Antipodes Music Server User Guide

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About This User Guide

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This User Guide refers to the following Antipodes digital audio products:

- DX Generation 3
- CX+EX Solution
- CX
- EX
- P1

This User Guide is current at the time of publication, but be aware that the software is regularly updated. You should regularly update your Antipodes software at the Antipodes GUI, and you can view or download the latest version of this User Guide at the Antipodes Audio web site at any time. If you need further assistance you should email Antipodes Support - they are there to help you whenever you get stuck with anything.

Note that there are three types of software that you will use:

1. **The Antipodes GUI.** This User Guide contains complete step-by-step instructions for how to use the Antipodes GUI to setup and manage your music server.
2. **File Sharing.** Antipodes Audio music servers are SMB compliant meaning you can manage music files on your music server using a computer or tablet attached to the same network. This avoids you needing to attach a keyboard, mouse or screen to the music server. Therefore it is very simple to copy, delete, rename, backup and re-tag your music files, and it is easy to download music direct to your music server, without needing to physically interact with the music server. It can all be done remotely from another computing device while your music server remains in your system. This User Guide explains how this works and provides examples. Because you will be using third-party applications, such as File Explorer on your Windows computer or Finder on your Mac computer, and these applications are subject to change and variations in setup, this User Guide can only provide examples to illustrate how to complete these tasks.
3. **Third-Party Applications.** Some music servers lock you into music player applications that are proprietary to the manufacturer of the music server. Antipodes Audio takes the opposite approach and focuses on fully integrating best of breed third-party music playback applications, and optimising the sound quality you can get from them. For this reason, this User Guide cannot provide you with complete and always up-to-date guides for each of these third-party applications. This User Guide covers getting started with each of the third-party applications. As well as contacting Antipodes Support, you can visit the web site of the application developer to access guides and get application support.

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1 Installation & Configuration

REAR PANEL CONNECTIONS

There are 5 types of connections that you may need to make to the rear panel of your Antipodes music server.

1. All units will require a mains power connection using an IEC cord. See Page 2 of this guide.
2. All units will require an Ethernet cable connection to your network. See Page 3 of this guide.
3. If you intend to play to a USB DAC then you will need to connect from a black USB Audio Port to your DAC. See Page 4 of this guide.
4. If you wish to connect a P1 or other optical drive, or you wish to connect a USB drive then you will need to connect these to a blue USB Port. See Page 5 of this guide.
5. If you have an Antipodes EX or DX you can play from analog outputs - RCA jacks on an EX or 1/8” jack on a DX. See Page 6 of this guide.
6. To add storage to your CX or EX you will need to insert one or two 2.5” 7mm SATA drives into the disk slots in the rear panel. See Page 7 of this guide.

POWERING ON & OFF

Turn power on at the rear panel and click the front power button once to start the music server. Click the front power button once to shutdown the music server.

When the DX is shutdown the front power button is unlit. While powering up, while powered up, and while powering down, the front panel button is lit with a blue light.

When the CX or EX is shutdown (but power is on at the rear panel) the front power button is lit amber. When powered up and ready for use the front power button is lit green. While booting up or shutting down, the front power button flashes.

Do not remove power at the rear of the server unless the server is shutdown. If the server does not shutdown using a single click, you can force a safe shutdown by pressing and holding the front button in until it shuts down.

CONFIGURATIONS

Antipodes music servers are designed to optimise sound quality in a high-end two channel audio system. This guide sets out the 4 main configurations you might decide to use your Antipodes music server in, plus a fifth configuration that allows you to also play music throughout your network.

1. Configuration 1. The most common configuration is to use your CX, DX or EX as both server and renderer and play using Direct USB to your USB DAC. See page 8 of this guide.
2. Configuration 2. Another common configuration is to use your CX, DX or EX as server and play using Direct Ethernet to a Roon Ready DAC, which works as both renderer and DAC. The same configuration is used when using a CX, DX or EX as server and play using Direct Ethernet to the Ethernet input of a DLNA/UPnP/OpenHome compliant DAC. In this configuration the Antipodes music server is acting only as a DLNA source and playback is controlled from the application provided with your DAC. See page 8 of this guide.
3. Configuration 3. Another common configuration is to use a separate renderer between the server and DAC. For example, the CX+EX solution dedicates the CX to server and the EX to renderer. The CX plays to the EX using Direct Ethernet and the EX plays to your DAC using Direct USB. See page 9 of this guide.
4. Configuration 4. At the same time as using any of the above three configurations, you can use a CX, DX or EX as server and play over your network to one or many DLNA/UPnP/OpenHome compliant DACs/Players on your network, or to one or many Roon Ready players on your network. You can even set the CX, DX or EX to be a PLEX server or SONOS server to act as a source for PLEX or SONOS Players. See page 10 of this guide.

Rear Panel - Mains Power Connections

All current model Antipodes music servers have internal linear power supplies. The mains power inlets are shown below.

DX Generation 3

The DX Gen3 power switch and IEC inlet are separate. The fuse-holder (one 1A fuse) is integrated into the IEC inlet. Units are set for 110-120VAC operation or 220-240VAC operation at the factory, but can be switched easily by a qualified technician by moving two internal connections.

CX & EX

The CX and EX use integrated power inlets, combining the fuse-holder (two 1A fuses, one for Phase and one for Neutral), power switch and IEC inlet.

The power setting can be changed by the user between 115V (110-120VAC) and 230V (220-240VAC) by removing the red fuse-holder, rotating it 180 degrees and re-inserting it. The current setting is shown through a small window.

We recommend that you leave the unit powered on via this rear power inlet even when the server has been shut down, as doing so will keep key power capacitors charged, allowng the server to quickly reach its optimum audio quality performance. Powering the unit off at the rear may mean a period of up to four days warm-up to reach peak audio performance again.

Rear Panel - Network Connections

All current model Antipodes music servers have two Ethernet network ports.

The music server must be connected by an Ethernet cable to your network, to enable remote control, server setup, software updates, access to streaming services and access to meta data services. This connection can use either of the two network ports, and you will only need to connect to one of the ports if you are using just a DX, CX or EX to play via USB to your DAC,

The other network port can be used to connect to another device such as a renderer or Ethernet DAC, allowing what we call a Direct Ethernet connection. This is beneficial if you wish to play from your Antipodes music server to an Ethernet input on your DAC, or if you wish to play to a renderer device such as an Antipodes EX.

For example:

- If you wish to use an Antipodes music server to play to a Roon Ready DAC, or if you wish to use a DLNA streaming DAC to play from an Antipodes music server, you would connect the Antipodes music server to your network via one of the network ports, and use the second port to connect from the Antipodes music server to your DAC. In this arrangement, the DAC would get its network connection through the Antipodes music server, and the Antipodes would provide a low-noise dedicated link to the DAC to ensure optimum audio quality.
- If you have the CX+EX solution you would connect the CX to your network via one of the network ports, and use the second port to connect from the CX to the EX In this arrangement, the EX would get its network connection through the CX, and the CX would provide a low-noise dedicated link to the EX to ensure optimum audio quality.

You can alternatively connect the units independently to your network, in which case you only use one of the network ports on the Antipodes music server. Communications between the devices will suffer more noise interference than using a Direct Ethernet connection as described above.

Rear Panel - USB Audio Connections

All current model Antipodes music servers have two black USB ports, one above the other.

The top port is labelled ‘5v On’ and the bottom port is labelled ‘5v Off’. The only difference between the ports is that the 5v connection that is part of the USB standard is powered on the top port and not powered on the bottom port. Note also that the 5v feed also has a communications layer on it.

The vast majority of USB DAC inputs require the 5v power, and/or the communications link carried on the 5v line, to be present, so in most cases you would connect from the top black port to your DAC when playing to the USB input on your DAC.

Some DACs can operate without the 5v power, This has nothing to do with whether your DAC has its own power supply. It is determined only by the USB input module used in your DAC. For these DACs you can connect from the bottom black port.

One downside to needing the 5v power to be present is that the high frequency communications layer may interfere with the USB data signal because of their close proximity within a USB cable. The amount of interference is diminished in well-designed cables and interference from the 5v power is immaterial with well-designed servers.

One way to address the issue is to use what is sometimes called a Dual USB Cable. A Dual USB cable is two USB cables, joined at the DAC end to fit intoi a single USB port in the DAC. Two separate USB ends go to the music server. One cable handles the digital audio signal and the other handles the 5v power and communications layer. In such a case, you connect the cable carrying the 5v to the top black port and the cable carrying the digital audio signal to the bottom black port.

Rear Panel - Other USB Connections

All current model Antipodes music servers also have blue USB ports for general duties.

There are two main potential uses for these ports.

1. You can connect a USB disk to a blue USB port and then mount it (explained in this guide) so that you can play files from the USB disk, or copy files between the server and the disk. There are two things to be aware of here,
    - Playing from an external USB disk will sound relatively poor compared to playing from internal storage or from storage connected via Ethernet. This is because USB disk controllers are typically electronically noisy and so this noise will pollute the server.
    - Copying music across your network will in many cases work better. If you happen to have music on a USB disk, we suggest you connect it to your PC or Mac and then copy the files to or from the server over your network.
2. If you have a P1, or intend to connect any other USB optical drive to your Antipodes music server, then the drive should be connected to one of the blue USB ports on the server.

Rear Panel - DX & EX Analog Outputs

The EX includes stereo analog output on left and right RCA jacks. The DX includes stereo analog output on 1/8” jack. If you intend to use these then you need to connect signal cables to your amplifier, or connect headphones to the 1/8” jack on the DX.

These connections are provided for convenience, and do not imply that the EX and DX have high quality DACs in them. The sound quality is comparable to a mid-range CD Player and a high end DAC will dramatically improve the sound quality.

These connections were added at the request of several Antipodes dealers because they allow a customer to replace a CD Player with just an EX or CX, and then upgrade with a quality DAC as funds permit. This path is simpler and provides better sound than starting with a good DAC and playing from a standard PC or Mac.

Rear Panel - Storage Disks

The CX and EX allow customers to add and upgrade their own internal storage.

Either one or two disks can be installed. Storage disks need to be 2.5” 7mm Sata disks, and provided they conform to this form factor, they can be either spinning hard drives or SSDs. SSDs will significantly improve sound quality. We recommend Samsung EVO SSDs for best compatibility. Other disks will work too but firmware quality varies, particularly with low-price SSD brands.

Disks are installed by sliding them into the disk slots on the rear panel of the CX or EX. Ensure you install the disk the correct side up and the connector side first (as shown below by the small arrow on the SSD).

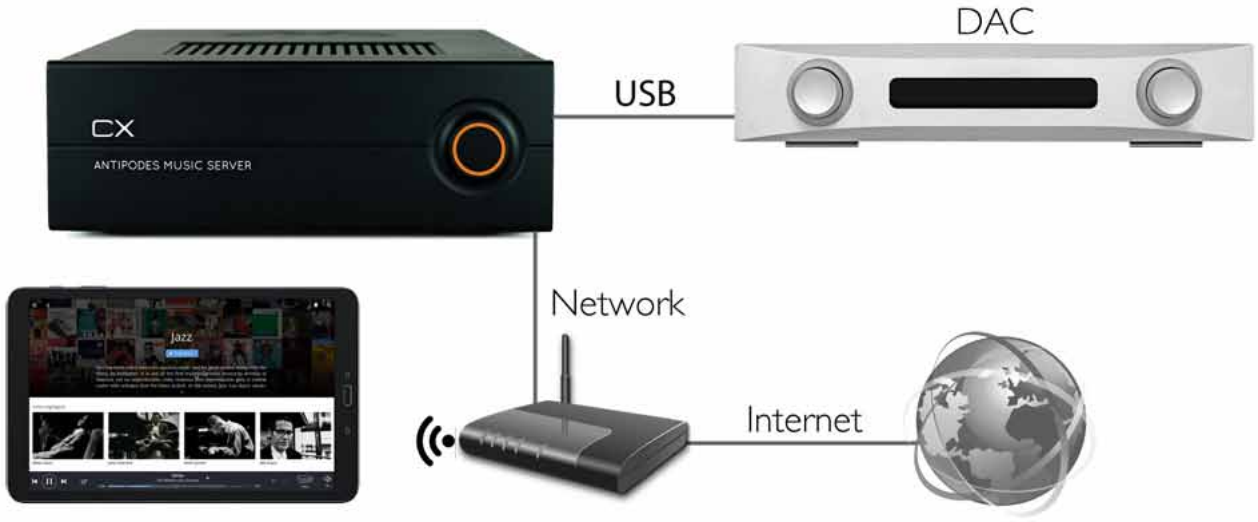
Customers then need to contact Antipodes Support to setup and optimise the storage, which can be done by remote session without your server needing to leave your system.

If you prefer, you can request your dealer to handle any storage installation or upgrade for you.

Configuration 1 - Direct To USB Input On DAC

Rear Panel Connections Required

1. Mains power
2. Ethernet cable connection from network port to the network
3. USB cable connection from a black USB port to the USB input on a DAC



Configuration 2 - Direct To Ethernet Input On DAC

Rear Panel Connections Required

1. Mains power
2. Ethernet cable connection from network port to the network
3. Ethernet cable connection from network port to the Ethernet input on a DAC

Important Note - the DAC only connects to your network when the Antipodes music server is booted up.

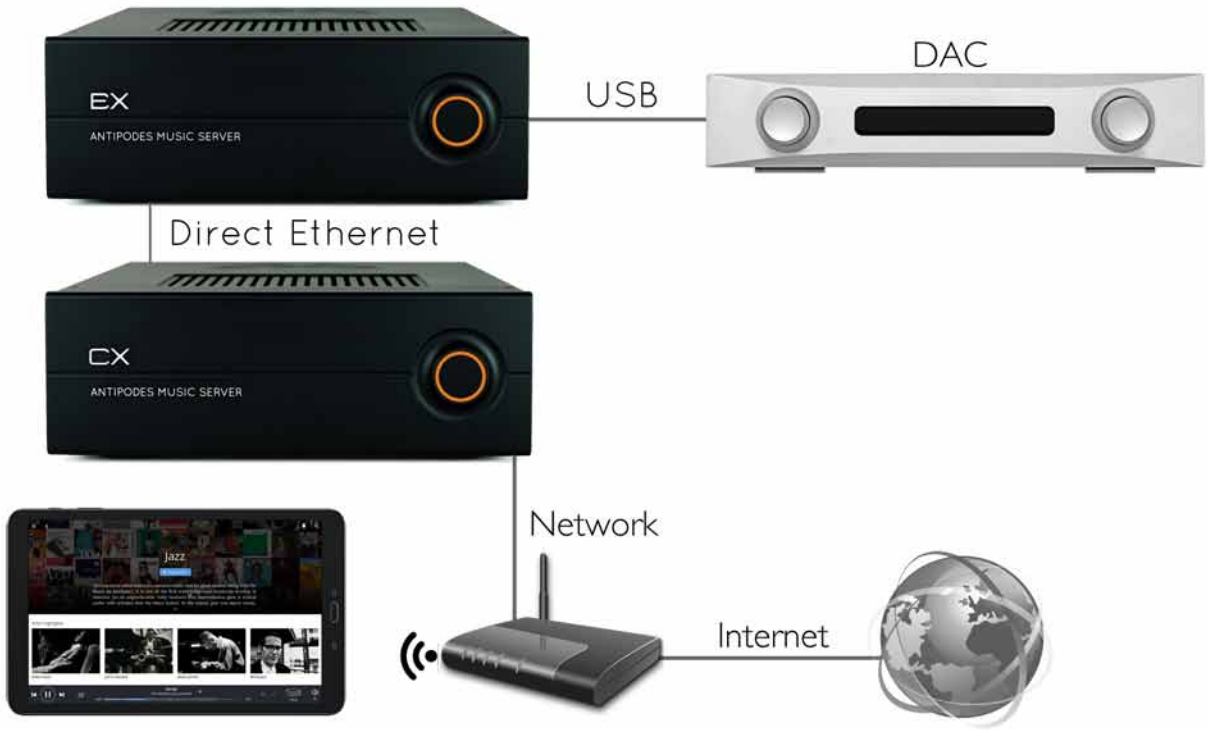
Configuration 3 - CX+EX Solution

Rear Panel Connections Required For Server (eg. CX)

1. Mains power
2. Ethernet cable connection from network port to the network
3. Ethernet cable connection from network port to a network port on the renderer (eg. EX)

Rear Panel Connections Required For Renderer (eg. EX)

1. Mains Power
2. Ethernet cable connection from server to a network port on the renderer
3. USB cable connection from a black USB port on the renderer to the USB input on a DAC.



Important Note

When booting up, Boot the CX first and only boot the EX after the CX has fully booted.

When shutting down, shut the EX down first and only shut down the CX after the EX has shut down.

Configuration 4 - Additional Features

Network Streaming

Rear Panel Connections Required

1. Mains power
2. Ethernet cable connection from network port to the network

Streaming Over The Internet & Playing From Networked Storage (eg. NAS)

Rear Panel Connections Required

1. Mains power
2. Ethernet cable connection from network port to the network
3. Connection to DAC (as required)

2 Opening The Antipodes GUI

You never need to connect a mouse, keyboard or screen to an Antipodes music server. To setup an Antipodes music server, make the connections described in the previous section, then turn your Antipodes on and wait 2 minutes.

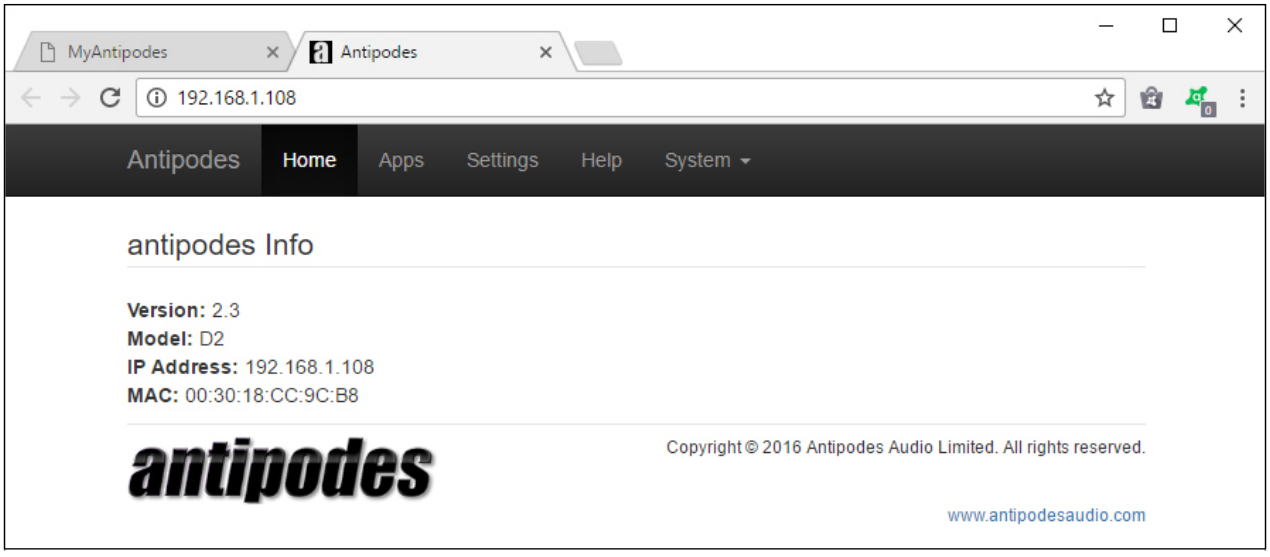
Open a browser (eg. IE, Chrome, Firefox Safari etc) on a computing device (eg. desktop, laptop, tablet or smartphone) and browse to this address:

myantipodes.com

Click on the 'Manage' button to open the Antipodes GUI for that music server.

The GUI is intuitive and you can just look around and try things.

The next sections show you some basics for getting started with playing music. If you cannot open the GUI for any reason or are confused about how to accomplish something in the GUI, please contact Antipodes Support for assistance first.



3 Playback Solutions Overview

Playback solutions typically require two applications:

- a server application for managing your files and for selecting what plays; and
- a renderer application that turns the file into a music signal and sends it to your DAC.

With Antipodes music servers you can choose to run both the server app and the renderer app on the same device, for a simple and complete solution.

Or you can run them on separate devices. For example the server app might run on one Antipodes and the renderer app might run on another Antipodes.

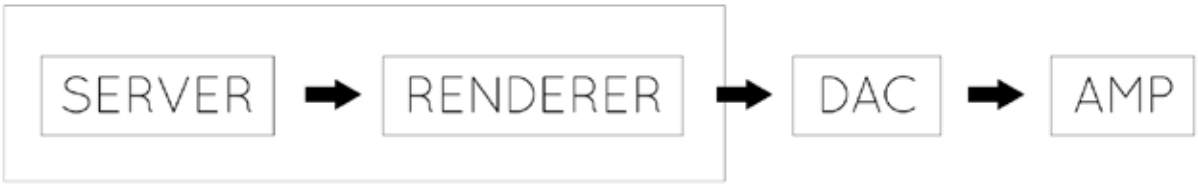
Or you might do both:

- run the server application on one Antipodes;
- run the renderer application on the same Antipodes to play direct to a DAC; and
- run the renderer application on other Antipodes devices on your network to play from the library on the first Antipodes.

Most of this guide refers to running both the server app and the renderer app on the same device, but the principles are the same for the other options.

With Antipodes music servers, you have the choice of:

- Three complete playback solutions (incorporating both server & renderer apps):
  - **Roon** - Roon Server & Roon Ready
  - **Squeezebox** - Squeezebox Server & Squeezelite
  - **MPD** - A special case as it is just a renderer app but it can play from the Antipodes library.
- Two separate renderer solutions.
  - The **HQPlayer NAA** solution enables your Antipodes to be a renderer to play from HQPlayer. HQPlayer (the server app) needs to be running on computer elsewhere on your network.
  - The **MPD** solution enables your Antipodes to be a renderer to play from a DLNA/UPnP server on your network. The server app could be on an Antipodes or on another device.
- A range of server solutions, including **DLNA/UPnP** and **Plex Media Server,** *plus* your Antipodes can be easily configured to be a music source for a **SONOS** system.



The most popular playback solutions on Antipodes music servers are Roon (for which you need to obtain a subscription), and free options Squeezebox and MPD.

Therefore the early parts of this guide cover these three most popular solutions.

The other solutions are covered later in the guide, and remember, you can use as many solutions at the same time as the number of renderer devices you have.

To start playing music using Roon, Squeezebox or MPD, there are three setup steps:

1. Setup the renderer app.
2. Setup remote control of the server app.
3. Get your music into the server app's library.

The next sections of this guide cover these three steps for the three popular playback solutions, to get you underway playing music with your Antipodes.

4 Setup A Renderer

INTRODUCTION

At the myantipodes.com screen, you will see the Antipodes devices attached to your network.

Most users use a single Antipodes for both server and renderer, and so it will be the only one shown in myantipodes.com. Click on 'Manage' to open the GUI for the Antipodes you will use as a renderer (the one that sends a digital audio signal to your DAC over USB, SPDIF or AES3, or the one that sends an Analog signal to your amplifier).

At the Antipodes GUI, select the menu item 'Settings'. You should now see a screen like the one shown below.

Note that all Antipodes have the same application suite available to them. In Section 8 of this guide, we cover how you can install/uninstall apps whenever you wish.

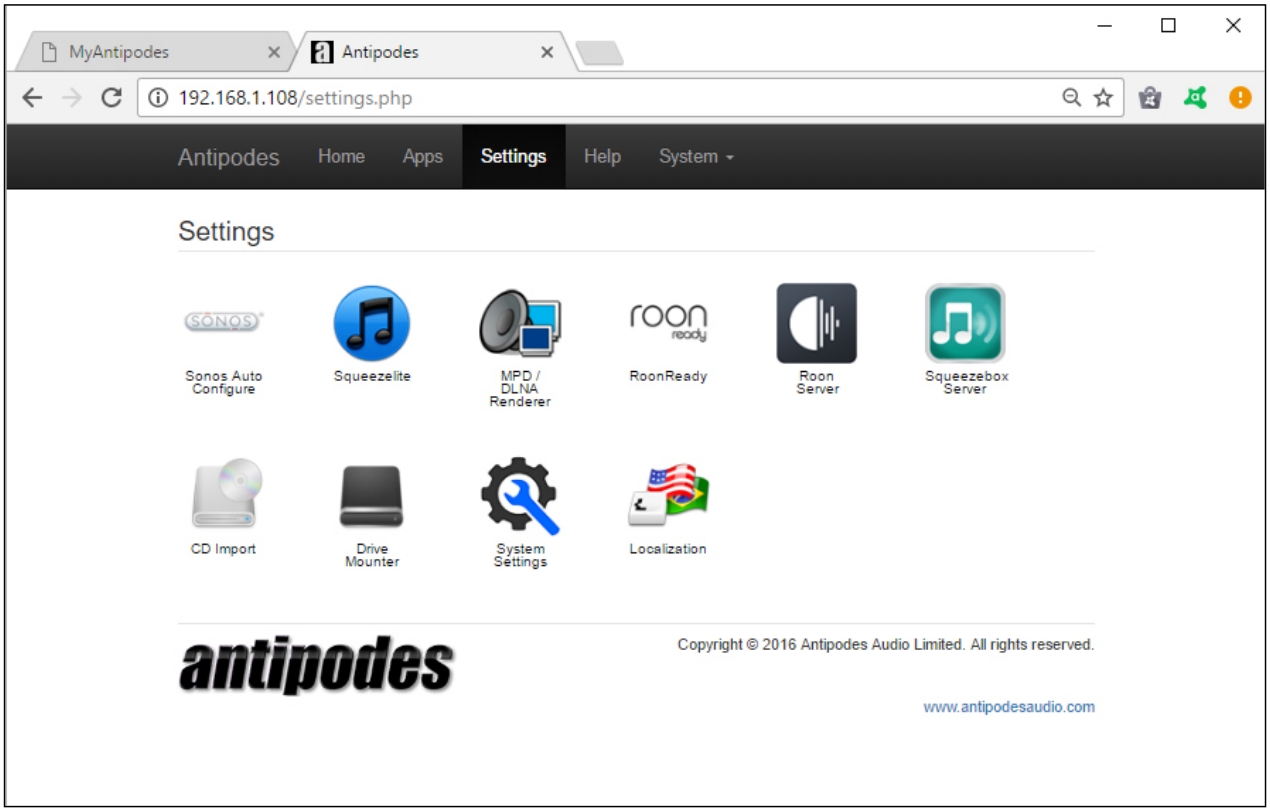
Some installed apps have user settings and these are the only ones shown on the 'Settings' screen.

