

# 5

## Features Specific to JDBC Thin

This chapter introduces the Java Database Connectivity (JDBC) Thin client and covers the following features supported only by the JDBC Thin driver:

- [Overview of JDBC Thin Client](#)
- [Additional Features Supported](#)

### 5.1 Overview of JDBC Thin Client

The JDBC Thin client is a pure Java, Type IV driver. It is lightweight and easy to install. It provides high performance, comparable to the performance provided by the JDBC Oracle Call Interface (OCI) driver. The JDBC Thin driver is written entirely in Java, and therefore, it is platform-independent. Also, this driver does not require any additional Oracle software on the client-side.

The JDBC Thin driver communicates with the server using TTC, a protocol developed by Oracle to access data from Oracle Database. It can be used for application servers. The driver allows a direct connection to the database by providing an implementation of TCP/IP that implements Oracle Net and TTC on top of Java sockets. Both of these protocols are lightweight implementation versions of their counterparts on the server. The Oracle Net protocol runs over TCP/IP only.

The JDBC Thin driver can be used on both the client-side and the server-side. On the client-side, drivers can be used in Java applications that run either on the client or in the middle tier of a three-tier configuration. On the server-side, this driver is used to access a remote Oracle Database instance or another session on the same database.

### 5.2 Additional Features Supported

The JDBC Thin driver supports all standard JDBC features. The JDBC Thin driver also provides support for the following additional features:

- [Default Support for Native XA](#)
- [Support for Transaction Guard](#)
- [Support for Application Continuity](#)

#### 5.2.1 Default Support for Native XA

Similar to the JDBC OCI driver, the JDBC Thin driver also provides support for Native XA. However, the JDBC Thin driver provides support for Native XA by default. This is unlike the case of the JDBC OCI driver, in which the support for Native XA is not enabled by default.



#### See Also:

["Native-XA in Oracle JDBC Drivers"](#)

## 5.2.2 Support for Transaction Guard

Transaction Guard feature provides a generic infrastructure for at-most-once execution during planned and unplanned outages and duplicate submissions. Transaction Guard feature (along with Application Continuity feature) provides transparent session recovery and replay of SQL statements (queries and DMLs) since the beginning of the in-flight transaction.



### See Also:

[Transaction Guard for Java](#)

## 5.2.3 Support for Application Continuity

Application Continuity provides a general purpose, application-independent infrastructure that enables recovery of work from an application perspective, after the occurrence of a planned or unplanned outage. It provides the following benefits:

- Masking of outages from the end user
- Recovery of user environments, in-flight transactions, and lost outcome
- A single, easy, and foolproof method for applications to recover
- A definite target response time for applications, regardless of outages



### See Also:

[Application Continuity for Java](#)