



*Allegro*

# Allegro Media Server

## *Version 2.0*

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# CHAPTER 1

## ALLEGRO MEDIA SERVER

### Welcome to the Allegro Media Server

The Allegro Media Server makes your iTunes® digital music libraries available over your home network, so they can be enjoyed in the room of your choice. Running as a background application, the Allegro Media Server acts as a bridge that streams music and photos from iTunes libraries on Apple® Macintosh® and Microsoft® Windows® computers to a wired or wireless networked digital media player.



The Allegro Media server belongs to the new generation of Universal Plug and Play (UPnP®) and Digital Living Network Alliance (DLNA®) media devices. UPnP is an open-standards technology that simplifies home networking. UPnP leverages TCP/IP and Web technologies to enable seamless networking, control, and data transfer among networked devices in the home.

The Allegro Media Server fully complies with the UPnP v1.0 and UPnP AV DCP 1.0 specifications. It is compatible with UPnP media players and renderers, and works with most DLNA-certified devices (1.5 and above), including the following networked digital media players:

- Cambridge Audio NP30
- D-Link DSM-320
- Linksys WMLS11B
- Marantz AV7005
- Naim products
- Omnifi DMS1
- All Philips UPnP Streamium products
- Sony PS3
- Windows Media Player
- Xbox 360

This manual describes how to install, configure, and use the Allegro Media Server on Windows and Macintosh computers. This manual includes troubleshooting suggestions and Frequently Asked Questions (FAQs) about the Allegro Media Server. For additional FAQs, please see <http://www.allegrosoft.com/allegro-media-server>.

# Installing the Allegro Media Server

This chapter describes how to install the Allegro Media Server. To install the Allegro Media Server on Microsoft Windows computers, see the procedure below. To install the Allegro Media Server on Macintosh computers, see “Macintosh Installations” on page 7.

As part of the installation procedure, you can register the Allegro Media Server for purchase. Registering the product entitles you to use it with any supported digital media player for as long as you like. Unregistered copies can be used for a limited time, so you can experience the joy of listening to music streamed over your network before you buy. To purchase the software, go to <http://www.allegrosoft.com/allegro-media-server> and click the **Buy Now** button at the top of the page.

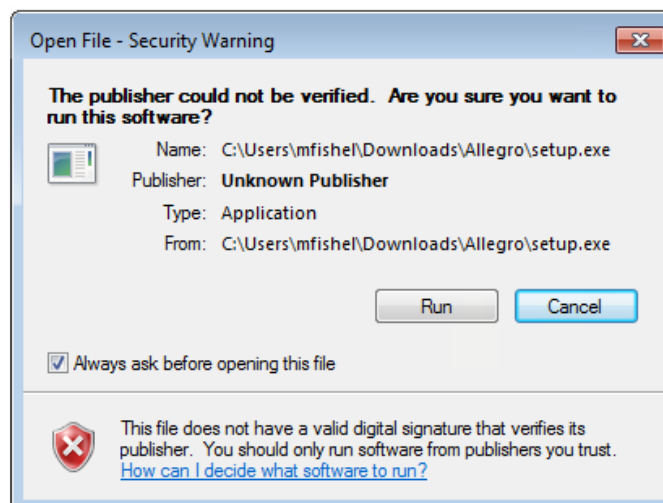
## Microsoft Windows Installations

You can install the Allegro Media Server on Microsoft Windows computers that meet the following minimum system requirements.

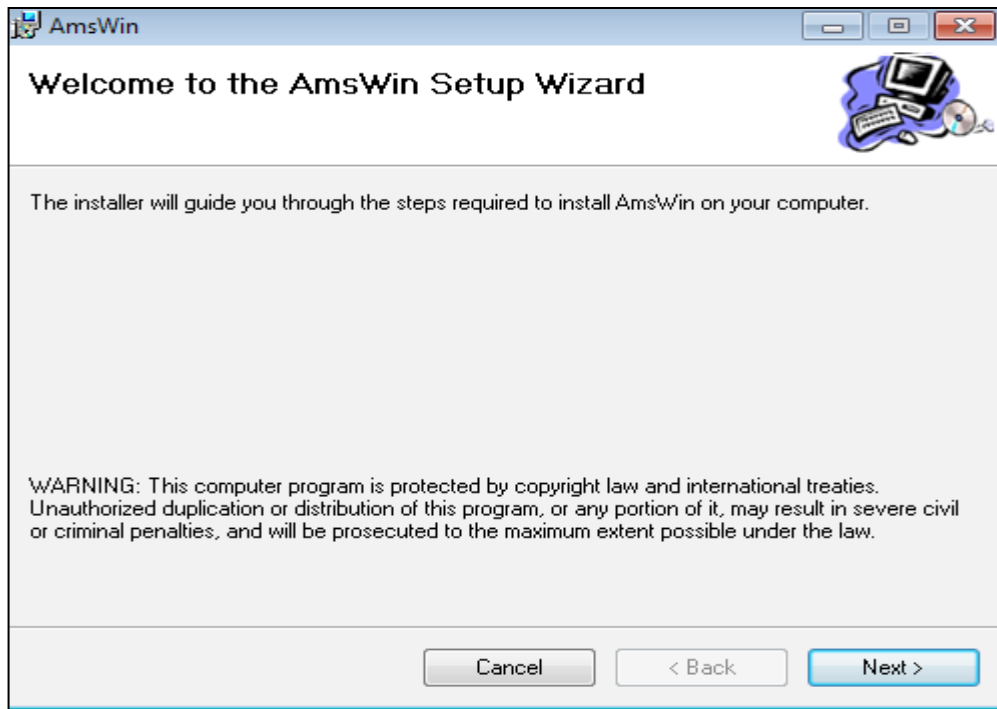
Component	Windows Requirement
Processor	1 GHz or better
Operating system	Microsoft Windows XP, Windows 2000, Windows 7, and Windows 8
Memory	512 MB (1 GB or more recommended)
Hard disk space	256 MB

To install the Allegro Media Server on a Windows computer:

