# WPS/TAM Integration

## Demo Installation Guide

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|---|---|
| Document Version Number: | 1.0 |
| Document Creation Date: | 04.Aug.2002 |
| Document Update Date: | 04.Aug.2002 |
| Client:: | (Internal) |
| Author: | Ray Neucom |
| Status: | IBM Confidential |

# Table of Contents

# Document History

| Version | Date | Description | By |
|---|---|---|---|
| 1.0 | 4 Aug 02 | Initial document creation. | Ray Neucom |

# INTRODUCTION

This document outlines an installation approach that can be used to build a demonstration of WebSphere Portal Server (WPS) and Tivoli Access Manager (TAM) integration. The installation process described in this documents assumes a single Windows 2000 (with Service Pack 2) system is used for the demo, but most of the integration points can be mapped to other environments.

The installation process described in these notes is specifically targeted at a demonstration or proof-of-concept system, and as such, takes a few shortcuts (e.g. no use of SSL for LDAP access) that would not be applicable for a production installation.

These notes apply to the following product versions:

- IBM WebSphere Portal Server, Enable Edition, v4.1.2;
- IBM Tivoli Access Manager for e-Business, v3.9.

Both of these products can be obtained from the KNAC.

Many of the manual configuration steps during the installation of WPS outlined in this document are required to workaround known problems with V4.1.2 of the WPS install program - it is expected that at least some of these problems will be resolved in the upcoming WPS fixpacks.

The demonstration system will optionally include the WebSEAL component of IBM Tivoli Access Manager for e-Business. In the case where WebSEAL is included, the browser will connect to the WebSEAL reverse proxy server, which will in turn provide single sign-on to the WebSphere Portal Server. In the case where WebSEAL is not configured, WebSphere will still use Access Manager based authentication and authorization (via the Access Manager JAAS interface), but the IBM HTTP Server will be accessed directly from the browser.

# INSTALLATION NOTES

The basic steps in installing a demonstration system for WPS-TAM integration are as follows:

1) Install DB2, IHS, GSKIT and LDAP.

2) Configure JDBC 2.0.

3) Install WebSphere Application Server (WAS).

4) Configure WebSphere security.

5) Install WebSphere Personalization and WPS.

6) Install and configure TAM.

7) Configure WPS for TAM authentication.

8) Configure WPS for TAM authorization.

9) Configure SSO from WebSEAL to WPS.

It is recommended that regular backups be made during the installation process, as it is difficult to recover from most of the installation errors encountered to-date.

## Step 0 Preliminaries

Prior to starting the installation, the following tasks should be performed:

- Give the machine a host name and domain - we will use “wpsdemo.boulder.ibm.com” for purposes of these installation notes.

- If no DNS is configured for the system, make sure it has a hosts file with an entry including both “wpsdemo” and ‘wpsdemo.boulder.ibm.com”.

All userids created during this installation will use a password of “passw0rd” (i.e. the “oh” is replaced by a “zero”) - feel free to use your own favorite demo password(s).

The install procedure outlined in this document was performed under the Windows 2000 administrative user “Administrator”.

The WPS 4.1.2 (Enable) install CDs used in the install process in this document are:

- cd1

- cd2-1

- cd2-10

- cd5

- cd4
- cd7.

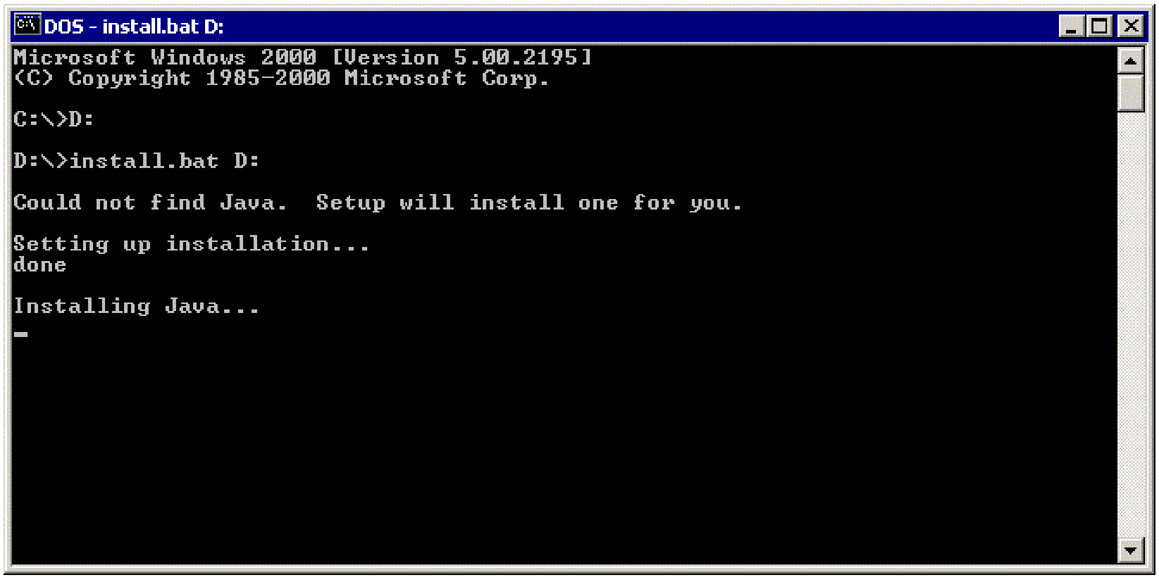
## Step 1 Install DB2, IHS, GSKIT and LDAP

For purposes of these notes, WPS 4.1.2 CDs are used to install DB2, IHS, GSKIT and LDAP.

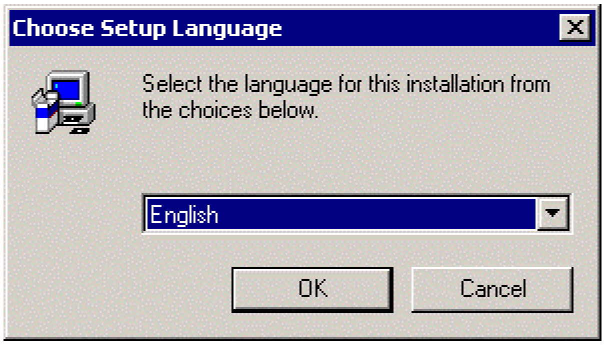
### Install Java

Load the first WPS 4.1.2 installation CD.

WPS installation is controlled by the "install.bat" script found on the first WPS installation CD. Install.bat takes ones parameter, the path name of where it is run from. When this script is run for the first time it will install a Java runtime for the installation program.



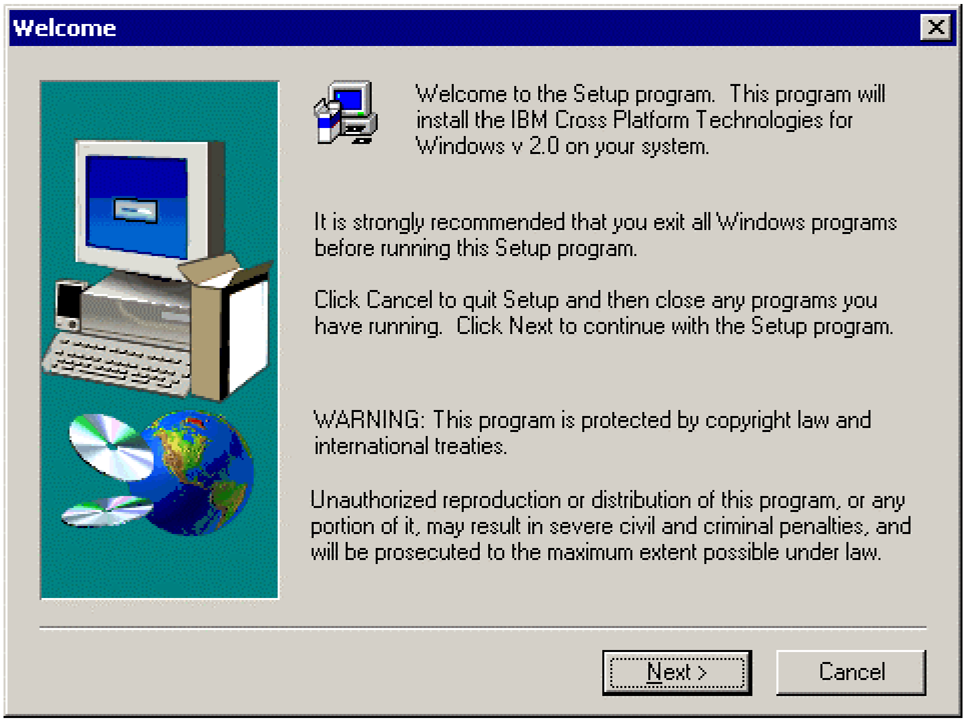
```
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>D:

D:\>install.bat D:

Could not find Java.  Setup will install one for you.

Setting up installation...
done

Installing Java...
_
```



Select the language for this installation from the choices below.

English

Select the language for the Java runtime and press "OK" - note only English was tested in the demonstration system used to create these installation notes.



Welcome to the Setup program. This program will install the IBM Cross Platform Technologies for Windows v 2.0 on your system.

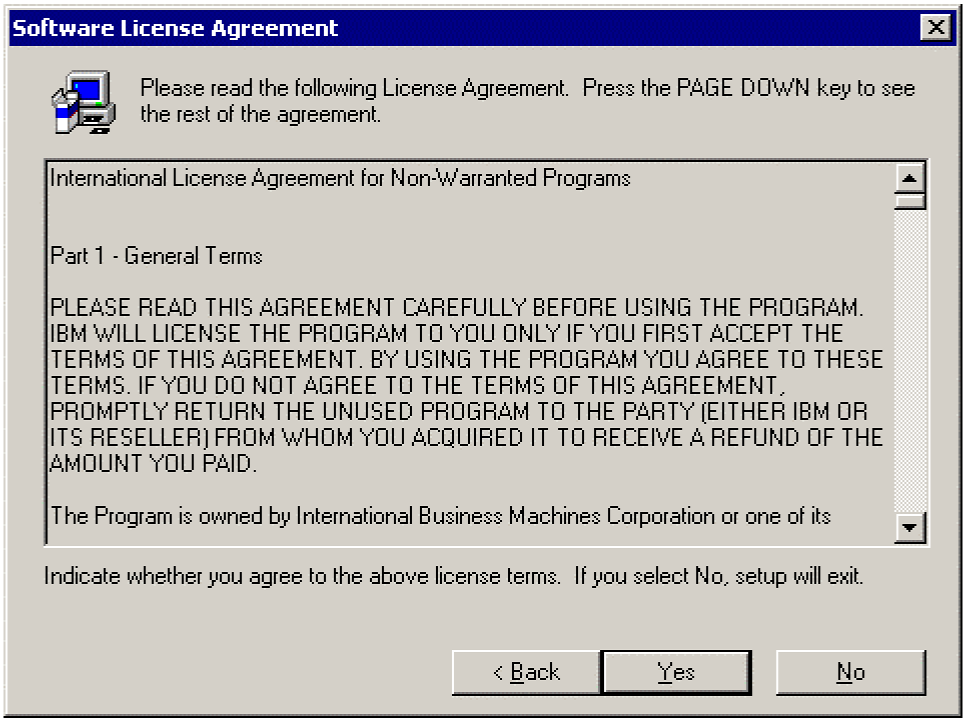
It is strongly recommended that you exit all Windows programs before running this Setup program.

Click Cancel to quit Setup and then close any programs you have running. Click Next to continue with the Setup program.

WARNING: This program is protected by copyright law and international treaties.

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.

Press "Next" to continue the installation.



Please read the following License Agreement. Press the PAGE DOWN key to see the rest of the agreement.

International License Agreement for Non-Warranted Programs

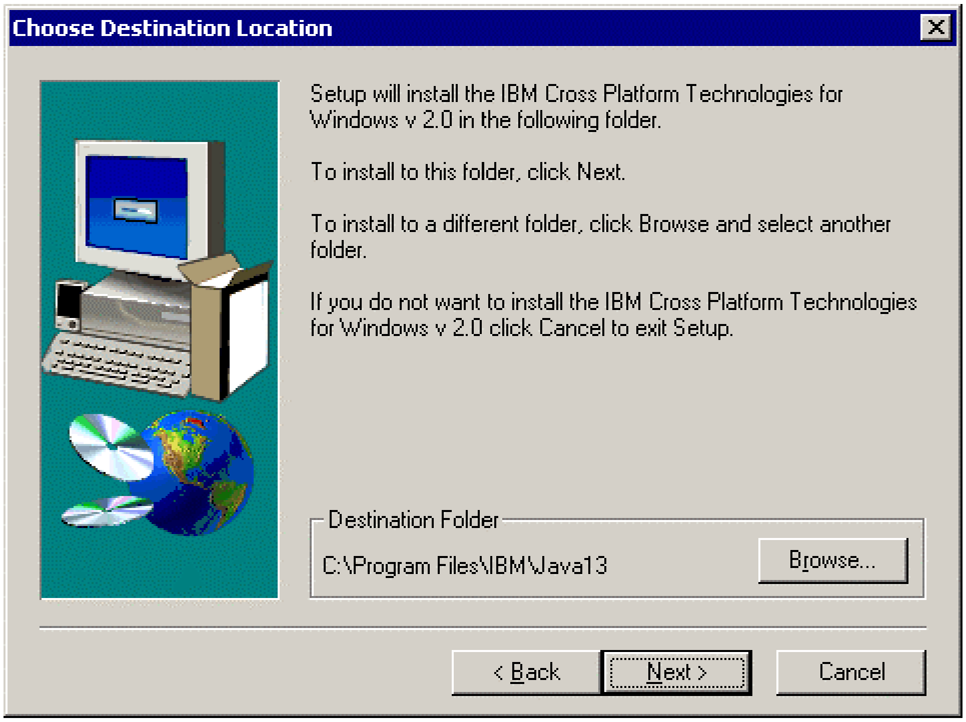
Part 1 - General Terms

PLEASE READ THIS AGREEMENT CAREFULLY BEFORE USING THE PROGRAM. IBM WILL LICENSE THE PROGRAM TO YOU ONLY IF YOU FIRST ACCEPT THE TERMS OF THIS AGREEMENT. BY USING THE PROGRAM YOU AGREE TO THESE TERMS. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, PROMPTLY RETURN THE UNUSED PROGRAM TO THE PARTY (EITHER IBM OR ITS RESELLER) FROM WHOM YOU ACQUIRED IT TO RECEIVE A REFUND OF THE AMOUNT YOU PAID.

The Program is owned by International Business Machines Corporation or one of its

Indicate whether you agree to the above license terms. If you select No, setup will exit.

Press "Yes" to continue the installation.



Choose Destination Location

Setup will install the IBM Cross Platform Technologies for Windows v 2.0 in the following folder.

To install to this folder, click Next.

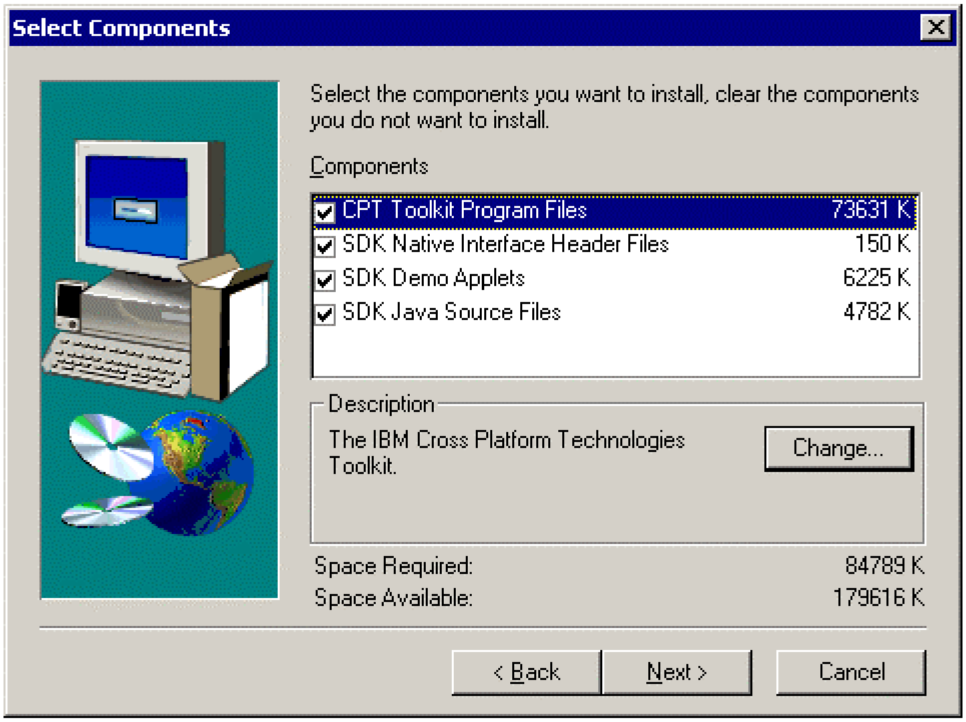
To install to a different folder, click Browse and select another folder.

If you do not want to install the IBM Cross Platform Technologies for Windows v 2.0 click Cancel to exit Setup.

Destination Folder

C:\Program Files\IBM\Java13

Press “Next” to accept the default location for installing the Java runtime.



Select Components

Select the components you want to install, clear the components you do not want to install.

Components

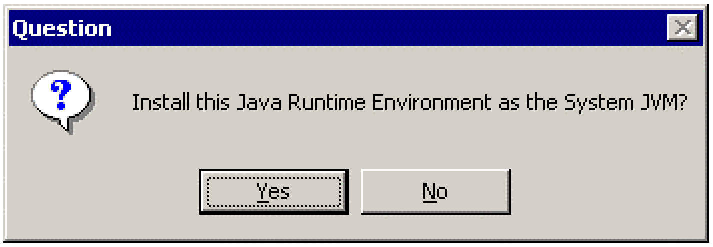
☑ CPT Toolkit Program Files 73631 K
☑ SDK Native Interface Header Files 150 K
☑ SDK Demo Applets 6225 K
☑ SDK Java Source Files 4782 K

Description

The IBM Cross Platform Technologies Toolkit.

Space Required: 84789 K
Space Available: 179616 K

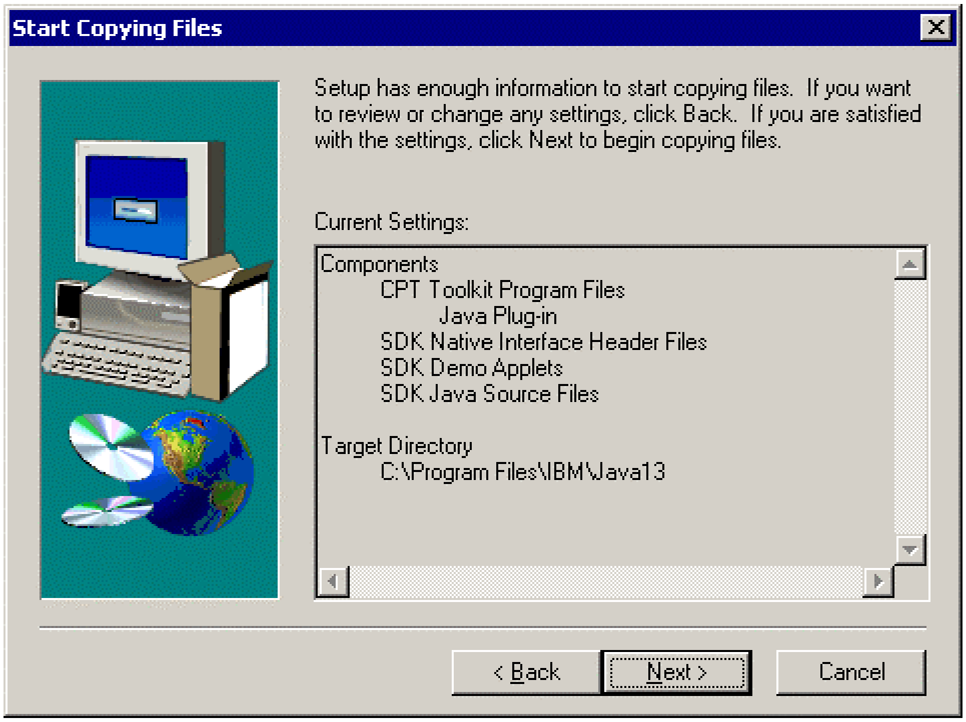
Press “Next” to install all options.



Question

Install this Java Runtime Environment as the System JVM?

Press “Yes” to configure this JVM as the system default.



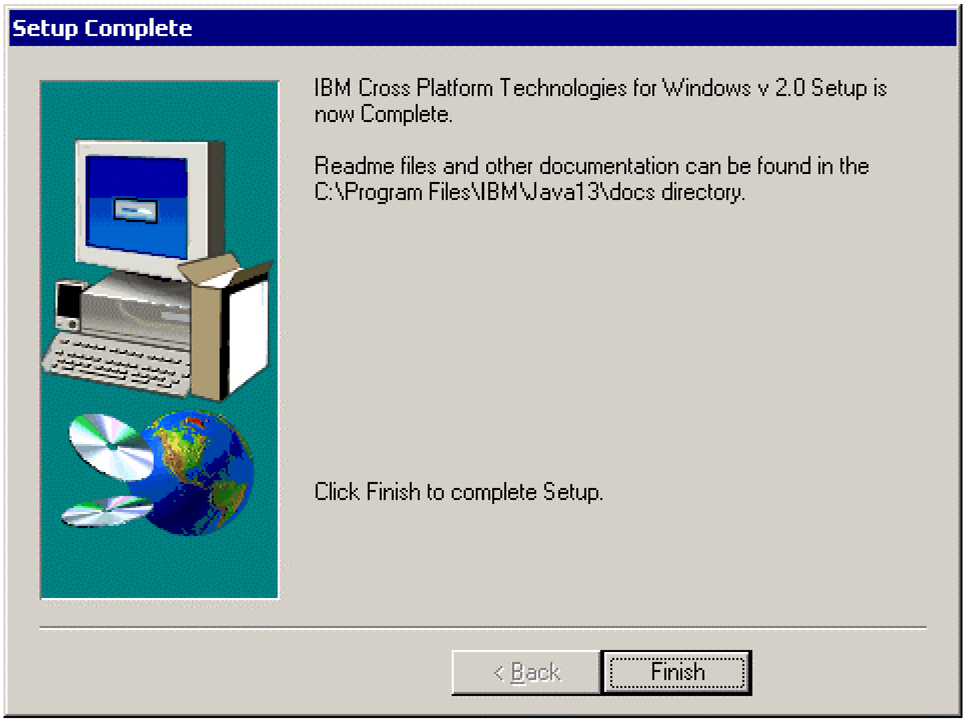
Start Copying Files

Setup has enough information to start copying files. If you want to review or change any settings, click Back. If you are satisfied with the settings, click Next to begin copying files.

Current Settings:

```
Components
        CPT Toolkit Program Files
                Java Plug-in
        SDK Native Interface Header Files
        SDK Demo Applets
        SDK Java Source Files

Target Directory
        C:\Program Files\IBM\Java13
```

Press “Next” to install the Java runtime. InstallShield will now install the Java runtime.



Setup Complete

IBM Cross Platform Technologies for Windows v 2.0 Setup is now Complete.

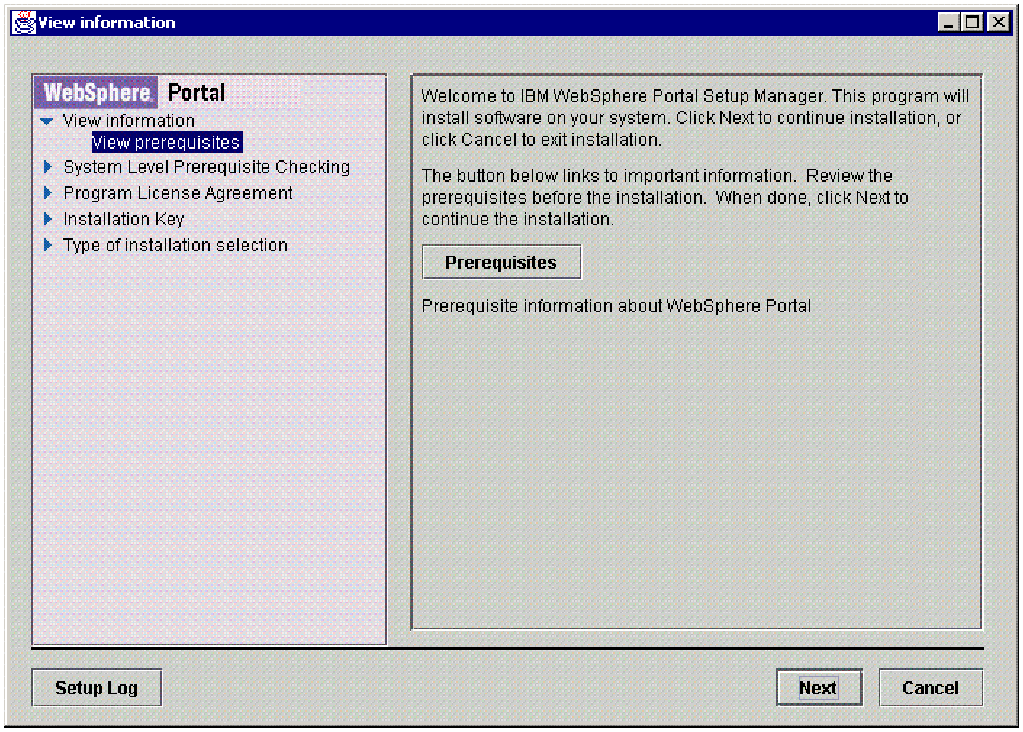
Readme files and other documentation can be found in the C:\Program Files\IBM\Java13\docs directory.

Click Finish to complete Setup.

Press “Finish” to continue.

### Install DB2, IHS, GSKIT and LDAP

Once the Java runtime has been installed, the WPS installation program will start up.  This is the program that will drive the installation process for WPS and all of it’s prerequisites.

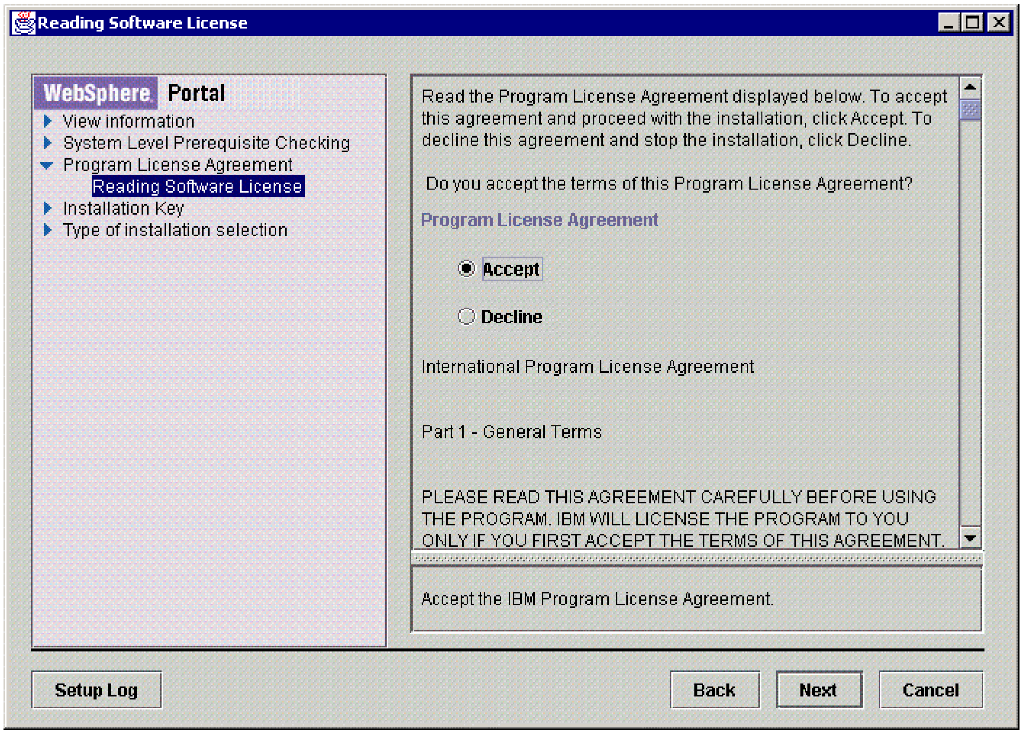


Welcome to IBM WebSphere Portal Setup Manager. This program will install software on your system. Click Next to continue installation, or click Cancel to exit installation.

The button below links to important information. Review the prerequisites before the installation. When done, click Next to continue the installation.

Prerequisite information about WebSphere Portal

Press “Next” to continue.



Read the Program License Agreement displayed below. To accept this agreement and proceed with the installation, click Accept. To decline this agreement and stop the installation, click Decline.

Do you accept the terms of this Program License Agreement?

Program License Agreement

● Accept

○ Decline

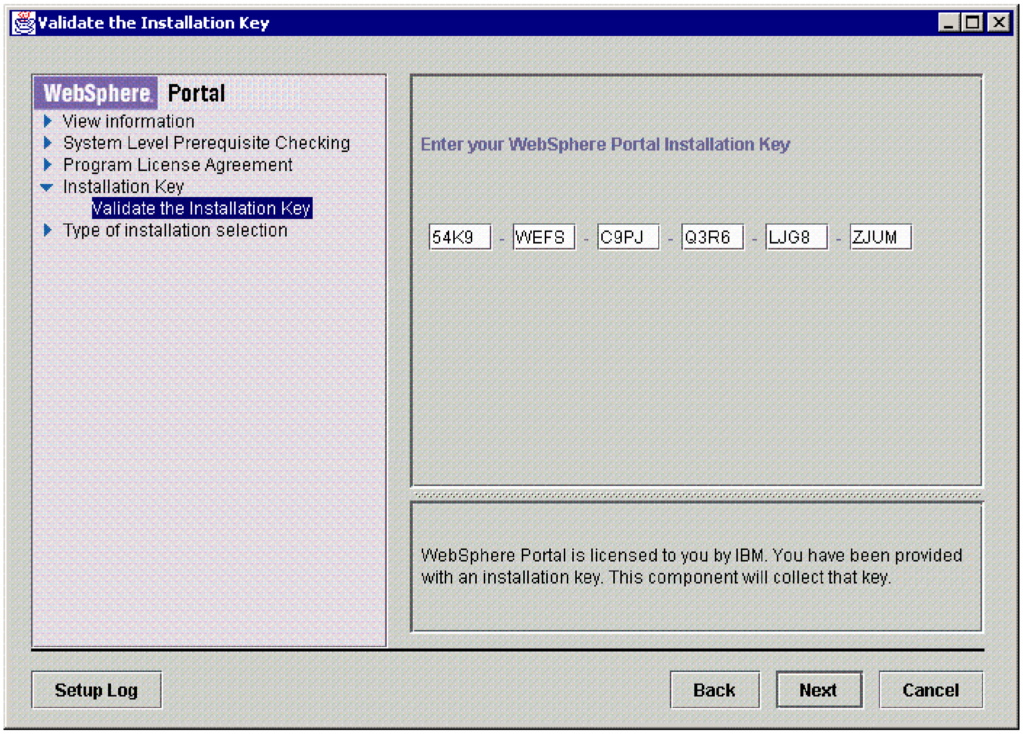
International Program License Agreement

Part 1 - General Terms

PLEASE READ THIS AGREEMENT CAREFULLY BEFORE USING THE PROGRAM. IBM WILL LICENSE THE PROGRAM TO YOU ONLY IF YOU FIRST ACCEPT THE TERMS OF THIS AGREEMENT.

Accept the IBM Program License Agreement.

Select “Accept” and press “Next”.


Validate the Installation Key
WebSphere Portal
View information
System Level Prerequisite Checking
Program License Agreement
Installation Key
Validate the Installation Key
Type of installation selection
Setup Log
Back
Next
Cancel

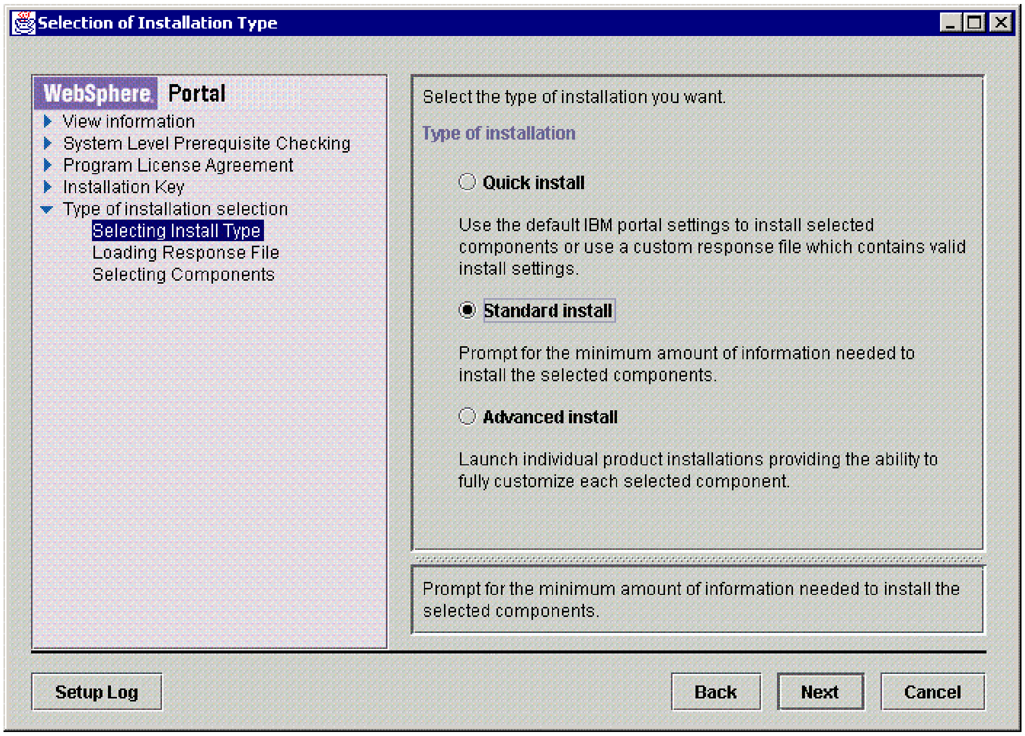
Enter your WebSphere Portal Installation Key

54K9 - WEFS - C9PJ - Q3R6 - LJG8 - ZJUM

WebSphere Portal is licensed to you by IBM. You have been provided with an installation key. This component will collect that key.

Enter the license key and press "Next". A valid license key for WPS 4.1.2 Enable (IBM internal use only!!) is:

```
54K9  WEFS  C9PJ  Q3R6  LJG8  ZJUM
```



Selection of Installation Type
WebSphere Portal
View information
System Level Prerequisite Checking
Program License Agreement
Installation Key
Type of installation selection
Selecting Install Type
Loading Response File
Selecting Components

Select the type of installation you want.

Type of installation

○ Quick install

Use the default IBM portal settings to install selected components or use a custom response file which contains valid install settings.

● Standard install

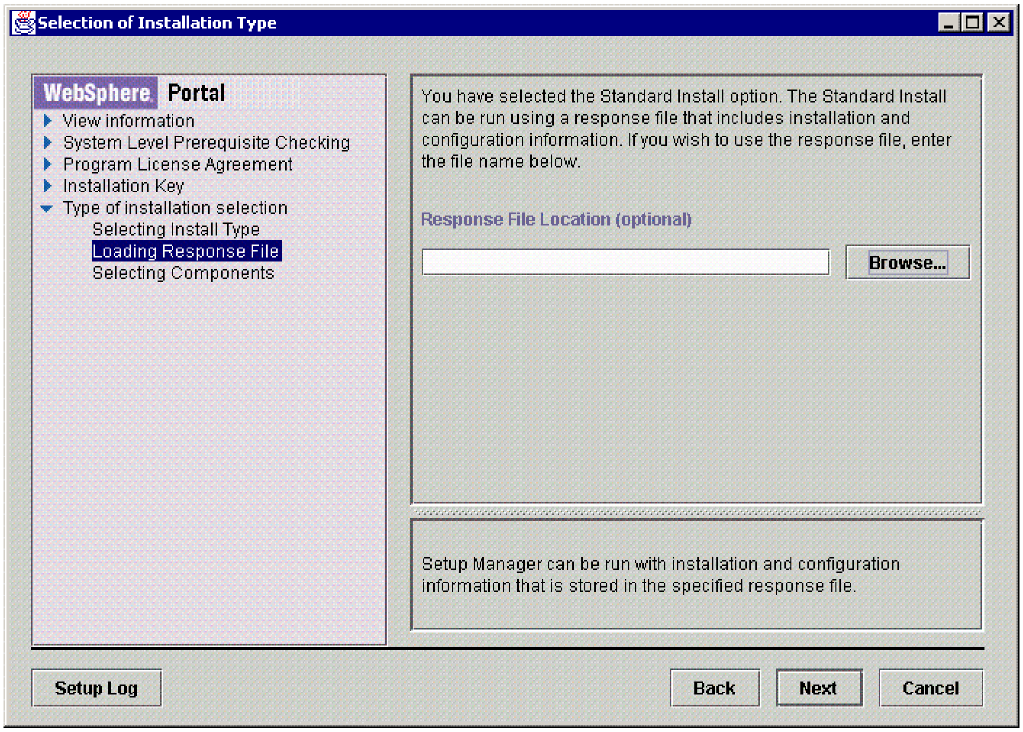
Prompt for the minimum amount of information needed to install the selected components.

