PLANETJ CORPORATION

WOW Installation Guide

TOMCAT * ISERIES* MYSQL

WOW Installation Guide

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Chapter

INTRODUCTION & PREREQUISITES

License Information

Before installing WOW you should read its license, located in the *license60.txt* file included in the docs directory on the WOW Installation CD or the trial download.

Understanding WOW installation requirements

WOW is a web application development tool and consists of two major components.

- 1. WOW Metadata
 - a. This component contains stored application data such as field descriptors, JDBC connections, and operations.
 - b. "WOW Metadata" is simply a set of database tables.
 - c. The WOW trial version supports WOW Metadata storage on the IBM iSeries UDB and MySQL. Other Metadata storage such as Oracle, IBM UDB for Windows, and SQL Server are supported in other enterprise versions of WOW.
- 2. WOW Application Code
 - a. This component includes all the WOW Java-based system code. WOW is a Servlet and JSP based web application.
 - b. For WOW trial and entry versions, this guide only covers running WOW on the Tomcat application server on a PC. Other application servers such as WebSphere can be configured to work with WOW but require additional setup (not covered in this guide). WOW can run on ANY Java platform and any system including Windows, iSeries, Linux, Unix, etc. We recommend using a Windows PC for the initial installation. Any WOW programs developed can be moved to other systems when appropriate.

Prerequisites

- 1. Windows PC (NT, 2000, XP, 2003) with at least 256 MB of RAM and a 400 Mhz or faster processor. WOW components require 150MB of disk storage. (A PC with a slower processor or less RAM may or may not be able to run WOW successfully.) A Windows server with 1GB of RAM and 1.5 or more GHZ processor is recommended.
- 2. If the PC server will use the iSeries, you must have a TCP connection to the iSeries.
- 3. If using iSeries, a OS of V4R5 or higher is needed. (Although it has not been tested on earlier OS versions, WOW may run even if the iSeries is running an OS released prior to V4R5.)
- 4. The iSeries must have host servers running. Host servers can be started using the STRHOSTSVR (*ALL) command. TCP must be running and can be started with the STRTCP CL command.
- 5. If the iSeries is being accessed through a firewall, the following ports must be open to allow WOW to access iSeries resources. Generally, if Operations Navigator is able to access the iSeries, WOW will be able to as well since they use the same ports and host servers.

PC Function	Server Name	Port Non-SSL	Port SSL
Server Mapper	as-svrmap	449	449
Database Access	as-database	8471	9471
Data Queues	as-dtaq	8472	9472
Remote Command	as-rmtcmd	8475	9475
Signon Verification	as-signon	8476	9476

6. If accessing AS/400 or MySQL to install metadata, verify that the user profile that you specify in WOW *can* connect and install the metadata libraries. To do this you need to make sure that the user profile has the correct authority to change and install PJSYS64 and PJUSER64 libraries.

INSTALLATION OF WOW USING APACHE TOMCAT WEB APPLICATION SERVER

This chapter describes the required material for WOW to run with Apache Tomcat as the Web Application Server.

Required Files for Apache Tomcat

There are three main components that must be installed to run WOW on the PC using Apache Tomcat (these files are all included on the CD and in the download files and are automatically installed during installation):

Component	Description
Java 2 SDK v1.5(or latest version)	This file contains all of the necessary files to run Java applications on your PC and is required by Apache Tomcat.
Jakarta Tomcat 5.5.15(or latest version)	This is the installation file for Apache Tomcat Web Application Server.
WOW Resource Files	The wow64 directory contains all of the necessary files for WOW to run correctly.

The WOW installation process will guide you through how to install Apache Tomcat.



INSTALLATION OF WOW STORING METADATA IN MYSQL

This chapter describes the required material for WOW to run utilizing MySQL as the metadata storage system.

Required Files for MySQL

There are two main components that must be installed to run WOW on the PC using MySQL (these files are all included on the CD and in the trial download and are automatically installed during installation):

Component	Description
MySQL 5.0	This is the installation file for MySQL.
(or Current Version)	
MySQL Resource Files	The <i>mysql</i> directory contains all of the necessary metadata database files for WOW to run

The WOW installation process will guide you through the MySQL installation.

Chapter

INSTALLATION AND CONFIGUREATION OF WOW

This chapter walks users through the WOW installation process.

