


A We Got Served "How To" Project



Stream media from a PC, Mac
or home server to computers,
mobile devices, connected
TVs and media streamers.

Terry Walsh

Stream Music & Video With Plex Media Server

Windows Edition (2016)

Published by We Got Served Ltd.

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About the Author

Terry Walsh



Terry Walsh is the Owner and Editor of We Got Served (<http://www.wegoterved.com>), which he established in 2007 to share his experiences with emerging home server platforms.

Since then, the site has grown to cover a wide range of digital home, consumer electronics, and small business product categories but retains at its core the mission to help users make the most of technology.

Terry graduated from the University of Durham, UK in 1995 with a Bachelor of Arts in English Language and Literature. Prior to starting WGS, Terry cut his teeth online in 1993 building and operating successful alternative music websites and communities for international artists.

Born and raised in Liverpool, England and now living in Waterloo, Canada with his wife and two sons, Terry has been awarded Microsoft's Most Valuable Professional Award each year since 2008 for his work on We Got Served.

Over the last four years, Terry has authored a wide range of Mac and Windows home server guides, including *Using OS X Yosemite Server at Home*, *Using OS X Mavericks Server at Home*, *Building a Home Server With Windows 8.1*, *Windows Home Server 2011 Step by Step*, *Using OS X Lion Server at Home*, *Using OS X Mountain Lion Server at Home*, *25 Essential Windows Home Server Projects* and *Building a Windows Home Theatre PC*. He has also edited a number of titles, including *Building a FreeNAS Home Server*, *Using Windows Home Server*, *25 Essential Windows Home Server Projects Volume 2* and *15 Essential Windows 8 Projects*.

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About We Got Served

We Got Served is a popular technology news and community site that was founded in February 2007. It is written, edited and moderated by a dedicated and knowledgeable team of technology enthusiasts around the world who are focused on bringing you the latest news, reviews, tutorials and support for the products you're using today and will be using tomorrow.

We created We Got Served as a place to learn about new technology, help readers make the most of the products and services they use, and most importantly to create a community where readers can learn, discuss and share their experience and knowledge with others in need of support. However you use the site, we hope you enjoy it.

Other Books by Terry Walsh

We Got Served publishes a wide range of guides for Microsoft Windows and Apple Mac OS X. Click the titles below to view online or visit <http://store.wegotsserved.com>.

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Revision History

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September 2016

Initial release

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Stream Music and Video With Plex Media Server

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Stream Music and Video With Plex Media Server

With your music, video and photo libraries growing rapidly, it can sometimes feel like you spend more time managing media than enjoying it! In this guide, we'll take a look at a fantastic media serving application that sits at the heart of my home network and many others too! Let me introduce you to Plex Media Server.

When it comes to native network media streaming in Windows, you may well have tried it, but you've probably had mixed results. Perhaps your device - a media receiver, smartphone, tablet or another computer - can see the PC, but you can't stream all of your media. Perhaps not all of your devices can see the PC in the first place. Even if your streaming device can access the PC, there's no guarantee that your media will be compatible.

While Windows *can* do a great job of streaming media, it's fair to say that a number of jigsaw pieces need to be in place for everything to work seamlessly. You need your network devices to recognize and be happy to play with each other and you need your media to be in a format that the streaming device supports.

It can lead to a *lot* of frustration.

The good news is that with the right software installed on your home server, not only can you create a fabulous media experience on the TV itself, but as an added bonus, you'll be able to stream media to myriad devices – Macs, other PCs, mobile devices, games consoles, media streamers and even connected TVs and Blu-ray players. Better still, you'll be able to access your media library remotely when traveling and you'll even be able to open up access to the server to family and friends.

This guide aims to make life much more easy with the help of a **DLNA-compliant media server** called **Plex** (<http://www.plex.tv>) and its accompanying media center application, **Plex Media Player**. DLNA (http://en.wikipedia.org/wiki/Digital_Living_Network_Alliance) or to give it its full name, the **Digital Living Network Alliance** is a consortium of companies who are collaborating on networking standards and certification to make it easier for devices to share media - principally by ensuring the devices they produce operate to agreed standards.

While modern operating systems like Windows 10 are said to be “DLNA-compliant”, that’s not the same as being “DLNA-certified”, resulting in inconsistent results. It’s fair to say that configuring native streaming support in Windows (via Windows Media Player) isn’t the most fun and the results are pretty unspectacular!