At the 'Settings' screen you will see icons for the installed renderer apps. In the screen shot below, these are Squeezelite, MPD and Roon Ready.

To setup one of these renderer apps, you begin by clicking on the relevant icon, to open that application's settings.

Each renderer app settings screen is a little different, but there are two main settings:

- Regardless of what physical audio outputs are fitted to your Antipodes, the renderer needs to know whether to load the driver for Analog Output, SPDIF (& AES3) Output, or USB Output.
- The renderer also needs to know how to send DSD files to your DAC. For example, as PCM files, DoP, Native DSD etc.



4.1 Setup Roon Ready

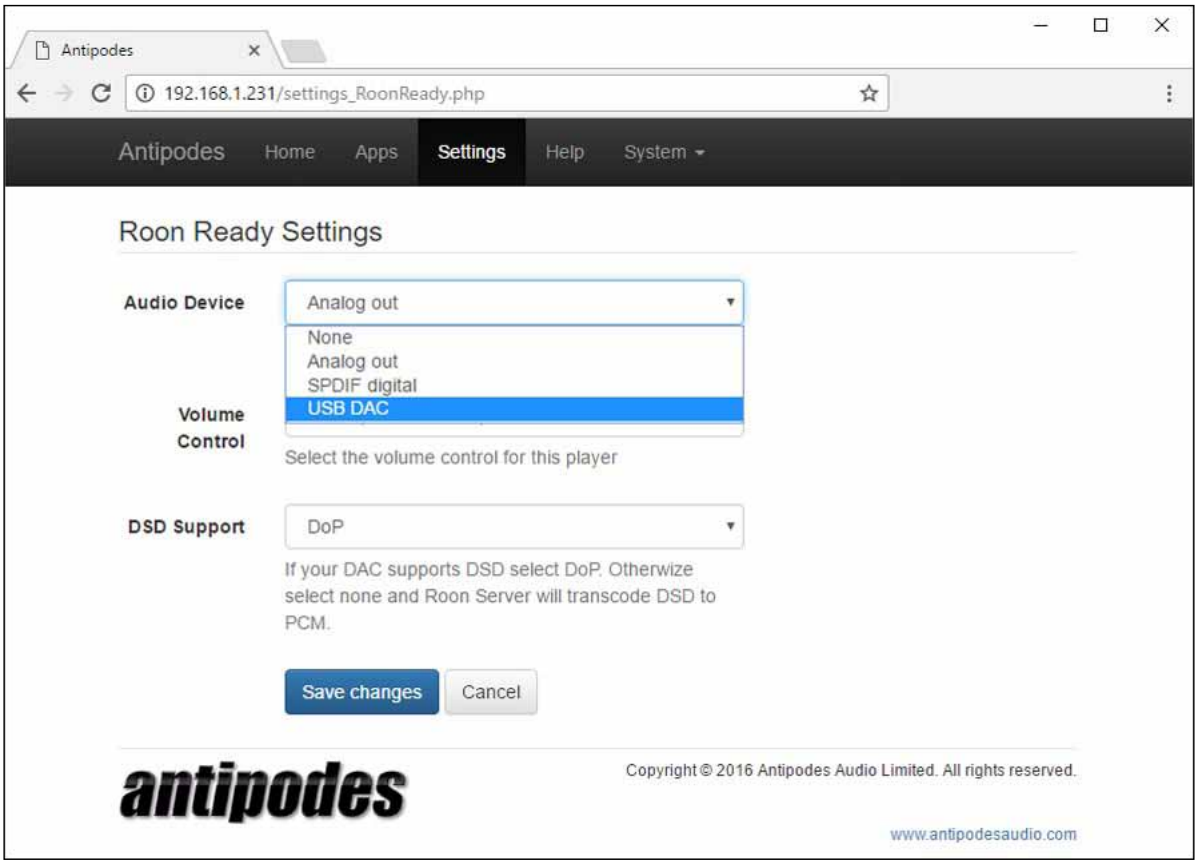
At the Antipodes GUI:

- Select the ‘Settings’ menu item
- Click on the ‘Roon Ready’ icon

This will open the screen shown below. Now:

- Select the correct output driver
- Select how you want to control volume (if you will use your preamplifier select ‘None’)
- Select how your DAC should receive DSD files.
- Click on ‘Save Changes’.

You can now proceed to Section 5 to setup remote control of the Roon Server application.



4.2 Setup Squeezelite

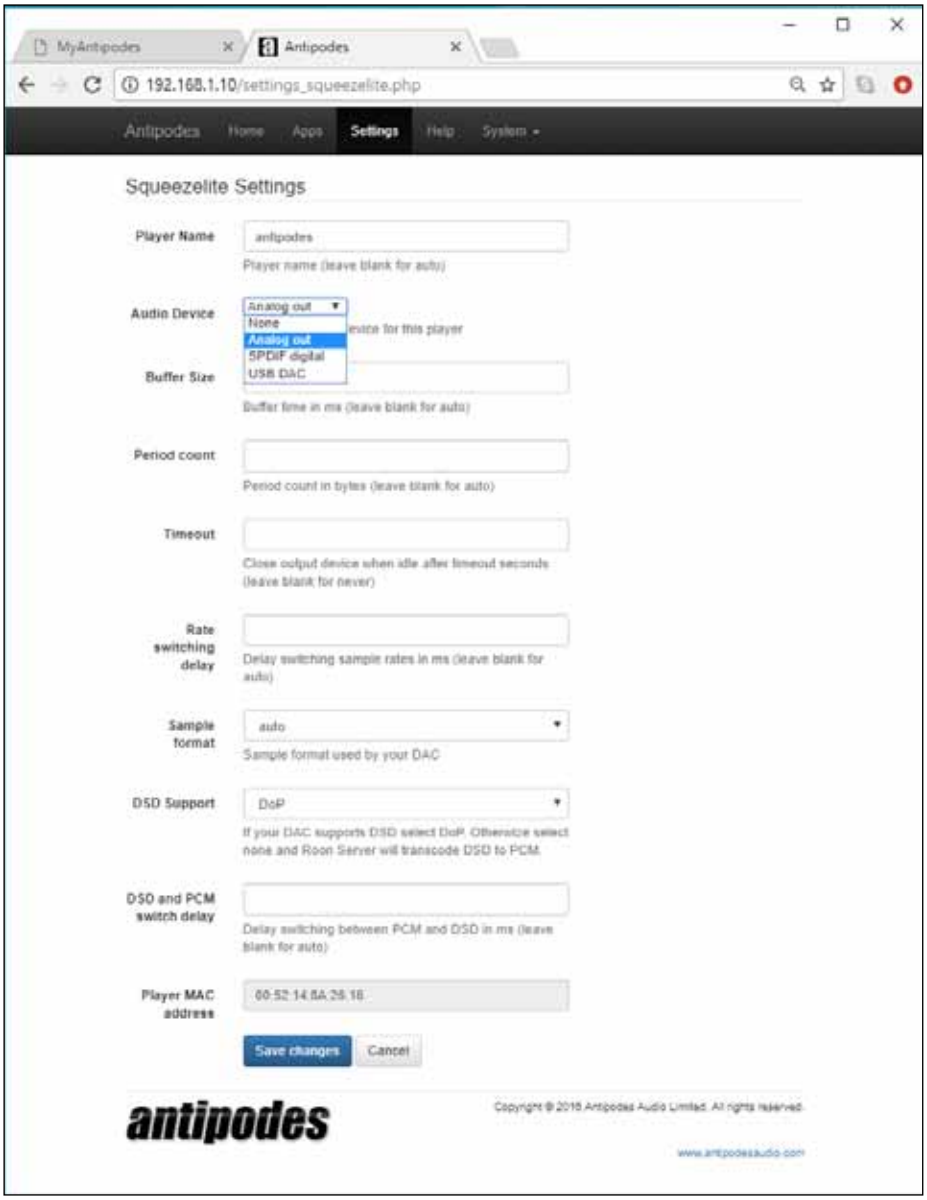
At the Antipodes GUI:

- Select the ‘Settings’ menu item
- Click on the ‘Squeezelite’ icon

This will open the screen shown below. Now:

- Select the correct output driver
- Select how your DAC likes to receive DSD files
- Leave the other settings at the default values
- Click on ‘Save Changes’.

You can now proceed to Section 5 to setup remote control of the Squeezebox Server application.



4.3 Setup MPD

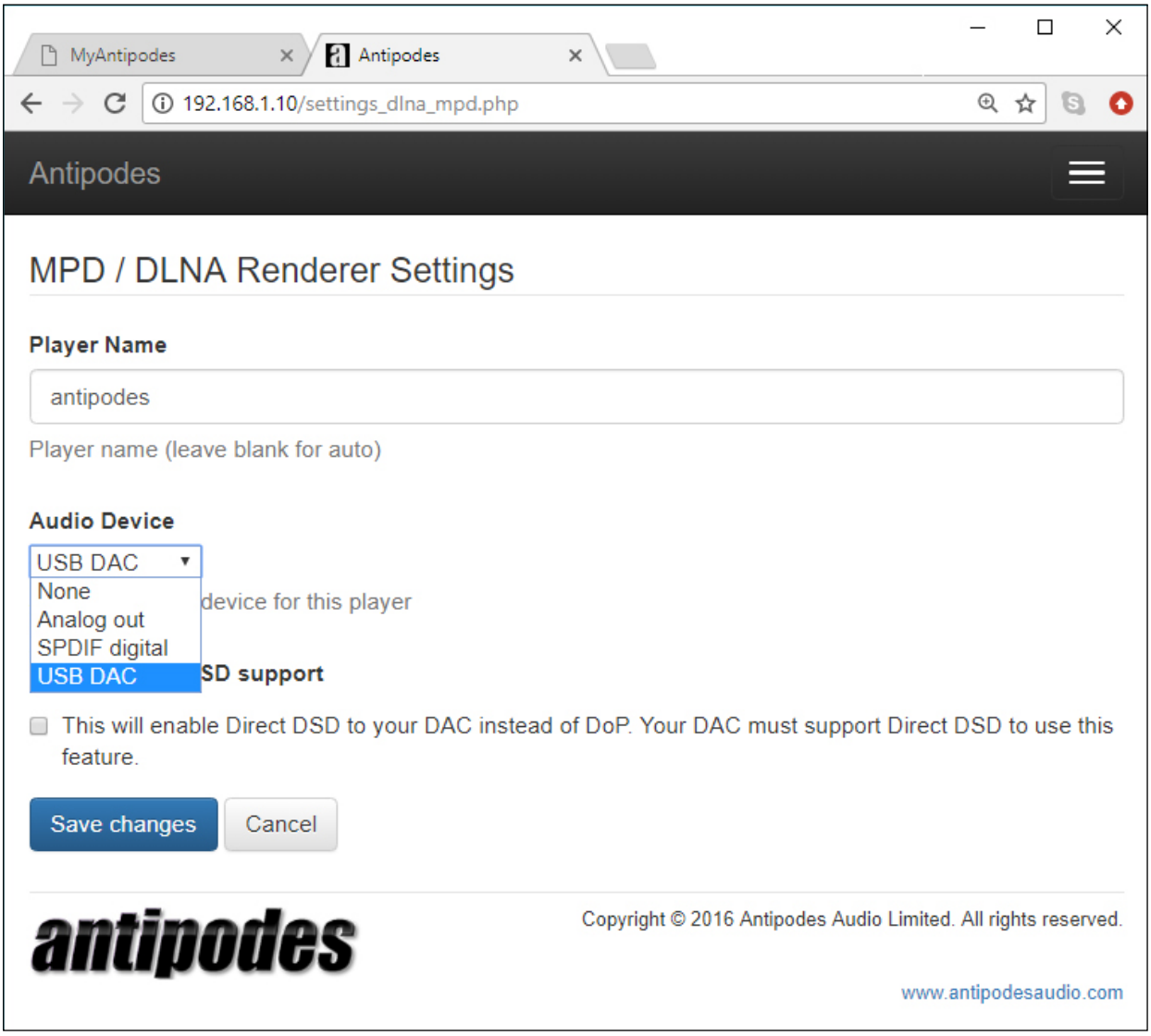
At the Antipodes GUI:

- Select the menu item ‘Settings’
- Click on the ‘MPD’ icon

This will open the screen shown below. Now:

- Select the correct output driver
- Select how your DAC should receive DSD files.
- Click on ‘Save Changes’.

You can now proceed to Section 5 to setup remote control of the MPD application.



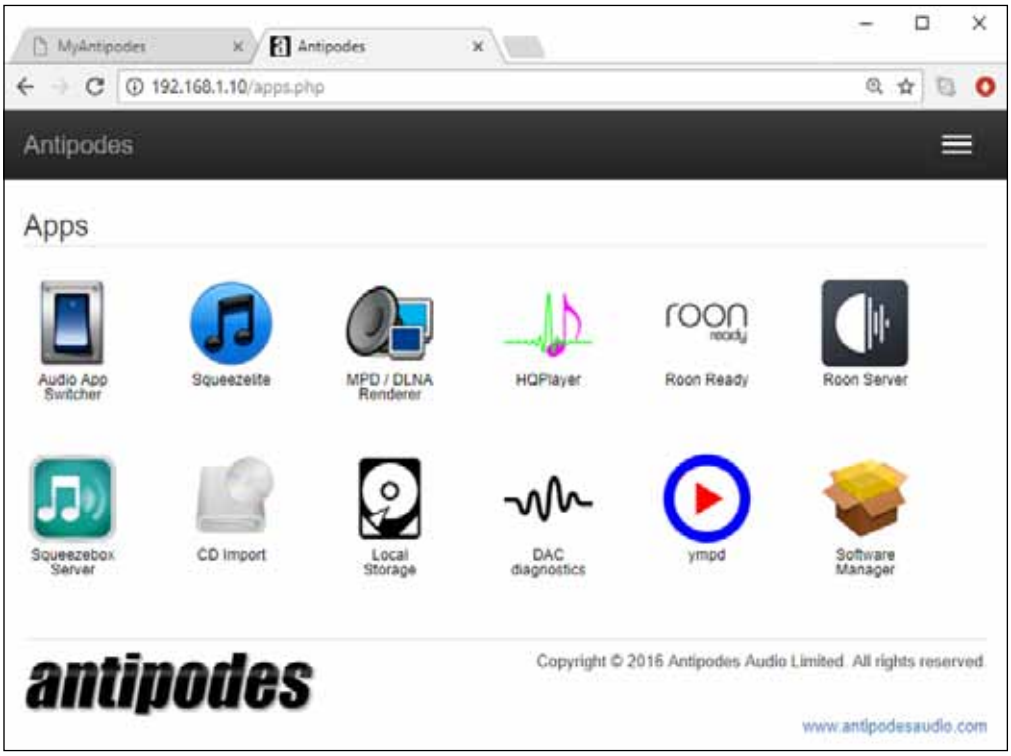
4.4 Switch Between Apps

You can setup several renderer applications at the same time. The last one you setup will be the ‘active’ application.

You can also easily switch between them.

At the Antipodes GUI:

- Select the menu item ‘Apps’
- Click on the ‘Audio App Switcher’ Icon.
- Click on any renderer app to make it ‘active’.



5 Setup Remote Control

INTRODUCTION

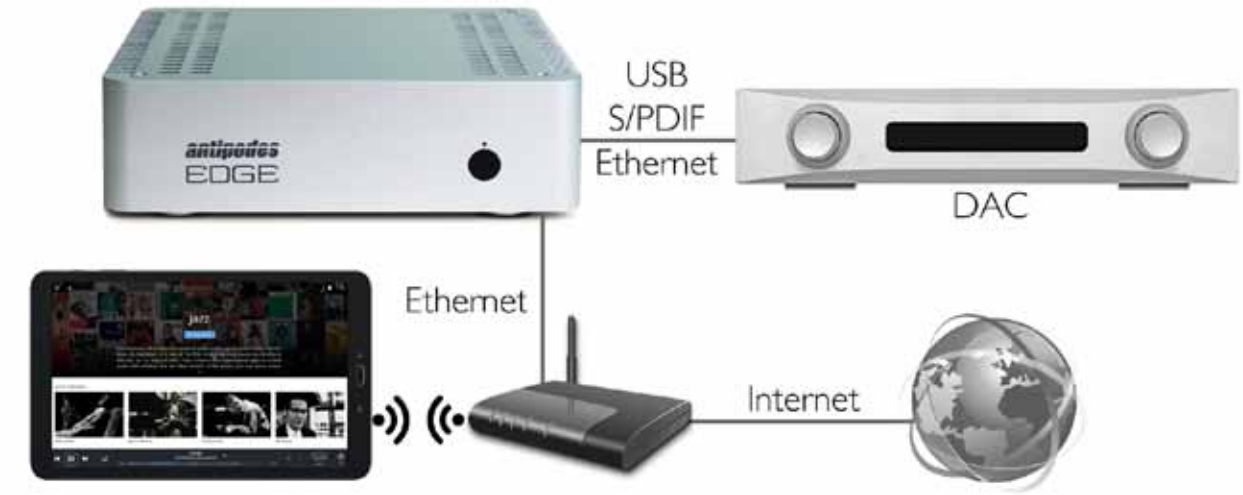
To control what your Antipodes plays, you need to setup remote control on a desktop, laptop, tablet or smartphone that is connected to the same network as the Antipodes.

The Antipodes and remote control device talk to each other over your network. The Antipodes displays your music files and streaming services on the remote device, and you use the remote device to tell the Antipodes what to play.

The remote control applications are simple and intuitive to setup and use.

The steps involved are:

- download the remote control application to your device
- complete the setup of the remote control application, and set it to control the Antipodes.
- use the remote control application to play music.



5.1 Setup Control Of Roon

LICENSING

Roon Server is already installed on your Antipodes. But to control Roon Server remotely you need to download and install Roon to a desktop, laptop, tablet or smartphone connected to the same network as the Antipodes.

You need a license from Roon Labs to run Roon Server on the Antipodes, but using Roon as a remote control on another device does not require a license. You can download Roon to multiple devices and use them all to control your Antipodes with one license.

If you are not sure whether you wish to meet the cost of a Roon license then you should try a Roon free trial first.

DESKTOP/LAPTOP

To control Roon Server on your Antipodes from your desktop or laptop, open a browser on the device and browse to 'roonlabs.com' and find the 'Download' page.

Select the download you need from the three options at the top of the list of options on the downloads page, to match the operating system on your desktop/laptop (see the screen shot below).

Once the download is complete, open it to run the installation process. Go to the next page in this guide for detailed help with installation.

TABLET/SMARTPHONE

To control Roon Server on your Antipodes from your tablet or smartphone, use your tablet or smartphone to search for 'Roon' at the App Store for your device. Download the Roon app and complete the installation steps. Go to the next page in this guide for detailed help with installation.

The Roon installation process is intuitive, but we have included some guidance here to assist you.

Your Antipodes needs to be connected to your network and powered on, and the Roon installation process will display devices that are running Roon on your network.

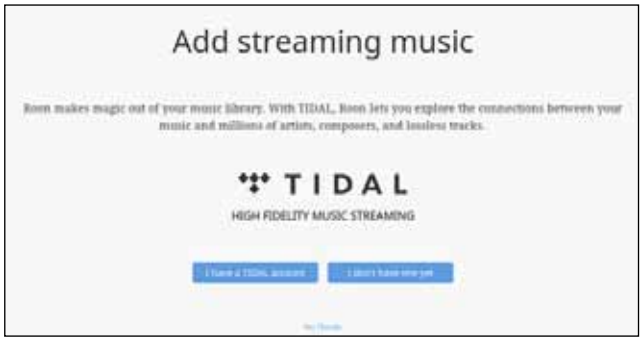
Click ‘Connect’ for your Antipodes server.

You will then see a login screen. You can enter your Roon license credentials here, or sign up for a free trial.

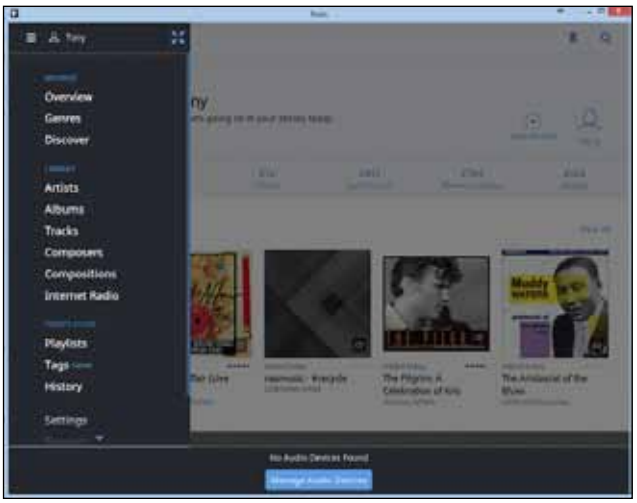
You will be asked for the location of your music files. You do not need to complete this step for files located on your Antipodes as they will be added to the Roon library automatically.

But you can use this screen to add files on a ‘network share’, such as a NAS, at this screen. This option can be set now or later via ‘Settings’ and you can click on ‘Next’ to skip this step.

You will be asked to add other services such as TIDAL streaming. You can add this later, but if you have a TIDAL account, enter your credentials at this screen. TIDAL streaming is integrated seamlessly with Roon for an excellent total experience, and is highly recommended.



When you have successfully logged into Roon you will be presented with a Roon application screen.



The next step is to enable the Antipodes as a Roon renderer.

Click on ‘Manage Audio Devices’ at the bottom of the screen. In the pop-up screen, scroll down to the Roon Ready section, and locate the Antipodes. Click on the ‘Enable’ button and type in a name for the player.

Depending on your setup you may need to select the ‘Audio Zone’ you wish to control.

Roon will automatically import music files on the Antipodes into the Roon library. If the Antipodes is new then it will only include the Demo Track.

You should now go to Section 6 of this guide to learn how to get music files onto your Antipodes and imported into the library of your Server applications.

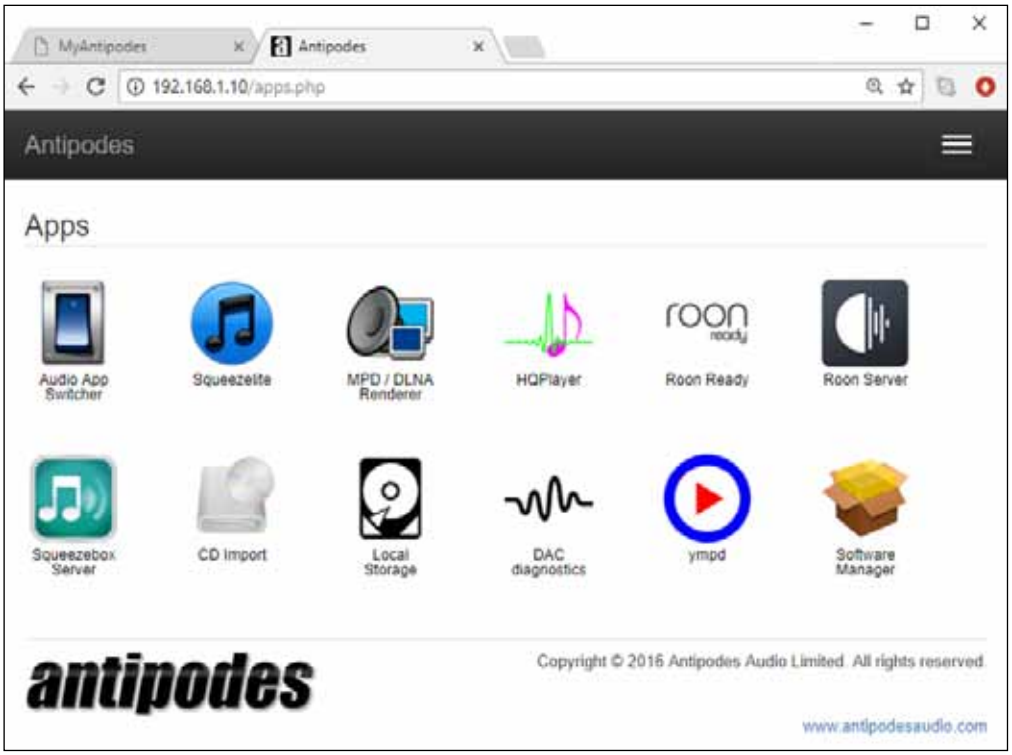
5.2 Setup Control Of SqueezeBox

Squeezebox Server is already installed on your Antipodes and is free to use. However the remote control applications for download to tablet and smartphone have a small charge. As with Roon, visit the relevant App Store for your tablet/smartphone and search on Squeezebox. We recommend iPeng for iPads and Orange Squeeze for Androids.