Installing WOW

- Load the CD into your CD ROM drive and the WOW Installation will automatically begin. If it does not automatically start, look at the root of the CD and double click on the WOWInstall.bat. If you have downloaded a copy of WOW, you need to unzip the downloaded file into a temporary directory. Next, locate and double-click on the WOWInstall.bat file. It will be in the WOWInstall directory. If you cannot find the WOWInstall.bat file, run a search for files or folders named WOWInstall.bat
 - a. **NOTE** If using MySQL for WOW Metadata please make sure you have successfully created a WOW user profile as instructed. Make sure the user profile has authority to access and create files.
- 2. The initial start-up process may take several seconds, or at most, a few minutes to start depending on your system's performance.
- 3. The screen that will appear after the 'please wait...' window will be a welcome screen.

NOTE Please read this screen carefully as you may loose data from your existing Apache Tomcat and MySQL installations. The mysql database in the "data" directory of the MySQL install will be overwritten by the installer if you choose MySQL for your Metadata. You must backup this file.

WOW v6.4: Welcome		
	Welcome to the WOW v6.4 setup program. This program will install WOW on your computer. It is strongly recommended that you exit all windows applications before running this setup program. Please make sure all data stored in Apache Tomcat and MySQL is backed up to a safe place. Click cancel anytime to quit the setup program. Click OK to continue. WARNING: This program is owned by PlanetJ Corporation and protected by copyright laws. Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.	
Cancel	Web Object Wizard - PlanetJ Corporation	

Figure 1 - WOW Installation Disclaimer

4. The next screen will be the license agreement such as the one shown below. Please read the license agreement carefully and to accept the terms, click I Agree.

WOW v6.4	4: License Agreement	X
W	You must read the following license before continuing the install.	
	Web Object Wizard (WOW) v63 License Agreement PlanetJ Corporation	
Part 1	- General Terms	
BY DOW	 NLOADING, INSTALLING, COPYING, ACCESSING, OR USING THE PROGRAM ` TO THE TERMS OF THIS AGREEMENT. IF YOU ARE ACCEPTING THESE TERM.	YOU
BEHALF	OF ANOTHER PERSON OR A COMPANY OR OTHER LEGAL ENTITY, YOU	
REPRES	ENT AND WARRANT THAT YOU HAVE FULL AUTHORITY TO BIND THAT PERSO	N, 🚽
4	V OD LECAL ENTERTY TO THERE TRONG TE VOIL DO NOT ACDEE TO THERE	•
<u>C</u> an	cel Web Object Wizard - PlanetJ Corporation	<u>I</u> Agree



5. If you do not have our recommended SDK version already installed, you will be asked to install it. If you choose to install it, you will be prompted for a directory to install the SDK in. The default directory is *C:\j2sdk1.4.2_04*, as shown below. You can install in a different directory if you wish.

NOTE If you currently have a previous version of J2SDK installed, we recommend you uninstall that version and install the version we have included in our WOW install program. WOW may or may not work with previous version of J2SDK. If you have a later version of the SDK already installed, you can choose not to install this version of the SDK by choosing the No button.

- 6. Continue clicking next and choosing the default values that are given; this will eventually complete the install of the Java 2 SDK v1.5 (or newest version). Do not restart your system yet if you are prompted to do so.
- 7. For more information on Java 2 Runtime, version 1.5 visit the Java 2 website at: <u>http://java.sun.com/j2se/1.5/</u>
- 8. Next, if you do not have our recommended Apache Tomcat version already installed, you will be asked to install it. If you already have Apache Tomcat 5.5 installed, we recommend backing up all critical files located in the Apache Tomcat directory. This is very important. The WOW installation will be writing files to *Apache Software Foundation**Tomcat 5.0**webapps*\. If you already have Tomcat installed, make sure it is not running.

NOTE If you currently have a previous version of Apache Tomcat installed, we recommend you uninstall that version and install the version we have included in our WOW install program. WOW may or may not work with previous version of Apache Tomcat. If you have a later version of Tomcat already installed, you can choose not to install this version of Tomcat by choosing the No button when prompted to install Tomcat.

9. The initial Tomcat setup wizard screen will appear. Click Next to proceed. A screen will appear asking you to read over the license agreement. After reviewing the license agreement, click the "I Agree" button. This will bring you to a screen, which will be similar to the screen below. Expand the 'Tomcat' menu and check the 'Service' option then click Next.

🗷 Apache Tomcat Setup		
Choose Components Choose which features of Apac	the Tomcat you want to install.	Marca Contraction
Check the components you wa install. Click Next to continue.	nt to install and uncheck the com	ponents you don't want to
Select the type of install:	Custom 🗸 🗸	
Or, select the optional components you wish to install: Space required: 11.2MB	Tomcat Tomcat Core Service Native Start Menu Items Councentation Examples Webapps	Description Hover your mouse over a component to see its description.
Nullsoft Install System v2,0 ———	< <u>B</u> ack	Next > Cancel

Figure 3 - Apache Tomcat Installation Options

10. After clicking the NEXT button the installation program will ask where to install the appropriate files. The default value like the one shown below should be used. Click the INSTALL button to begin the installation of Apache Tomcat.

