

## A leading provider of data acquisition systems

### Project: 'Handheld Applications Development Platform'

#### About the Customer

The customer is one of the leading providers of handheld applications and helps organizations streamline their operations with automatic identification and data collection systems. Their solutions are designed for manufacturing, distribution, healthcare and warehousing enterprises, as well as state, local and federal agencies. The firm is based in United States with representation across Europe and Australia.

#### Background & Business Drivers

The firm needed a large and stable IT vendor with a high degree of process excellence, backed by technical and domain expertise for development of data acquisition applications for .Net Compact Framework with SQL Express as the database.

#### InterralT's Value Proposition

InterralT with its expertise in mobile technologies and Microsoft .Net technologies met all technical and business needs of the customer. InterralT's domain knowledge of handheld application development and prior experience in development of data acquisition applications helped to execute the entire project from offshore within budget & schedule time.

#### Scope of services & Solution

The scope of the work for this engagement covered development of data acquisition system. This solution is intended to generate applications for portable data terminals like Windows Mobile devices, HP iPaq, among others. The application has the functionalities to provide single-screen definitions of data tables for collecting, validating, reporting and exporting information into a real-time, dynamic application. The user-entered information pertaining the applications is exported to the handheld device, through a configuration/parameter file. The application running on the portable device then renders the forms for the end-user based on the configurations set during creation of the application.

The entire solution involved two broad applications.

1. PC Wizard
2. Application on Handheld Device.

The functionalities of these applications are:

##### **PC Wizard**

This application running on PC is coded in VB/C# .Net framework. The functionalities in the PC Wizard are:

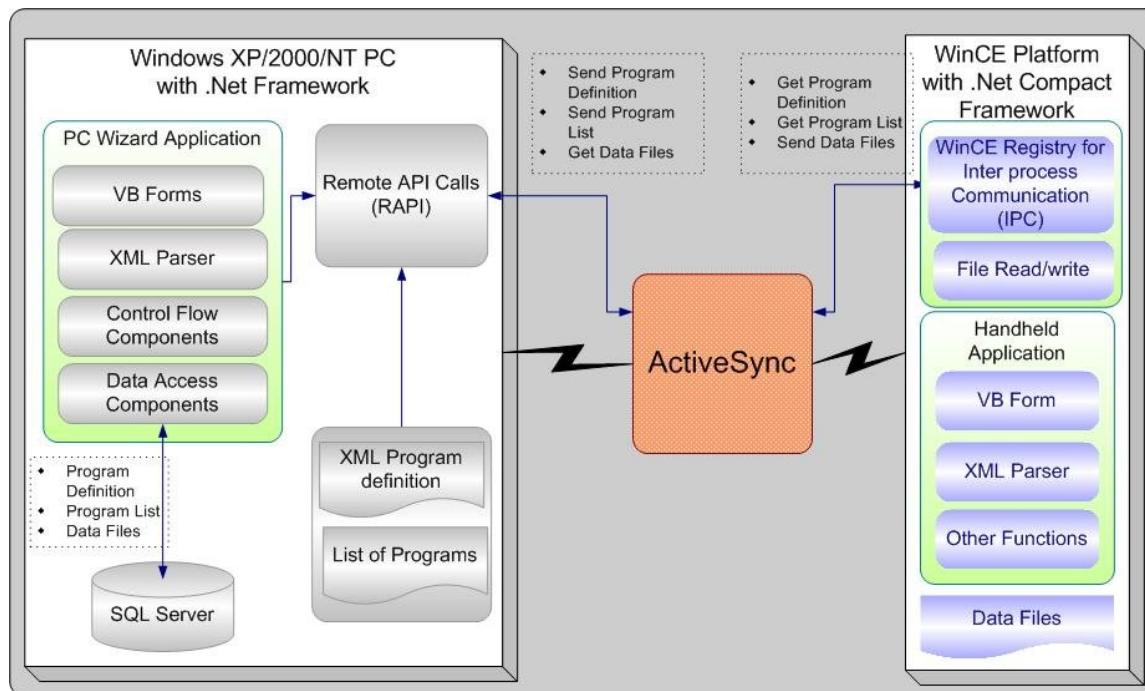
- Creation of Program
- Uploading of the Program to Handheld Device

- Import of Data from handheld device
- Viewing/Manipulating data
- Reporting
- Exporting data to flat files for external applications
- Security (Admin/Regular user)
- Command Line Options

### Application on Handheld device

This application running on the handheld device renders the screens for data capture. And was developed in .NET Compact Framework. The functionalities in the application running on handheld device are:

- Import Program from PC
- Display of available programs and ability to run a user-selected specific program
- Execution of user-selected program as a sequence of screens for data capture (The data capture can be through either keyboard or through barcode reader, which enters data as keystrokes.
- Ability to browse and manipulate the captured data
- Upload data to PC



### Business Challenges

- Application was to be developed in a very short time span
- Security requirements
- Generating application forms dynamically

- Providing a generic application to create innumerable forms and applications

### Pay offs

- The PC wizard is designed as a generic solution, which can be used to create various handheld applications
- User-friendly training manuals & online-help reduce the learning lead-time significantly for the client's existing end-user (Corporate Account Managers). This also helped the client in future resource ramp-up.

### Technologies

Core Technologies used in the development of the handheld application are

- .NET Compact Framework
- .NET Framework
- SQL Express
- Microsoft Visual Studio used for development