DESKTOP/LAPTOP

You can use your Desktop or Laptop computer to control what plays. To do this, open the Antipodes GUI and click on the 'Apps' menu item.

Click on the Squeezebox Server icon.



This will open the admin interface for Squeezebox Server in a new tab. This interface not only allows you to play music, but it also allows you to manage the setup of Squeezebox Server.

You get much better interfaces for playing music from Tablet and Smartphone Apps, but it is useful to get to know the Squeezebox admin interface available on Desktop and laptop, because of the large range of features included.

At the top right hand corner of the screen you will see the name you previously gave to the Squeezelite player, in this example 'Antipodes_USB'. If the name does not show there click the downward arrow and select it from the displayed list.

The pane at the left of the screen, headed 'Home' is where you select the source of the music you want to play. You can select from 'My Music', 'Radio' or 'My Apps'. The pane on the right hand side will display the music you have selected to play.

Here is a quick run through of the playback options.

My Music consists of music tracks stored on the Antipodes, on network-connected NAS drives, or on other shared devices in your home network. You have a wide range of selection choices available, from 'Artists' or 'Albums' to 'Playlists' that you have compiled and stored, and random mixes of tracks from your music library:

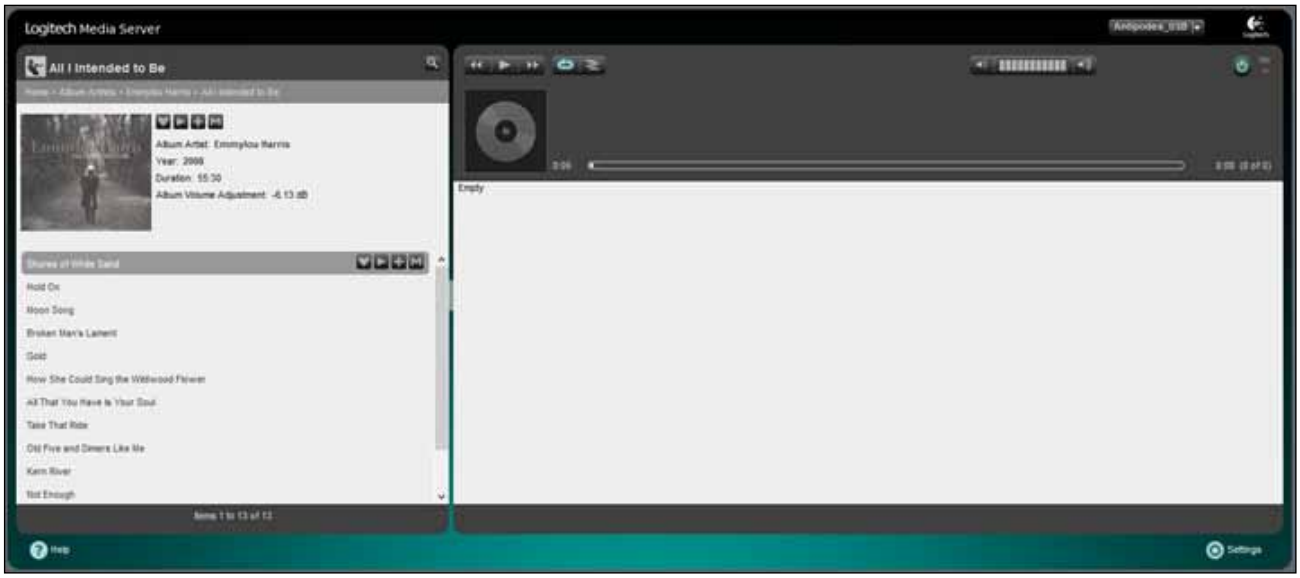
Radio gives you access to a wide range of streamed Internet radio stations from around the world

My Apps lists streaming services you have setup and are subscribed to, such as Tidal, Spotify, Pandora, Rhapsody, Qobuz, and Deezer.

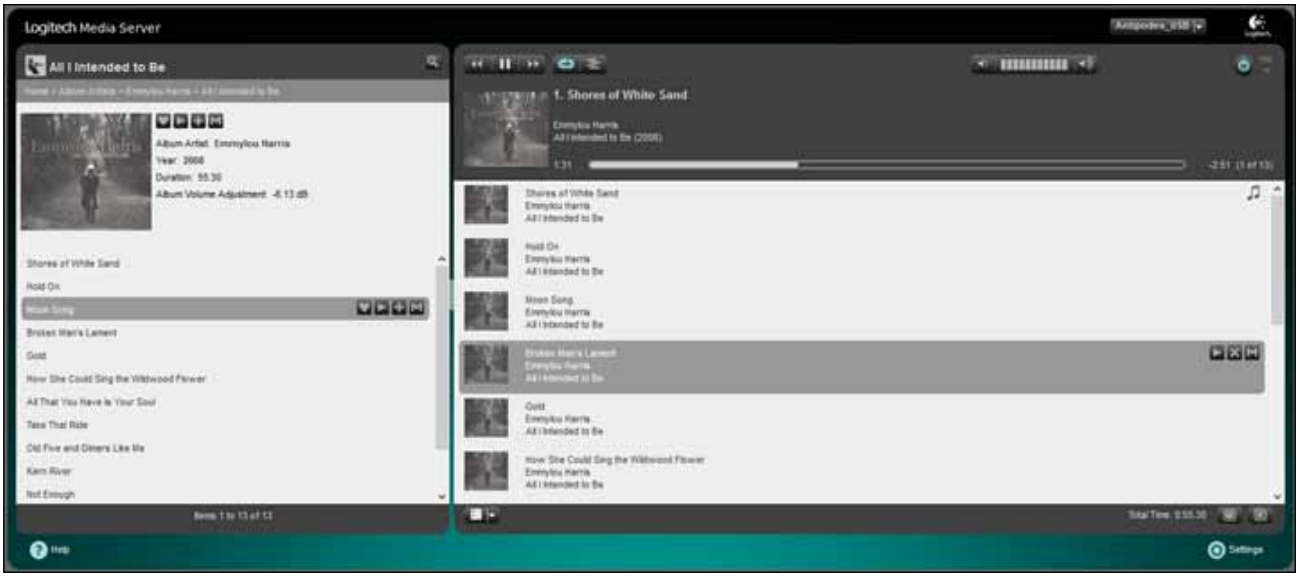
You need to have a 'mysqueezebox.com' login to register for some of these streaming services.

PLAYING MUSIC

To play music you make your selection from one of the options in the left hand pane:



You then click on the or the symbol to add the selection to a 'playlist' in the right hand pane:



The controls at the top of the 'playlist' pane allow you to play or pause the music.

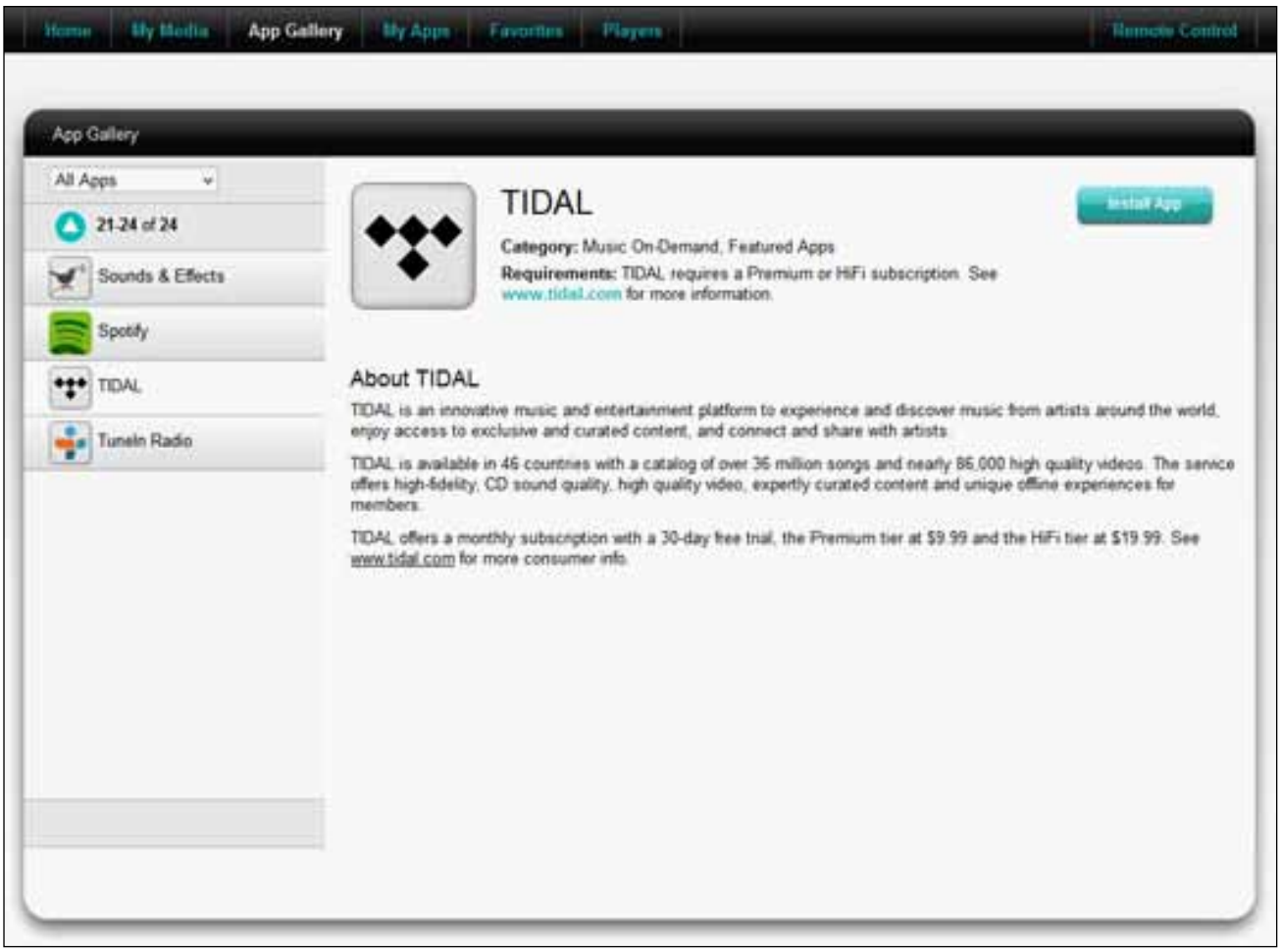
To clear the 'playlist' pane click the icon at the bottom right of the screen.

STREAMING SERVICES

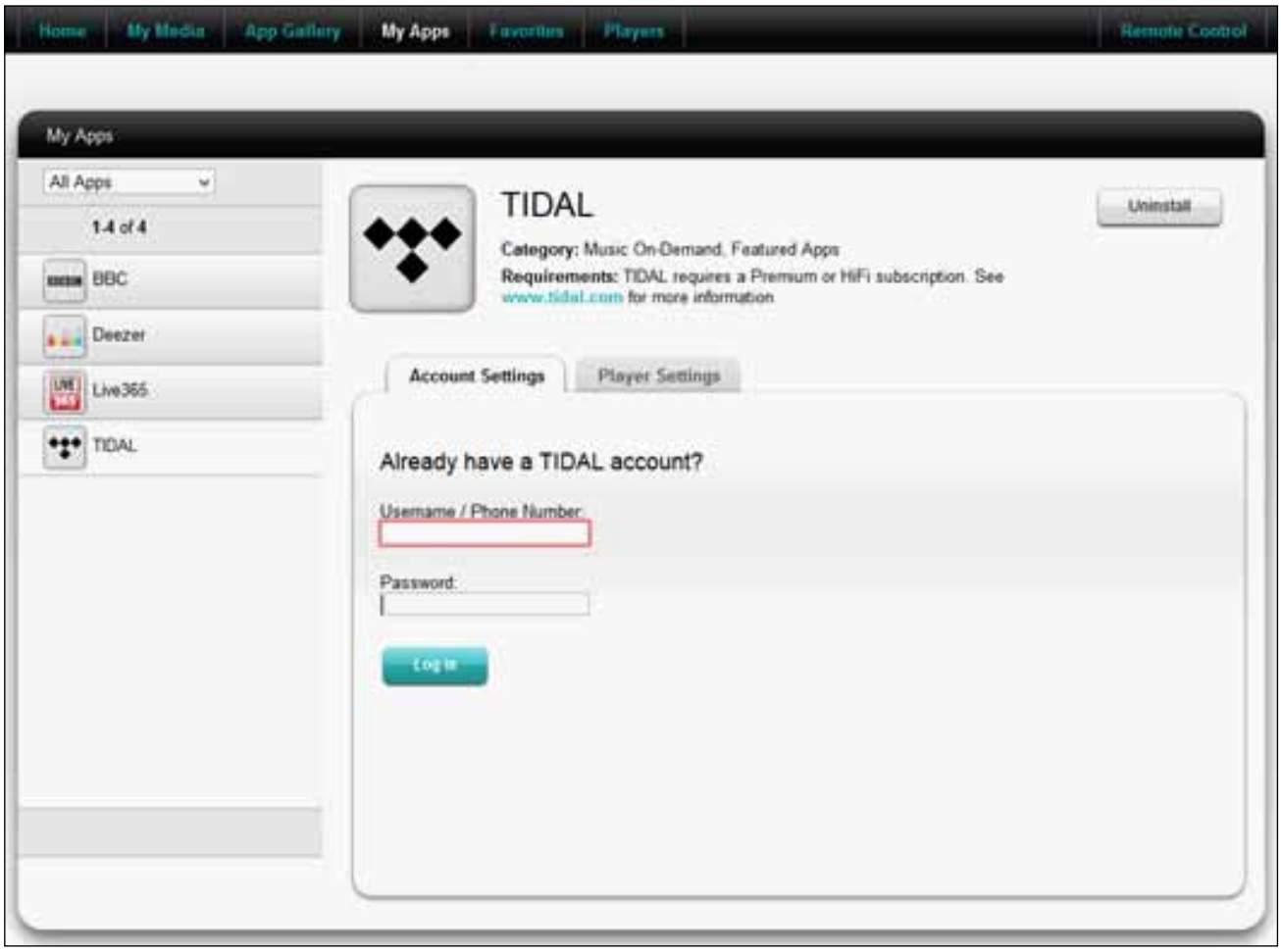
You need to have a 'mysqueezebox.com' login to register for some of the streaming services in Squeezebox. As an example we will go through the steps to enable TIDAL streaming. Go to 'Squeezebox Server / Settings/Plugins' and check that TIDAL is enabled. If it is not there, look under 'Inactive plugins' or 'Recommended 3rd Party Plugins', tick the 'Enabled' box and then click 'Apply', to enable it.

Now go to Squeezebox Server/Settings/mysqueezebox.com, check that you have an account, or create a new one.

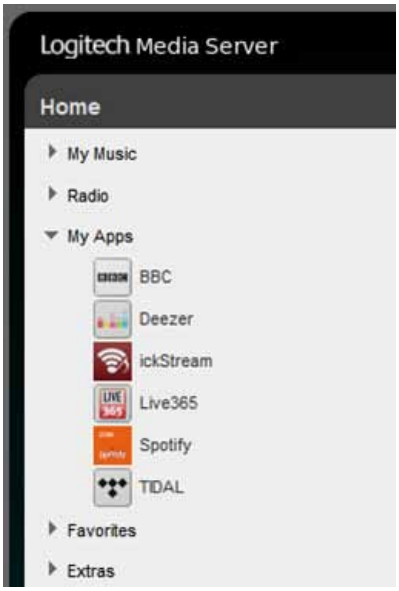
Log in to your mysqueezebox.com account, click the 'App Gallery' tab, select TIDAL and click 'Install App'.



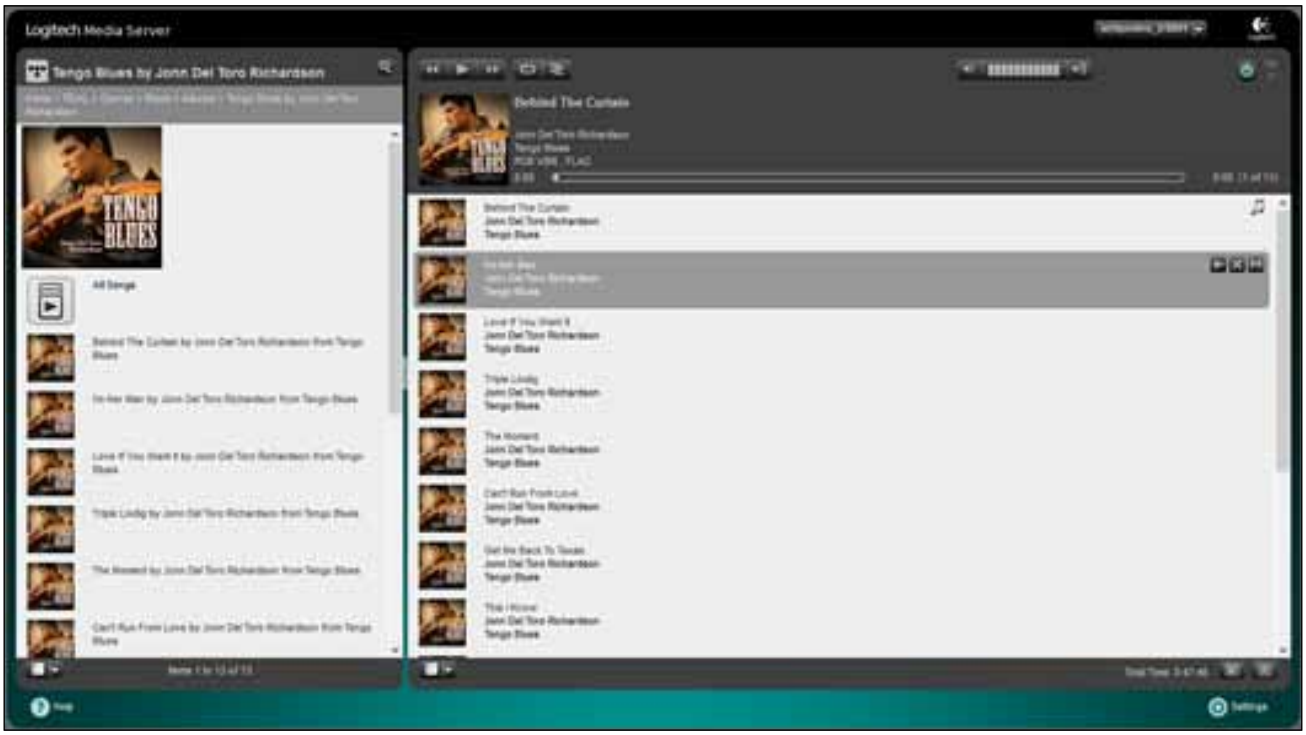
Click ‘Configure’ and enter your TIDAL credentials (email id and password).



Go to the Squeezebox Server screen, click ‘My Apps’ and you should find that TIDAL has been added to the list of apps.



Click the TIDAL icon to start using TIDAL.

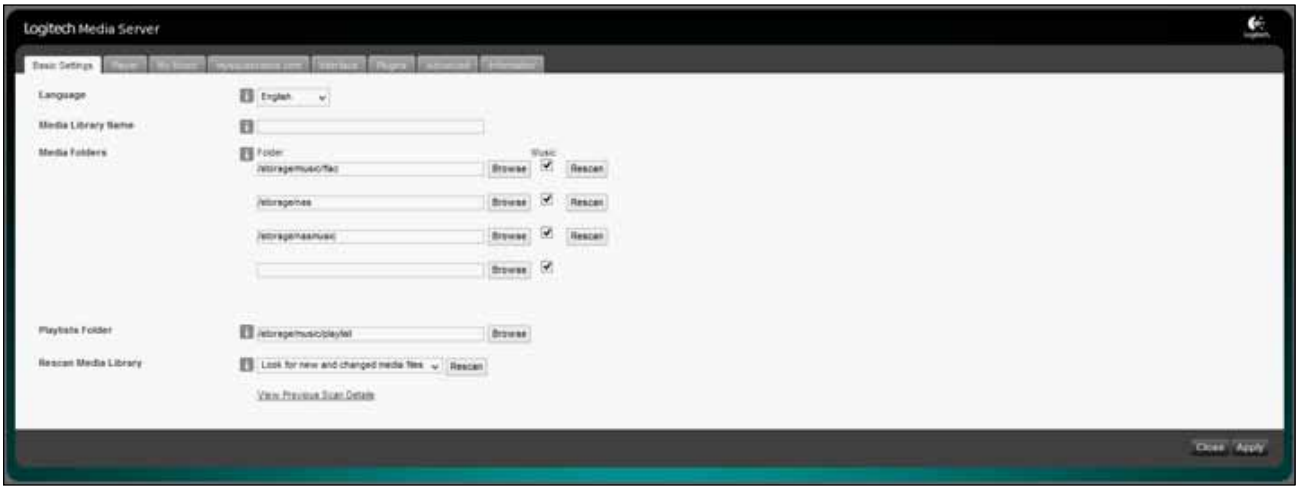


SQUEEZEBOX SETTINGS

At the bottom right hand side of the Squeezebox Server control screen is a Settings icon. Click on this to make various settings for Squeezelite and Squeezebox Server. When you click this icon a new window will open in your browser. Most of the settings have already been set to the commonly used options. However you may wish to make changes as you become familiar with Logitech Media Server and its options.

You click the different tabs to access various settings. We will only cover library scanning in this guide. The range of options available is too large to cover in this document.

Basic Settings



This window allows you to set the folders in your Antipodes to be included in the Squeezebox library. And it allows you to force Squeezebox to scan for new additions. CDs ripped will be automatically added to the library, but files copied to the Antipodes require a scan before they are included in the Squeezebox library. Scanning options appear in the drop-down box at the bottom of the screen shown above.

5.3 Setup Control Of MPD

MPD is included in the Antipodes software suite mainly as a DLNA renderer application in case you are wanting to use your Antipodes to play from a DLNA server on your network. This functionality is described in the MinimServer and BubbleUPnP Server sections of this guide (Section 7).

However, MPD can also be used as a complete playback solution because it can also play from a folder of music files. This does not offer a lot of features, which means it only requires you to download a client app and start playing music, but it does offer one very important feature - excellent sound quality.

Unlike Squeezebox, there are no server app features to manage. You just download and use a client app to play music. Like Squeezebox, MPD is free to use,

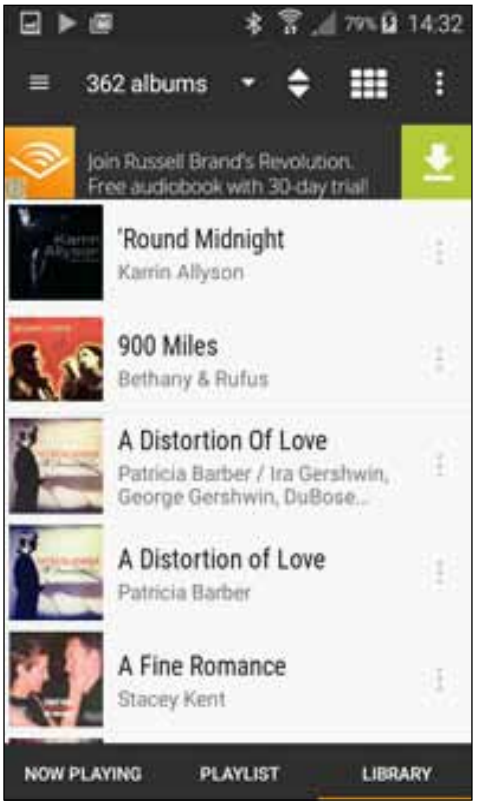
DESKTOP/LAPTOP

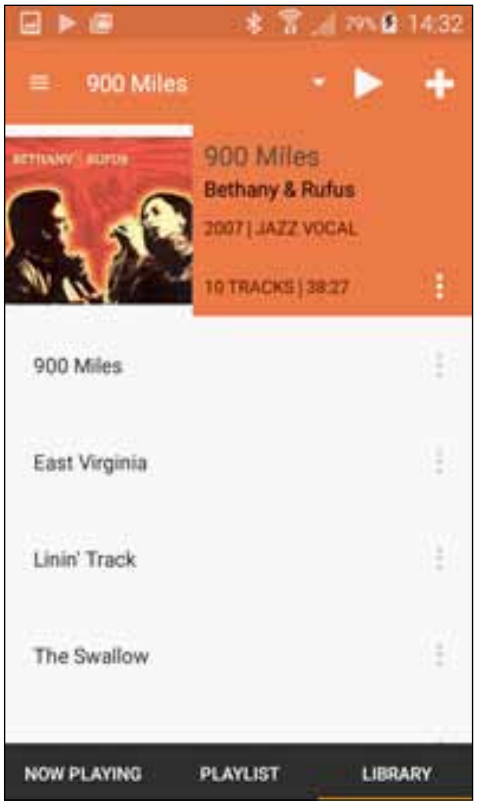
The best remote client for MPD on desktop or laptop is Cantata. It can be downloaded free for Windows devices or Macs from:

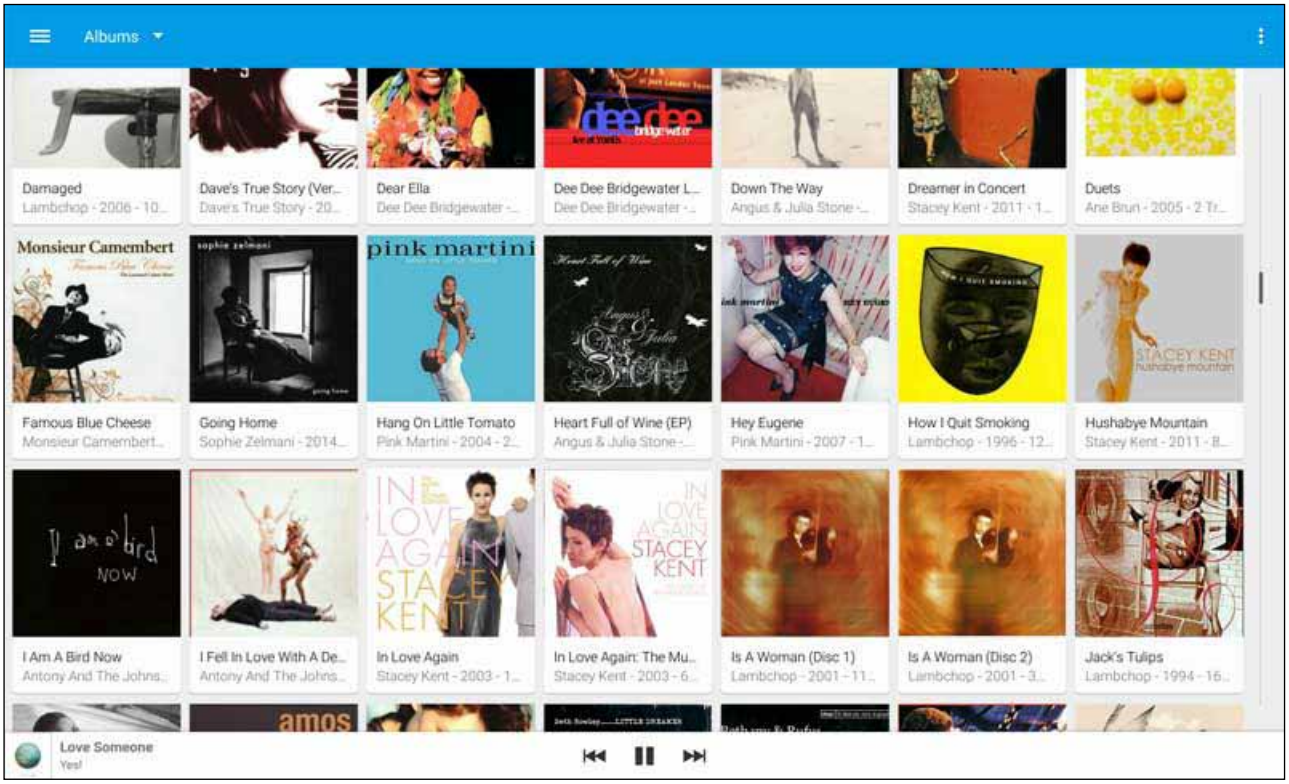
http://www.easympd.com/en/tips/0045_client.php

Tablet/Smartphone Apps to run MPD incur a small fee, and are downloaded from the relevant App Store for your tablet/smartphone.