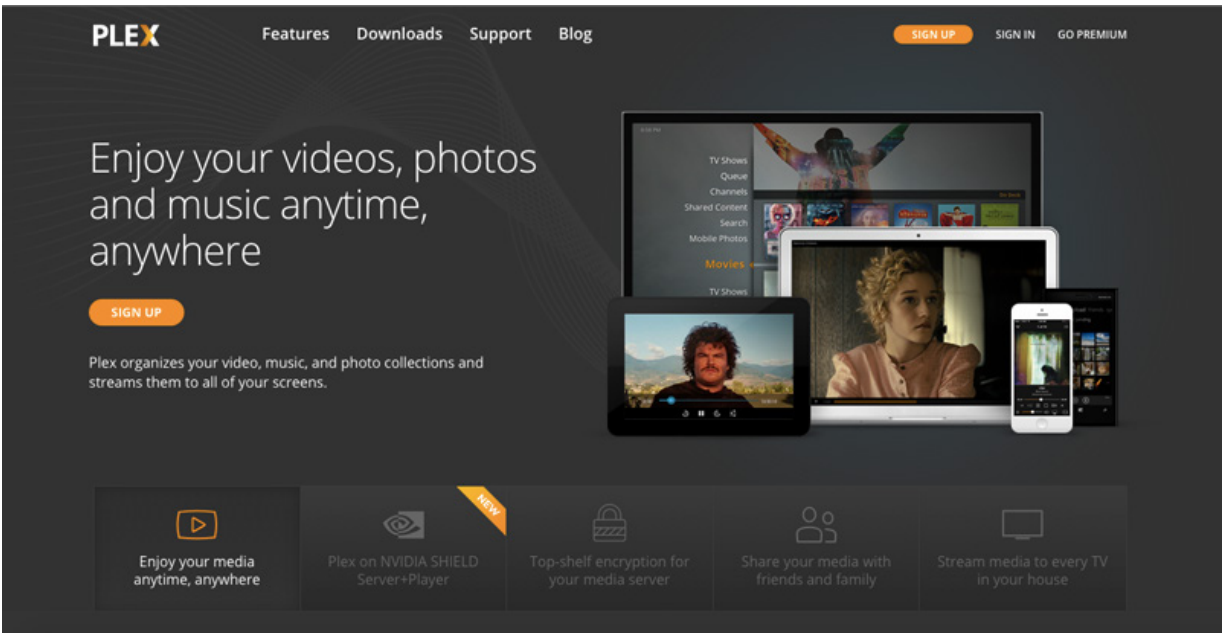
So, installing third-party media server software such as Plex gives Windows the boost needed to get your media streaming successfully to a host of network devices over the network. It does this in two ways - first, ensuring the appropriate networking standards are being used to transfer the media to a network device. Second, by *transcoding* (converting in real-time) any media that is in a media format not supported by that streaming device.

With everything being managed in the background by your home server/media PC, all you should see on the client device – a TV, obviously, or one of the other types of hardware mentioned earlier, is your media, ready, willing and able to be streamed when you want. That’s the theory, anyway! Let’s take a look at how it works.

