

## Open Architecture

### The Architecture

The Titanium Open Receivables Environment (ORE) is a feature-rich, enterprise debt recovery solution, with the ability to scale to meet the needs of the world's largest receivables management organizations. Titanium ORE is an open system that can integrate via pluggable interfaces to predictive dialers, document management systems, electronic payment processors, and other vendors utilized by collection enterprises. Designed to operate within a distributed and clustered environment, it is scalable to serve many thousands of concurrent online users working against terabytes of data.

### Architectural Goals

The overarching architectural goals that were paramount to the design and implementation of Titanium ORE are:

- Flexible and reusable business services able to service a very high volume of requests.
- A loosely coupled system with resilient relationships between:
  - Logical application layers
  - Other systems and services with which you are exchanging data.
- An ability to communicate on open and secure web protocols over:
  - Local area networks (LANs)
  - Wide area networks (WANs)
  - Virtual private networks (VPNs)
  - Public Internet
- To provide a simple and cost-effective deployment platform, ensuring that users are working with the most recently released version of the software.
- A feature rich and responsive user interface.
- An open and secure system with the ability to easily integrate with other systems in your enterprise environments.

### Platform

Titanium ORE is built on top of the *Java Enterprise (J2EE)* platform and utilizes the best-of-breed open source and commercial components and frameworks available today. The system is portable across operating systems, J2EE application servers, and relational databases.

### Data

The underlying database schema is open and very efficiently organized, providing you with the ability to perform trend analysis and discover implicit relationships among the captured data using commercial data mining packages.

### Middleware

The Titanium ORE multi-layered, object-oriented application architecture clearly delineates and decouples the service integration, business, and data access layers of the middleware. The layered approach makes for a more scalable and maintainable enterprise application. It allows each layer to focus on a specific role, and in most cases, provides the flexibility to override (or plug in) alternative implementations without imposing any changes on the upstream or downstream components.

### Client

The *Java Web Start* technology is used to provide a rich set of features that gives end user workstations easy access to the latest versions of applications upon log in. It also provides you with easy deployment and management of applications for your internal IT departments. With the *Java Web Start* technology, which works with virtually all web servers, you can easily supply the full-featured Titanium ORE application to your users across the globe. The client software communicates with the Titanium middleware via the standard and secure HTTPS web protocol.

### Systems Integration

Titanium ORE is a true *Service Oriented Architecture (SOA)* that exposes and consumes SOAP web services as its primary means of interfacing with external systems. It exchanges data with a number of vendors and services external to the system. Examples include electronic payment processors, commercial predictive dialers, document management systems, credit bureaus, and skip trace providers. Because Titanium ORE is most often deployed in a heterogeneous enterprise environment, service integration and interoperability are keys to the system's success.