NOTE It is best to install Apache Tomcat in its default directory so the configuration of WOW goes smoothly, however make sure you either install Apache Tomcat to a root drive such as *D*:/*Apache Software Foundation*/*Tomcat 5.0*| or in the program files directory such as *E*:/*Program Files*| *Apache Software Foundation*|*Tomcat 5.0*|

💐 Apache Tomcat Setup	
Choose Install Location Choose the folder in which to install Apache Tomcat.	
Setup will install Apache Tomcat in the following folder. To install in a Browse and select another folder. Click Next to continue.	a different folder, click
Destination Folder C:\Program Files\Apache Software Foundation\Tomcat 5.5	B <u>r</u> owse
Space required: 11.2MB Space available: 772.1MB	
Nullsoft Install System v2.0	vext > Cancel

Figure 4 - Apache Tomcat Installation Directory

11. After clicking the Next button, the program will prompt you for a password to access Tomcat as shown below. Enter a password and record it on the next page. Keep the rest of the default values the same. If you have another program using port 8080, change the port number and continue. Do not restart your system if you are prompted to do so. The port specified will affect the URL used to access WOW through Tomcat. For example, leaving the port defaulting to 8080 would mean that you would access WOW using a URL similar to: <u>http://localhost:8080</u>. This port can be changed at anytime by modifying the Tomcat config file found at .../conf/server.xml.

NOTE Remember the port number because you will need it later when configuring WOW. We recommend using any port between 8080 – 8090 or port 80 if you know it is not being used. Often Windows servers will have Microsoft IIS running on port 80 which will cause a conflict which is why we recommend port 8080. To check, simply open a browser and enter this URL: <u>http://localhost</u>

💐 Apache Tomcat Setup: Configuration	n Options
Configuration Tomcat basic configuration.	
HTTP/1.1 Connector Port	8080
Administrator Login	
User Name	admin
Password	•••••
Nullsoft Install System v2.0	< Back Next > Cancel

Figure 5 - Apache Tomcat Installation Administration

Record your Tomcat configuration below:

Tomcat install directory: C:\Program Files\Apache Software Foundation\Tomcat 5.0

If changed:

Tomcat port: _____

Tomcat user name: _____

Tomcat password: _____

12. After clicking the Next button, the installer will prompt for the location of the JVM. It is important that you specify the location of a JDK rather than a JRE. A JRE does not contain the files needed to compile the JSPs (specifically *javac*). Depending on which JDK you have installed, the location specified here may vary.

😹 Apache Tomcat Setup: Java Virtual Machine path selection	
Java Virtual Machine Java Virtual Machine path selection.	
Please select the path of a J2SE 5.0 JRE installed on your system:	
C:\Program Files\Java\jre1.5.0_06	
Nullsoft Install System v2,0 < <u>B</u> ack <u>I</u> nstall	Cancel

Figure 6 - Apache Tomcat Installation JDK

13. After clicking the Next button, the installer will ask if you want to "Run Apache Tomcat". YOU MUST UNCHECK THIS OPTION for the WOW Install to complete properly!! If Tomcat is started automatically in this step, you MUST STOP IT AND RESTART Tomcat before WOW will be operational. It is up to you whether or not you show the readme file. Click Finish to complete the Tomcat install.



Figure 7 - Apache Tomcat Installation Final Screen

14. The next screen you should see should look similar to the screen below. This screen is responsible for selecting the appropriate WOW metadata system. This is very important. If you want your WOW metadata store locally in MySQL, choose the MySQL radio button (this will ask you to install MySQL on your PC). Click OK once you have made your selection.

с	onfiguring WOW Metadata Database 🛛 🛛 🔀
¢	onfiguring Metadata Database 🛛 💓
	Metadata System
	AS/400 (iSeries)
	○ MySQL
	<u>О </u> В2
	O Microsoft Access
	○ <u>S</u> QL Server
	○ <u>o</u> racle
	Enternrise Edition Notice If your metadata database preference is not available, please contact PlanetJ Corporation
	Cancel Web Object Wizard

Figure 8 - Configuring WOW Metadata Screen

15. For iSeries WOW Metadata Users: The next step is to FTP AS/400 savefiles to your WOW metadata system. This will happen automatically. Please be prepared to enter your WOW iSeries metadata system name, user id, and password. For the user id and password, you should be using the WOW user profile. Please be aware this process may take up to 30 minutes depending on your internet connection speed to the system. On most machines it takes only a few minutes. This process will run the following commands in this order: CRTSAVF FTP RSTLIB DLTF. If you currently have PJSYS64 or PJSYS64 libraries on your system, the installation will skip this step and will not overwrite any existing PJSYS64 or PJSYS64 libraries. You will see a prompt like the one below. The DLTF command simply deletes the file created during CRTSAVF.

