Aquilonis

Case Study

Aquilonis Sync Framework for Healthcare

About Sync Framework

This framework helps companies reduce time to market with fast, accurate and efficient data synchronization between any two devices viz PDA, Desktop, Mobile handset and the remote database server.

Biggest challenge for the Organizations whose folks are on the move is to synchronize the data on their handhelds with the main remote server either REAL time or in BATCH mode.

Our Sync Framework ensures that, the WHOLE Organization sees the same data at ANY POINT IN TIME.

Our framework helps you build an exclusive data funnel which supports transaction of multiple records of SAME or DIFFERENT tables and field.

Transactions are synchronous with multiple mobile handheld clients ensuring:

Data Integrity
Utmost Speed
Highest Accuracy
Efficiency and
No Data Corruption

Background

A leading provider of handheld enabled Pachymeter and Biometer for Ophthalmologists based out of California, USA. The existing product is developed and working on Palm OS.

Limitations

- Non Friendly User Interface with small screen resolution
- Needed formalized way of data synchronization
- Technical limitation with Palm's conduit mechanism
- Looking for faster, accurate and efficient data synchronization

Challenges

- Reduced time to market with highest ROI
- To migrate the existing software from Palm to WinCE.
- User friendly GUI with advanced features and controls
- Customization and integration of our Synchronization framework to achieve highest Data Integrity, Utmost Accuracy, Efficiency and No Data Corruption.

Data Synchronization

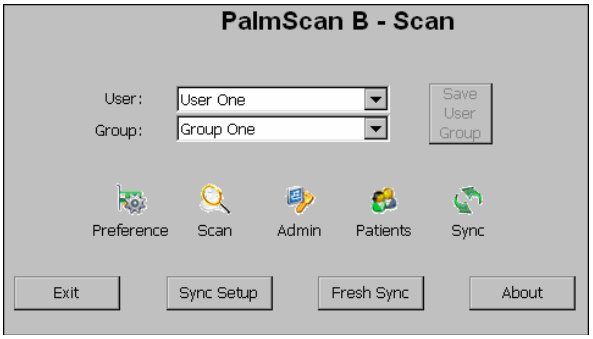
Looking at the end user profile, which are all Doctors and not technical users,

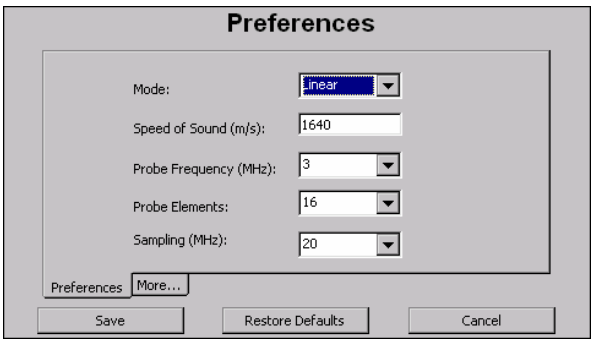
- TCP/IP based Socket server and client mechanism is adopted.
- HTTP based communication was ruled out as it requires managing a web server.

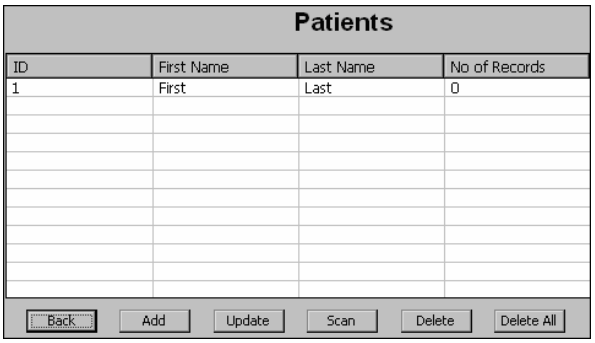
Data accuracy and speed are of utmost important parameters for the end users when it comes to data synchronization between handheld and the server.

