

# Infor Service Management and Infor CloudSuite Industrial Mobile Technology Overview

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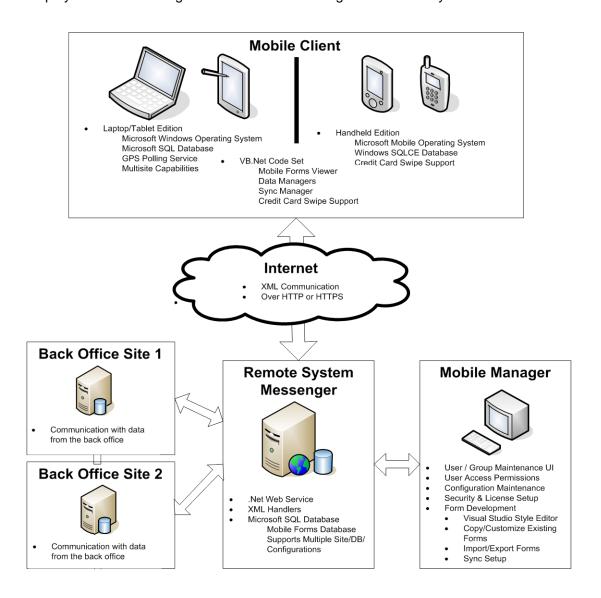
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# Mobile Technology Overview

# System Flow Diagram

Displayed below is a diagram of the Service Management Mobile system:



## Service Management Mobile Client

The Service Management Mobile Client is a VB.Net application that can run on a laptop, tablet or handheld device that is running a Microsoft Windows operating system.

#### **Local Database**

- Microsoft SQL or SQLCE depending on the device
- Stores application data that is displayed and maintained on the device
- Stores forms data that is interpreted by the Mobile Forms Viewer (see below) to display information to the screen
- Stores connection and users access information for synchronizing data

## Synchronization Manager

- Downloads a user-definable subset of data from the back office system to the mobile device using an XML message sent to the Remote System Messenger
- Based on performance, cost of communication and specific business processes, the synchronization manager can be configured to only download specific data for the mobile user as well as branch out to include other related data elements.
- To assist with performance, multiple synchronization types exists that can be used in different situations (ex. Service Tech might download different information than a Sales Representative)
- To reduce synchronization times, only the data that has changed on the mobile device is uploaded to the back office
- Displays information about any conflicts that might have occurred due to data that has been
  modified both on the mobile client and in the back office between the last a synchronization was
  done

#### Mobile Forms Viewer

- Used to display forms that are created using the Mobile Forms Designer (see below)
- Displays screen objects and performs user-defined events

## **Data Managers**

- Data Managers contain the business logic for the mobile application
- Data Managers assist with maintaining the integrity of the data that is manipulated on the client device
- Data Managers provide default behavioral actions to data elements based on associated business rules. (ex. Field Lengths, Enabling/Disabling, Lookups, ...)
- Data Manager support User extended Tables, however, UETs should be replication across all Application Databases in order for the Mobile Form Sync to work properly

# Remote System Messenger

The Remote System Messenger is a .Net Web Service that takes requests via XML messages from the Service Management Mobile Client and translates them into commands to retrieve and update data in the back office.

#### **Local Database**

- Microsoft SQL
- Stores user information for authentication and data access purposes
- Stores forms data that is sent to the mobile client for display the application
- Forms data will be shared regardless of the Back Office configuration
- One RSM database can house data from numerous Back Office sites

### **XML Handlers**

- Take the XML request from the client application, apply any business logic to fill in any missing information and/or validate any incoming data, and perform the appropriate actions against the back office database
- XML Handlers can perform such actions as:
  - Call stored procedures
  - Generate TSQL

# Mobile Manager

## Forms Designer Module

The Forms Designer is a Visual Studio 2008 style editor that can be used to create and maintain forms that are used by the Service Management Mobile clients to run the application.

- Any developer familiar with Microsoft Visual Studio 2008 should be able to function very
  efficiently within the editor as most of the editor's objects are from the same toolset
- Existing forms and can be modified and quickly deployed to the mobile clients through a standard synchronization
- Comes with a number of pre-defined event handlers to allow the developer to trigger actions, change screen object properties (ex. Font, Color, etc), manipulate data and capture signatures
- Forms are stored in the Remote System Messenger database as they are saved
- Only one set of forms is created for each RSM database (regardless of the number of Configuration / Sites to which RSM communicates)

## Remote System Messenger Administration

- Administration of the remote users and devices is done using the Admin module of Mobile Manager
- Users can be associated with specific data elements in the back office to assist with the data security and synchronization of information that is sent to the mobile device
- Users are associated with a specific Form Group to insure that the proper forms are sent to the user's remote device to match the process they will be performing
- Each user should be associated with at least one Back Office Configuration to which Mobile will synchronize data

## Centralize Synchronization Profiles

The Mobile Administrator can configure profiles which have non-user specific synchronization settings. This is to ease in the setup, distribution, and support of the mobile devices. Profiles for specific roles and functions should be created and then associated to Mobile Users or Groups.

## Multi-site Support

If Service Management Mobile requires data access and manipulation of more than on Back Office Database Configuration, then a list of the specific Configurations which to connect must be declared. The Multi-site Mobile solution works as follows:

- Provides visibility of cross-site Back Office data in a single session
- · Manages to which site data updates should be directed