Download and Install Plex Media Server for Windows

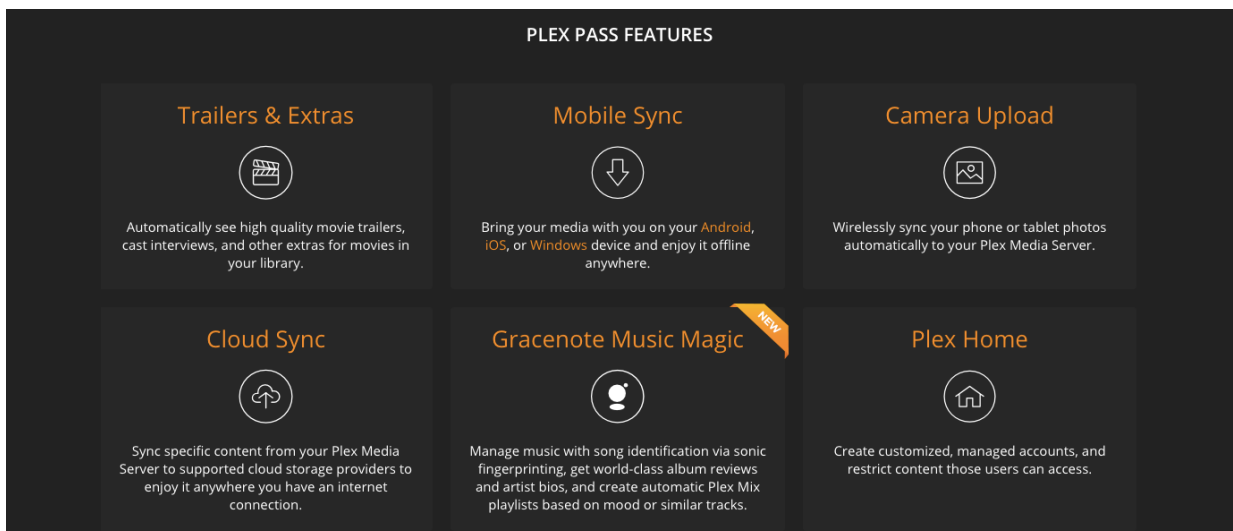
There are a variety of DLNA-supporting media servers on the market today, but I’ve been using the free **Plex Media Server** (<http://www.plex.tv>) for many. Its heritage is as a Mac application (and indeed it was spun out of the XBMC code base some years ago), but the company offered support for Windows in 2011 and has a growing range of client applications (called **Plex Media Player** on Windows and Mac) for most desktop and mobile OS platforms. Smart TVs, game consoles - yep, you’ll probably find a version of Plex available for those too!

Alongside media streaming, Plex also automatically grabs relevant metadata for your media (such as cover art, cast and crew information for movies) which can subsequently provide a very rich experience for media streaming, depending on how your client of choice supports display of that metadata.



The Plex website.

Plex is classed as a **freemium** application, meaning that its core features are free to use. A **Plex Pass** upgrade (currently \$4.99 a month, \$39.99 annually or a one-time \$149.99 lifetime pass) unlocks additional features, including user account management, movie trailers and extras, Gracenote music identification and cloud storage synchronization. Some of the features we'll cover in this chapter require Plex Pass, but it's an optional upgrade - the core feature set works brilliantly and offers amazing value.



Some of the extended features available with Plex Pass.

Plex Media Server System Requirements

While PMS can be run on mid-range PCs, to take advantage of advanced features like media transcoding (converting media files from one format to another in real time), I'd recommend you use a reasonably powerful PC.

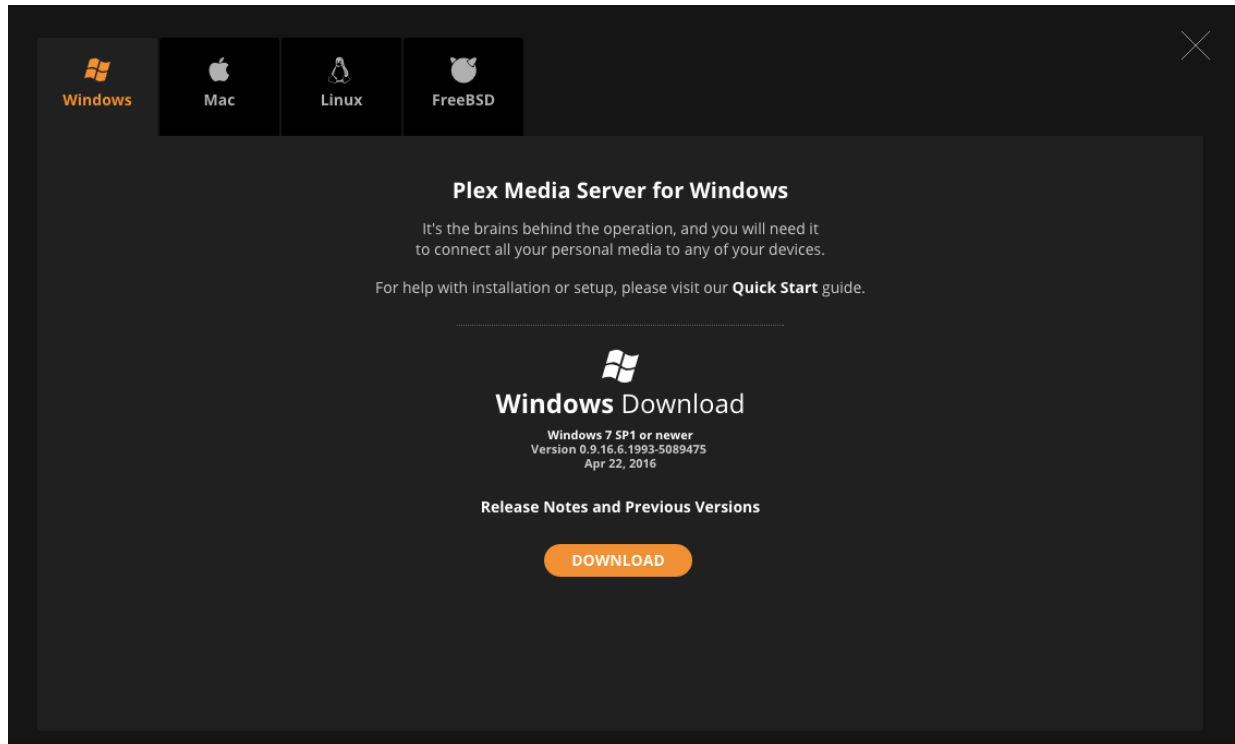
The developer's system recommendations are as follows:

