

## Enhancement to CRM product

### The Client

The customer is large CRM solutions provider, with worldwide distribution outlets servicing North and South America, Europe and Asia Pacific.

### The Challenge

The project involved making several enhancements to customer's application development tool. One of the principal enhancements was to develop a form designer using which the user can design data entry forms by drag drop of windows control and attaching them with the database fields. The form designer had to be backed up with a form runtime, which will load and execute these designed forms, allowing users to enter data in the application.

### The Solution

The proposed solution involved developing a form designer, a form runtime and modifying the existing code extensively for the other enhancements. The form designer was modeled as a Visual Basic executable and form runtime as a Visual Basic ActiveX control. Visual Basic was chosen over VC++ to reduce the development time and effort. As Visual Basic was generally slower than Visual C++, numerous sophisticated techniques like caching, demand loadings etc. were employed to speed up the performance of the application. The designed forms were stored as XML files. Modifying existing VC++ code extensively helped achieve the other enhancements. This part of the project involved some very complex GUI development that made heavy use of MFC as well as Win32 SDK. A major challenge in this area was to understand the code base thoroughly, which was about 500,000 lines in size.

### The Benefits

- The form designer allowed the user to design and customize data entry, forms greatly increasing the flexibility of the product.
- The increased database capacity for additional category, view, form etc. addressed long-standing demands of some of the bigger companies using of the product.
- The user interface was greatly enriched making it much more intuitive and user-friendly

### The Technology

Visual Basic