

USB Media Sync

by Transpacific Software Pvt Ltd

The client:

The client is a leading manufacturer of custom made garments and accessories based in Florida, USA.

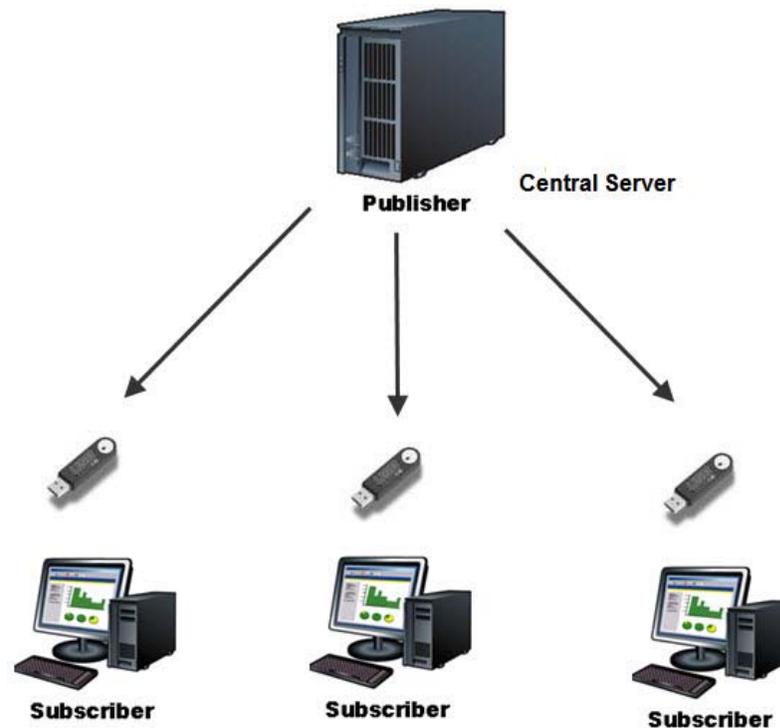
The Situation:

The client was looking out at a branding campaign to reach out to consumers'. As a part of this campaign they were planning to distribute USB flash drives. These flash drives had to be portable media carrying devices with plug and play as well as sync facility with Server. The client wanted to augment such marketing investment by extending the linkage between brand and consumer.

The client had a central Server which would be updated time to time. This updates were to be reflected on the USB flash drives through latest files downloaded from Server. To enable this they came up with an idea to design a sync framework which could handle this activity flawlessly without much user interference.

The Challenge:

