**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-4.0.0a-alpha-win".
2. Follow the onscreen instructions to do a typical installation of MySQL.
3. Install **MySQL** as a service.
4. Open the Command Prompt.
5. Type 'cd c:\mysql\bin', and press **Enter**.
6. Type 'mysqld-nt --install', and press **Enter**.
7. 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.

1. Type 'mysql -u root -p123456', and press **Enter** to get connected to **MySQL**. You should see the **MySQL** prompt.
2. Create user **ws** and database **ws**.
3. Log into **MySQL** as the root.
4. Type 'use mysql', and press **Enter**.

You are now inside **MySQL** database, and mysql database is active.

1. Type '\. create.sql', and press **Enter** to create database "ws" and user "ws" with password "ws".
2. Type 'quit', and press **Enter**.
3. 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.

1. Start Internet Explorer.
2. Type 'http://localhost:8080/axis' in the address bar. You can see **Apache Axis** Welcome page.
3. Click **view** link. You should see all the web services include the "transactions" web service.

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