

# ORACLE TUXEDO JCA ADAPTER

## KEY FEATURES AND BENEFITS

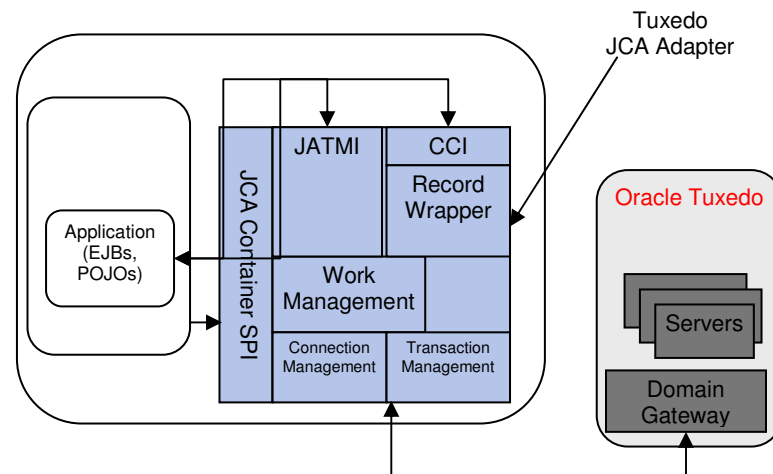
### FEATURES

- Call Tuxedo services from JEE applications (Servlets, JSPs, EJBs and POJOs)
- Call EJBs and POJOs from Tuxedo services
- Global XA transactions context propagation from JEE application server to Tuxedo
- Security context propagation from JEE application server to Tuxedo
- Common Client Interface with support for use of all Tuxedo buffer types
- JATMI support for simplified access and optimized performance
- SSL encryption across network links
- Support for Tuxedo domains features, such as failover, compression
- Support for JCA 1.5 compliant application servers
- Interoperability with Tuxedo 8.1 and later versions
- Uses optimized and scalable Tuxedo domains protocol

### BENEFITS

- Standards-based interoperability among distributed applications that span diverse hardware and software platforms
- No need to change Tuxedo domains configuration
- Global XA transactions ensure data consistency
- Facilitates the development of heterogeneous distributed applications with a cross-platform, cross-language data model.
- Lower your TCO by leveraging existing IT assets without the need for costly rewrites.

*Oracle Tuxedo JCA Adapter is a JEE Connector Architecture based, bi-directional connector between Tuxedo applications and JCA compliant JEE application servers. Oracle Tuxedo JCA Adapter provides transparent and reliable access to existing Oracle Tuxedo services from JEE applications using standard Common Client Interface (CCI) in addition to highly optimized Tuxedo JATMI. In addition, using Oracle Tuxedo JCA Adapter, Oracle Tuxedo applications can call EJBs and POJOs hosted in a JEE application server. The result is composite applications preserving existing investment in Tuxedo and provides flexibility in interoperability among distributed applications that span diverse hardware and software platforms.*



**Figure 1. Oracle Tuxedo JCA Adapter architecture**

### Standards-based Development Environment

Oracle Tuxedo JCA Adapter supports JCA standard Common Client Interface (CCI) to access Tuxedo services from JEE applications. It supports CCI records, which can be used in conjunction with all Tuxedo buffer types for optimized data handling. Support of standard CCI allows easy access to Tuxedo services from JCA enabled frameworks. CCI supports synchronous and asynchronous interaction styles.

In addition to CCI, Tuxedo JCA Adapter also supports Tuxedo JATMI (Java Application To Monitor Interface) API for simplified and optimized access to Tuxedo services. JATMI is Java api and similar to Tuxedo ATMI. In addition to

support of synchronous and asynchronous interaction styles, JATMI also supports Tuxedo queueing APIs (tpenqueue, tpdequeue apis).

### **Global Transaction Support**

Oracle Tuxedo JCA Adapter supports global transactions in addition to local and delegated transactions. With Oracle Tuxedo JCA Adapter, your application can update a resource on the JEE application server and the other resource using Tuxedo service. All this can be done within the same global transaction, maintaining the integrity across diverse platforms. Transactions can be started on the JEE application server as a user transaction.

### **Simple Configuration and Deployment**

Oracle Tuxedo JCA Adapter can be deployed to a JCA 1.5 compliant application server. Configuration of Tuxedo JCA adapter is based on standard ra.xml and a Tuxedo specific configuration file. Tuxedo JCA Adapter is deployed using standard application server tools or console. Tuxedo JCA Adapter does not require any additional tool for operations and administration. Native tools provided by the application server can be used with Tuxedo JCA Adapter.

Oracle Tuxedo JCA Adapter does not require any component to be installed on the Tuxedo node. In addition, one can use existing Tuxedo domains configuration eliminating the need to make any change in Tuxedo application, in order to access Tuxedo services from JEE application server.

### **Optimize Performance, Scalability, and Availability**

Oracle Tuxedo JCA Adapter improves performance with significantly faster response times while offering full support for multiple interaction styles, including inbound/outbound and synchronous/asynchronous. Oracle Tuxedo JCA Adapter is based on highly optimized Tuxedo domains architecture/protocol enabling it to leverage RASP (reliability, availability, scalability and performance) features of Tuxedo domains. Tuxedo JCA Adapter can automatically load balance requests across available Tuxedo nodes or route request to available nodes in case of catastrophic failure, thus improving the availability and reliability of composite applications.

### **Security**

Oracle Tuxedo JCA Adapter supports identity propagation of users logged into JEE application servers. Tuxedo JCA Adapter can pass user identity to Tuxedo eliminating need to login again to Tuxedo application, thus creating single sign-on across application platforms. User identity is then used by Tuxedo to control access to Tuxedo services.

Oracle Tuxedo JCA Adapter can help establish mutual trust relationship between JEE application server and Tuxedo applications. The connection can be mutually authenticated either through password configuration or through use of SSL certificates.

## RELATED PRODUCTS AND SERVICES

Oracle Tuxedo delivers a robust platform to run high-volume applications across distributed, heterogeneous computing environments, enabling transactions that stretch from customer-facing, business-critical applications to back-office processes, across any system, anywhere in the world.

### RELATED PRODUCTS:

- Oracle Tuxedo
- Oracle Tuxedo System and Applications Monitor (TSAM)
- Oracle Tuxedo SALT
- Oracle Tuxedo Mainframe Adapters
- Oracle Tuxedo Jolt
- Oracle Tuxedo Application Runtime for CICS and Batch
- Oracle Tuxedo Application Rehosting Workbench
- Oracle WebLogic Server

## Contact Us

For more information about Oracle Tuxedo JCA Adapter, please visit [oracle.com](http://oracle.com) or call +1.800.ORACLE1 to speak to an Oracle representative.



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