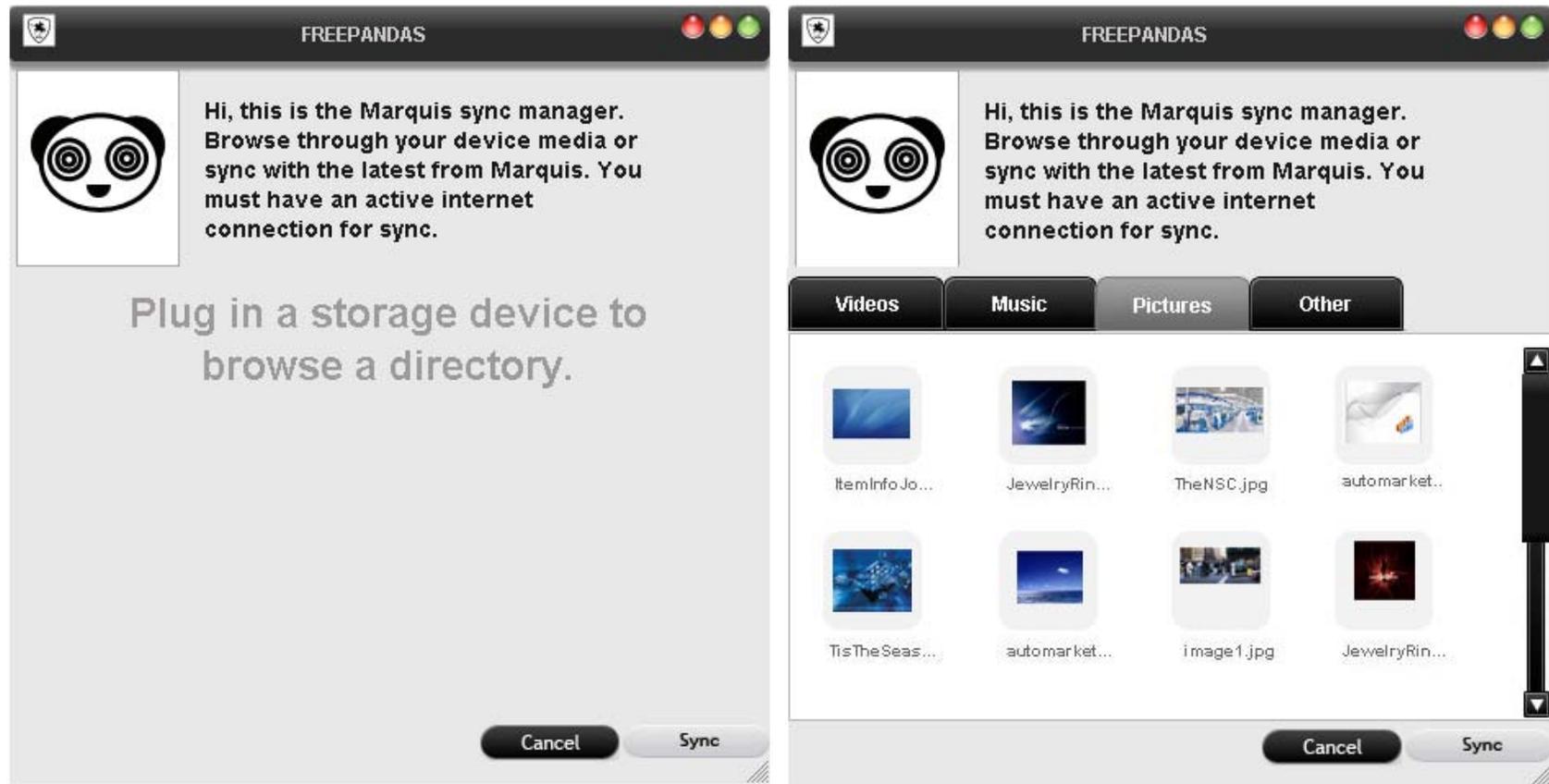
The USB flash drive had to synchronize with the client central server over an internet FTP protocol and had to auto download files to USB. The major challenge here was to incorporate auto update functionality in the sync framework.



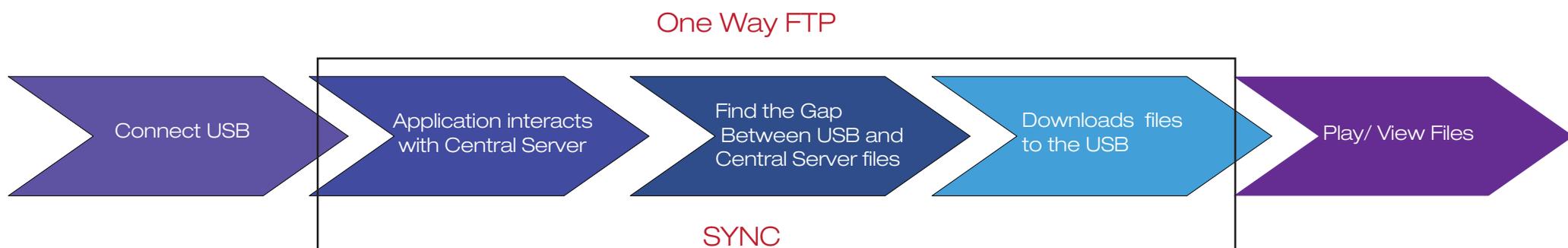
This functionality further has to sort media according to the file type. In addition, the framework had to be functional across diverse Operating systems.