****NOTE**** The WOW user profile or user profile used to connect to your iSeries must have authority to create, restore, access and change the PJUSER64 and PJSYS64 save files and then subsequent libraries.

Restori	ng libraries to AS/400 (iSeries)
?	We suggest you allow us to automatically create the PJSYS64 and PJUSER64 libraries on your metadata system. Do you want WOW to perform this task automatically?
	<u>Y</u> es <u>N</u> o



16. For iSeries WOW Metadata Users: If you do not want to have the WOW Installation automatically restore the meatdata libraries, select No, otherwise choose Yes. If you choose No, you will have to restore the libraries manually. See chapter 2 for instructions on how to restore the metadata libraries manually. If you choose Yes you will be presented with the following screen.

Creating PJSYS64	and PJUSER64 savefiles in QGPL on AS/400
	You are about to FTP AS/400 savefiles to your WOW metadata system. Please be prepared to enter your WOW metadata system name, user id, and password. For the user id and password, you should be using the WOW user profile. Please be aware this process may take up to 30 minutes depending on your internet connection speed to the system. On most machines it takes only a few minutes. This process will run the following commands in this order: CRTSAVF FTP RSTLIB DLTF The DLTF command simply deletes the file created during CRTSAVF. If you currently have the PJSYS84 or PJUSER84 libraries on your system, please back them up for safety; however, this process will skip the transfer if the PJSYS84 or PJUSER84 library are present. Your libraries WILL remain intact. Please be patient
<u>C</u> ancel	Web Object Wizard - PlanetJ Corporation

Figure 10 - Restoring library warnings

17. For iSeries WOW Metadata Users: Click OK to continue. The next step is entering a valid sign-on to your WOW Metadata System. You will be presented with a screen that is similar to the one below. The system can be either an IP address or the name of the system if it is available on your network.

AS/400 Sign On (iSeries)			
	System		
F	Examples:	127.0.0.1 or AS400X	
-	UserID	WOW	
	Password		
	<u>0</u> K	<u>C</u> ancel	

Figure 11 - iSeries Sign On

18. For iSeries WOW Metadata Users After clicking OK to the Sign On screen, the restore library process will begin. This process may take up to 30 minutes depending on the internet connection speed to the system. However, on most machines this only takes a few minutes. Please be patient with the restore library process. You will see a screen similar to the screen below. Then, skip to step 23.

NOTE: IF YOU SEE A MESSAGE INDICATING THERE WAS AN ERROR WITH THE RESTORE TO THE ISERIES, IT MAY SIMPLY BE AN AUTHORITY WARNING INDICATING THE OWNERSHIP CHANGES OCCURRED. IF LIBRARIES PJSYS64 AND PJSYS64 EXIST ON YOUR ISERIES AFTER THIS STEP, THE INSTALLATION WAS SUCCESSFUL AND YOU CAN IGNORE THE ERROR/WARNING MESSAGE.

🞯 WOW v6.4: Web Object Wizard Installation		
Welcome Please be patient while WOW is being installed.		W
 Install JDK/SDK (jdk-1_5_0_06-windows-i586-p.exe) Install Apache Tomcat (apache-tomcat-5.5.12.exe) Configure Metadata 	ンンン	Copy Files Configure WOW Starting WOW
32%		
Cancel Web Object Wizard - PlanetJ Corpor	ration	Close

Figure 12 - Please Wait window displayed during restoration of planetj50 library

19. For MySQL WOW Metadata Users: If you do not already have MySQL installed, you will be asked to install it. If you already have MySQL installed, make sure you back up all your data. This is very important. The WOW installation will put files into the *mysql\data* folder so please be sure you have backed up all data in that folder. You may also want to back up the my.ini file located in *C:\WINDOWS* or *C:\WINNT*. The current *my.ini* file will be renamed to *myOLD_X.ini* where X indicates a number. Also make sure the MySQL service is stopped.

Installa	ition of necessary programs.	
?	We suggest you install the following program: MySQL 4.0.17	
	<u>Y</u> es <u>N</u> o	

NOTE If you currently have a previous version of MySQL installed, we recommend you uninstall that version and install the version we have included in our WOW install program. WOW may or may not work with previous version of MySQL.

