



Java™ Software Division

Sales Information Brief - Java™ Blend™

Description

Java™ Technology for the Enterprise Drives Business–CriticalApplications Java technology for the enterprise enables powerful, robust, and scalable server–oriented development for distributed computing environments. One product based on this technology, Java™ Blend™ software, is designed to enable new levels of productivity and innovation while leveraging existing enterprise investments.

Integrating Java™ Technology Objects with Enterprise Data

Java Blend software enables enterprises to simplify database applications development. Java Blend software contains a tool and a runtime environment that simplifies building business applications that integrate Java technology objects with enterprise data. Unlike products based on conventional database access techniques, Java Blend software allows developers to write entirely with Java technology objects. Java Blend software transparently and automatically maps database records to Java technology objects and Java technology objects to databases, so that developers can avoid having to translate programming language data structures to database tables.

Java Blend software leverages Object/Relational technology and provides a new way of writing database applications. It offers significant advantages over traditional database application programming techniques. Java Blend software helps increase programming productivity by eliminating the need to write SQL or understand the details of corporate database schemas. Application developers only need to write Java applications!

Target Customer

There are over 3000 beta applicants today, with approximately 150 slots for approved applicants. The target for Java Blend will be the beta accounts in the coming quarters. The Beta Accounts will be tiered based upon opportunity.

- Enterprise, Systems Integrators, VARs, ISVs
- Doing/Interested in Java Development
- Need to access databases

Value Proposition

The Java™ Blend™ Value Proposition is to provide Java™ application developers: enterprise, VAR, SI, etc. a tool for integrating Java objects with enterprise data. By using the Java Blend tool, the Java application then developed can access existing relational databases and legacy data. With Java Blend, the Java application programmer can accomplish this integration without having the skills of a database programmer. The benefits of a Java application program written with Java Blend are:

- A shortened development cycle.
- Fewer errors than doing it manually.
- No special training for writing database programs.
- Applications written are portable across databases.
- There is automatic access to existing (RDBMS) data.

System Requirements

Supported Hardware

- Java Blend Release 1.0 has been tested on the same hardware that the JDK is tested on (SPARC Solaris, PC Solaris, PC Windows 95 and NT).

Supported JDKs

- Java Blend Release 1.0 runs on JDK 1.1.x. Only features that are available in JDK 1.1 are used.
- Java Blend is 100% Pure Java (Pending)

Supported Databases

- Java Blend Release 1.0 supports Sybase 10 and 11, Oracle 7.3.x, and MS SQL Server 6.5.

Technical Overview

Java Blend is a set of powerful tools combined with a runtime environment that makes it easy for developers to build business applications that integrate Java objects and enterprise data stored in relational databases. The system was designed to provide bi-directional object/relational mapping with transaction support. The object/relational mapping means that if you already have existing data tables, Java Blend can automatically generate Java objects that correspond to that data. Conversely, it can analyze your existing Java business objects and generate the database schema necessary to store them in your relational database. Either way, these objects are persistent and will exist independently of the programs that use them. All of the values of all of their fields (including references to other persistent objects) will be preserved from program to program.

Transaction support means that the persistent objects stored in your database will always be kept in a consistent condition. For example, you will be able to load a set of related persistent objects into your program, make changes to those objects, and then save them back into the database, safe in the knowledge that your actions will not corrupt the collections of objects stored in the database. Either all of the changes you make are safely recorded, or the objects will be left in their original state and an exception will be raised in your program.

Key Features

Java Blend Mapping Tool

- The Java Blend mapping tool runs in one of two modes: Java->DB or DB->Java. It presents a unified graphical user interface that handles both mapping modes, and allows the mapping mode to be selected on a per-mapping basis.

DB-Java mapping mode

- In DB-Java mapping mode, the mapping tool allows the user to import a database schema, mapping it automatically to a set of Java classes.

Java-DB mapping direction

- Given a set of Java classes, Java Blend automatically generates a database schema to store instances of those classes. Java Blend automatically generates the SQL DDL that the user simply loads into the database to create the tables to which your classes are mapped.

Java Blend Runtime

- After the mapping phase is complete, application programmers need not keep track of the database, nor need they write SQL. The application deals only with Java classes and objects and operations (including queries) over those classes and objects. Operations over the related database objects are performed automatically by Java Blend.

