Jack Henry's Xperience

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WHITE PAPER

Introducing...

Xperience is the new Jack Henry & Associates User Interface. It is more specifically a frame work, design tenants and tools for presenting a variety of JHA and 3rd Party applications in one unified UI.

The Need

Financial institutions and analysts are sensitive to the fact that the user interfaces of software products have not always advanced as desired and many of these products appear antiquated. It is noted that many of these customer facing products do not integrate well with one another and may not appear to utilize the same technology. These issues drive the desire of the market and of customers to have a rich and integrated user experience that consolidates application usability with features like single sign-on and seamless interoperability between lines of business software. This desire to have a consistent user experience throughout the software products a financial institution utilizes require applications being delivered to act like one solution instead of several disjointed products.

Furthermore, our customers continue to express a desire for more usable and consistent user experience among the various roles within the financial institution. Through various enhancement submissions across the spectrum of Jack Henry products, a few reoccurring ideas emerge.

- End-users to be able to close or collapse parts of the display area of the product allowing more data to be displayed.
- Simplify or reduce the graphics displayed in the UI for a less busy design.
- End-users to be able customize the data items and their position on the screen.
- All the applications and end-user needs working together, regardless of source.
- Network administrators want secure software that is easy to install and update.
- End-users to be able to use the product software without having elevated rights to the PC.
 Should work with regular or limited user rights to the local machine.
- Intuitive and consistent design that reduces training time.
- Role based design facilitating a CSR job for example.

Xperience

Xperience is a revolutionary and visionary modernization of Jack Henry products and is designed to address the concerns expressed by the market, customers and product sales competitiveness by achieving an attractive, functional and flexible presentation system. The outcome of the project is also designed to enable the organizations to attract new business and cement relationships with existing customers who demand a better user experience. In additional it will create a visionary software development practice within Jack Henry that will produce sharable human and material resources and reusable techniques across the company. Three distinctive deliverables emerge to address these objectives including standards, controls and framework infrastructure.

By defining a common look and feel expected by all products, the end-user benefits from consistent appearance and behavior among the many different products they use in their role. The standards crafted by our user experience architect and approved by a committee of product representatives from various product teams among the Jack Henry Banking, ProfitStars and Symitar brands are the blue print for Jack Henry product user interfaces.

Enterprise controls for the Windows and Web implement these standards and provide common tooling by which product build their user interfaces. By using a common set of Jack Henry Enterprise UI controls (building blocks) and adhering to strict UI standards Jack Henry product development teams are fulfilling the company's "Look like one company" vision. By making many of these controls available to integrated third party solution providers, all the solutions an FI utilizes can be one cohesive package.

The Xperience Product

In its third major revision, available June 2011, the Xperience framework hosts both product user interfaces as well as a common set of enterprise services available to each of these products. Within the Xperience presentation space, end-users can take advantage of these products and services in a tabbed view also allowing side by side views of the user interface features. Support for multiple monitors allows viewing selected tabs on a second monitor. A common navigation mechanism called the "Start Menu" empowers the end-user to effortlessly search or navigate the various user interface functions from Jack Henry products. The screen history feature of the Xperience toolbar allows the end-user to navigate backwards and forwards through user interface views they have visited during the session.

Interoperability...

A proprietary communication protocol called the "Message Bus" borrows loose coupling and backward compatibility principles from jXchange to allow products and services to easily interact with each other to coordinate the various user interface activities.

Single Sign On...

Leveraging the new Jack Henry Enterprise Services Identity Management System the Xperience single sign on service secures products within Xperience by using a "single" user credential. Integration with a financial institution's existing user credentials from Microsoft's Active Directory allows product security to be tied to existing user credentials. Today this is a user name and password credential collected from the end-user at the beginning of the Xperience session but technologies including bio-metrics and Microsoft's Card Space will be possible in the future.

Xperience Help System...

A cross product search engine enables products to author content for a variety of contexts not limited to product level but feature, screen or field level help if needed. Enabling the end-user to retrieve relevant documentation for their current display context and presented in a consistent format.

Zero Deployment...

By visiting the Xperience web page served from the Xperience server within the financial institution or data center, the end-user launches a click-once web application leading to the seamless installation of Xperience and its products and services to the desktop. After this "first" launch, Xperience and its products and services are continually updated via this centralized server. The site administrator is in complete control of the install, upgrade, roll-back and removal of Xperience packages via a centralized administrative console.

Support...

