

## Server Side Architecture :-

The “Media Server” will provide the primary storage location for all meta data, and media files. All media for all users will be stored in the file storage pool, and be catalogued, and linked to from the meta data database.

A master set of file meta data will be kept by the server, allowing each user account to modify their own meta data for any particular file.

The master database also provides the master storage location for each user accounts meta data. This local user account meta data is updated on a regular basis from users local meta data db.

It is proposed that this database be built upon SQLite, avoiding the need for the installation of something like MySQL, on each client machine.

### Media Server



### Media Bank



## Client Side Architecture :-

This example of a static user illustrates the locally kept instance of the users meta data. This is likely to contain all data from the ID3 tag, as well as album art. This should help to speed the process of searching and browsing, by using the local DB source.

Any changes to meta data, made by the user are edited on the users local copy. The modified date field is set, and then used at the next server sync update the master database, on the “Media Server”. The client and server databases are replicated on a routine basis, with an interval yet to be determined.

All media in the users account is streamed from its location on the server. It is proposed that a method of pre-caching is used, to create a large buffer for playback of audio files; this may have to be examined for video.

### Static User



### Media Account



## Mobile User



### Media Account



### Media Wallet



This example of a mobile user illustrates the additions made to a “Static User” to create a “Mobile User”.

The user still relies upon a media account, and so stores their meta data, not only locally, but with a synced server side version.

A “Mobile User” can create a “Media Wallet”. A “Media Wallet” is a local storage pool indexed and referenced by the local media account database, allowing the playback of Media Wallet Media, when not connected to the network. Allowing a Mobile User to travel offsite.

The media wallet facility is the primary reason for a local instance of the users meta data. This technically duplicates server side data, but could be argued is used to speed up user activities, and providing a server side meta data backup. Meaning a new machine could be connected to the Media suite, and used by an existing user, using their previously created media account.