cause it to return to that point.
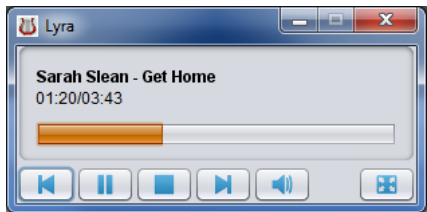


Controls of playback operations are as follows:

| | |
|---|---|
|  | Changes playback to the song previous to the currently playing song based on the **What's Playing** list.  If there are no songs previous to this one this action will be ignored. |
|  | The play/pause combination changes based on current playback.  When music is not currently playing, this button will start playback at the first song in the **What's Playing** list.  Alternatively this action it will **Pause** playback. |
|  | Will **Stop** the playback of the currently playing song and if the user subsequently presses on the **Play** button playback will resume at the same point. |
|  | Will shift the playback to the next song based on the current song.   If there are no songs queued for playback next this action will be ignored. |
|  | When clicked, these buttons will permit the user to change the volume level at the host.  Based on selected features this may take place several seconds after the user has actually requested the change. |
|  | This icon is unique to the **Compact Player** and will revert to view to the **Player/Organiser**. |

# Program Configuration and Options

## Manage Options and Preferences

This dialog contains a series of tabs which offers control over various aspects of the **Lyra** application.  Certain key interface elements which are displayed at all times is the **Save** and **Cancel** buttons which only applies once you are finished with all changes.

Saving the changes will not result in an immediate change to the application.  This will require the user to exit the application and start again in order for the modifications to take effect.

### Look and Feel

The **Look and Feel** tab contains options to manage the look and feel of the application.  At the most basic level you can control the **Look and Feel Manager** used to paint the widgets on the screen and at the most granular level a user can specify a unique colour scheme for the display of the information within **Lyra** itself.
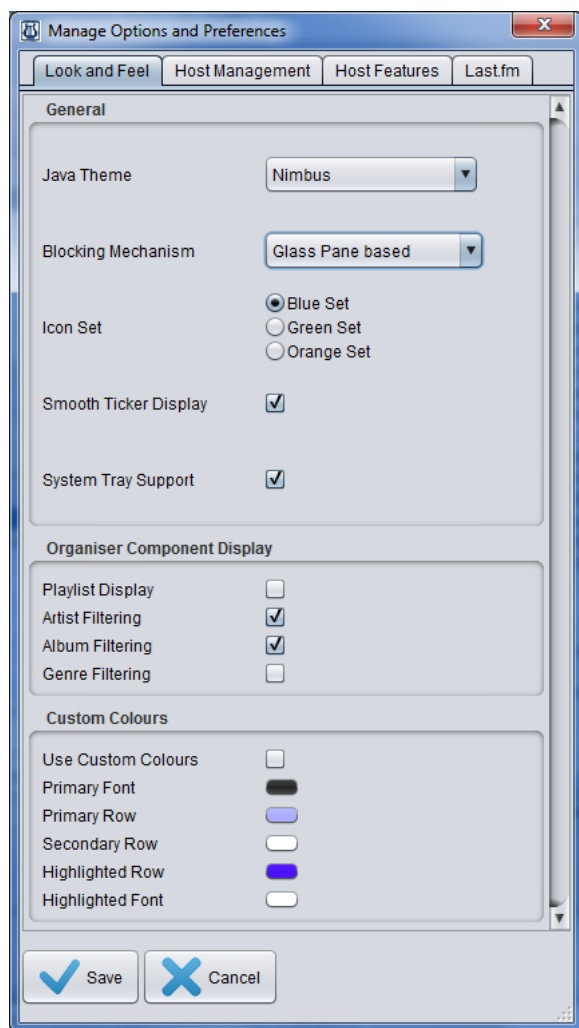
## *General Options*

These are the most basic elements of the **Look and Feel** controls.  Changes in these elements will typically result in a fairly radical change in the look of the application.

