OAS Playout – Quick Start Guide

Welcome to OAS Playout – a comprehensive digital audio player designed for the seamless cueing and playing of digital music files held on a computer system. It also has dedicated support for additional audio media such as may be utilized on a radio station – jingles, advertisements and other small sound 'bites'.

This guide provides a quick overview of the package and how to get the system up and running. Once you have a feel for the system it is highly recommended you spend some time using the Online Help/Documentation to get a feel of the intricacies of the package and how best to manage your system.

Overview

OAS Playout enables the playback of digital audio files held on a computer system. Prior to using the system you need to create the audio files and then load them into it. For music, this is typically achieved using the components outlined in the following diagram.



The package forms two principal components:

- OAS Playout comprises the 'on-air' playout system, the twin channel MP3 playback engine
- OAS Playout Manager controls and manages the audio database store utilised by the system

In order to generate the physical audio files themselves you will need some third party audio encoder software and since most music today is held in CD format, some form of CD ripping software eg. *AudioGrabber* is highly recommended.

The process of getting audio into OAS Playout can be quite easy and straightforward if some forethought is put in before starting the process. Key things to consider are:

Audio Format

Whilst OAS Playout can play digital files held in a number of different formats, the most prevalent of these (and the one the software is primarily designed to support) is the MP3 format. However it can also play Windows Media (.wma) and OGG/Vorbis (.ogg) files. For the purposes of this guide, it is assumed you will be using MP3.

Audio Quality

When encoding files to MP3, the following should be utilised as a minimum:

Sample rate: 44khz (standard CD quality) Bitrate: 128bps minimum, 192 or 256 is preferable

Channels: Stereo, 16-bits

MP3's can also be encoded as Variable Bit Rate(VBR) – as suggested the bitrate is not constant across the file. Whilst OAS Playout can play these files, their use is not recommended because of difficulties in determining and calculating track length.

Normalisation

Most CD Ripping software offers the option of *normalising* the audio before it is converted to MP3. This process ensures the audio utilises the full digital range available and is highly recommended to normalise to 100%. This helps to ensure the output levels of all tracks are consistently the same so there is no need to keep adjusting the output levels.

If tracks aren't normalised, the Playout Manager software can do it dynamically on the audio files themselves however this requires time consuming pre processing on the files so it is recommended normalisation be applied at the encoding stage. This will also give better sound levels when used on other players besides Playout.

Data Consistency

A key consideration to make early on is to decide on the naming convention used for track information and to save effort later on ensure that as files are encoded that the naming is enforced (although it can be changed using the Playout Manager software later) – for example the group '*The Beatles*' can be represented in many ways:

The Beatles Beatles Beatles; The

This is important because when it comes to using the on-air package and presenters search for a given artist the results seen in the above example will vary as to whether he/she looks for artists beginning with 'B' or 'T'.

The Playout Database

The Playout Database is central to the whole system – without it the package will not operate. It is held in a single file named **audio.mdb**, located by default in (C:\Documents and Settings\All Users\Documents\OnAStickSoftware\OAS Playout\").

It is highly recommended you back up this file regularly because it holds all the information pertinent to the operation of the system. If it gets corrupted or damaged in any way then you will have to re-import all your audio into the system from scratch. The *OAS Playout Manager* tool provides a simple mechanism for creating backups (from the *Tools* menu) however these are kept in the same folder on the disk so you should archive them onto backup media in case of hard drive failure.

The database may be relocated if desired (to a central file server for example) – in which case simply *Cut* & *Paste* (in Windows Explorer) the *audio.mdb* file to the new location. The next time *Playout* or *Playout Manager* is started it will prompt for the database and you can navigate it to the new location.

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Getting Audio into the system - first steps

The procedure can be highly automated and straightforward depending on the resources available.

Step 1: Rip & encode audio to MP3

Load an audio CD into your PC and launch the CD ripping software of your choice. Most CD ripping software will display a list of audio tracks held on the CD and allow you to enter the names of each track – following is from AudioGrabber:

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Track name	Time	Filesize	Information	
1. Track 1 2 Track 2 3 Track 3 4 Track 4 5 Track 5 6 Track 6 7. Track 7 8 Track 8 9 Track 8 9 Track 9 10. Track 10 11. Track 11 12 Track 12	03:57 03:40 03:12 03:35 03:23 05:45 03:38 04:12 03:29 05:27 05:36 04:38	39.96 Mb 37.03 Mb 32.36 Mb 36.32 Mb 34.23 Mb 58.19 Mb 36.78 Mb 42.51 Mb 35.16 Mb 55.04 Mb 56.59 Mb 46.77 Mb		
✓ 12 Tracks, Playtime: 50:37 Total time left: 00:00:00	Disk: needed:	0.00 Mb, free: 1	320.96 Mb	

Now is the time to enter the track/artist details according to your desired naming criteria. Alternatively if you have an internet connection and your CD ripping software supports it, you can make use of the global CD Databases (CDDB or FreeDB). These contain track listings of thousands of CDs and are maintained by voluntary submission from users from around the world. You can interrogate one of these via your CD ripping software either automatically or by a button click to get a full title/artist/album breakdown.