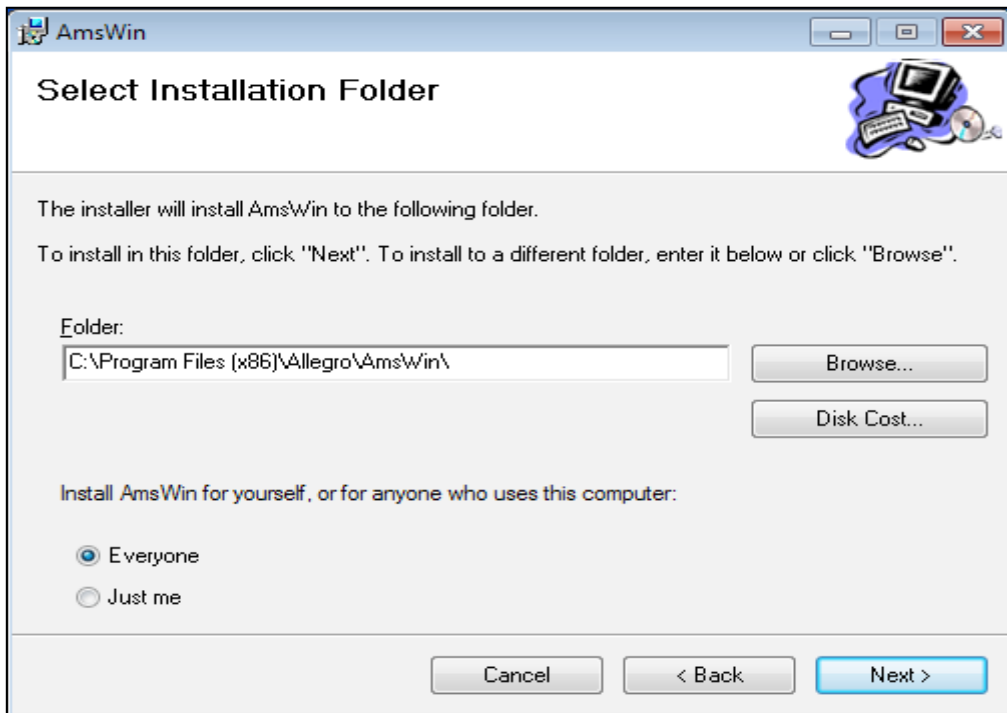
1. Open a browser and go to <http://www.allegrosoft.com/allegro-media-server>.
2. Click the **Download** button. A compressed file is downloaded.
3. Create a new folder, and then extract the contents of the compressed file into the new folder.
4. Double-click the `setup.exe` file.



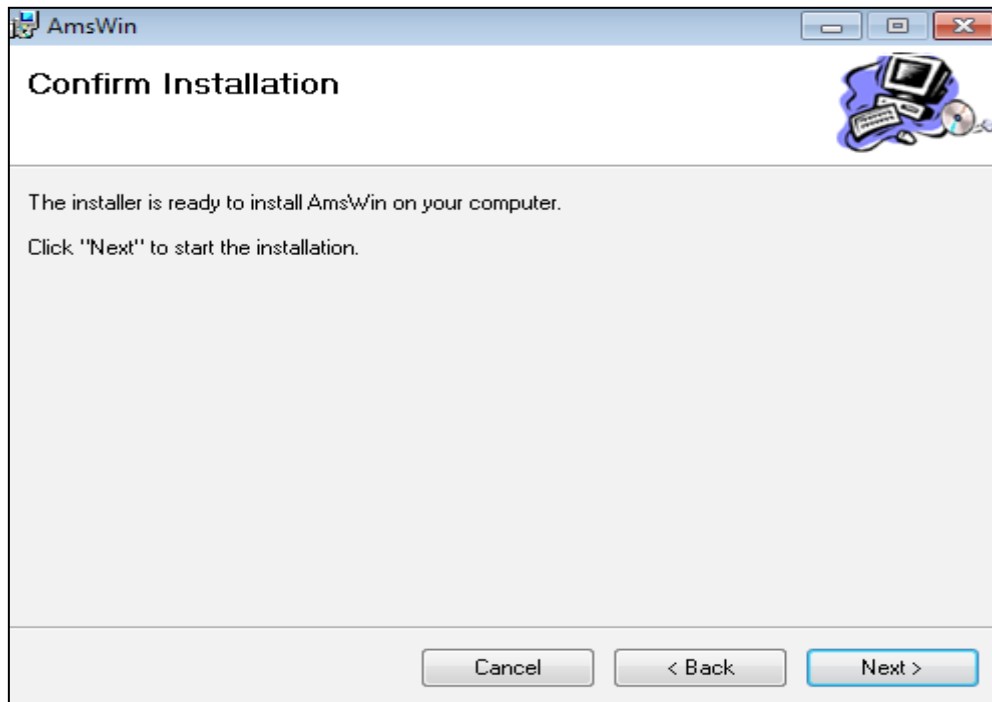
5. Click **Run**. The Welcome page appears.



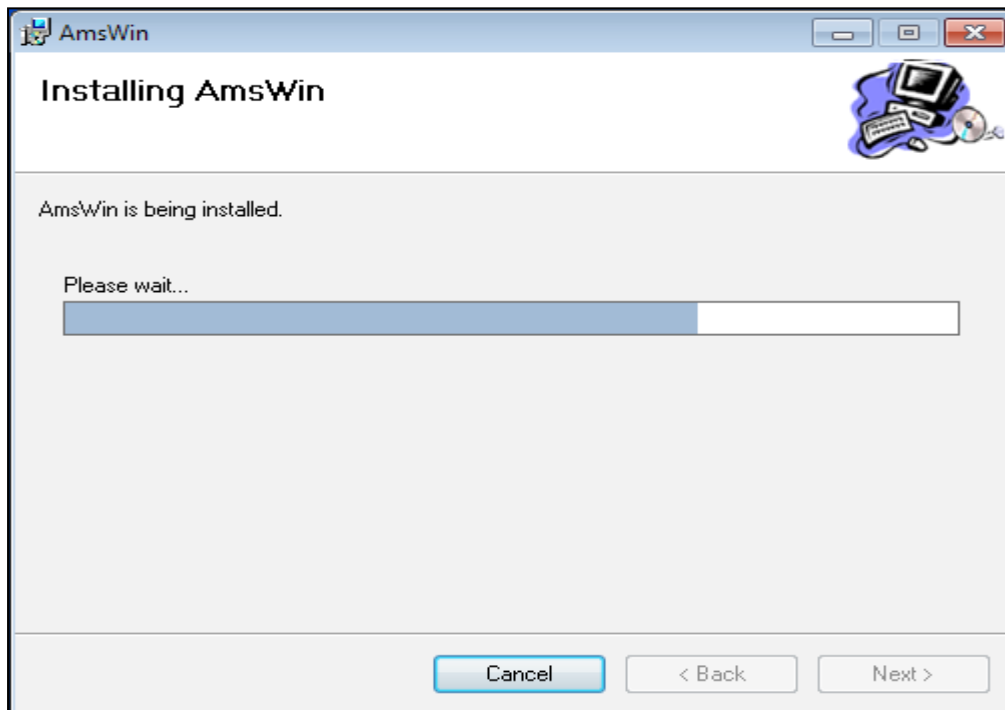
6. Click **Next**. The Select Installation Folder page appears.



