What's Brewing?

What's Brewing With Java

Java is the foundation of our next generation product, BBj. Here, we track and analyze the developments taking place in the world of Java. This issue's column is written by Win Quigley, BASIS Product Marketing Manager.

The highlight of December's Java Business Conference was the official launch by Sun Microsystems of the Java 2 Enterprise Edition (J2EE). With J2EE, Sun offers three editions of Java: A Micro Edition for single users/PCs; the Java 2 Standard Edition, which BASIS is using to develop BBj; and J2EE.

J2EE is a superset of the Java 2 Standard Edition 1.2. The goal is to provide a complete development environment, to take the pain out of delivering enterprise- level software by handling plumbing and interoperability for the programmer. So application modules (logic, business rules) are encapsulated in Enterprise Java Beans (EJB) and placed in an enterprise container. User interfaces connect into the container from the Web, from a terminal, from a cellular phone, etc. Data and other services connect into the container as well. The developer can focus his or her time on the EJB without even having to know about the enterprise into which the EJB will be deployed. The container is a binary standard for packaging enterprise applications.

The container hides the complexity of remote procedure calls. No special application programming interfaces (APIs) for scaling or robustness are required. The container dictates the quality of service. The developer doesn't have to manage the state of components, concurrency issues, security, availability, administration. The component the developer writes in this edition need only concern itself with presentation, business logic and data access.

Developers can create their applications in components. The components are assembled into applications, which are binary packages. These can be deployed into the enterprise via a deployment descriptor, which is a text file in XML format. The descriptor describes the environment into which the application is to be deployed, i.e., the network (local or Internet), the location of file service, etc.

Sun has set the standard for assembling the application modules and integrating them into the enterprise. Vendors will be selling the deployment tools. Currently selling these tools are In-Line, Tendrill, Forte and Imprise.

The implications for BBj programmers are intriguing. Business logic could be an application written in BBX, compiled in BBj, then encapsulated as an EJB in a J2EE container. Legacy data could be available to a J2EE connector through a standard connector. In this conception, the solid, mature BBX applications that have run businesses for years can become part of an enterprise-wide solution.businesses for years can become part of an enterprise-wide solution.