EVERTEC enables single customer view for Banco Popular de Puerto Rico using the HP NonStop server

HP NonStop servers provide a single view of the customer, enabling transactions to be available in near real time.

Objective:
EVERTEC needed a centralized data model that would connect all channels of its client, Banco Popular de Puerto Rico, creating a single consistent view of the customer across all channels to provide superior service.

Approach:
HP created a single and consistent view of the customer on an HP NonStop server as well as a customer-centric data model in the HP NonStop system environment.

IT improvements:
- Centralized customer data and bank channels for a single customer view
- Delivered real-time, 24x7 availability of critical information
- Offered scalability to accommodate growth
- Supported an adaptive infrastructure, so new services could be brought to market quickly

Business benefits:
- Enabled the customer to be treated as a relationship, not as a transaction
- Expanded opportunities for service representatives to up- and cross-sell

EVERTEC, a subsidiary of Popular, Inc., has annual sales of USD 110 million and services multinational companies in Puerto Rico, the Caribbean, and South America. Its clients include government agencies, universities, and industries such as banking, education, telecommunications, manufacturing, and retail. EVERTEC's largest client is Banco Popular de Puerto Rico (BPPR), the leading bank in Puerto Rico. BPPR is also Popular's banking subsidiary.

EVERTEC implemented its groundbreaking Technology Infrastructure Project (TIP) on the HP NonStop server. TIP, which began as a performance review, revealed a problem with the underlying infrastructure that provided services to the Internet channel application. When customers signed onto the Internet channel of BPPR, the bank's information needed to be retrieved from multiple back-office applications.

> "We definitely see NonStop systems as strategic for us. We feel that what we have created—the single customer view—will give the bank a significant competitive advantage over its competitors."
>
> Miguel Mercado, senior vice president, EVERTEC

Obtaining such information involved a complicated process, not to mention the fact that any problems that occurred with the mainframe that hosted these applications would cause the Internet channel to become unavailable to customers. Also, while account balance information could be retrieved, it was based on the previous day's transactions.

The team decided to create a data model with all customer information, centralize it on an HP NonStop server, and connect all channels of the bank to that system. The ultimate goal was to create a single and consistent view of the customer across all channels, providing superior service as well as expanding opportunities for up- and cross-selling by service representatives.

The team also created a customer-centric data model in the NonStop system environment. Every day, information from the batch applications on the mainframe—and some online, real-time applications—are fed into this data model. Information is updated in an operational data store (ODS) known as the "Transaction Vault."

Miguel Mercado, senior vice president of EVERTEC, is in charge of making the project a success. "Our job in the Enterprise Systems Architecture division is to design systems that enable our customers to transform strategic goals into operational realities," he said.

First into production was the voice recognition unit (VRU) channel, followed by online banking. The plan is to integrate all channels into the Transaction Vault, including the branch offices, agent-assisted call centers, commercial lending units, ATMs, and POS terminals. "Once TIP has been fully implemented, all these requests will be serviced locally by the Transaction Vault," said Mercado. "We won't have to go to the mainframe to get the information. And if the mainframe decides not to be available, the customer will not see any interruption in service."

Advantages replace issues

TIP is built on the HP Open System Services (OSS) version of the NonStop platform. "A lot of people didn't believe the NonStop system was open enough to create the new infrastructure, but we have proved them wrong," stated Mercado. "We're using CORBA as the transport for XML messages between the channels and the Transaction Vault; C++ is used for the business logic modules; and IBM WebSphere MQ provides the communications between the Transaction Vault and the mainframe. The ability to use open standards was important to us, in terms of both resource availability and ease of development."

Also important were the mixed-workload capabilities of the platform—even loading millions of records a day does not degrade the response time to online queries—in addition to its hallmark availability and scalability features. TIP runs on a six-processor HP NonStop S88000 Server with NonStop SQL database, fully replicated to an identical server using GoldenGate Software.

Previously, the Internet channel could retrieve the account balance from ACI BASE24, but it was getting yesterday's transactions from the mainframe. In order to balance the online statement for customers, the channel application had to perform specific arithmetic functions. "With TIP, we can now present the detail of all transactions in near real time," said Mercado. "If customers perform a transaction at an ATM or POS terminal and then bring up their Internet account immediately afterwards, they will see the details of the transaction that was just completed."

Powerful synergy

Key partnerships helped ensure the successful creation and deployment of TIP. HP played an integral role—first with comprehensive exploration services to identify business objectives and understand how HP technology could meet them, and then in designing the system itself. The design was then handed off to Opsol Integrators for development.

Because Mercado planned to utilize the full scope of HP's Real Time Enterprise (RTE) architecture as the basis of the solution, and because Opsol Integrators has been actively engaged in such implementations since 2001, there was a natural synergy between the two companies. "We do the custom programming to connect all these systems," explained Opsol CEO Yash Kapadia. Having much of the infrastructure in place via the Opsol RTFS Hub made it possible to accelerate the project schedule while still containing costs.

Informatica PowerExchange and PowerCenter form the data integration backbone of the TIP system. This leading extract, transform, and load (ETL) technology proved to be the right choice for contending with the complicated data structures, according to Mercado. In fact, he estimates that the Informatica platform helped reduce the time required to custom-code integration between the mainframe-based legacy applications and the Transaction Vault by six to nine months.

"We can now present the detail of all transactions in near real time."
Miguel Mercado, senior vice president, EVERTEC

Adaptive enterprise

With the implementation of TIP, EVERTEC has become even more adaptive in responding to BPPR's needs. One example is the Vault Access Channel (VAC) project, which enables branch-based customer service representatives to display check images in response to a customer request. In the past, the agent had to type the request into a mainframe system. The request went to somebody in the back office, who then made a photocopy of the check and sent it to the customer. It took days for the customer to receive the requested copy.

The bank wanted the ability to provide a copy immediately to the customer at the branch, but implementing the application in the mainframe environment was problematic. For one thing, the personal computers used at the branches were not powerful enough to handle the resource demands imposed by the mainframe-based application.

EVERTEC was able to leverage TIP to provide an effective solution. "We took the service created to present images in the Internet channel and simply replicated it for the VAC," said Mercado. "Because it's a Web-based application, we did not have to install anything new at the branches; the existing PCs can be used to access the Internet. We gave the bank the capability of looking at the images with the new application in just two hours. This was something powerful that we were able to do very fast for the bank."

In general, locating the Transaction Vault between the channel applications and the core back-office applications enables the bank to add a new channel—or a new back-office application—with a single connection. "We wanted to separate what we call the relationship bank from the transaction bank," said Mercado. "This will allow us to adapt to changes in the market and be more competitive."

Customer solution at a glance

Primary applications
EVERTEC's Technology Infrastructure Project (TIP) is built on HP Open System Services and the HP Real Time Financial Services (RTFS) framework, with Informatica PowerExchange and PowerCenter forming the data integration backbone

Primary hardware
• HP NonStop S88000 Server

Primary software
• HP NonStop operating system
• HP NonStop SQL database
• GoldenGate Software
• C++
• IBM WebSphere MQ
• CORBA

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