Just search on MPD. We recommend MPDroid on Android and mPad on iPads. If all you want to do is play your music files, MPD is an excellent choice.







6 Add Music To The Server Library

INTRODUCTION

There are four ways you can add music files to the library of a server application running on your Antipodes.

The first three ways involve adding files to the internal storage of your Antipodes, by:

1. Ripping CDs to the Antipodes
2. Copying files to the Antipodes
3. Downloading music over the internet to the Antipodes

The fourth way is:

4. Adding music files to the library by mounting external storage (eg. on a NAS, USB, etc)

In general, we recommend that music files be added underneath this folder on your Antipodes.

/storage/music/flac

This location is automatically added into the library of every server application on your Antipodes.

You can create other folders alongside the ‘flac’ folder if you wish, but it means you need to tell each server application to add these folders to the library.

It is therefore simpler if you add folders under the ‘flac’ folder.

Music files do not need to be flac files. They can be in any format.

Roon Server

Note that if you are using Roon, then Roon Server offers a way to add external shared directories, such as on a NAS, to the Roon library.

If using Roon we recommend you use the method in Roon Server settings rather than the method described in Section 6.4 of this guide.

6.1 Import Music From Your CDs

The CD Import application automatically rips CDs, retrieving artwork and metadata tags. Just insert the CD (label up) into the Antipodes, and wait until the CD ejects.

You can also specify whether music is ripped to compressed FLAC (to save space), or uncompressed FLAC (to optimise playback sound quality). Click on 'Settings' and then click the CD Import icon. At the screen below, select the FLAC compression setting and then 'Save Changes'.

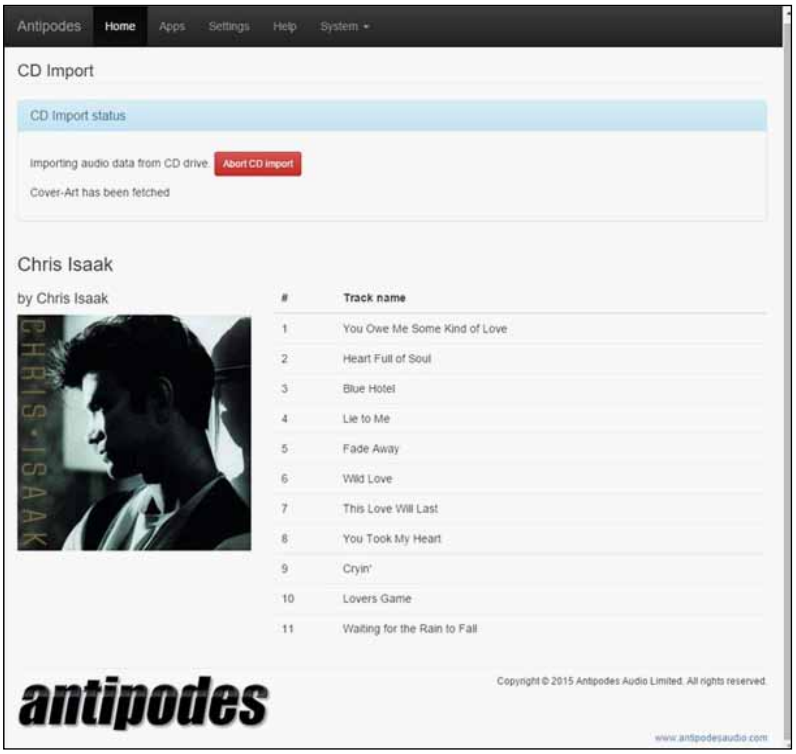
To observe the ripping progress, click on 'Apps', then on the 'CD Import' icon.

If you wish to abort the ripping process click on 'Abort CD Import'.

The ripping is completed in paranoid mode. This means each segment is read twice. If the rips are not identical then the ripping speed is reduced until two identical rips are achieved.

This takes at least twice as long as a normal ripping process but will guarantee you the best possible rip. It is worth the time taken to do it correctly.

Not all Antipodes music servers have integrated rippers, but you can add an Antipodes Platform to add auto-ripping. You can also add your own USB CD optical drive to use the CD Import application, simply by attaching it to the Storage USB port.



6.2 Copy Music To The Server

To copy files to or from your Antipodes, or delete files on your Antipodes, open File Explorer (Windows) or Finder (Mac).

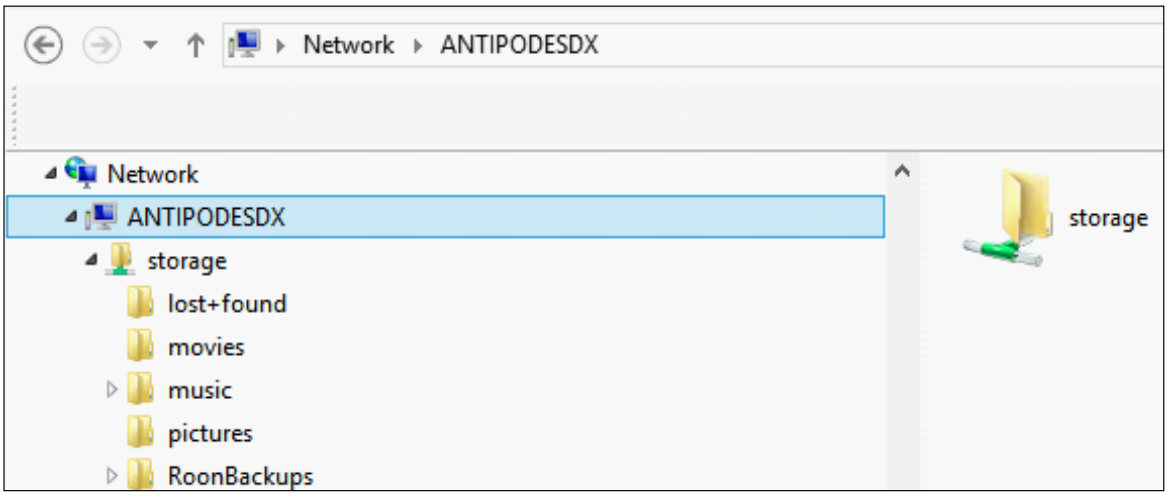
Antipodes will usually show in the left pane under ‘Network’ (Windows) or ‘Shared’ (Mac). You can now copy and delete files in the same way as if they were located on your computer.

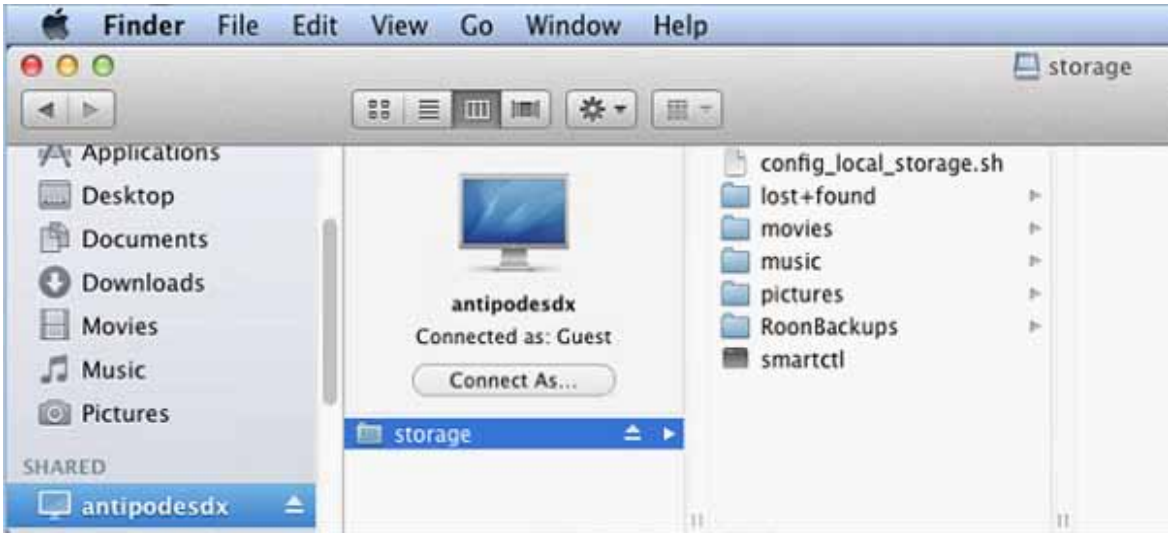
If ‘antipodes’ does not show in File Explorer then there may be a network problem. Enter the address of your Antipodes in the address bar of File Explorer - eg. \\antipodes\storage, or

\\192.168.1.214\storage

(use the IP address found by browsing to myantipodes.com).

Similarly if Antipodes does not show under ‘Shared’ in Mac Finder, click Finder menu item Go, and then sub-menu item Connect To Server. In the dialogue box that appears, enter address smb://antipodes/, or smb://192.168.1.214 (but use your actual IP address, this is just an example) and click Connect. If you are asked for a username, click on the Guest option. This will open Antipodes in Finder.



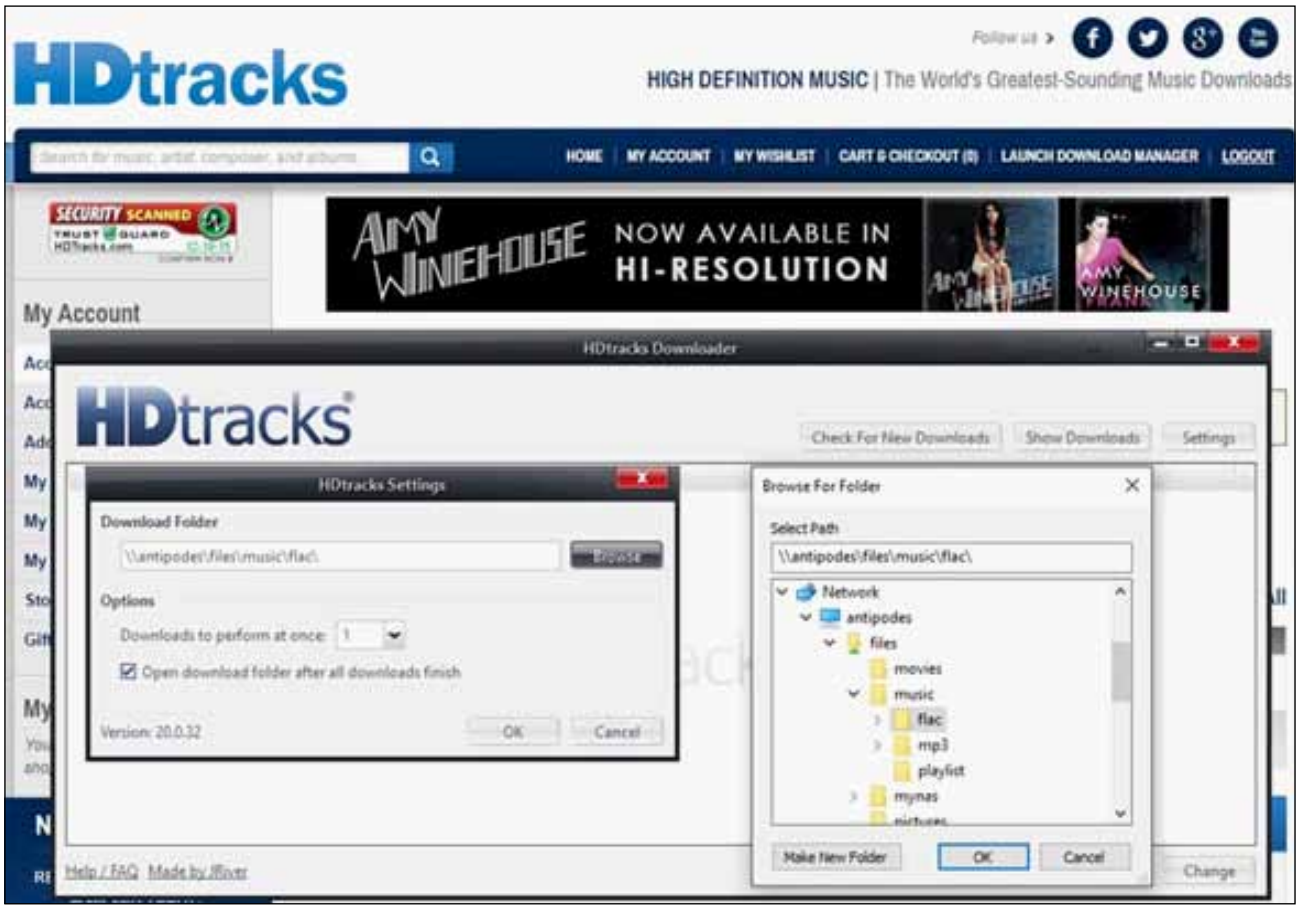


6.3 Download Music To The Server

In this example we have used the HDTracks downloading application. When you start a download, click on the HDTracks ‘Settings’ button.

You can either type in the address ‘\\antipodes\storage\music\flac’, or click on the ‘Browse’ button to locate the download location on the Antipodes.

Once you have set this, the HDTracks application will remember it for future downloads.

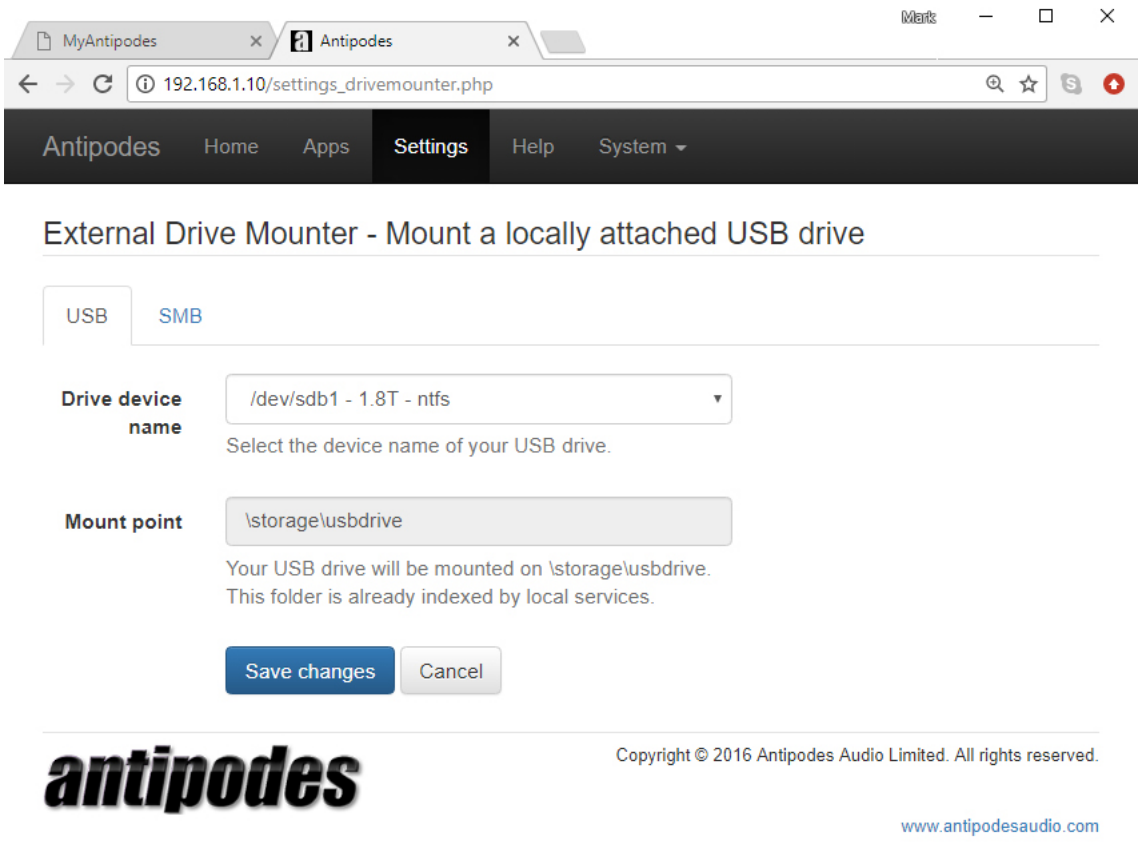


6.4 Mount External Storage

The Drive Mounter app lets you ‘mount’ an external USB drive or a folder on your home network that is on PC or NAS and play music tracks stored on them.

To be able to play music from a USB drive:

1. Connect the drive to a spare USB port on the back of the Antipodes
2. At the Antipodes GUI, select the ‘Settings’ menu
3. In ‘Settings’, click on the ‘Drive Mounter’ icon.



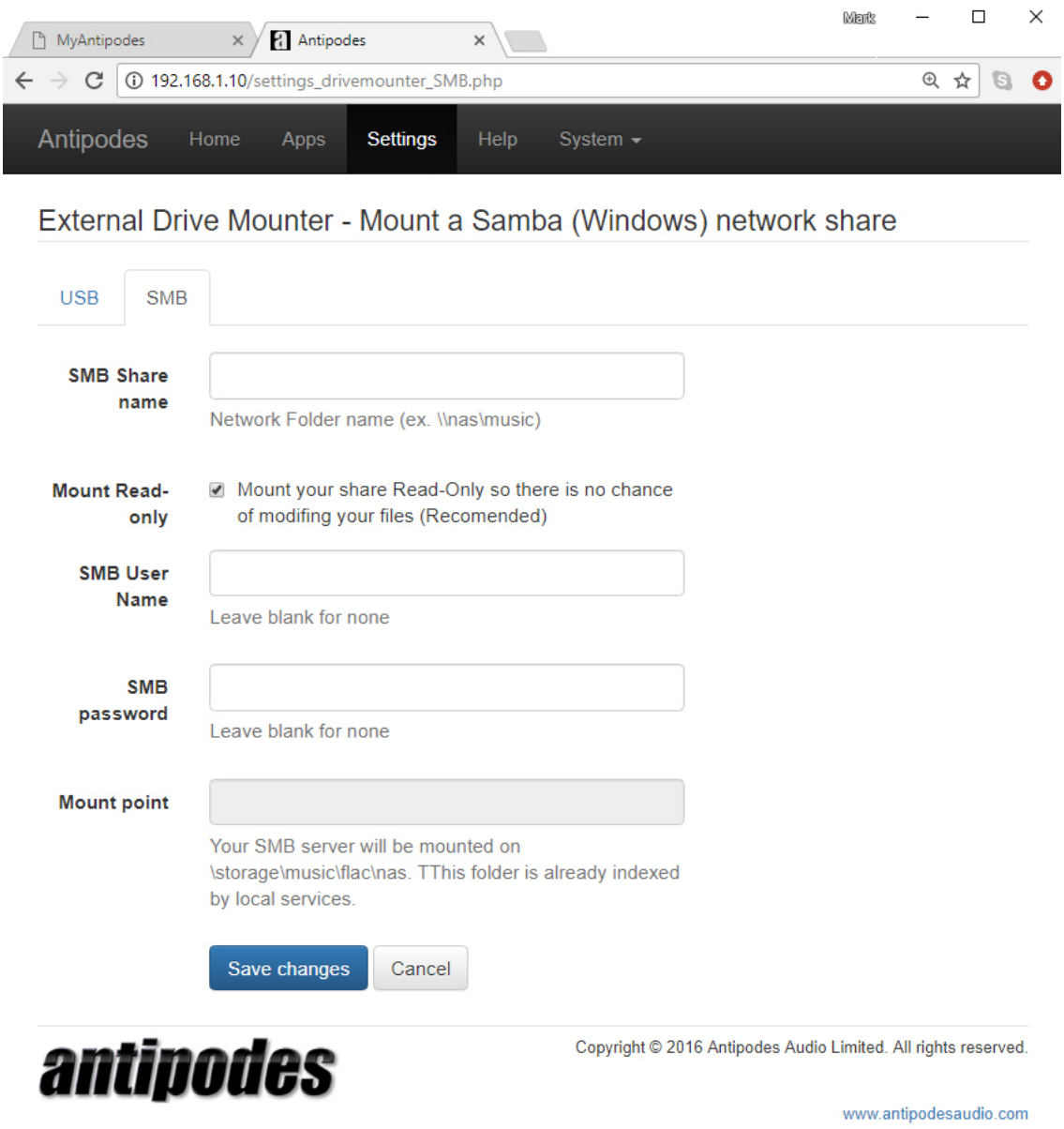
Select the USB drive from the drop down list and click on ‘Save Changes’.

The USB drive selected is now mounted on \storage\usbdrive on your Antipodes.

The Drive Mounter app also lets you 'mount' files stored on a NAS or any network share.

To be able to play music from a USB drive:

1. At the Antipodes GUI, select the 'Settings' menu
2. In 'Settings', click on the 'Drive Mounter' icon
3. Click on the 'SMB' tab.



1. Enter the network address of the files
2. Provide User Name & Password for the device the files are on
3. Click on 'Save Changes'.

Your remote files are now mounted on your Antipodes and can be added to your library for playback.

7 Other Playback Solutions

INTRODUCTION

Antipodes Music Servers offer a range of other playback solutions. In general these other playback solutions are not going to provide you with the same sound quality as the Roon, Squeezebox and MPD solutions.

But you may wish to use another playback solution to meet a particular need or to work with a particular device.

For most customers these other playback solutions are a secondary use of their Antipodes. For example, you might use your Antipodes with Roon to play direct to a DAC in your main system. But a secondary use might be to play from the library on your Antipodes through a SONOS system.

In most cases the relevant applications are available for your Antipodes but you need to install them first. Go to Section 8 to learn how to install them.

These include:

DLNA/UPnP/Open Home Solutions. This includes MinimServer and BubbleUPnP Server. These enable the Antipodes to be used as a DLNA server for DLNA renderers that you already have in your network.

Plex Media Server (Video, Music, Images etc). This enables serving video, provided you have a Plex player to stream to.

SONOS Integration. This enables your Antipodes to be a music source for your SONOS system.

HQPlayer NAA. This is a special purpose renderer application, to play from HQPlayer running on a Windows or Mac computer.

The rest of this section will get you started with each of these but you may need to visit the developer's site to get a detailed guide on how to meet your needs.

7.1 MinimServer

MinimServer is a UPnP/DLNA AV server that enables the music library on an Antipodes server to be accessed by DLNA-capable devices. MinimServer is not installed on Antipodes servers by default. Therefore you need to install it before you can use it.

At the Antipodes GUI, select the 'Apps' menu item, click on the 'Software Manager' icon, and then select the 'Available Apps' tab.

Click on the 'MinimServer' icon and click 'Install' to open the installation process.

Select the 'Apps' menu item in the Antipodes GUI and click on the 'MinimServer' icon.

Click on 'MinimServer Admin' to see the license terms, and accept them if you wish to proceed.

Set the Content Directory to '/storage/music', as shown above, and select 'Update'.

