

# How to Set Up Apache and JSERV with Oracle

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# Introduction

- Integrated set up of Apache Web Server with Oracle8i (8.1.6)
- Oracle Web products to be integrated:
  - 1) Oracle XSQL
  - 2) Oracle JSP
  - 3) Developer Server 6i
  - 4) WebDB 2.2

# Introduction (cont'd)

- Process builds nearly the same configuration as the Oracle 9iAS
- Requires the downloading of components from external web sites
- Extensive customization of the http.conf and jserv.conf

# Set Up Basics

- Download
- Directories to create
- Apache configuration
- JDK 1.3
- JSDK 2.0
- JServ 1.1.2
- Oracle XSQL 1.0

# Set Up Basics (cont'd)

- JavaServer Web Development Kit 1.0.1
- Oracle JSP 1.0
- Remote debugging with JDeveloper 3.1 \*
- Oracle JDBC driver 8.1.6
- Oracle Developer 6i
- Oracle WebDB 2.2

# Files to Download

Program	URL
* Apache	<a href="http://www.apache.org">http://www.apache.org</a>
* Jserv	<a href="http://java.apache.org">http://java.apache.org</a>
* JDK	<a href="http://java.sun.com/">http://java.sun.com/</a>
* Java Servlet DK	<a href="http://java.sun.com/products/servlet/download.html">http://java.sun.com/products/servlet/download.html</a>
* JavaServer 1.0.1 WDK	<a href="http://java.sun.com/products/servlet/download.html">http://java.sun.com/products/servlet/download.html</a>
Oracle JSP	<a href="http://technet.oracle.com/software/tech/java/servlets/software_index.htm">http://technet.oracle.com/software/tech/java/servlets/software_index.htm</a>
Oracle XSQL for Java	<a href="http://technet.oracle.com/tech/xml/">http://technet.oracle.com/tech/xml/</a>
Oracle JDBC driver 8.1.6	CD-ROM << Oracle Server 8i Release 2 (8.1.6) >>
Oracle Developer 6i	CD-ROM << Oracle Developer 6i >>
(*) Required	All packages marked with (*) are required by the other packages.

# Directory Structure

Program	Version	Directory	Downloaded file
Apache *	1.3.12	E:\web\usr\apache	apache_1_3_12_win32.exe
JServ *	1.1.2	E:\web\usr\apache jserv 1.1.2	ApacheJServ-1_1_2.exe
JDK *	1.3	E:\web\usr\jdk1.3	j2sdk1_3_0-win.exe
Java Servlet DK *	2.0	E:\web\usr\jsdk 2.0	jsdk20-win32.exe
JavaServer 1.0.1 WDK	1.0.1	E:\web\usr\jswdk	jswdk1_0_1-win.zip
Oracle JSP	1.0.0.6.1	E:\web\usr\ojsp	ojsp_10061_otn.zip
Oracle XML Dev. Kit Java	1.0	E:\web\usr\xsql	xsqlservlet_v1_0_0_0.zip
Oracle JDBC driver 8.1.6	8.1.6	E:\web\usr\jdbc	CD-ROM
Oracle Developer 6i	6.0.8.8.0	D:\dev6i	CD-ROM

# Apache Configuration

- Choose a target directory –  
E:\web\usr\apache
- Type of installation – select **TYPICAL**
- Configuration file
  - 1) Change DocumentRoot
  - 2) Change ServerName
  - 3) Create index.html in e:\



# Apache Index File

```
<H1>DEMO</H1>
<HTML>
<br><a href="/servlets/IsItWorking">Apache JServ</a>
<br><a href="/jserv/">Apache JServ status</a>
<br><a href="/xsql/">Oracle XSQL</a>
<br><a href="/ojsp/">Oracle JSP</a>
<br><a href="/dev60html/runform.htm">Oracle Forms</a>
<br><a href="/dev60html/runrep.htm">Oracle Reports</a>
<br><a href="/dev60cgi/wdbcgi.exe">Oracle WebDB</a>
</HTML>
```