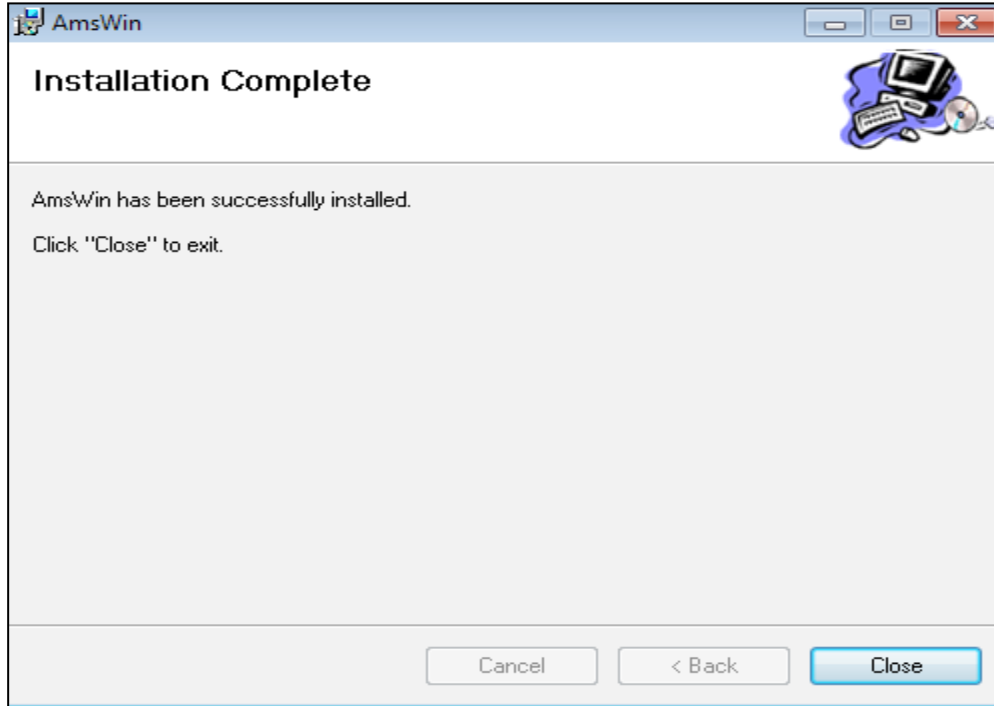
- In the next page, confirm the file location. By default, the Allegro Media Server is available to anyone who uses this computer. To make it available to you only, click **Just me** under **Install AmsWin for yourself, or for anyone who uses this computer**. Click **Next**.



- Click **Next**. A page shows the progress of the installation.



9. When the installation completes, the Installation Complete page appears. Click **Close** to close the page and complete the installation.



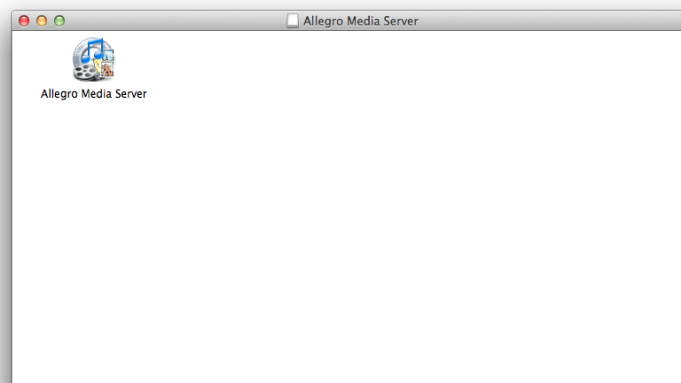
## Macintosh Installations

You can install the Allegro Media Server on Macintosh computers that meet the following minimum system requirements.

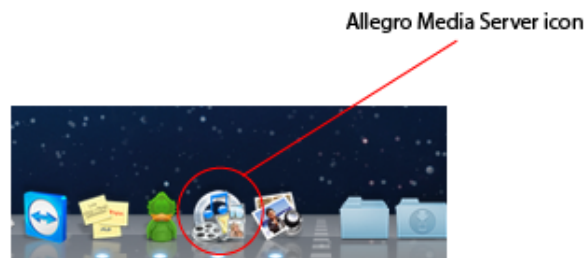
<b>Component</b>	<b>Requirement</b>
Computer	Intel® based Apple Mac
Operating system	Mac OS X 10.6 (Snow Leopard) or later
Memory	1 GB
Hard disk space	256 MB

To install the Allegro Media Server on a Macintosh computer:

1. Open a browser and go to <http://www.allegrosoft.com/allegro-media-server>.
2. Click the **Download** button to download a disk image (.dmg) file containing the application file used to install Allegro Media Server.
3. After the download completes, double-click the disk image file. A window opens, showing the Allegro Media Server application file.



4. Drag the application file from the window into Applications folder to install Allegro Media Server, and then delete the disk image file.
5. Confirm that the Allegro Media Server icon appears on the desktop.



# Configuring and Using the Allegro Media Server

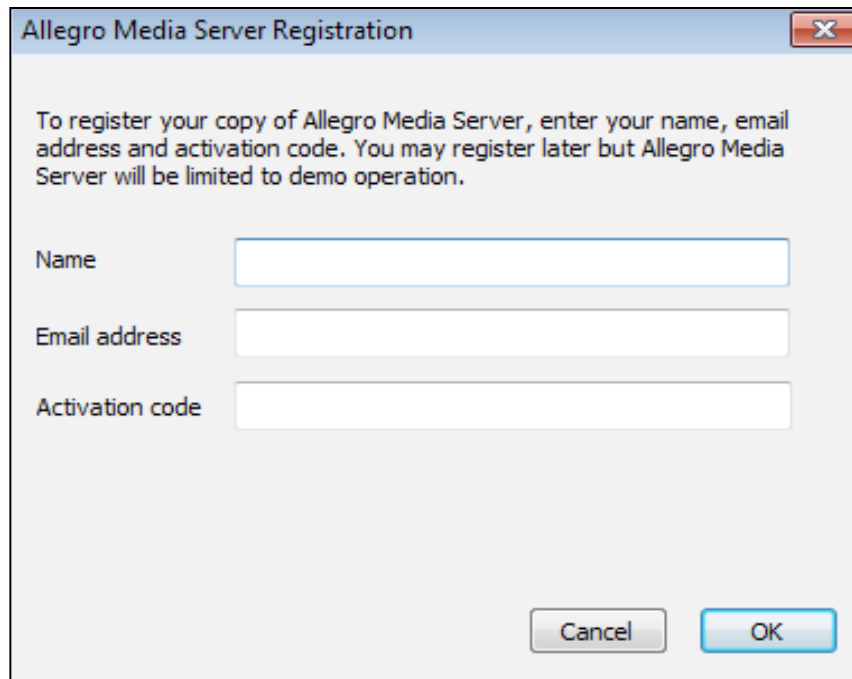
After you install the Allegro Media Server, configure it to suit your requirements. After configuration, you can use the Allegro Media Server to stream music and photos from your iTunes library to supported digital media players.