How to Run MinimServer

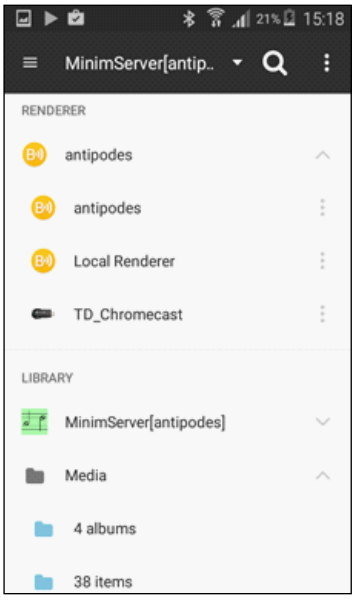
After MinimServer has been installed on the Antipodes server it will start automatically and run continuously. There are no 'Start' or 'Stop' commands for MinimServer.

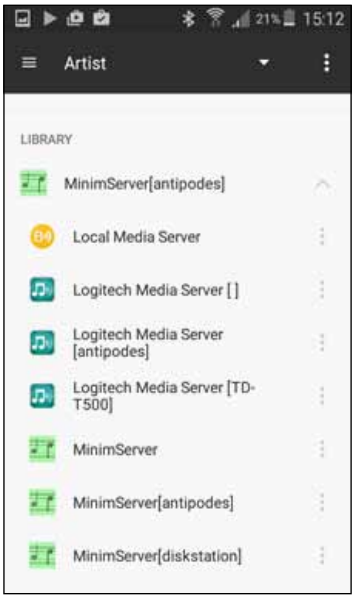
How to Use MinimServer

With DLNA solutions, you control the renderer device and it pulls music from DLNA servers. So running MinimServer on your Antipodes makes your Antipodes server appear as a UPnP/DLNA server on UPnP/DLNA renderer devices on your network. These could be networked music players, computers, televisions, tablets, smartphones etc.

You can also use UPnP/DLNA apps on a tablet or smartphone as a remote control device to manage such playback solutions, selecting the DLNA servers to play from and the DLNA renderers to play to.

There are also two UPnP/DLNA renderer applications on Antipodes music servers; MPD and the UPnP/DLNA Interface plugin that is included in the Squeezebox Server, which is pre-enabled:





7.2 BubbleUPnP

BubbleUPnP Server is a UPnP server application enabling you to:

- Have secure Internet access to your UPnP/DLNA server content, with BubbleUPnP on a tablet and foobar2000 on a Windows device.
- Create OpenHome media renderers from any UPnP AV renderer (provides on-device playlist, and multiple Control Point access to the same renderer)
- Address some common issues with UPnP/DLNA servers (discovery issues, broken data, add some audio DLNA compliance) by creating a proxy Media Server
- Access your UPnP/DLNA servers across different networks

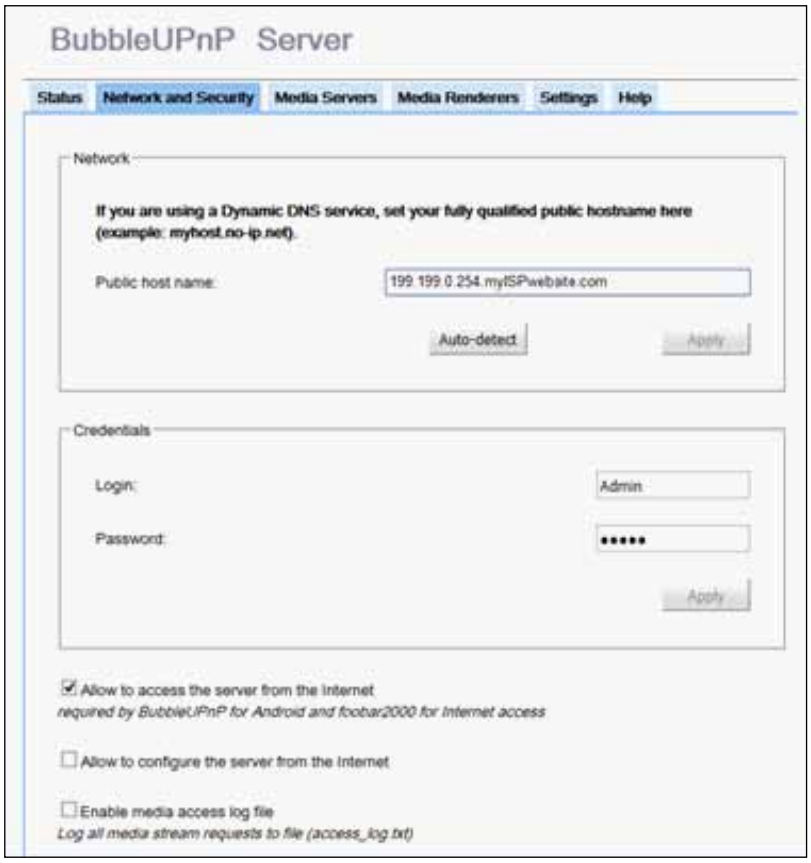
BubbleUPnP Server is not installed on Antipodes servers by default. Therefore you need to install it before you can use it. Go to Section 8 for a guide to installing and uninstalling apps in the Antipodes GUI.

After installing it, set up BubbleUPnP Server by selecting the 'Apps' menu item in the Antipodes GUI, and then click on the BubbleUPnP icon.

Click 'OK' at the welcome screen.

You will be prompted to supply login details for remote access.

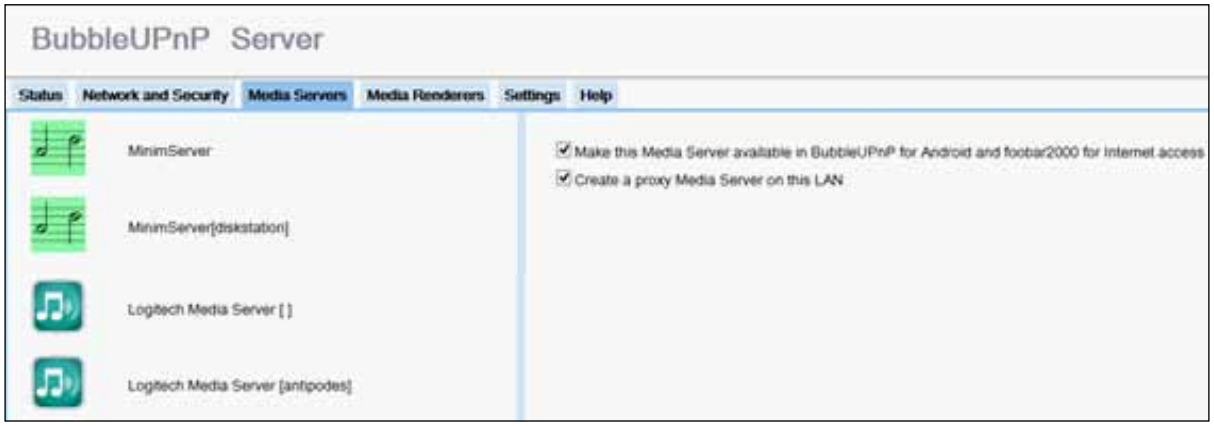
Leave the following screen that displays unchanged.



Click the ‘Status’ tab and check that the ‘Internet Connectivity Test’ has worked successfully, as shown below. Leave the other settings unchanged.

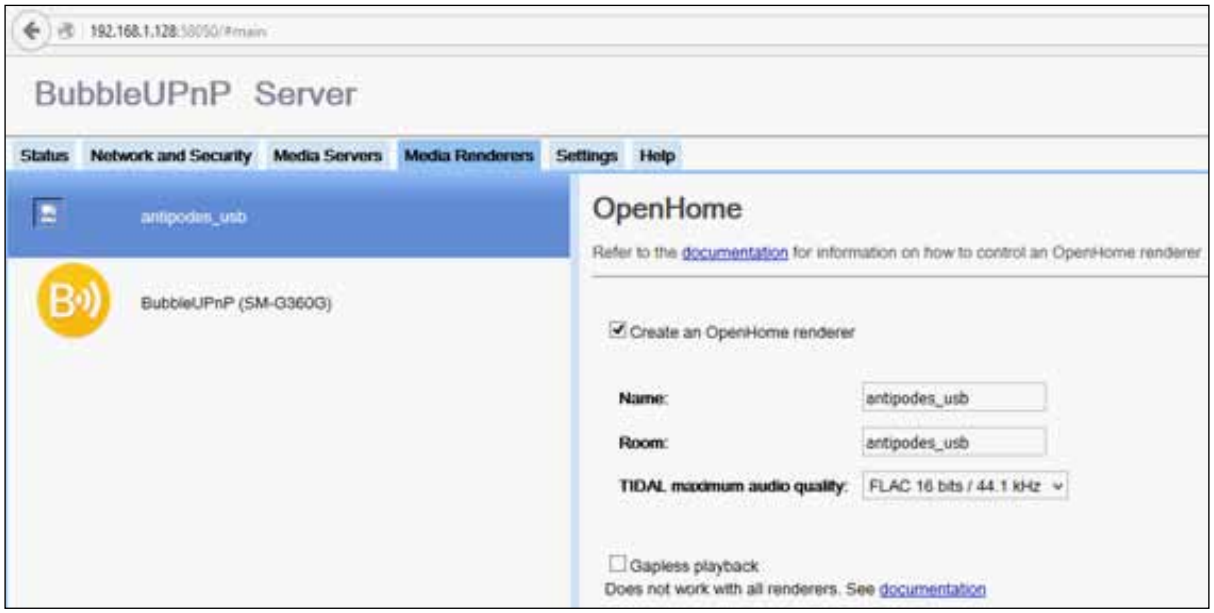
If the ‘Internet Connectivity Test’ was unsuccessful, click the ‘Restart Server’ button at the bottom of the screen.

Click the ‘Media Servers’ tab to display the UPnP/DLNA servers that have been located on your network by BubbleUPnP.



Finally, click the ‘Media Renderers’ tab. This window shows the DLNA renderers that have been located on the network, in this example ‘antipodes_USB’, a player on the Antipodes server, and BubbleUnP SM-G3600 (the local player on a Samsung Galaxy smartphone).

Check the ‘Create an OpenHome renderer’ box to enable OpenHome capability for the renderer.



How to Run BubbleUPnP Server.

After it has been successfully installed BubbleUPnP Server will be started automatically and then runs continuously. It is automatically started when the Antipodes server is powered on. It can be restarted by pressing the ‘Restart Server’ button on the ‘Status’ screen.

BubbleUPnP Server Support

Usage and support information for BubbleUPnP Server is available at

www.bubblesoftapps.com/bubbleupnpserver/.

7.3 Plex Media Server

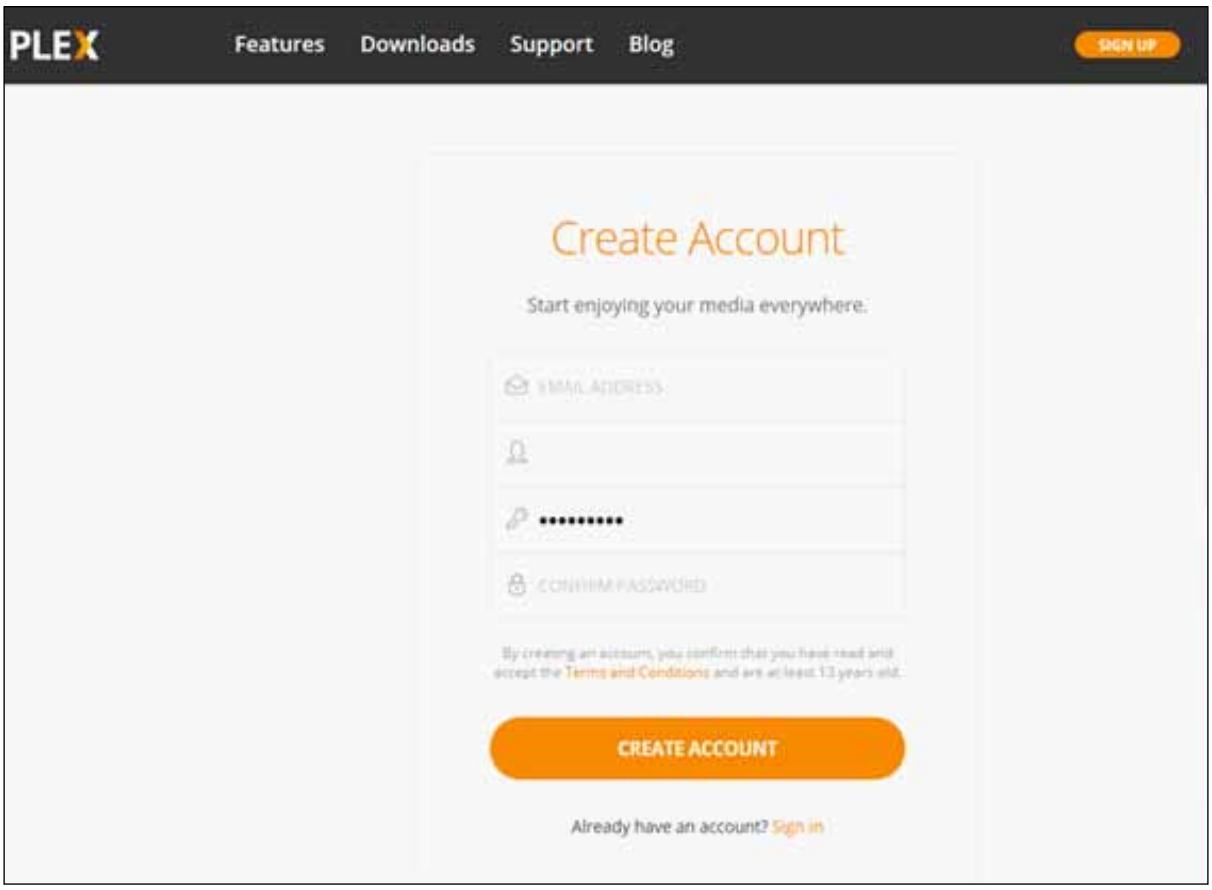
Plex is a media server application that organises video, music and photos from personal media libraries and streams them to media servers, smart TVs, streaming boxes and mobile devices that have compliant player apps.

Plex can also be setup as a DLNA server, and on the Antipodes you can use a DLNA renderer app such as MPD or Squeezelite as its music player.

You can control Plex on a Windows PC, an Apple Mac or a tablet or smartphone using one of the DLNA remote controller apps such as BubbleUPnP, UPnPlay, Foobar 2000 etc.

To use Plex with the Antipodes you must install the optional Plex application. Go to Section 8 for a guide to installing and uninstalling applications in the Antipodes GUI.

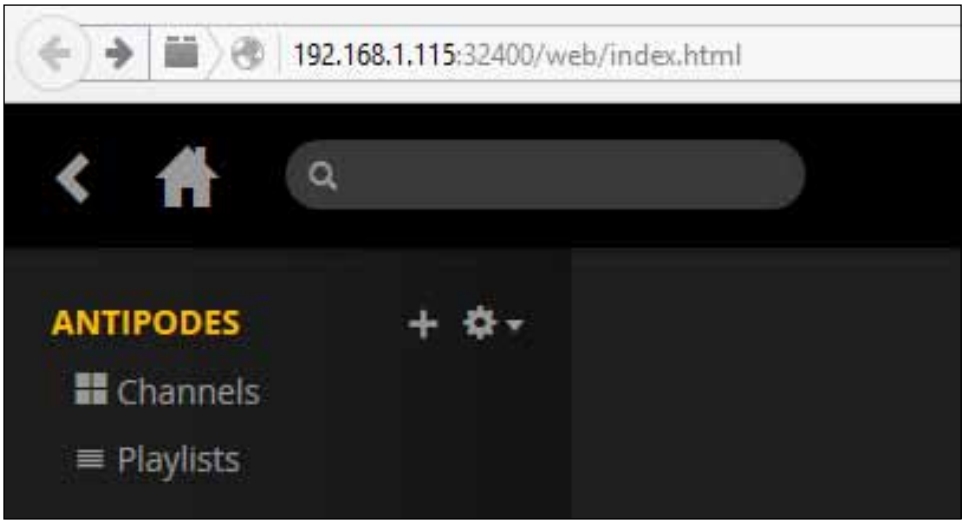
After installing it on your Antipodes, the first step is to use a browser to go to https://plex.tv/, click on ‘Create Plex Account’ and proceed to create your account.



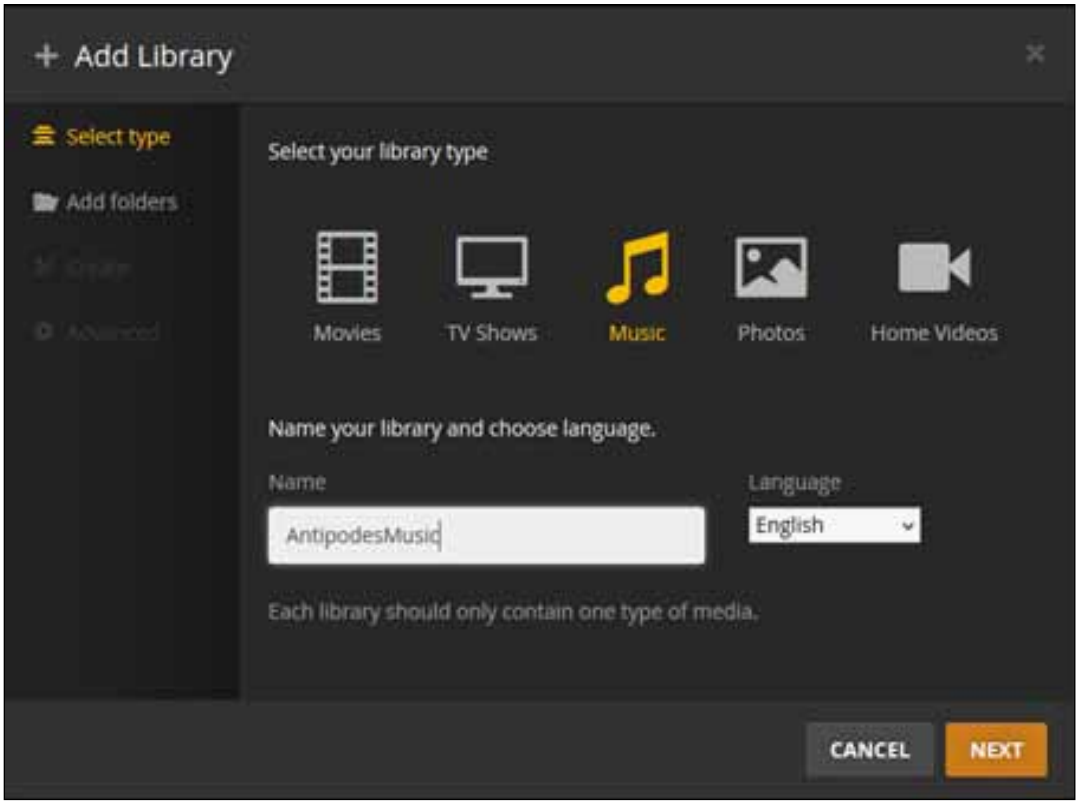
Then, back in the Antipodes GUI, select the ‘Apps’ menu item, and click on the ‘Plex’ icon. A new browser window will open where you can review and agree to the Plex Terms of Service. You will then be taken to the Plex interface.

How to Set Up Plex

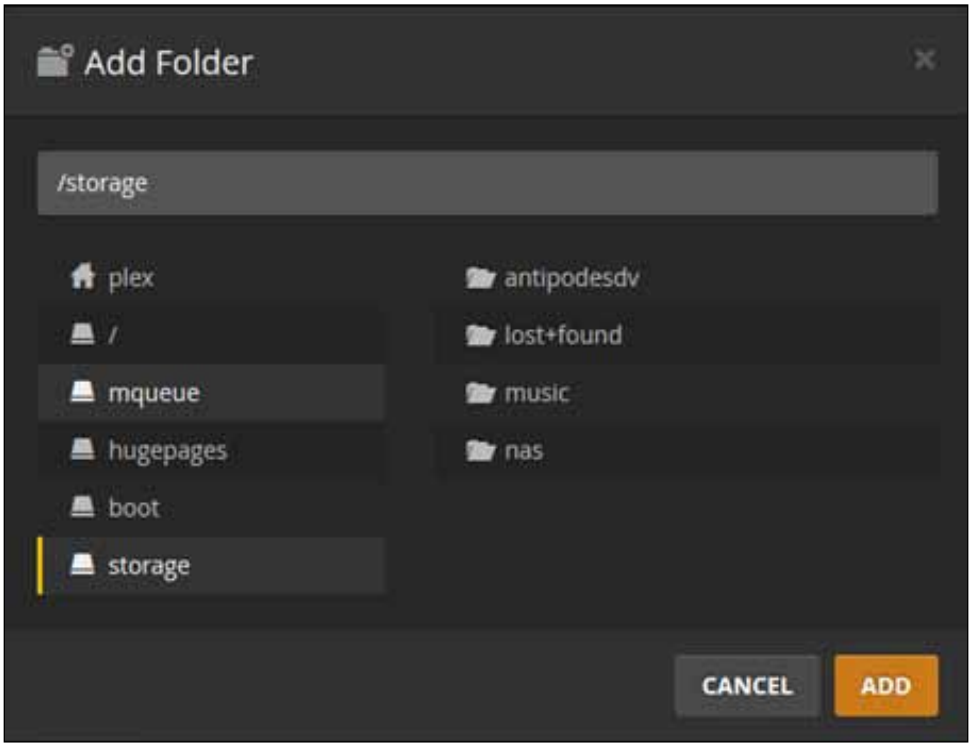
At the top left hand side of the screen click the '+' symbol next to the server name (ANTIPODES):

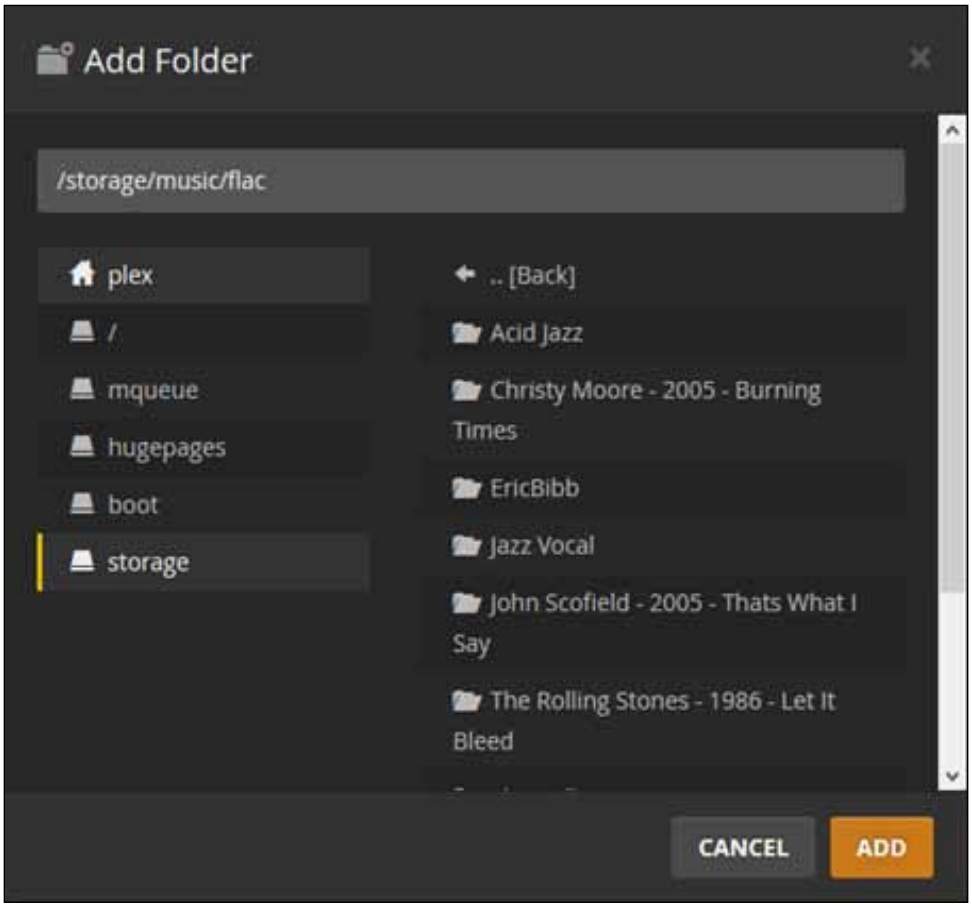


In the 'Add Library' window that appears select 'Music', give your library a name, and then click 'NEXT'.