| | |
|---|---|
| **Java Themes** | Java themes, also known as **Look and Feel Managers** are built-in to the **Java Resource Engine (JRE)** which powers the application.  The list of available themes is limited to your platform, operating system or what has been installed for you.  By default, the application will attempt to make use of the **Nimbus** theme, which is used in the display of all screenshots. |
| **Blocking Mechanism** | The blocking mechanism applies to the method with which library synchronisation process will block the interface from user interaction.   As of version **1.0.2** of **Lyra** there are two methods available with the **GlassPane** method being default. |
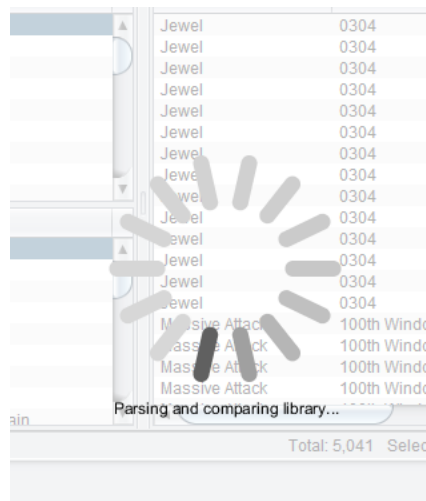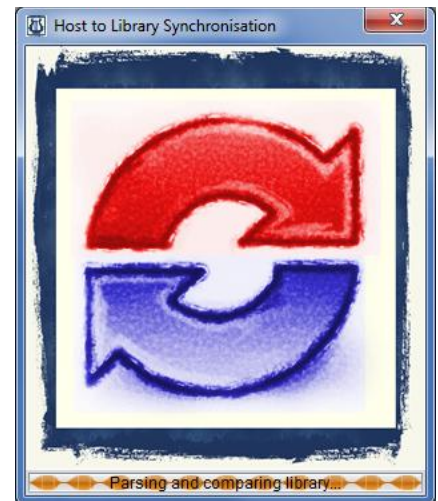


GlassPane Implementation                    Dialog Box Implementation

As seen above, the **GlassPane** implementation is placed directly upon the **Player/Organiser** frame and is graphically more demanding.  This demand will in turn slow down the synchronisation process at the expense of a more integrated look and feel.

The **Dialog Box** implementation makes use of a **modal** dialog box and a never ending progress bar.  While not as visually pleasing as the **GlassPane** method, lower requirements for processing allow the synchronisation process to take place quicker on slower stations such as a **Netbook**.

| | |
|---|---|
| **Icon Set** | There are three colours available for the display of icons for **Lyra**.  This will hopefully permit the application to more easily blend in the icon set with the desired look and feel.  At the time of this writing, the following colours are available: **Blue**; **Green**; and **Orange**. |
| **Smooth Ticker Display** | By default **Lyra** will attempt to scroll long song names pixel-by-pixel creating a smoother overall look.  Under some circumstances this may appear choppy and |

be hard on the eyes when viewing for an extended period of time.  You can disable smooth scrolling and switch to character scrolling with should alleviate eye strain.

**System Tray Support**    **System Tray** support will enable or disable the use of the **System Tray Icon** with **Lyra**.  Only visible on platforms which support the feature, this can allow a user to remove the icon if they prefer normal window hiding behaviour or if the feature is not working correctly within their current environment.

## *Organizer Component Display*

**Lyra** itself has the ability to manage playlists and filter content by **Artist**, **Album** and **Genre**.  These capabilities can grant a fair amount of flexibility when using the application; however it can quickly become evident that certain features are not necessarily desired.

This section provides the ability for a user to remove sections from the display outright in order to streamline the interface.

**Playlist Display**    Removes all playlist display and control.

**Artist Filtering**    Removes the album listing in the application.

**Album Filtering**    Removes the artist listing in the application.

**Genre Filtering**    Removes the genre listing in the application.

## *Custom Colours*

When the **Use Custom Colours** checkbox is selected colours can be managed and displayed within the application.  These choices will be used in the **Organiser** component of **Lyra** and can be controlled down to the following elements:

**Primary Font**    Colour used for the font for both the primary and secondary row background colours.

**Primary Row**    Row background colour that will appear for all primary rows.

**Secondary Row**    Alternate row background colour, if matched with the secondary row background then there will be no visual difference in rows.

