

1999 Fall COMMON Java Labs Setup

About this package

This package is the ZIP version of the full content of the Java labs IBM hosted at the 1999 Fall COMMON at San Antonio, TX. We are making it available on the web to AS/400 customers for them to learn more about programming in Java and using VisualAge for Java targeting AS/400. It contains:

1. Documentation and instructions for the 3 labs:
 - Introduction to VisualAge for Java
 - Java for RPG Programmers
 - AS/400 Data Access Using Enterprise Toolkit for AS/400
2. One VisualAge for Java 'repository file' with source code for the Labs.

Disclaimer

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Workstation Setup

Hardware Requirements:

Pentium 166Mhz or better workstation
At least 64MB RAM (96 MB Recommended)
At least 200MB free hard disk space after all the pre-requisite software is installed.
SVGA Monitor (1024x768 pixels resolution with 256 colors Recommended)

Software Requirements:

- Windows 95/NT 4.0 Operating System with the latest Service Packs.
- VisualAge for Java Enterprise Edition 2.0+ with Enterprise Toolkit for AS/400 feature installed
- Client Access 400 (Version 3 Release 1 Mod 2+ with latest Service Pack installed)
- Java Development Kit (JDK) 1.1.7+ (NOT JDK 1.2.x)
- Java Foundation Classes (JFC or Swing) 1.0.2
- Netscape 3.0 or Netscape Communicator 4.0
- AS/400 Toolbox for Java Classes (V4R3 Mod 1 version) installed on your AS/400 host
- WINZIP or PKUNZIP which supports long filenames
- An editor that supports long filenames such as LPEX Editor.
- Downloaded **VJ400LAB.ZIP** (repository file and lab handouts)

Initial Setup Instructions:

Ensure that appropriate Operating System and all pre-requisite software are installed on the workstation with enough space to install other software. Find the partitions that can hold the other software.

1. Unzip downloaded **VJ400LAB.ZIP** on the partition with enough free space.
2. Add JDK, Swing and AS/400 Toolbox for Java classes to your windows environment as follows.
On WIN95: Make sure that the **PATH** statement in **C:\AUTOEXEC.BAT** includes “x:\jdk1.1.7\bin;.” and the **CLASSPATH** statement includes “x:\jdk1.1.7\lib\classes.zip;.;x:\swing\swing.jar;x:\jt400\lib\jt400.zip”.
On WIN/NT: You can click on the **My Computer** icon on the desktop. Open **Control Panel** folder, and double click **System** icon. Click **Environment** tab. Modify **PATH** to include “x:\jdk1.1.7\bin;.”. Modify **CLASSPATH** to include “x:\jdk1.1.7\lib\classes.zip;.;x:\swing\swing.jar;x:\jt400\lib\jt400.zip”.
3. Launch **VisualAge for Java** by selecting **Start->Programs->IBM VisualAge for Java for Windows->IBM VisualAge for Java**. Then select “**Go to Workbench**” radio button on the **VisualAge Quick Start** dialog box and click **OK**. Click on **File** menu and select **Quick Start** (or press F2) to bring up **Quick Start** window. Select **Features** and **Add Features** and click **OK**. Select **IBM Enterprise Toolkit for AS/400**. Click **OK** to install it. This may take a while, so keep patience. Wait until it is done.
4. On the Workbench, click on the **File** menu and select **Import** to bring up **Import SmartGuide**. Select **Repository** radio button on the first screen. Select **Local Repository** radio button on the second screen and click **Browse...** Button. Select the folder **x:\VJ400LAB**, where you have installed the lab. Select **VJ400LAB.DAT** and click **Open** to close the dialog box. Select **Project** radio button on the **Import SmartGuide** and click **Details** button to get the list of projects in the file. Select **VA Java for AS400 Labs** project on the left hand column and the latest version on the right hand column, and click **OK**. Check **Add most recent project edition to workspace** checkbox. Click **finish**. This may take a while.
5. Expand the **VJ400LAB5** package and the **MainWindow** class in it. Click on the **connect()** method. Change the server name from S400A to your AS/400 host name on the following statement.
as400Connect = DriverManager.getConnection("jdbc:as400://yourAS400");
Press CTRL+S to save the changes.
6. Note that you must complete the AS/400 setup before performing this step.
Expand **ZY400APP** to see the **InventoryList** class. Click on **Run** button on the toolbar to run it. The Signon to AS/400 dialog appears. Enter appropriate data and click OK. If everything is setup correctly you should be able to run the application properly. Try List button to make an AS/400 connection and populate the list. Click on a part and see that the Part Detail is shown. Try updating the part by changing the Inventory and clicking the Update button.

