

Bumiputra Commerce Bank Delivers eBanking Web Services in Malaysia - Services Leverage Java J2EE and Sun's Service-Driven Platform with eXtropia's eBanking Suite

HIGHLIGHTS

Company

Bumiputra Commerce Bank Bhd

Industry/Market

Financial Services

Applications/Solutions

- --eXtropia AppFactory^a
- --eXtropia eBanking
- --eXtropia ACE
- --eXtropia Reverse Proxy
- --eXtropia SOAP Server
- --Solaris^a Operating Environment
- --Java^a 2 Enterprise Edition (J2EE)
- --Enterprise JavaBeans^a (EJB)

Products

- --2 x Sun Netras^a
- --3 x Sun Enterprise^a 450s
- --1 x Sun Enterprise 250

Key Business Challenges

- --Providing new channels for eBanking customers
- --Integrating heterogeneous systems

Key Business Solutions

- --Streamlined processes yield lower costs for BCB and its clients
- --Infrastructure in place for the 'rapid' release of new products and services

Alliance

- --eXtropia

"The applications and middleware components that eXtropia has delivered on Sun's Service-Driven Network Architecture will form a cornerstone of the BCB Internet strategy. This combination has proven to be a crucial piece in the development of BizChannel, through which the bank's payroll, trade financing, treasury, cash management, and other eBanking products and services will be delivered," said Dennis Chong, iCommerce Vice-President of Bumiputra Commerce Bank

Bumiputra Commerce Bank (BCB) is one of Malaysia's leading banks in the retail and corporate sectors. It created an eBanking portal called BizChannel to provide online banking services to its customers. BCB chose Sun and eXtropia to provide a complete solution and expertise, as well as to assist in its EAI (Enterprise Application Integration) efforts. The project was successfully implemented using eXtropia's eBanking Suite of products on Sun's Service-Driven platform. Today, BizChannel provides services such as Income Tax Services to companies. This is the first of a series of products it will soon offer and is a component of a payroll management tool that helps companies manage their employees' monthly tax contributions.

The Need For Enterprise Application Integration

Bumiputra Commerce Bank (BCB) was established in 1 October 1999 as the result of a merger of the former Bank Bumiputra Malaysia Berhad with Bank of Commerce. This successful merger has created a landmark and signals the start of a new era for the Malaysian financial services industry.

In line with its business goals, BCB wanted to streamline its internal processes in order to cut costs and increase its organizational efficiency and flexibility, a challenge that many businesses face in today's new economy. This is often a difficult task given that internal processes are almost always tied with external parties.

Business interactions with banks occur at multiple levels – whether it is through payroll, treasury, cash management, trade financing, supply chain management payment, or any similar function. These interactions have traditionally been plagued by inefficiencies. Since each company's business has its own unique internal systems, it has been difficult if not impossible to provide generic paperless services that integrate seamlessly with their clients. Therefore, paper pushing, human error, and wasted time and resources often result at the expense of productivity and efficiency.

eXtropia eBanking Suite & Sun Service-Driven Platform

To fulfill its goals, BCB approached eXtropia, a Sun partner, to help build its eBanking portal, BizChannel, and integrate its back-end processes. This meant that BCB had to expose its applications to its client's network and systems. Among its concerns were integration costs, maintenance, security and time-to-market.

To enable BCB's Web services, eXtropia recommended its eBanking suite and worked with Sun Microsystems to implement Sun's vision of a Service-Driven Network, where Web services (Web tone) would be as reliable as dial-tone. One of the goals was to ensure that the

infrastructure would allow the mix of various types of software methods that are harnessed together to perform services.

The project took only four months - from conception to completion. In the implementation, BCB's eBanking portal was built using Java J2EE and Sun's Service-Driven architecture, leveraging the eXtropa's own SOAP server and Channel Management Engine to allow the bank's clients to interact with its eBanking services. This is done via many channels that include the WEB, XML/EAI, and even file-based support.