**Highlighted Row**    When a user selects a row(s) it will normally take on a different background colour in order to help with identification.

**Highlighted Font**    Provides a font colour that will apply specifically to highlighted rows.

## Host Management

Permits the user to create new **Music Player Daemon (MPD)** entries or remove existing entries.  When multiple hosts are registered the user will be prompted for which host to use when he start the application.  In the case of a single host experience **Lyra** will assume it to be default and bypass this prompt.
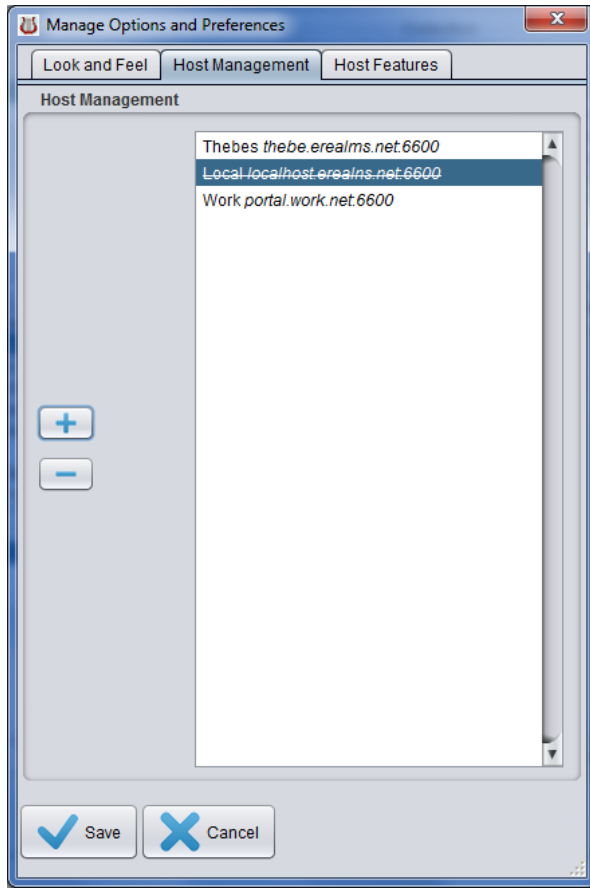
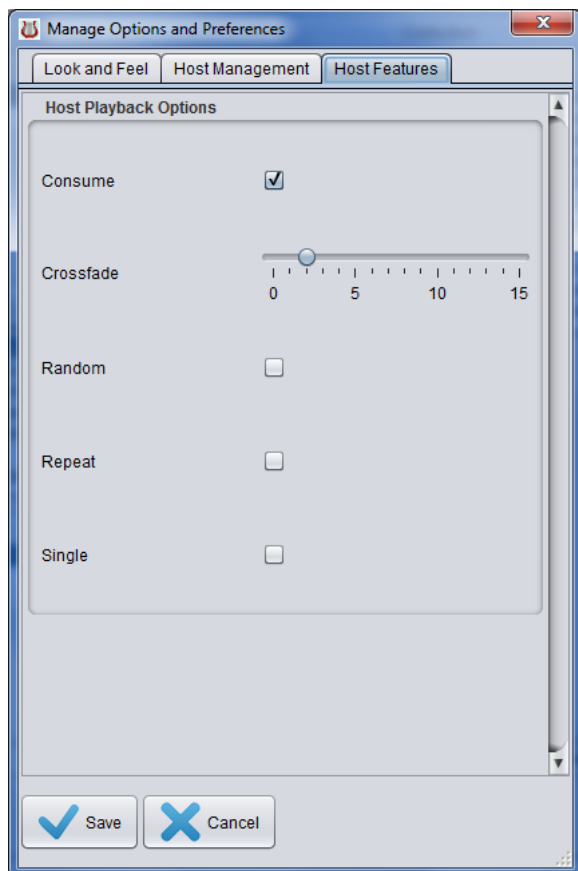**Plus Button**              When clicked, this button will pop-up a new dialog enabling the user to create a new host entry.

**Minus Button**             Selected host entries, including those that has just been added to the list the button will be removed.  These entries will henceforth appear as crossed out in order to maintain a complete list until modifications ready to be comitted.