# Start Apache

- **E:\Web\usr\apache\Apache.exe -d  
“E:\web\usr\apache” -s**
- **E:\web\usr\apache\apache.exe -d  
“E:\web\usr\apache” -k shutdown**
- Shortcuts

# JDK 1.3 Installation

- Choose a target directory –  
E:\web\usr\jdk1.3
- Choose packages to install – all

# JSDK 2.0 Installation

- Choose a target directory –  
E:\web\usr\jsdk2.0

# JServe 1.1.2 Installation

- Choose a target directory –  
E:\web\usr\apache jserv 1.1.2
- Choose full installation
- Specify software location
  - 1) JVM – E:\web\usr\jdk1.3\bin
  - 2) JSDK 2.0 – E:\web\usr\jsdk2.0
  - 3) Apache – E:\web\usr\apache
- Modify http.conf

# JServe 1.1.2 Installation (cont'd)

- Start Apache

- 1) Test Page

<http://127.0.0.1/servlets/IsItWorking>

- 2) Status Page <http://127.0.0.1/jserv/>

# Oracle XSQL 1.0 Installation

- Choose a target directory, unzip it in –  
E:/web/usr/xsql
- Modify four files
  - 1) JSERV.PROPERTIES –  
E:\web\usr\apache jserv 1.1.2\conf

# Oracle XSQL 1.0 Installation (cont'd)

**# Oracle XSQL Servlet**

**wrapper.classpath=E:\web\usr\xsql\lib\oraclexsql.jar**

**wrapper.classpath=E:\web\usr\xsql\lib\classes111.zip**

**wrapper.classpath=E:\web\usr\xsql\lib\xmlparserv2.jar**

**wrapper.classpath=E:\web\usr\xsql\lib\oraclexmlsql.jar**

**wrapper.classpath=E:\web\usr\xsql\lib**



# Oracle XSQL 1.0 Installation (cont'd)

- Modify four files

2) JSERV.CONF –

E:\web\usr\apache jserv 1.1.2\conf

*ApJServAction .xsql /servlets/oracle.xml.xsql XSQLServlet*

# Oracle XSQL 1.0 Installation (cont'd)

- Modify four files
  - 3) HTTPD.CONF –  
E:\web\usr\apache\conf  
Alias /xsql/ “E:/web/usr/xsql/”
  - 4) XSQLCONFIG.XML –  
E:\web\usr\xsql\lib

# Oracle XSQL 1.0 Installation (cont'd)

```
<connection name="demo">  
<username>scott</username>  
<password>tiger</password>  
<dburl>jdbc:oracle:thin:@localhost:1521:ORCL</dburl>  
<driver>oracle.jdbc.driver.OracleDriver</driver>  
</connection>
```

# Oracle XSQL 1.0 Installation (cont'd)

- Configuration parameters for JDBC

Parameter	Description
<u>localhost</u>	Is the name of the Database Servers' computer name <u>ex.</u> WCJNYDB5.
1521	Is the default port for the Oracle Listener
ORCL	Is the Oracle database's SID

# Oracle XSQL 1.0 Installation (cont'd)

- Install XSQL demos
  - 1) Run **E:\web\usr\xsql\demo\install.sql**
  - 2) Install OID before running the sql pgm.
  - 3) Install .sql will install the XSQL demo tables and views

# Oracle XSQL 1.0 Installation (cont'd)

- Stop/Start Apache to test the XSQL configuration
- Go to URL <http://127.0.0.1/xsql/>

# Install Scott/tiger DB

- Check DBA Studio for user Scott; if not there, run scott.sql
- Check to see that all the tables have been created

# Java Server Web DK 1.0.1 Installation

- JSWDK is a zip file – extract only  
jswdk-1.0.1\lib\servlet.jar
- Create directory E:\web\usr\jswdk



# Oracle JSP 1.0 Installation

- OJSP is a zip file – unzip to  
E:\web\usr\ojsp
- Explanation of Apache install  
E:\web\usr\ojsp\docs\install\apach.htm