20. For MySQL WOW Metadata Users: If you choose to install MySQL, you will be presented with the following screens. Select an installation type (we recommend Typical for beginning users) on the second screen and hit Next.



🔂 MySQL Serve	er 4.1 - Setup Wizard	
Setup Type Choose the se	etup type that best suits your needs.	
Please select a	a setup type.	
© Typical	Common program features will be installed. Recommended for general use.	
O <u>C</u> omplete	e All program features will be installed. (Requires the most disk space.)	
O Cu <u>s</u> tom	Choose which program features you want installed and where they will be installed. Recommended for advanced users.	
	< <u>B</u> ack <u>N</u> ext > Ca	ncel

21. For MySQL WOW Metadata Users: For the following screen, make sure you're installing MySQL to a root drive such as *D*:*mysql*\ or in the program files directory such as *C*:*Program Files\mysql*\. Click Finish when the install is completed.

Figure 13 - MySQL Installation Screens

🖟 MySQL Server 4.1 - Setup Wizard 🛛 🛛 🔀
Ready to Install the Program
The wizard is ready to begin installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
Current Settings:
Setup Type:
Typical
Destination Folder:
C:\Program Files\MySQL\MySQL Server 4.1\
< <u>B</u> ack Install Cancel

Figure 14 - MySQL Directory & Configuration Screens

22. For MySQL WOW Metadata Users: After MySQL has completed the install, you will be brought back to the WOW Installer. You will see a dialog asking if MySQL was installed correctly. Proceed past this dialog only after MySQL has been fully installed. The dialog is similar to the one below. If everything went fine, click Yes.

Proceed only afte	er the installation of: MySQL 4.0.17	X
2 Dia	I MySQL 4.0.17 install correctly?	
	Yes No	

Figure 15 - MySQL Installation

23. Next you will be presented with the Installation Options dialog. You may choose to install an optional program called the SQL Assistant. If you choose to do so, refer to the SQL Assistant Installation Guide.pdf in the <WOW CD>\sqlassistant\docs directory. The WOW SQL Assistant is a utility that allows WOW SQL operations to be built in a point and click fashion. We only recommend you install it if you have no previous SQL experience.

WOW v6.4: Installation Options 🛛 🔀			
This will install Web Object Wizard (WOW) on your computer.			
Please select the optional components you wish to install:	 ✓ Web Object Wizard (required) ☑ SQL Assistant (recommended) 		
Space required: 26.87MB This does not include size required for the SDK, Apache Tomcat, or MySQL.	documentation VOW Documentation (required)		
Cancel Web Object Wizard - PlanetJ Corporation OK			

Figure 16 - WOW Installation Options Screen

24. Next, we need to configure WOW and this is accomplished via our configuration dialog as seen below. Enter the name of your system where you restored the WOW metadata to in the WOW Metadata System field. The Webserver Location must point to the Apache Tomcat install root (the folder prior to the *webapps* directory). The default location is: C:\Program Files\Apache Software Foundation \Tomcat 5.0. For the Webserver Port Number, make sure you specify the port number you set when Tomcat was installed. Both the Webserver Port Number and Webserver Location should default to the correct values unless you changed the defaults.

For MySQL WOW Metadata Users: Here you must set the WOW Metadata System to jdbc:mysql://localhost/pjsys64. You can either copy and past it from here or click on the Example text on the screen (to the right of the red arrow) and it will put that value (jdbc:mysql://localhost/pjsys64) in the text box for you if the WOW Metadata System text field is blank. This will also put wow (lower-case) in the password field for you if the Password text field is blank. For a User Id and Password, you must use WOW (upper-case) for the User Id and wow for the password. **NOTE** These values are case sensitive. You must have the User Id capital WOW and the Password lower-case wow.



Figure 17 - Configuring WOW Screen

- 25. Next the WOW installation program will try to start Apache Tomcat. You will see a splash screen for Tomcat that will close when the service has started. Please see the Troubleshooting section of this guide, or contact your PlanetJ customer support representative if you have any problems.
- 26. If everything was a success during the WOW installation process, you should see a screen like the one below. Please note there still may be problems with WOW even though you see green checks next to each installation process.

