



JAVA & Database Connectivity



Implementation of the JAVA Database Connectivity Advanced Programming Interface

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What is the JDBC API?

- JAVA Classes
- Interfacing with Multiple Databases



Useful Scenarios:

- Company Mergers
- Multiple OS platform environments
- Datawarehousing
- Database Porting



Why use JAVA & JDBC ?

- Platform Independent
- One Applet for many users
- Additional connections made easy
- Strong industry support

***** The Java Bandwagon *****

How does JAVA do it ?

- Driver Manager
- Database Driver for each database
- Establish connection
- SQL Statement
- Process Results



The four types of drivers:

- 1) JDBC/ ODBC Bridge
- 2) Native-API Partly-Java
- 3) Net-Protocol All-Java
- 4) Native-Protocol All-Java



JDBC/ODBC Bridge



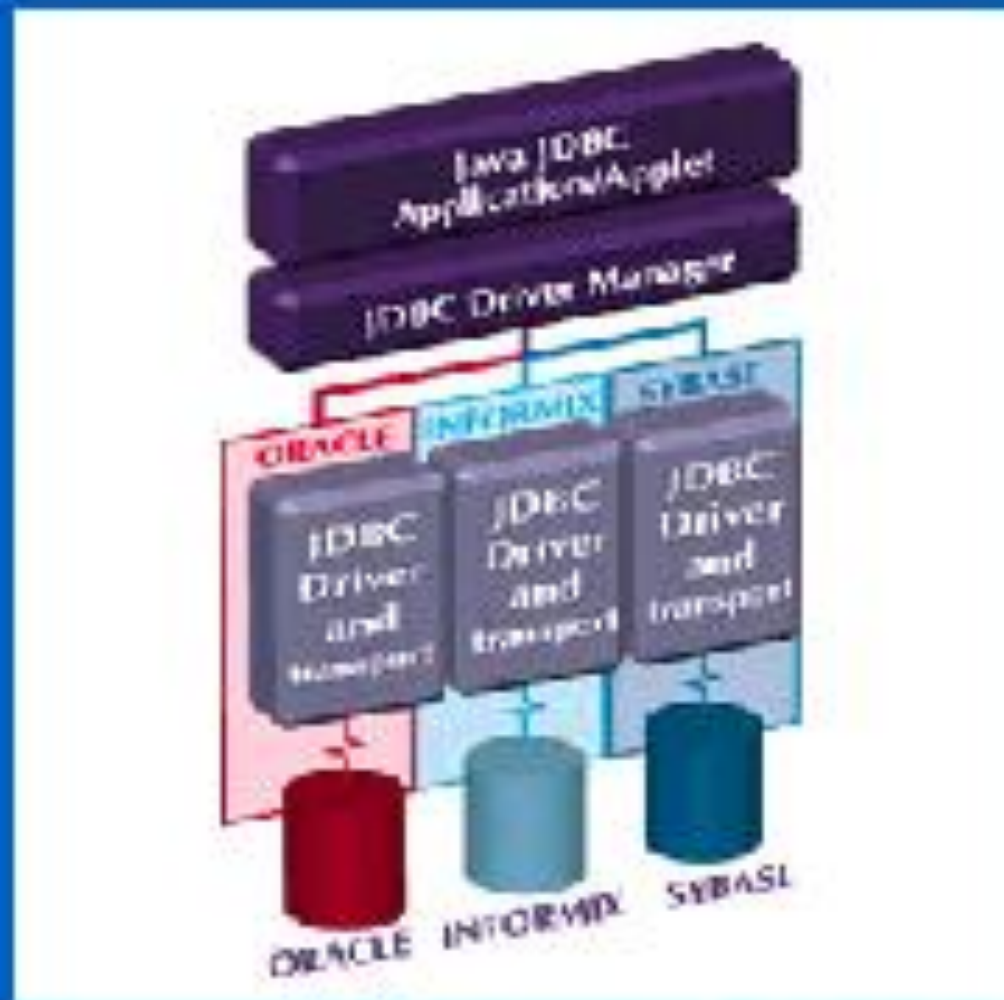
Native-API Partly-Java



Net-Protocol All-Java



Native-Protocol All-Java



Establish A Connection !!!

```
Connection con = DriverManager.getConnection(  
    "jdbc:mysql://acm.org/acm.mdb", "login", "password");
```



SQL Statemen :

```
Statement stmt = con.createStatement();
```

```
ResultSet result = stmt.executeQuery("SELECT name,  
dept, title FROM Emp table");
```



Process Results

```
while ( result.next( ) ) {  
    String x = getString( "name" );  
    int y = getInt( "dept" );  
    int z = getInt( "title" );  
}
```



Wrappin' it up

- Connecting Multiple Databases
- Portable
- Easy to use
- An Applet a day.....
Keeps the command prompt away !!

Resources Used

Java Database Programming with JDBC
Patel & Moss. Coriolis Group Books. 1996

Sun Microsystems
<http://www.javasoft.com/>

White Paper: Deploying Java and JDBC
<http://www.intersolv.com/products/dd-wp-jdbc.htm>