- CPU: Intel Core i3 (or equivalent) or faster
- RAM: 2 GB or greater

For media transcoding, the more powerful your processor, the greater number of simultaneous video streams you'll be able to serve to client devices. Stay tuned for a more in depth guide to transcoding later in the guide. Now, let's get the software installed!

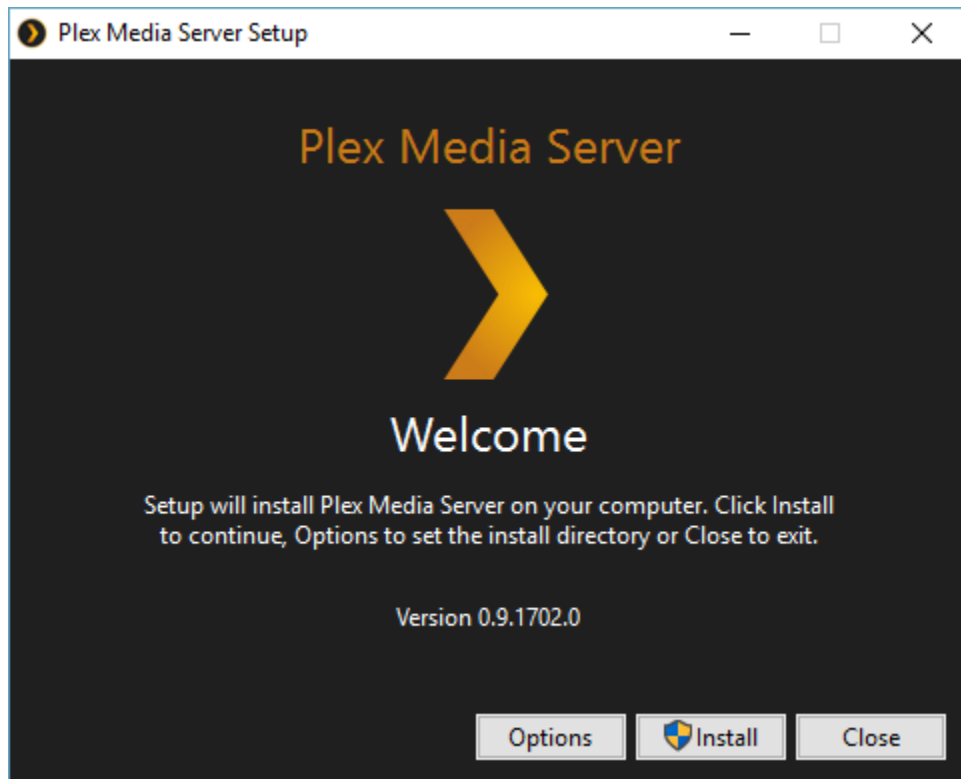
Installing Plex Media Server

Our first task is to get the Plex Media Server software installed and configured. Head over to the Plex website (<http://www.plex.tv>) and download **Plex Media Server for Windows**.