If the Signon dialog does not display, than check the Console window. If you see the java.lang.NoClassDefFoundError exception, then right click on the InventoryList class and select Properties from the pop-up menu. Click on the Class Path tab on the Properties window. Check the Project path check box and click on the **Edit....** Check **IBM Enterprise Toolkit for AS/400** and **JFC class libraries** projects. Click **OK** and **OK**. Run it again and follow the steps in the previous paragraph.

Your System Name : (the system you noted in step 10)
Your Userid : JAVA01
Your Password : JAVA01
Your AS/400 Library : ADTSLAB

AS/400 Host Setup

Hardware Requirements:

An AS/400 system

Software Requirements:

OS/400 V3R7+ or V3R2+ with the latest PTF CUM tape installed
PW1 (LPP 57xxPW1) - ADTS/400 with one of the following PTF installed

V3R2M0	5763PW100	SF46712
V3R6M0	5716PW100	SF46713
V3R7M0	5716PW100	SF51022
V4R2M0	5769PW100	SF49832
V4R3M0	5769PW100	SF49832
V4R4M0	5769PW100	SF56671

Client Access for Windows with the latest PTFs installed
TCP/IP

Setup Instructions:

NOTE: You must have *SECADMIN and *ALLOBJ authority to run this setup.

1. You must have appropriate ADTS/400 PTF mentioned above loaded and applied in order to perform this step. Sign on to the AS/400 server using your 5250 emulator & issue the following commands to restore the **ADTSLAB** library and to setup labs by calling the **LABSETUP** program:

```
RSTLIB SAVLIB(ADTSLAB) DEV(*SAVF) SAVF(QPDA/ADTSLAB)  
ADDLIB ADTSLAB  
LABSETUP USERS(1)
```

Now wait for the message "Command completed successfully". If you don't receive this message then press PF10 to see the detailed messages, fix the problems & run the command again.

This will create a userid **JAVA01** with password **JAVA01**. It will also create **JAVA01** library and assign proper authorities to the **JAVA01** userid.

2. Ensure that the user profile QUSER is enabled and password protected.
3. Issue the following commands on your AS/400 session.

```
STRTCPSVR *ALL  
STRHOSTSVR *ALL
```

Cleanup after running the labs

AS/400 Host Cleanup

Cleanup Instructions:

These host cleanup steps must be performed if you wish to repeat any LAB.

- 1.** Make sure that everyone has signed off, and no one is running the LAB application that accesses the lab libraries on AS/400.
- 2. NOTE: You must have *SECADMIN and *ALLOBJ authority to run this setup.**
Move the focus to the AS/400 emulator & issue the following commands:
ADDLIBLE ADTSLAB
LABCLEANUP USERS(1)
Wait for message "Command completed successfully". If you don't receive this message then press PF10 to see the detailed messages, fix the problems & run the command again.

Workstation Cleanup

Cleanup Instructions:

These workstation cleanup steps must be performed if you wish to repeat any LAB. Lets say we want to repeat LAB number 2:

- 1.** Start **VisualAge for Java** session.
- 2.** Select **VJ400LAB2** package of **VA Java for AS400 Labs** project, and right click on it. Select **Replace with Another Edition**. Select the original edition from the list of edition, and click **OK** to replace it. This may take few minutes.
- 3.** Click on **Window** menu on **Workbench** and select **Log** window. On the **Log** window press clear button. Again click on **Window** menu on **Workbench** and select **Console** window. On the **Console** window press clear button, then close it.
- 4.** Save the workspace by clicking **File** menu and selecting **Save Workspace**.

Removing labs library

AS/400 Host Cleanup

Cleanup Instructions:

1. Make sure that everyone has signed off, and no one is running the LAB application that accesses the lab libraries on AS/400.

2. **NOTE: You must have *SECADMIN and *ALLOBJ authority to run this setup.**

Move the focus to the AS/400 emulator & issue the following commands:

ADDLIBLE ADTSLAB

LABCLEANUP USERS(1)

Wait for message "Command completed successfully". If you don't receive this message then press PF10 to see the detailed messages, fix the problems & run the command again.

DLTLIB ADTSLAB

Workstation Cleanup

Cleanup Instructions:

You can delete the project from the VAJava workspace. If you wish to do so, start VAJava and go to the **Workbench** window. Left click on "VA Java for AS400 Labs" project. Once selected, right click on it and select "Delete..." from the pop-up menu. Select OK to confirm the deletion.