## Host Features

Host features exist as an alternate method for certain **Music Player Daemon (MPD)** options to be selected within **Lyra**. While not necessarily related to the other two tabs available, these provide additional functionality which may be desired by users.



| | |
|---|---|
| **Consume** | Removes a list from the **Current Playlist** once it has been played or skipped. While not always desired, this feature will leave the **What's Playing** list more manageable and shrink it as necessary. |
| **Crossfade** | Allows a user to select in seconds, the amount of time two songs will be played concurrently in order to fade in one song as the other fades out. |
| **Random** | Enables random play at the host level, which means that a random order will be used playing a song out the **What's Playing** list. This differs from **Shuffle**, which will randomize the order in the **Current Playlist** upon request without and will do so only once. |
| **Repeat** | Enables a song or the **What's Playing** to be played over. |
| **Single** | Will play only a singular song and when mixed with the **Repeat** option will repeat only a singular song. |

## Last.fm

The **Last.fm** service provides **Lyra** with the ability to extract and pull information about albums, artists and gain access to the album cover art. While this integration requires an account with the service, the integration provides a user with **Scrobbling** abilities that can translate into better suited recommendations from their site.

This feature is completely optional and can be disabled at any time if so desired. However, at the time of this writing **Last.fm** is the only integrated service which will provide album art to the player.

In order to integrate into the **Last.fm** service, the user is required to establish a trust relationship between **Lyra** and the site itself. First start by clicking on the **Last.fm** tab and you will be greeted with the screen below:
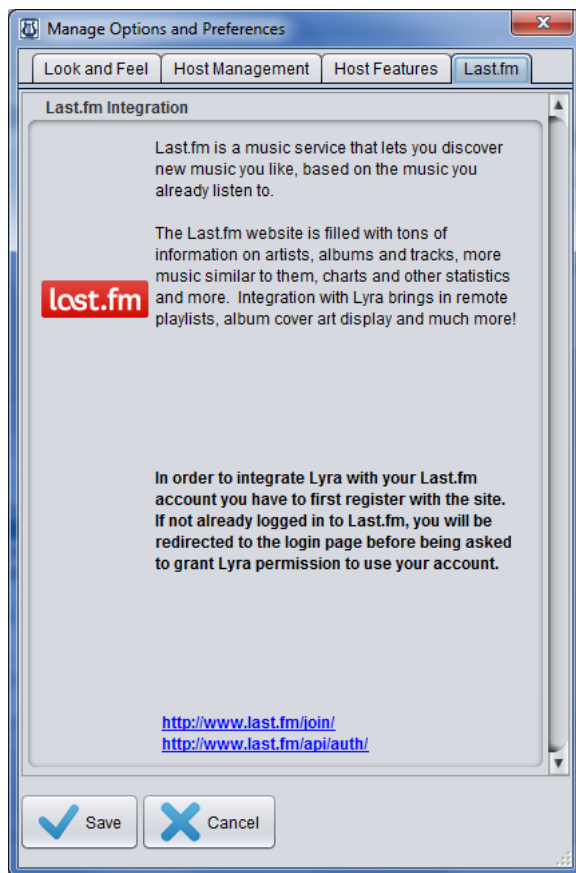


In order to integrate with the Last.fm service two steps must be taken. Firstly, if you do not already have an account with the service you will be register to get a login. Clicking on the top hyperlink http://www.last.fm/join/ will open a browser window allowing you do register and proceed to the next step.