To configure the Allegro Media Server on Microsoft Windows computers, see the procedure below. To configure the Allegro Media Server on Macintosh computers, see “[Macintosh Configuration](#)” on page 12.

## Microsoft Windows Configuration

The following procedure describes how to configure the Allegro Media Server on a Windows computer. As part of this procedure, you can use an activation code to activate your copy of the Allegro Media Server. To obtain an activation code, please go to <http://www.allegrosoft.com/allegro-media-server> and click the **Buy Now** button at the top of the page.

1. Double-click the Allegro Media Server icon on your desktop. The first time you double-click the icon, the registration page appears.

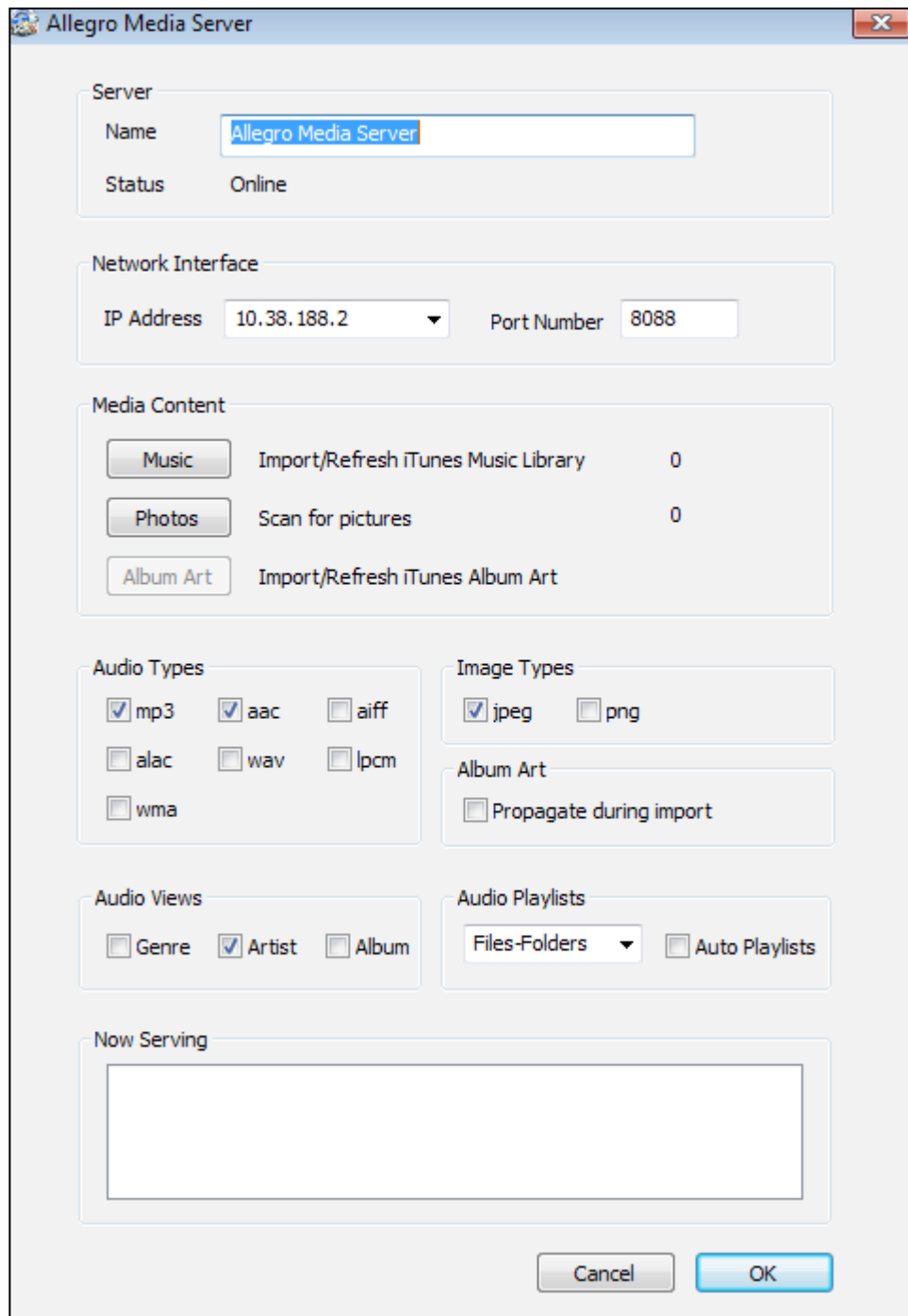


The image shows a Windows-style dialog box titled "Allegro Media Server Registration". The dialog has a standard title bar with a close button (X) in the top right corner. The main text inside the dialog reads: "To register your copy of Allegro Media Server, enter your name, email address and activation code. You may register later but Allegro Media Server will be limited to demo operation." Below this text are three input fields: "Name", "Email address", and "Activation code". At the bottom right of the dialog are two buttons: "Cancel" and "OK".

2. If you purchased your copy, enter the requested information and click **OK** and you will no longer see the registration dialog when you start the application. Otherwise, click **Cancel**. The Allegro Media Server configuration dialog box on the following page appears.

**Note:** If you click **Cancel**, the Allegro Media Server runs in time-limited mode for approximately one hour. When the time limit expires, the Allegro Media Server must be restarted.





3. Set the configuration settings to suit your requirements (refer to the table on the next page).
4. When you finish, click **OK** to save your changes and close the dialog box. (Or click **Cancel** to discard your changes and close the dialog box.)