○ Advanced install

Launch individual product installations providing the ability to fully customize each selected component.

Prompt for the minimum amount of information needed to install the selected components.

The install procedure outlined in this document uses the “standard” install option of WPS. So select “Standard install” and press “Next”.



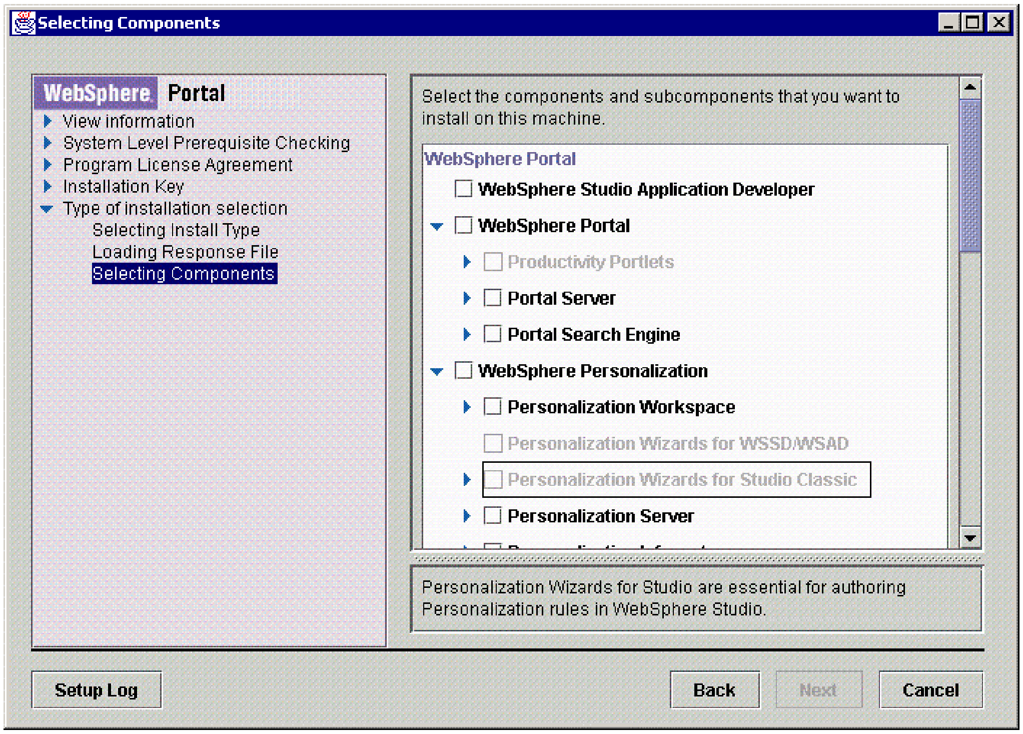
Selection of Installation Type
WebSphere Portal
View information
System Level Prerequisite Checking
Program License Agreement
Installation Key
Type of installation selection
Selecting Install Type
Loading Response File
Selecting Components

You have selected the Standard Install option. The Standard Install can be run using a response file that includes installation and configuration information. If you wish to use the response file, enter the file name below.

Response File Location (optional)

Setup Manager can be run with installation and configuration information that is stored in the specified response file.

We will not be using a response file to automate the install, so leave the field blank and press “Next”.



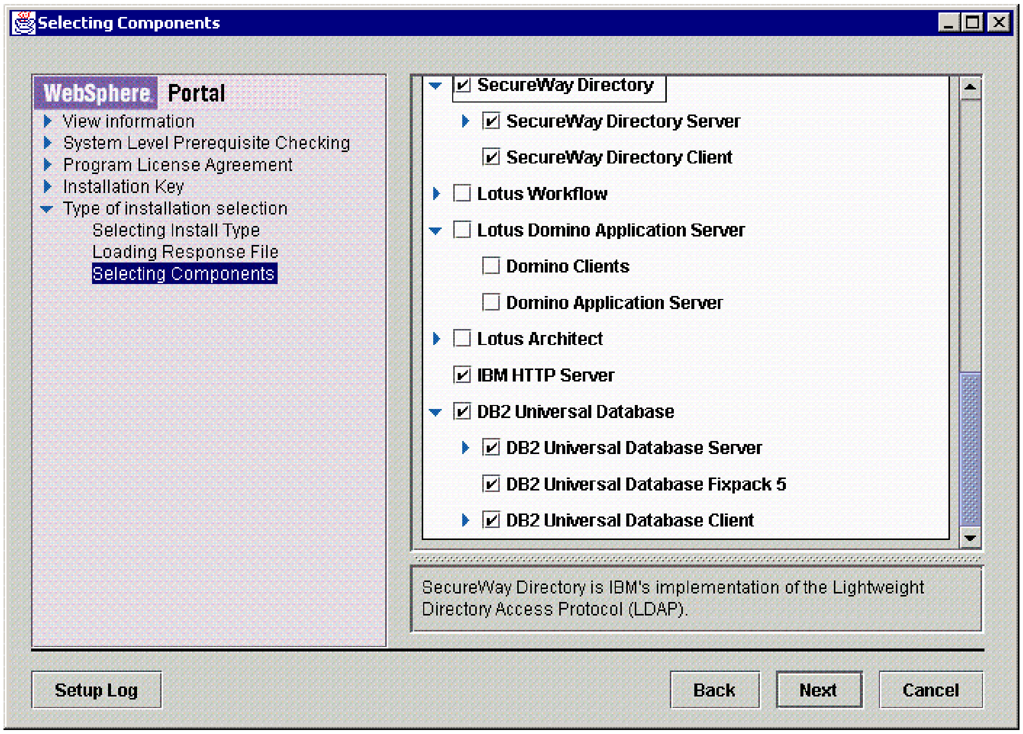
Select the components and subcomponents that you want to install on this machine.

WebSphere Portal

- □ WebSphere Studio Application Developer
- □ WebSphere Portal
  - □ Productivity Portlets
  - □ Portal Server
  - □ Portal Search Engine
- □ WebSphere Personalization
  - □ Personalization Workspace
  - □ Personalization Wizards for WSSD/WSAD
  - □ Personalization Wizards for Studio Classic
  - □ Personalization Server

Personalization Wizards for Studio are essential for authoring Personalization rules in WebSphere Studio.

A list of available products for install is then displayed.



- ☑ SecureWay Directory
  - ☑ SecureWay Directory Server
  - ☑ SecureWay Directory Client
- □ Lotus Workflow
- □ Lotus Domino Application Server
  - □ Domino Clients
  - □ Domino Application Server
- □ Lotus Architect
- ☑ IBM HTTP Server
- ☑ DB2 Universal Database
  - ☑ DB2 Universal Database Server
  - ☑ DB2 Universal Database Fixpack 5
  - ☑ DB2 Universal Database Client

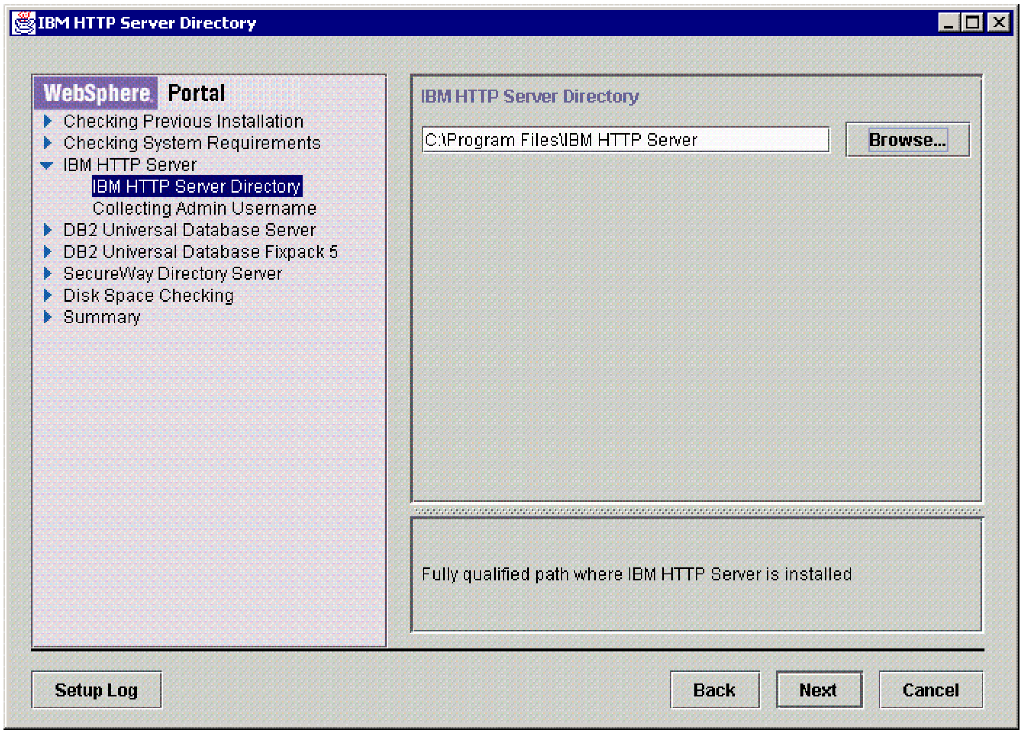
SecureWay Directory is IBM's implementation of the Lightweight Directory Access Protocol (LDAP).

Scroll to the bottom of the list and select:

- DB2 Universal Database

- IBM HTTP Server
- SecureWay Directory.

Press “Next” to continue.



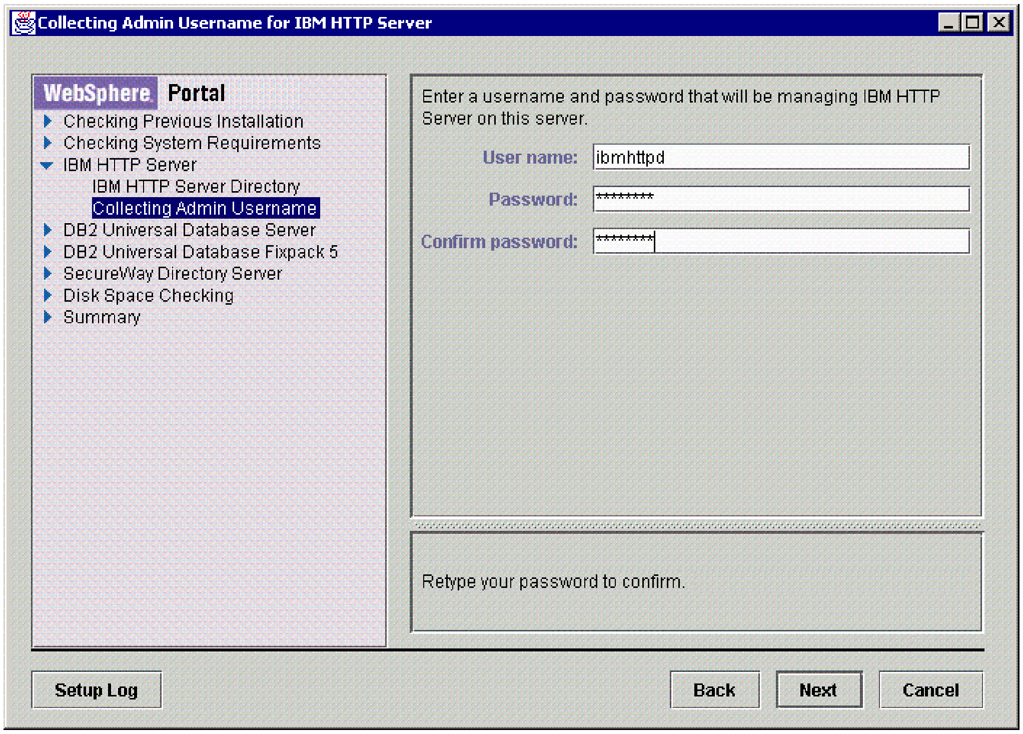
IBM HTTP Server Directory
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
IBM HTTP Server Directory
Collecting Admin Username
DB2 Universal Database Server
DB2 Universal Database Fixpack 5
SecureWay Directory Server
Disk Space Checking
Summary
Browse...
Setup Log
Back
Next
Cancel

IBM HTTP Server Directory

C:\Program Files\IBM HTTP Server

Fully qualified path where IBM HTTP Server is installed

Press “Next” to accept the default install location for the IBM HTTP Server.


Collecting Admin Username for IBM HTTP Server
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
IBM HTTP Server Directory
Collecting Admin Username
DB2 Universal Database Server
DB2 Universal Database Fixpack 5
SecureWay Directory Server
Disk Space Checking
Summary
Setup Log
Back
Next
Cancel

Enter a username and password that will be managing IBM HTTP Server on this server.

User name: ibmhttpd

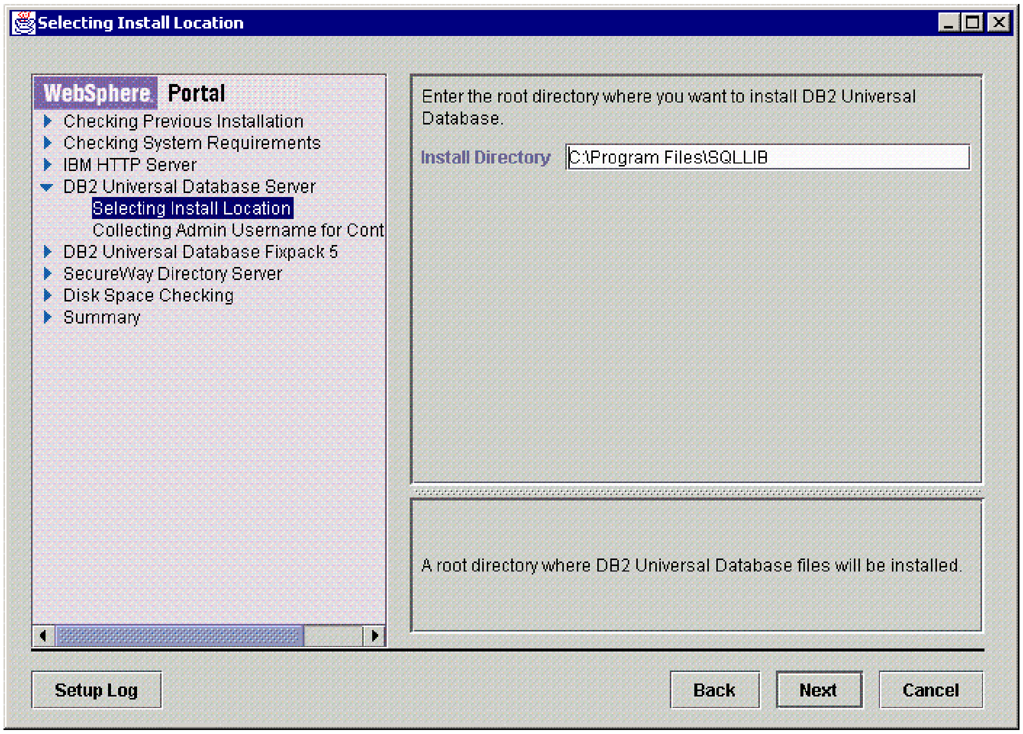
Password: *********

Confirm password: *********

Retype your password to confirm.

Enter a user name and associated password for the IBM HTTP Server to run under (the WPS installer will create this id if needed) - here we used “ibmhttpd” and “passw0rd”.

Press “Next” to continue.

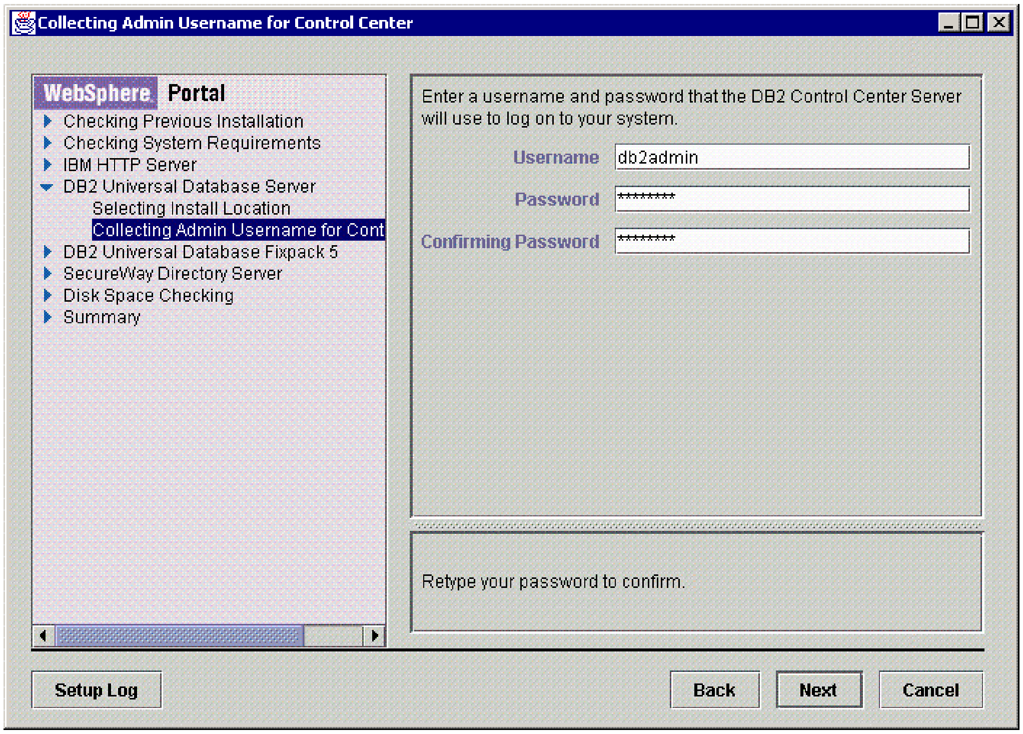

Selecting Install Location
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
DB2 Universal Database Server
Selecting Install Location
Collecting Admin Username for Cont
DB2 Universal Database Fixpack 5
SecureWay Directory Server
Disk Space Checking
Summary
Setup Log
Back
Next
Cancel

Enter the root directory where you want to install DB2 Universal Database.

Install Directory C:\Program Files\SQLLIB

A root directory where DB2 Universal Database files will be installed.

Press “Next” to accept the default install location for DB2.


Collecting Admin Username for Control Center
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
DB2 Universal Database Server
Selecting Install Location
Collecting Admin Username for Cont
DB2 Universal Database Fixpack 5
SecureWay Directory Server
Disk Space Checking
Summary
Setup Log
Back
Next
Cancel

Enter a username and password that the DB2 Control Center Server will use to log on to your system.

Username: db2admin

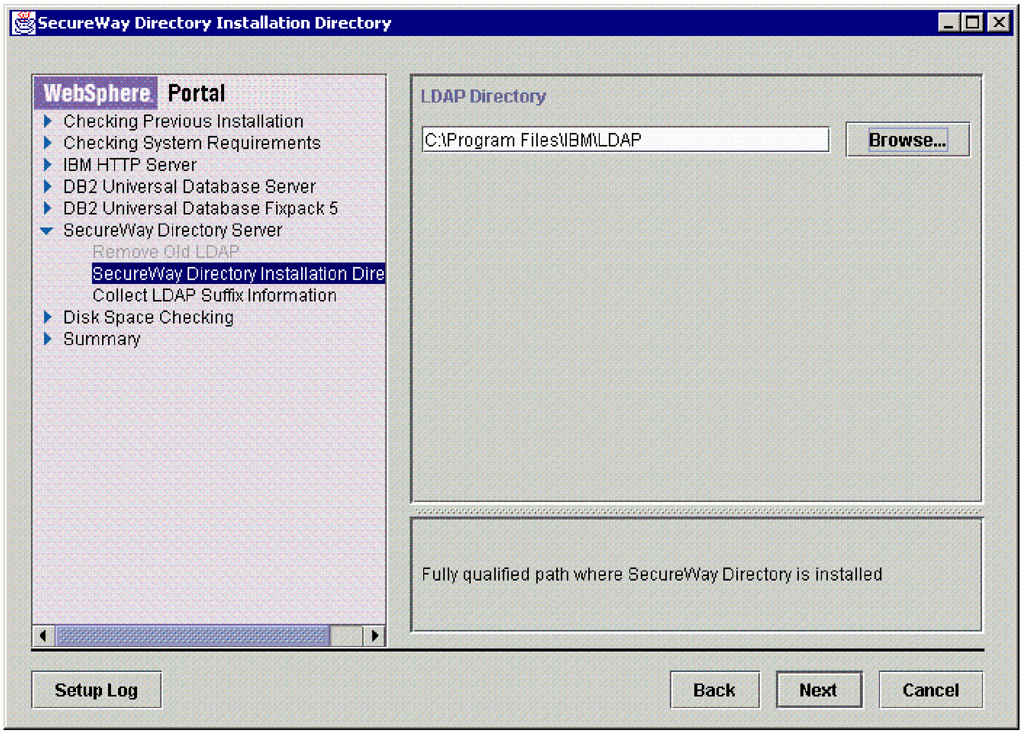
Password: *********

Confirming Password: *********

Retype your password to confirm.

Enter a user name and associated password for the DB2 server to run under (the WPS installer will create this id if needed) - here we used “db2admin” and “passw0rd”.

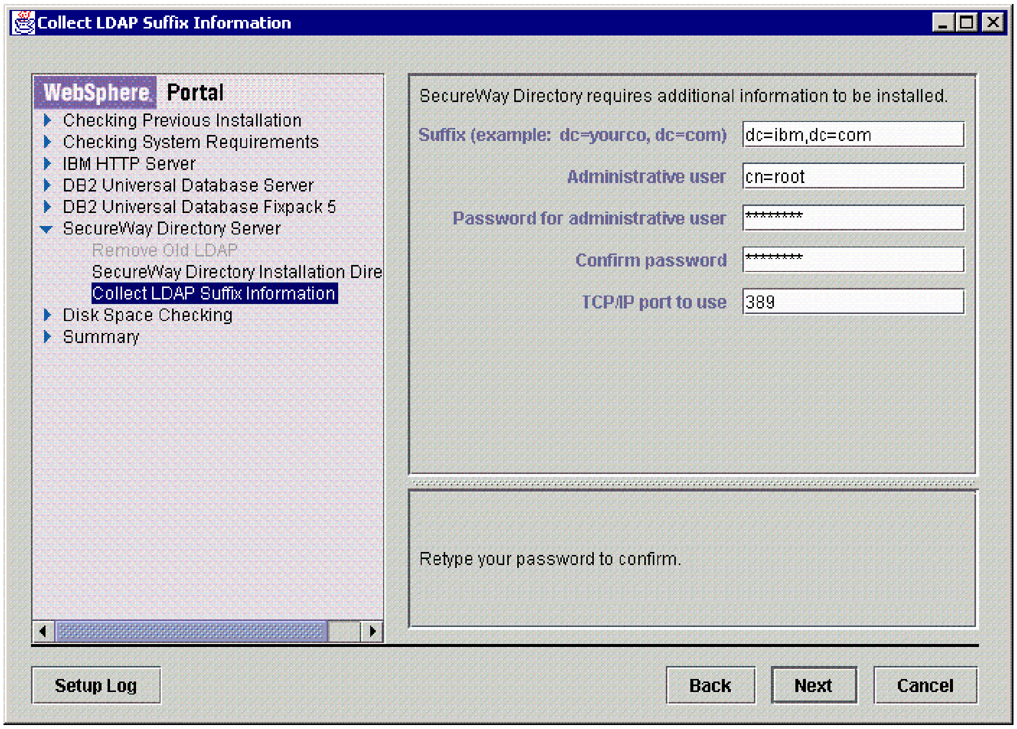
Press “Next” to continue.


SecureWay Directory Installation Directory
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
DB2 Universal Database Server
DB2 Universal Database Fixpack 5
SecureWay Directory Server
Remove Old LDAP
SecureWay Directory Installation Dire
Collect LDAP Suffix Information
Disk Space Checking
Summary
Browse...
Setup Log
Back
Next
Cancel

LDAP Directory: C:\Program Files\IBM\LDAP

Fully qualified path where SecureWay Directory is installed

Press “Next” to accept the default install location for LDAP.



Collect LDAP Suffix Information
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
DB2 Universal Database Server
DB2 Universal Database Fixpack 5
SecureWay Directory Server
Remove Old LDAP
SecureWay Directory Installation Dire
Collect LDAP Suffix Information
Disk Space Checking
Summary
Setup Log
Back
Next
Cancel

SecureWay Directory requires additional information to be installed.

Suffix (example: dc=yourco, dc=com) dc=ibm,dc=com

Administrative user cn=root

Password for administrative user ********

Confirm password ********

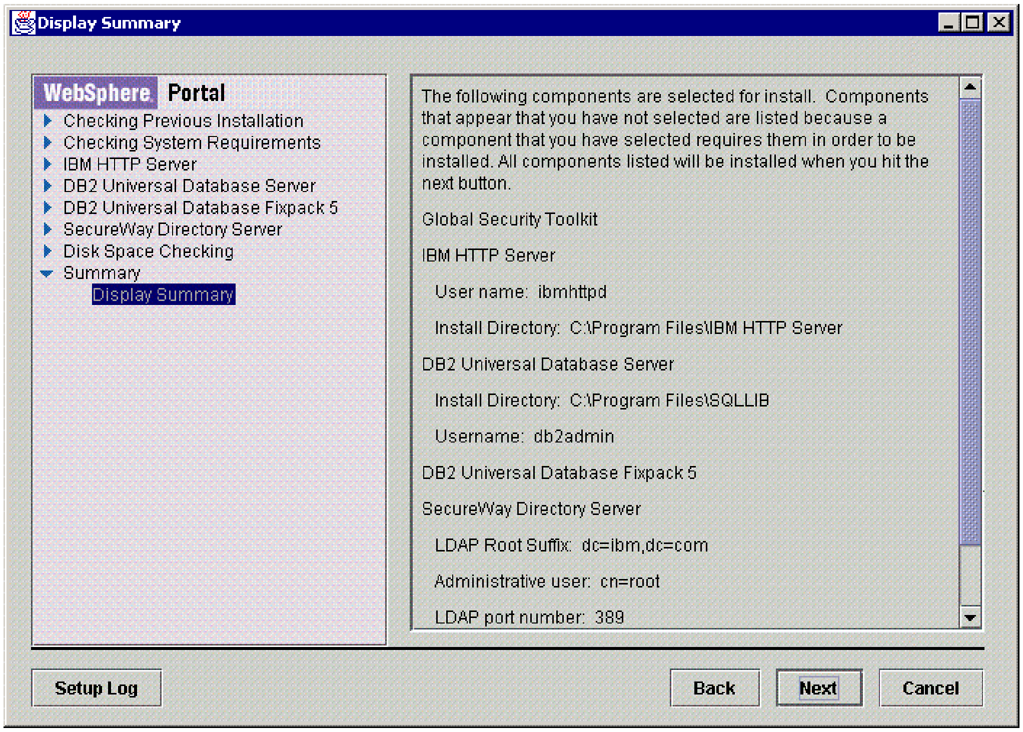
TCP/IP port to use 389

Retype your password to confirm.

Enter the LDAP configuration information:

- Suffix under which users and groups will be created - "dc=ibm,dc=com" - I believe you will experience problems with the WPS 4.1.2 installer if this suffix contains spaces.
- Administrative user - "cn=root".
- Password for administrative user - "passw0rd".
- LDAP TCP port - 389. Note that the installation outlined in this document is intended for demo purposes and uses a TCP connection to LDAP. A production installation would almost certainly require an SSL session to be established to LDAP.

Press "Next" to Continue.


Display Summary
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
DB2 Universal Database Server
DB2 Universal Database Fixpack 5
SecureWay Directory Server
Disk Space Checking
Summary
Display Summary
Setup Log
Back
Next
Cancel

The following components are selected for install. Components that appear that you have not selected are listed because a component that you have selected requires them in order to be installed. All components listed will be installed when you hit the next button.

Global Security Toolkit

IBM HTTP Server

User name: ibmhttpd

Install Directory: C:\Program Files\IBM HTTP Server

DB2 Universal Database Server

Install Directory: C:\Program Files\SQLLIB

Username: db2admin

DB2 Universal Database Fixpack 5

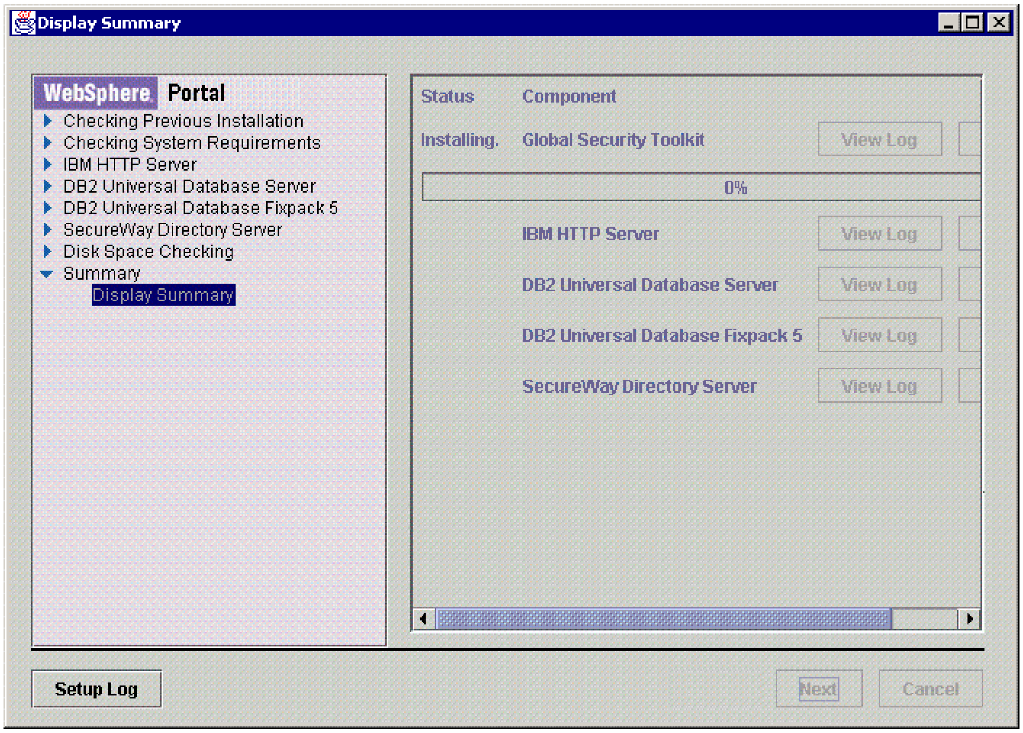
SecureWay Directory Server

LDAP Root Suffix: dc=ibm,dc=com

Administrative user: cn=root

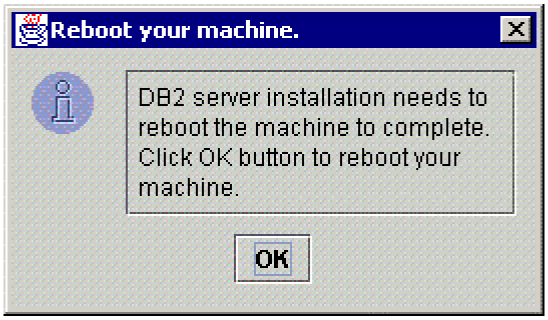
LDAP port number: 389

Check the parameters displayed and press “Next” to commence the installation of the selected products.



| Status | Component |
|---|---|
| Installing. | Global Security Toolkit |
| 0% | |
| | IBM HTTP Server |
| | DB2 Universal Database Server |
| | DB2 Universal Database Fixpack 5 |
| | SecureWay Directory Server |

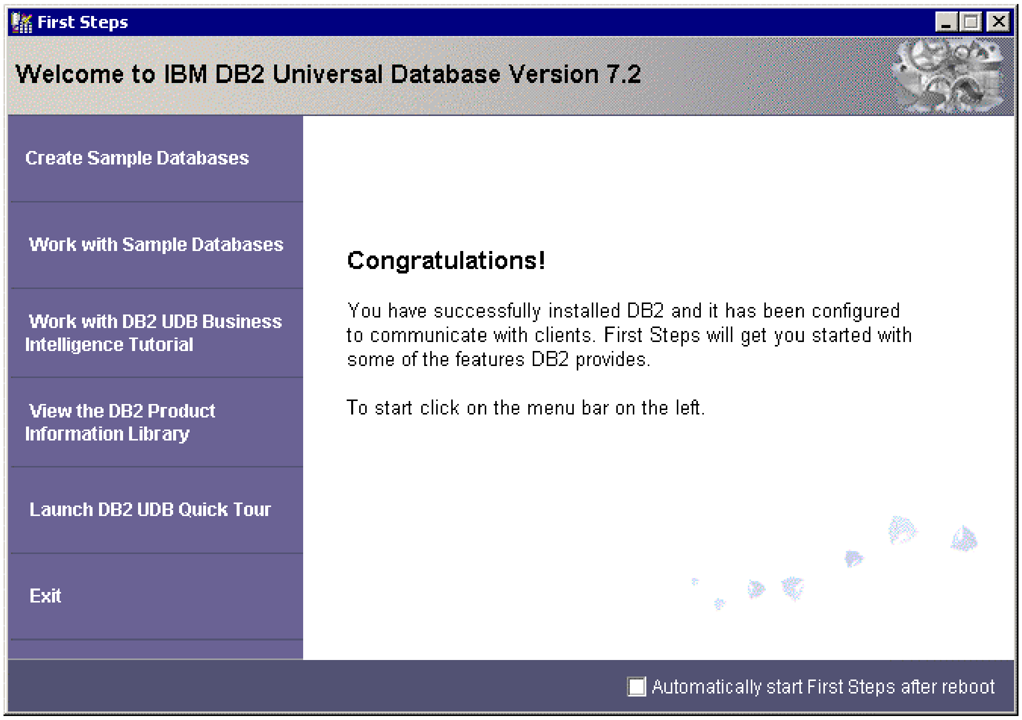
A screen will then be displayed that shows the progress of the installation.



Reboot your machine.

DB2 server installation needs to reboot the machine to complete. Click OK button to reboot your machine.

At some point during the installation of DB2 a reboot is required. Press "ok" to reboot - the WPS installer will automatically restart after reboot (but it may take some time to start, so be patient).



First Steps

Welcome to IBM DB2 Universal Database Version 7.2

Create Sample Databases
Work with Sample Databases
Work with DB2 UDB Business Intelligence Tutorial
View the DB2 Product Information Library
Launch DB2 UDB Quick Tour
Exit

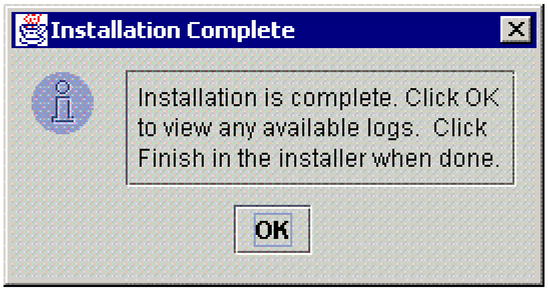
Congratulations!

You have successfully installed DB2 and it has been configured to communicate with clients. First Steps will get you started with some of the features DB2 provides.

To start click on the menu bar on the left.

□ Automatically start First Steps after reboot

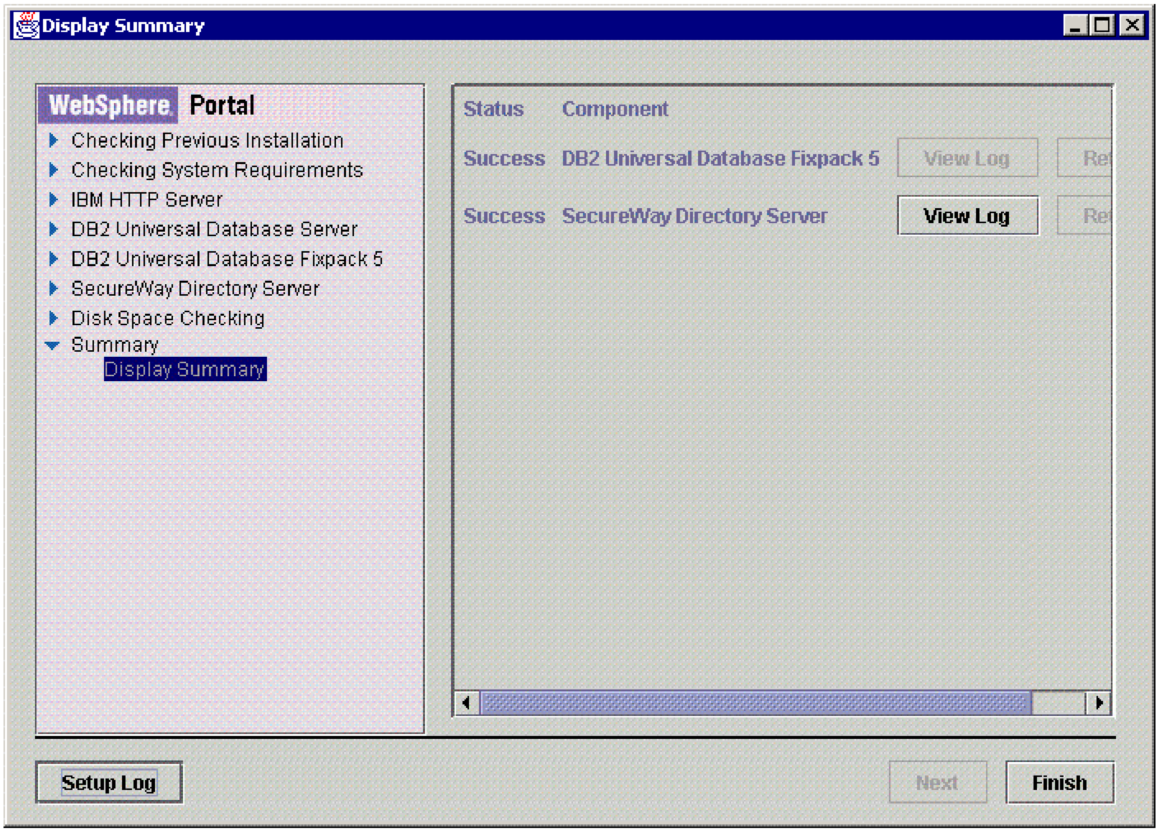
The above DB2 information screen is shown near the end of the DB2 install. Press "Exit".