The Plex Media Server download page.

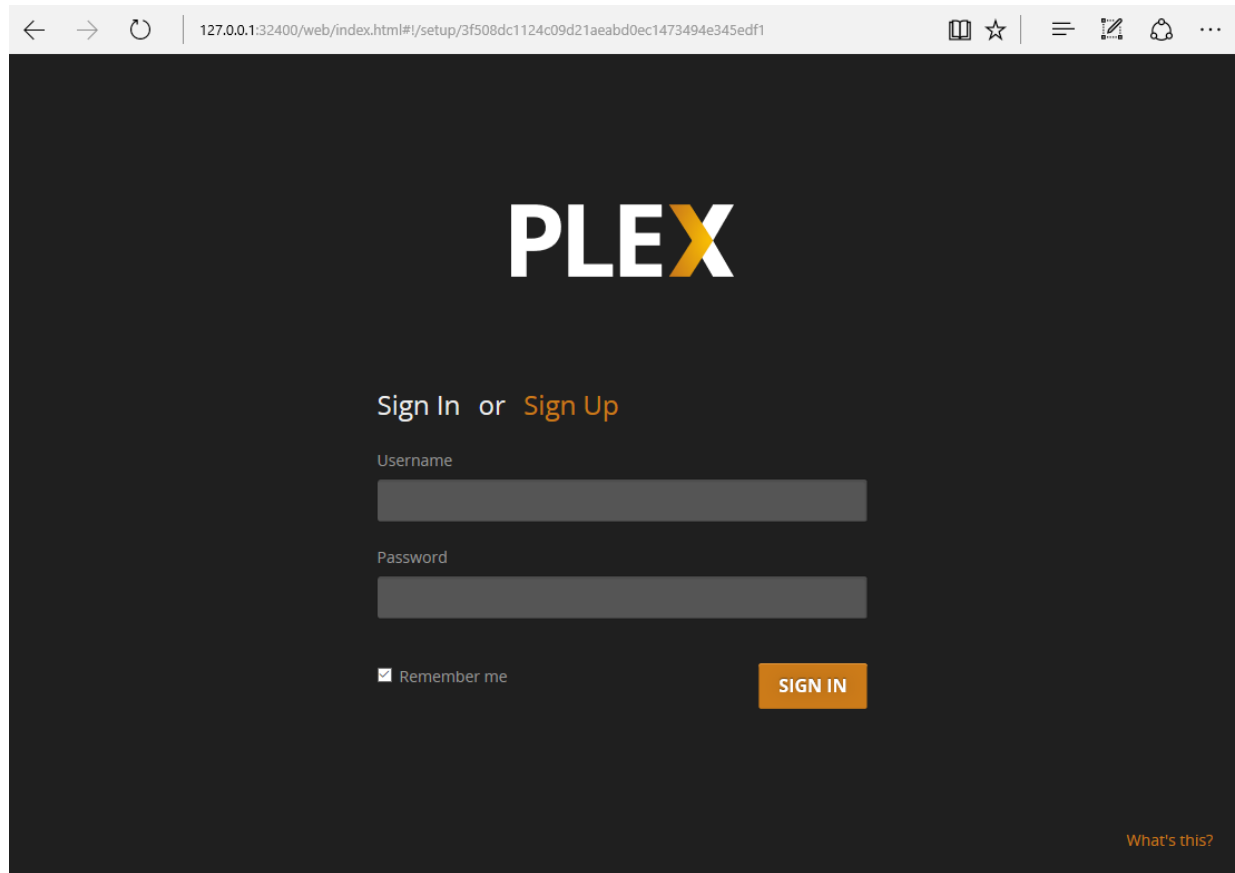
Install Plex Media Server for Windows in the usual way - you can accept the default options, unless you wish to change the default installation location.



Installing Plex Media Server on Windows 10.

