

## J2EE: The Great Communicator

As insurers face the challenges of selling through multiple channels, competition from banks, the pressures of creating new products to meet customers' needs and the issues of pricing and regulation, they also find themselves at a technological crossroads. Insurers nationwide, both large and small, are conducting business on aging legacy systems that are doing the job for now, but aren't sophisticated enough to allow the industry to meet the challenges of the next decade. At the same time they are retrofitting work processes from mainframes to work through the Internet.

"There's a generational transition going on in IT. Ten years ago agents were sent terminals that would connect to a mainframe, and they would use the terminal to submit applications and to check accounts. Eight years ago the functionality was moved to the PC with client/server software," said Mike Malloy, vice president of Wily Technology Inc. The Brisbane, Calif.-based company produces performance management software for Enterprise Java Applications.

As the Internet grew and matured, companies discovered they didn't need to put the software out on every PC, instead using applications that were delivered via browser technology. "Java is a flexible language designed for the Internet, so it's the ideal platform to help companies to handle the generational shift from mainframe, to client/server to the Internet," Malloy said.

J2EE, or Java 2, Enterprise Edition, is a programming architecture that uses the Java language to support applications that enable enterprise programs to reach suppliers, customers and employees that communicate via Internet browsers. J2EE is a standard, not a product. For example, a standard explains how to develop an application; then vendors produce application products which follow the standards. The Java community/vendors and customers create the specifications to perform functions that are compatible with Java technology standards.

J2EE was developed within the Java Community Process, led by Sun Microsystems and with participation by other companies including Hewlett-Packard, IBM, BEA and Oracle. Currently there are 500 participants in the community development, and 220 standards under development or in use. "As a group, the vendors collaborate on specifications and compete on implementation," said Glen Martin, marketing manager for Sun Microsystems. Companies in the consortium create their own application server products using J2EE. For example, BEA markets WebLogic and IBM WebSphere.

The reigning philosophy behind Java development is, "Write Once, Run Anywhere." Therefore J2EE applications are able to run on any platform, such as Windows, Unix or IBM's OS390. "J2EE's structure is easy to communicate with-

in and without," said Ron Lang, director of insurance solutions for WorldGroup. "For example, a workers' comp field auditor using a J2EE application could run the same rating engine on his laptop that resides on the home office's mainframe or he could access it via a Web browser from anywhere."

J2EE's ability to run on every platform is its greatest selling point since insurers' legacy systems usually resemble patchworks using IBM Series 1, Unix or Windows. "Enterprises have accumulated a lot of disparate hardware and applications over the years, and today face the need to integrate these into a cohesive application framework and present the result through Web interfaces. They have to aggregate, extend and repurpose, not replace," said Martin of Sun Microsystems.



Randy Wheeler

After Pittsburgh-based Highmark Life & Casualty reviewed its technology as a part of assessing its toehold against the competition, it realized it had too many legacy systems splicing information together. "We had too many inconsistencies that caused the necessity of double-checking work," said Matthew Piroch, Highmark Life & Casualty's chief information officer. "We wanted a single source of data from quoting through billing. We knew where we wanted to go in the future, and the legacy systems weren't going to support that." Highmark Life & Casualty, a member of Highmark Inc., provides employer stop-loss, disability and life group products and workers' compensation coverage.

Piroch said the company is implementing a J2EE-based solution in steps, beginning with the claims side of the business and then underwriting. "We didn't want to try the big-bang theory," Piroch said.

Interoperability was the reason Sarasota, Fla.-based FCCI Insurance Group chose J2EE. "We made a decision based on J2EE's beta release in 2000 looking at our systems moving forward," said Steven P. Goldsmith, supervisor, application systems architecture, FCCI Insurance Group. "We are running on AS400, Oracle database and a Windows 2000 server, and Java allowed us to run on all those platforms." Since FCCI, a commercial property/casualty insurer, writes its own software using open-source tools, J2EE's interoperability also made it a perfect fit.

J2EE also brings scalability to projects. This is important to consider during long-range planning whether a project can support thousands of users, rather than hundreds. "For a lot of growing companies, scalability is a critical issue. They want a platform that will grow as their organization grows. When an organization needs to transition to an industrial-strength platform, the J2EE platform-independent architecture enables the transition with minimal issues," said Randy Wheeler chief executive officer of Valley Oak Systems.

—Lynna Goch