Installation Complete

Installation is complete. Click OK to view any available logs. Click Finish in the installer when done.

Press "OK" to continue.



Display Summary
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
DB2 Universal Database Server
DB2 Universal Database Fixpack 5
SecureWay Directory Server
Disk Space Checking
Summary
Display Summary
View Log
Re
View Log
Re
Setup Log
Next
Finish

| Status | Component |
|---|---|
| Success | DB2 Universal Database Fixpack 5 |
| Success | SecureWay Directory Server |

Press “Finish” to exit the install program (for now).

## Step 2 Configure JDBC 2.0

[This section was adapted from the IBM WebSphere V4.0 Advanced Edition Handbook]

IBM WebSphere Application Server V4.0 requires JDBC2.0, whereas the default installation of IBM DB2 uses JDBC1.2. To update the DB2 JDBC level, complete the following steps:

**1)** Stop the DB2 JDBC Applet Server Windows service as follows:

```
C:\> net stop "DB2 JDBC Applet Server"
```

**2)** In a command window, change to the `C:\Program Files\SQLLIB\java12` directory and type the command shown in bold:

```
C:\Program Files\SQLLIB\java12\> usejdbc2.bat
```

**3)** 3. Output similar to that shown in the screen shot below should be obtained.

**4)** 4. Start the DB2 JDBC Applet Server Windows service as follows:

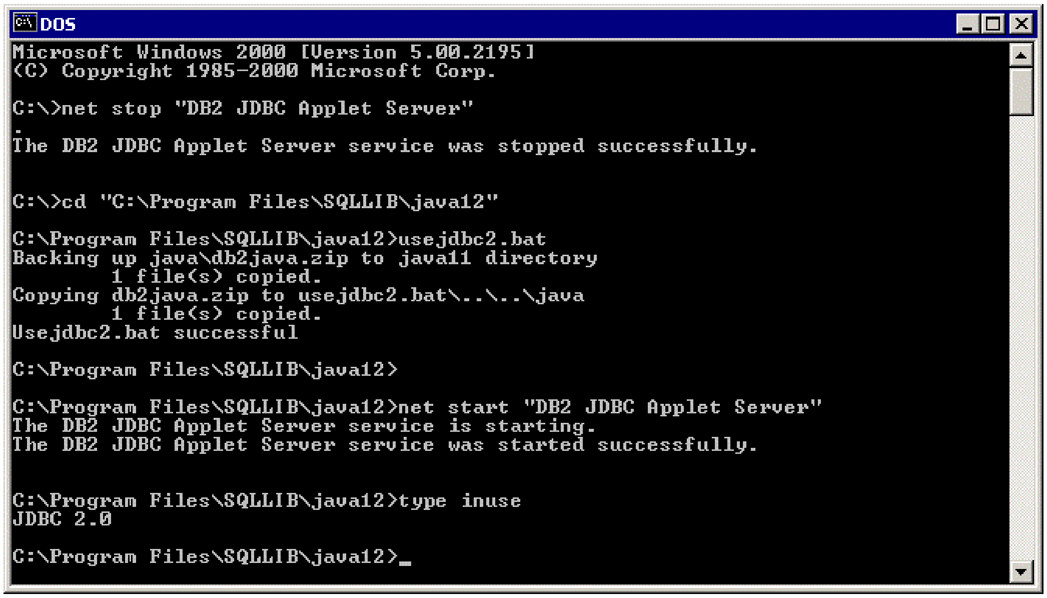
```
D:\> net start "DB2 JDBC Applet Server"
```

**5)** 5. Check the contents of the `C:\Program Files\SQLLIB\java12\inuse` file. If JDBC 2.0 is being used, the file will contain:

```
JDBC 2.0
```

**Note**: If the output of usejdbc2 indicates that any of the files failed to copy successfully, then the JDBC2 update failed. If this occurs, stop all DB2 services and then repeat the above steps. If you see any "access denied" or "process cannot access..." errors and the JDBC Applet Server is indeed not running, then some other (non-DB2) process has locked the db2java.zip file for some reason.

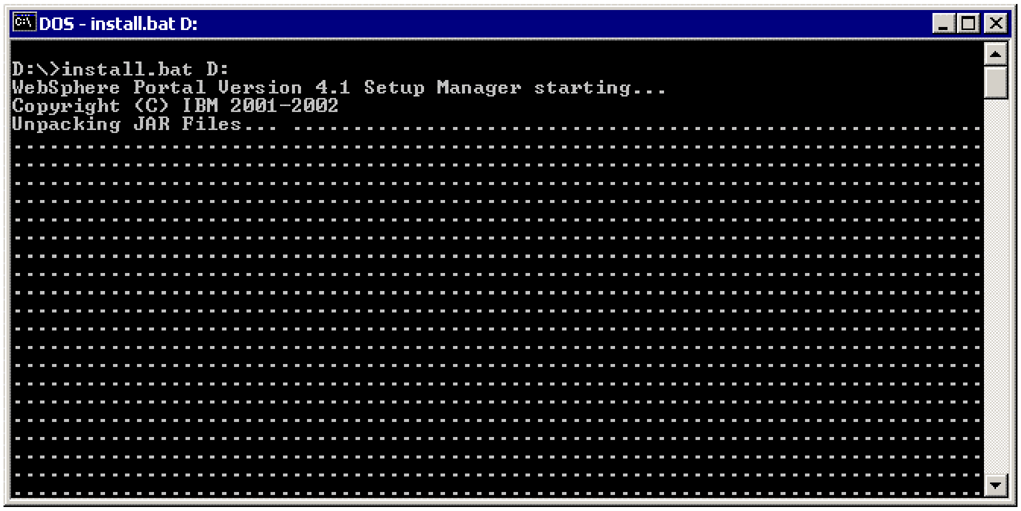
The following screen shot shows the expected output from the above steps:



```
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>net stop "DB2 JDBC Applet Server"
.
The DB2 JDBC Applet Server service was stopped successfully.


C:\>cd "C:\Program Files\SQLLIB\java12"

C:\Program Files\SQLLIB\java12>usejdbc2.bat
Backing up java\db2java.zip to java11 directory
        1 file(s) copied.
Copying db2java.zip to usejdbc2.bat\..\..\java
        1 file(s) copied.
Usejdbc2.bat successful

C:\Program Files\SQLLIB\java12>

C:\Program Files\SQLLIB\java12>net start "DB2 JDBC Applet Server"
The DB2 JDBC Applet Server service is starting.
The DB2 JDBC Applet Server service was started successfully.


C:\Program Files\SQLLIB\java12>type inuse
JDBC 2.0

C:\Program Files\SQLLIB\java12>_
```

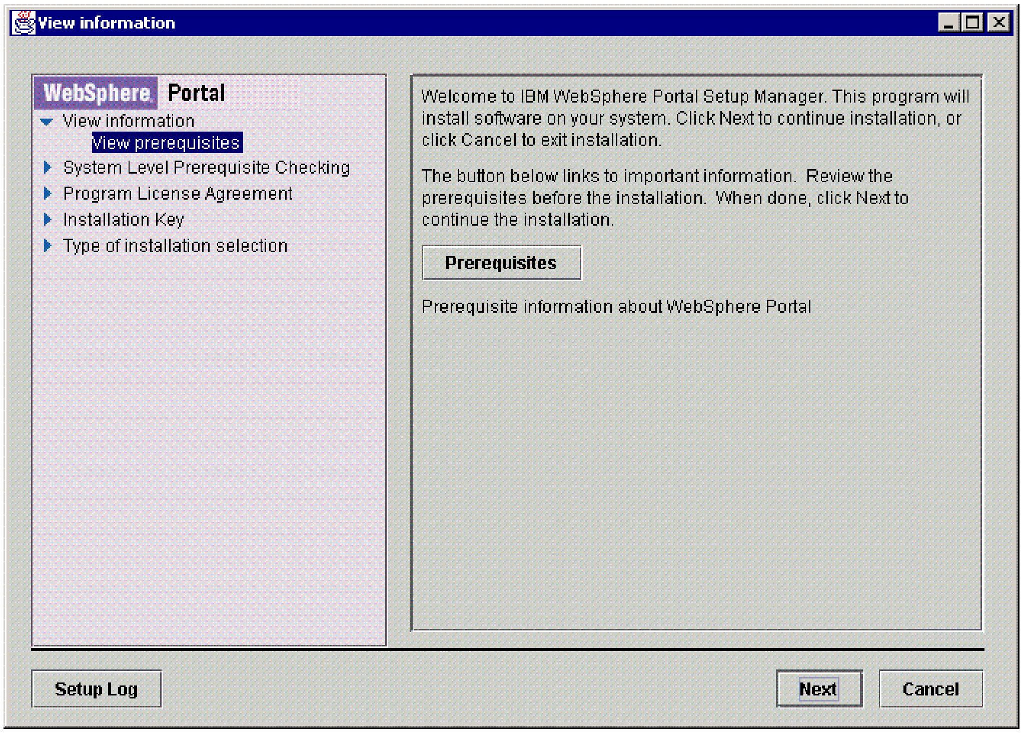
## Step 3 Install WebSphere Application Server (WAS)

Reload the first WPS 4.1.2 installation CD. Ensure LDAP and IHS are running.



```
D:\>install.bat D:
WebSphere Portal Version 4.1 Setup Manager starting...
Copyright (C) IBM 2001-2002
Unpacking JAR Files... ...........................................................
```

Run the WPS Installation program again.

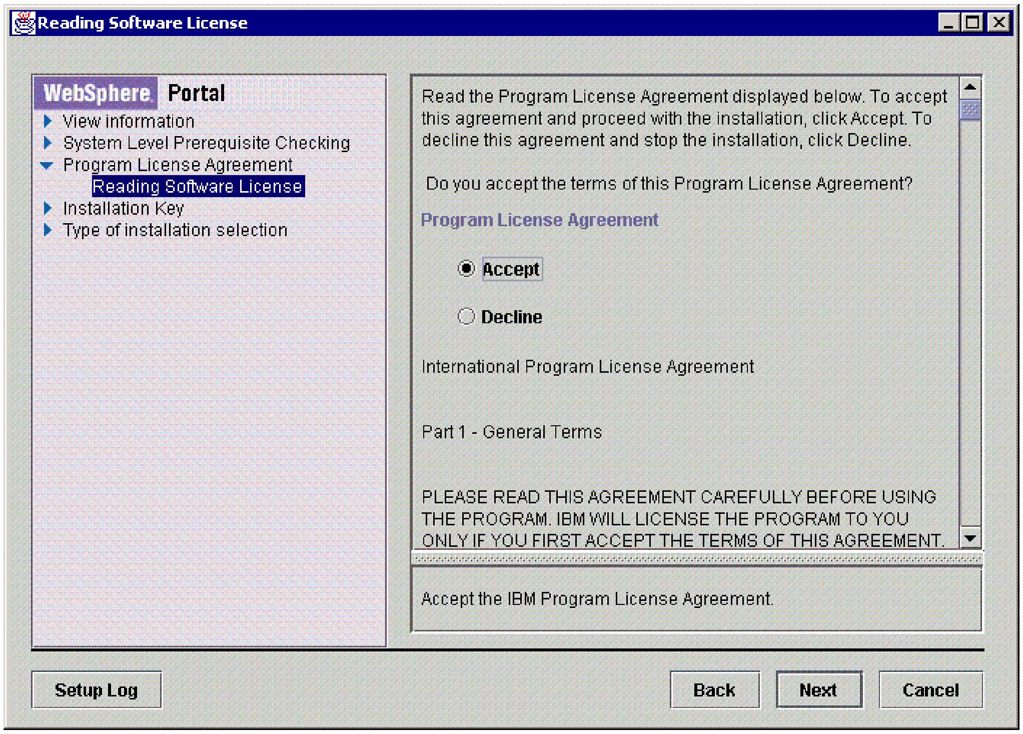


Welcome to IBM WebSphere Portal Setup Manager. This program will install software on your system. Click Next to continue installation, or click Cancel to exit installation.

The button below links to important information. Review the prerequisites before the installation. When done, click Next to continue the installation.

Prerequisite information about WebSphere Portal

Press “Next” to continue.



Read the Program License Agreement displayed below. To accept this agreement and proceed with the installation, click Accept. To decline this agreement and stop the installation, click Decline.

Do you accept the terms of this Program License Agreement?

Program License Agreement

● Accept

○ Decline

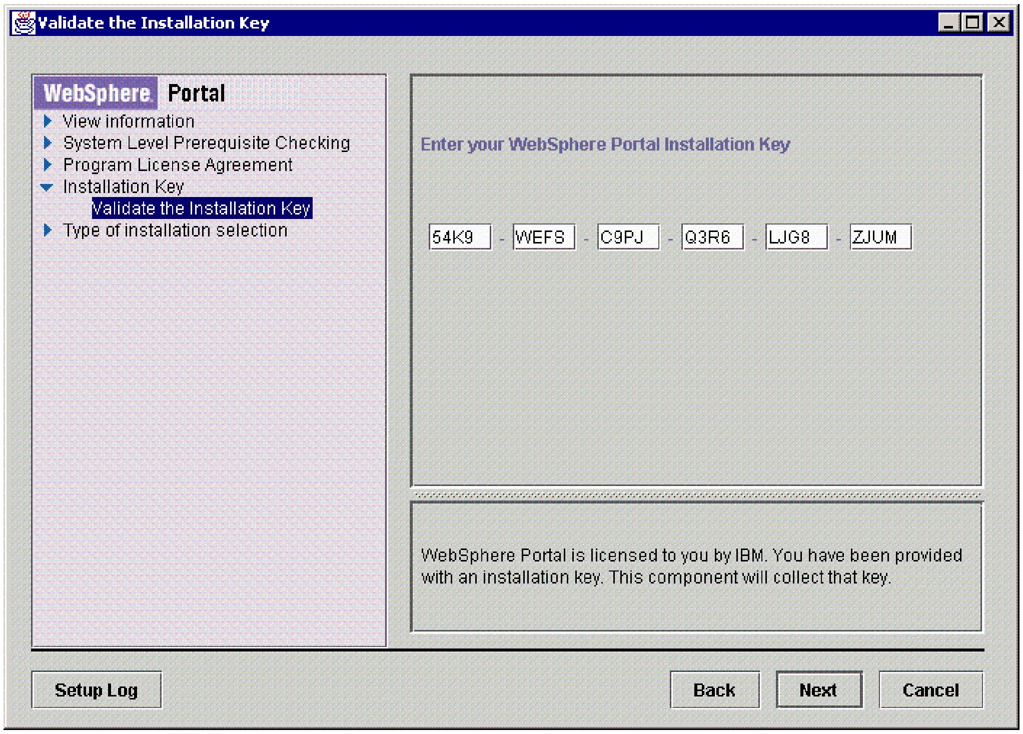
International Program License Agreement

Part 1 - General Terms

PLEASE READ THIS AGREEMENT CAREFULLY BEFORE USING THE PROGRAM. IBM WILL LICENSE THE PROGRAM TO YOU ONLY IF YOU FIRST ACCEPT THE TERMS OF THIS AGREEMENT.

Accept the IBM Program License Agreement.

Select “Accept” and press “Next”.



Validate the Installation Key
WebSphere Portal
View information
System Level Prerequisite Checking
Program License Agreement
Installation Key
Validate the Installation Key
Type of installation selection
Setup Log
Back
Next
Cancel

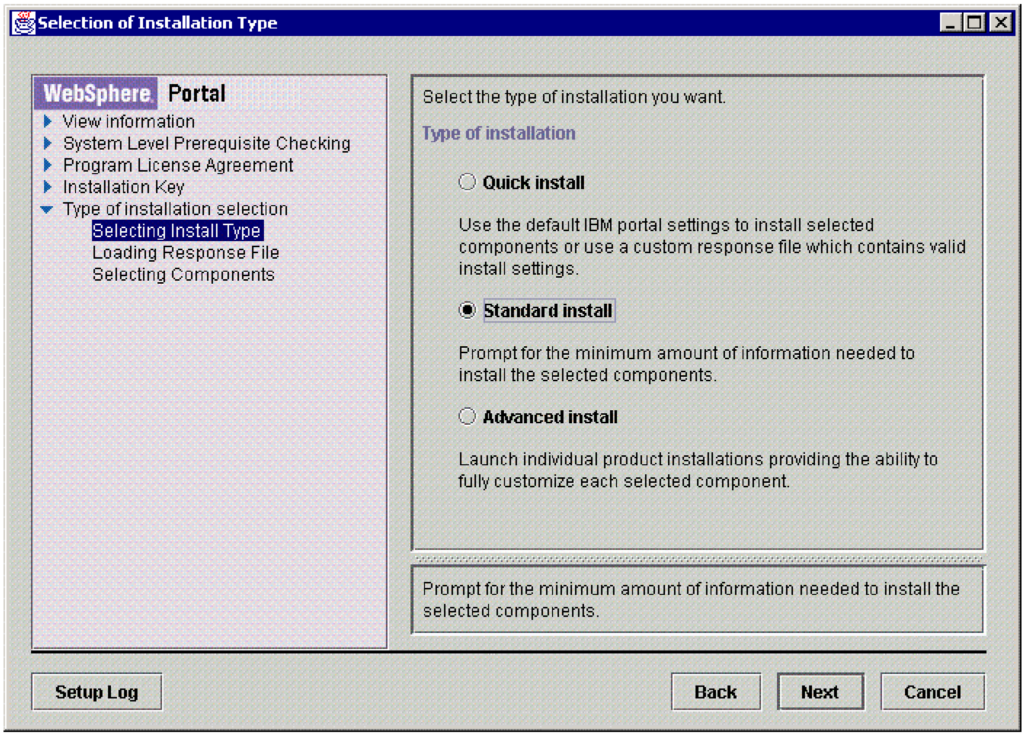
Enter your WebSphere Portal Installation Key

54K9 - WEFS - C9PJ - Q3R6 - LJG8 - ZJUM

WebSphere Portal is licensed to you by IBM. You have been provided with an installation key. This component will collect that key.

Enter the license key and press “Next”. A valid license key for WPS 4.1.2 Enable (IBM internal use only!!) is:

```
54K9   WEFS   C9PJ   Q3R6   LJG8   ZJUM
```



Selection of Installation Type

Select the type of installation you want.

Type of installation

○ Quick install

Use the default IBM portal settings to install selected components or use a custom response file which contains valid install settings.

● Standard install

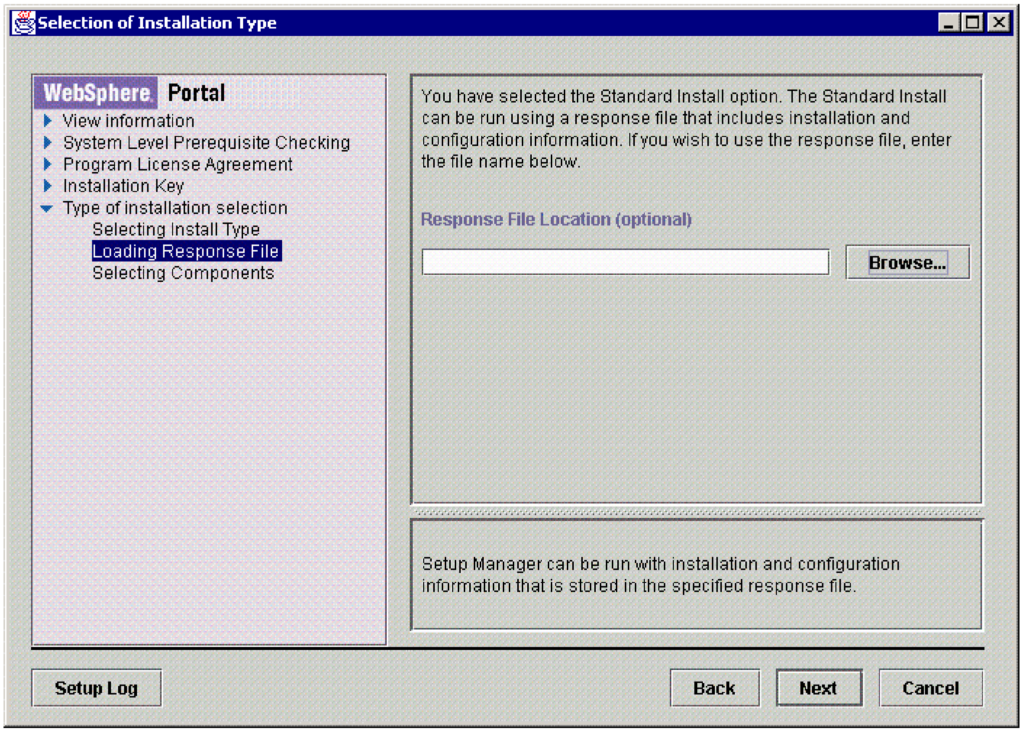
Prompt for the minimum amount of information needed to install the selected components.

○ Advanced install

Launch individual product installations providing the ability to fully customize each selected component.

Prompt for the minimum amount of information needed to install the selected components.

Select “Standard install” and press “Next”.



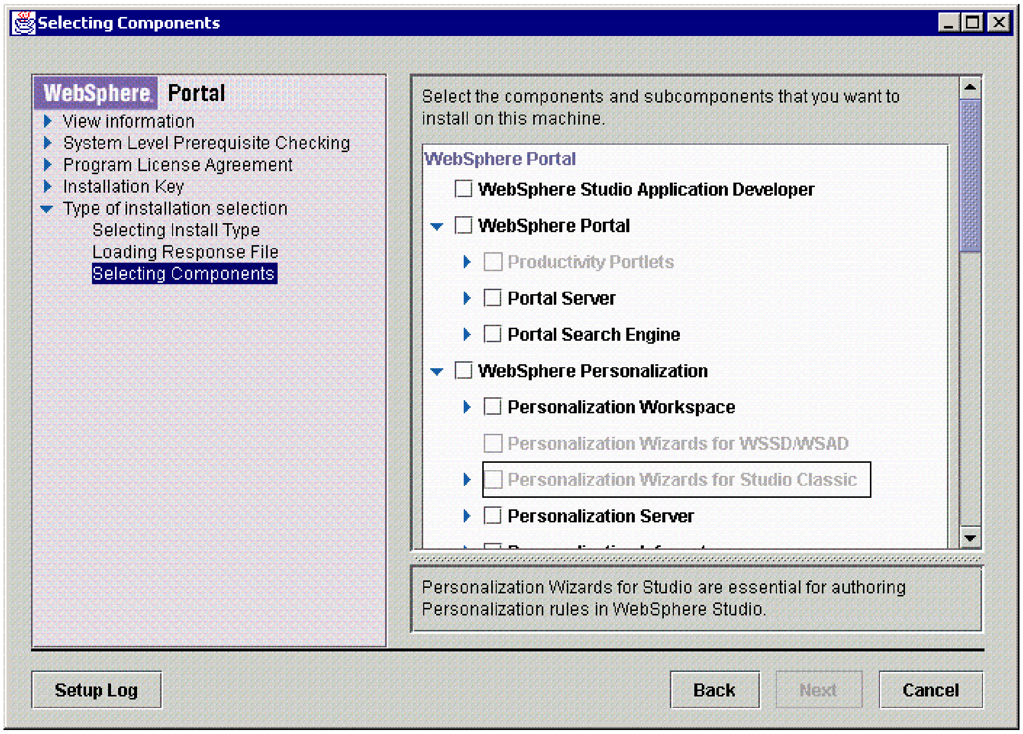
Selection of Installation Type

You have selected the Standard Install option. The Standard Install can be run using a response file that includes installation and configuration information. If you wish to use the response file, enter the file name below.

Response File Location (optional)

Setup Manager can be run with installation and configuration information that is stored in the specified response file.

Leave the field blank and press “Next”.



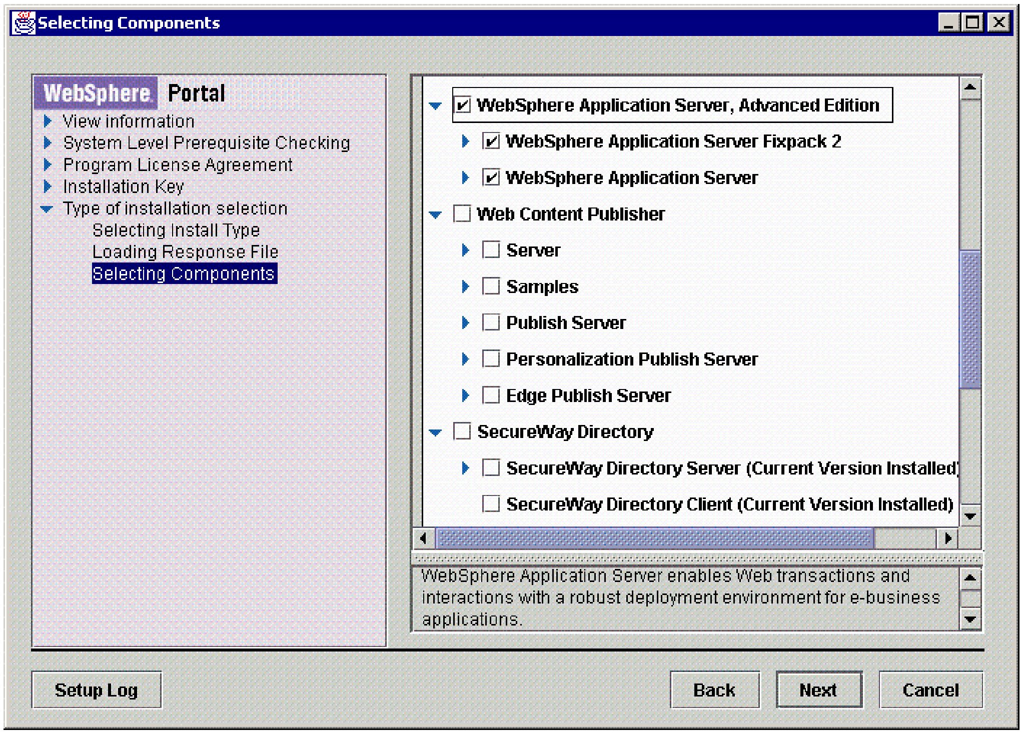
Select the components and subcomponents that you want to install on this machine.

WebSphere Portal

- □ WebSphere Studio Application Developer
- □ WebSphere Portal
  - □ Productivity Portlets
  - □ Portal Server
  - □ Portal Search Engine
- □ WebSphere Personalization
  - □ Personalization Workspace
  - □ Personalization Wizards for WSSD/WSAD
  - □ Personalization Wizards for Studio Classic
  - □ Personalization Server

Personalization Wizards for Studio are essential for authoring Personalization rules in WebSphere Studio.

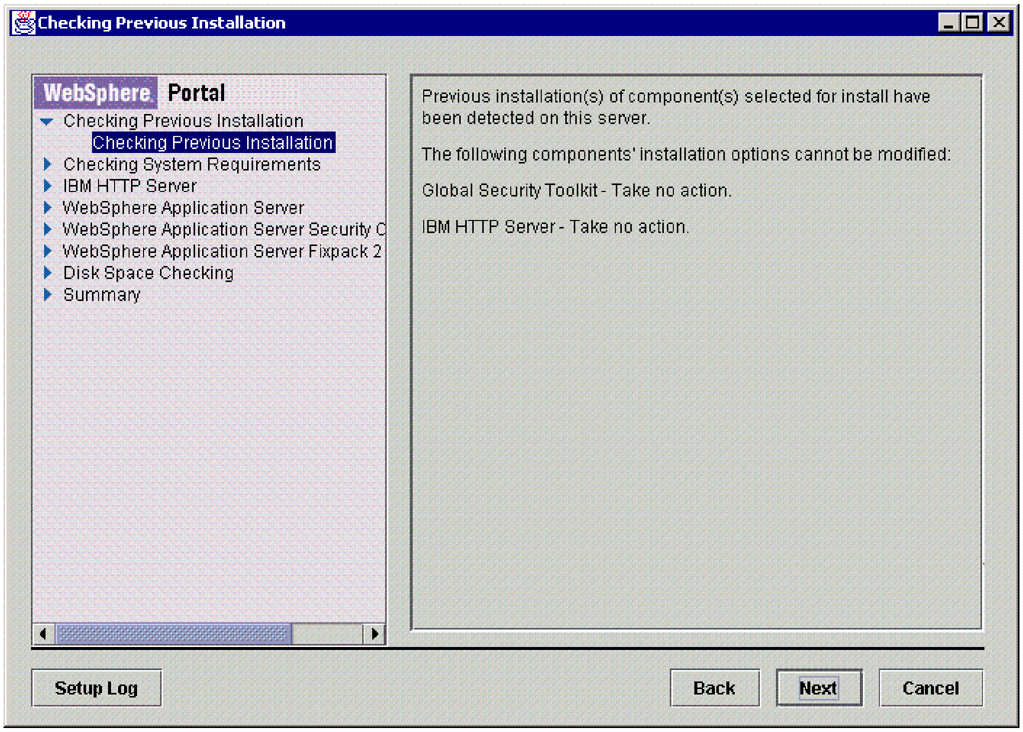
A list of available products for install is then displayed.



- ☑ WebSphere Application Server, Advanced Edition
  - ☑ WebSphere Application Server Fixpack 2
  - ☑ WebSphere Application Server
- □ Web Content Publisher
  - □ Server
  - □ Samples
  - □ Publish Server
  - □ Personalization Publish Server
  - □ Edge Publish Server
- □ SecureWay Directory
  - □ SecureWay Directory Server (Current Version Installed)
  - □ SecureWay Directory Client (Current Version Installed)

WebSphere Application Server enables Web transactions and interactions with a robust deployment environment for e-business applications.

Scroll down and select WebSphere Application Server. Press “Next” to continue.


Checking Previous Installation
WebSphere Portal
Checking Previous Installation
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
WebSphere Application Server
WebSphere Application Server Security C
WebSphere Application Server Fixpack 2
Disk Space Checking
Summary
Setup Log
Back
Next
Cancel

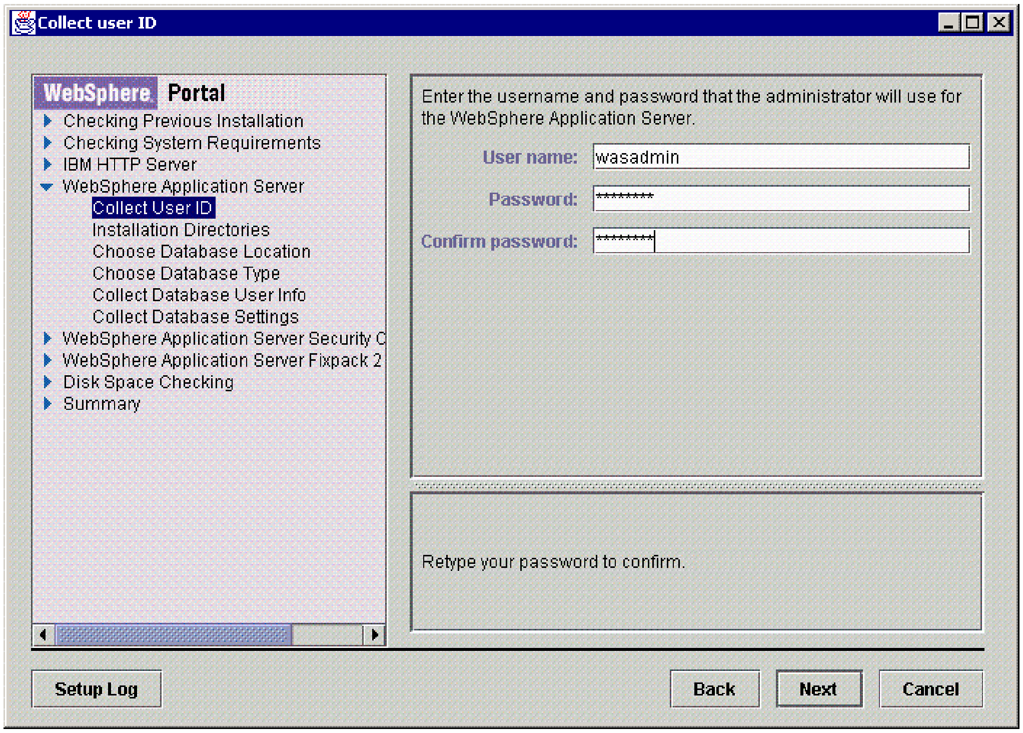
Previous installation(s) of component(s) selected for install have been detected on this server.

The following components' installation options cannot be modified:

Global Security Toolkit - Take no action.

IBM HTTP Server - Take no action.

Press “Next” to acknowledge that GSKIT and IHS are already installed.


Collect user ID
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
WebSphere Application Server
Collect User ID
Installation Directories
Choose Database Location
Choose Database Type
Collect Database User Info
Collect Database Settings
WebSphere Application Server Security C
WebSphere Application Server Fixpack 2
Disk Space Checking
Summary
Setup Log
Back
Next
Cancel

Enter the username and password that the administrator will use for the WebSphere Application Server.

User name: wasadmin

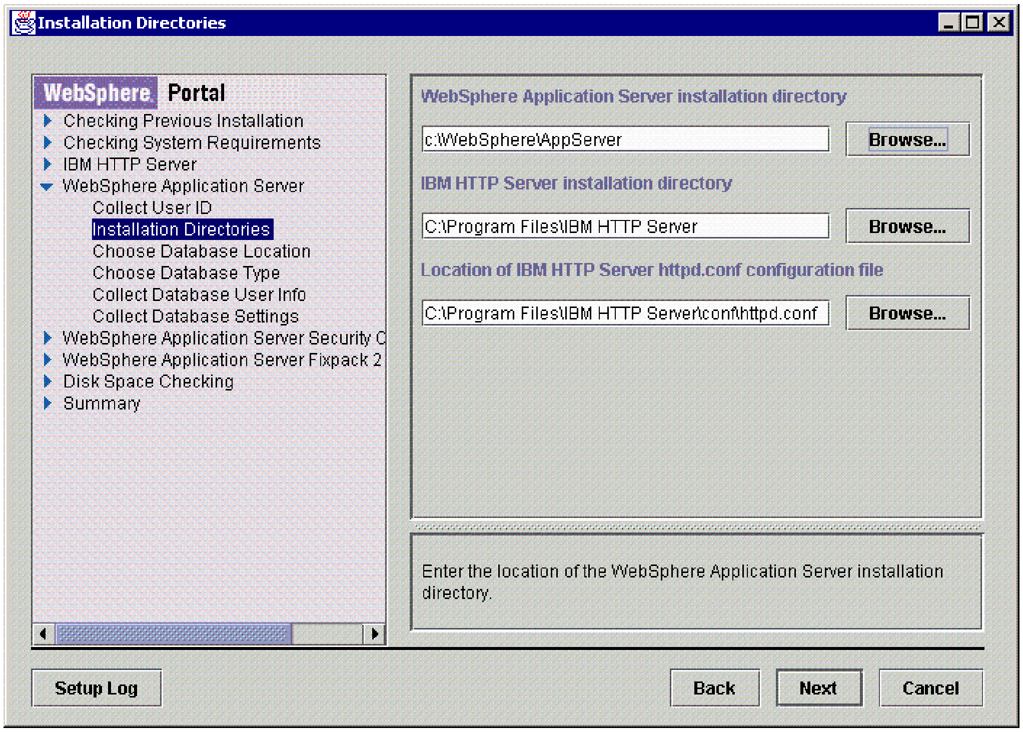
Password: ********

Confirm password: ********

Retype your password to confirm.

Enter a user name and associated password for WAS to run under (the WPS installer will create this id if needed) - here we used “wasadmin” and “passw0rd”.

Press “Next” to continue.


