### Installation Instructions for a Web Service Application

This instruction is only used for installation on Windows 2000/NT/XP.

#### **Before Installation**

- Make sure that you have the installation CD supplied along with this documentation.
- For the remainder of this document, we will assume all required files are contained on the D: drive.

### Installing JAVA 2 SDK

- 1. Double click the file labelled "j2sdk-1\_4\_2\_10-windows-i586-p.exe" in the tools folder on the D: drive to begin the setup.
- 2. Install to the default directory chosen by the install shield.
- 3. Once the installation is complete, you must set the JAVA\_HOME:
  - 1) Click Start, and then click Control Panel.
  - 2) Double click **System**.
  - 3) Click Advanced tab.
  - 4) Click Environment Variables.
  - 5) Under System Variables, click New.
  - 6) Set the Variable name to 'JAVA\_HOME'.
  - 7) Set the **Variable value** to 'c:\j2sdk1.4.2\_10'. Click **OK**.
  - 8) Under **System Variables**, click the variable labelled 'Path' to highlight it. Click **Edit...**.
  - 9) At the end of the variable value, add the following:';C:\j2sdk1.4.2\_10\bin', and then click **OK**.
  - 10) Click **Ok**, and Click **Ok** again.

### **Installing Tomcat 5.0.28**

- 1. Double click the file labelled "jakatar-tomcat-5.0.28.exe" in the tools folder on the D: drive to begin the setup.
- 2. Follow the on-screen instructions to set up Tomcat.
- 3. When prompted about the directory to install Tomcat, enter 'C:\tomcat\Tomcat-5.0'.
- 4. Check the checkbox for NT Service to ensure that Tomcat is installed as a service.

- 5. Once Tomcat is installed, you must setup the CATALINA\_HOME:
  - 1) Click **Start**, and then click **Control Panel**.
  - 2) Double click **System**.
  - 3) Click **Advanced** tab.
  - 4) Click **Environment Variables...**
  - 5) Under System variables, click New.
  - 6) In the Variable name field, type 'CATALINA\_HOME'.
  - 7) In the Variable value field, type 'c:\tomcat\Tomcat-5.0'. Click OK.
  - 8) Click **OK**, and then click **OK** again.
  - 9) Tomcat will now start when Windows starts. Tomcat must be started for the web service to work.

### **Installing AXIS**

- 1. Double click the zip file labelled "xml-axis-11beta.zip" in the tools folder on the D: drive. All files in the zip file will be extracted to the folder named "C:\axis".
- 2. Once extraction is completed, navigate to the "C:\axis\axis-1\_1beta\webapps" folder, and copy the folder called 'axis' to the folder "C:\tomcat\Tomcat-5.0\webapps\".

## Installing MySQL

- 1. Double click the file labelled "Setup.exe" located in "D:\tools\mysql-4.0.0aalpha-win".
- 2. Follow the onscreen instructions to do a typical installation of MySQL.
- 3. Install **MySQL** as a service.
  - 1) Open the Command Prompt.
  - 2) Type 'cd c:\mysql\bin', and press **Enter**.
  - 3) Type 'mysqld-nt --install', and press **Enter**.
  - 4) Type 'net start mysql', and press Enter.
- 4. Copy the file labelled "mm.mysql-2.0.4-bin.jar" located in the "D:\tools\jdbc\_for\_mysql" folder to the folder "C:\tomcat\Tomcat-5.0\webapps\axis\WEB-INF\lib".

## Setting Up the Database Used by Web Service

- 1. Copy the file "create.sql" located from the folder "D:\database\" into the folder "C:\mysql\bin".
- 2. Start the **Command Prompt**.

- 3. Type 'cd c:\mysql\bin'. Press Enter.
- 4. Type 'mysqladmin -u root password 123456', and press **Enter**. Note: This will set the password as "123456" for the user root. Users should use real password instead of "123456" for security reason.
- 5. Type 'mysql -u root -p123456', and press **Enter** to get connected to **MySQL**. You should see the **MySQL** prompt.
- 6. Create user **ws** and database **ws**.
  - 1) Log into **MySQL** as the root.
  - 2) Type 'use mysql', and press **Enter**.
  - You are now inside MySQL database, and mysql database is active.
- 7. Type '\. create.sql', and press **Enter** to create database "ws" and user "ws" with password "ws".
- 8. Type 'quit', and press **Enter**.
- 9. Log in to **MySQL** as the user "ws" by entering the following command: 'mysql -u ws -pws ws'.

If you are able to log in, you have set up the user and database successfully.

### Installing the Web Service Database

- 1. Copy the file "ws.sql" located in folder "D:\database\" into the folder "C:\mysql\bin".
- 2. Start the **Command Prompt**.
- 3. Type 'cd c:\mysql\bin', and press Enter.
- 4. Type 'mysql -u ws -pws ws', and press **Enter** to log into **MySQL** as the user "ws".
- 5. Type 'use ws', and press **Enter**. This sets the "ws" database as the active database.
- 6. Type "\. ws.sql" and press **Enter** to load the "ws" database.
- 7. Type 'show tables', and press **Enter**. You should see the table "transactions"; that means the "transactions" table has been added.

## Installing and Deploying the Web Service

- 1. Copy the folder "transactions" located in "D:\classes" into the folder "C:\tomcat\tomcat-5.0\webapps\axis\web-inf\classes".
- 2. Copy the files in the folder "D:\classes\libfiles" into the folder "C:\tomcat\tomcat-5.0\webapps\axis\WEB-INF\lib".

# Deploying the Web Service

- 1. Start the **Command Prompt**.
- 2. Type 'cd C:\tomcat\tomcat-5.0\webapps\axis\web-inf\classes\studentsupdate', and press **Enter**.
- 3. Type 'deploy' and press **Enter** to run the dos batch file "deploy.bat". The web service should now be deployed.
- 4. Start Internet Explorer.
- 5. Type 'http://localhost:8080/axis' in the address bar. You can see Apache Axis Welcome page.
- 6. Click **view** link. You should see all the web services include the "transactions" web service.

Congratulations! Now you have successfully installed "transactions" web service.