Click on the lower hyperlink http://www.last.fm/api/auth and you will be presented with a browser window similar to the one below.
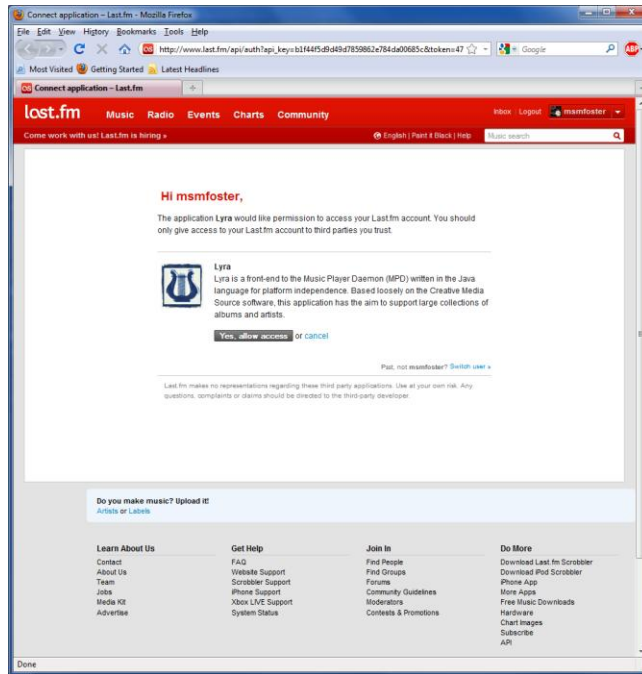
Click on the **Yes, allow access** button in order to continue.  Without this step the application will not integrate with the **Last.fm** service.  If you have clicked on the button, the following screen will be shown:
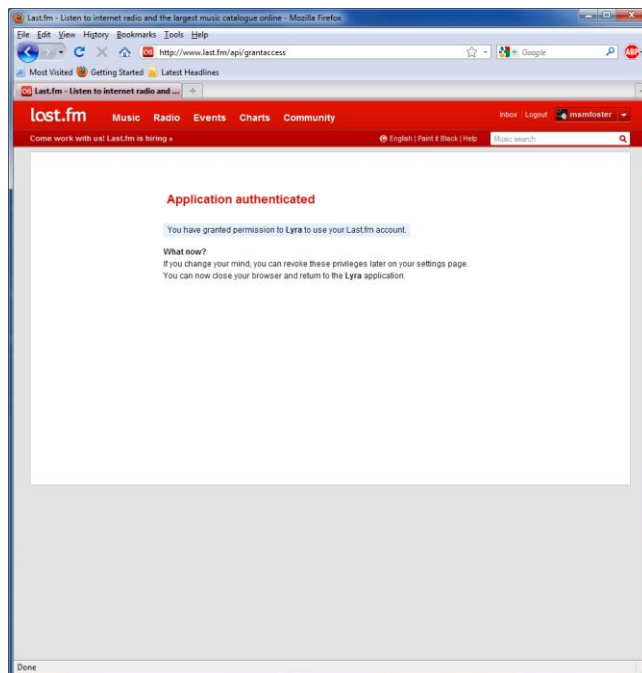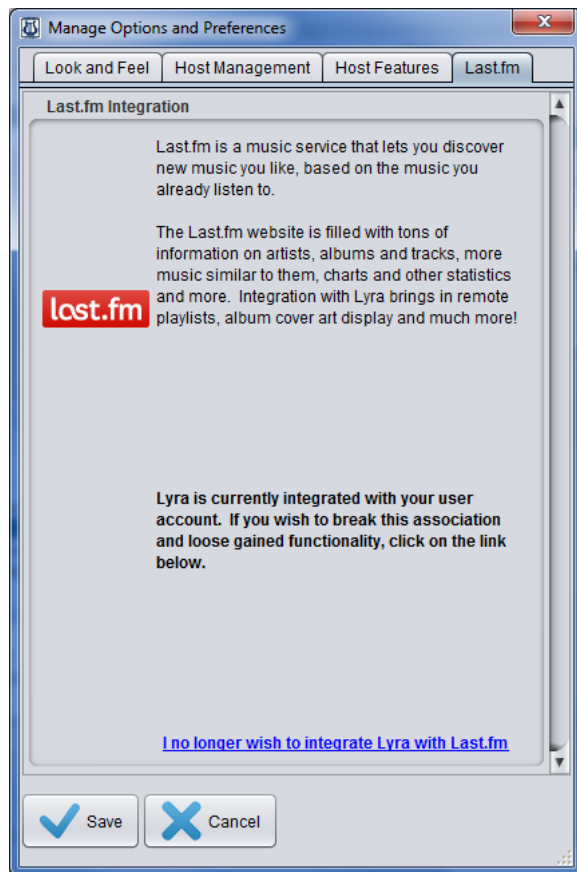