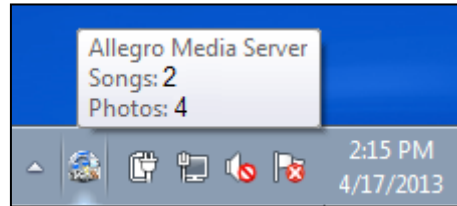
<b>Field</b>	<b>Description</b>
Server	
Name	Friendly name to differentiate the Allegro Media Server from other media servers.
Status	Read-only field that shows whether the Allegro Media Server is online or offline.
Network Interface	
IP Address	IP address of the host media computer. If your computer has more than one network-interface card (NIC), use this field to specify the IP address that will be used with the Allegro Media Server.
Port Number	The IP port is a communications “channel” that network devices use to access the Allegro Media Server. By default, the Allegro Media Server uses port 8092. If this port is being used by other programs on your computer, change this port number to one that is not in use. Changing the port number restarts the Allegro Media Server.
Media Content	Click these buttons to add music and photo files to the Allegro Media Server. <ul style="list-style-type: none"> <li>• Music = imports or refreshes music from your iTunes music library. The number to the right of this field shows the number of files imported.</li> <li>• Photos = searches the system for images and imports them. The number to the right of this field shows the number of images imported.</li> <li>• Album Art = imports album art files from your iTunes music library..</li> </ul>
Audio Types	Songs in an iTunes library can be in various media formats. Check the boxes of the formats that you want Allegro Media Server to advertise. For example, to advertise MP3 format and not AAC and AIFF formats, check <b>mp3</b> and uncheck <b>aac</b> and <b>aiff</b> . The Apple Music Store media format is AAC. If your media player does not support AAC-encoded files, convert them to a supported format.
Image Types	Images in an iTunes library can be in various media formats. Check the boxes of the formats that you want Allegro Media Server to advertise. For example, to advertise JPEG format only and not PNG, check <b>jpeg</b> and uncheck <b>png</b> (which are the default settings).
Album Art	To include album cover art with the songs that are presented to the digital media player, check the <b>propagate during import</b> check box.
Audio Views	Use the check boxes to specify the type of sorting used when presenting iTunes playlists to the media player. Choices are: <ul style="list-style-type: none"> <li>• Genre = songs are sorted by genre.</li> <li>• Artist = songs are sorted by artist. (<i>default</i>)</li> <li>• Album = songs are sorted by album.</li> </ul> <p>Allegro Media Server uses the hierarchy genre &gt; artist &gt; album. If you check <b>Artist</b>, for example, Allegro Media Server presents an Artist container. Selecting the container shows a list of artists. Selecting an artist shows a list of albums. Selecting an album shows a list of songs.</p> <p>If <b>Artist</b> is not checked, there is no Artist container, regardless of the other check boxes. If no check boxes are checked, the Allegro Music Server presents a single view called <b>All Songs</b> that shows an alphabetical list of the songs in your iTunes library.</p> <p><b>Note:</b> Some media servers may ignore this setting and present this information in other ways.</p>
Audio Playlists	Specifies how iTunes playlists are presented to the media player. Refer to the media player documentation for information about how the media player expects to receive playlists. Choices are: <ul style="list-style-type: none"> <li>• DIDL_S = select for media players that use this file format to represent a playlist.</li> <li>• M3U = select for media players that use this file format to represent a playlist.</li> <li>• Files-Folders = select for media players that expect playlists as folders, with files for each song in a playlist. (<i>default</i>)</li> </ul>
Auto Playlists	Check this check box to have the Allegro Media Server create playlists automatically for all songs by an artist, all songs in a genre, etc. in addition to the playlists created with iTunes .
Now Serving	A read-only field that displays information about the content currently being served by the Allegro Media Server.

## Using the Allegro Media Server on a Windows Computer

After you configure the Allegro Media Server, you can use it to stream music and photos from your iTunes library to your digital media player. The Allegro Media Server runs in the background, as shown by an icon that appears in the system tray at the lower right side of your Windows desktop:



To see the number of audio tracks and photos being served to your digital media player, hover your mouse over the icon in the system tray.



- Double-clicking the icon in the system tray redisplay the configuration dialog box, allowing you to change configuration settings and view the content currently being served to the digital media player.
- Right-clicking the icon allows you to stop the Allegro Media Server or view the About window.

When media is added to your iTunes library, use the following buttons in the configuration dialog box to make Allegro Media Server aware of the newly added content:

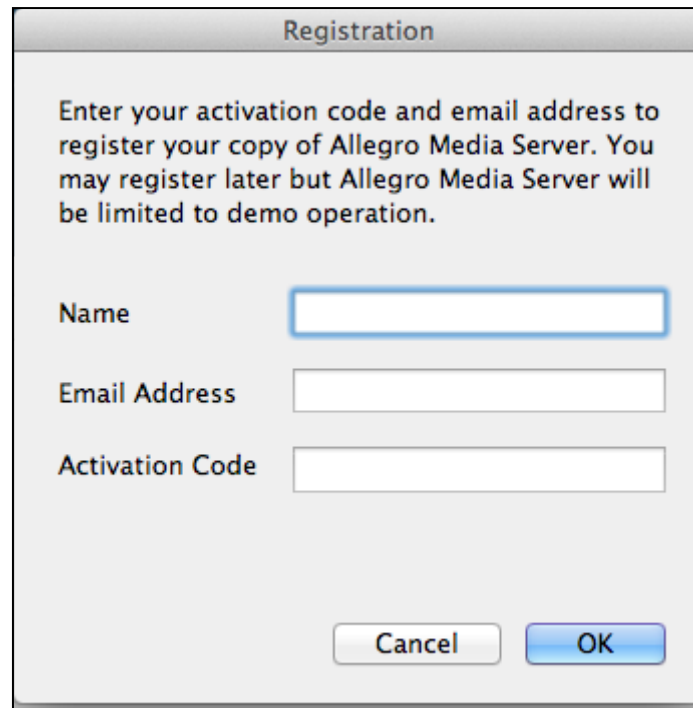
- **Music** — imports or refreshes music from your iTunes music library.
- **Photo** — scans for pictures you want to import.
- **Art** — imports album art files from your iTunes music library.

**Note:** Although Allegro Media Server is intended for use with iTunes, the application will run if iTunes is not installed. In this case, Allegro Media Server shows 0 songs and 0 photos.