Xperience also adds value through improved support tools for Jack Henry products with improved diagnostics, troubleshooting and logging built into Xperience. Support representatives can diagnose problems via a centralized enterprise logging system thus reducing the remote access to workstations for troubleshooting. Details error messages can be obtained from the logs rather than dependence on recreating elusive problems remotely to capture screen shots of error dialogs.

Product Adoption

The first product to officially adopt Xperience was the SilverLake core banking product, a number of JHA's other solutions quickly followed, and the other cores will follow soon. Jack Henry has invested heavily over the years in adding rich feature and functionality into SilverLake, which has made SilverLake the leading Jack Henry core system in the marketplace. SilverLake's past UI is either "green screen" or "Browser", which is accomplished by utilizing the Seagull JWalk tool creating a Browser representation of the "green screen" application executing on the iSeries host.

The SilverLake UI was reengineered to take full advantage of the capabilities and technologies exposed with Xperience and allow the product to bring a rich user experience along to match its rich feature and functionality. Some areas of specific focus designed into the new SilverLake UI include the following:

- An intuitive flow layout of the application to improve navigation
- The ability for a bank to design and configure their own inquiry views without requiring custom
- Visibility of multiple windows with information allowing for more data to be seen without paging through different screens

- The usage of graphics to assist the intuitiveness of the application and to provide better representation of the data
- Imbedding information or images from other applications to make the JHA integration story even stronger
- The consolidation of multiple functions within the application to bring better efficiency to the end user

Due to the magnitude of reengineering the SilverLake UI in Xperience, we took a phased approach on how we deliver "SilverLakeXP". Our intent was to focus the first phases on the most used areas of the application in order to impact as many users as possible with the deployment. The first phase was focused on the Account and CIF Inquiry capabilities of SilverLake and many "related functions" that surround the Account and CIF Inquiry modules such as Transaction History viewing, Stop Payments, Holds, Loan Payoffs, etc. Phase two focused on completing many remaining "related functions" for inquiry and moved to Account/CIF Maintenance as the next highest priority.

The several JHA Banking Server based products were also delivered in the Xperience framework with Release 2012, and beyond. Each development group is working into their roadmap the ability to reengineer their products by taking advantage of the standard enterprise services exposed within Xperience and also adhering to the established enterprise UI standards to assist in the common presentation of all Jack Henry products.

The Future

Xperience deliverables must always represent the forward thinking technologies important for Jack Henry product user interfaces and end-user needs. Within the next year Xperience will introduce several improvements as well as additional control libraries, applets and services.

- Primary focus on more products adopting Xperience
- Increased integration between products to improve user experience
- Common applets and services for image viewing
- Support for Xperience hosting of Silverlight applications with native Message Bus capabilities
- Implementing new features of Windows 7 such as pinning
- Support for Microsoft Surface technologies targeted at bank lobby kiosks
- Openness to 3rd party software allowing integrated street mapping with leading technologies from Microsoft and Google

Integration with Third Parties

[This section updated, 6/2016] Integration with SilverLake Xperience is accomplished in a number of ways depending on client and solution needs. Since no solution stands alone, it will undoubtedly be necessary for third party integration to include jXchange Service Gateway to get information from the core and one of several methods to get the solution's data or the solution itself 'into Xperience'.

The jXchange Service Gateway is a Service-Oriented Architecture (SOA) based integration framework that enables sharing of operational, financial, customer, and account information between a financial institution's Jack Henry & Associates, Inc. Core Solutions and other software products using standard Business Services and Web Services.

A few similar messages are available as part of the Xperience Client Agent Services (sometimes casually, thou incorrectly, referred to as message bus messages). This jXchange related technology allows various actions to be launched "in Xperience" already knowing specific useful starting data, such as account number.

Alternately, some solutions can become jXchange providers. In this case the consumer is SilverLakeXP, for instance the user might want to know what documents are stored for the loan she is viewing. She clicks on the appropriate tab and SLXP issues a jX DocImgSrch for that loan. If the ECM solution is a jX provider (as is our own Synergy product) then the list of available documents is presented. SLXP doesn't know or care who the ECM is, it just asks for the document list. If the vendor is not a jX provider for Doc Image operations, then clicking on the tab would show nothing.

Another way for 3rd Party vendor products to 'live in Xperience' is through SilverLake Xperience Power-On interfaces. Vendors or banks, utilizing the PowerOn tool kit can develop interfaces to utilize third party solutions within Xperience. The PowerOns can then be sold to other institutions in the online PowerOn Store.