# Oracle JSP 1.0 Installation (cont'd)

- Modify 3 files:

1) JSERV.PROPERTIES –

E:\web\usr\apache jserv 1.1.2\conf

*# Oracle JSP Servlet*

*wrapper.classpath=E:\web\usr\jswdk\servlet.jar*

*wrapper.classpath=E:\web\usr\ojsp\lib\ojsp.jar*

*wrapper.classpath=E:\web\usr\jdk1.3\lib\tools.jar*

*wrapper.classpath=E:\web\usr\ojsp\lib\translator.zip*

# Oracle JSP 1.0 Installation (cont'd)

2) JSERV.CONF –

E:\web\usr\apache jserv 1.1.2/conf

*# Executes a servlet passing filename with proper extension in PATH\_TRANSLATED*  
*# property of servlet request*  
*# Syntax: ApJServAction [extension] [servlet-uri]*  
*# Defaults: NONE [...]*

**ApJServAction .jsp /servlets/oracle.jsp.JspServlet**  
**ApJServAction .sqljsp /servlets/oracle.jsp.JspServlet**

# Oracle JSP 1.0 Installation (cont'd)

3) HTTPD.CONF –  
E:\web\usr\apache\conf

```
Alias /ojsp/ "E:/web/usr/ojsp/webroot/"
```

# Oracle JSP 1.0 Installation (cont'd)

- Stop/Start Apache to test configuration  
<http://127.0.0.1/ojsp/>

# Remote Debugging with JDeveloper 3.1

This product has technical issues which  
could not be resolved.

# Oracle JDBC Driver 8.1.6 Installation

- Create directory -- E:\web\usr\jdbc\
- Copy file classes12.zip from Oracle 8.1.6 installation (JDBC/LIB)
- Modify jserv.properties to use classes12.zip

OLD: wrapper.classpath=E:\web\usr\xsql\lib\classes11.zip

NEW: wrapper.classpath=E:\web\usr\jdbc\classes12.zip

# Oracle JDBC Driver 8.1.6 Installation (cont'd)

- JSERV.PROPERTIES –  
wrapper.path=E:\oracle\ora8\bin



# Oracle Developer 6i Installation

- Modify HTTPD.CONF –  
E:\web\usr\apache\conf

```
Alias /dev60html/ "d:/dev6i/tools/web60/html/"  
Alias /images/ "d:/dev6i/webdb/images/"  
Alias /forms60java/ "d:/dev6i/forms60/java/"  
Alias /jinitiator/ "d:/dev6i/JINIT/"  
Alias /rep60demo/ "d:/dev6i/TOOLS/DEVDEM60/DEMO/REPORTS/"  
Alias /forms60demo/ "d:/dev6i/TOOLS/DEVDEM60/WEB/"  
Alias /web_qt/ "d:/dev6i/TOOLS/DOC60/US/"  
ScriptAlias /dev60cgi/ "d:/dev6i/tools/web60/cgi/"
```

# Oracle Developer 6I Installation (cont'd)

- Stop/Start Apache to test configuration

<http://127.0.0.1/dev60html/runform.htm>

<http://127.0.0.1/dev60html/runrep.htm>

# Oracle WebDB 2.2 Installation

- The DAD must be changed in  
D:\dev6i\listener\cfg\wdbsvr.app
- To configure CGI file of WebDB, copy the  
file D:\dev6i\bin\wdbcgi.exe into  
D:\dev6i\tools\web60\cgi\