## Macintosh Configuration

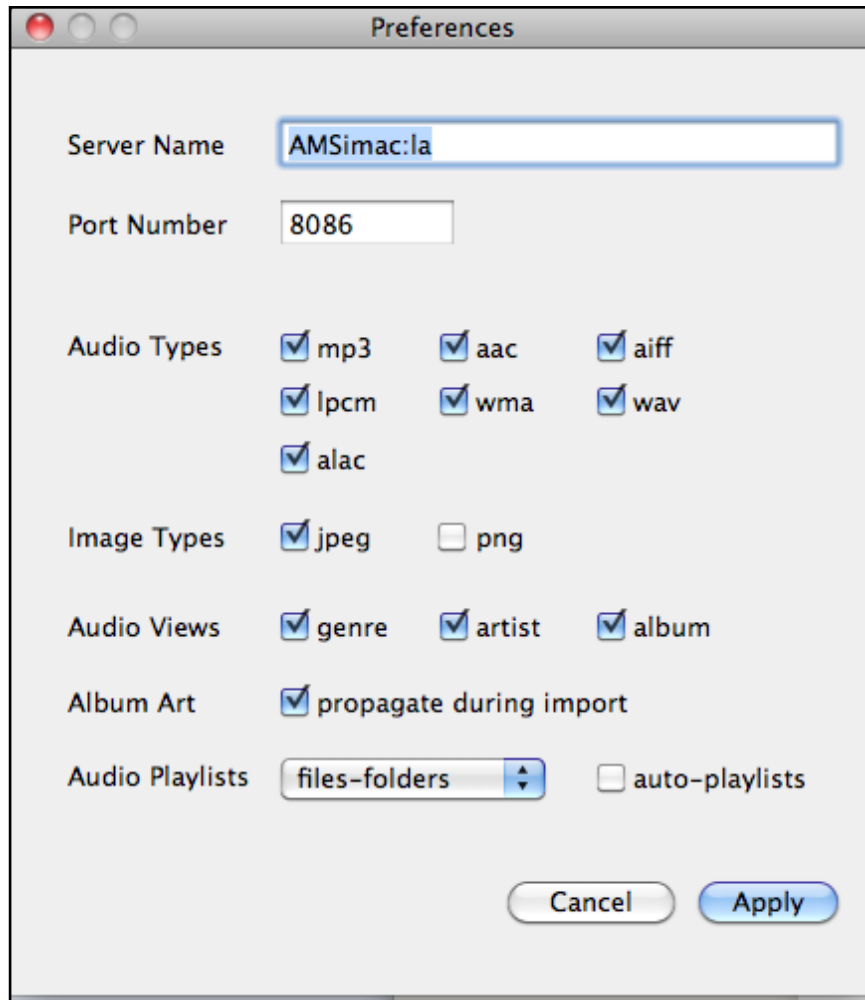
The following procedure describes how to configure the Allegro Media Server on a Macintosh computer. As part of this procedure, you can use an activation code to activate your copy of the Allegro Media Server. To obtain an activation code, please go to <http://www.allegrosoft.com/allegro-media-server> and click the **Buy Now** button at the top of the page.

1. Double-click the **Allegro Media Server** icon to launch the program. The first time you double-click the icon, the registration page appears.



The image shows a registration dialog box titled "Registration". The dialog box has a light gray background and a dark gray title bar. Inside the dialog, there is a text area with the following text: "Enter your activation code and email address to register your copy of Allegro Media Server. You may register later but Allegro Media Server will be limited to demo operation." Below this text are three input fields: "Name", "Email Address", and "Activation Code". Each field is a white rectangle with a thin gray border. At the bottom of the dialog, there are two buttons: "Cancel" and "OK". The "OK" button is highlighted with a blue gradient.

2. If you purchased your copy, enter the requested information and click **OK** and you will no longer see the registration dialog when you start the application. Otherwise, click **Cancel**. The Allegro Media Server Preferences dialog box on the following page appears.

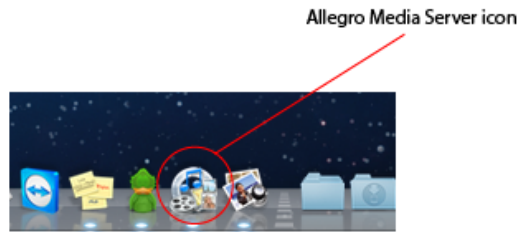


3. Configure your preferences (refer to the table on the next page).
4. When you finish, click **Apply** to save your changes and close the dialog box. (Or click **Cancel** to discard your changes and close the dialog box.)

<b>Field</b>	<b>Description</b>
Server Name	Friendly name to differentiate the Allegro Media Server from other media servers.
Port Number	The IP port is a communications “channel” that network devices use to access the Allegro Media Server. By default, the Allegro Media Server uses port 8092. If this port is being used by other programs on your computer, change this port number to one that is not in use. Changing the port number restarts the Allegro Media Server.
Audio Types	Songs in an iTunes library can be in various media formats. Check the boxes of the formats that you want Allegro Media Server to advertise. For example, to advertise MP3 format and not AAC and AIFF formats, check <b>mp3</b> and uncheck <b>aac</b> and <b>aiff</b> . The Apple Music Store media format is AAC. If your media player does not support AAC-encoded files, convert them to a supported format.
Image Types	Images in an iTunes library can be in various media formats. Check the boxes of the formats that you want Allegro Media Server to advertise. For example, to advertise JPEG format only and not PNG, check <b>jpeg</b> and uncheck <b>png</b> (which are the default settings).
Audio Views	<p>Use the check boxes to specify the type of sorting used when presenting iTunes playlists to the media player. Choices are:</p> <ul style="list-style-type: none"> <li>• Genre = songs are sorted by genre.</li> <li>• Artist = songs are sorted by artist. (<i>default</i>)</li> <li>• Album = songs are sorted by album.</li> </ul> <p>Allegro Media Server uses the hierarchy genre &gt; artist &gt; album. If you check <b>Artist</b>, for example, Allegro Media Server presents an Artist container. Selecting the container shows a list of artists. Selecting an artist shows a list of albums. Selecting an album shows a list of songs.</p> <p>If <b>Artist</b> is not checked, there is no Artist container, regardless of the other check boxes. If no check boxes are checked, the Allegro Music Server presents a single view called <b>All Songs</b> that shows an alphabetical list of the songs in your iTunes library.</p> <p><b>Note:</b> Some media servers may ignore this setting and present this information in other ways.</p>
Album Art	To include album cover art with the songs that are presented to the digital media player, check the <b>propagate during import</b> check box.
Audio Playlists	<p>Specifies how iTunes playlists are presented to the media player. Refer to the media player documentation for information about how the media player expects to receive playlists. Choices are:</p> <ul style="list-style-type: none"> <li>• <b>DIDL_S</b> = select for media players that use this file format to represent a playlist.</li> <li>• <b>M3U</b> = select for media players that use this file format to represent a playlist.</li> <li>• <b>files-folders</b> = select for media players that expect playlists as folders, with files for each song in a playlist. (<i>default</i>)</li> </ul>
auto-playlists	Check this check box to have the Allegro Media Server create playlists automatically for all songs by an artist, all songs in a genre, etc. in addition to the playlists created with iTunes .