As for transactional integrity, security, reporting and administration, all of these leverage the bank's existing legacy systems and are supported by a well-tested range of components delivered by eXtropa.

Since the implementation relies heavily on Web services, new clients are able to connect their existing systems easily to BCB's own systems and begin to reap the benefits of an eorganization. In addition, a well-defined and flexible service-driven architecture with integrateable stack assures quick implementation time, and the cost savings associated with online banking are expected to be significant.

BCB's eBanking portal today offers payroll, trade financing, and cash management services and integrates tightly into Channel-e, BCB's retail portal. One of the offerings that its customers can benefit from is the Income Tax Services, which is a component of the payroll management tool that helps companies manage their employees' monthly tax contributions. Over the next year, BCB will roll out several other business services to its clients.

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How It All Works

The BCB Architecture is based on J2EE and delivers on Sun's Service-Driven Network architecture, with additional complementary components built by eXtropa.

All these commercial banking services are offered to BCB clients on the Web using Servlet/JSP-based applications that access the EJB business components using standard Java RMI-IIOP.

These applications have been developed using eXtropa's Application Development Toolkit (ADT) that provides a framework and component library for developing Web-based application using J2EE technology. Packaged as Web services, these are then delivered to clients using various channels ranging from traditional file transfer to SOAP-based XML.

An important layer of the architecture is security. Enabling commercial banking services on the Web (and through wireless devices) is critical. These are dictated by:

- --Strict security requirements internal to the bank
- --Security requirements defined by the Central Bank
- --Legislations

BCB's own security model was designed and developed by eXtropia using a combination of client-side digital certificates, reverse proxies and a custom authentication and authorization engine exposed through SOAP.

Central to all the services that BCB is providing to its clients is a J2EE application server called the eXtropia AppFactory. This server hosts the Enterprise Java Beans (EJBs) that model the business processes. The application server integrates with BCB's back-end Message Orientated Middleware (MOM), IBM CICS and internal RDBMS to execute the actual transactions and operations.

Because more and more services are being released over the next 6 months, UDDI services are planned for release this year as well.

The entire IT architecture is powered by two Sun Netras, three Sun Enterprise 450s and a Sun Enterprise 250 server because of their RAS (Reliability, Availability and Serviceability) features. In addition, Sun servers were chosen because of their availability to scale to meet future transactions.

BizChannel Benefits BCB and its Clients

eXtropia and Sun provided a complete, integrateable solution and the necessary expertise to enable BCB to deliver corporate banking services to its clients via its BizChannel eBanking portal.

BCB benefited highly from using eXtropia platform solutions. Because the eXtropia technology is highly componentized and involves a flexible process, project implementation time was cut to a short four-month delivery cycle. In addition, the eXtropia technology and development process resulted not only in dramatically lower project development costs but also higher quality services. By leveraging Sun's hardware and software platforms, eXtropia provided BCB with a "write once, run anywhere" interface for its existing and future business clients.

BCB itself today is geared towards offering highly reliable Web services through an open and evolutionary approach delivered through a service-driven architecture which leverages existing software technologies as well as new ones such as SOAP (Software Object Access Protocol) without requiring to start from scratch when providing new and additional Web services. This in turn helps maintain ROI and effective business practices.

As for BCB's clients, the new infrastructure and services will benefit them significantly. By enabling their banking services with BCB, they can now greatly reduce the costs associated with traditional inefficient channels such as fax, phone or feet (standing in line).

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eXtropia specializes in web and wireless business banking solutions. Using a proprietary just-in-time software framework that has been developed over the last 8 years, our team of domain specialists deliver customized, secure, and scalable solutions quickly and at a lower cost.

Our unique technology called "Embedded Banking" provides the glue that binds business applications with banking applications and allows our customers to extend financial services beyond the traditional banking walls. Our core banking products such as Trade Financing, Payroll, Business Cash Management, Payment, Treasury and Loans provide a solid base of services that any bank can extend to its business customers. For more information, visit www.extropia.com.