Oracle Adapters for Tuxedo

KEY FEATURES

• Comprehensive Tuxedo Integration
• Leverage and capitalize on existing legacy data
• Incorporates Legacy into a service oriented architecture (SOA)
• Real-time integration with Tuxedo Events.
• Standards based support
  – JCA 1.5
  – XML
  – WSDL
  – WSIF

• Easy-to-use, Rich Design-Time
  – Browse and Import metadata contained in Tuxedo UBB files and Jolt repository
  – Generate XSD, WSDL schemas

• Easy to set-up, configure and administer

• Robust Proven Technology
  – Guaranteed exactly once message delivery
  – Scalable and highly available
  – Sophisticated error management capabilities
  – Robust transaction management
  – Integration with Tuxedo security mechanisms

Analysts estimate that enterprises spend as much as 40% of their IT budgets annually on integration and, that as much as 80% of operational data resides in 'legacy' environments. While new web and composite applications are built to enhance customer service, streamline business operations and build competitive edge, the core IT value in many enterprises remains locked within these legacy systems. Leveraging the huge investments in capital, human resources and business knowledge put into these legacy systems, and integrating them with new technologies and business initiatives is the key for competitive advantage and successful eBusiness. The Adapters provide an easy-to-use, scalable, flexible, standards based SOA platform to enable rapid and real-time access to Tuxedo applications.

Figure 1: Mainframe Adapter Architecture Diagram
**Comprehensive Tuxedo Connectivity**

The Adapter exposes the underlying Tuxedo transactions and events as Web Services to other Oracle Fusion Middleware product components.

The Oracle Connect is the core component of the Adapter and resides natively on the legacy systems. It contains an embedded native Tuxedo Adapter for providing highly efficient access to Tuxedo. The Oracle Connect for Tuxedo is based on the C-ATMI API and does not require the deployment of Weblogic Tuxedo Connector (WTC). The Tuxedo Adapter supports the various Tuxedo messaging paradigms and is used to invoke tpcall() and tpcall() Tuxedo interactions. The Adapter has comprehensive support for the various Tuxedo message buffers and translates the Tuxedo buffers to XML and vice versa.

**Simple and Easy to use Design Time Graphical Interface**

Oracle Studio is an easy-to-use graphical tool for configuration and monitoring of Oracle Connect.

The tool has built-in support for introspecting the metadata contained in UBB files and JOLT repository and automatically generates appropriate XSD and WSDL schemas for the same. This introspection is dynamic and does not require coding.

**Transaction Support**

The Oracle Connect engine supports Tuxedo transactions. The Adapter can be used to Begin, end or commit Tuxedo transactions.

**Real-time event capabilities**

Oracle Connect is capable of publishing Tuxedo events in real-time. It has an embedded Event Adapter for the above purpose. The Event Adapter is used by the legacy transactional application like Tuxedo to generate an XML event and put it into a reliable and robust queue.

**Scalable and robust architecture**

Oracle Connect provides a reliable and robust server that is proven to work under changing loads ranging from single user solutions to multi-user solutions supporting millions of requests a day.

The Oracle Connect employs a front-end process that manages client requests (daemon) and request-handlers that process them (called servers). The servers are set up to wait for incoming requests (hot servers), or are loaded upon request. Servers can also be defined to support multiple requests (reusable servers) to handle many incoming requests to handle different types of usage profiles. This flexible and robust server architecture supports changing activity patterns while using only the necessary system resources.

**Fail-over and HA**

Oracle Connect handles failover by providing back-up daemons so that the system can always accept and handle client requests. If a client request fails,
Oracle Connect guarantees the transaction by rolling back any changes that occurred and sending the client application an appropriate error message.

Summary
Oracle Connect for Tuxedo is the fastest and most productive way to connect Tuxedo application with Oracle Application Server product components. Using the Oracle Adapter for Tuxedo, companies can quickly incorporate their legacy systems into a service-oriented and event-driven architecture, increasing the total value of their existing IT investments.