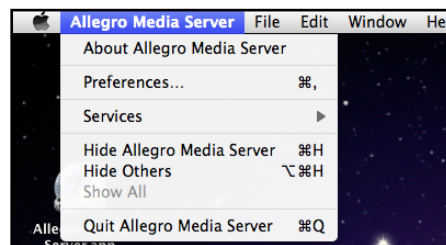
## Using the Allegro Media Server on a Macintosh Computer

After you configure your preferences, you are ready to stream music and photos from your iTunes library to your digital media player. The light below the icon in the Dock may go ON, depending on your computer's configuration:



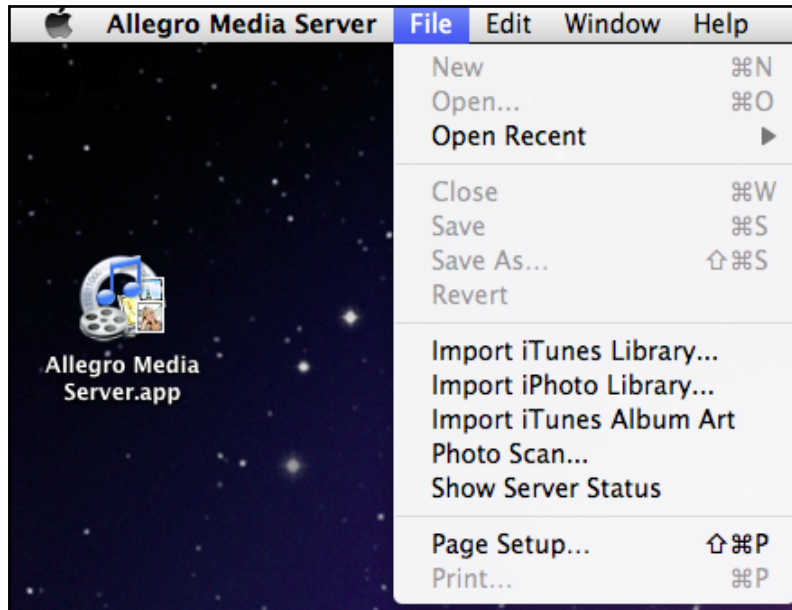
When Allegro Media Server is active, the **Allegro Media Server** menu appears in the menu bar with the following menu commands:

- **Preferences** — redisplay the Preferences dialog box, allowing you to view and change configuration settings.
- **Hide Allegro Media Server** — hides the Allegro Media Server in the Dock and toggles this menu command to **Show Allegro Media Server**, which you can use to redisplay the icon in the Dock.
- **Quit Allegro Media Server** — exits the Allegro Media Server application.



When media is added to your iTunes library, use the following menu commands in the **File** menu to make Allegro Media Server aware of the newly added content:

- **Import iTunes Library** — imports or refreshes music from your iTunes music library.
- **Import iPhoto Library** — imports or refreshes pictures from your iPhoto library.
- **Import iTunes Library Art** — imports or refreshes art files from your iTunes library.
- **Show Server Status** — provides at-a-glance information about the number of songs, picture, and playlists. Use this menu command to check imports or to see the number of media objects that Allegro Media Server knows about.





# Troubleshooting

In the unlikely event you encounter a problem using the Allegro Media Server, refer to the troubleshooting suggestions in this chapter to resolve the problem. Most problems can be corrected using the Allegro Media Server configuration settings.

- For Windows computers, see “[Microsoft Windows Configuration](#)” on page 8.
- For Macintosh computers, see “[Macintosh Configuration](#)” on page 12.

## **The Allegro Media Server and digital media player cannot communicate.**

Be sure the Allegro Media Server and digital media player are on the same network. Problems might occur when the two are on different networks (for example, if the Allegro Media Server is on a cabled Ethernet network while the digital media player is on a wireless network).

## **Audio formats are not presented to the digital media player.**

The audio type is not checked in the Allegro Media Server configuration dialog box (Windows) or Preferences dialog box (Mac). Confirm the settings under **Audio Types** to make sure the appropriate check boxes are checked. Unchecked audio types are not presented to the digital media player.

## **Audio files are not presented in the desired sort order to the digital media player.**

Use the check boxes under **Audio Views** to specify the type of sorting used when presenting iTunes playlists to the media player. For example, if you check **Artist**, Allegro Media Server presents an Artist container.

- Selecting the container shows a list of artists.
- Selecting an artist shows a list of albums.
- Selecting an album shows a list of songs.

Similarly, if you check **Genre**, Allegro Media Server presents a Genre container.

- Selecting the container shows a list of genres.
- Selecting a genre shows a list of artists.
- Selecting an artist shows a list of albums.
- Selecting an album shows a list of songs.

## **Audio files are presented to the digital media player in a single view called All Songs.**

There are no check boxes checked under **Audio Views**. Use the check boxes under **Audio Views** to select the desired sort order.

## **Playlists are not presented to the digital media player.**

Confirm that the setting for **Audio Playlists** is appropriate for your digital media player. Refer to the documentation for your digital media player to see the playlist format that the player expects to receive.

## **Album art is not appearing with songs presented to the digital media player.**

The **Propagate during import** check box under **Album Art** is not checked. Check this check box to propagate album art with its associated songs.

## **Certain types of images are not presented to the digital media player.**

The image type is unchecked in the Allegro Media Server configuration dialog box (Windows) or Preferences dialog box (Mac). Confirm the settings under **Image Types** to make sure the appropriate check boxes are checked. Unchecked image types are not presented to the digital media player.

# Answers to Common Questions

For additional FAQs, please see <http://www.allegrosoft.com/allegro-media-server>.

## Q. What are the system requirements for running the Allegro Media Server on Macintosh?

A. Allegro Media Server requires Mac OS X 10.6 (Snow Leopard) or later.

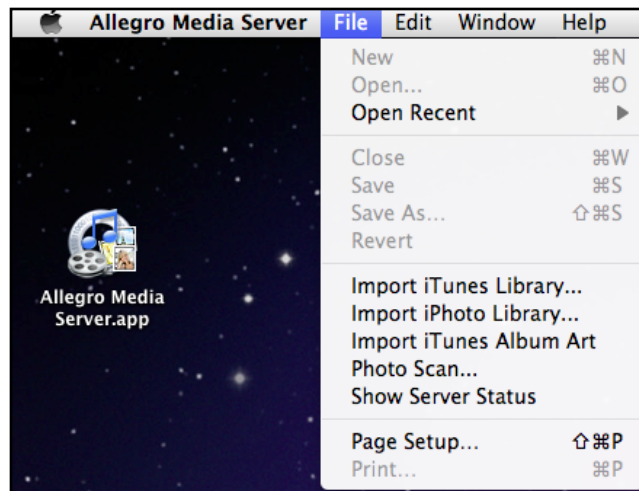
## Q. What are the system requirements for running the Allegro Media Server on Windows?

A. Allegro Media Server requires Windows XP, Windows 2000, Windows 7, or Windows 8. iTunes must be installed on the computer that will run the Allegro Media Server and a network connection must be available. When Allegro Media Server starts, you are notified if iTunes is not installed or if a network connection is not available.

## Q. Will Allegro Media Server detect new music I add to my iTunes library?

A. Allegro Media Server will not present new music added to the iTunes library until you request it. To import new music from the iTunes library:

- Windows users: click the **Music** button in the configuration dialog box.
- Mac users: with Allegro Media Server as the active application, click **Import iTunes Library** on the **File** menu (see the figure below).



