

## ... Transcending Platforms

**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.

## Product Specifications

## Platforms

- J2EE
  - EJB 2.0
  - EJB 1.1
- JDO
- Standalone (J2SE)

## Application Servers

WebLogic  
WebSphere  
Orbix E2A  
JBoss  
HP-AS  
Orion  
Sybase EA

## Managed Environment

- Pluggable JTA
- Pluggable JCA
- Pluggable JMS

## Distributed Cache

- Transactional cache at client and process level
- Read-only cache
- Distributed
- synchronized cache through JMS.

## Transaction

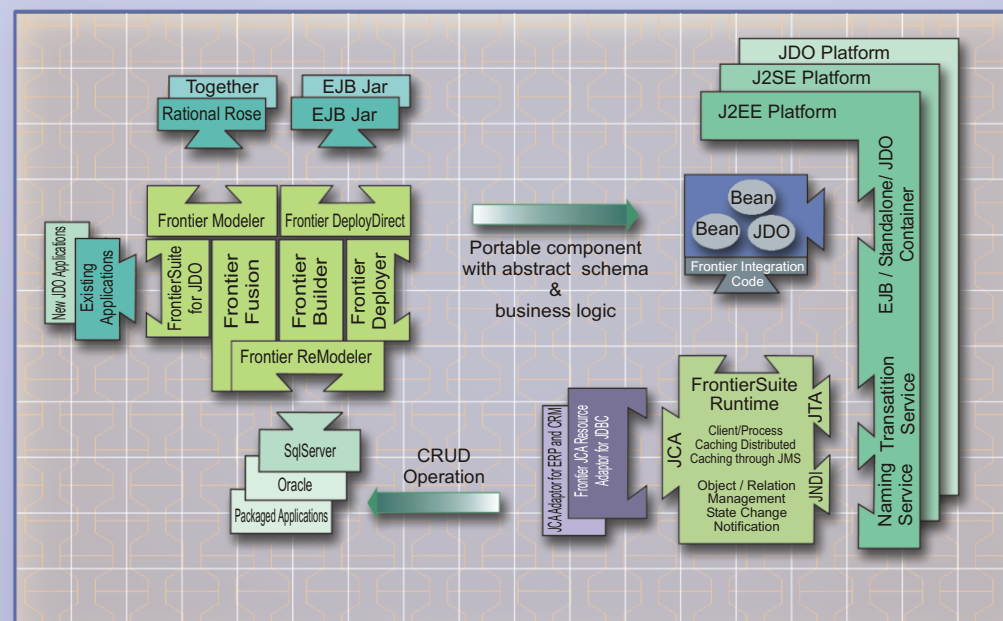
JTA based  
XA compliant

## Concurrency Modes

- Optimistic
- Pessimistic
- Read-only
- Blind-update

## Query Language

- EJBQL, JDO OQL, OQL
- Dynamic queries
- Conditional navigation
- Active & lazy read
- XML data extraction through customizable encoders and decoders
- Prepared statement caching



## 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](http://www.ObjectFrontier.com)

# FrontierSuite

## ... Transcending Platforms

### Product Specifications

#### RDBMS

Oracle  
MS-SQL Server  
DB2  
Cloudscape  
PointBase  
Sybase  
MS Access  
Any JDBC compliant  
RDBMS

#### Operating Systems

Any OS supporting  
Java 2  
Sun Solaris  
HP-UX  
Linux  
AIX

#### System Requirements

128 MB RAM  
15 MB for  
installation and  
development  
2 MB for Runtime

### 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.



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