Installation Directories
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
WebSphere Application Server
Collect User ID
Installation Directories
Choose Database Location
Choose Database Type
Collect Database User Info
Collect Database Settings
WebSphere Application Server Security C
WebSphere Application Server Fixpack 2
Disk Space Checking
Summary
Browse...
Browse...
Browse...
Setup Log
Back
Next
Cancel

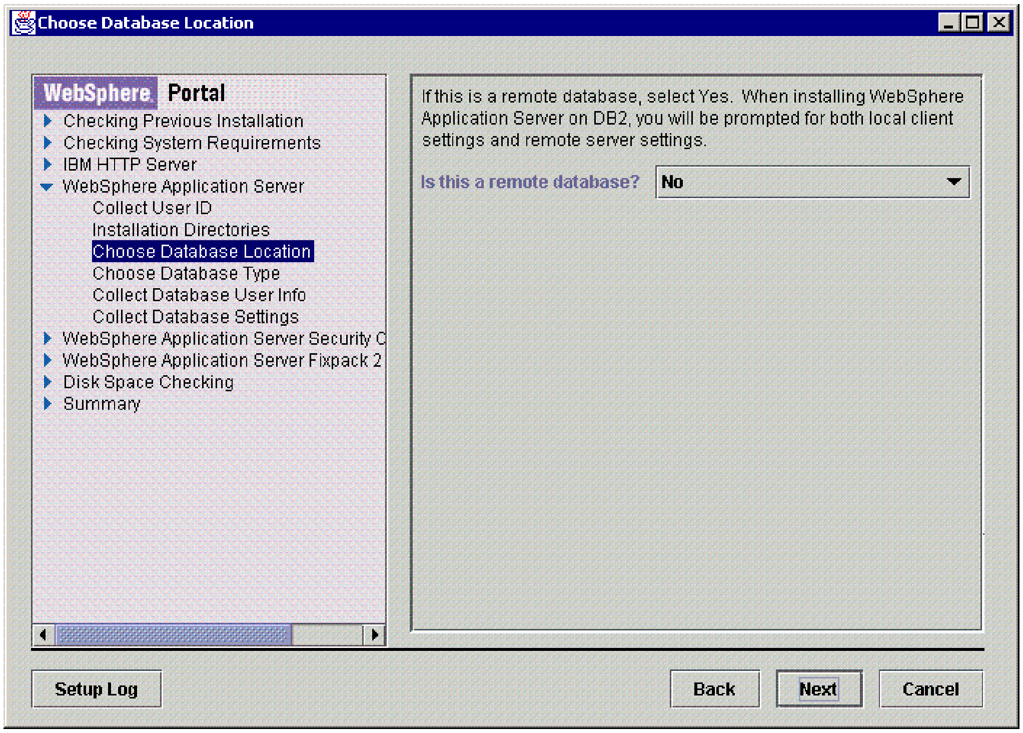
WebSphere Application Server installation directory: c:\WebSphere\AppServer

IBM HTTP Server installation directory: C:\Program Files\IBM HTTP Server

Location of IBM HTTP Server httpd.conf configuration file: C:\Program Files\IBM HTTP Server\conf\httpd.conf

Enter the location of the WebSphere Application Server installation directory.

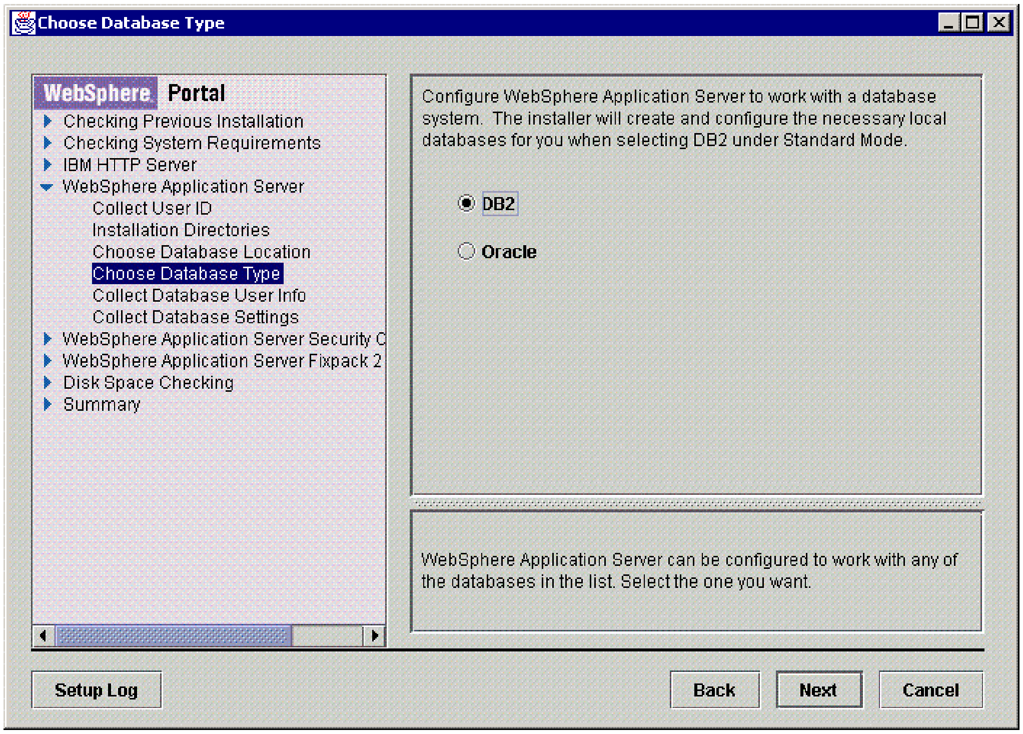
Press “Next” to accept the default locations for WAS.


Choose Database Location
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
WebSphere Application Server
Collect User ID
Installation Directories
Choose Database Location
Choose Database Type
Collect Database User Info
Collect Database Settings
WebSphere Application Server Security C
WebSphere Application Server Fixpack 2
Disk Space Checking
Summary
Setup Log
Back
Next
Cancel

If this is a remote database, select Yes. When installing WebSphere Application Server on DB2, you will be prompted for both local client settings and remote server settings.

Is this a remote database? No

As we are installing everything on one system in this demo installation, press “Next” to specify a local database.



Choose Database Type

WebSphere Portal

- Checking Previous Installation
- Checking System Requirements
- IBM HTTP Server
- WebSphere Application Server
  - Collect User ID
  - Installation Directories
  - Choose Database Location
  - Choose Database Type
  - Collect Database User Info
  - Collect Database Settings
- WebSphere Application Server Security C
- WebSphere Application Server Fixpack 2
- Disk Space Checking
- Summary

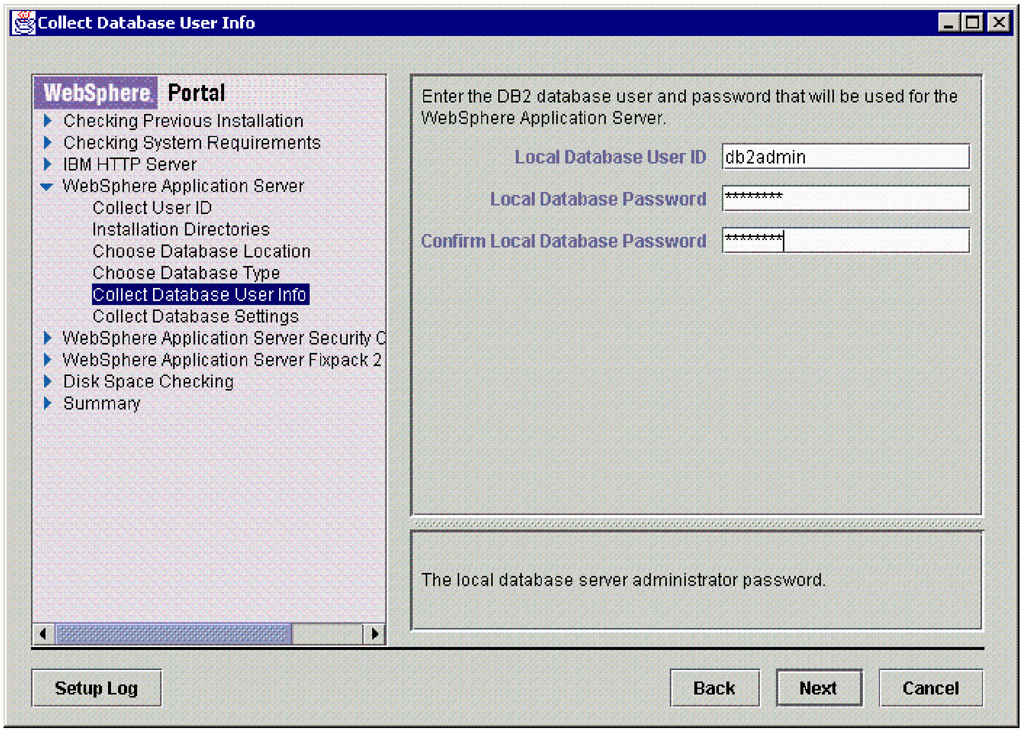
Configure WebSphere Application Server to work with a database system. The installer will create and configure the necessary local databases for you when selecting DB2 under Standard Mode.

● DB2

○ Oracle

WebSphere Application Server can be configured to work with any of the databases in the list. Select the one you want.

Ensure “DB2” is selected and press “Next” to continue.



Collect Database User Info

WebSphere Portal

- Checking Previous Installation
- Checking System Requirements
- IBM HTTP Server
- WebSphere Application Server
  - Collect User ID
  - Installation Directories
  - Choose Database Location
  - Choose Database Type
  - Collect Database User Info
  - Collect Database Settings
- WebSphere Application Server Security C
- WebSphere Application Server Fixpack 2
- Disk Space Checking
- Summary

Enter the DB2 database user and password that will be used for the WebSphere Application Server.

Local Database User ID: db2admin

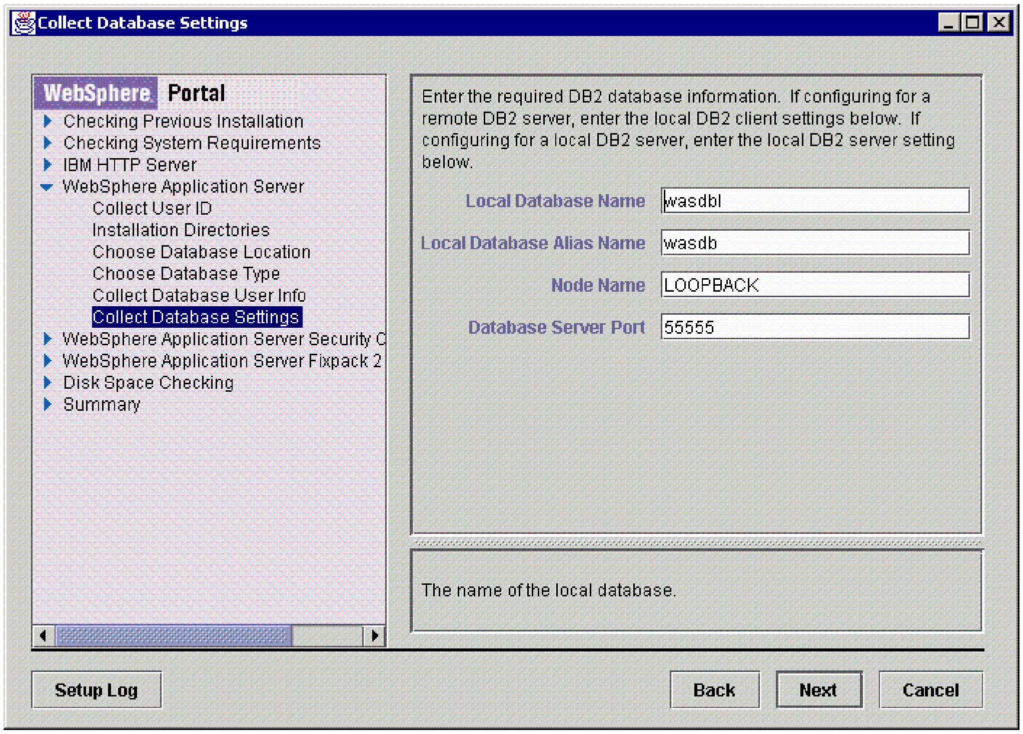
Local Database Password: ********

Confirm Local Database Password: ********

The local database server administrator password.

Enter the userid and password for DB2 administration - “db2admin”, “passw0rd”.

Press “Next” to continue.


Collect Database Settings
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
WebSphere Application Server
Collect User ID
Installation Directories
Choose Database Location
Choose Database Type
Collect Database User Info
Collect Database Settings
WebSphere Application Server Security C
WebSphere Application Server Fixpack 2
Disk Space Checking
Summary
Setup Log
Back
Next
Cancel

Enter the required DB2 database information. If configuring for a remote DB2 server, enter the local DB2 client settings below. If configuring for a local DB2 server, enter the local DB2 server setting below.

Local Database Name: wasdbl

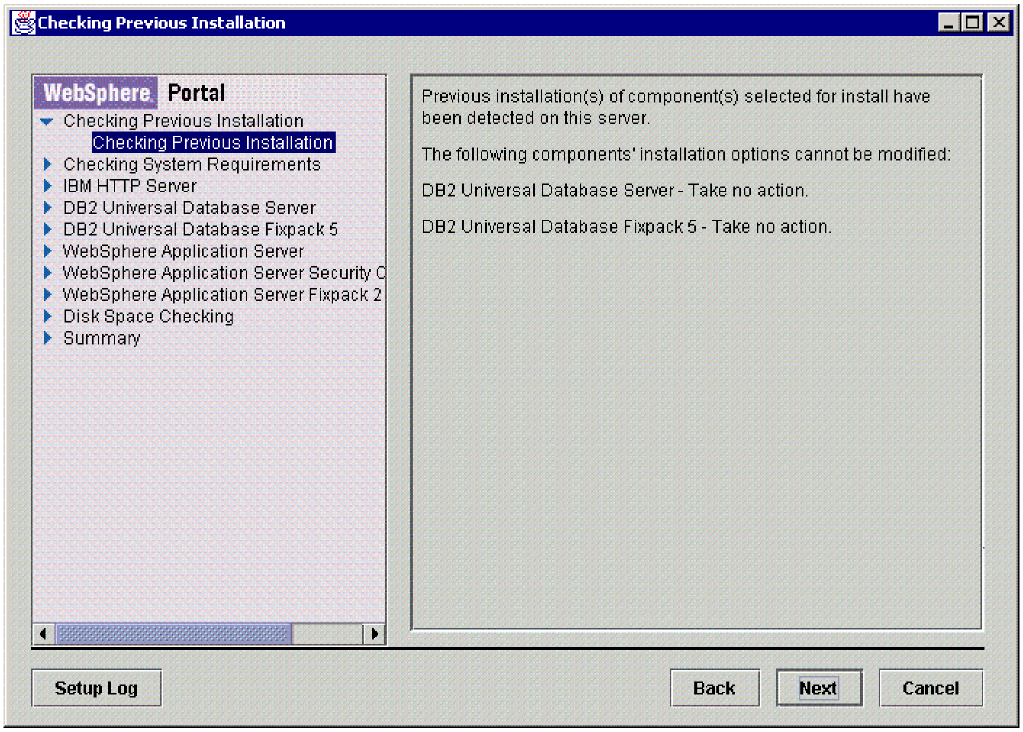
Local Database Alias Name: wasdb

Node Name: LOOPBACK

Database Server Port: 55555

The name of the local database.

Press “Next” to accept the default WAS database settings.


Checking Previous Installation
WebSphere Portal
Checking Previous Installation
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
DB2 Universal Database Server
DB2 Universal Database Fixpack 5
WebSphere Application Server
WebSphere Application Server Security C
WebSphere Application Server Fixpack 2
Disk Space Checking
Summary
Setup Log
Back
Next
Cancel

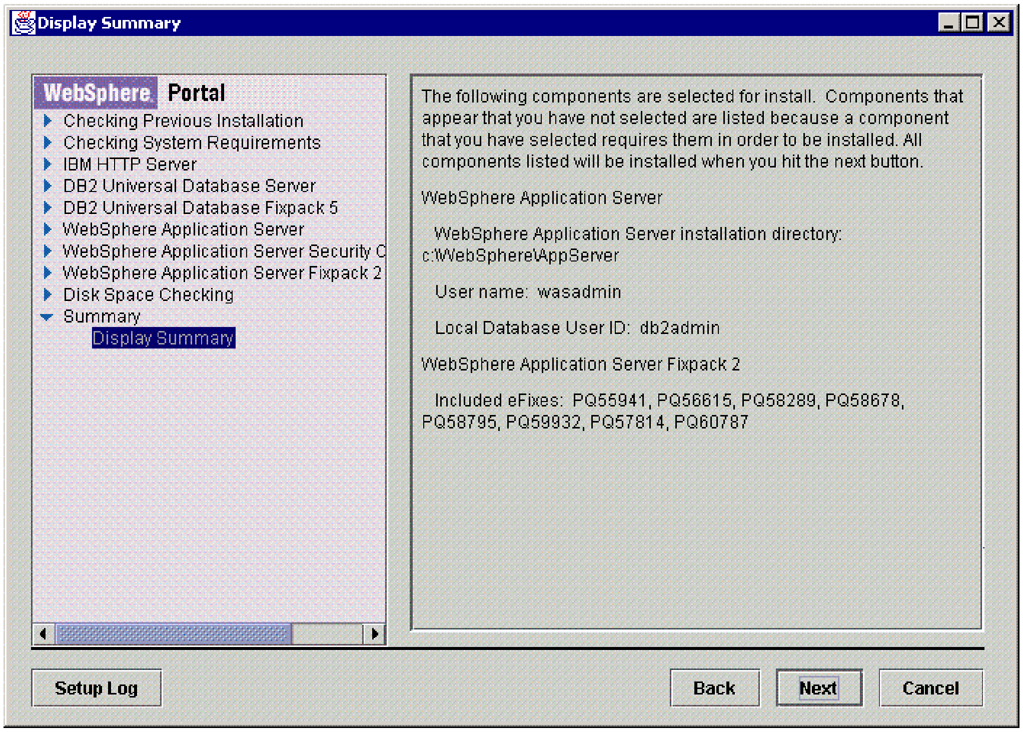
Previous installation(s) of component(s) selected for install have been detected on this server.

The following components' installation options cannot be modified:

DB2 Universal Database Server - Take no action.

DB2 Universal Database Fixpack 5 - Take no action.

Press “Next” to confirm that the correct version of DB2 has been installed.



Display Summary
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
DB2 Universal Database Server
DB2 Universal Database Fixpack 5
WebSphere Application Server
WebSphere Application Server Security C
WebSphere Application Server Fixpack 2
Disk Space Checking
Summary
Display Summary
Setup Log
Back
Next
Cancel

The following components are selected for install. Components that appear that you have not selected are listed because a component that you have selected requires them in order to be installed. All components listed will be installed when you hit the next button.

WebSphere Application Server

WebSphere Application Server installation directory: c:\WebSphere\AppServer

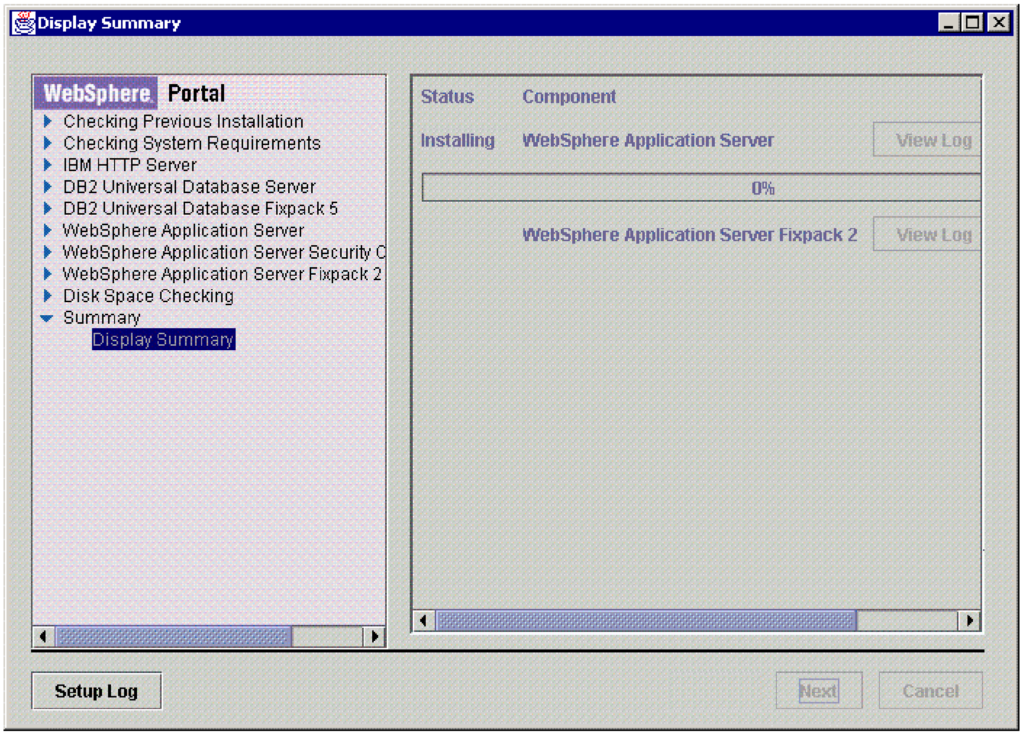
User name: wasadmin

Local Database User ID: db2admin

WebSphere Application Server Fixpack 2

Included eFixes: PQ55941, PQ56615, PQ58289, PQ58678, PQ58795, PQ59932, PQ57814, PQ60787

Check the WAS parameters displayed and press “Next” to start the installation of WAS.

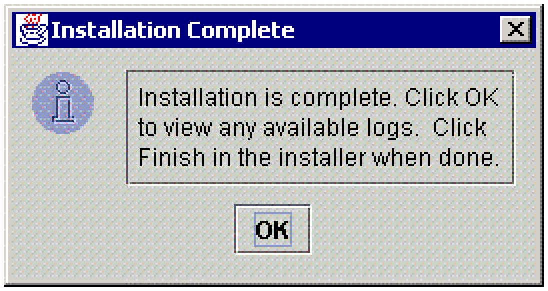


Display Summary
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
DB2 Universal Database Server
DB2 Universal Database Fixpack 5
WebSphere Application Server
WebSphere Application Server Security C
WebSphere Application Server Fixpack 2
Disk Space Checking
Summary
Display Summary
View Log
View Log
Setup Log
Next
Cancel

| Status | Component |
|---|---|
| Installing | WebSphere Application Server |
| | WebSphere Application Server Fixpack 2 |

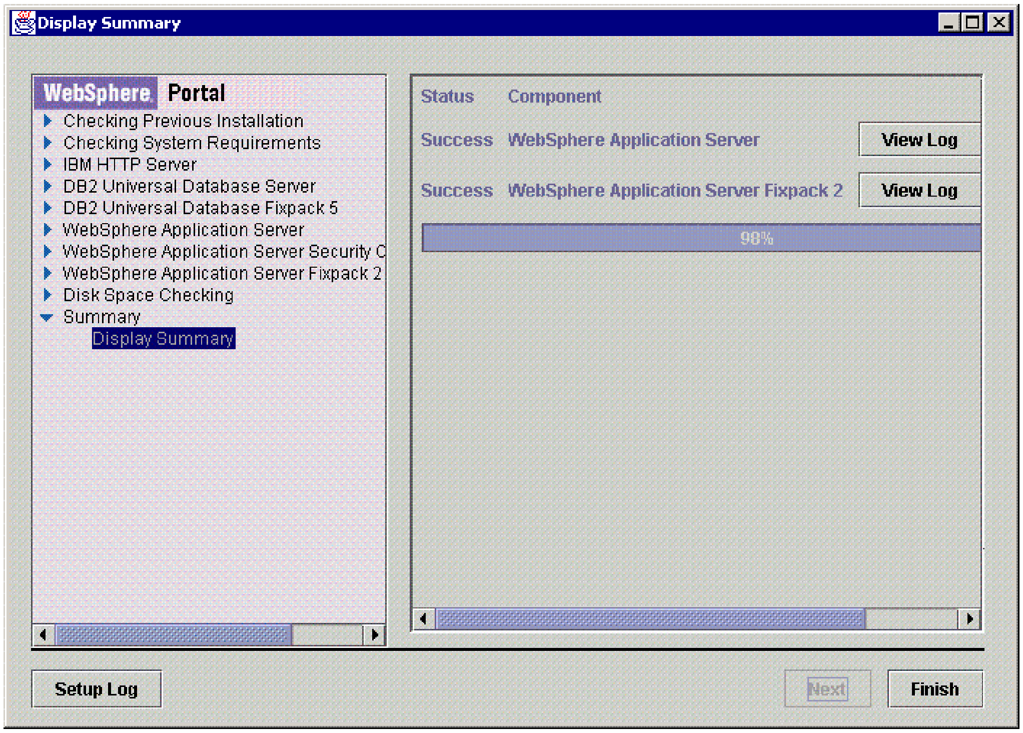
0%

A status screen is shown during the installation to indicate progress made.



Installation is complete. Click OK to view any available logs. Click Finish in the installer when done.

Press “OK”.


Display Summary
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
DB2 Universal Database Server
DB2 Universal Database Fixpack 5
WebSphere Application Server
WebSphere Application Server Security C
WebSphere Application Server Fixpack 2
Disk Space Checking
Summary
Display Summary
98%
Setup Log
Next
Finish

| Status | Component | |
|---|---|---|
| Success | WebSphere Application Server | View Log |
| Success | WebSphere Application Server Fixpack 2 | View Log |

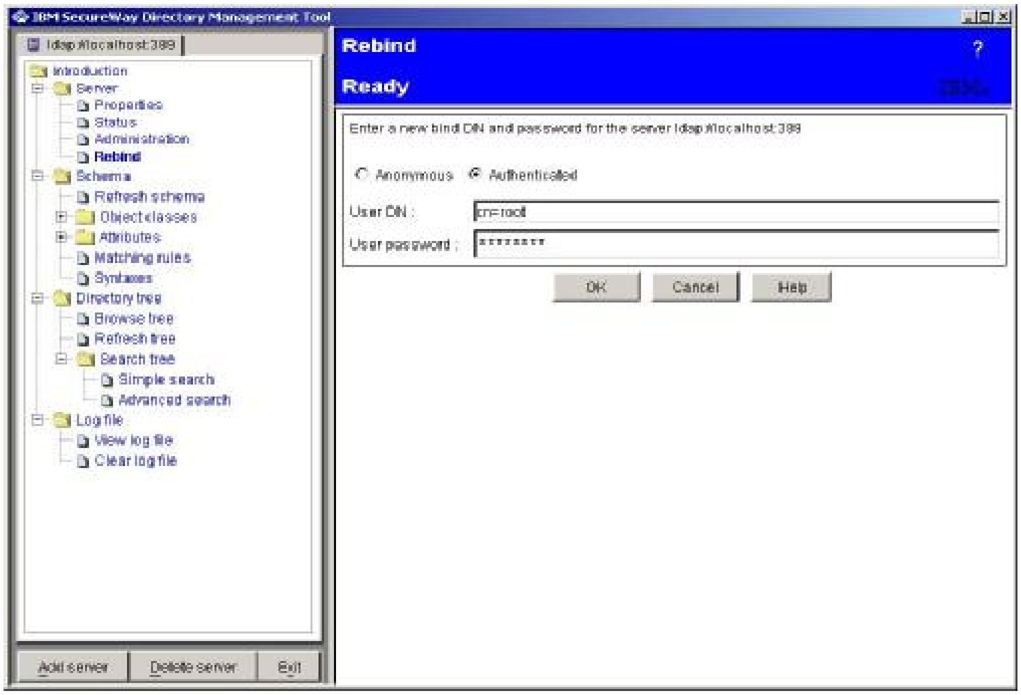
Press “Finish” to exit the install program (disregard the status bar showing 98% complete - the important point is “Success” next to each of the items).

## Step 4 Configure WebSphere security

Shutdown and reboot the system. Start the LDAP and IHS servers - via the Services control panel.

### Add LDAP Entries

Start the LDAP Directory Management Tool (DMT): “Start->Programs->IBM SecureWay Directory->Directory Management Tool”.



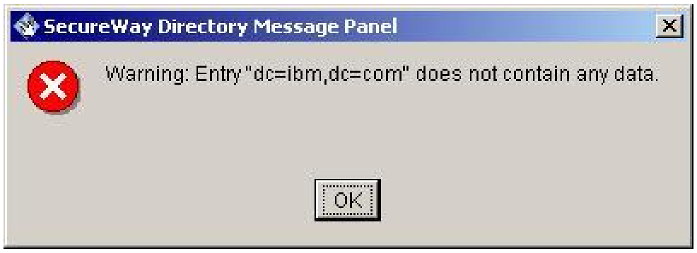
Enter a new bind DN and password for the server ldap://localhost:389

○ Anonymous ● Authenticated

User DN : cn=root

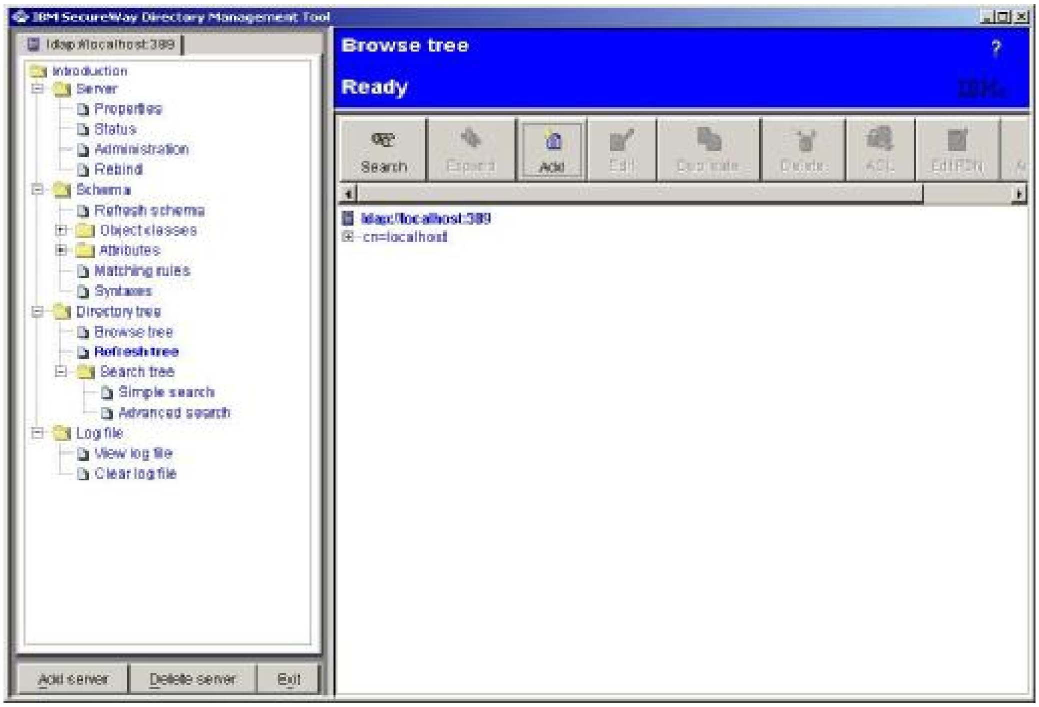
User password : ********

Select “Rebind” from the left menu panel, then select the “Authenticated” option and enter the User DN and password (“cn=root”, “passw0rd”). Press “OK” to authenticate to the LDAP server.

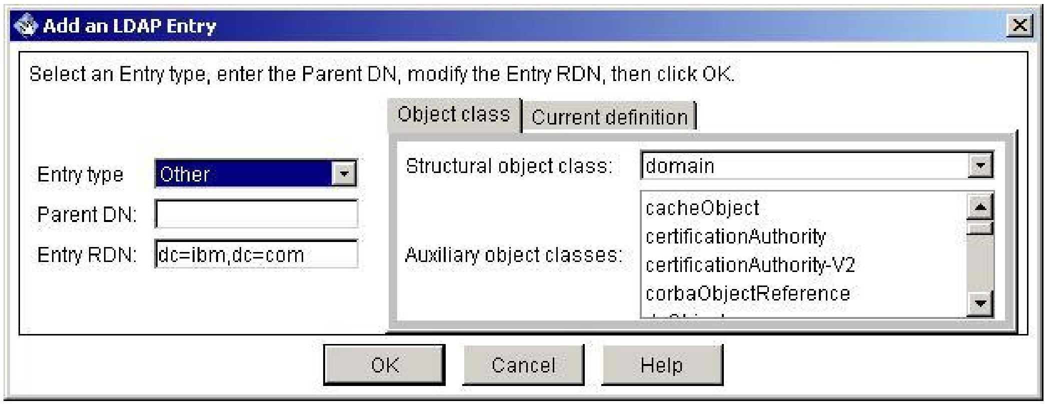


Warning: Entry "dc=ibm,dc=com" does not contain any data.

Click “OK” to acknowledge the warning displayed.



Select "Browse Tree" from the left menu panel, then press the "Add" button.


Add an LDAP Entry

Select an Entry type, enter the Parent DN, modify the Entry RDN, then click OK.

Entry type: Other

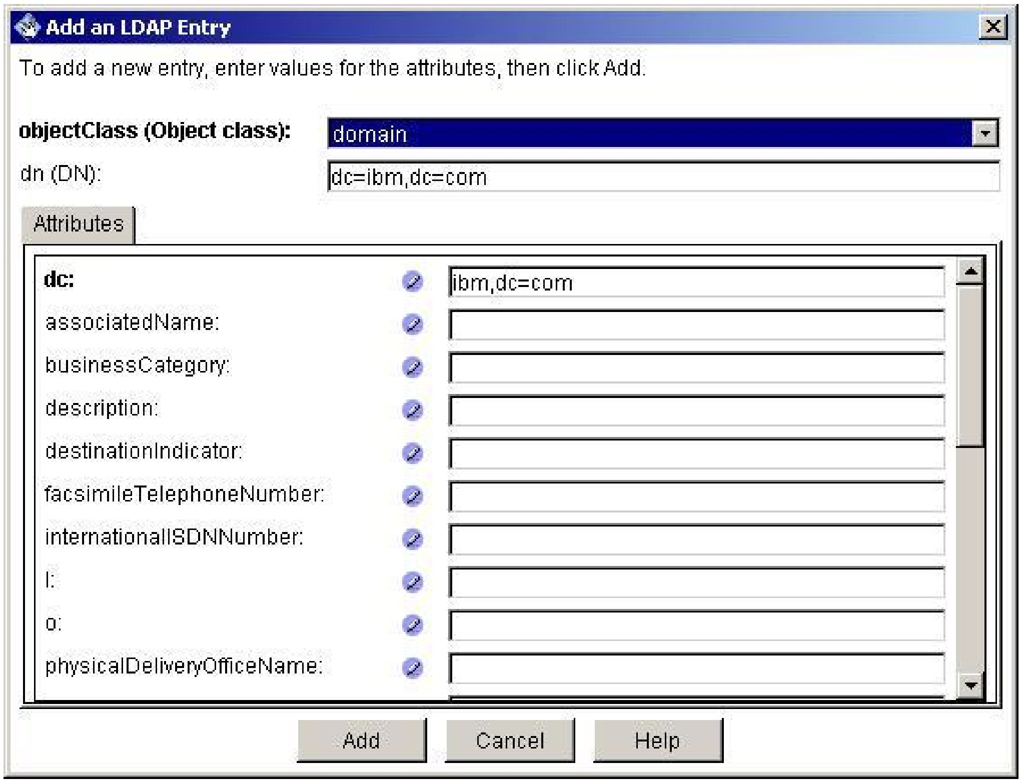
Parent DN:

Entry RDN: dc=ibm,dc=com

Structural object class: domain

Auxiliary object classes: cacheObject, certificationAuthority, certificationAuthority-V2, corbaObjectReference

Select "Other" from the "Entry type" pull-down list. Select "domain" from the "Structural object class" pull-down list. Enter "dc=ibm,dc=com" in the "Entry RDN" field, then press "OK".