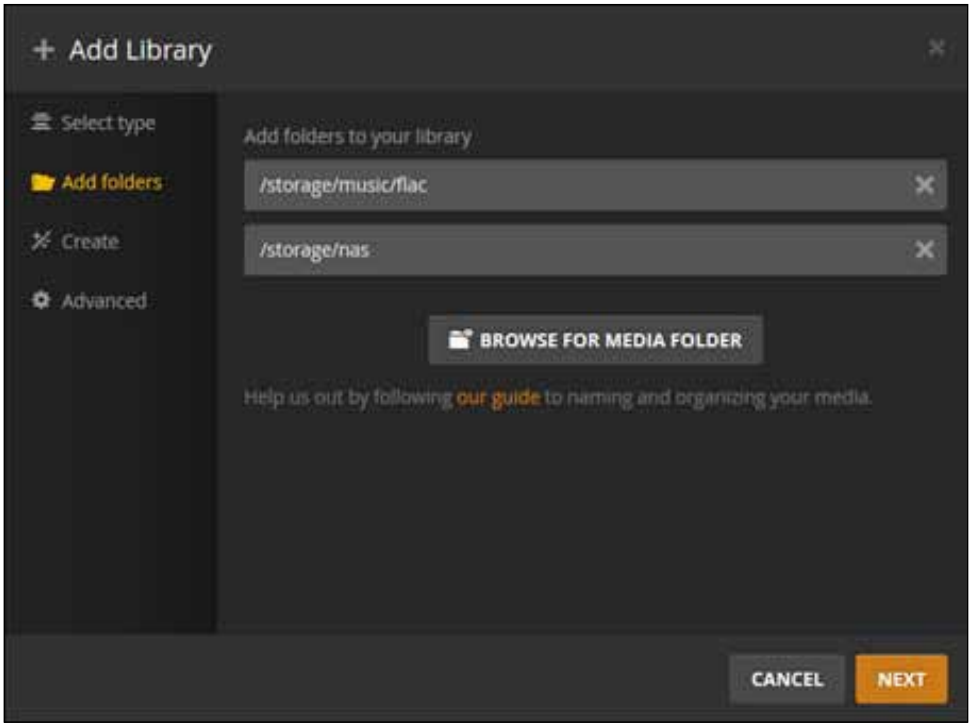


In the following screens you will select the folders to include in your music library. Click the ‘storage’ entry on the left hand side, then ‘music’, and finally ‘flac’; this points to where album folders are stored on the Antipodes (/storage/music/flac).

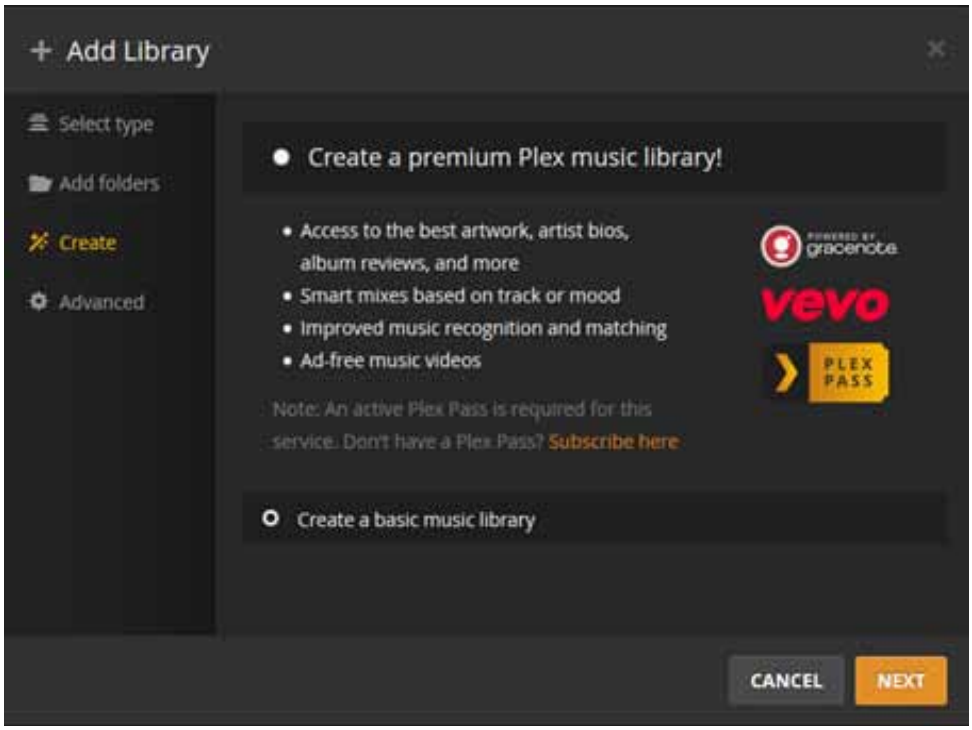


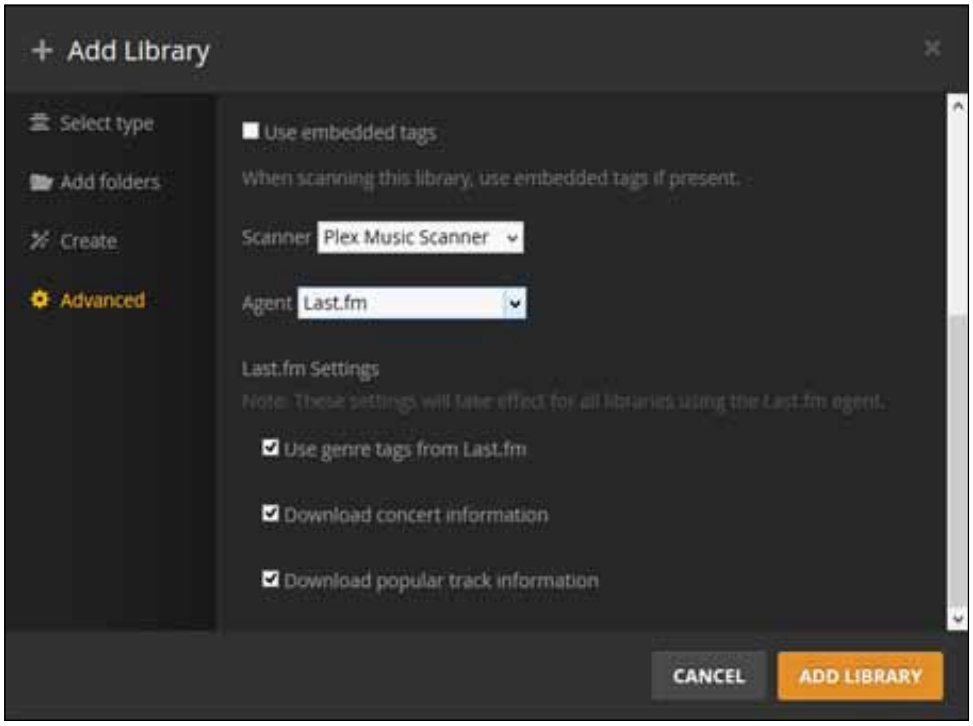


Then click ‘ADD’ to add the folder to your music library. You can add additional folders to your library now or later on; here ‘/storage/nas’ has also been added.

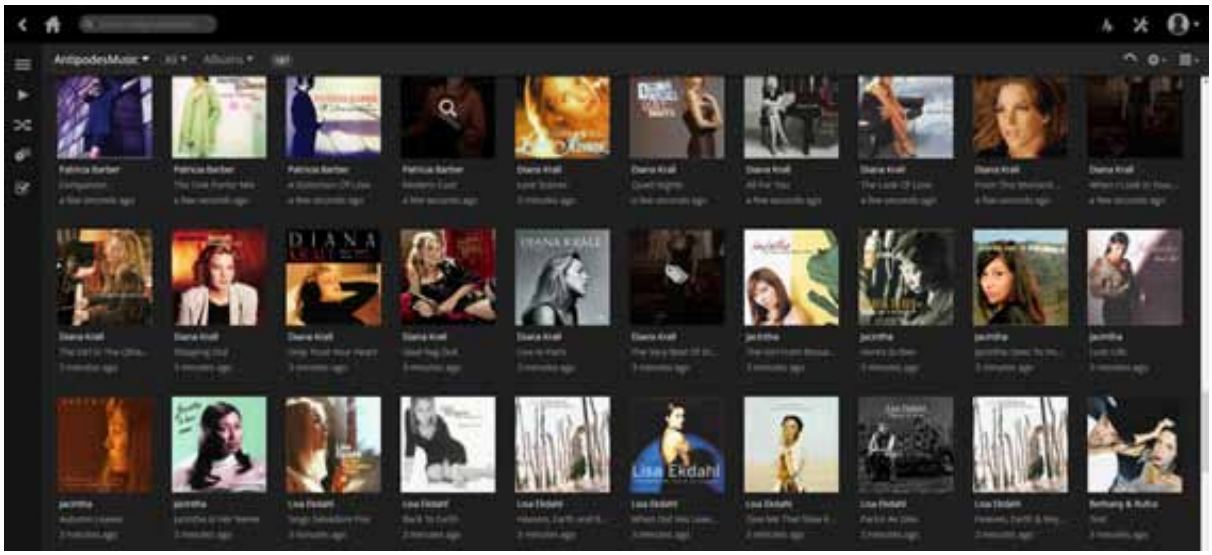


When you have finished adding folders click ‘NEXT’, select ‘Create a basic music library’ on the following screen followed by ‘NEXT’, and then ‘ADD LIBRARY’ on the last screen.





Plex Media Server will then create the library on your Antipodes.



How to run Plex using a DLNA Remote App

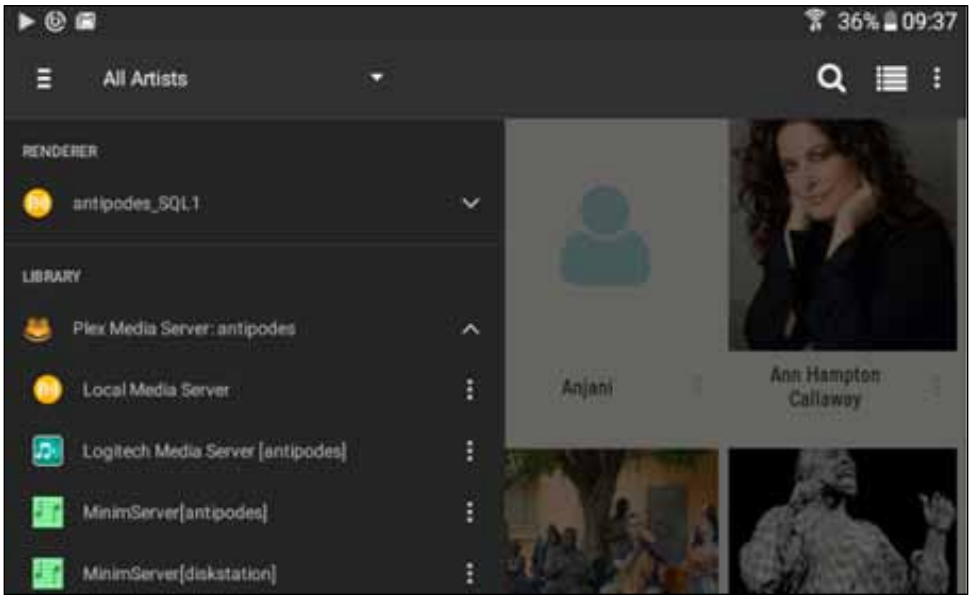
While you can use the Plex Media Server application on the Antipodes to set up your Plex library you cannot use the application to play music through the Antipodes (although you can use it to play music on the Windows PC or Mac on which you are running the application). To play music from your Plex library through the Antipodes you must use a DLNA remote app; several apps are available for Android or for iOS devices. You use the remote app to select a DLNA renderer (player) such as MPD or Squeezelite on the Antipodes, and a DLNA server, in this case Plex.

The examples shown below use BubbleUPnP on an Android tablet.

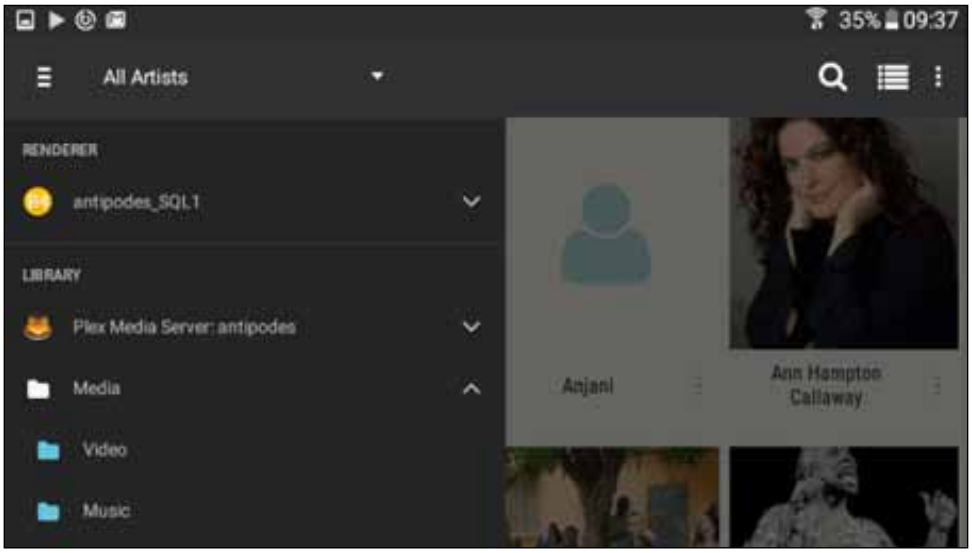
Using BubbleUPnP with Plex

BubbleUPnP for Android can be downloaded from Google Play.

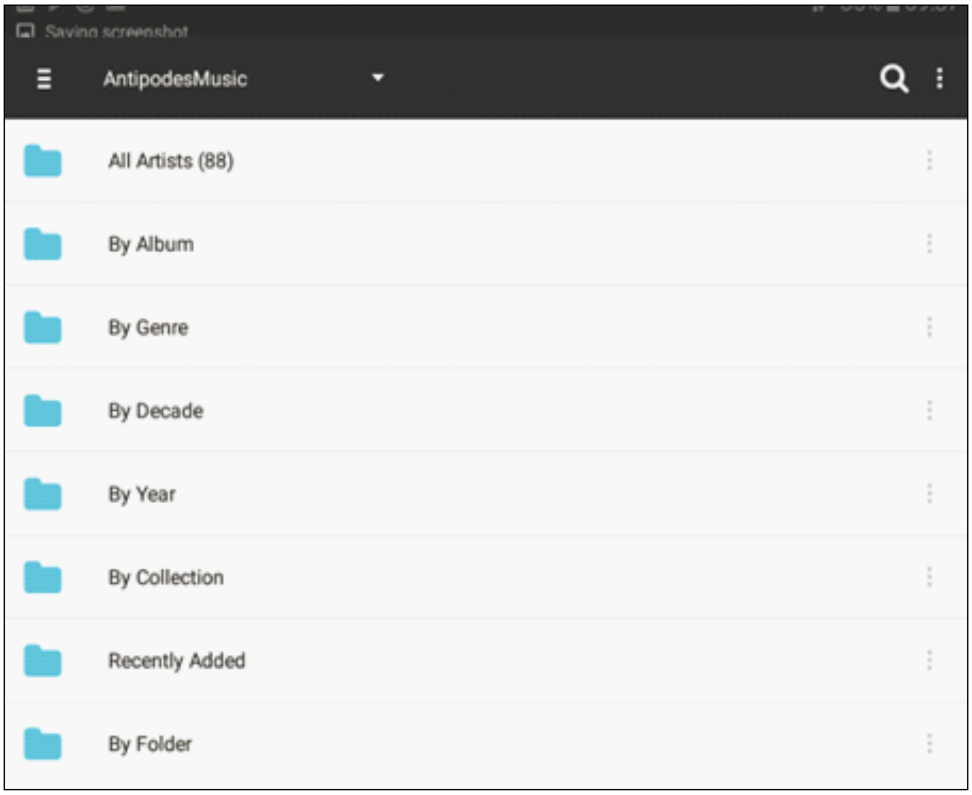
When you open the app on your tablet or smartphone the screen display shows the DLNA Renderers (at the top) and DLNA Servers that have been detected by BubbleUnP. In this example the renderer ‘antipodes_ SQL1’ (Squeezelite on the Antipodes) is selected and there is a choice of several libraries (servers).



When ‘Plex Media Server: antipodes’ is selected you select ‘Media/Music’, and then ‘AntipodesMusic’ (the name given earlier to the library during the setup stage)



You can then drill down through your Plex library using a variety of filters to build and play your playlists.



Support

Plex website: https://plex.tv/

Plex apps for Android, iOS, Windows: https://plex.tv/downloads

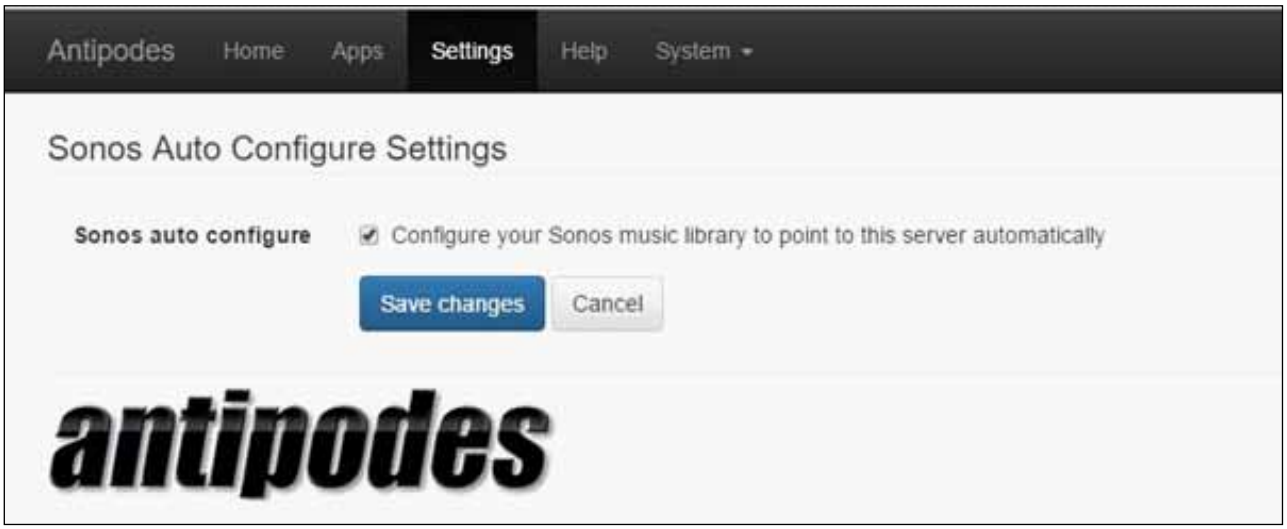
7.4 SONOS Integration

Install and setup this application and your Antipodes Music Server will appear within your SONOS application as a music source.

This means you can use your Antipodes music server to rip and store music, play to a high quality DAC in your stereo system, and have the same music available for playback using SONOS hardware, throughout your home.

SONOS Integration is not installed on your Antipodes server by default, so you will need to install it at the Antipodes GUI first. Go to Section 8 for a guide to installing and uninstalling apps in the Antipodes GUI.

Then select the 'Settings' menu item at the Antipodes GUI, click on the 'SONOS Integration' icon, tick the option to integrate with your SONOS system and click on the 'Save Changes' button.



7.5 HQPlayer NAA

Signalyst HQPlayer is an upsampling multichannel audio player for Windows, Linux and OS X. A light version can be optionally installed on the Antipodes server and then controlled by a copy of HQPlayer Desktop running on a PC or Max. HQPlayer provides high levels of digital manipulation on the files, including room correction, digital volume, different digital filters, up-sampling, trans-coding etc.

HQPlayer NAA is not installed on your Antipodes server by default, so you will need to install it at the Antipodes GUI first. Go to Section 8 for a guide to installing and uninstalling apps in the Antipodes GUI.

HQPlayer NAA is only a renderer application so you need to also install the HQPlayer main application on a desktop computer. Go to:

http://www.signalyst.com/consumer.html

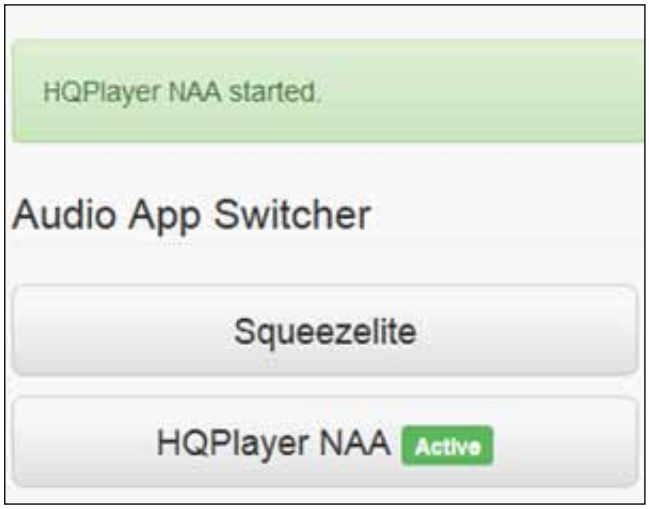
and download and install the appropriate version of HQPlayer Desktop. HQPLayer Desktop requires a licence to be purchased. You can use the product for 30 days at no charge for evaluation.

How to Run HQPlayer

To get the best performance from HQPlayer we recommend that your Antipodes server and PC or Mac are both Ethernet cable-connected to your network router. This however is not mandatory and you may find it works satisfactorily with wireless PC connection.

Once HQPlayer NAA is installed on your Antipodes there is no more to do in the Antipodes GUI than select HQPlayer NAA at the 'Audio App Switcher' (see section 4.4 of this guide).

But you need to complete the necessary setup in the HQPlayer desktop application - see the next pages for a guide to doing this.



This part of the guide refers to a third-party application that is not included with your Antipodes server, but we include it as a way to get started quickly with this application. For detailed and up to date information, you should visit:

Website: http://www.signalyst.com/

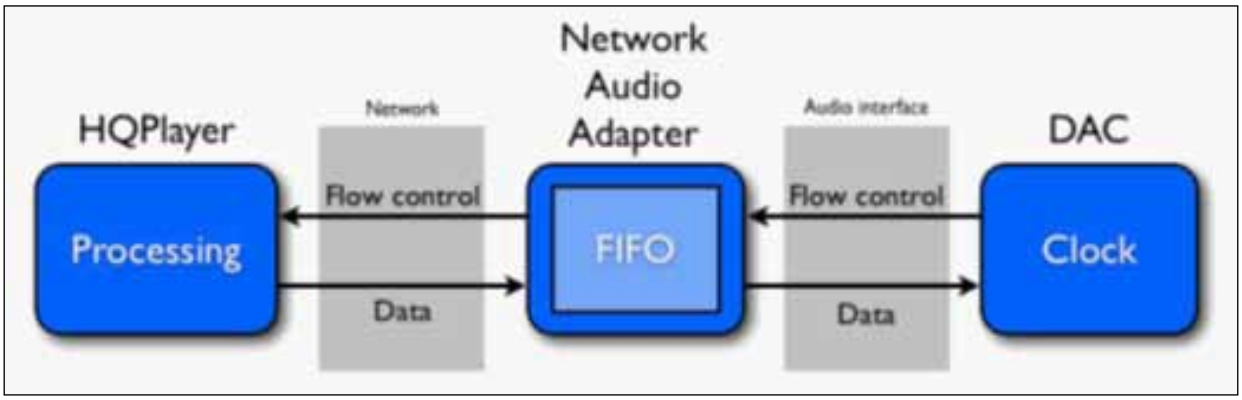
The HQPlayer Desktop User Guide can be found at: i-cat.biz/pdf/HQPlayer-manual.pdf

There is a very active HQPlayer community forum at:

http://www.computeraudiophile.com/f11-software/hq-player-20293/.

Run HQPlayer on Windows or Mac

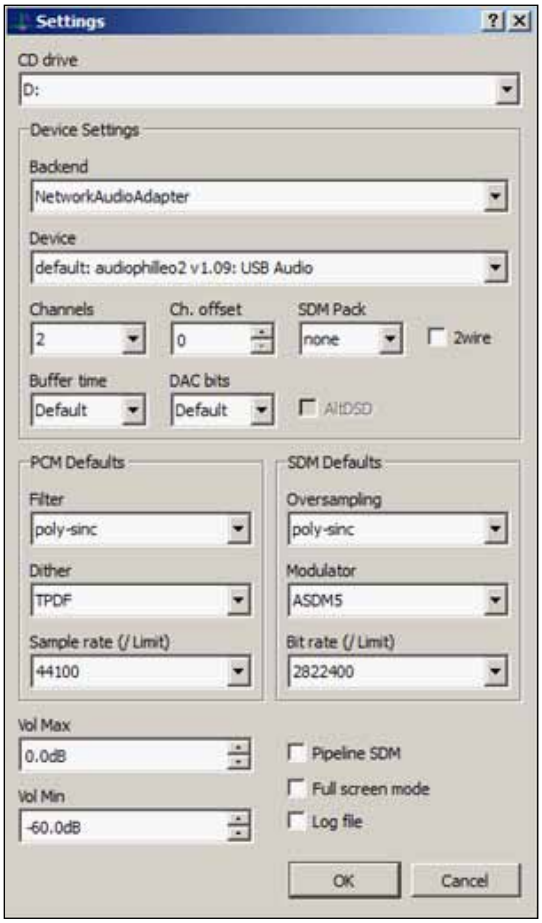
The audio processing is performed at the HQPlayer Desktop application side, and then streamed asynchronously over the network for reproduction on your Antipodes. In the diagram below the Antipodes is the Network Audio Adaptor.



How To Set Up HQPlayer on Windows or Mac

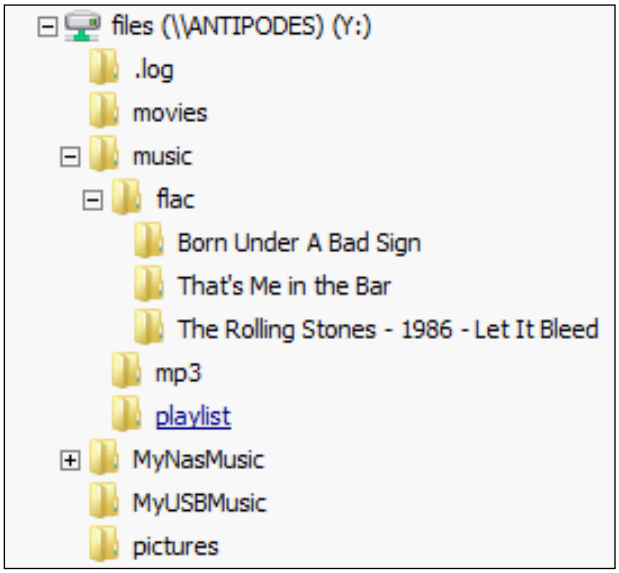
Start HQPlayer NAA on your Antipodes server and then start the HQPlayer Desktop application on your PC or Mac. Click ‘File/Settings’.