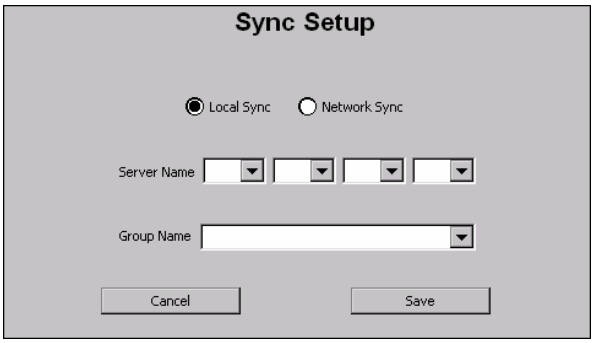
Key aspect of data sync was a feature named "Fresh Sync". Whenever the user changes the handheld or does factory reset, "Fresh Sync" helps user to retrieve all the data from the server.

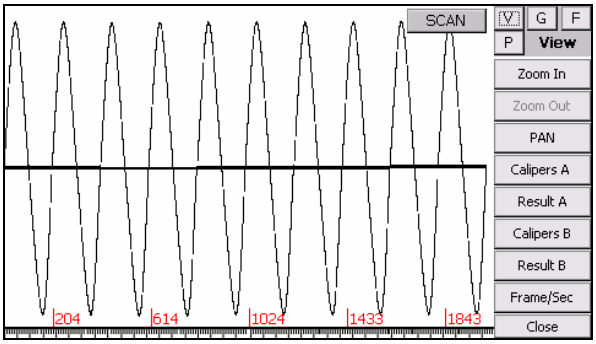
PalmScanB our WinCE based User Interface: Screen Snapshots

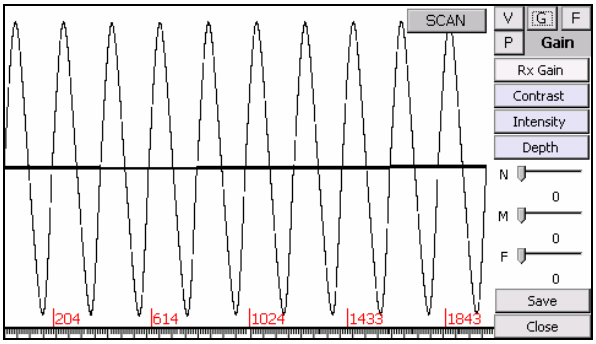




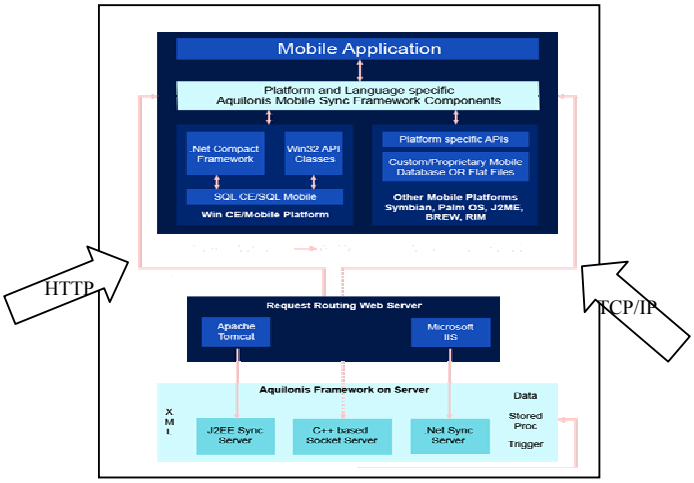








Sync Framework Architecture



Technology

This product was developed on
OMAP processor with
Win CE 6.0 OS
Visual Studio .Net 2005 IDE
Standard CE 6.0 SDK
Screen Resolution: 480 X 272

The desktop application was developed using .Net based managed code with database** as MSDE 2000.

**Product is designed to support any RDBMS