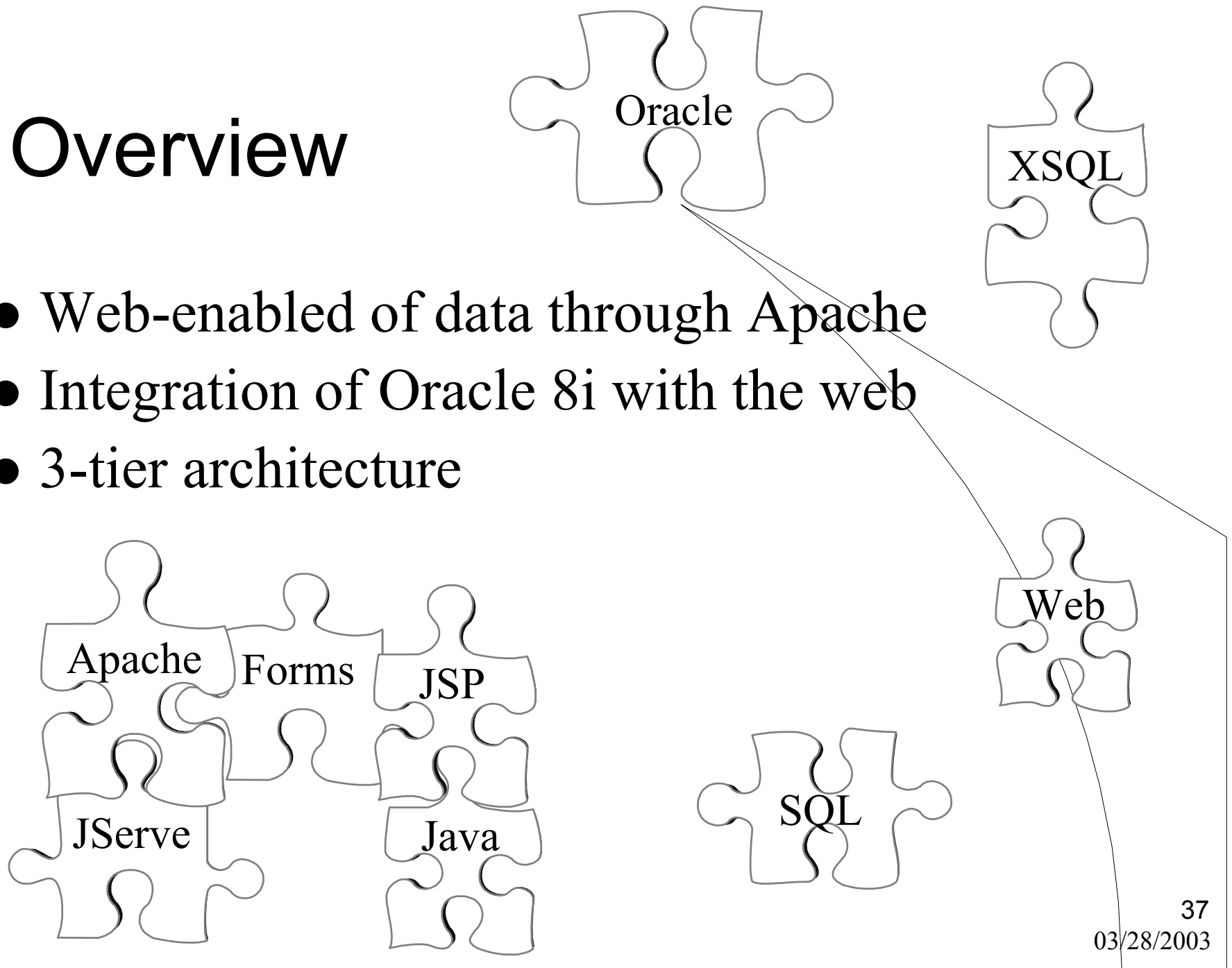
# Oracle WebDB 2.2 Installation (cont'd)

- Edit HTTPD.CONF –  
E:\web\usr\apache\conf

```
SetEnv ORACLE_HOME d:\dev6i  
SetEnv TNS_ADMIN d:\tnsadmin  
SetEnv WV_GATEWAY_CFG d:\dev6i\listener\cfg\wdbsvr.app
```

# Overview

- Web-enabled of data through Apache
- Integration of Oracle 8i with the web
- 3-tier architecture



# Closing

- Apache offers ease of integration with Oracle and other databases
- 3-tier computing
- Thin Web clients
- Low-maintenance

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