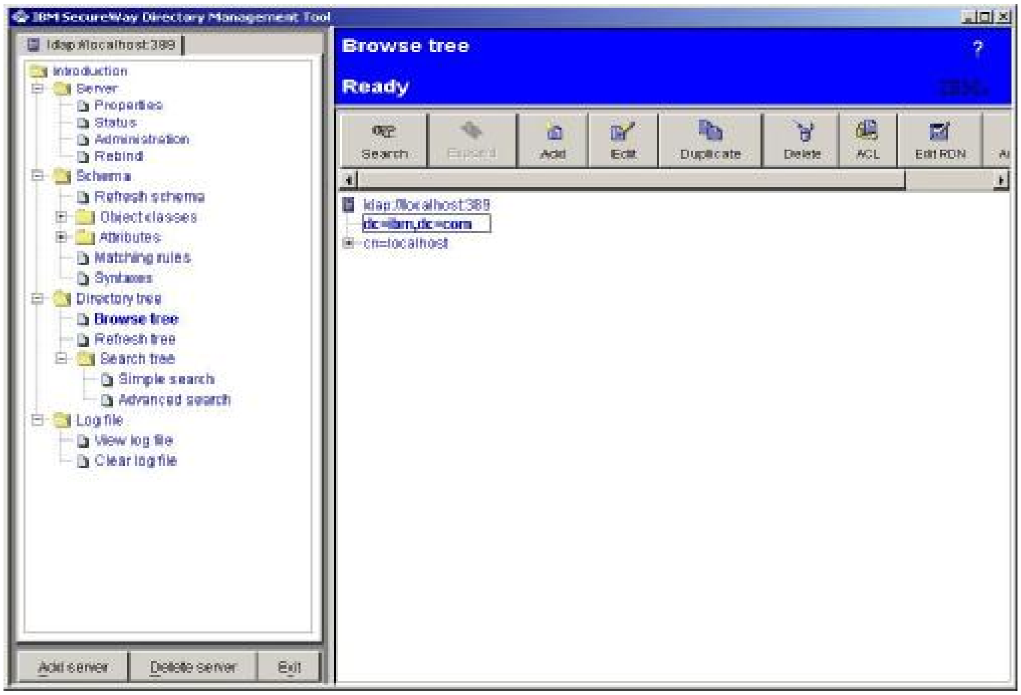
To add a new entry, enter values for the attributes, then click Add.

**objectClass (Object class):** domain

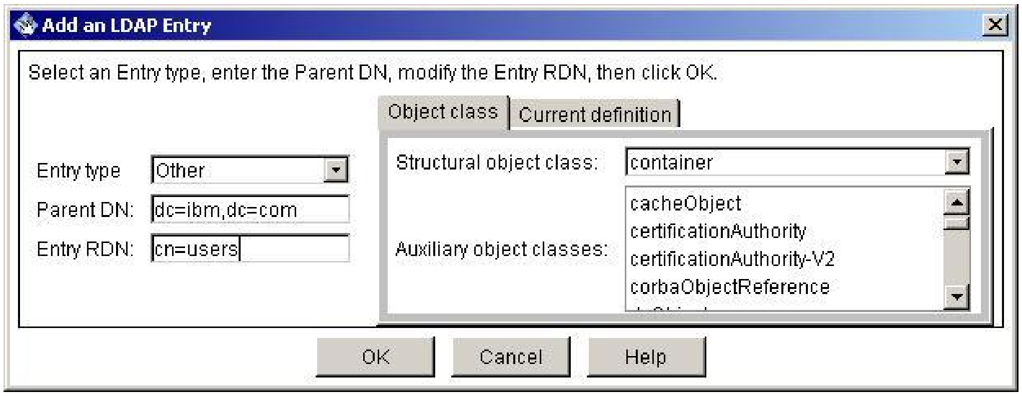
dn (DN): dc=ibm,dc=com

| | |
|---|---|
| **dc:** | ibm,dc=com |
| associatedName: | |
| businessCategory: | |
| description: | |
| destinationIndicator: | |
| facsimileTelephoneNumber: | |
| internationalISDNNumber: | |
| l: | |
| o: | |
| physicalDeliveryOfficeName: | |

Press “Add” to add the domain container.



Select the newly created domain container “dc=ibm,dc=com” and press the “Add” button.



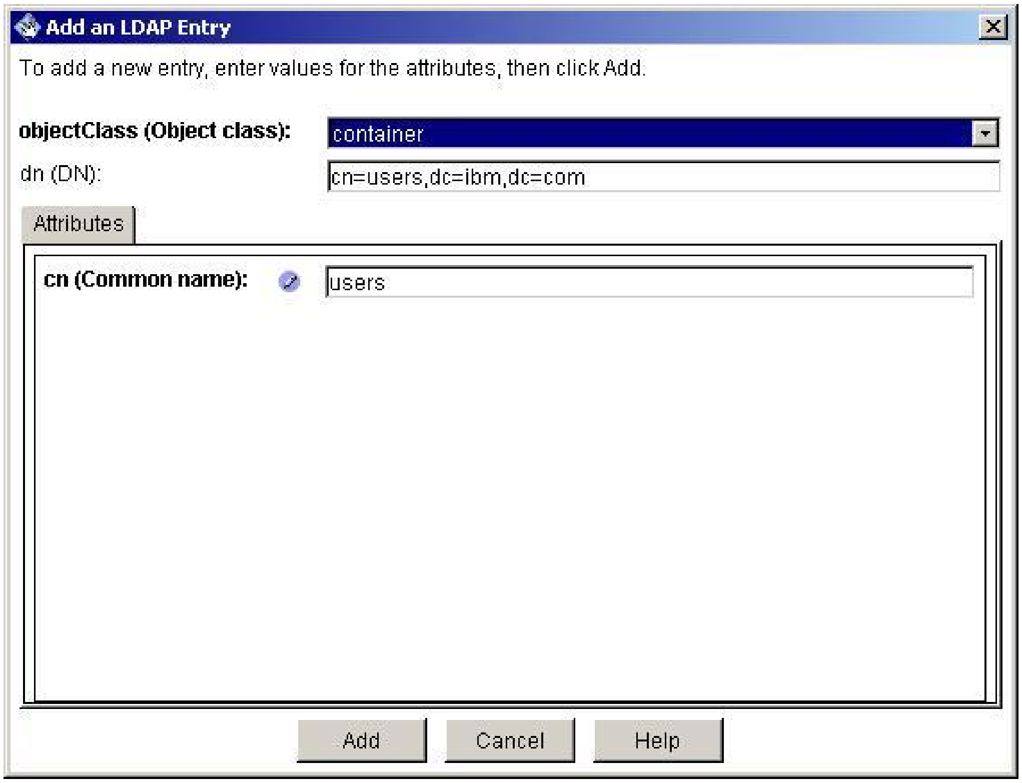
Add an LDAP Entry

Select an Entry type, enter the Parent DN, modify the Entry RDN, then click OK.

Entry type: Other
Parent DN: dc=ibm,dc=com
Entry RDN: cn=users

Structural object class: container

Select “Other” from the “Entry type” pull-down list. Select “container” from the “Structural object class” pull-down list. Enter “cn=users” in the “Entry RDN” field and press “OK”.

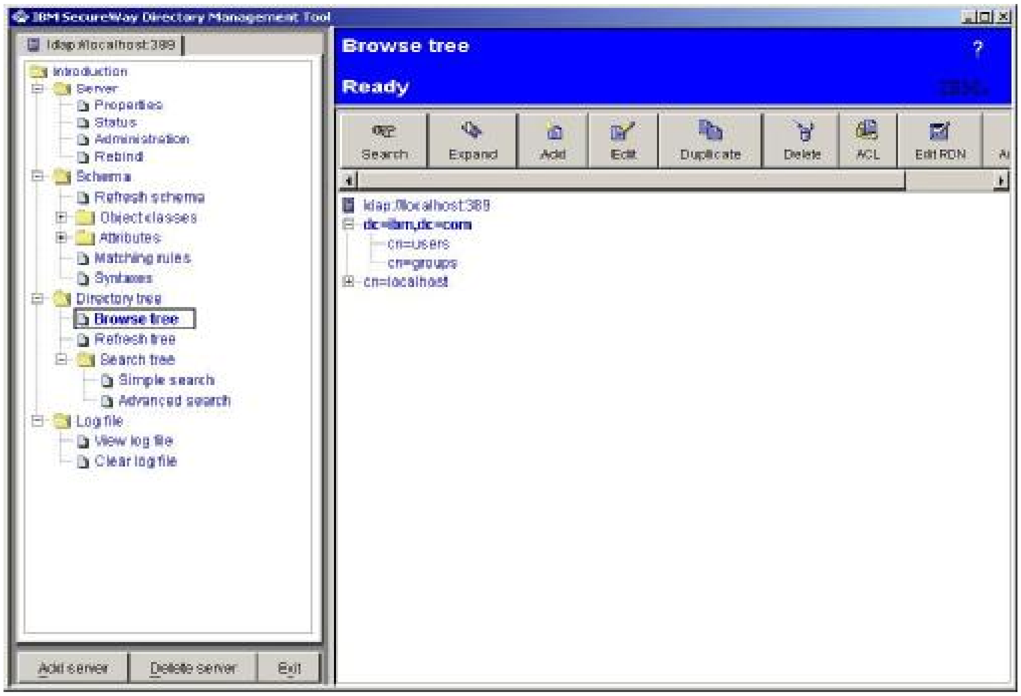


Add an LDAP Entry

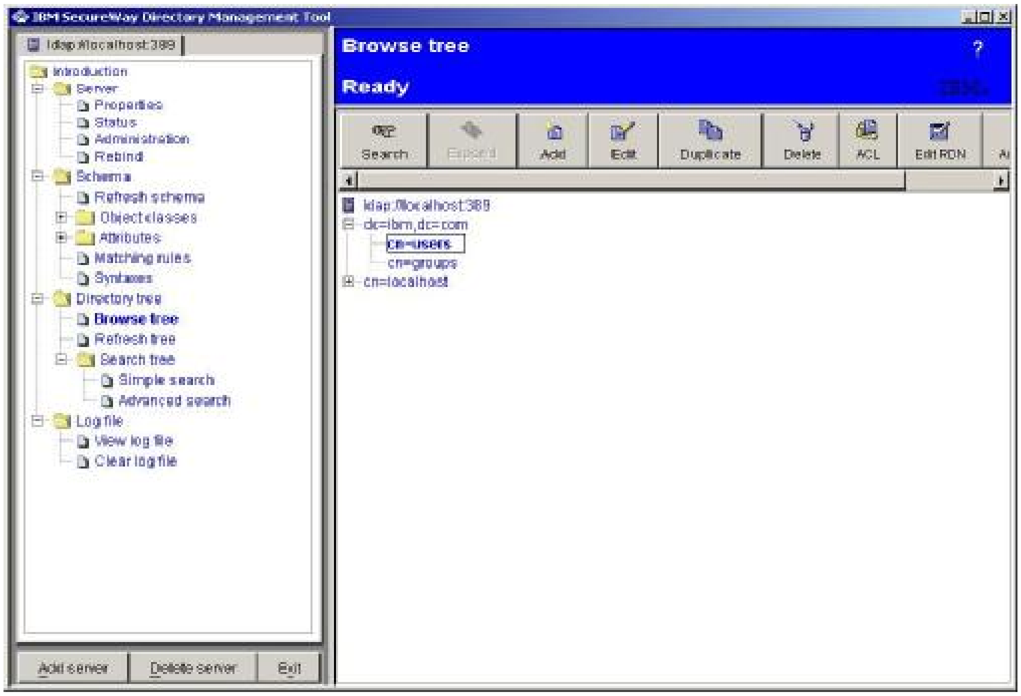
To add a new entry, enter values for the attributes, then click Add.

objectClass (Object class): container
dn (DN): cn=users,dc=ibm,dc=com
cn (Common name): users

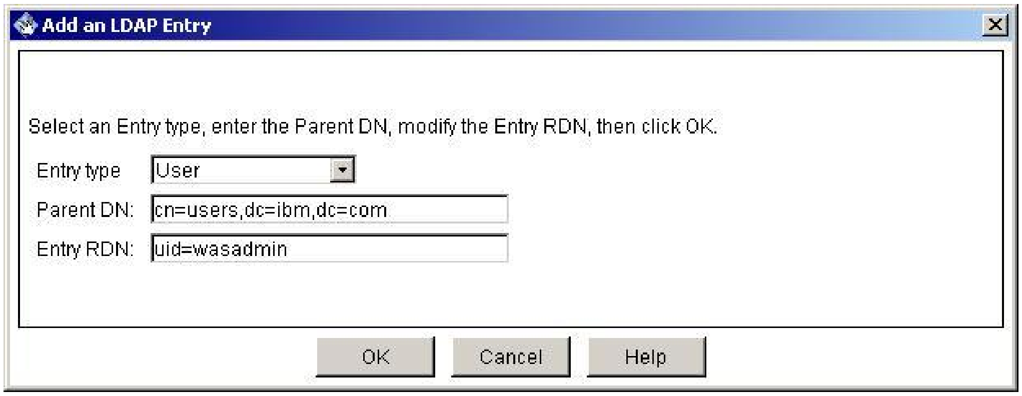
Press “Add” to add the container object for users.



Repeat the process above for adding the “users” container to add a container called “groups”.



Select the “users” container object and press the “Add” button.



Add an LDAP Entry

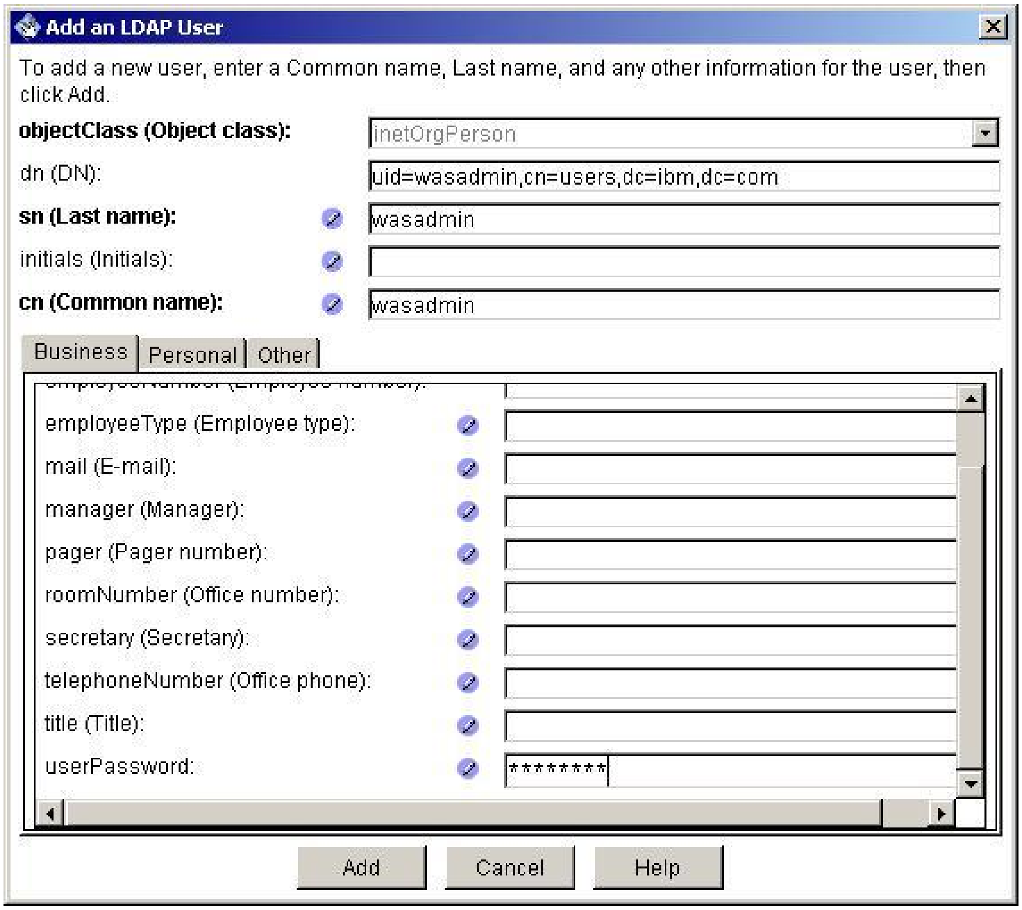
Select an Entry type, enter the Parent DN, modify the Entry RDN, then click OK.

Entry type: User

Parent DN: cn=users,dc=ibm,dc=com

Entry RDN: uid=wasadmin

Select "User" from the "Entry type" pull-down list. Enter "uid=wasadmin" in the "Entry RDN" field. Press "OK".



Add an LDAP User

To add a new user, enter a Common name, Last name, and any other information for the user, then click Add.

**objectClass (Object class):** inetOrgPerson

dn (DN): uid=wasadmin,cn=users,dc=ibm,dc=com

**sn (Last name):** wasadmin

initials (Initials):

**cn (Common name):** wasadmin

employeeType (Employee type):

mail (E-mail):

manager (Manager):

pager (Pager number):

roomNumber (Office number):

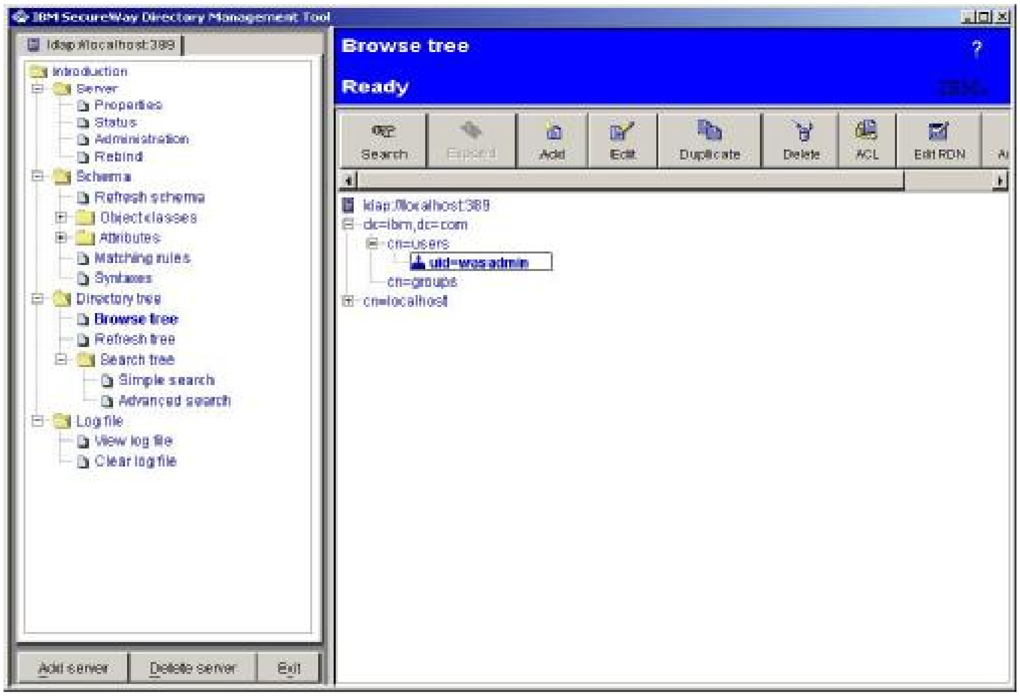
secretary (Secretary):

telephoneNumber (Office phone):

title (Title):

userPassword: ********

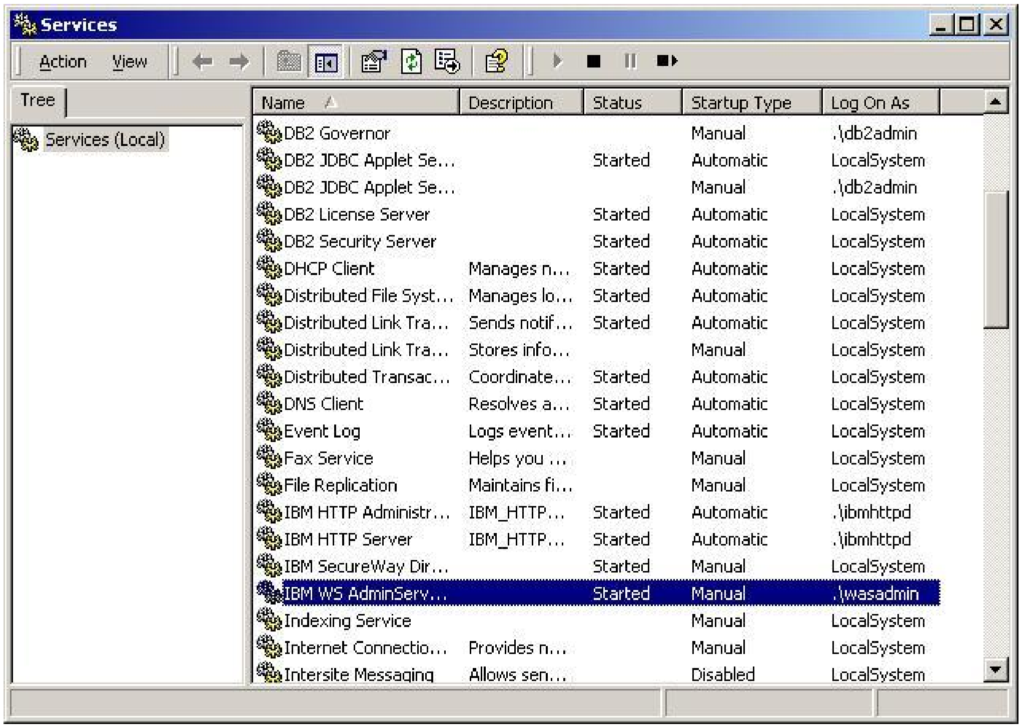
Enter some value in the surname field (e.g. "wasadmin") and in the "Common Name" field. Scroll down to the "userPassword" field and enter "passw0rd". Press "Add" to add the user.



Press “Exit” to close the DMT.

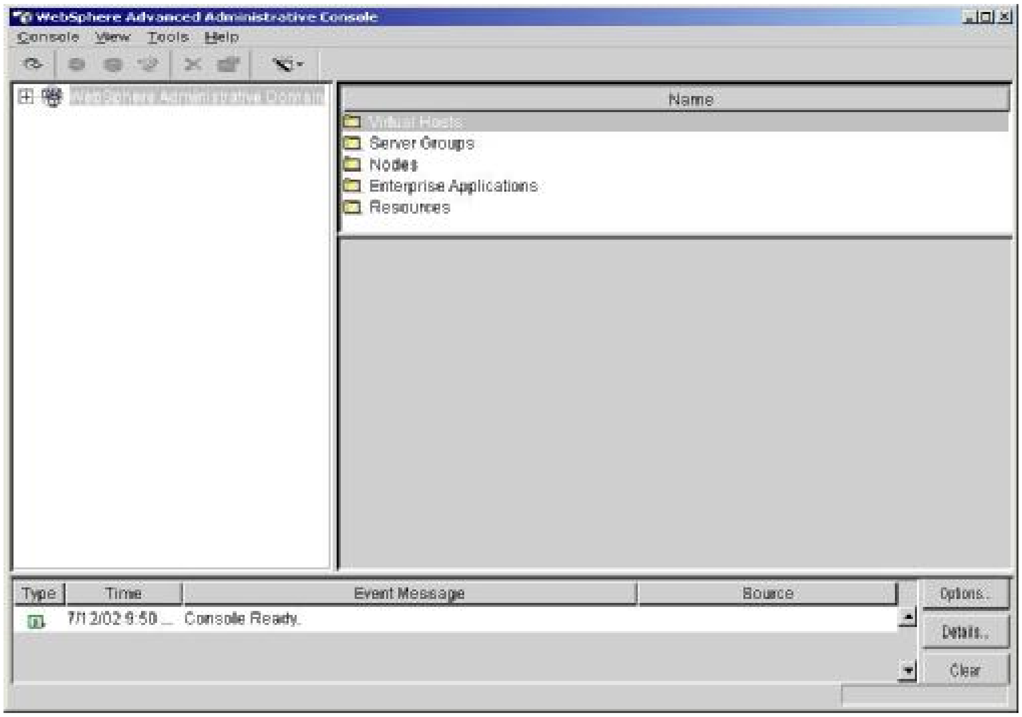
## Configure WAS for LDAP

Start the WAS Server (“Start->Programs->IBM WebSphere->Application Server V4.0 ->Start Admin Server”). You may want to copy this shortcut to your desktop.



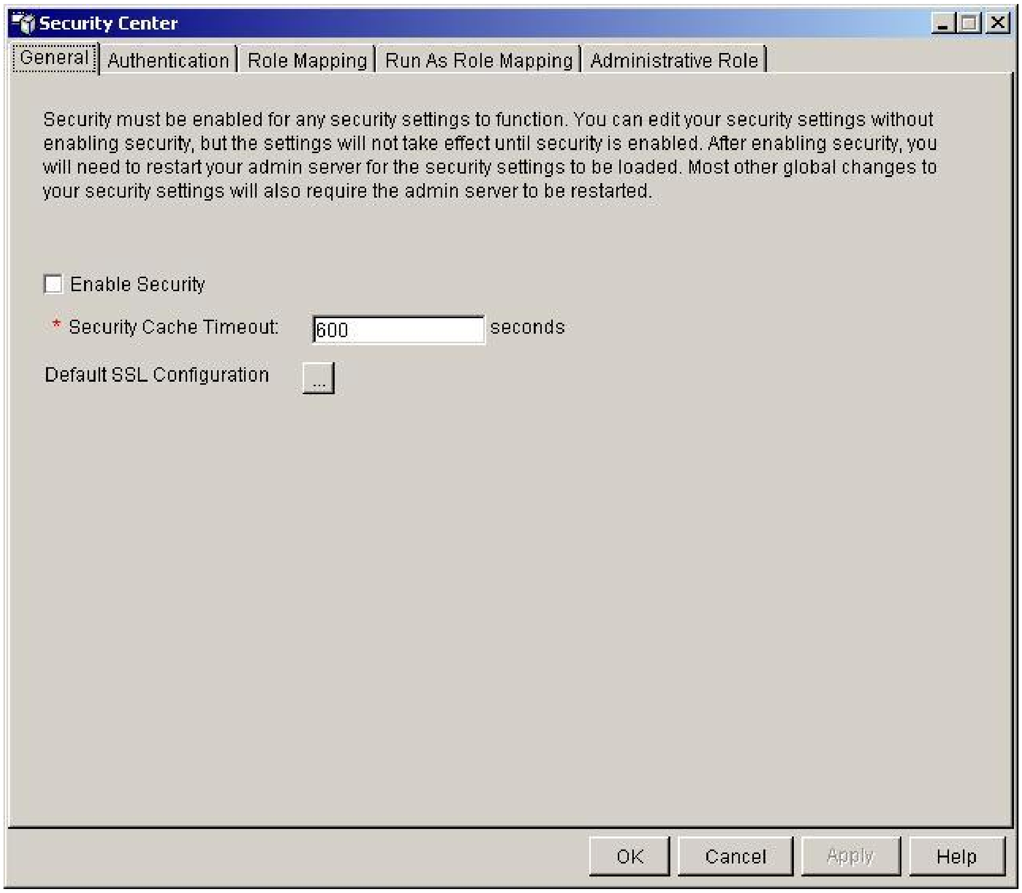
| Name | Description | Status | Startup Type | Log On As |
|---|---|---|---|---|
| DB2 Governor | | | Manual | .\db2admin |
| DB2 JDBC Applet Se... | | Started | Automatic | LocalSystem |
| DB2 JDBC Applet Se... | | | Manual | .\db2admin |
| DB2 License Server | | Started | Automatic | LocalSystem |
| DB2 Security Server | | Started | Automatic | LocalSystem |
| DHCP Client | Manages n... | Started | Automatic | LocalSystem |
| Distributed File Syst... | Manages lo... | Started | Automatic | LocalSystem |
| Distributed Link Tra... | Sends notif... | Started | Automatic | LocalSystem |
| Distributed Link Tra... | Stores info... | | Manual | LocalSystem |
| Distributed Transac... | Coordinate... | Started | Automatic | LocalSystem |
| DNS Client | Resolves a... | Started | Automatic | LocalSystem |
| Event Log | Logs event... | Started | Automatic | LocalSystem |
| Fax Service | Helps you ... | | Manual | LocalSystem |
| File Replication | Maintains fi... | | Manual | LocalSystem |
| IBM HTTP Administr... | IBM_HTTP... | Started | Automatic | .\ibmhttpd |
| IBM HTTP Server | IBM_HTTP... | Started | Automatic | .\ibmhttpd |
| IBM SecureWay Dir... | | Started | Manual | LocalSystem |
| IBM WS AdminServ... | | Started | Manual | .\wasadmin |
| Indexing Service | | | Manual | LocalSystem |
| Internet Connectio... | Provides n... | | Manual | LocalSystem |
| Intersite Messaging | Allows sen... | | Disabled | LocalSystem |

Use the Services control panel to check WAS is running.



| Type | Time | Event Message | Source |
|---|---|---|---|
| | 7/12/02 9:50 ... | Console Ready. | |

Start the WAS Administration Console ("Start->Programs->IBM WebSphere->Application Server V4.0->Administrator's Console"). You may want to copy this shortcut to your desktop.



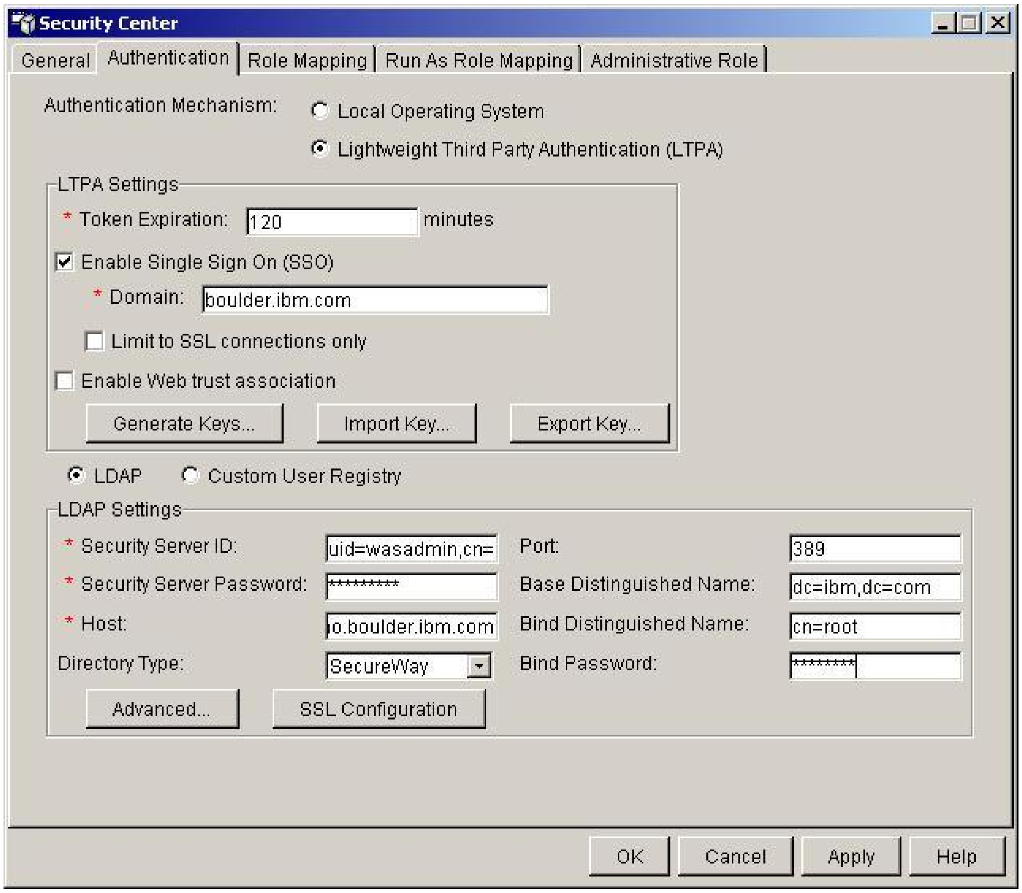
Security must be enabled for any security settings to function. You can edit your security settings without enabling security, but the settings will not take effect until security is enabled. After enabling security, you will need to restart your admin server for the security settings to be loaded. Most other global changes to your security settings will also require the admin server to be restarted.

☐ Enable Security

* Security Cache Timeout: 600 seconds

Default SSL Configuration ...

Start the Security Center ("Console->Security Center…"). Make sure you do not select "Enable Security" at this point.



Authentication Mechanism: ○ Local Operating System ● Lightweight Third Party Authentication (LTPA)

LTPA Settings

* Token Expiration: 120 minutes

☑ Enable Single Sign On (SSO)

* Domain: boulder.ibm.com

□ Limit to SSL connections only

□ Enable Web trust association

● LDAP ○ Custom User Registry

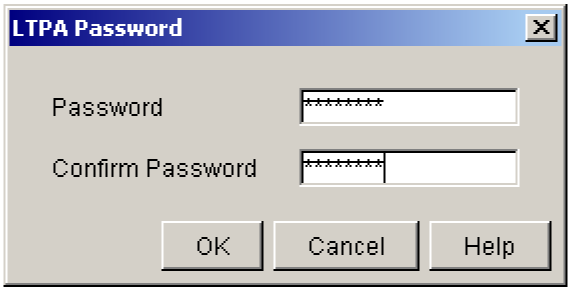
LDAP Settings

| | | | |
|---|---|---|---|
| * Security Server ID: | uid=wasadmin,cn= | Port: | 389 |
| * Security Server Password: | ********* | Base Distinguished Name: | dc=ibm,dc=com |
| * Host: | o.boulder.ibm.com | Bind Distinguished Name: | cn=root |
| Directory Type: | SecureWay | Bind Password: | ******** |

Select the “Lightweight Third Party Authentication (LTPA) option. Enter the following field values:

| | |
|---|---|
| • Domain: | boulder.ibm.com |
| • Security Server ID: | uid=wasadmin,cn=users,dc=ibm,dc=com |
| • Security Server Password: | passw0rd |
| • Directory Type: | SecureWay |
| • Port | 389 |
| • Base Distinguished Name | dc=ibm,dc=com |
| • Bind Distinguished Name | cn=root |
| • Bind password | passw0rd |

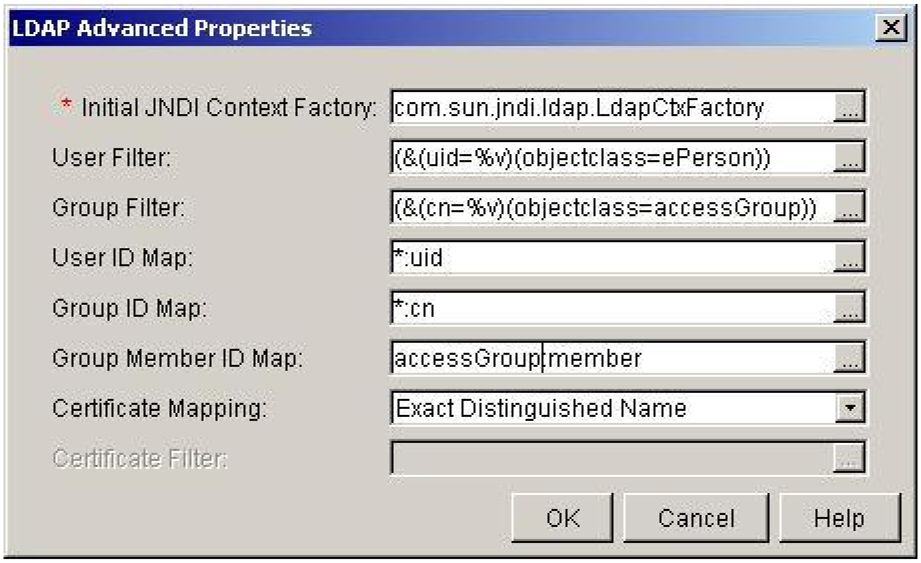
Press “Apply” to continue.



Password *********

Confirm Password ********

Enter the password for LTPA cookies: “passw0rd”.



* Initial JNDI Context Factory: com.sun.jndi.ldap.LdapCtxFactory

User Filter: (&(uid=%v)(objectclass=ePerson))

Group Filter: (&(cn=%v)(objectclass=accessGroup))

User ID Map: *:uid

Group ID Map: *:cn

Group Member ID Map: accessGroup:member

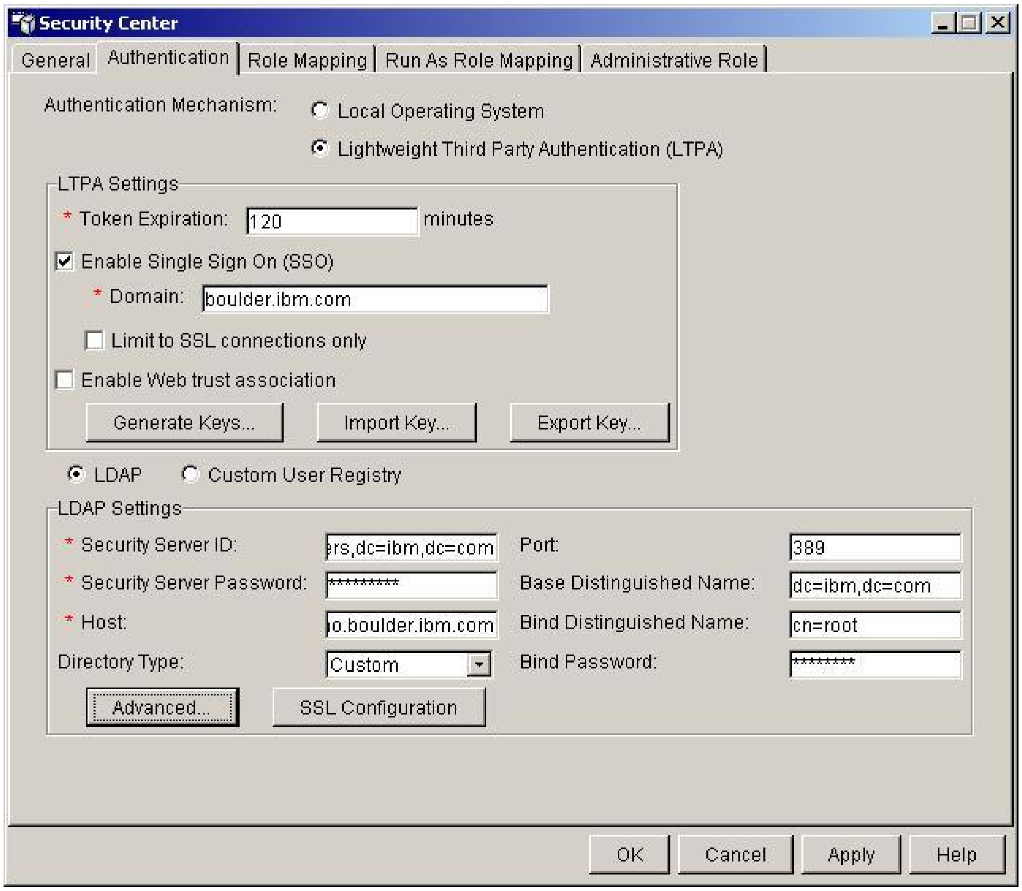
Certificate Mapping: Exact Distinguished Name

Certificate Filter:

Press the “Advanced” button from the Authentication tab of the Security Center. Update the following fields:

- Group Filter: (&(cn=%v)(objectclass=accessGroup))
- Group Member ID Map: accessGroup:member

Press “OK” to continue.



