

MOBILE DATA CENTER

Project Profile

Project: Mobile Data Center
Industry: Software
Business area: Mobile platforms
Year/Duration: 2007/2 years
Resources: Team of two programmers and Project Manager
Technology:
 Symbian OS
 C++ programming language

Client

SallandElectronics is a department of Salland Engineering, an international company active in the semi-conductor industry. One of the company's important activities are service and manufacturing for ATE (Automated Test Equipment) test systems, used by chip manufacturers for testing their semiconductor components. The company offers its services in every stage of the project: advice, development, test phase, production or purchase and logistics, and in a later stage of the project SallandElectronics provides support and service.

Project scope

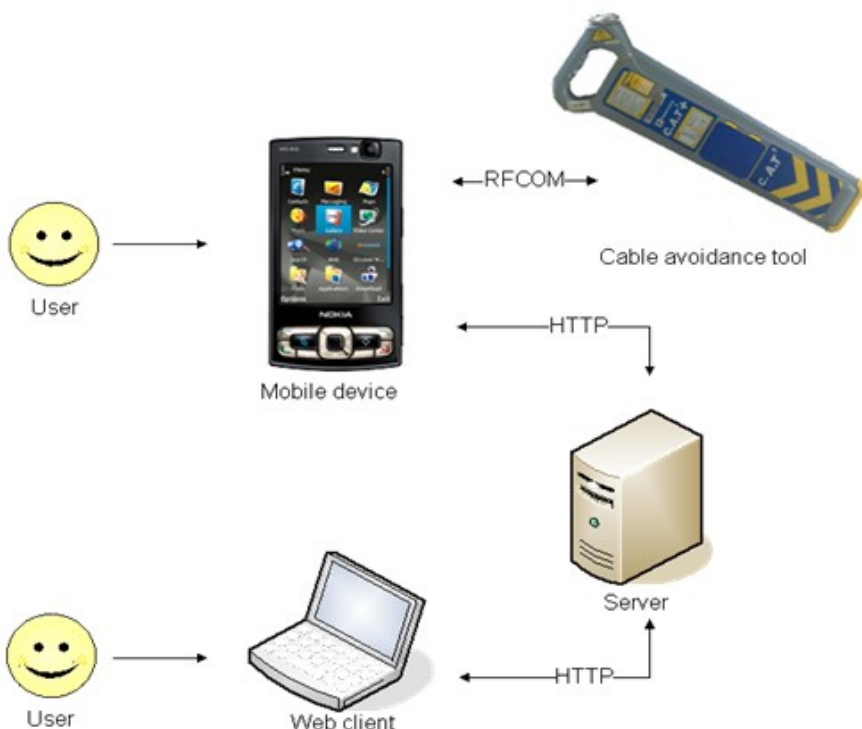
Growing market requirements and technology achievements drive successful companies like Salland Electronics to new solutions which simplify work and automate processes. The scope of this very project was to allow cable tracking in the field using GPS on a mobile device, collect measurements data via Bluetooth and enable users to take photos and navigate spatial data via map screen. This is done in order to detect and avoid cables and pipe installations during construction.

Execom solution

The main task for EXECOM development team was to develop a mobile device application from scratch on Symbian platform. The application had to be implemented on a specified mobile device and tested right in the field. In order to fulfill the basic requirement: cable tracking with the device, the developers implemented:

- Communication between mobile device and external device
- Communication between mobile device and Web client
- Data logging while application is running for actions: detector using, photo taking and sound recording
- Data reception from CAT (Cable Avoidance Tool)
- Date/time records and log entries
- GPS positions recording
- Log data sending to web site using GPRS
- Photo recording as log entries
- Application sound recording as log entries

Communication between mobile device and external device is set through Bluetooth via RFCOM protocol, while data is sent from mobile device to Web server and afterwards to Web client via http protocol. This way data are being quickly and efficiently transferred from the field to Personnel.



Benefits

Close cooperation with Salland Electronic's engineers brought EXECOM new experience and resulted in gaining knowledge in new business areas. Working on Mobile Data Center project brought both companies the following benefits:

- Cooperation between highly skilled and trained pool of employees
- Access to the latest technologies
- Reliable software solution
- Gaining experience in mobile platforms development