Getting Started with AircastDB

This article is an introduction to the Aircast audio and scheduling database, AircastDB, and will help you to make the first steps with AircastDB

About AircastDB

AircastDB (Aircast Database) is the audio and scheduling database built into Aircast. It is made up of three parts:

- Audio Library keeps a list of your audio files, lets you edit their metadata and organize the audio items in a virtual folder structure.
- **Playlist Editor** a place where you can create and edit hourly playlists that are later grabbed by the playout application.
- **Mini Scheduler** a music scheduling function built into AircastDB that allows you to generate hourly playlists based on configurable hour and music templates, or import music from 3rd party schedulers.

AircastDB is built into Aircast (except Home Player), so you don't have to install any other software. It's designed as an add-on for Aircast though, so Aircast can operate without any database backend, and even when you have a AircastDB set up, you can still play audio files straight from any Windows folder without adding them to the AircastDB library or playlist first.

SQL database

AircastDB uses an SQL backend to store the library and playlists. There are two kinds of backends available:

- Local database: All data is stored in a single *.mldb file on your local harddisk, using an "embedded" SQL databae called SQLite. The setup is very easy because SQLite is built into Aircast, and you don't have to worry about an SQL server installation. However SQLite will not work well over a network, so this type of installation is only recommended if you use Aircast on a single, standalone computer.
- Networked database: Uses a regular SQL Server, either PostgreSQL (recommended), MySQL or Microsoft SQL Server. Setup is more difficult because you have to install the SQL server first, but the network capabilities of these SQL products will allow you to access the database from any number of Aircast computers on your LAN simultaneously.

Note that the SQL database only stores the **metadata** of the audio items in your library, not the actual audio files - the files will be located in a regular harddisk folder or network share.

Audio folders

Unlike other radio automation products, AircastDB does not organize your audio files in a cryptic folder structure, or reencodes them to any particular audio format. Instead it works on existing audio folders located on your harddisk or a network share. (Future versions might support additional storage locations such as HTTP servers or cloud services - that's why we use the general term "storage" to refer to your audio folders.)

How AircastDB handles your audio files

Once registered as a storage, AircastDB can synchronize your audio folder: It scans the folder recursively and creates a new data record in its library for all files found. (If you deleted any files since the last sync, it can also delete the data records for that files in the same step.)

Unless explicitly requested, AircastDB will never perform any write operations on your audio folders (delete, change or copy files). It tries to be as unobtrusive as it gets - it just scans ("synchronizes") the folders and adds a list of the files to its library, where you can start editing metadata and organize the files in virtual folders.

AircastDB also doesn't care about the format your file are in. When it scans the folder, it will find all audio files supported by the BASS audio library and any installed BASS add-on. Mixed content is no problem at all. File tags (like ID3 tags) are automatically imported when possible.

So when you're migrating from another radio automation software to Aircast, you can usually just add the existing audio folder as a AircastDB storage and use it. This makes the migration very easy. (In fact it should be possible to use both products at the same time.) For some third-party automation software, we have also import filters available that import the existing metadata from the third-party database once the files have been sync'd into AircastDB.

Recommended folder layout for new libraries

If you plan to start a brand new audio library, we recommend that you set up a network share, say M:\ (UNC paths like \\server\audio will also work), and use subfolders for music, jingles and other content:

M:\Jingles M:\News 	M:\Music	
	M:\Jingles	
•••	M:\News	

(For a local mode AircastDB installation, you could create a folder C:\Audio and then use subfolders like C:\Audio\Music etc. instead.)

Each of these subfolders will then be registered as a storage in AircastDB and can synchronized with the Library. Inside the subfolders, you can organize the files however you like, e.g. create a subfolder for each artist in the Music folder. AircastDB will recursively scan each storage during the synchronization process, so it will find the files in any subfolder further down the tree.

However it is very important that you do not rename or move the files around once they have been added to the Library, otherwise the file will show up as missing (under the old name) and new (with the new name) at the same time. (Note: The Sync dialog has a *Fix renamed files* function to handle this situation, but generally all files should stay in their location and keep their names all the time.)

Setup

As AircastDB is an optional add-on for any Aircast installation, you must set up the database before you can start using it.