Authentication Mechanism: ○ Local Operating System ● Lightweight Third Party Authentication (LTPA)

LTPA Settings

* Token Expiration: 120 minutes

☑ Enable Single Sign On (SSO)

* Domain: boulder.ibm.com

☐ Limit to SSL connections only

☐ Enable Web trust association

● LDAP ○ Custom User Registry

LDAP Settings

* Security Server ID: rs,dc=ibm,dc=com

* Security Server Password: **********

* Host: o.boulder.ibm.com

Directory Type: Custom

Port: 389

Base Distinguished Name: dc=ibm,dc=com

Bind Distinguished Name: cn=root

Bind Password: *********

Notice that the “Directory Type” has been changed to “Custom” (due to the group object class changes). Press “OK” to exit the Security Center.

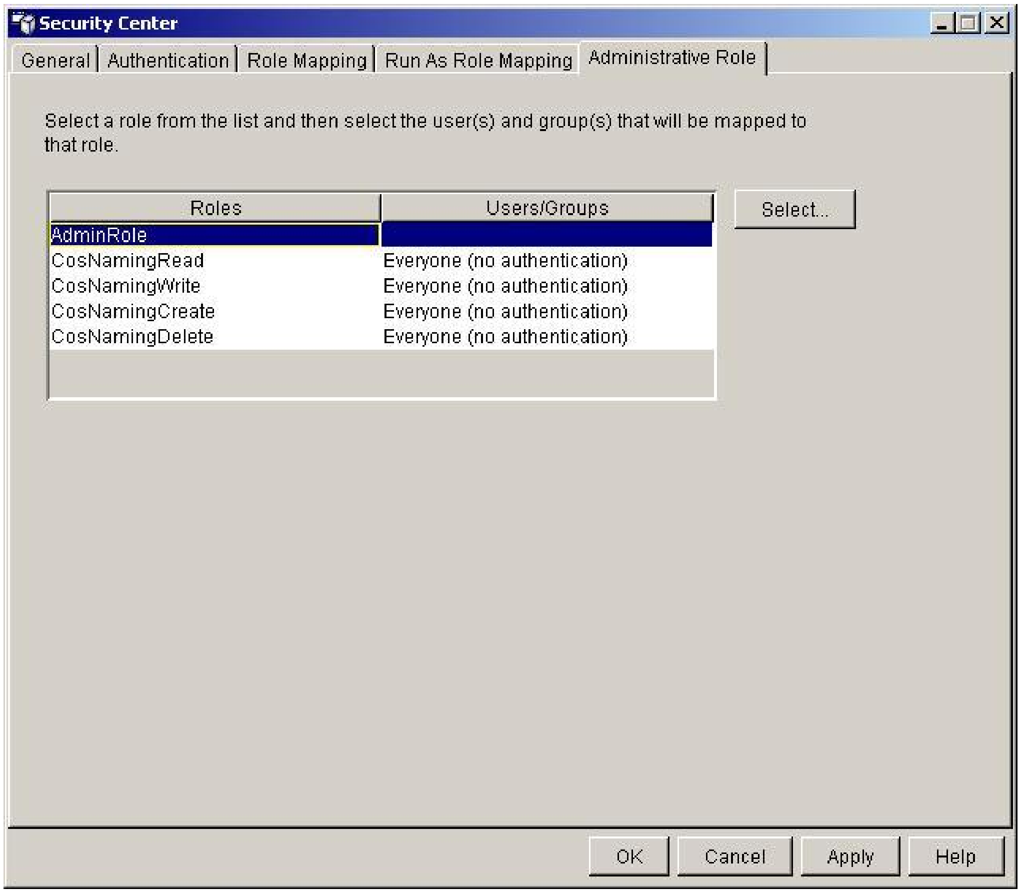
Exit the WAS Console.

Stop the WAS Admin Server using the Services control panel.

Restart the WAS Admin Server.

## Enable WAS Security

Ensure the WAS Admin Server is running (via the Services control panel).

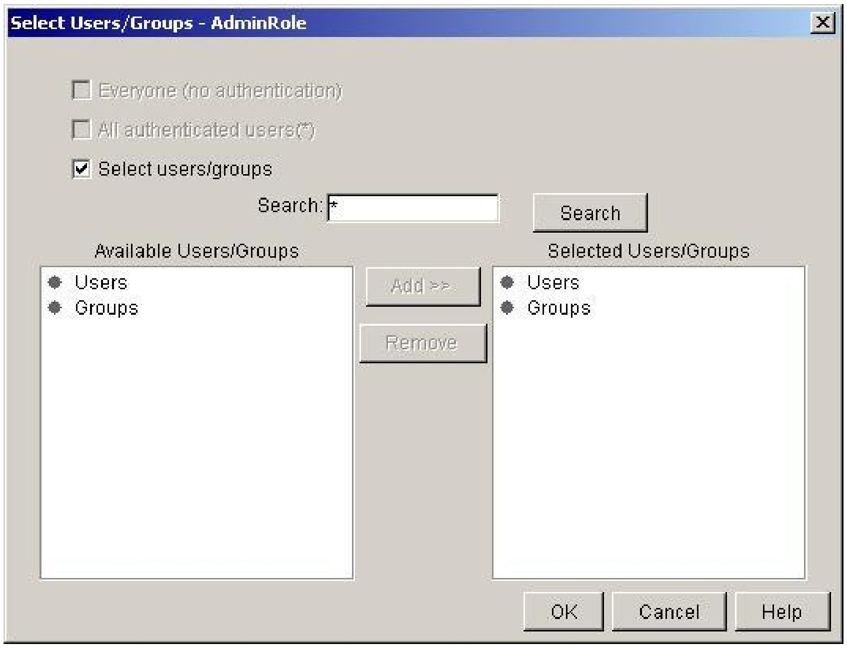


Select a role from the list and then select the user(s) and group(s) that will be mapped to that role.

| Roles | Users/Groups |
|---|---|
| AdminRole | |
| CosNamingRead | Everyone (no authentication) |
| CosNamingWrite | Everyone (no authentication) |
| CosNamingCreate | Everyone (no authentication) |
| CosNamingDelete | Everyone (no authentication) |

Start the WAS Admin Console. Start the Security Center. Select the “Administrative Role” tab.

Select the “AdminRole” entry and press “Select…”.



Select Users/Groups - AdminRole

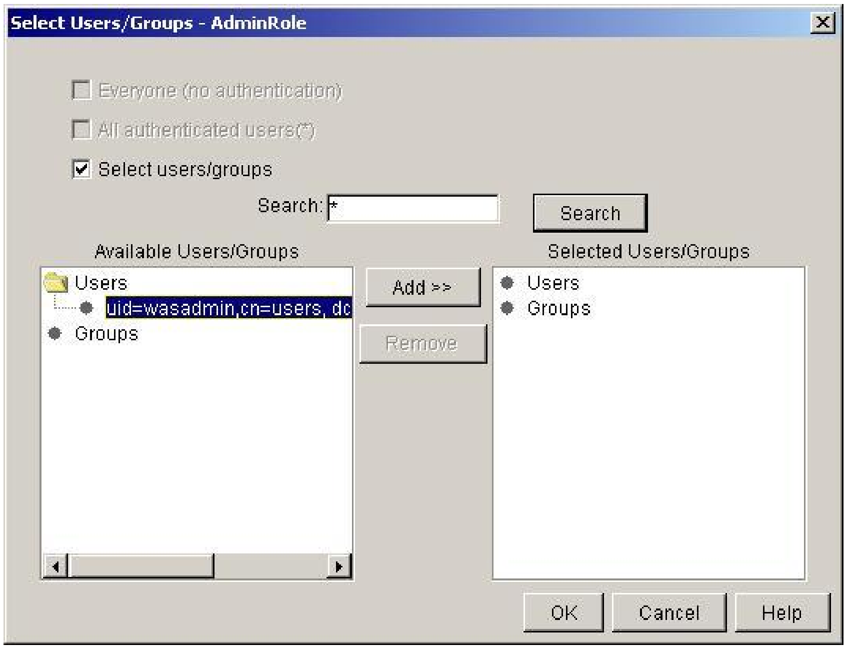
□ Everyone (no authentication)

□ All authenticated users(*)

☑ Select users/groups

Search: *

Select “Select users/groups”, enter “*” in the “Search” field and press “Search”.



Select Users/Groups - AdminRole

□ Everyone (no authentication)

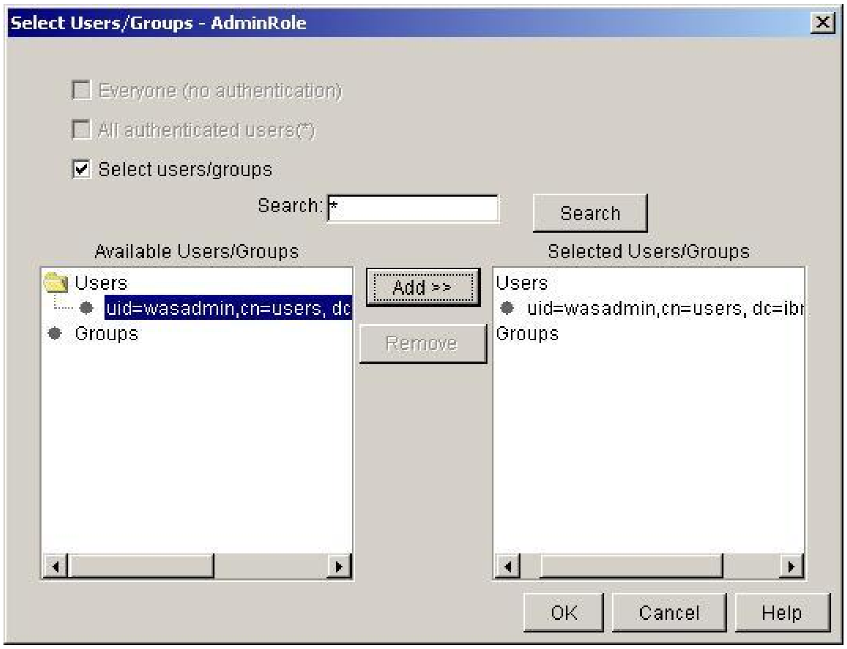
□ All authenticated users(*)

☑ Select users/groups

Search: *

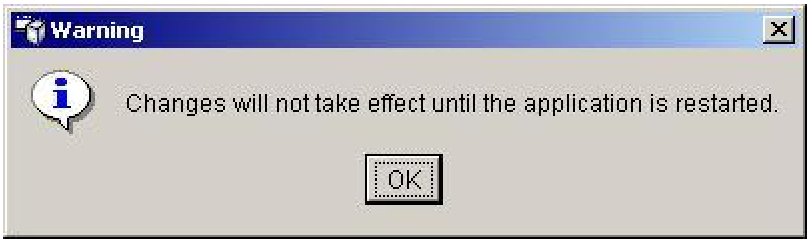
Users
- uid=wasadmin,cn=users, dc

Select the entry for “wasadmin” and press the “Add >>” button.



Select Users/Groups - AdminRole
□ Everyone (no authentication)
□ All authenticated users(*)
☑ Select users/groups
Search: *
Search
Available Users/Groups
Users
uid=wasadmin,cn=users, dc
Groups
Add >>
Remove
Selected Users/Groups
Users
uid=wasadmin,cn=users, dc=ibr
Groups
OK
Cancel
Help

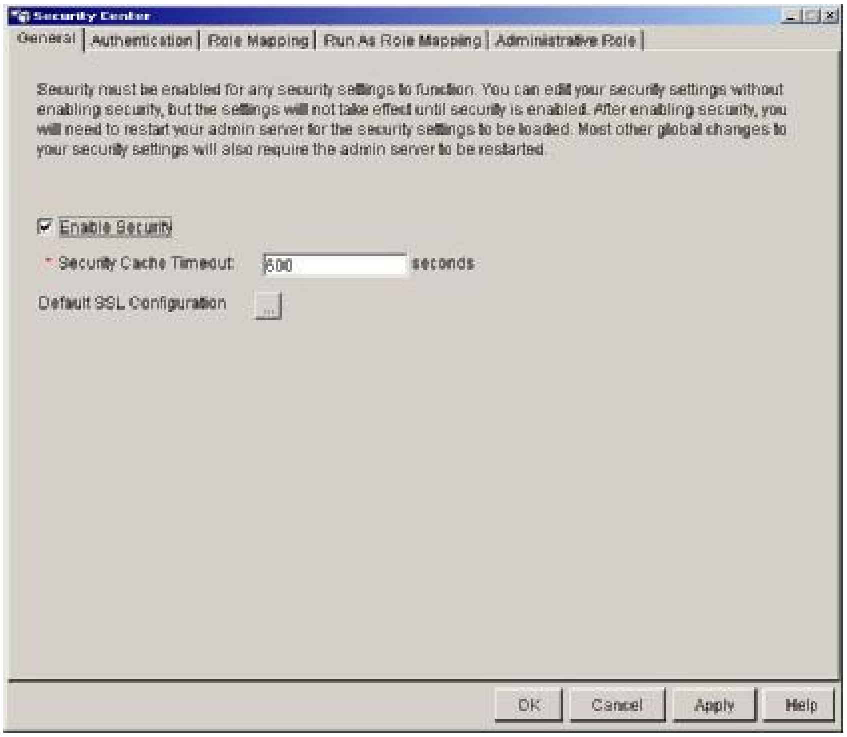
The entry for "wasadmin" should now appear in the right hand panel. Press "OK" to continue.



Warning

Changes will not take effect until the application is restarted.

Press "OK".



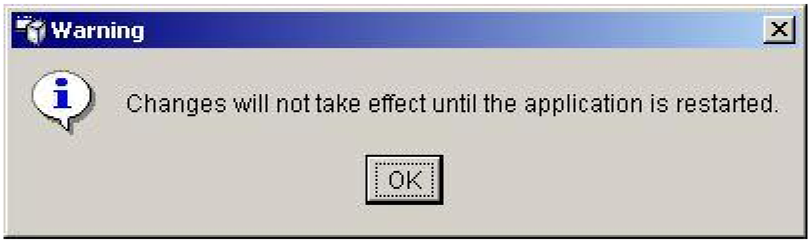
Security must be enabled for any security settings to function. You can edit your security settings without enabling security, but the settings will not take effect until security is enabled. After enabling security, you will need to restart your admin server for the security settings to be loaded. Most other global changes to your security settings will also require the admin server to be restarted.

☑ Enable Security

* Security Cache Timeout: 600 seconds

Default SSL Configuration ...

Select the “General” tab.  Select the “Enable Security” checkbox and press “Apply”.



Changes will not take effect until the application is restarted.

Press “OK”.

Exit the WAS Console.

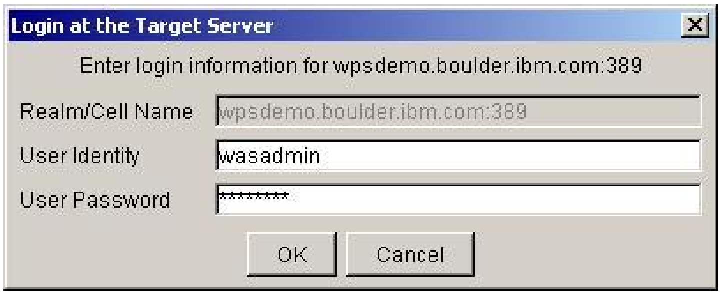
Stop the WAS Admin Server using the Services control panel.

Restart the WAS Admin Server.

### Check WAS Security Enabled

Ensure the WAS Admin Server is running (via the Services control panel).

Start the WAS Console.



Login at the Target Server

Enter login information for wpsdemo.boulder.ibm.com:389

Realm/Cell Name: wpsdemo.boulder.ibm.com:389

User Identity: wasadmin

User Password: ********

Now that security has been enabled you should receive a prompt requesting login information when you start the WAS Console.

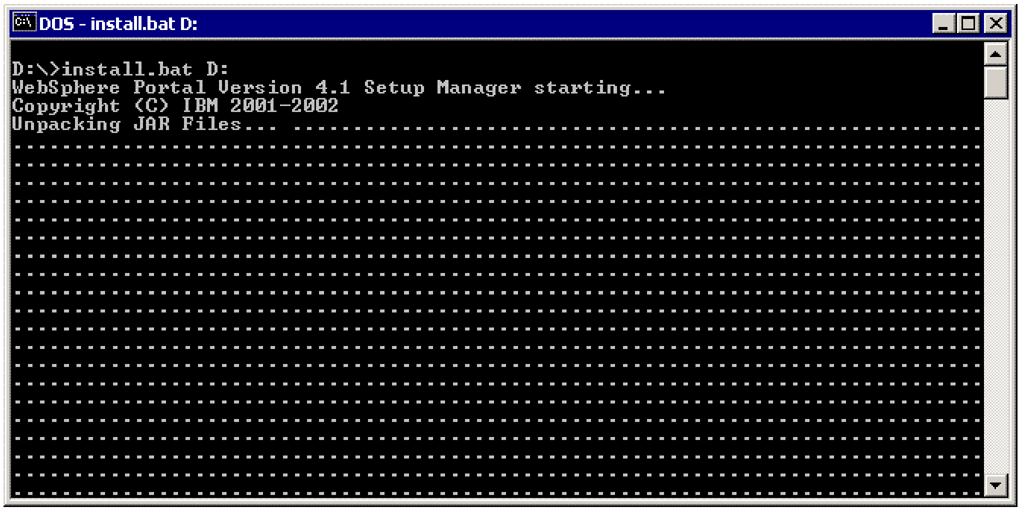
Enter “wasadmin” and “passw0rd” and press “OK” to start the console.

Exit the WAS Console.

## Step 5 Install WebSphere Personalization and WPS

Reload the first WPS 4.1.2 installation CD. Ensure DB2, IHS, LDAP and WAS are all running.

### Start WebSphere Personalization and WPS Install



DOS - install.bat D:

```
D:\>install.bat D:
WebSphere Portal Version 4.1 Setup Manager starting...
Copyright (C) IBM 2001-2002
Unpacking JAR Files... .........................................................
................................................................................
................................................................................
................................................................................
................................................................................
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```
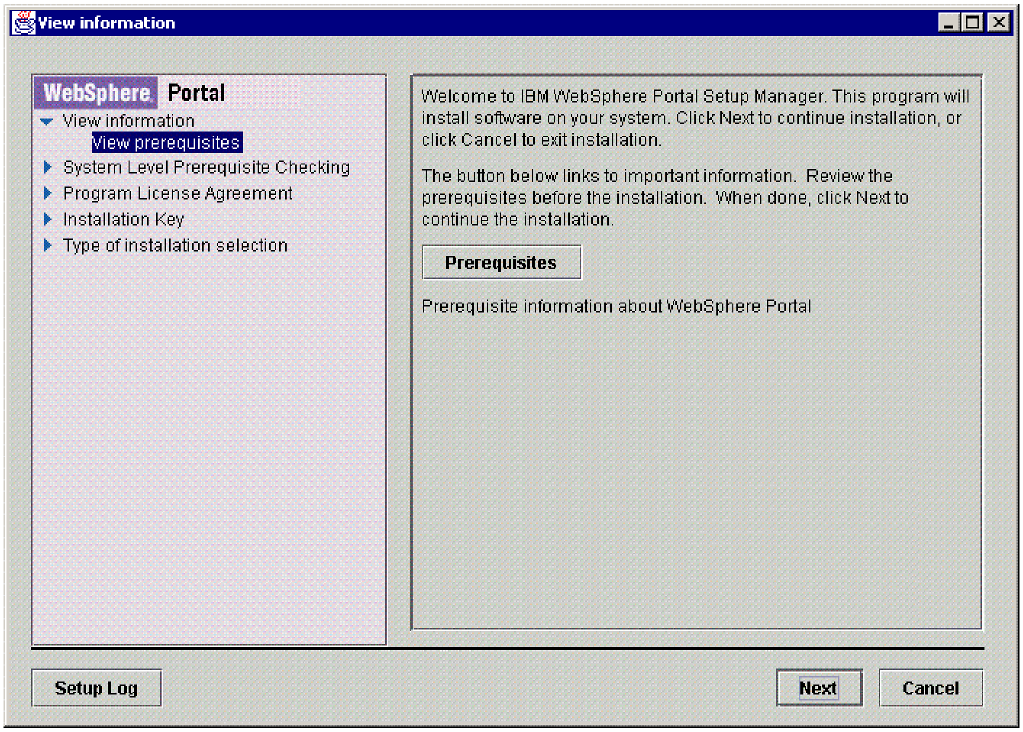

Run the WPS Installation program again.

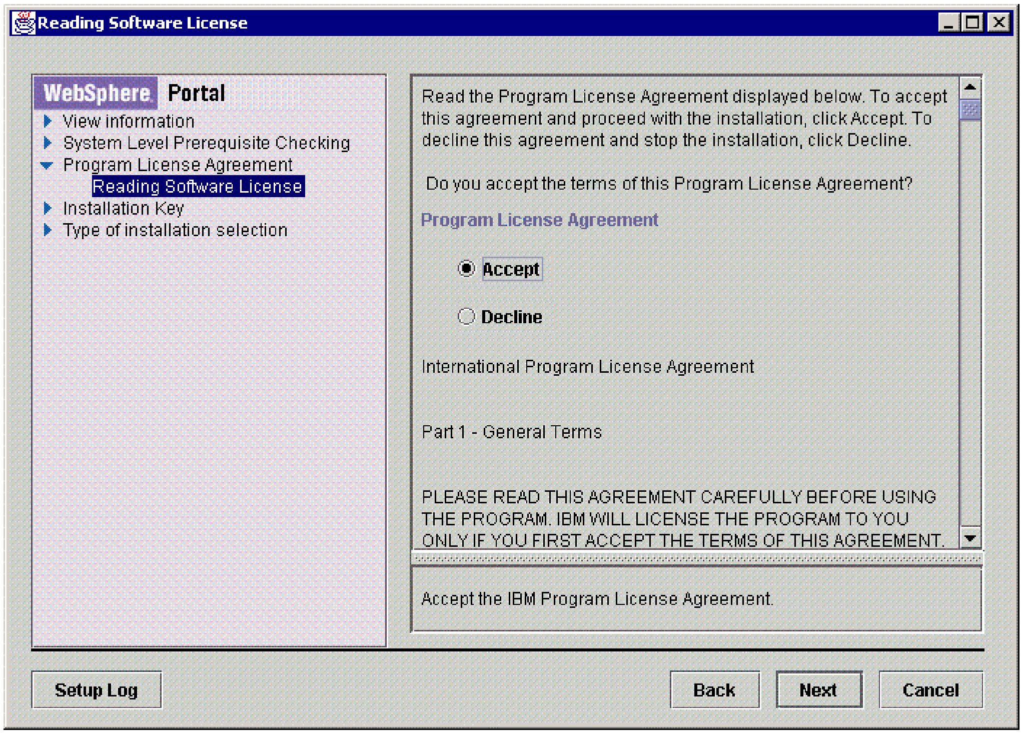


Welcome to IBM WebSphere Portal Setup Manager. This program will install software on your system. Click Next to continue installation, or click Cancel to exit installation.

The button below links to important information. Review the prerequisites before the installation. When done, click Next to continue the installation.

Prerequisite information about WebSphere Portal

Press “Next” to continue.



Read the Program License Agreement displayed below. To accept this agreement and proceed with the installation, click Accept. To decline this agreement and stop the installation, click Decline.

Do you accept the terms of this Program License Agreement?

● Accept

○ Decline

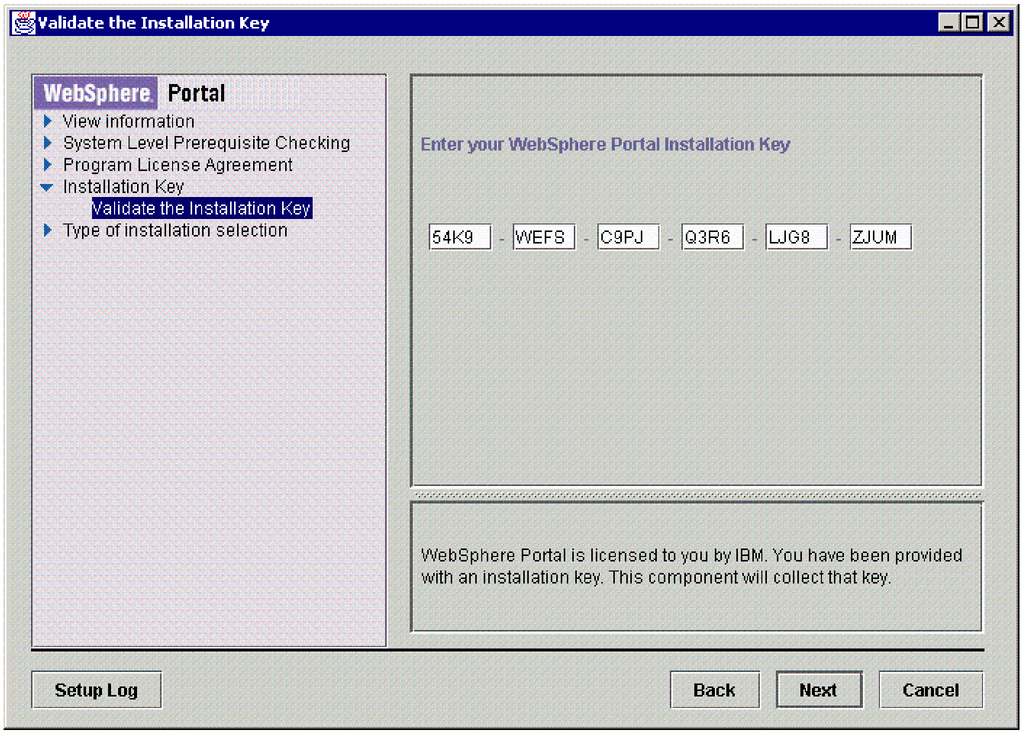
International Program License Agreement

Part 1 - General Terms

PLEASE READ THIS AGREEMENT CAREFULLY BEFORE USING THE PROGRAM. IBM WILL LICENSE THE PROGRAM TO YOU ONLY IF YOU FIRST ACCEPT THE TERMS OF THIS AGREEMENT.

Accept the IBM Program License Agreement.

Select “Accept” and press “Next”.



Validate the Installation Key

WebSphere Portal

- View information
- System Level Prerequisite Checking
- Program License Agreement
- Installation Key
  - Validate the Installation Key
- Type of installation selection

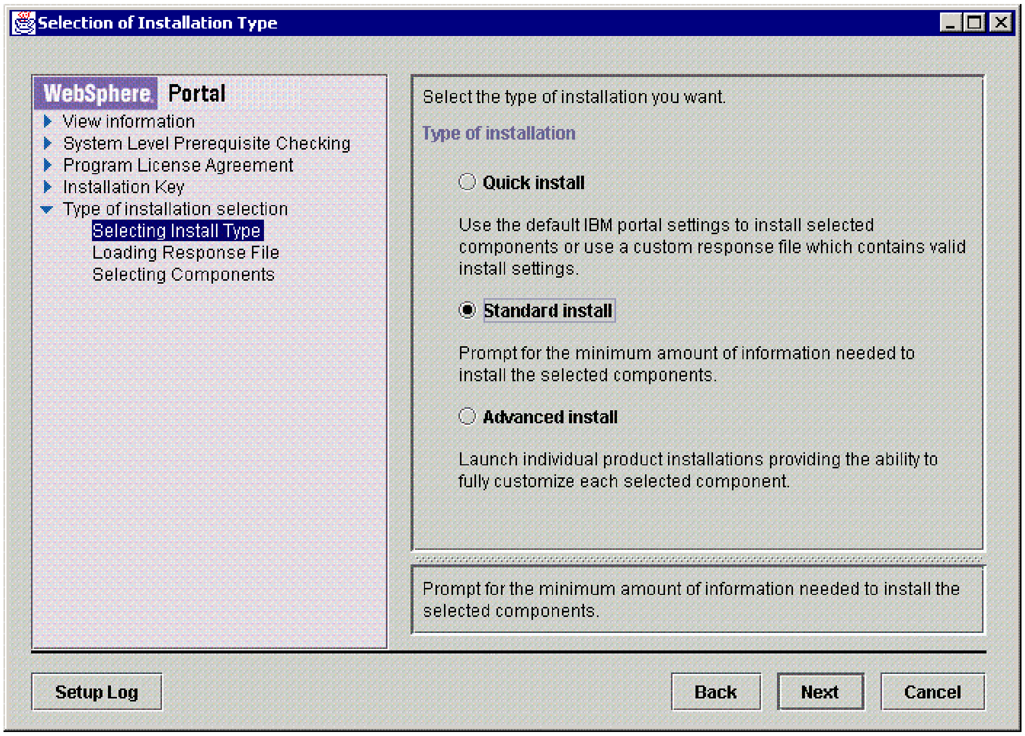
Enter your WebSphere Portal Installation Key

54K9 - WEFS - C9PJ - Q3R6 - LJG8 - ZJUM

WebSphere Portal is licensed to you by IBM. You have been provided with an installation key. This component will collect that key.

Enter the license key and press “Next”. A valid license key for WPS 4.1.2 Enable (IBM internal use only!!) is:

