**FrontierSuite** provides a sophisticated and flexible environment for rapidly developing and deploying robust Enterprise Java Applications across multiple platforms.

FrontierSuite development environment is built for Model Driven Architecture (MDA), which provides application and platform interoperability in the design, development and deployment process. It provides an intuitive solution for component based iterative software development using proven design patterns.

FrontierSuite runtime environment is built on open industry standards (JTA, JCA, JMS). It provides robustness and scalability for enterprise applications through its unified persistence manager and distributed caching.

Enterprise applications built using FrontierSuite can be deployed across any J2EE/JDO/J2SE platform and any JDBC/JCA compliant data source.

**Features And Benefits**

- Supports multiple platforms - J2EE, JDO and Standalone (J2SE).
- Uses MDA approach for application and platform interoperability.
- Generates platform dependent code from platform independent model.
- Provides intuitive solution for component based iterative development.
- Provides end-to-end application development suite.
- Provides total support for iterative development and application assembly, saving up to 70% of development and maintenance efforts (UML modeling, relational mapping, customizable code generation and configurable application assembly).
- Improves software quality through the use of proven design patterns.
- Integrates with third party modeling tools and IDEs (Rational Rose, Together, Paradigm Plus, Forte, JBuilder).
- Adheres to industry standards - JCA, JTA, JMS, JDBC, EJB and JDO.
- Supports client and process level caching and JMS based distributed caching.
- Connects to disparate EIS using JCA adapters.
- Reduces development time through RAD approach.
- Provides up to 50 times performance improvements for enterprise applications.

**ObjectFrontier**

www.ObjectFrontier.com
Object Modeling - Frontier Modeler
- Object modeling functionality - inheritance, aggregations and associations (including Relations as Objects).
- Integration with third party modeling tools like Rational Rose, Together, Paradigm Plus.
- Support for user defined compound attributes (Dependent Value Objects).
- Object reference from one object model to another object model.

O/R Mapping - Frontier Fusion
- Default fusion that automatically maps business objects and their relations to relational schema.
- Vertical, horizontal and collapsed Mapping for inheritance.
- Mapping of a business object to multiple tables and vice versa.
- Customization of object and relationship mapping to relational tables.
- Relational schema and entities generation. Fine-tuning tables and indexes for specific RDBMS.
- Support for stored procedures through JCA.

Component Development - Frontier Builder
- Portable code generation for abstract schema for EJB, JDO and Standalone (J2SE) platforms.
- Facility to add and maintain business rules independent of the abstract schema code.
- Integration with third party IDEs like Forte, JBuilder for adding business rules.
- Fine grained code customization for all platforms.
- Code compilation environment.
- Support for iterative development life cycle.

Application Deployment - Frontier Deployer & Frontier XML Editor
- Automatic generation of EJB deployment descriptor.
- Complete configuration of EJB deployment descriptor.
- Automatic generation of application server specific deployment configurations.

FrontierSuite for JDO
- Class Enhancer.
- Support for Relations.
- Automatic mapping of JDO to the corresponding relational entities in the RDBMS.

Reverse Engineering - Frontier ReModeler
- Automatic reverse engineering of relational schema into an object model.
- Automatic interpretation of existing relationships between tables.
- Selective reverse engineering.
- Synchronization between object model and relational schema.
- JCA toolkit for EAI.

CMP for Entity Beans - Frontier DeployDirect
- Support for EJB 2.0 and EJB 1.1 CMP.
- Automatic generation of application server specific configuration descriptors.
- Automatic mapping of entity beans to the corresponding relational entities in the RDBMS.
- Support for application assembly and iterative development.

Persistence Manager - FrontierSuite Runtime
- Object state management.
- Object change notification.
- Support for Optimistic, Pessimistic, Blind-update & Read only concurrency modes.
- XML extraction of an object graph using customizable encoders and decoders.
- Object navigation with active and lazy read options.
- Multi level conditional object navigation.
- Automatic unique ID generation with support for user specific ID generation mechanisms.
- Customizable connection pooling and object caching.
- Distributed cache architecture for rapid data access and data synchronization through JMS notification.
- Support for EJB-QL/ JDO OQL/ OQL
- Management of one-to-one, one-to-many and many-to-many relations.

Product Specifications

<table>
<thead>
<tr>
<th>RDBMS</th>
<th>Oracle</th>
<th>MS-SQL Server</th>
<th>DB2</th>
<th>Cloudscape</th>
<th>PointBase</th>
<th>Sybase</th>
<th>MS Access</th>
<th>Any JDBC compliant RDBMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Systems</td>
<td>Any OS supporting Java 2</td>
<td>Sun Solaris</td>
<td>HP-UX</td>
<td>Linux</td>
<td>AIX</td>
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<tr>
<td>System Requirements</td>
<td>128 MB RAM</td>
<td>15 MB for installation and development</td>
<td>2 MB for Runtime</td>
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