Audiograbber		
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Compilation disc Artist Keane	Album Hopes And Fears	
Track name	Time Filesize	Information
1. Somewhere Only We Know 2 Bend And Break 3 We Might As Well Be Strangers 4. Evenybody's Changing 5. Your Eyes Open 6. She Has No Time 7. Can't Stop Now 8. Sunshine 9. This Is The Last Time 10. On A Day Like Today 11. Unitled 1 12. Bedshaped	0357 3396 Mb 0340 37.03 Mb 0312 32.36 Mb 0335 36.32 Mb 0545 58.19 Mb 0338 36.78 Mb 0412 42.51 Mb 0329 35.16 Mb 0527 55.04 Mb 0536 56.59 Mb 04.38 46.77 Mb	
I2 Tracks, Playtime: 50:37 Total time left: 00:00:00	Disk: needed: 0.00 Mb, free:	1320.95 Mb

It's worth entering as much information here as possible to save effort later on – Audiograbber for example lets you set Album, Year and Genre information as well as the Track/Artist info. All this information can (and you should set up your software to do so) be tagged onto the MP3 files for other software to use. These tags are used by the OAS Playout Manager software when loading the tracks into the Playout database.

As a preference you should set your CD ripping software to write ID3v2 tags (under *Settings, ID3v2 tag*), with as much information as possible. You should also remember to enable and set the normalisation levels in the ripping software as well.

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C Track number only ● Track number/total tracks ○ No tracknumbers at all ▼ Encoded By ImageFM Grp ▼ Add Music CD identifier to ID3v2 tag (MCDI tag)	

Make sure the encoder settings are correct (*MP3* button on Audiograbber) – for example using the *Lame* encoder:

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C Direct Rip and Encode to MP3 file							
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Select the tracks to encode and hit the rip button.



Step 2: Load the files into the Playout Database

Launch the OAS Playout Manager tool and select the Music Import tab.

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Locate the section entitled *Import Selection* and press the *Browse* button. Navigate to the folder where your MP3s are located and click OK. Press the *Disk Tree* button on the main page.

Depending on the quantity of files in this folder (and the ones below it) the package will shortly display a list of MP3 files found for loading.

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Bend And Break	Keane	Hopes And Fears	Indie			\\Fridge\in
Caril Stop Nois	Keane	Hopes And Fears	Indie			1\Fridge\in
Everybody's Changing	Keane	Hopes And Fears	Indie			\\Fridge\in
🗹 On A Day Like Today	Keane	Hopes And Fears	Indie			\\Fridge\in
She Has No Time	Keane	Hopes And Fears	Indie			\\Fridge\in
Somewhere Dnly We Know	Keane	Hopes And Fears	Indie			\\Fridge\in
Sunshine Sunshine	Keane	Hopes And Fears	Indie			\\Fridge\in
This Is The Last Time	Keane	Hopes And Fears	Indie			\\Fridge\in
Untitled 1	Keane	Hopes And Fears	Indie			\\Fridge\in
We Might As Well Be Strang	Keane	Hopes And Fears	Indie			\\Fridge\in
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The page shows all the files available for import along with the Artist, Album etc. info retrieved from the tagging information held with the file. The check box next to each item indicates the file will be loaded into the database – if you need to exclude specific files uncheck the box.

In the lower half of the pane, the software displays Artists, Albums and Genres which are being assigned and used for these files. Each works in a similar vein.

File: ///Fridge/imagefm/music/Keane - Ho	opes and Fe	ars\Keane - Bedshaped.mp3
Items which may be added as a result of this import:	Artist	_
Hopes And Fears	Album	_
Apply Apply	Genre	_

These panels show a new artist (*Keane*) and new Album (*Hopes and Fears*) are about to be entered into the system. This can be changed if desired to an existing Artist/Album by picking an alternative from the drop down list on the right hand side. Refer to the on-line help for more information about this.

The tracks are only loaded into the database by pressing the *Update* button. Close the package when the updates have been applied.

Note: This covers the process for loading Music into the system. For all other forms of audio – Jingles, Adverts etc. the process is very similar utilising the *Jingle Import* tab.

Step 3: Play the music

OAS Playout can now be launched in order to play the tracks selected. When the main screen is displayed, press the Load button next to one the main Play Panels.

Category: Mi	IBÍC	•			
Title:		Artist		Search by Album	1
Title	Artist	Duration	Genre	Other	Selection:
Bedshaped Bend And Break Can't Stop Now Everybody's Changing On A Day Like Today She Has No Time Somewhere Only We Know Sunshine This Is The Last Time Untited 1 We Might As Well Be Strangers Your Eyes Open	Keene Keene Keene Keene Keene Keene Keene Keene Keene Keene Keene Keene	04: 37 03: 39 03: 38 05: 26 05: 45 05: 45 05: 45 04: 12 03: 28 05: 35 05: 45 05: 45 05	Indie Indie Indie Indie Indie Indie Indie Indie Indie Indie	B00BDD0C B00BDD0C B00BDD0C B00BDD0C B00BDD0C B00BDD0C B00BDD0C B00BDD0C B00BDD0C B00BDD0C B00BDD0C B00BDD0C	Duration: Details:
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Select the desired track and press OK. The track can now be played by pressing the associated Start button.

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Summary

The process outlined in the previous sections give only a broad overview of the process however for the most part it should be reasonably intuitive. The *Playout Manager* software also allows for the editing of music information once it is loaded into the database and provides similar import capabilities for Jingles, Adverts etc. It also provides the ability to update the ID3 tags held on files so other applications can obtain this information as well.

In addition you can generate custom playlists and categorise Jingles for button wall definition and producing custom lists of audio.

It is well worth reading through the User Manual now which provides a step by step guide to using the entire package.

Jon Bird, updated August 2008

mailto:playout@onasticksoftware.co.uk http://www.onasticksoftware.co.uk/playout.html