```
54K9   WEFS   C9PJ   Q3R6   LJG8   ZJUM
```



Selection of Installation Type

WebSphere Portal

- View information
- System Level Prerequisite Checking
- Program License Agreement
- Installation Key
- Type of installation selection
  - Selecting Install Type
  - Loading Response File
  - Selecting Components

Select the type of installation you want.

Type of installation

○ Quick install

Use the default IBM portal settings to install selected components or use a custom response file which contains valid install settings.

● Standard install

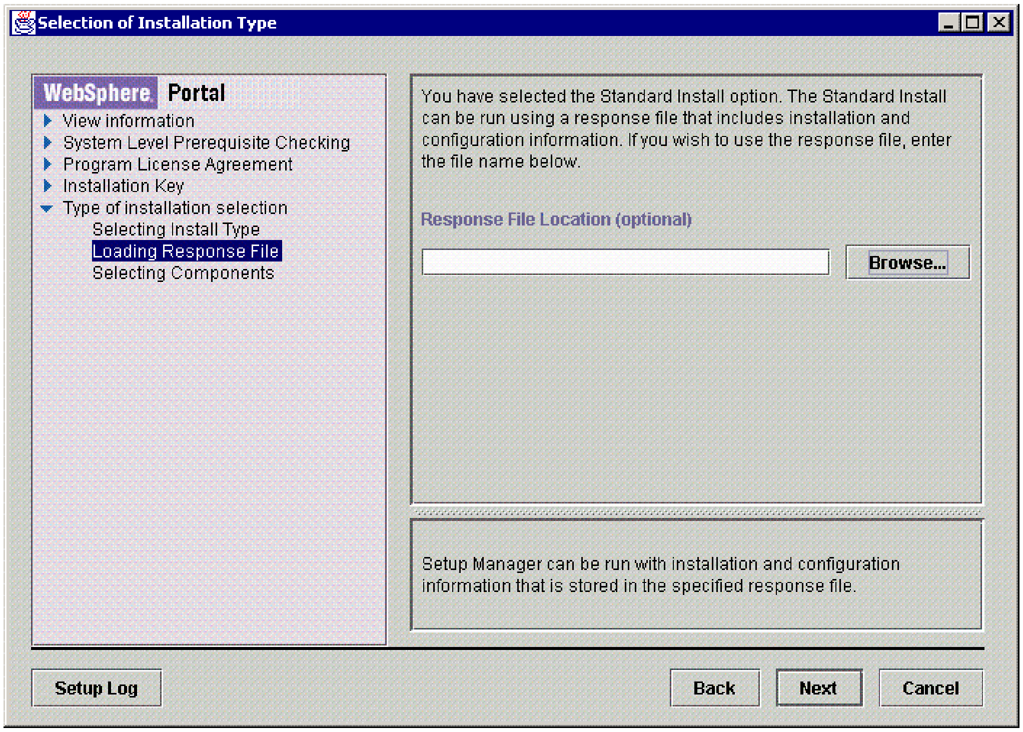
Prompt for the minimum amount of information needed to install the selected components.

○ Advanced install

Launch individual product installations providing the ability to fully customize each selected component.

Prompt for the minimum amount of information needed to install the selected components.

Select “Standard install” and press “Next”.



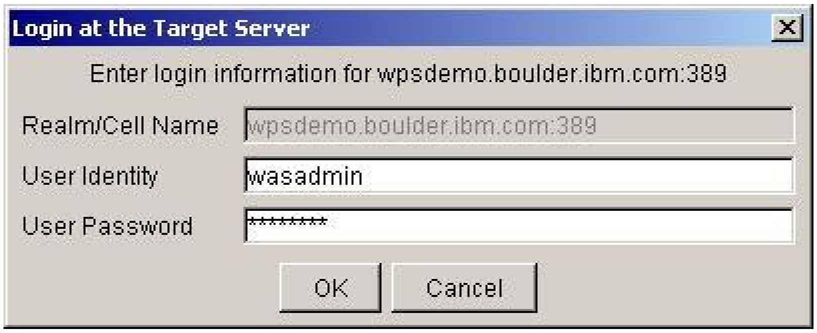
Selection of Installation Type
WebSphere Portal
View information
System Level Prerequisite Checking
Program License Agreement
Installation Key
Type of installation selection
Selecting Install Type
Loading Response File
Selecting Components

You have selected the Standard Install option. The Standard Install can be run using a response file that includes installation and configuration information. If you wish to use the response file, enter the file name below.

Response File Location (optional)

Setup Manager can be run with installation and configuration information that is stored in the specified response file.

Leave the field blank and press “Next”.



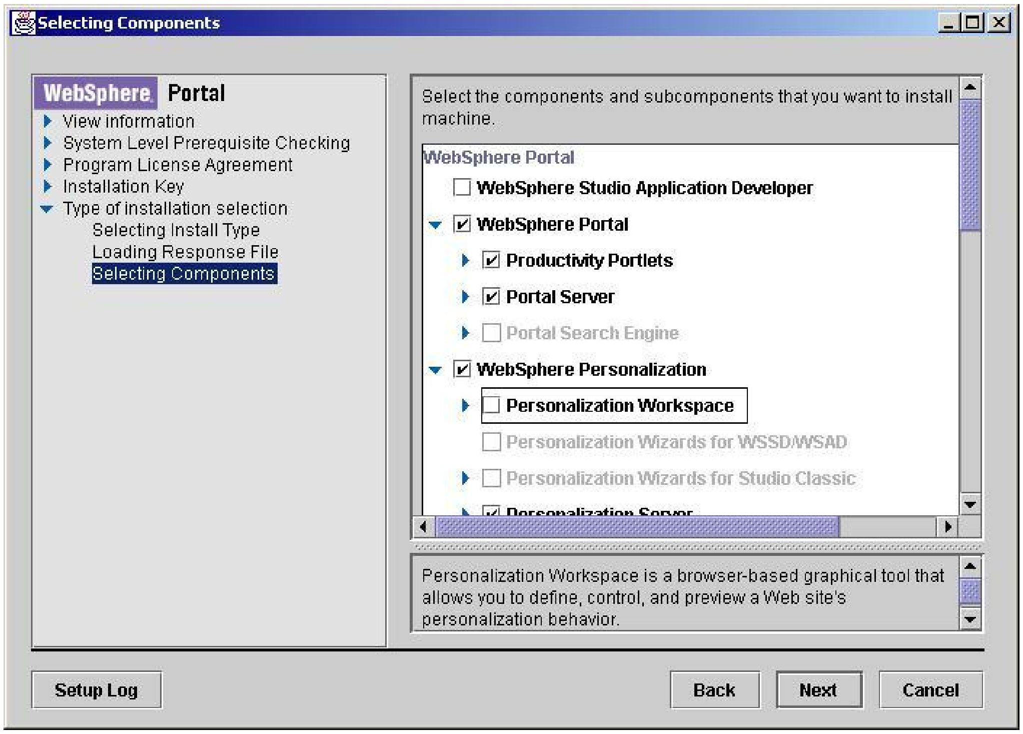
Enter login information for wpsdemo.boulder.ibm.com:389

Realm/Cell Name wpsdemo.boulder.ibm.com:389

User Identity wasadmin

User Password ********

Enter “wasadmin” and “passw0rd” and press “OK” to continue.



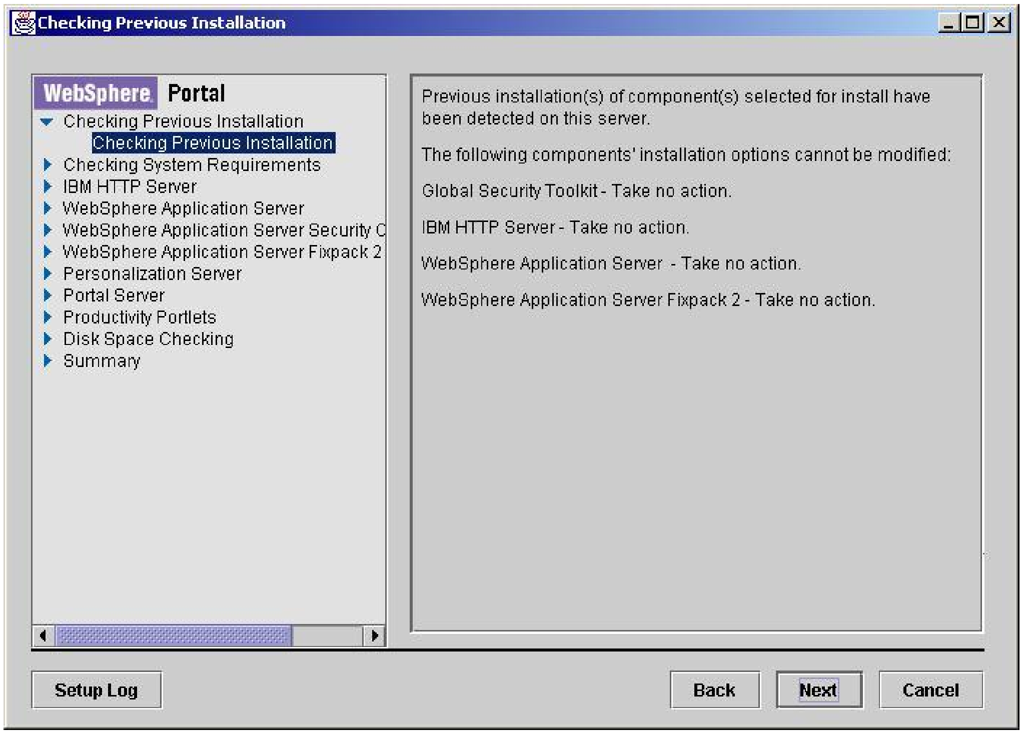
Select the components and subcomponents that you want to install machine.

WebSphere Portal

- □ WebSphere Studio Application Developer
- ☑ WebSphere Portal
  - ☑ Productivity Portlets
  - ☑ Portal Server
  - □ Portal Search Engine
- ☑ WebSphere Personalization
  - □ Personalization Workspace
  - □ Personalization Wizards for WSSD/WSAD
  - □ Personalization Wizards for Studio Classic
  - ☑ Personalization Server

Personalization Workspace is a browser-based graphical tool that allows you to define, control, and preview a Web site's personalization behavior.

Select the checkbox next to "WebSphere Portal" (other items will be automatically selected). Press "Next" to continue.


Checking Previous Installation
WebSphere Portal
Checking Previous Installation
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
WebSphere Application Server
WebSphere Application Server Security C
WebSphere Application Server Fixpack 2
Personalization Server
Portal Server
Productivity Portlets
Disk Space Checking
Summary
Setup Log
Back
Next
Cancel

Previous installation(s) of component(s) selected for install have been detected on this server.

The following components' installation options cannot be modified:

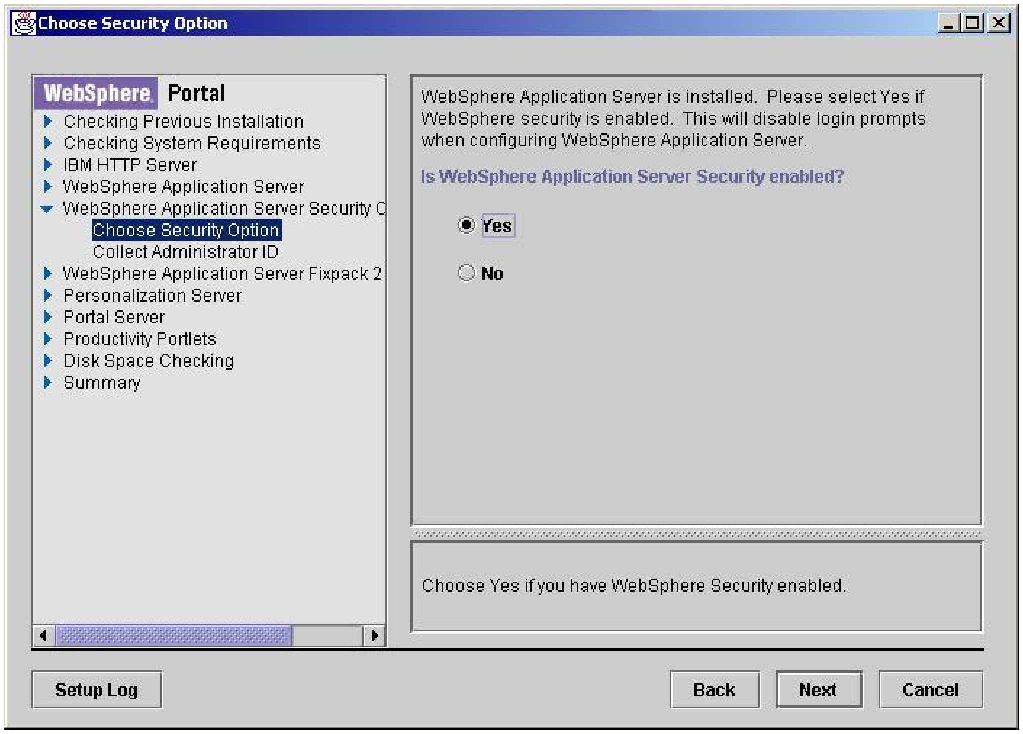
Global Security Toolkit - Take no action.

IBM HTTP Server - Take no action.

WebSphere Application Server - Take no action.

WebSphere Application Server Fixpack 2 - Take no action.

Press "Next" to acknowledge that the correct versions of GSKIT, IHS, and LDAP are already installed.



WebSphere Application Server is installed. Please select Yes if WebSphere security is enabled. This will disable login prompts when configuring WebSphere Application Server.

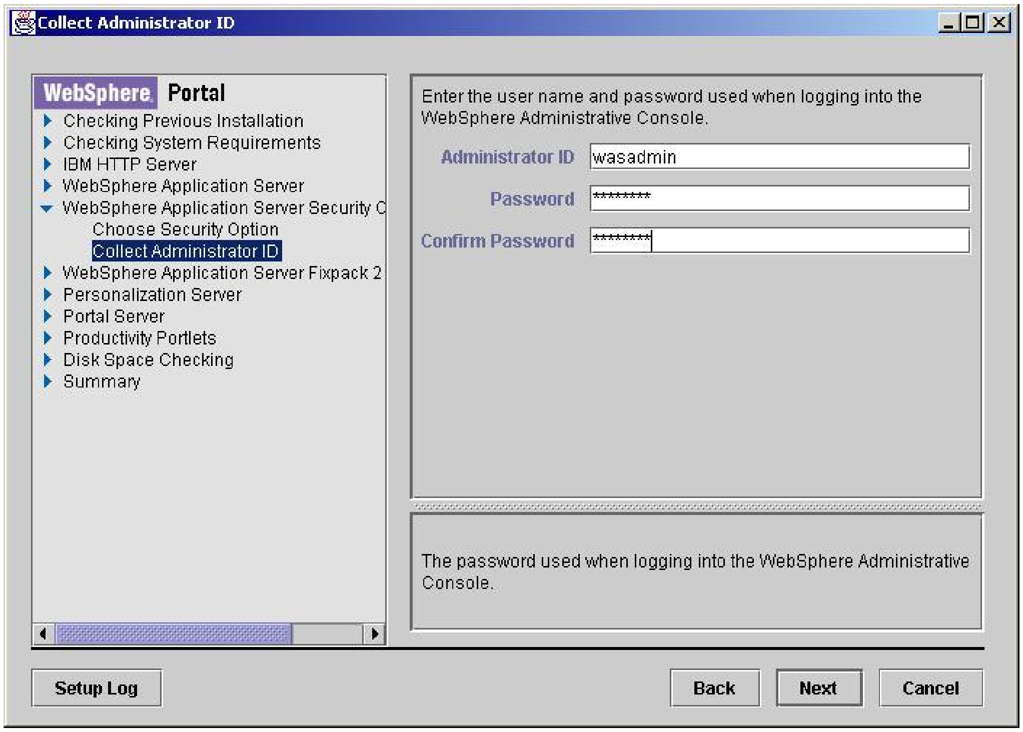
Is WebSphere Application Server Security enabled?

● Yes

○ No

Choose Yes if you have WebSphere Security enabled.

Ensure "Yes" is selected and press "Next" to continue.



Enter the user name and password used when logging into the WebSphere Administrative Console.

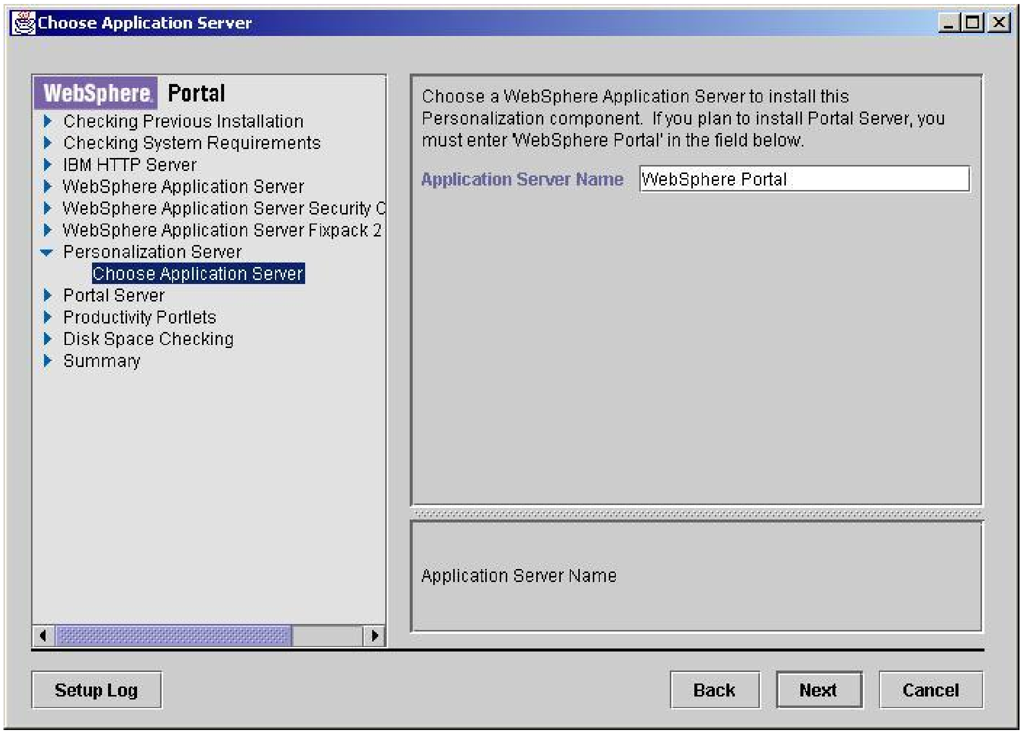
Administrator ID: wasadmin

Password: ********

Confirm Password: ********

The password used when logging into the WebSphere Administrative Console.

Enter "wasadmin" as the "Administrator ID" and "passw0rd" as the associated password. Press "Next" to continue.



Choose Application Server

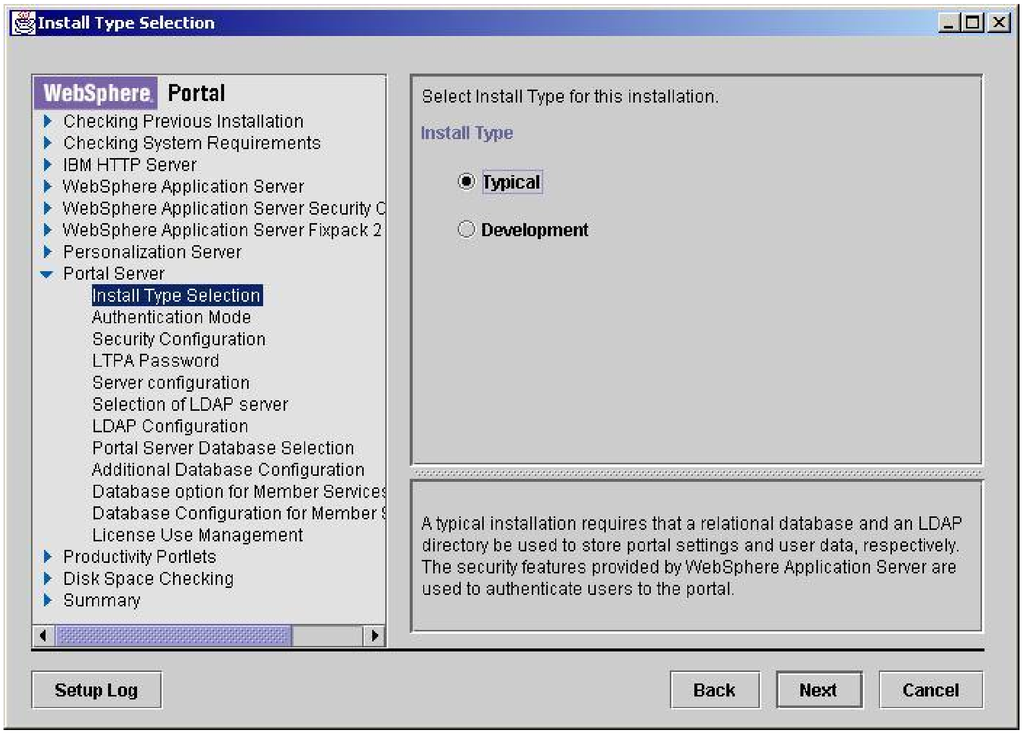
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
WebSphere Application Server
WebSphere Application Server Security C
WebSphere Application Server Fixpack 2
Personalization Server
Choose Application Server
Portal Server
Productivity Portlets
Disk Space Checking
Summary
Setup Log
Back
Next
Cancel

Choose a WebSphere Application Server to install this Personalization component. If you plan to install Portal Server, you must enter 'WebSphere Portal' in the field below.

Application Server Name: WebSphere Portal

Application Server Name

Press “Next” to accept the default application server name for WPS.



Install Type Selection

WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
WebSphere Application Server
WebSphere Application Server Security C
WebSphere Application Server Fixpack 2
Personalization Server
Portal Server
Install Type Selection
Authentication Mode
Security Configuration
LTPA Password
Server configuration
Selection of LDAP server
LDAP Configuration
Portal Server Database Selection
Additional Database Configuration
Database option for Member Services
Database Configuration for Member S
License Use Management
Productivity Portlets
Disk Space Checking
Summary
Setup Log
Back
Next
Cancel

Select Install Type for this installation.

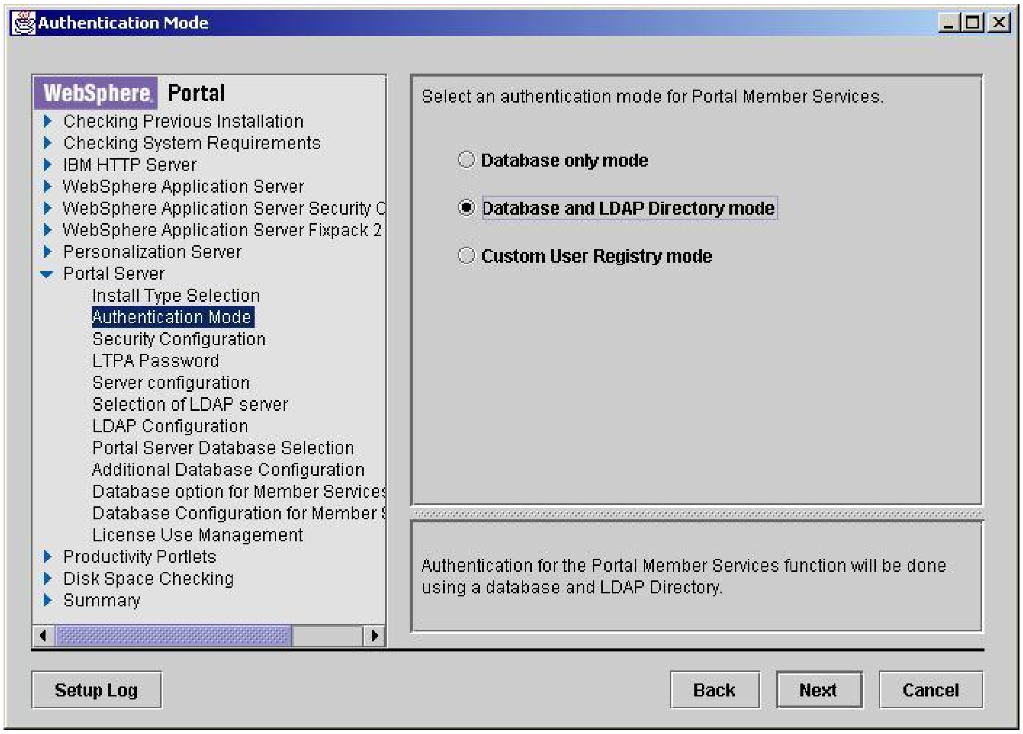
Install Type

● Typical

○ Development

A typical installation requires that a relational database and an LDAP directory be used to store portal settings and user data, respectively. The security features provided by WebSphere Application Server are used to authenticate users to the portal.

Ensure “Typical” is selected and press “Next” to continue.



Select an authentication mode for Portal Member Services.

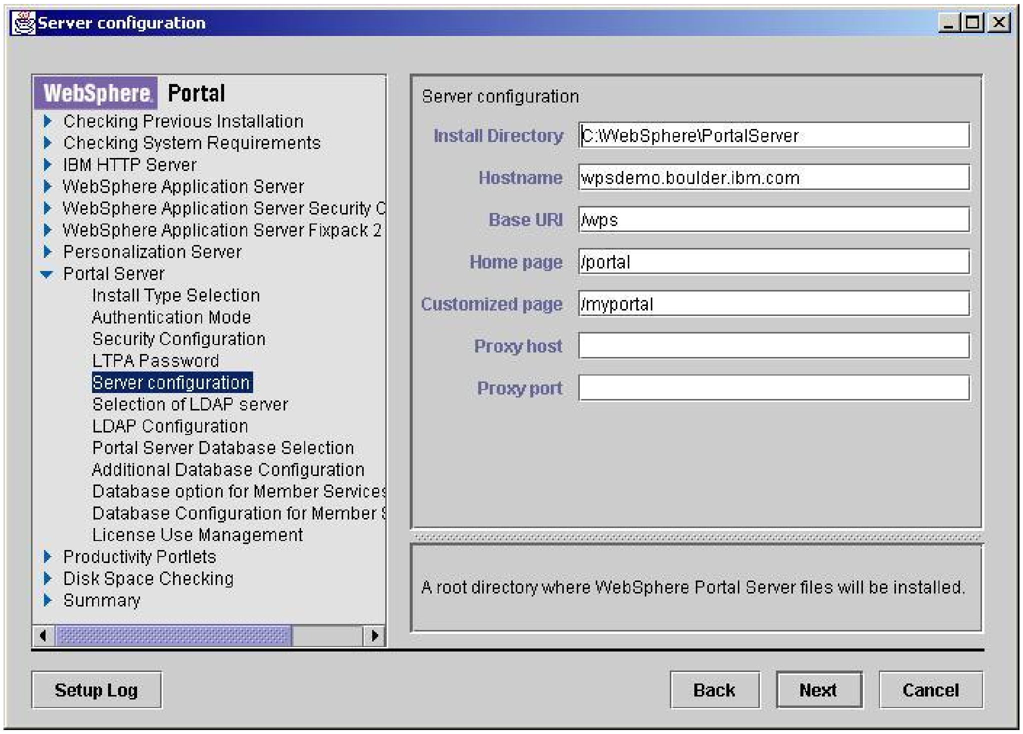
○ Database only mode

● Database and LDAP Directory mode

○ Custom User Registry mode

Authentication for the Portal Member Services function will be done using a database and LDAP Directory.

Ensure “Database and LDAP Directory mode” is selected and press “Next” to continue.

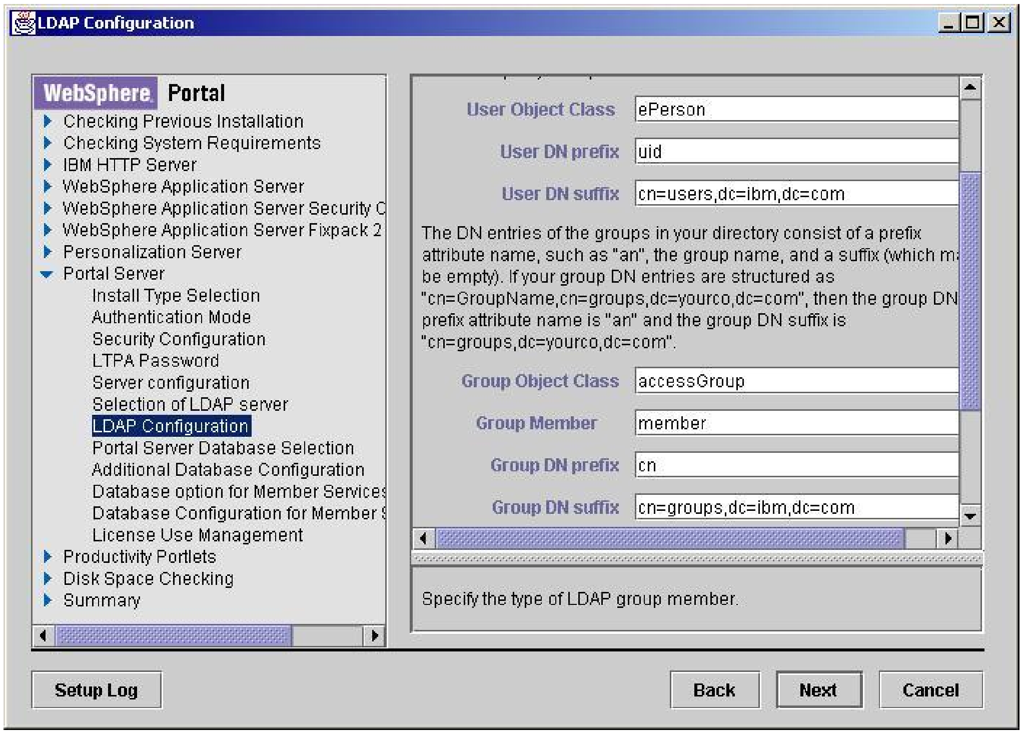


Server configuration

| | |
|---|---|
| Install Directory | C:\WebSphere\PortalServer |
| Hostname | wpsdemo.boulder.ibm.com |
| Base URI | /wps |
| Home page | /portal |
| Customized page | /myportal |
| Proxy host | |
| Proxy port | |

A root directory where WebSphere Portal Server files will be installed.

Press “Next” to accept the default WPS server configuration parameters.



User Object Class: ePerson

User DN prefix: uid

User DN suffix: cn=users,dc=ibm,dc=com

The DN entries of the groups in your directory consist of a prefix attribute name, such as "cn", the group name, and a suffix (which m be empty). If your group DN entries are structured as "cn=GroupName,cn=groups,dc=yourco,dc=com", then the group DN prefix attribute name is "cn" and the group DN suffix is "cn=groups,dc=yourco,dc=com".

Group Object Class: accessGroup

Group Member: member

Group DN prefix: cn

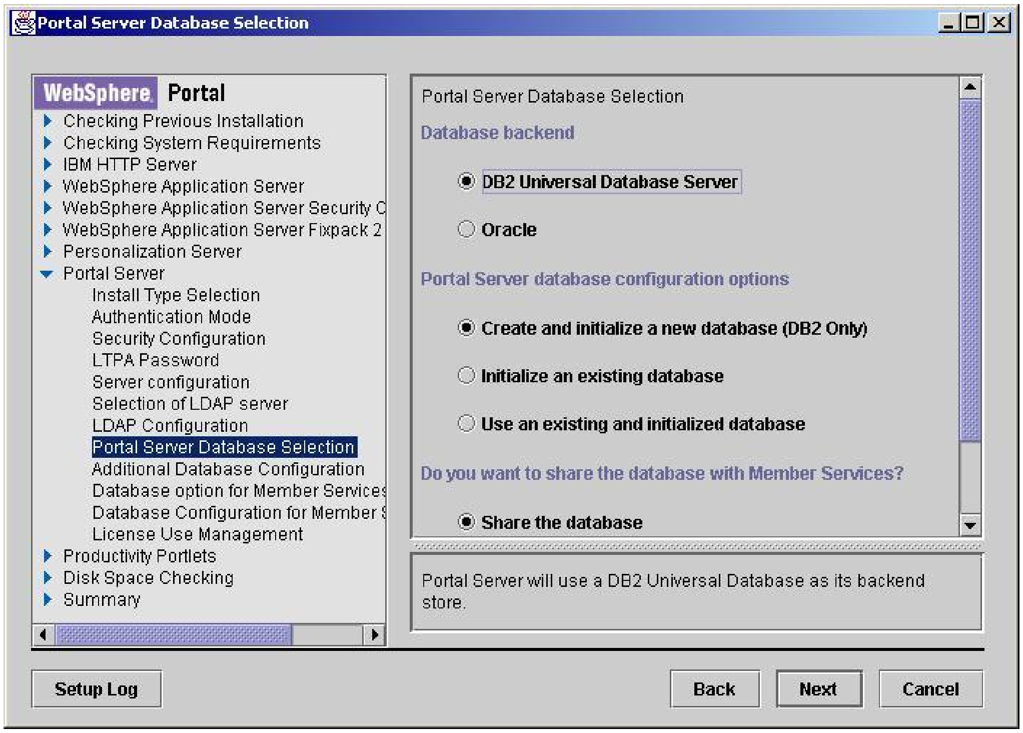
Group DN suffix: cn=groups,dc=ibm,dc=com

Specify the type of LDAP group member.

Modify the following field values:

- User Object Class: ePerson
- Group Object Class: accessGroup
- Group Member: member

Press “Next” to continue.


Portal Server Database Selection
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
WebSphere Application Server
WebSphere Application Server Security C
WebSphere Application Server Fixpack 2
Personalization Server
Portal Server
Install Type Selection
Authentication Mode
Security Configuration
LTPA Password
Server configuration
Selection of LDAP server
LDAP Configuration
Portal Server Database Selection
Additional Database Configuration
Database option for Member Services
Database Configuration for Member S
License Use Management
Productivity Portlets
Disk Space Checking
Summary
Setup Log
Back
Next
Cancel

Portal Server Database Selection

Database backend

● DB2 Universal Database Server

○ Oracle

Portal Server database configuration options

● Create and initialize a new database (DB2 Only)

○ Initialize an existing database

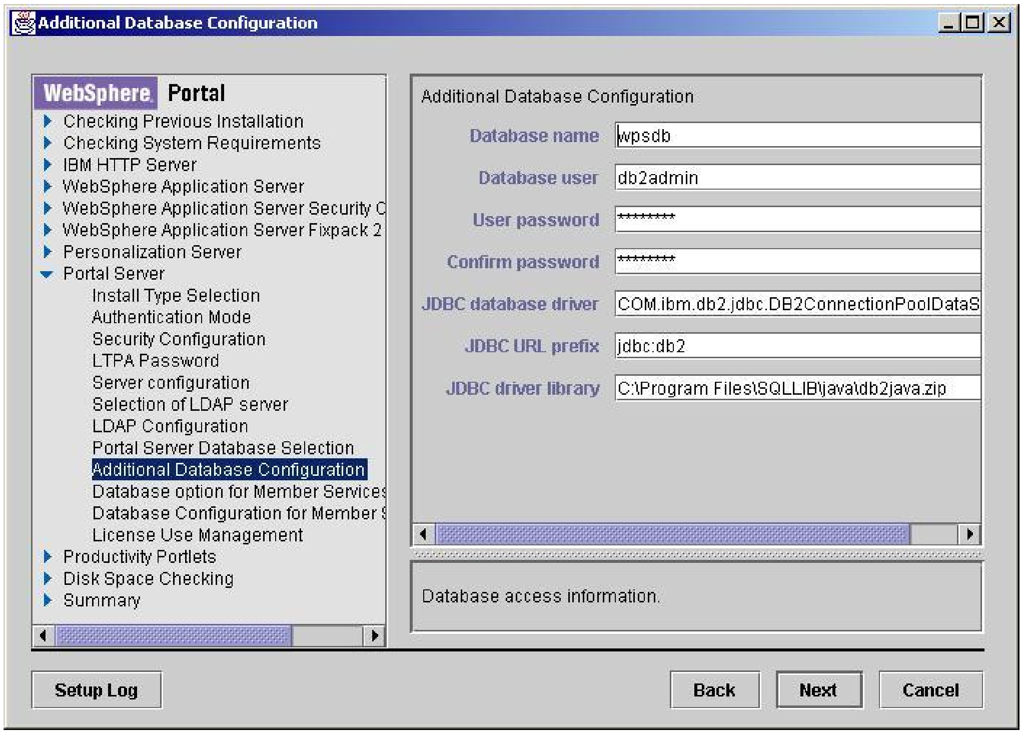
○ Use an existing and initialized database

Do you want to share the database with Member Services?

● Share the database

Portal Server will use a DB2 Universal Database as its backend store.

Press “Next” to accept the default WPS database options.


Additional Database Configuration
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
WebSphere Application Server
WebSphere Application Server Security C
WebSphere Application Server Fixpack 2
Personalization Server
Portal Server
Install Type Selection
Authentication Mode
Security Configuration
LTPA Password
Server configuration
Selection of LDAP server
LDAP Configuration
Portal Server Database Selection
Additional Database Configuration
Database option for Member Services