SQL setup

First of all, you must install and prepare the SQL datatabase (or SQLite database file for local mode), and add the database connection to your Aircast configuration. Please see the instructions for the particular SQL backend you are going to use:

- SQLite backend setup (local mode)
- PostgreSQL backend setup (networked)
- Microsoft SQL Server backend setup (networked)
- MySQL server backend setup (networked)

Once the SQL backend is set up, and the database connection has been added to Aircast, you will be able to run the *Database* application from the Aircast group in the Windows Start Menu, and the AircastDB main window will open. (Alternatively, click the green *Database* button in the toolbar of the playout window to open the AircastDB window from inside the main app, it will serve the same purpose in most cases.)

Prepare audio folders

Next, you must decide where to store your audio files (local harddisk and network share), and which folders to use as storages for the AircastDB Library. Please see the comments on audio folders above. The audio folders should also be populated with a couple of audio files so we can try the synchronization function.

Add audio folders as storages

Open the AircastDB app and and go to Administration \rightarrow Configuration \rightarrow Storages and add your audio folder(s) as storages.

Do not add individual subfolders of another storage! AircastDB will automatically scan all subfolders!

Database Configuration						
Storages	Stations	Sub-Playlists	Mini Sched	uler Standard Attributes	Playlist Attribute	es
ID	Name			Default Location		Items
1	music			F: \music \eigene		811
2	Jingles			F:\eldoradio\jingles		111
4	Werbun	9		\\CLUBHOUSE\data\mp3	\stuff\Werb	14
6	C:\temp			C:\temp		0
7	Test-Sto	rage		D:\data\Test-Storage		1
Ad	d	Remove	2	Edit	OK	Cancel

You will be able to enter a name and description for each storage that will later appear in the menus - by default, the name is just the folder name.

When you're done, click OK - you will be prompted to restart AircastDB.

Synchronize storages

Now we are ready to scan your hard drive (the registered storages) for audio files. Click the *Synchronize* button, select the desired storage (if you have registered more than one), and the Synchronize dialog will appear:

Synchronize Storage - music					
New Files	Missing Files				
G\Gluecifer\(Gluecifer) Tender Is The Savage\01 (Gluecifer) I Got A War G\Gluecifer\(Gluecifer) Tender Is The Savage\02 (Gluecifer) Chewin' Fin G\Gluecifer\(Gluecifer) Tender Is The Savage\03 (Gluecifer) Ducktail He G\Gluecifer\(Gluecifer) Tender Is The Savage\04 (Gluecifer) The Genera G\Gluecifer\(Gluecifer) Tender Is The Savage\05 (Gluecifer) Red Noses, G\Gluecifer\(Gluecifer) Tender Is The Savage\06 (Gluecifer) Drunk And G\Gluecifer\(Gluecifer) Tender Is The Savage\07 (Gluecifer) Rip-Off Str G\Gluecifer\(Gluecifer) Tender Is The Savage\08 (Gluecifer) Dog Day, D G\Gluecifer\(Gluecifer) Tender Is The Savage\09 (Gluecifer) Sputnik Mo G\Gluecifer\(Gluecifer) Tender Is The Savage\09 (Gluecifer) Sputnik Mo G\Gluecifer\(Gluecifer) Tender Is The Savage\09 (Gluecifer) Sputnik Mo G\Gluecifer\(Gluecifer) Tender Is The Savage\10 (Gluecifer) Exit At Gat kurz.mp3					
V Select all	Select all				
Import Selected Files	Delete Selected Items				
Import Options	Fix Renamed File				
Add to folder: Disorted	In the lists above, select the old and new file names of a moved/renamed file, then dick the button below:				
Set type to: Music 🔹	Fix Renamed File				
Scan complete, 11 files are new, 0 are missing.					

When the scan is complete, the list of new files (not yet part of the Library) is displayed on the left hand side. By default, all new items are selected, but if you don't want to import everything at this time, you can select individual items or a range of items with the mouse (hold down Ctrl or Shift and click).

It's a good idea to set the type of these files to "Music" (or whatever it is) at this point, in the Import Options section. You can also specify the virtual folder that the items should go into - as we haven't set up any folders yet, it's simply the Unsorted folder.

When ready, click *Import Selected Files*, and AircastDB will open each file, analyze it (read tags, perform Auto Cue etc.), and add it to the Library.

When you add more files to your audio folder, you can return to the Synchronize dialog at any time and repeat the steps. If you happened to delete files, they will appear in the right-hand side list, and you have the option to remove them from the Library.