Return to the **Lyra** application.  The panel screen will have changed and display the information below:
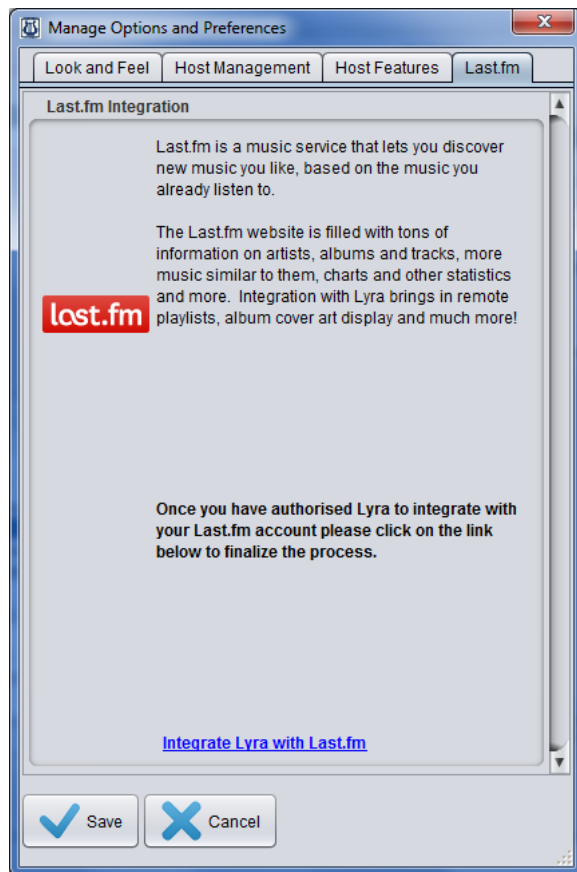
Click on the **Integrate Lyra with Last.fm** hyperlink in order to continue.

Now you have completed integration with the Last.fm service. A feature which can be disabled at any time clicking on the **I no longer wish to integrate Lyra with Last.fm** hyperlink.

It is important to remember that the Save button is still critical in the integration procedure. Without saving the changes, **Lyra** will not be saved.

## Create a New Music Player Daemon (MPD) Host

The host creation process can appear during two stages of using the application. The first appears if no hosts currently exist in order to establish a base. It can also be accessed making use of the **Host Management** tab in the **Host Options**. Both options make use of the same dialog and require no alternate operations.
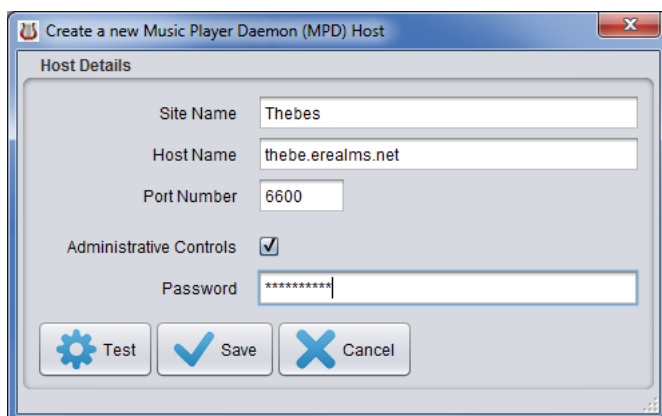
In order to configure a new host, enter the correct host information matching an instance of the **Music Player Daemon**. By default, the information will be taken as-is without verification as to the authenticity of the details provided.  If so desired, click on the **Test** button in order to confirm that the details provided do are correct.

| | |
|---|---|
| **Site Name** | A unique identifier that will allow quick identification against other hosts.  [*A-Za-z0-9 .-_*] |
| **Host Name** | Qualified domain name or direct IP address used to locate the host on which the daemon resides. [*A-Za-z0-9 .-_*] |
| **Port Number** | Port number associated with the hostname. [*0-9*] |
| **Administrative Controls** | When enabled permits the entry of a password to gain more functionality from the **Music Player Daemon**.  This is not always necessary in order to use **Lyra** with all of its features. |
| **Password** | Associated password necessary to gain elevated privileges on the host. |

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