Under ‘Backend’ select ‘NetworkAudioAdapter’. Under ‘Device’ select the entry that matches the name of you DAC or USB adapter (‘audiophilleo2’ in the above example). Then click ‘OK’.

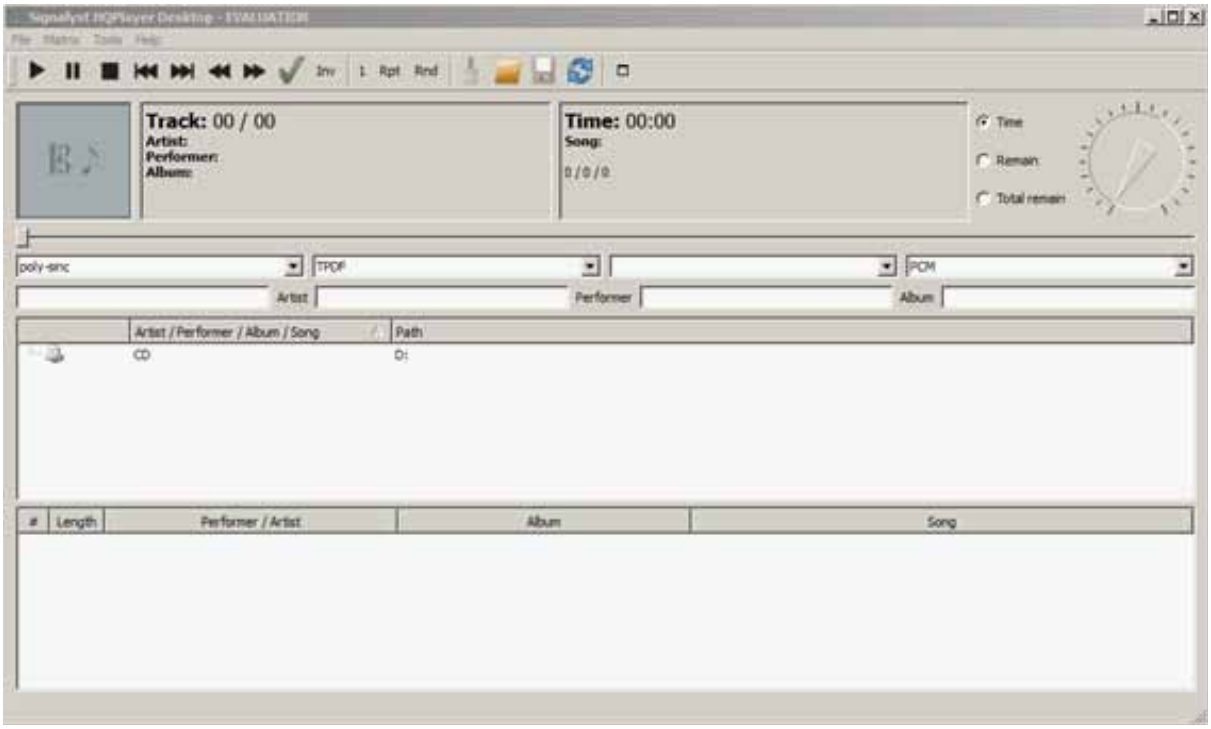


How To Use HQPlayer on Windows or Mac

The music library that HQPlayer Desktop works with is a Windows or OS X folder. It is therefore necessary to map your Antipodes music library as a shared network drive, as shown, in order to play music files using HQPlayer.

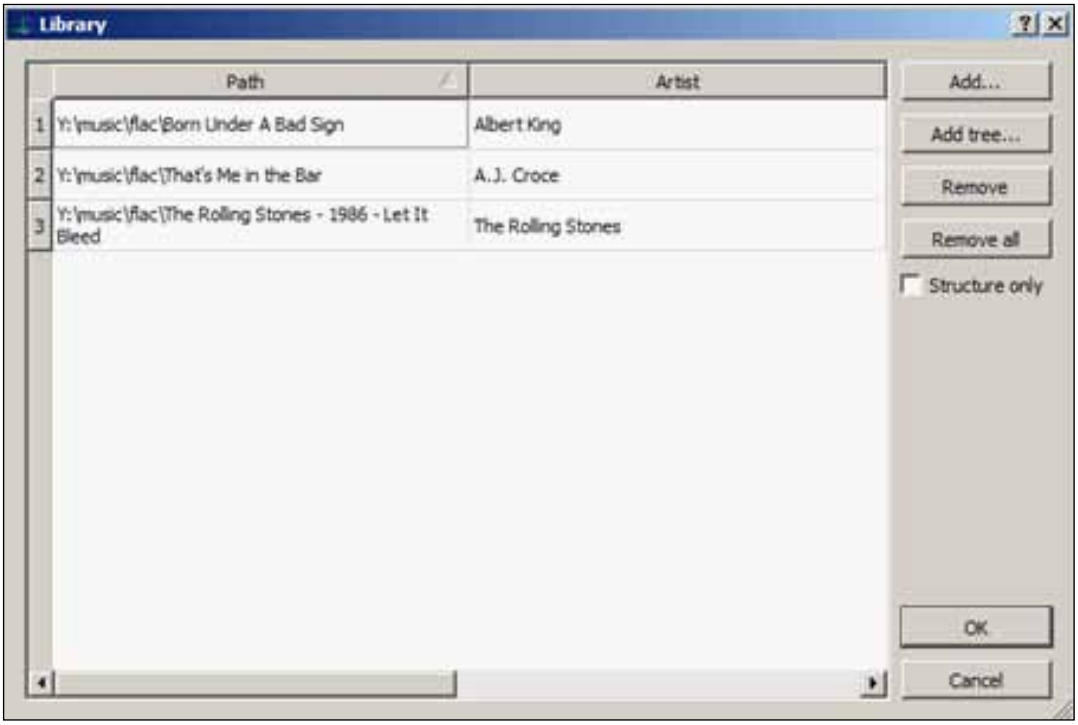


When you start HQPlayer Desktop for the first time you will be presented with a blank screen.

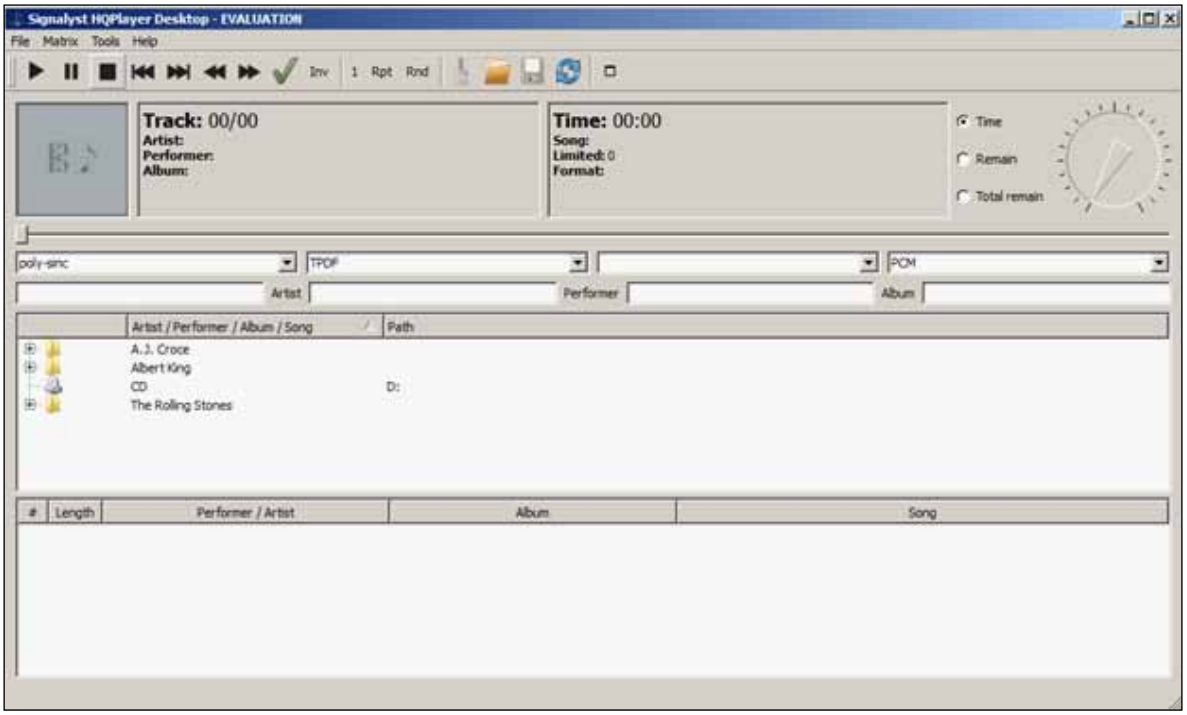


To start adding music files to HQPlayer click ‘File/Library’ and then ‘Add’ (for individual files) or ‘Add Tree’ (to add a folder).

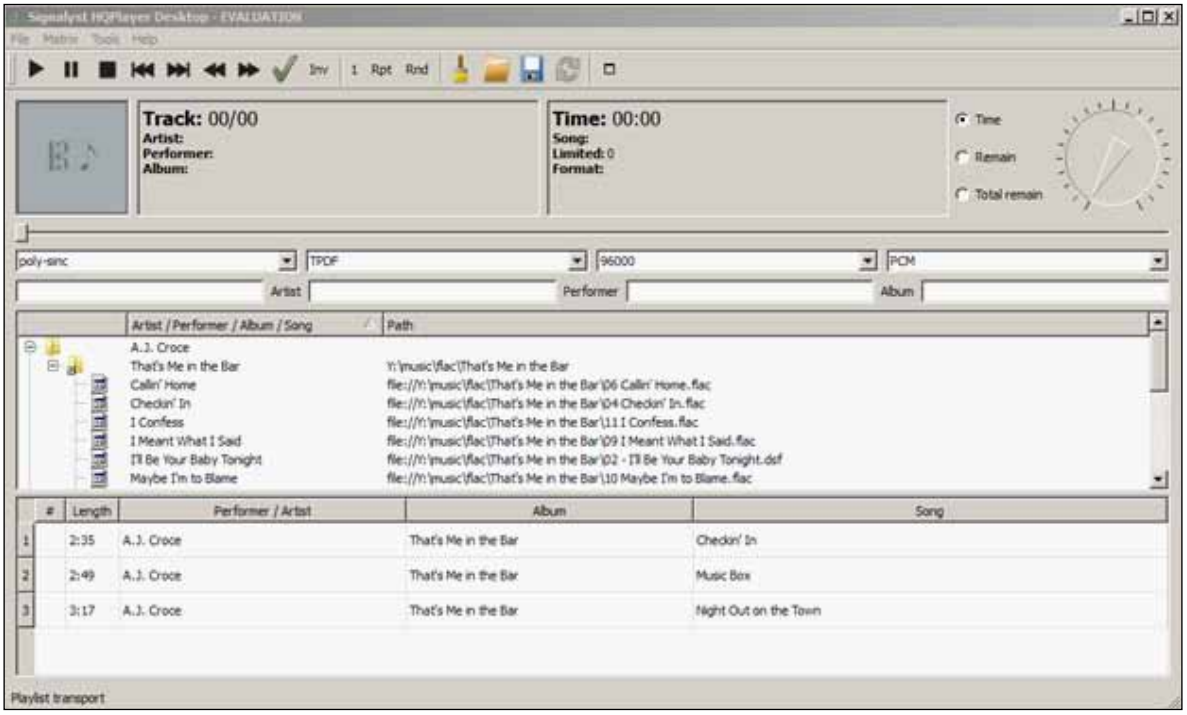
Select a folder, such as the ‘flac’ folder shown above, and then click ‘OK’.



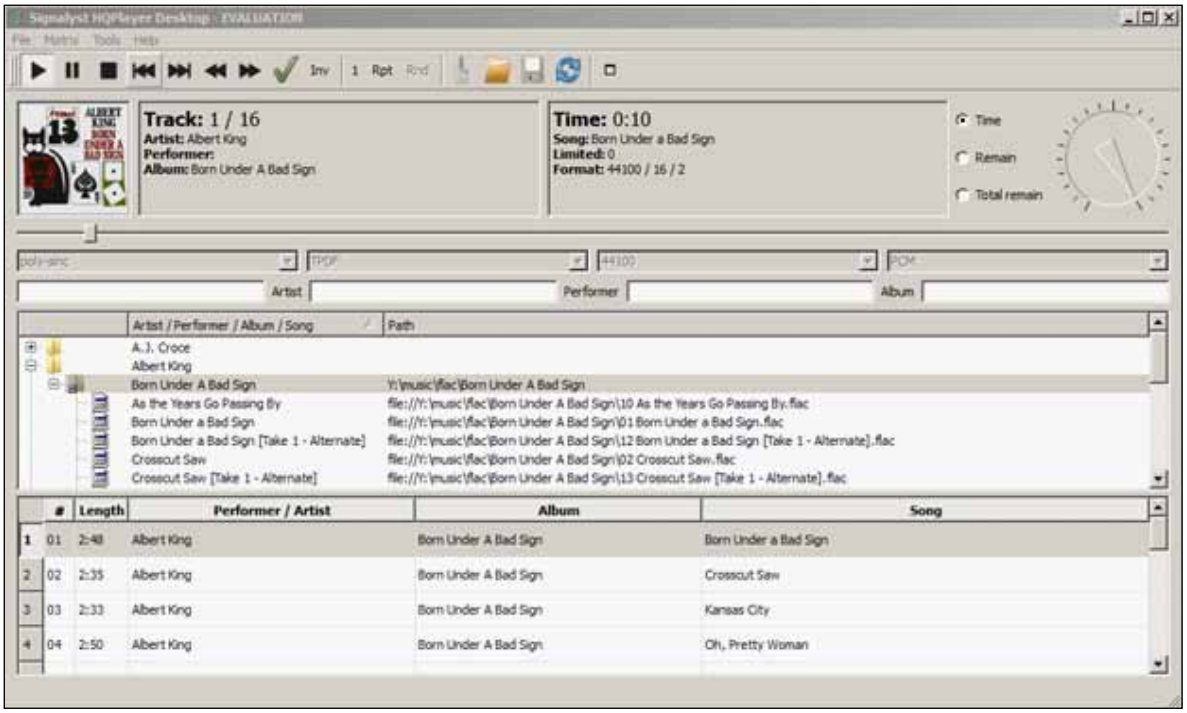
The contents of the selected folder, i.e. album folders, will be displayed in the middle (library) pane.



You can then drill down through the folder views, select albums and/or tracks and add them to the bottom (playlist) pane.



Then click the first, or any track, in the playlist, or ▶ to start playing music.



There is also a full-screen mode selectable (☐ at the right hand end of the task bar).

8 Managing Applications

The Antipodes GUI offers a wide range of best-of-breed applications for playing music. You can choose to install or uninstall any of them with a couple of clicks. It is a good idea, from a sound quality point of view, to only install the playback applications that you intend to use regularly, because installed applications will load services at start-up that will consume resources and raise the noise floor of the system.

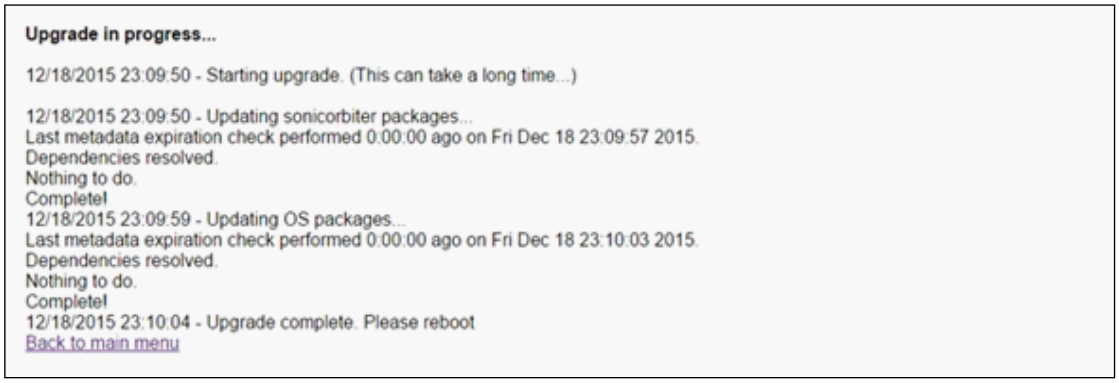
You should also regularly update your Antipodes software.

Therefore this section covers how to update the software suite, how to install applications and how to uninstall applications.

At the Antipodes GUI, select the 'Apps' menu item and click on the 'Software Manager' icon.

Updating The Software Suite

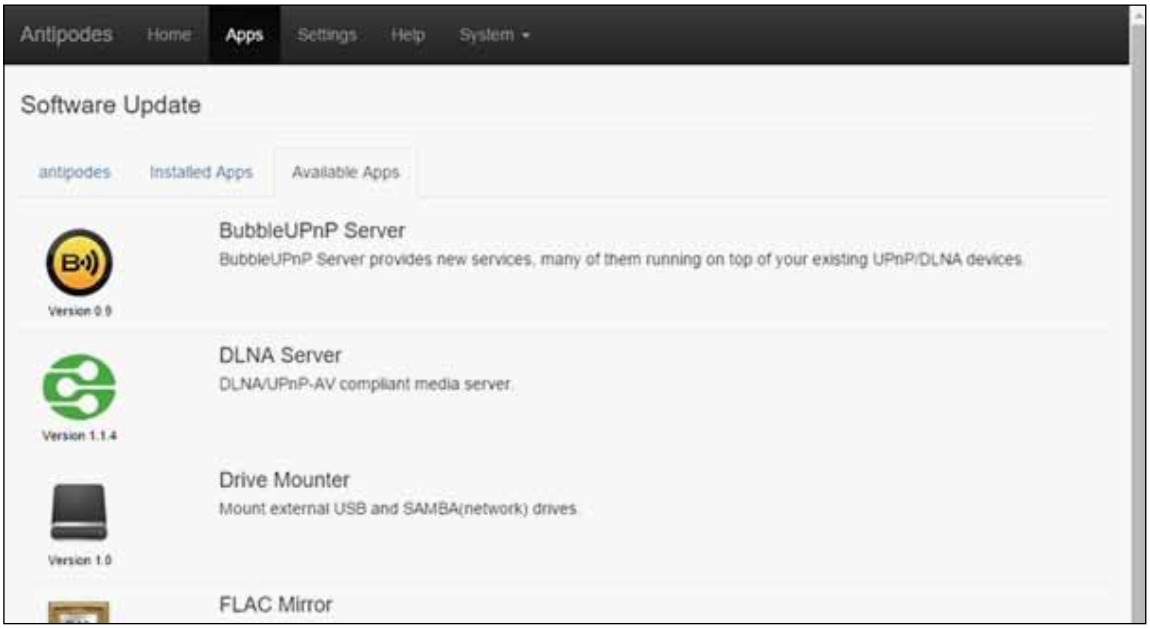
Click on the 'Update' button, confirm by clicking on 'Update' and let the process run to completion.



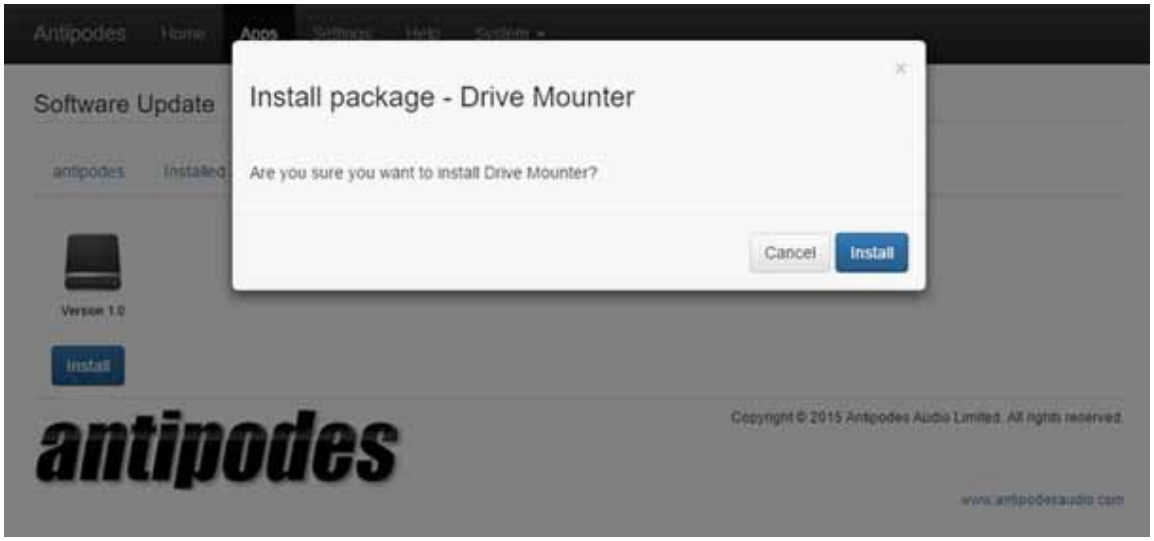
When the update has finished click on ‘Back to main menu’, and reboot to complete the update process.

Installing Applications

On the Software Update screen (see above) select the ‘Available Apps’ tab.



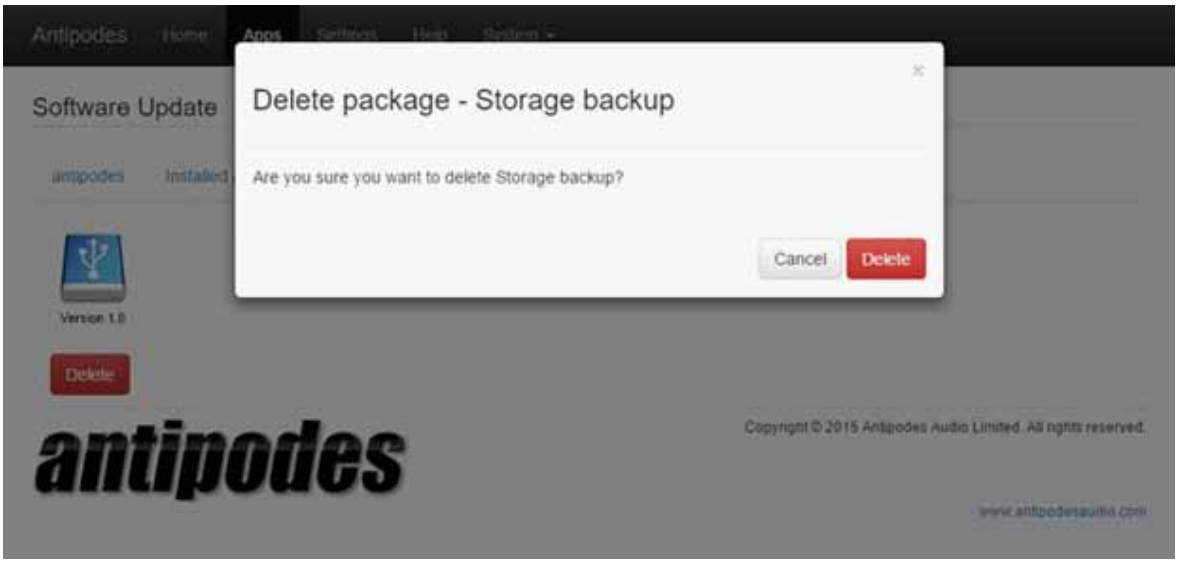
Click the icon of the app you wish to install and then on ‘Install’ and ‘Install’ to confirm.



Click on ‘Back to Package Manager’. The application has now been installed and can be seen in ‘Installed Apps’.

Uninstalling Applications

On the Software Update screen (see above) select the ‘Installed Apps’ tab and click the icon of the application you wish to uninstall.



Click on ‘Delete’ and ‘Delete’ to confirm, and the application will be removed from the ‘Installed Apps’ list and appear on the ‘Available Apps’ list.

9 Administration Applications

INTRODUCTION

The Antipodes GUI includes a number of additional applications for system information and administration. This section covers each of these, and includes:

1. Flac Mirror
2. Backup
3. System Information
    - Local Storage Information
    - Localization
    - Network System Name

9.1 FLAC Mirror

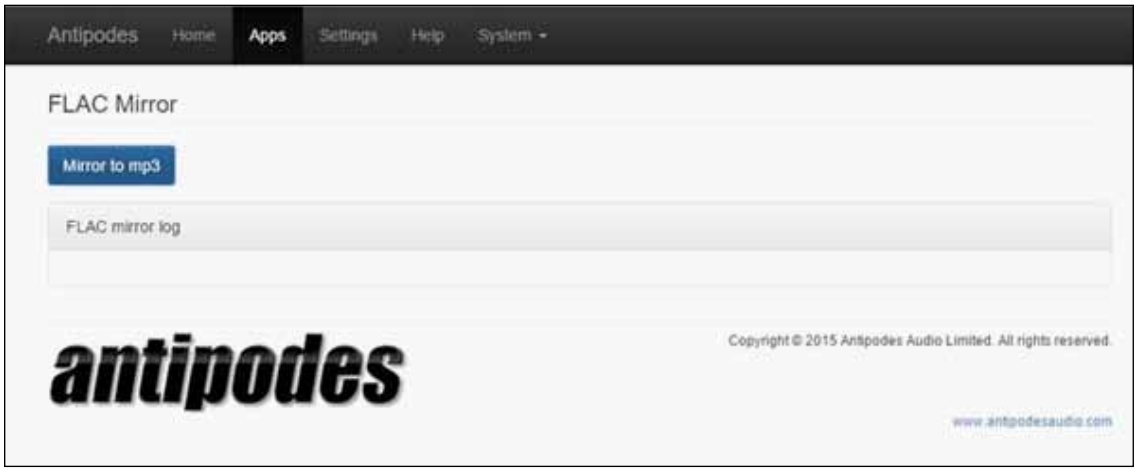
This application provides you with a very simple way to make compressed copies of your music files, which can be more suitable for your mobile devices or for streaming over a low-speed network.