Working towards the Solution:

The TPS team incepted “auto update functionality’ as a prototype of the development. Adobe Air 2.0 was used for development leveraging on its compatibility with Mac OS, windows as well as Linux and ability to work with USB. Following the approval from the client, the TPS team started with the full development.



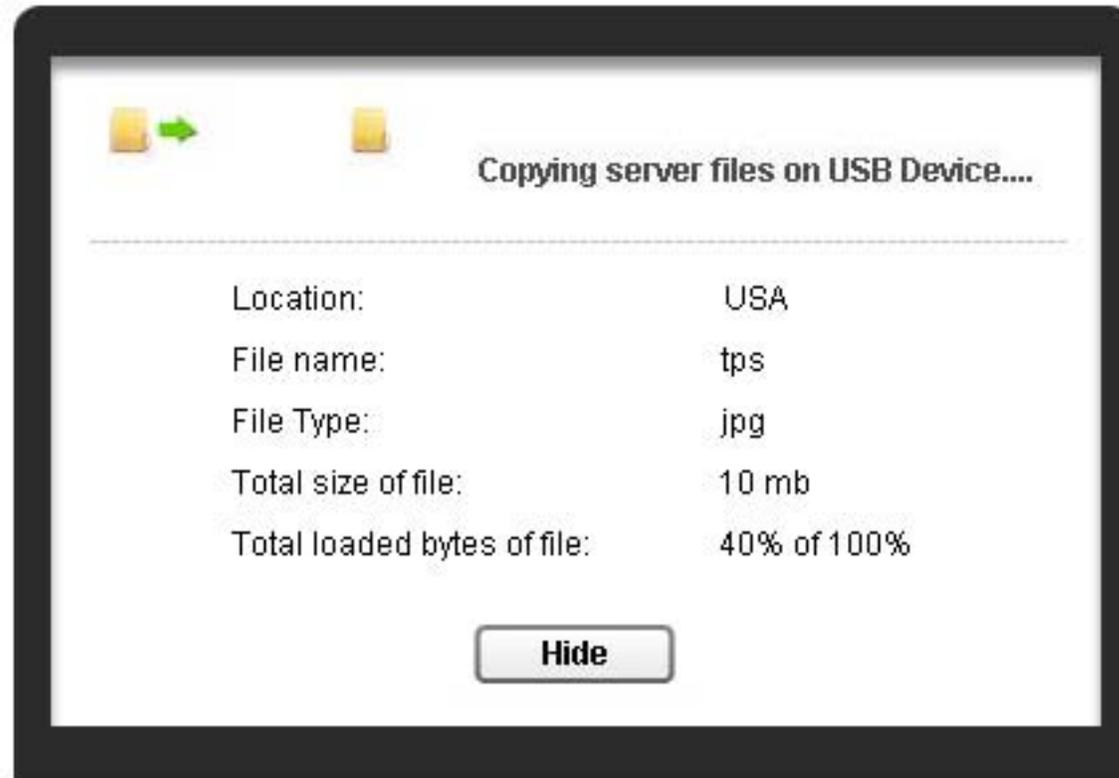
Design was based on Hub and spoke topology with the server acting as a Hub supporting many USB flash drives. Sync was carried through a one way FTP mechanism with incorporating “server wins” concept.



The team was successful in achieving flawless updates while maintaining data integrity.

Further functionality was assured with cross OS testing. As the development progressed, security features were added using Database encryption and authentication.

The central admin just uploaded the files on the central server. The user of the USB had to plug in, synchronize media and could view/play the files from their USB directly. The Sync framework read the files from the USB, compared it with the Server updates and replicated the same on the USB.



The team was successful in achieving a full media synchronization and auto update facility on the USB flash drive with user not really having to bother much about the local machines they were working on

Future:

TPS is now looking forward to extend compatibility across all OS, both on PCs as well as hand held devices. Further developments will be aimed at syncing any type of data, using any protocol over any network.