



Providing Flexible Solutions for an Ever-Changing World

Mobilis Thick-Client Application Framework

Traditionally, Global 360 applications were built using ViewStar's Application Designer module. ViewStar workflow and scheduled tasks, as well as all customization to ViewStar applications, had to be done using ViewStar's proprietary language, Script. With the release of Global 360 Enterprise's BPI OLE object set, the applications and tasks used to interface to the Enterprise system can now be developed using industry standard programming languages, such as Visual Basic and PowerBuilder. By allowing applications to be developed using these languages, Enterprise applications and tasks can now interface with an endless number of other products, such as, Microsoft Word, Novell Groupwise, and Attachmate Extra, just to name a few. Practically any software application which has an OLE-compliant interface can now be integrated.

In order to ease the burden of developing new imaging applications utilizing this technology, Mobilis has developed a thick-client application framework as a front-end to the Enterprise system. In other words, this framework provides the user interface to any Enterprise workflow. The main purpose of the framework is to enable customers to rapidly build applications which enable access to folders in Enterprise queues for document viewing, indexing, and manipulation. Because the framework is written in Visual Basic, any OLE-compliant third-party product may be integrated directly into the application, thereby providing a more unified interface for an end-user.

The framework was developed using Object Oriented Design (OOD) principles. These principles allow the re-use of many of the framework objects in all application modes, both in the current application and for future applications. The purpose of using an OOD approach is to provide a software foundation which can be reused, maintained, and is flexible. This approach establishes a layer of "Core" objects that are intended to be common across all framework application modes. These core objects have been implemented as global peer objects (within the application). This allows all objects within the application to directly call methods on all core objects. Various core objects control the application functionality, presentation and user interaction; others control the interaction with Enterprise's BPI. To reduce the number of interfaces to BPI, only two of the objects interact directly through BPI, the Work Packet manager and Session Manager; other objects may use Enterprise supplied controls to display data, but limit Enterprise BPI interaction to methods and properties on the controls.

One of the key features of the framework is the processing statistics which it captures. Every time a user has any interaction with a folder, this information is captured in the framework reporting tables. The data captured enables management to produce the following types of reports (but not limited to): total time logged into the application, number of folders processed per day, number of documents processed per day, and the average time to process a document.

Another feature of the framework is filters. Filters provide an extension to Enterprise's security and queue logic. A filter provides a mechanism of searching a queue or library index with pre-defined search attributes. Enterprise grants rights to all queues attached to a specific application node. So, if a user has access rights to an application, the user has rights to all folders in all the queues to which the application has rights. We wanted to further limit the rights of specific users to specific folders within a queue, and filters provide this capability. For example, one indexer might have rights to work on Accounts Payable documents for company names which start with the letters A – M, whereas a different indexer may only have rights to documents for companies N

- Z. This functionality is accomplished by defining filters and assigning user rights to these filters. The user then selects the filter they want to use and selects the Open button.

In order to limit the input errors invariably made during the indexing process, the ability to pre-define the values of certain document attributes (fields) is also provided within the framework. Attributes for which defaults exist are easily defined via a framework associated table along with the valid values. This feature increases throughput and ensures the accuracy of the indexing function.

Other features included in the framework are: user-definable filters, multi-viewer capability, multiple open modes (manual, auto-next, and popup), library/workflow search capability, markup and annotation capability, and page/document deletion (if desired).

In conclusion, Mobilis customers' will realize the following benefits from the implementation of our thick-client framework:

- *Management reporting* – one of the biggest benefits of implementing an automated workflow is the ability to capture and monitor employee productivity. The framework automatically records the statistics necessary for management to accomplish this.
- *Rapidly create new applications* – any developer familiar with the Enterprise's BPI interface and the framework can create new applications within minutes, and have a fully functional application. The support burden is also reduced through the framework because all applications will be built using the same framework.
- *Leverage Visual Basic expertise* – because the framework is written in Visual Basic, customers are able to fully support and extend framework applications without reliance on Global 360 Enterprise consultants.
- *User Filters* – ability to control user access to documents in queues with a high degree of flexibility.
- *Attribute defaults* – this inherent capability greatly increases throughput and indexing reliability.
- *Production-proven* – the framework is currently being used at several customer sites (e.g., Hibernia National Bank, Texas Secretary of State) and has been in production for a number of years.
- *Reduces programming mistakes* – as with any object-oriented programming language, Visual Basic provides developers with the ability to produce inefficient applications. For Global 360 Enterprise, this would be done through the misuse of the BPI objects. The framework reduces the opportunities for developers to make these mistakes by providing a framework which readily employs the use of all the BPI objects relevant to a workflow application.

Please contact Jake Hanson at (281)807-3533 (jake.hanson@mobilistech.com) for pricing information and references.