If Allegro Media Server still does not detect your music files, delete the **Allegro Media Library.xml** file on your computer. The next time you start your computer, this XML file regenerates automatically, with a list of the music files in your iTunes library. For Windows 7 and Mac computers, this file resides at the following locations. For other Windows operating systems, use your operating system's search function to find the file.

- Windows 7: Users/<username>/AppData/Roaming/Allegro/Allegro Media Library.xml
- Macs: Macintosh HD/Users/<username>/Library/Application Support/Allegro/Allegro Media Library.xml

**Q. What music formats are supported?**

A. The Allegro Media Server displays and serves songs in most of the formats that iTunes supports, including AAC, MP3, WAV, and AIFF. Not all media players support all formats, so some songs may not be playable on some players. If you use iTunes to create the music library on your personal computer by importing music from CDs, use MP3 format to use your music library with the widest number of media players.

**Q. Will Allegro Media Server play songs from the Apple Music Store?**

A. The Allegro Media Server plays songs from the Apple Music Store. Songs from the Apple Music Store are in AAC-encoded format. The Allegro Media Server plays these files in their native format, without requiring them to be converted to another format. If your digital media player does not support AAC-encoded files, however, convert the files to a supported format, such as MP3.

**Q. Will Allegro Media Server play files in Apple lossless format?**

A. No, Allegro Media Server does not play files in Apple lossless format because we are not aware of any media players that have Apple Lossless decoders. When we find one, we will add support to serve this format.

**Q. With which media players does Allegro Media Server work?**

A. Since Allegro Media Server fully complies with the UPnP v1.0 and UPnP AV DCP 1.0 specifications, it is compatible with UPnP media players or control points that also comply with these specifications, including devices compliant with DLNA 1.5. For a sample list of compatible players and renderers, see page 2.

**Q. What about other media players?**

A. As other media players are tested, we will update our compatibility table. Some media players do not use UPnP protocols. The Streamium MCi200/i250 models and the Slim Devices Squeezebox, for example, are not UPnP media players. While these products are software upgradeable and in theory could become UPnP devices, we are unaware of any plans by the manufacturers to add this capability.

In theory, any UPnP-compliant media player should work with the Allegro Media Server. However, some media players use UPnP AV protocols in a proprietary way, so they only work with the media server supplied with that media player. In addition, some UPnP-compliant media players require a Windows PC application to be running. While these products work in Windows-only and mixed environments, they are unsatisfactory in a Macintosh-only environment.

The Digital Living Network Alliance (DLNA) has defined a set of guidelines to promote digital media device interoperability. These guidelines include definitions on the use of UPnP AV protocols to ensure that devices work together. Allegro is a member of DLNA and supports these guidelines.

**Q. Does the Allegro Media Server provide iTunes streaming Internet radio support?**

A. No, Allegro Media Server does not currently support Internet radio. The formats used for streaming Internet radio don't necessarily match the formats for playing songs and playlists from a music library on a personal computer. Over time, we expect media servers and media players to evolve and support this capability.

## Q. Will Allegro Media Server work without iTunes?

A. The iTunes application does not need to be running for the Allegro Media Server to work. The Allegro Media Server application reads the iTunes music library file to find the music stored on your computer. While the iTunes application does not need to be running, it does need to be used on your computer, as the Allegro Media Server has no independent search capabilities to find music on your computer.

## Q. What if I have multiple iTunes users and libraries on my computer?

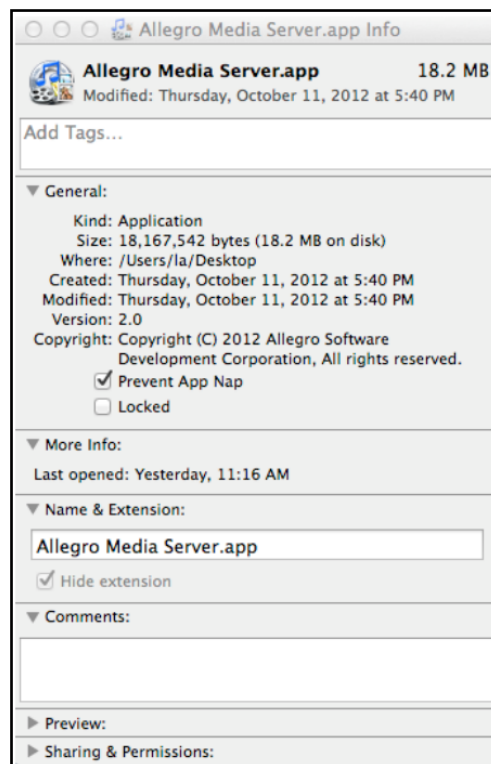
A. Each iTunes user on a computer can have his own copy of the Allegro Media Server. If you change the default server name in the configuration dialog for each server, your media player can tell the iTunes library to which it is connecting. To run multiple copies of Allegro Media Server at the same time, change the port number in the configuration dialog so each copy uses a separate port number.

## Q. When I run Allegro Media Server on Windows, I receive the error message “The application failed to initialize properly (0xc0000135). Click on OK to terminate the application.” What does this mean?

A. Allegro Media Server for Windows uses the .NET framework. This error message means the .NET framework is not installed. Search for **dotnetfx.exe** on the Web to find Microsoft support pages with information about how to install the .NET framework.

## Q. Since upgrading my Mac to Mavericks, Allegro Media Server is unstable and often will not work at all.

A. In the Mavericks OS X Update, Apple added a new feature called “App Nap” to conserve battery life. This feature puts applications to sleep that are hidden from view or behind other open windows. Apple provides a way to override this capability in the Get Info panel for the application. Open a new Finder window and go to your Applications folder. Select the AMS application, and then right-click and select **Get Info** or type Command-I. When the following panel appears, check the box next to **Prevent App Nap** to override the Mavericks App Nap functionality.



## **Q. How do I obtain support?**

A. If you have difficulty using the Allegro Media Server, please contact us at [ams@allegrosoft.com](mailto:ams@allegrosoft.com).

## **Q. How do I report questions or interoperability problems?**

A. The Allegro Media Server has been tested with a number of digital media players. However, we are interested in hearing about the problems you experience, as well as your successes and suggestions for new features.

Please email us at [ams@allegrosoft.com](mailto:ams@allegrosoft.com).

If you report a problem, please include the following information:

- Personal computer on which you are running iTunes.
- Operating system and version on which you are running iTunes.
- Version number of iTunes are you using.
- Media player make and model.
- Pathname of your iTunes music library file.
- Approximate number of many songs in your iTunes music library.
- Describe the problem in detail. Is it repeatable? Have you found a workaround?

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