CORE JAVA

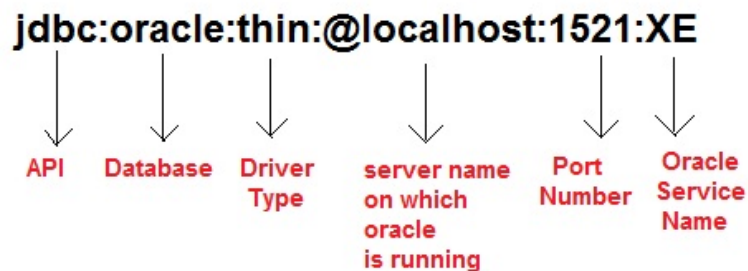## Connecting to Oracle Database using Thin Driver

To connect a Java application with Oracle database using Thin Driver. You need to follow the following steps

1. **Load Driver Class:** The Driver Class for oracle database is **oracle.jdbc.driver.OracleDriver** and

   `Class.forName("oracle.jdbc.driver.OracleDriver")` method is used to load the driver class for Oracle database.

2. **Create Connection:** For creating a connection you will need a Connection URL. The Connection URL for Oracle is

   You will also require **Username** and **Password** of your Oracle Database Server for creating connection.

3. **Loading jar file:** To connect your java application with Oracle, you will also need to load `ojdbc14.jar` file. This file can be loaded into 2 ways.

   1. Copy the jar file into `C:\Program Files\Java\jre7\lib\ext` folder.

      or,

   2. Set it into classpath. For more detail see **how to set classpath** (setting-classpath-for-java.php)

   Download ojdbc14.jar file (ojdbc.jar)

NOTE: Here we are discussing about Oracle 10g as database. For other version of Oracle you will be require to do some small changes in the Connection URL.

Example

Create a table in Oracle Database

```
create table Student(sid number(10),sname varchar2(20));
```

Insert some record into the table

```
insert into Student values(101,'adam');
insert into Student values(102,'abhi');
```

Accessing record from Student table in Java application

```java
import java.sql.*;
class Test
{
public static void main(String []args)
{
try{
//Loading driver
Class.forName("oracle.jdbc.driver.OracleDriver");

//creating connection
Connection con = DriverManager.getConnection
                    ("jdbc:oracle:thin:@localhost:1521:XE","username","password");

Statement s=con.createStatement();       //creating statement

ResultSet rs=s.executeQuery("select * from Student");    //executing statement

while(rs.next()){
System.out.println(rs.getInt(1)+" "+rs.getString(2));
}

con.close();     //closing connection
}catch(Exception e){
e.printStacktrace();
}
}
}
```

Output

```
101 adam
102 abhi
```

Inserting record into a table using java application

```
import java.sql.*;
class Test
{
public static void main(String []args)
{
try{
//Loading driver...
Class.forName("oracle.jdbc.driver.OracleDriver");

//creating connection...
Connection con = DriverManager.getConnection
                    ("jdbc:oracle:thin:@localhost:1521:XE","username","password");

PreparedStatement pst=con.prepareStatement("insert into Student values(?,?)");

        pst.setInt(1,104);
        pst.setString(2,"Alex");
        pst.executeUpdate();

con.close();      //closing connection
}catch(Exception e){
e.printStacktrace();
}
}
}
```