🚭 WOW v6.4: Web Object Wizard Installation		
Welcome WOW installation is complete.		W
 Install JDK/SDK (jdk-1_5_0_06-windows-i586-p.exe) Install Apache Tomcat (apache-tomcat-5.5.12.exe) Configure Metadata 	🖌 Copy I 🗸 Config 🗸 Startir	files Jure WOW ng WOW
100%		
Cancel Web Object Wizard - PlanetJ Corpor	ation	Close

Figure 18 - WOW Installation screen, showing the installation status of each process

27. At the end of the installation, a browser window similar to the one below will open:

Planet Corporation Wow is 100% Pure Java		
Steps to Run Web Object Wizard - WOW		
1. Ensure Webserver (Tomcat or WebSphere) is started.		
If running Apache Tomcat as the Webserver, please allow a few seconds for the server to start. If you experience any problems, please contact your customer support representative at PlanetJ Corporation. You may manually start Tomcat if needed by using Windows->Start->Tomcat menu or from the Windows->Control Panel -> Services panel (look for Apache Tomcat5 service and click "start".		
Support and Troubleshooting		
1 Make sure Tomost is running. Click on the following link to verify Tomost		
http://localhost.8080		
2. If and ONLY if you are using MYSOL, ensure MYSOL is started from the windows services control.		
3. Send an email to: <u>support@planetjavainc.com</u> We will help you immediately.		
4. <u>WOW Homepage</u>		
5. <u>WOW Support</u>		
© 2002, 2003 PlanetJ Corporation, 1821 Kelson Pl. Escondido,CA 92029 Tel 760.432.0600 <u>info@planetjavainc.com</u>		

Figure 19 - Welcome Page

Once your webserver (Apache Tomcat) is started, open a browser and go to the following URL: <u>http://localhost:8080/wow64/WOWBuilder</u>. Bookmark this location for future use. (The URL is case sensitive and the port number may vary according to what port you set) If the installation was successful, you will see a sign-on screen similar to the one below:

	PLANETJ CORPORATION
Web Object Wizard	APAN LATH-
Returning users login he	ere:
E-mail Password	
>> Not a registered user yet? Click her	<u>e to sign up!</u>

Figure 20 - Initial WOW screen

For more information on using WOW once it is installed, refer to the WOW Builder Guide, which is included on the WOW Installation CD in the docs directory. For any further questions, please contact your local PlanetJ customer support representative.

NOTE: After initial installation, WOW will compile all components as they are accessed. This may result in slower performance but will only occur with the first access. If WOW fails to start, reboot your PC, start Tomcat, and re-access WOW by opening a browser to: <u>http://localhost:8080/wow64/WOWBuilder</u>

Chapter

STARTING AND RUNNING WOW

If you have questions on starting and running WOW for the first time, read this chapter

Starting WOW

First we need to ensure the webserver (Apache Tomcat) is started. See Starting Apache Tomcat

During the WOW installation, shortcuts to run WOW were placed in your Start Menu and on your Desktop. You can run WOW by clicking on any of these shortcuts. A desktop shortcut will look something like the image below:



Figure 21 - Desktop Shortcuts to WOW

You can find the Start Menu shortcut by clicking the Start Button, then Programs, then Web Object Wizard, then the link to run WOW is called Web Object Wizard X.XX where X.XX is the version of WOW you have installed. I will look like the image below:



Figure 22 - Start Button Menu Shortcut to WOW

You can also simply bring up a browser window and type in the following URL: <u>http://localhost:8080/wow64/WOWBuilder</u>. (The URL is case sensitive and the port number may vary according to what port you set) In the above URL also note that wow64 is dependent on version. For example "wow60" is wow 6.0 while "wow64" is wow 6.4. Check your version by checking for a corresponding folder at: "C:\Program Files\Apache Group\Tomcat 5.0\webapps". If a wow64 folder exists at this location then your URL should include wow64.

If the installation was successful, you will see a sign-on screen similar to the one below:

	PLANETJ CORPORATION
Web Object Wizard	AN/4TH-
Returning users login	here:
E-mail Password	
Login	
>> Not a registered user yet? Click	<u>nere to sign up!</u>

Figure 23 - Initial WOW screen

Creating a connection to AS/400 (iSeries)

The first thing you need to do after signing on to WOW is create a connection. Refer to the WOWBuildersGuide.pdf for detailed instructions. The import properties that are unique to AS/400 (iSeries) are the URL, Driver, User ID, and Password. They must be similar to the following:

URL = jdbc:as400:XXX (Where XXX is your IP Address) JDBC Driver = AS/400 (iSeries) (com.ibm.as400.access.AS400JDBCDriver) User ID = WOW Password = XXX (Where XXX is the password to your WOW user profile)

🐵 Connection Spe	c				
JDBC Driver	AS/400 Remote	~	Alias*	YOUR SYSTEM NAME	
URL [*]	jdbc:as400:YOUR IP ADDRESS				
Properties					<
User ID			Password		