With a couple of mouse-clicks you can make copies of your entire collection to mp3 format. The original files are not changed in any way. A handy feature of this app is that if you add new music the FLAC Mirror app will only need to mirror the new files.

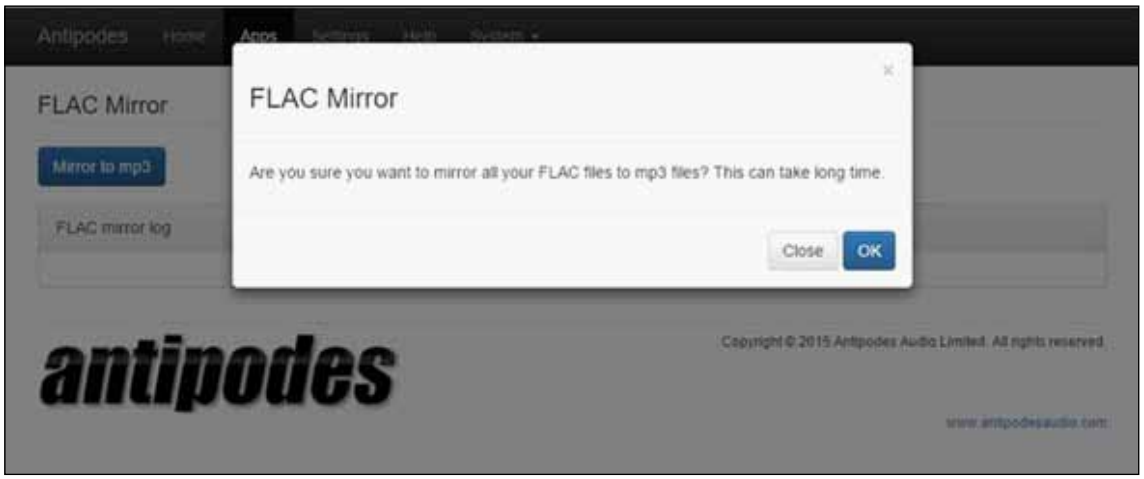
The mp3 files are located at \\antipodes\storage\music\mp3. You can set this location as a music source in a network player, or copy from this location to your mobile device.

If you need a wider range of functionality for transcoding files, see the section in this guide 'Manage Files' for how to use your preferred third-party app.

At the Antipodes GUI, select the 'Apps' menu item, and then click on the 'FLAC Mirror' icon.



Click on the 'Mirror to mp3' button and then on 'OK'. The screen will report progress throughout the process.



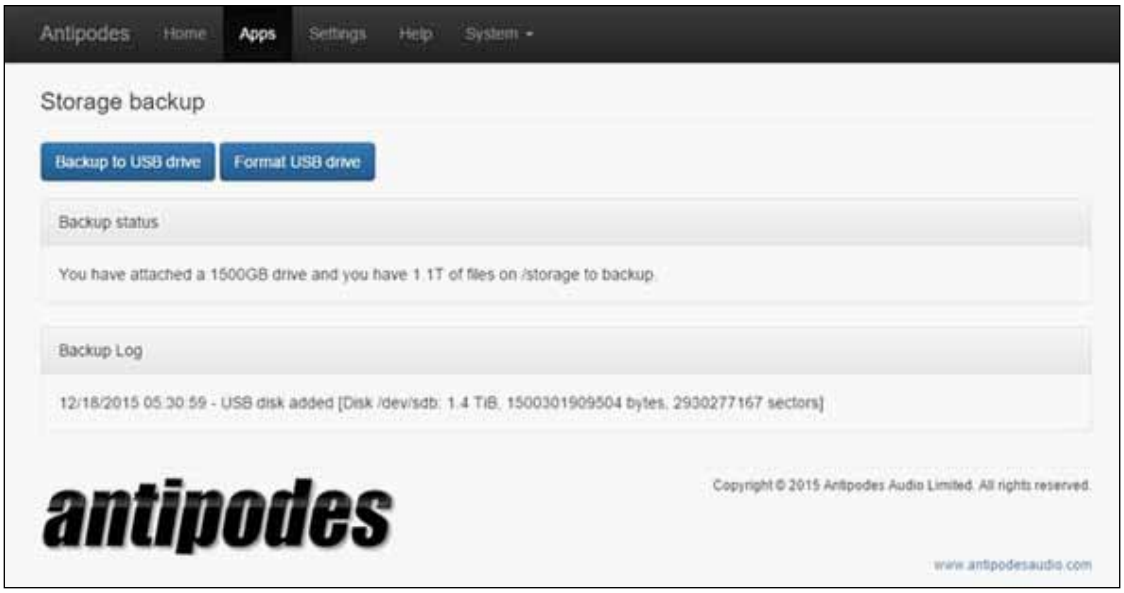
9.2 Storage Backup

We strongly recommend that you make backups of your music library.

This application provides you with a very simple way to make incremental backup copies of your music files. ‘Incremental’ means that if you add new music the Storage Backup app will only copy the new files. The backup is unencrypted, so you can remove the drive from the Antipodes, attach it to another device, and copy from it.

For this reason there is no need for a Restore application. The files on your backup drive are easily and simply copied back onto the Antipodes. See section 6.2 of this guide for a description of how to do this.

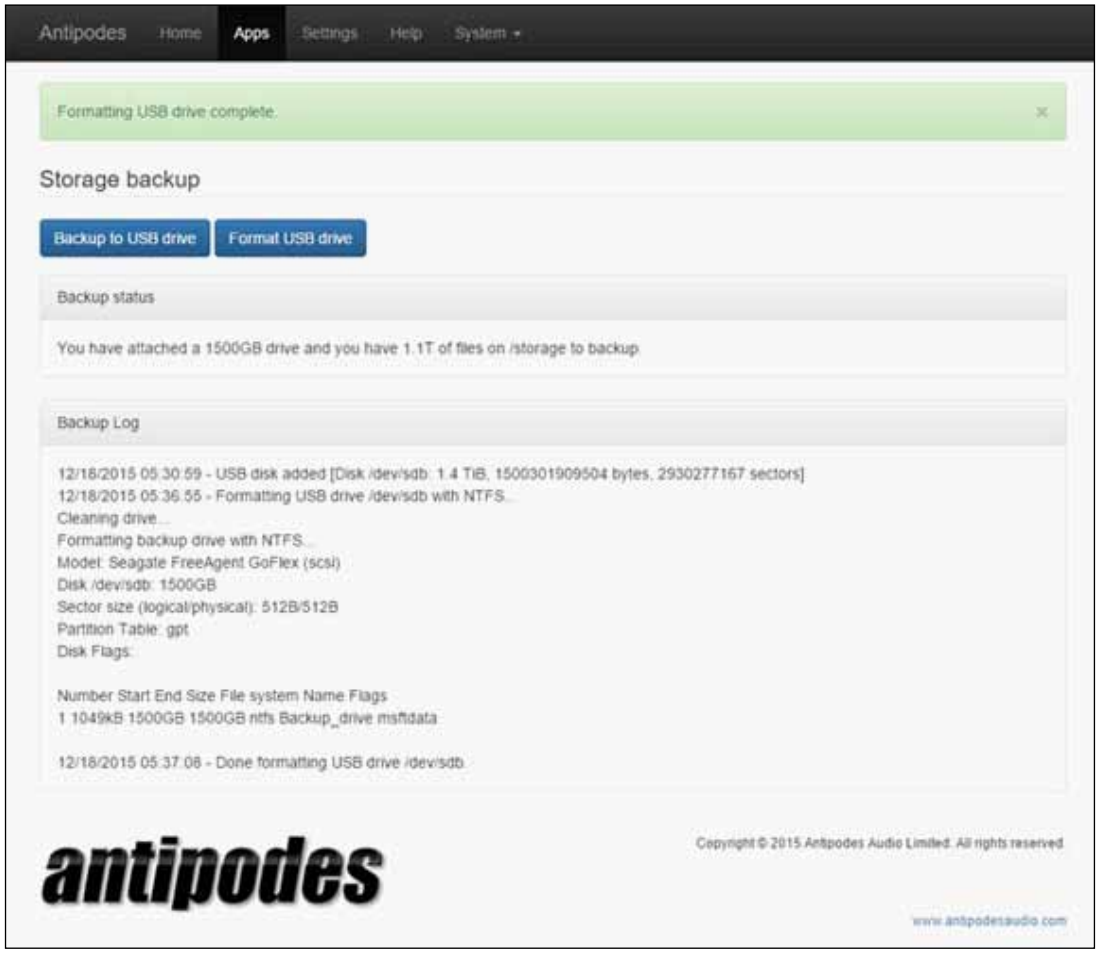
Connect an external USB drive to a spare USB port (but not a USB Audio port) at the back of your Antipodes. At the Antipodes GUI, select the ‘Apps’ menu item, and then click on the ‘Storage Backup’ icon.



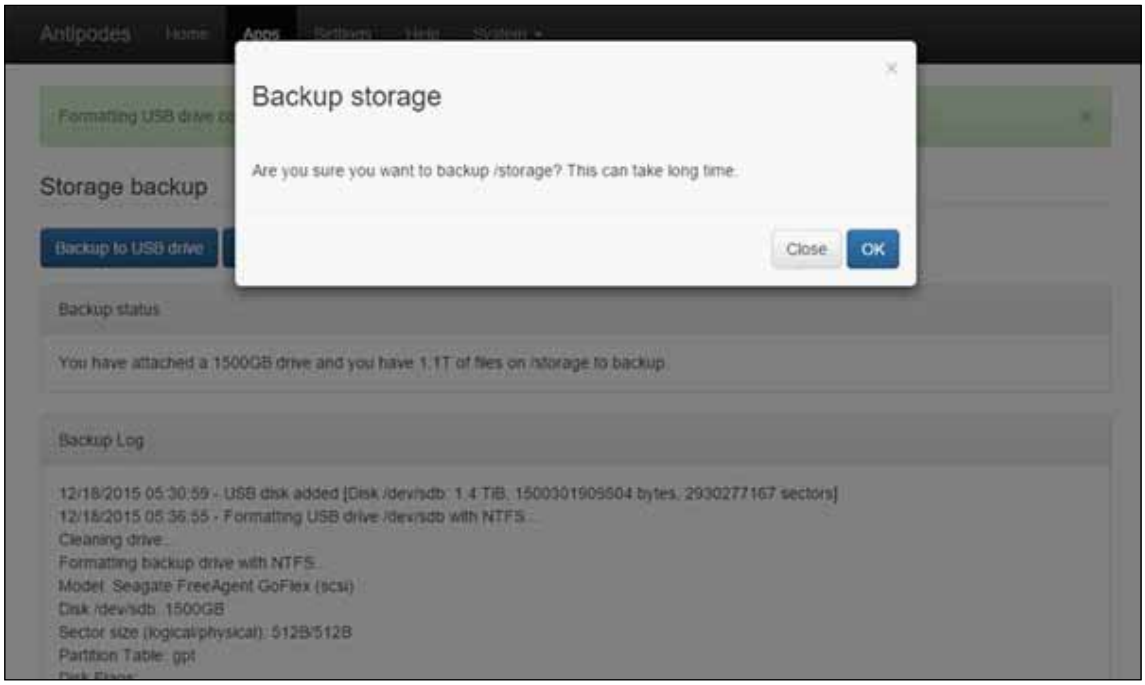
If this is the first time you have connected the USB drive to the Antipodes for backup, make sure you do not need any files that are currently on the drive, and click on the ‘Format USB drive’ button.

If you have backed up to this USB drive before do not format it and go straight to the step below to click on the ‘Backup to USB drive’ button, and the process will only add new and changed files to the USB drive.

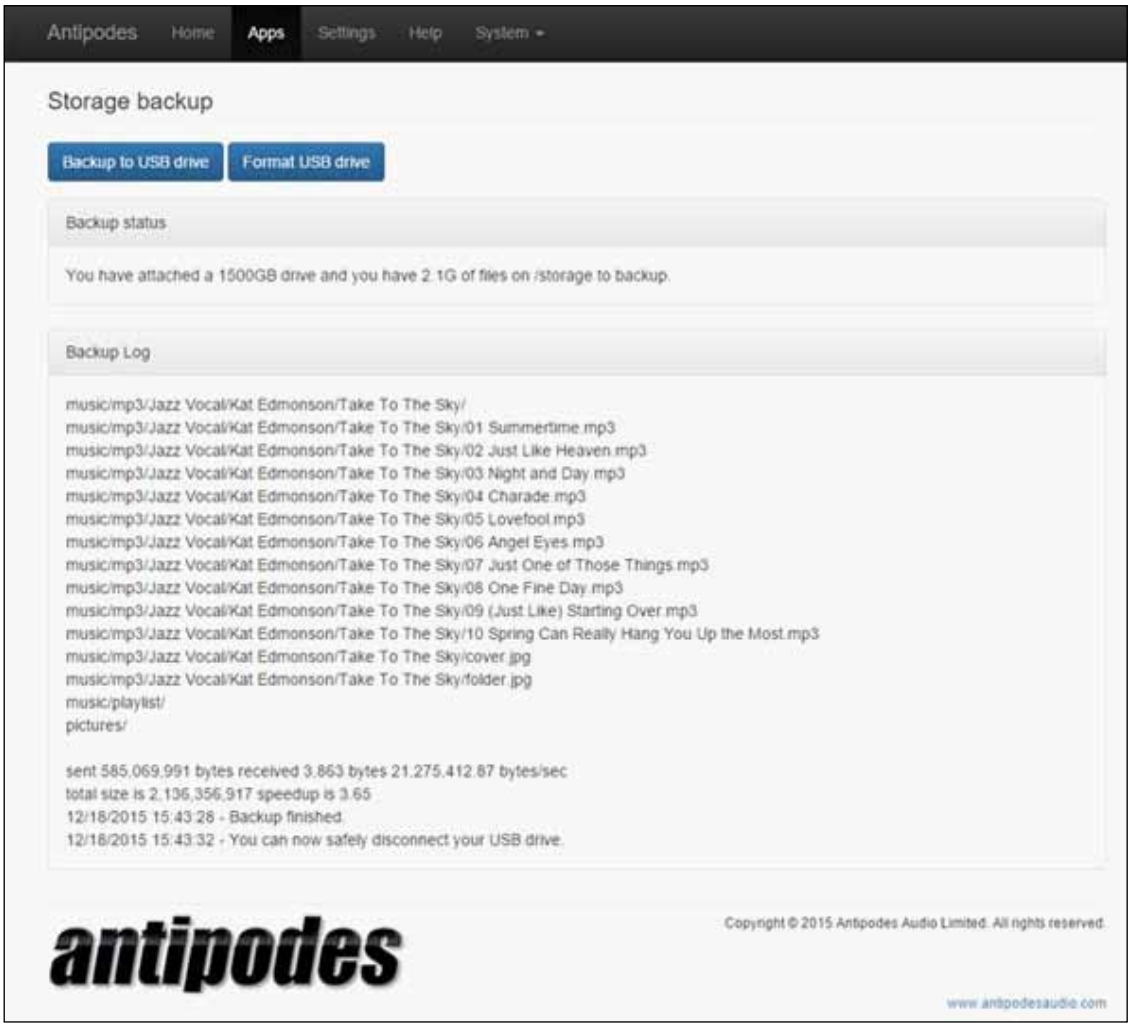
Click ‘OK’ and the screen will display progress until it has finished formatting the USB Drive.



When the USB drive has been formatted then click the ‘Backup to USB drive’ button.



Click the ‘OK’ button and the screen will display progress until it has finished the backup to the USB Drive, adding all new and changed files added since the last backup.

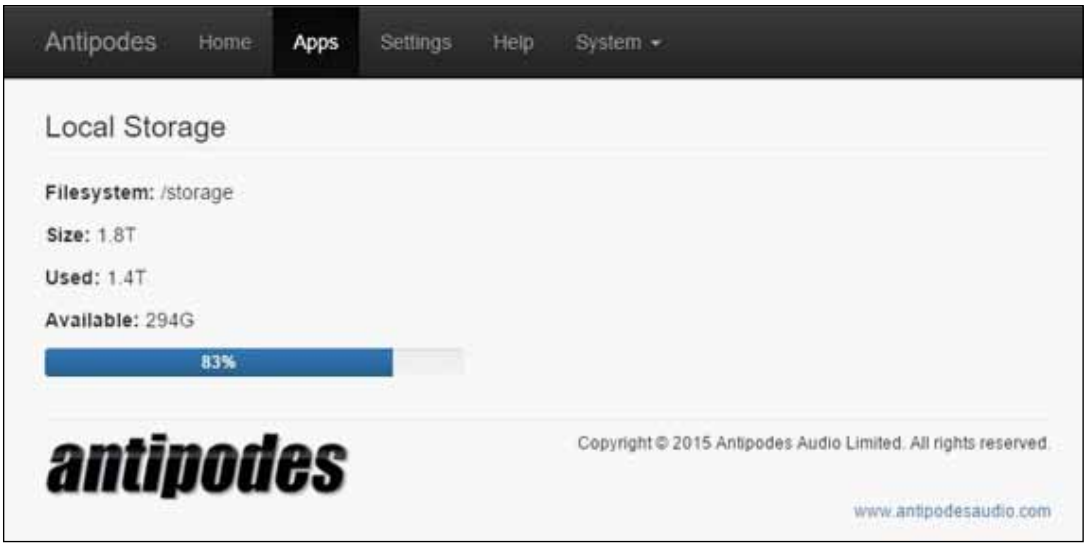


When the backup has finished disconnect the USB drive and store it in a secure place.

9.3 System Information

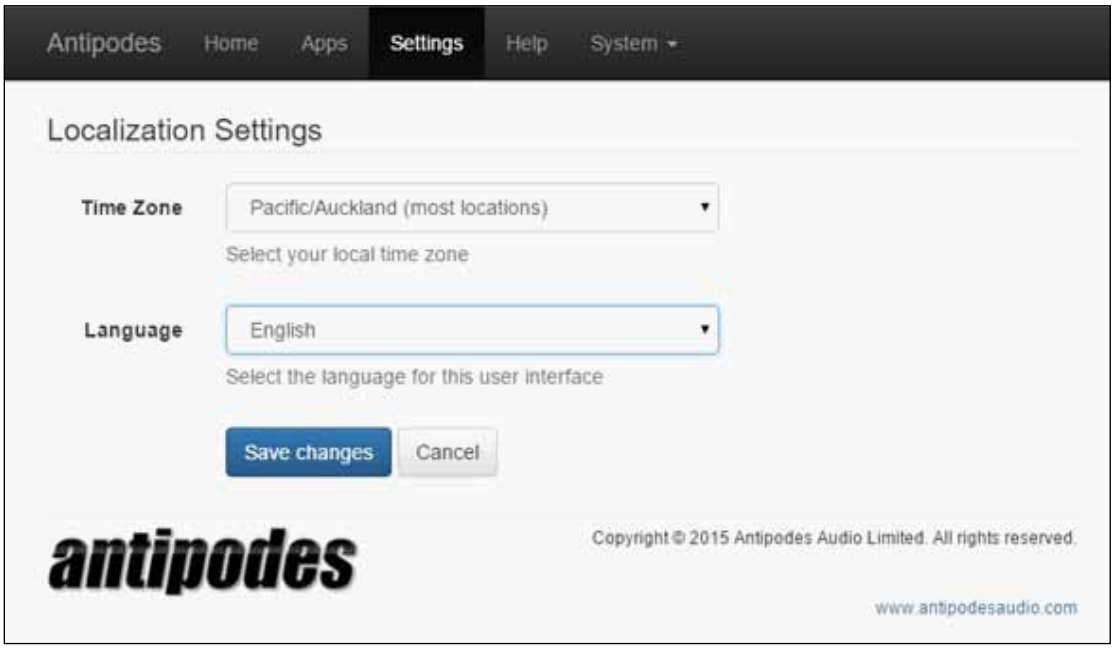
1. Local Storage

At the Antipodes GUI, select the ‘Apps’ tab and click on the ‘Local Storage’ icon. Note that 1TB (one trillion bytes) of space is reported by computers as 0.9TB due to the binary number system used.



2. Localisation

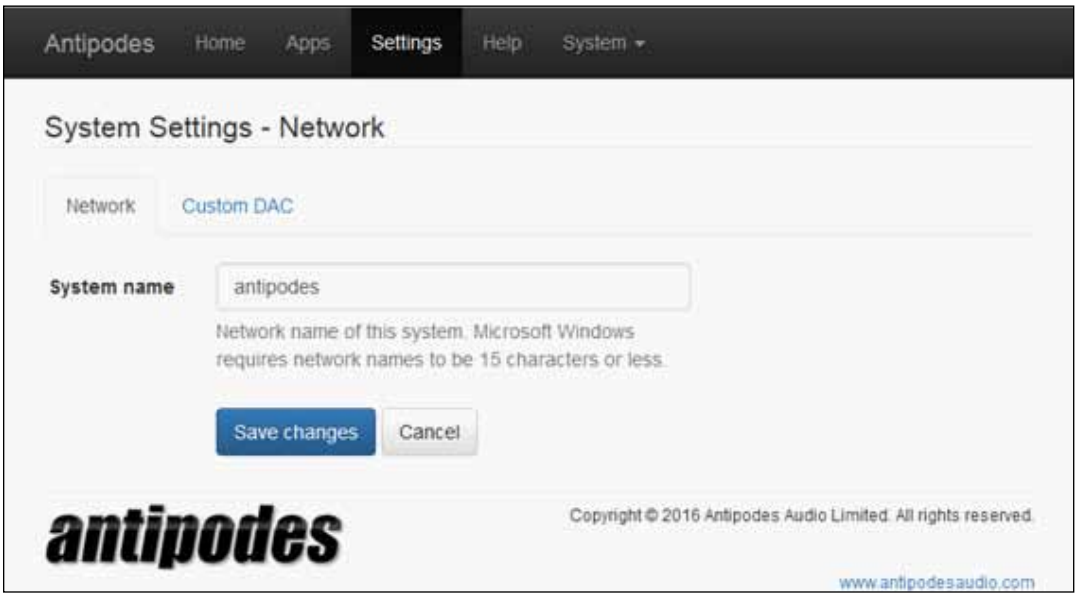
At the Antipodes GUI, select the ‘Settings’ tab and click on the ‘Localization’ icon. You can set the time zone you live in and your preferred language. Click on ‘Save Changes’ when you have finished.



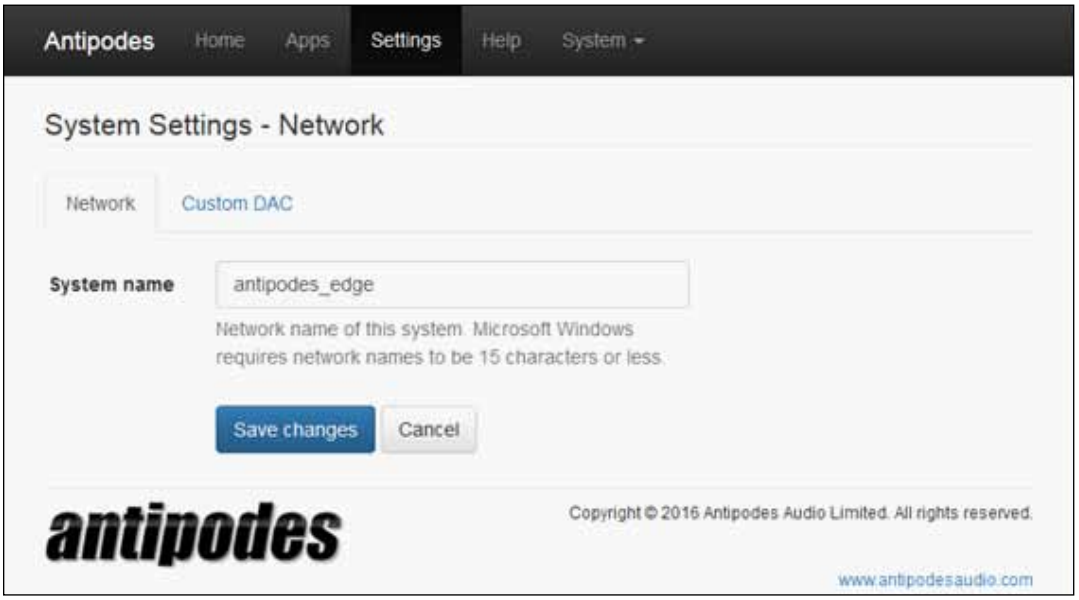
3. Network System Name

When you have more than one Antipodes in your network you will want to give them different names, so that you can more easily recognise which is which when setting things up.

At the Antipodes GUI, select the ‘Settings’ menu item, and click on the ‘System Settings’ icon.



In the ‘Network’ tab type in the new System Name (max. 20 characters). It is advisable to use only lower-case letters and numbers without spaces; you can use hyphens or underscore symbols.



Click ‘Save Changes’ and then reboot your Antipodes for the change to take place and for your router to recognise the new name.

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