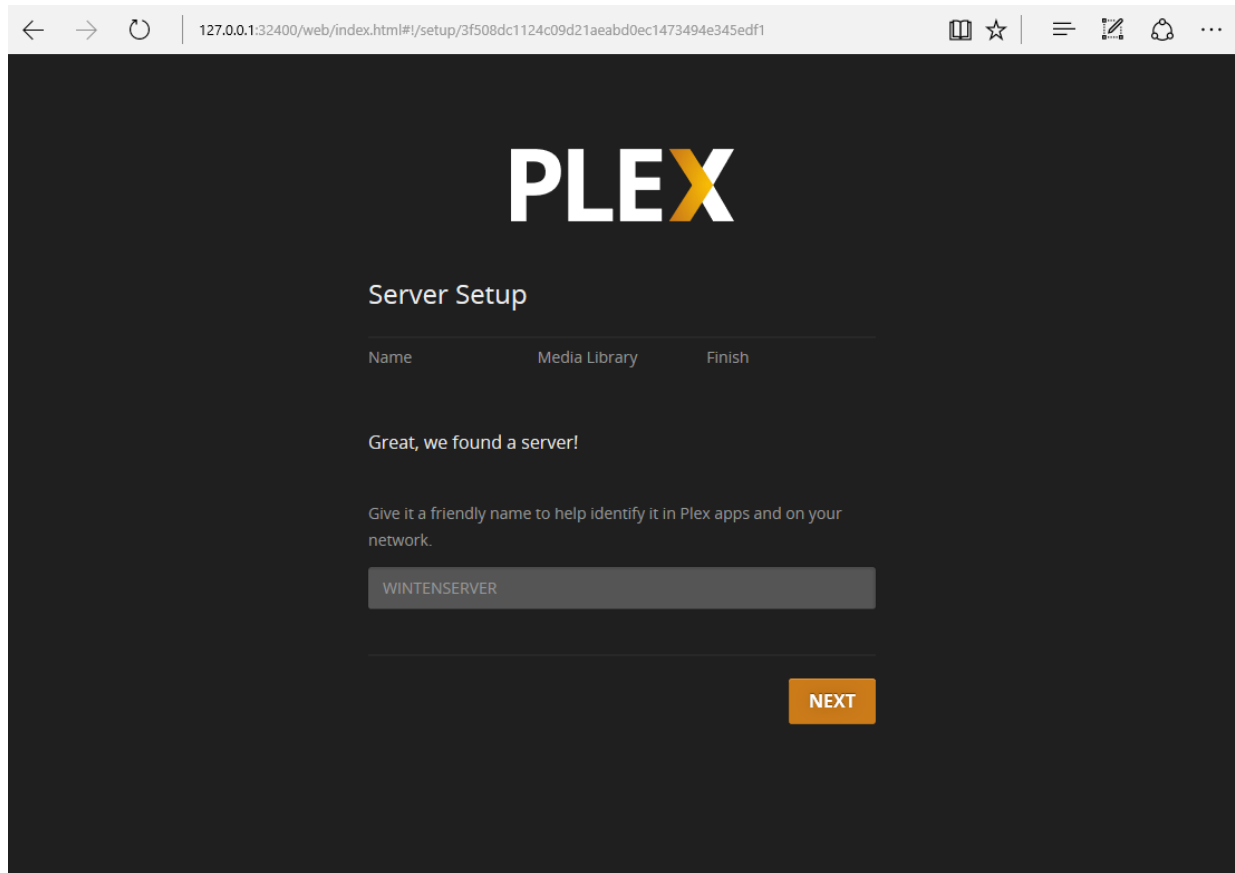
Once installed, hit the Launch button and Plex Media Server opens up a web browser window. You may well see a Windows Firewall dialog asking for connection permissions. Be sure to grant those permissions!

Accept the Terms of Service and you'll be asked to set up a Plex account. Sign Up, if you do not have an existing account, or Sign In to your Plex account to proceed.



You'll need to register an account to use Plex Media Server.

Once you've created an account and have logged in, Plex will open a brief setup wizard.



Setting up Plex Media Server.

To get started, we need to complete a few details. Firstly, create a name for your computer in Plex Media Server, so it can be distinguished from other computers that may also be running PMS. Your computer name will be pre-populated by default, but you can change the name to whatever you wish.

Configuring Plex Media Libraries and Metadata Sources

The second setup screen is called **Media Library** – it's here that we tell Plex where we've stored (or are planning to store) our media. Media is organized into distinct libraries, depending on the type of content held. Default options are **Movies**, **Music**, **Photos**, **Home Videos** and **TV Shows** – but you can name your libraries however you wish.