Figure 24 - Connection To AS/400 (iSeries)

Creating a connection to MySQL

The first thing you need to do after signing on to WOW is create a connection. Refer to the WOWBuildersGuide.pdf for detailed instructions. The import properties that are unique to MySQL are the URL, Driver, User ID, and Password. They must be exactly as follows:

URL = jdbc:mysql://localhost/pjsys63 JDBC Driver = MySQL (com.mysql.jdbc.Driver) User ID = WOW Password = wow

🐵 Connection Spec					
JDBC Driver	MySQL	~	Alias	YOUR SYSTEM NAME	
URL [*]	jdbc:mysql://YOUR IP ADDRESS	YOUR			
Properties					<
User ID*			Password*		

Figure 25 - Connection To MySQL

NOTE User ID and Password are case sensitive in MySQL.

If you want to use different properties for User ID and Password, you will have to add records in the mysql.user table. Please consult the MySQL User's Manuel for details on how to create new user accounts.

Creating a connection to ORACLE

The first thing you need to do after signing on to WOW is create a connection. Refer to the WOWBuildersGuide.pdf for detailed instructions. The import properties that are unique to ORACLE are the URL, Driver, User ID, and Password. They must be exactly as follows:

```
URL = jdbc:oracle:thin:@localhost:PJSYS64 (Where localhost is your IP address and PJSYS64 is your database)
JDBC Driver = ORACLE (Remote) (oracle.jdbc.driver.OracleDriver)
User ID = Any valid user id.
Password = Any valid password
```

Connection Spec					
JDBC Driver	ORACLE (Remote)	*	Alias	YOUR SYSTEM NAME	
URL [*]	jdbc:oracle:thin:@YOUR IP ADI	DRESS:Y(
Properties					~ >
User ID			Password		
	Figure 26 -	Connection to O	RACLE		

Starting MySQL

MySQL is a Database Service on your computer, so all your metadata is stored locally. When installation of WOW completes, MySQL should have started up automatically. To see its status, run the MySQL System Tray Monitor which opens a gray gear icon in your task bar (see Figure 31 below). Since MySQL is a Windows Service you can also start and stop it through Windows by navigating to Control Panel > Administrative Tools > Services and locating the appropriate MySQL service.



Figure 27 - Starting MySQL System Tray Monitor

Starting Apache Tomcat

Similar to MySQL, the Apache Tomcat Server runs as a Windows service and can be controlled through Windows by navigating to Control Panel > Administrative Tools > Services and locating the appropriate Tomcat service. If you checked the 'Service' box during the initial Apache Tomcat installation, the Tomcat service will begin automatically when you start Windows. You can check if the service has started by using the 'Configure Tomcat' shortcut that is provided for your convenience. To access this shortcut, navigate through the Start Menu to All Programs > Apache Tomcat 5.5 > Configure Tomcat.



As shown above, using the Configure Tomcat program, you can Start, Stop, Pause, Restart, etc.

At this point, you have successfully installed WOW and may begin to use it. For instructions on how to use WOW, refer the following website:

http://www.planetjavainc.com/learn wow.html

PlanetJ offers education and technical consulting services as well. Contact info@planetjavainc.com more information.



Figure 29 - Tomcat Page

Optimizing Apache Tomcat

Tomcat ships with the maximum amount of memory set to 64MB, which is not large enough to operate most large web applications. We recommend increasing the maximum amount of memory to 80% of the total RAM available on your server. This can be done as shown below.

First, navigate to the Start Menu > All Programs > Apache Tomcat 5.5 > Configure Tomcat.



To access the Tomcat properties allowing changes to the maximum memory, select the Java tab in the Apache Tomcat Properties dialog screen.

💊 Apache Tomcat Prop	perties	×			
General Log On Logging Java Startup Shutdown					
Use default					
Java Virtual Machine:					
C:\Program Files\Java\ji	C:\Program Files\Java\jre1.5.0_06\bin\client\jvm.dll				
Java Classpath:	Java Classpath:				
D:\Program Files\Apach	e Software Foundation\Tomcat 5.5\bin\bootstrap				
Java Options:					
-Dcatalina.home=D:\Pro -Dcatalina.base=D:\Pro -Djava.endorsed.dirs=D -Djava.io.tmpdir=D:\Pro	ogram Files\Apache Software Foundation\Torr gram Files\Apache Software Foundation\Tom D:\Program Files\Apache Software Foundatior ogram Files\Apache Software Foundation\Torr				
Initial memory pool:	МВ				
Maximum memory pool:	350 MB				
Thread stack size: KB					
	OK Cancel <u>A</u> pply				

In the initial memory pool box the value can be anything but should start with at least 64-100MB. The maximum memory pool should be up to 80% of your computers RAM. For example, if you have 512MB of Ram then you should set the maximum memory to around 400MB.

Now we have changed the default memory allocation for Tomcat to handle heavier data loads.

MOVING WOW TO ANOTHER SERVER

Refer to this if you have already installed WOW and want to run WOW on a different server.

Moving WOW to another Server:

Various reasons including disaster recovery, machine upgrades, or scaling requirements may require you to move WOW to another server. In this section, step by step instructions will be given to move an existing WOW installation to another machine.

NOTE: You must have a valid WOW license for each production server. Contact PlanetJ at <u>support@planetjavainc.com</u> to confirm that your licenses are valid.

NOTE: You must also have the Java JDK installed on the new machine. If already installed ignore this note. Otherwise this can be found in the WOW installation folder (jdk-1_5_0_06-windows-i586-p.exe) or <u>www.java.sun.com</u>.

Step 1- Installing a new Application Server

First you need to install the new application server such as Apache Tomcat or Websphere onto your new machine. In this example we use Apache Tomcat. The Tomcat Installation can be found in your WOW installation folder located in your CD or download folder. Double click on the executable (apache-tomcat-5.5.15.exe) and step through the installation.

Step 2 – Copy and Deploy Current WOW Application Context(s)

Next get the current WOW context(s) located on the machine and application server that you want to move WOW from. In the application server's webapps folder, copy the WOWXX(XX is your current WOW version number) and paste it into your new application server's webapps folder. Do this for each context that you want to backup or move to the new system.

Step 3 - Optimize Application Server (Tomcat)

After copying all contexts (WOW Applications) onto your new system, you should decide whether this new system will be a production system. If yes, it is recommended that you optimize your Application Server to run WOW applications faster and more efficiently. For more information about optimizing Tomcat, see our Optimizing Tomcat document on the PlanetJ website.

Step 4 - Restart Application Server and Test

Once all changes have been made and the WOW context(s) have been copied, restart the Application Server on the new system and run WOW.

💊 Apache Tomc	at Properties 🛛 🔀
General Log On	Logging Java Startup Shutdown
Service Name:	Tomcat5
Display <u>n</u> ame:	Apache Tomcat
Description:	Apache Tomcat 5.5.14 Server - http://tomcat.apache
Pat <u>h</u> to executat	ole:
"D:\Program File	es\Apache Software Foundation\Tomcat 5.5\bin\tomcat5.
Startup typ <u>e</u> :	Manual
Service Status:	Started
<u>S</u> tart	Stop Pause Restart
Restart	ing Tomcat

If you have any problems moving WOW from one system to another, please contact <u>PlanetJ</u>.

Chapter

TROUBLESHOOTING

Refer to this chapter if any piece of the WOW installation fails.

Troubleshooting Apache Tomcat

Unable to compile class for JSP

An error occurred at line: -1 in the jsp file: null

Generated servlet error:

[javac] Since fork is true, ignoring compiler setting.[javac] Compiling 1 source file[javac] Since fork is true, ignoring compiler setting.

Solution: Stop and Start Apache Tomcat. Make sure there are no errors when Tomcat starts, then start WOW again. See Starting WOW

Apache Tomcat Problem #2

WOW assumes by default to run with JDK 1.5. If you have JDK 1.4 installed and configured and used by Tomcat, you may need to update the tools.jar file located in: C:\Program Files\Apache Group\Tomcat 5.0\common\lib

To do this, find the tools.jar file in your JDK1.5 installation directory and copy it to the tomcat directory listed above. Tools.jar is a set of tools to enable WOW to compile JSPs and must be in the applications server's classpath.

AS400 MetaData

WOW installation will restore 2 libraries to your iSeries. The user profile under which WOW runs must have authority to all the files in these 2 libraries. If WOW does not correctly start (You may see a white screen), verify you have authority to these files by typing the following at an AS400 command line:

RUNQRY () PJSYS64/SQLOPS

If you don't have authority, request that your system administrator provide authority to them by running the following commands:

GRT'OBJAUT OBJ(PJSYS64/*ALL) OBJTYPE(*ALL) USER(WOW) GRT'OBJAUT OBJ(PJUSER64/*ALL) OBJTYPE(*ALL) USER(WOW)

Adjust the USER to be the user profile that you installed WOW under. After granting authority, you will need to restart your application server.

Troubleshooting WOW

Please contact your PlanetJ representative or support@planetjavainc.com.