Database Configuration for Member S
License Use Management
Productivity Portlets
Disk Space Checking
Summary
Setup Log
Back
Next
Cancel

Additional Database Configuration

Database name: wpsdb

Database user: db2admin

User password: ********

Confirm password: ********

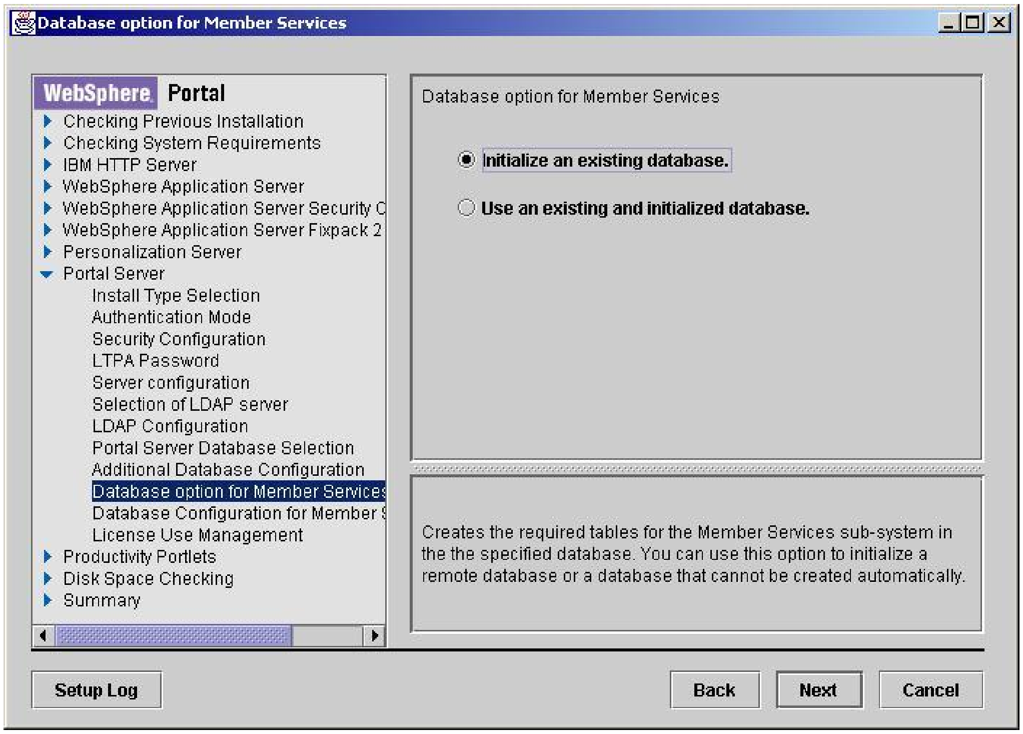
JDBC database driver: COM.ibm.db2.jdbc.DB2ConnectionPoolDataS

JDBC URL prefix: jdbc:db2

JDBC driver library: C:\Program Files\SQLLIB\java\db2java.zip

Database access information.

Enter “db2admin” as the Database user and “passw0rd” as the associated password. Press “Next” to continue.


Database option for Member Services
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
WebSphere Application Server
WebSphere Application Server Security C
WebSphere Application Server Fixpack 2
Personalization Server
Portal Server
Install Type Selection
Authentication Mode
Security Configuration
LTPA Password
Server configuration
Selection of LDAP server
LDAP Configuration
Portal Server Database Selection
Additional Database Configuration
Database option for Member Services
Database Configuration for Member S
License Use Management
Productivity Portlets
Disk Space Checking
Summary
Setup Log
Back
Next
Cancel

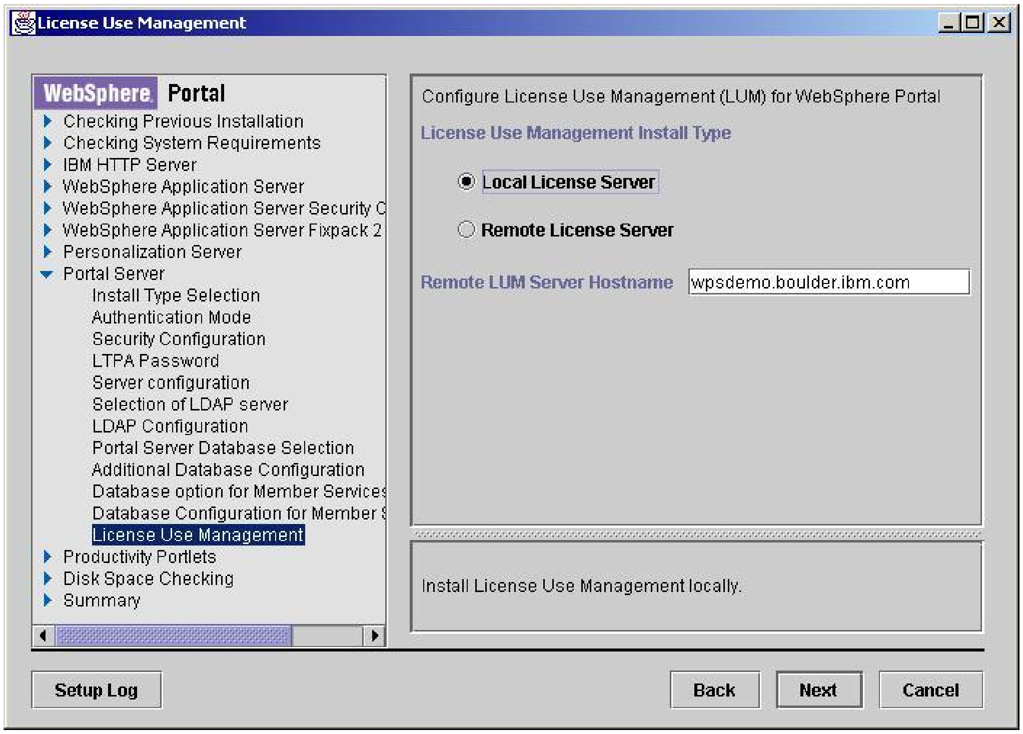
Database option for Member Services

● Initialize an existing database.

○ Use an existing and initialized database.

Creates the required tables for the Member Services sub-system in the the specified database. You can use this option to initialize a remote database or a database that cannot be created automatically.

Press “Next” to select the default option for the member services database.



Configure License Use Management (LUM) for WebSphere Portal

License Use Management Install Type

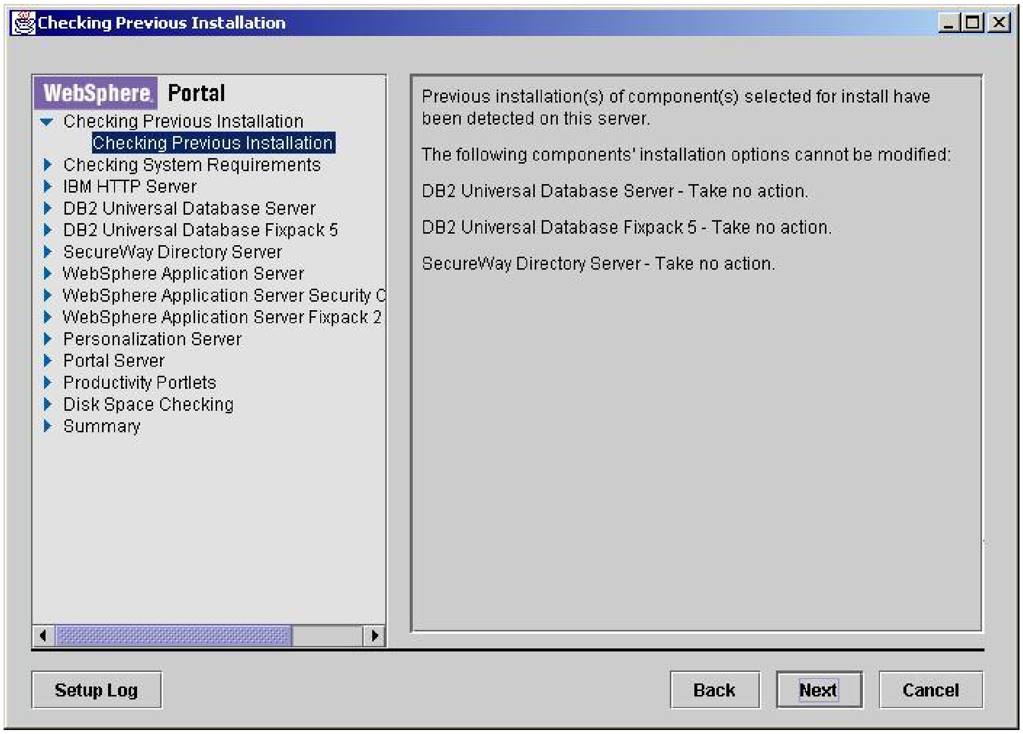
● Local License Server

○ Remote License Server

Remote LUM Server Hostname: wpsdemo.boulder.ibm.com

Install License Use Management locally.

Ensure “Local License Server” is selected and press “Next” to continue.


Checking Previous Installation
WebSphere Portal
Checking Previous Installation
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
DB2 Universal Database Server
DB2 Universal Database Fixpack 5
SecureWay Directory Server
WebSphere Application Server
WebSphere Application Server Security C
WebSphere Application Server Fixpack 2
Personalization Server
Portal Server
Productivity Portlets
Disk Space Checking
Summary
Setup Log
Back
Next
Cancel

Previous installation(s) of component(s) selected for install have been detected on this server.

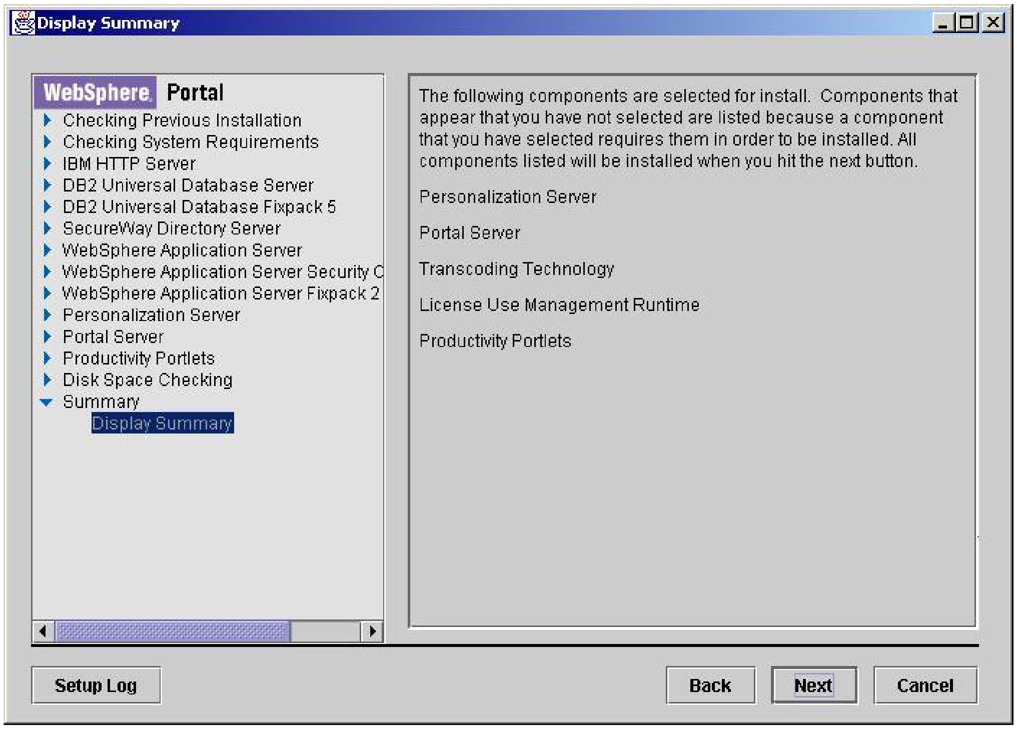
The following components' installation options cannot be modified:

DB2 Universal Database Server - Take no action.

DB2 Universal Database Fixpack 5 - Take no action.

SecureWay Directory Server - Take no action.

Press “Next” to acknowledge that the correct versions of DB2 and LDAP are already installed.


Display Summary
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
DB2 Universal Database Server
DB2 Universal Database Fixpack 5
SecureWay Directory Server
WebSphere Application Server
WebSphere Application Server Security C
WebSphere Application Server Fixpack 2
Personalization Server
Portal Server
Productivity Portlets
Disk Space Checking
Summary
Display Summary
Setup Log
Back
Next
Cancel

The following components are selected for install. Components that appear that you have not selected are listed because a component that you have selected requires them in order to be installed. All components listed will be installed when you hit the next button.

Personalization Server

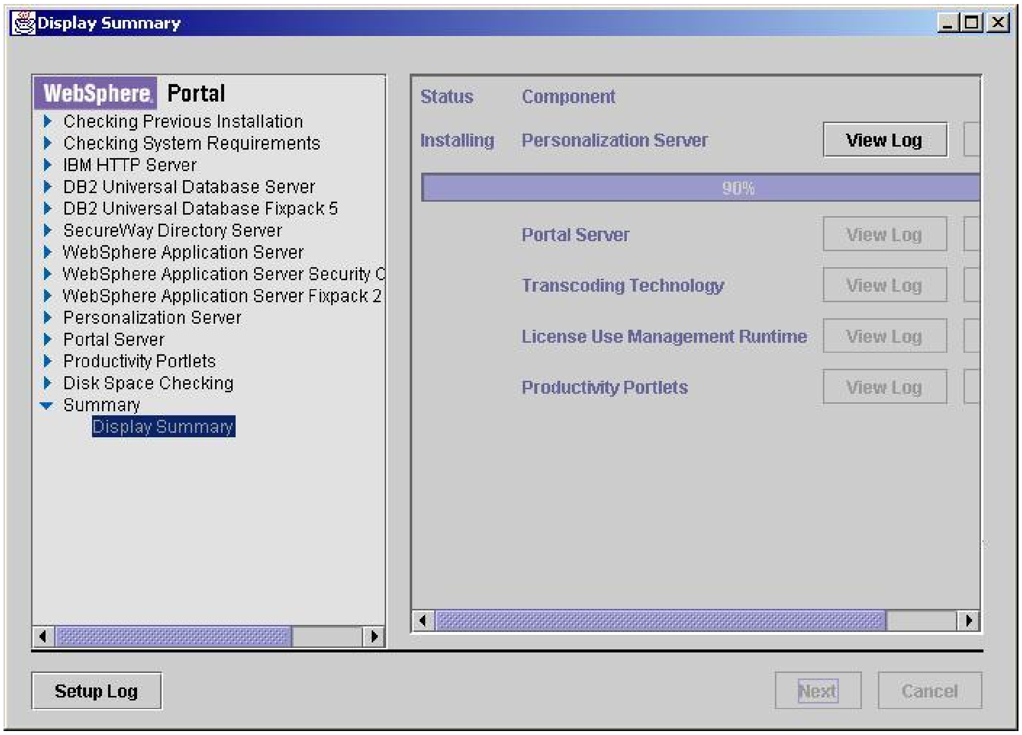
Portal Server

Transcoding Technology

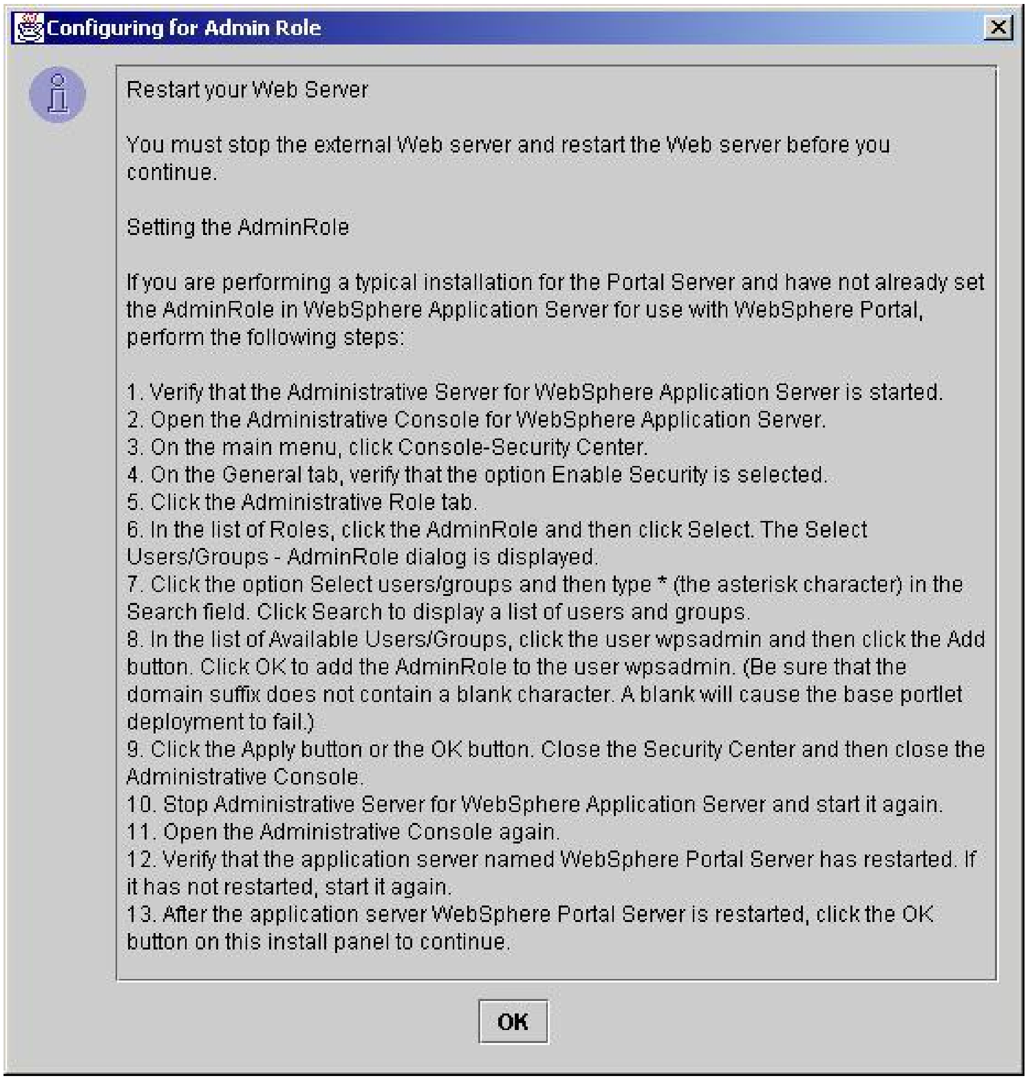
License Use Management Runtime

Productivity Portlets

Press “Next” to start the installation of the selected products.



During the installation a screen is shown summarizing the progress of the installation.



Restart your Web Server

You must stop the external Web server and restart the Web server before you continue.

Setting the AdminRole

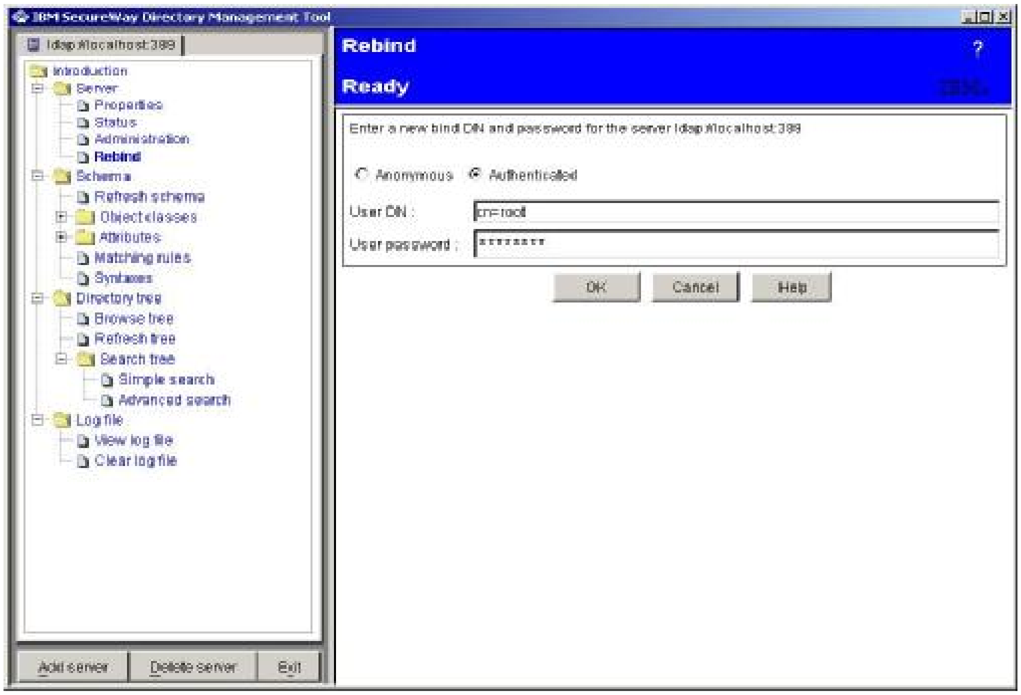
If you are performing a typical installation for the Portal Server and have not already set the AdminRole in WebSphere Application Server for use with WebSphere Portal, perform the following steps:

1. Verify that the Administrative Server for WebSphere Application Server is started.
2. Open the Administrative Console for WebSphere Application Server.
3. On the main menu, click Console-Security Center.
4. On the General tab, verify that the option Enable Security is selected.
5. Click the Administrative Role tab.
6. In the list of Roles, click the AdminRole and then click Select. The Select Users/Groups - AdminRole dialog is displayed.
7. Click the option Select users/groups and then type * (the asterisk character) in the Search field. Click Search to display a list of users and groups.
8. In the list of Available Users/Groups, click the user wpsadmin and then click the Add button. Click OK to add the AdminRole to the user wpsadmin. (Be sure that the domain suffix does not contain a blank character. A blank will cause the base portlet deployment to fail.)
9. Click the Apply button or the OK button. Close the Security Center and then close the Administrative Console.
10. Stop Administrative Server for WebSphere Application Server and start it again.
11. Open the Administrative Console again.
12. Verify that the application server named WebSphere Portal Server has restarted. If it has not restarted, start it again.
13. After the application server WebSphere Portal Server is restarted, click the OK button on this install panel to continue.

When this screen appears do not press “OK” until the steps in the next sub-section have been successfully completed.

### Fix LDAP Entries for WPS Administrators

Start the Directory Management Tool (DMT).



Rebind

Ready

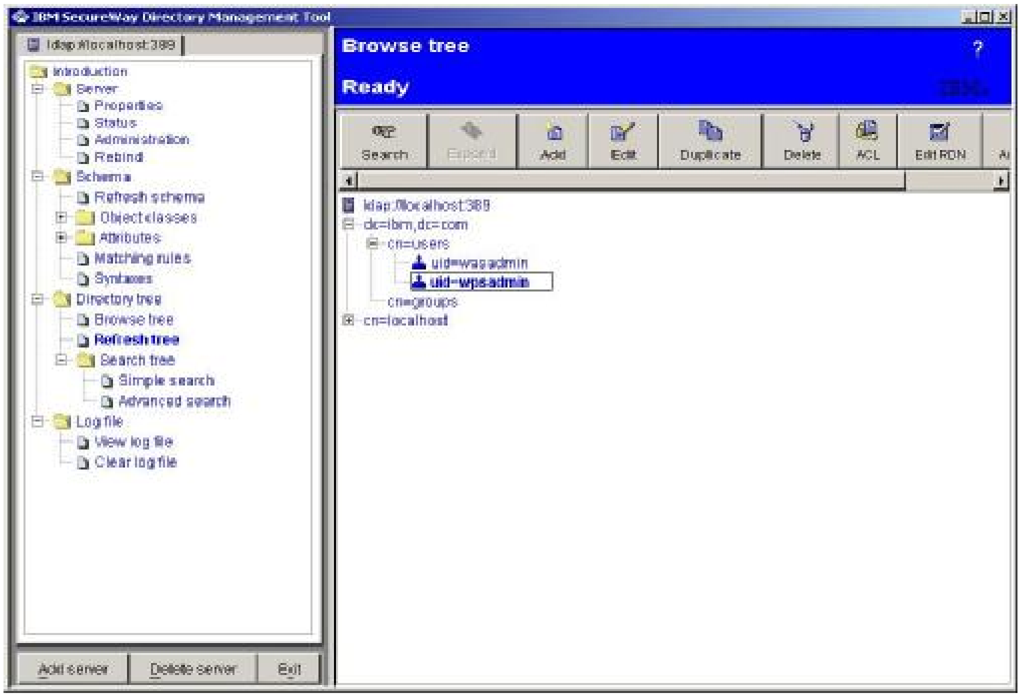
Enter a new bind DN and password for the server ldap://localhost:389

○ Anonymous ● Authenticated

User DN : cn=root

User password : ********

Select “Rebind” from the left hand menu panel. Select “Authenticated” and enter “cn=root” as the User DN and “passw0rd” as the associated password. Press “OK” to authenticate to the LDAP server.

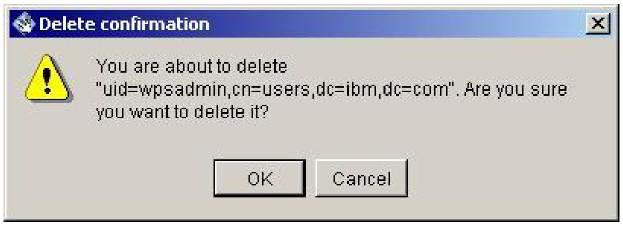


Browse tree

Ready

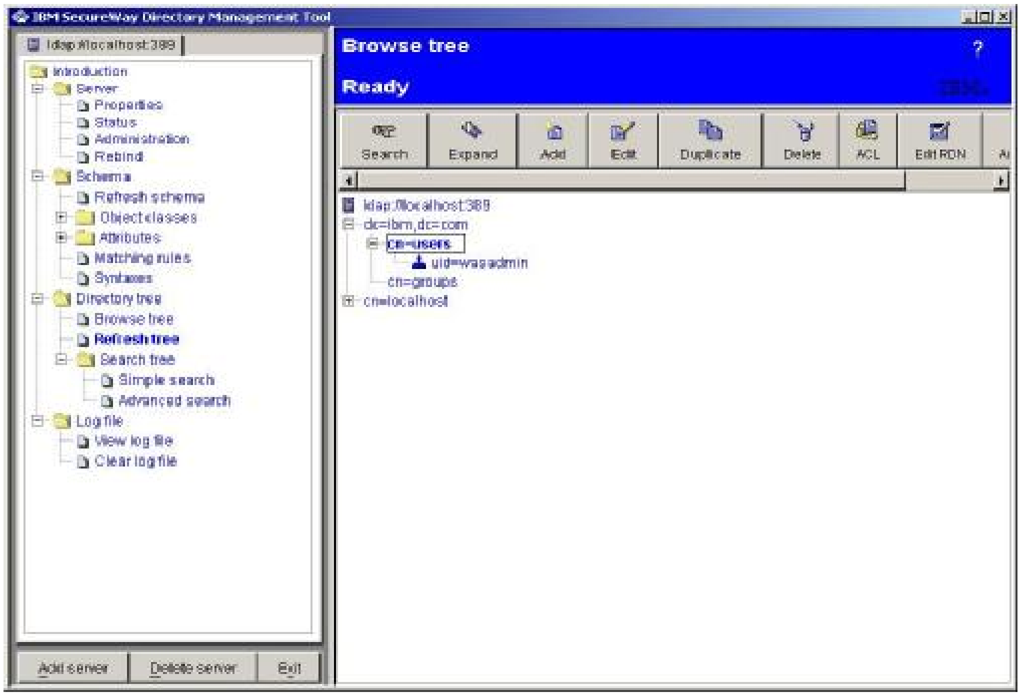
```
ldap://localhost:389
⊟ dc=ibm,dc=com
   ⊟ cn=users
        uid=wasadmin
        uid=wpsadmin
     cn=groups
⊞ cn=localhost
```

Select the entry for “wpsadmin” and press the “Delete” button.

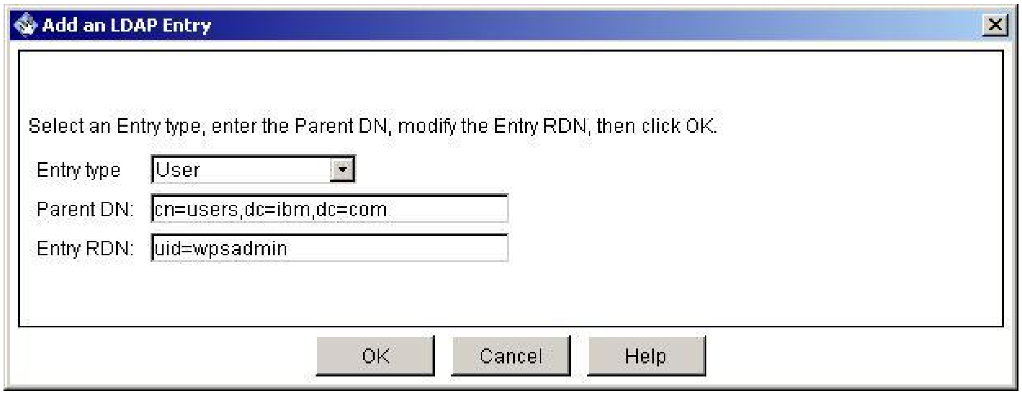


You are about to delete "uid=wpsadmin,cn=users,dc=ibm,dc=com". Are you sure you want to delete it?

Press “OK” to confirm the deletion of “wpsadmin”.



Select the “cn=users” container object and press the “Add” button.



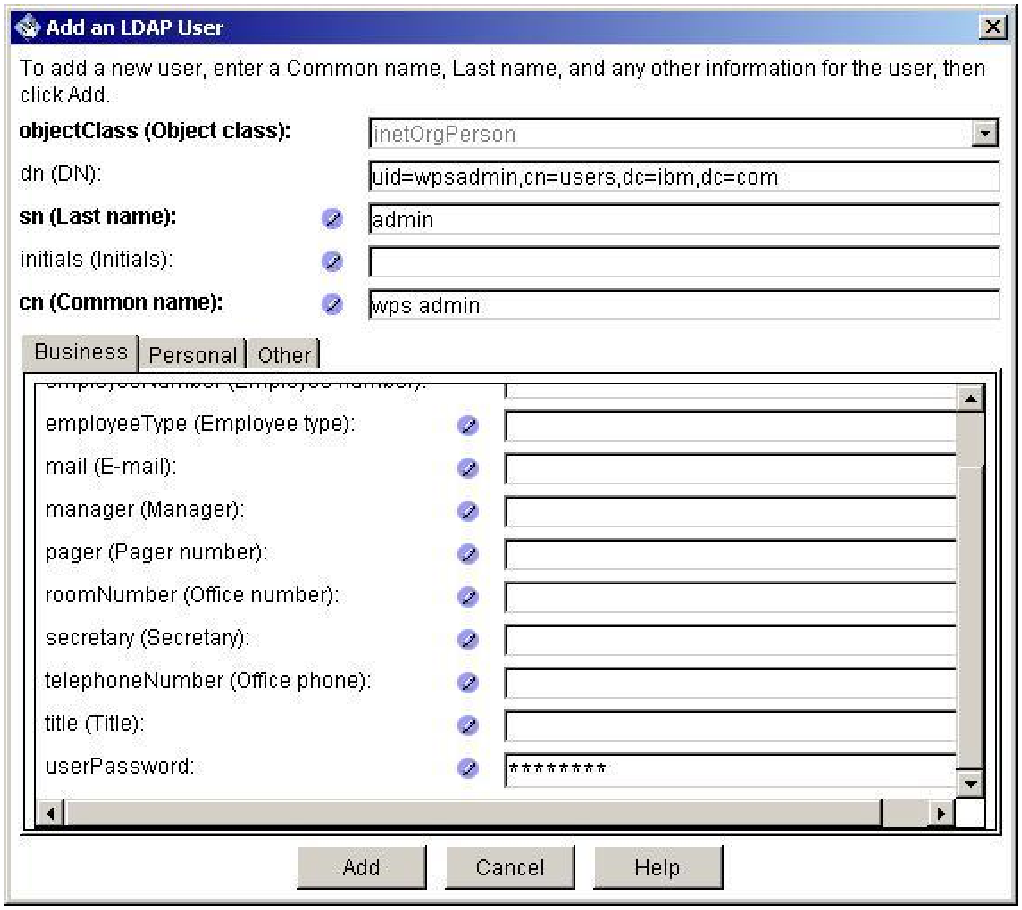
Select an Entry type, enter the Parent DN, modify the Entry RDN, then click OK.

Entry type: User

Parent DN: cn=users,dc=ibm,dc=com

Entry RDN: uid=wpsadmin

Select an “Entry Type” of “User” and enter “uid=wpsadmin” in the “Entry RDN field”. Press “OK” to continue.



Add an LDAP User

To add a new user, enter a Common name, Last name, and any other information for the user, then click Add.

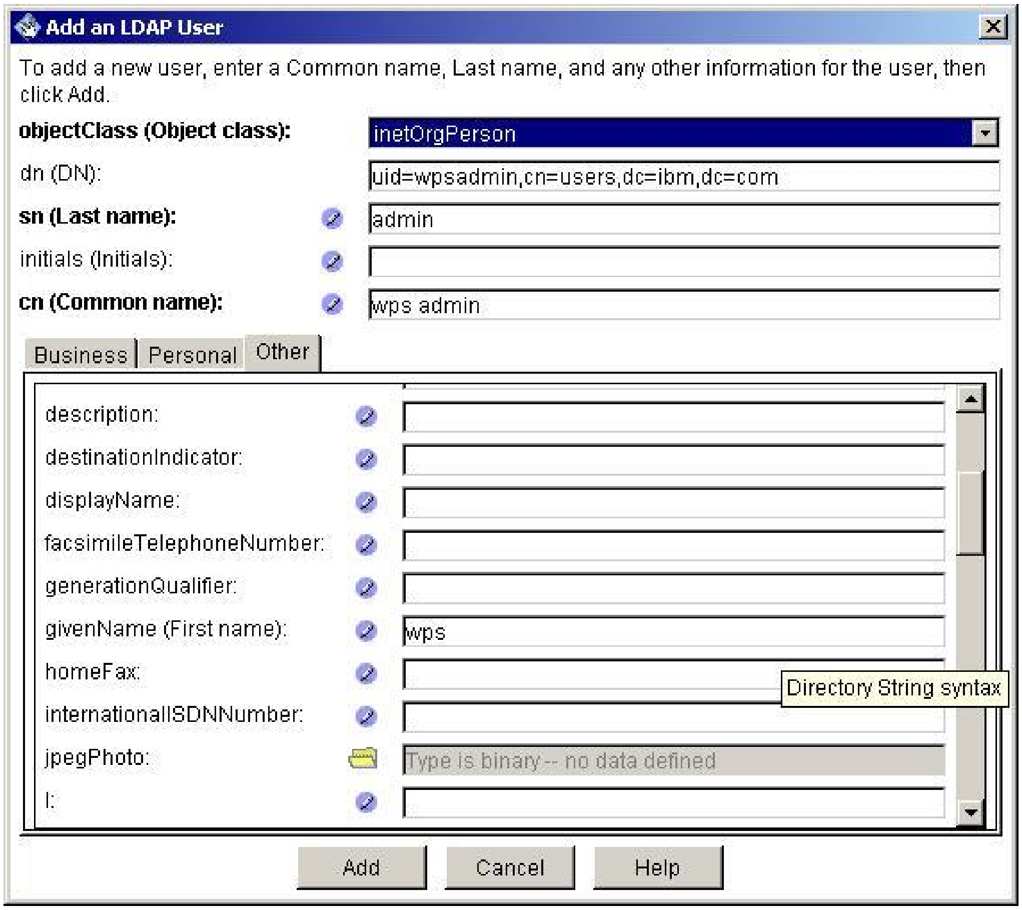
| | |
|---|---|
| **objectClass (Object class):** | inetOrgPerson |
| dn (DN): | uid=wpsadmin,cn=users,dc=ibm,dc=com |
| **sn (Last name):** | admin |
| initials (Initials): | |
| **cn (Common name):** | wps admin |

| | |
|---|---|
| employeeNumber (Employee number): | |
| employeeType (Employee type): | |
| mail (E-mail): | |
| manager (Manager): | |
| pager (Pager number): | |
| roomNumber (Office number): | |
| secretary (Secretary): | |
| telephoneNumber (Office phone): | |
| title (Title): | |
| userPassword: | ********* |

Enter the following field values (these correspond to the values in the original “wpsadmin” entry created by WPS):

| | |
|---|---|
| sn | admin |
| cn | wps admin |
| userPassw0rd | passw0rd |

Select the “Other” tab.



Add an LDAP User

To add a new user, enter a Common name, Last name, and any other information for the user, then click Add.

**objectClass (Object class):** inetOrgPerson

dn (DN): uid=wpsadmin,cn=users,dc=ibm,dc=com

**sn (Last name):** admin

initials (Initials):

**cn (Common name):** wps admin

description:

destinationIndicator:

displayName:

facsimileTelephoneNumber:

generationQualifier:

givenName (First name): wps

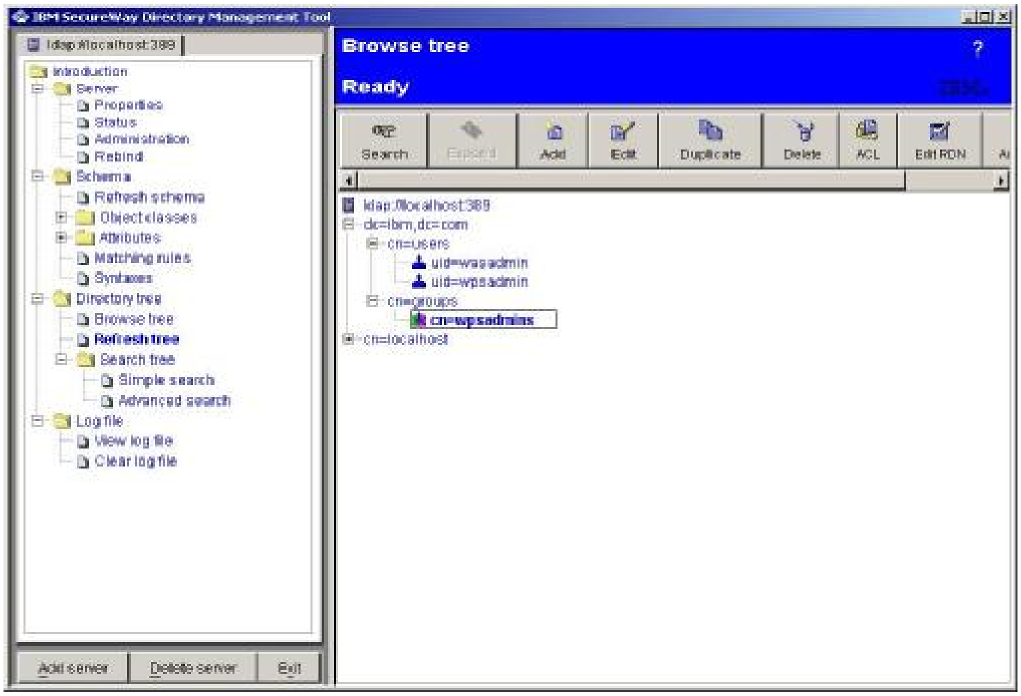
homeFax:

internationalISDNNumber:

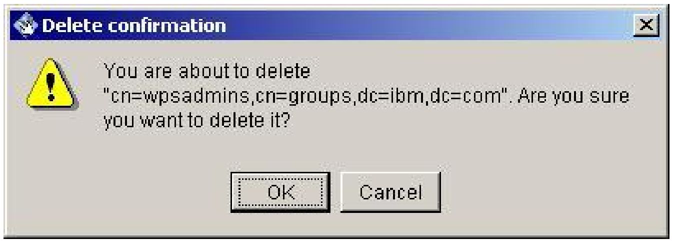
jpegPhoto: Type is binary -- no data defined

l:

Scroll down to the “givenName” field and enter “wps”.  Press “Add” to add the entry to LDAP.

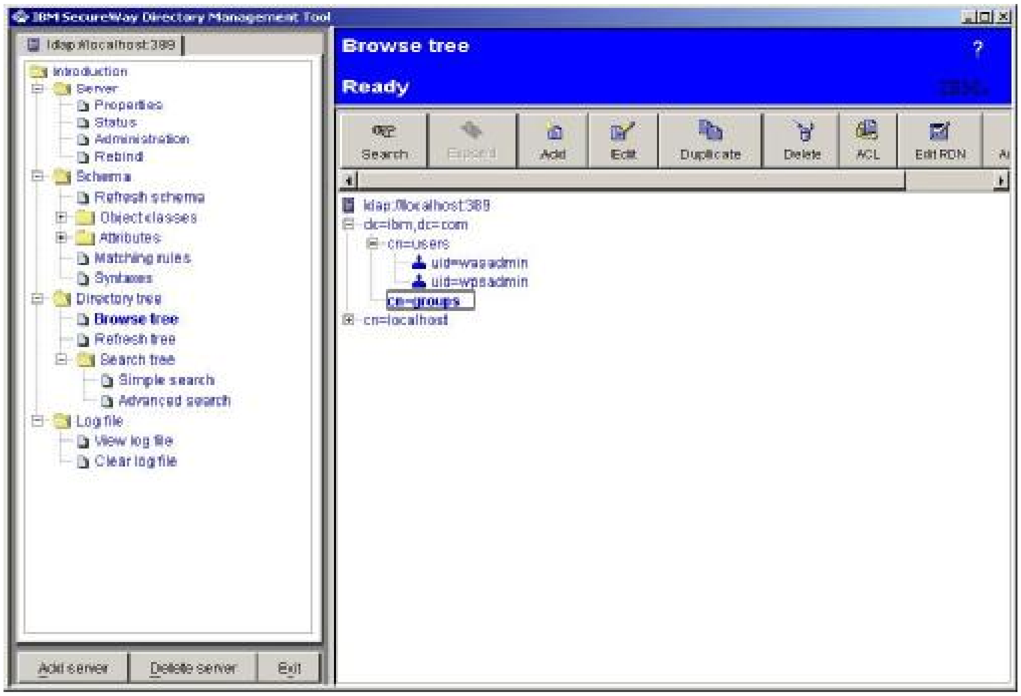


Select the entry for "wpsadmins" and press the "Delete" button. You may have refresh the tree to see the wpsadmins entry.

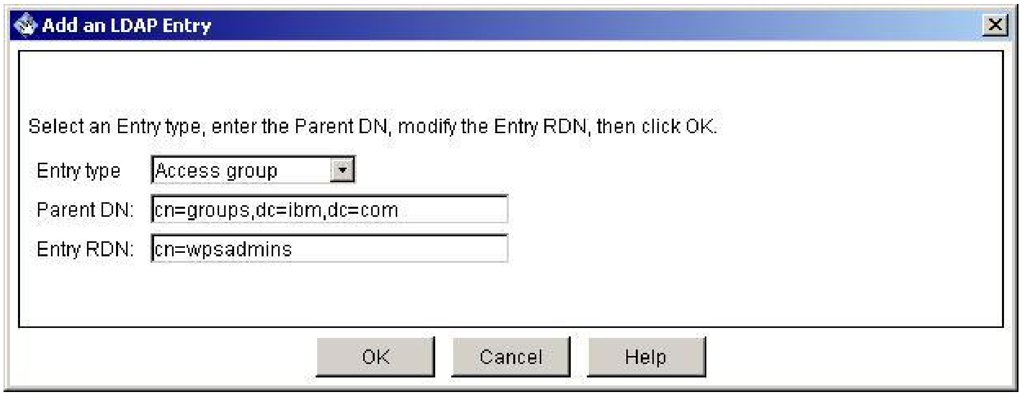


You are about to delete "cn=wpsadmins,cn=groups,dc=ibm,dc=com". Are you sure you want to delete it?

Press "OK" to confirm the deletion of the wpsadmins group.



Select the “groups” container and press the “Add” button.



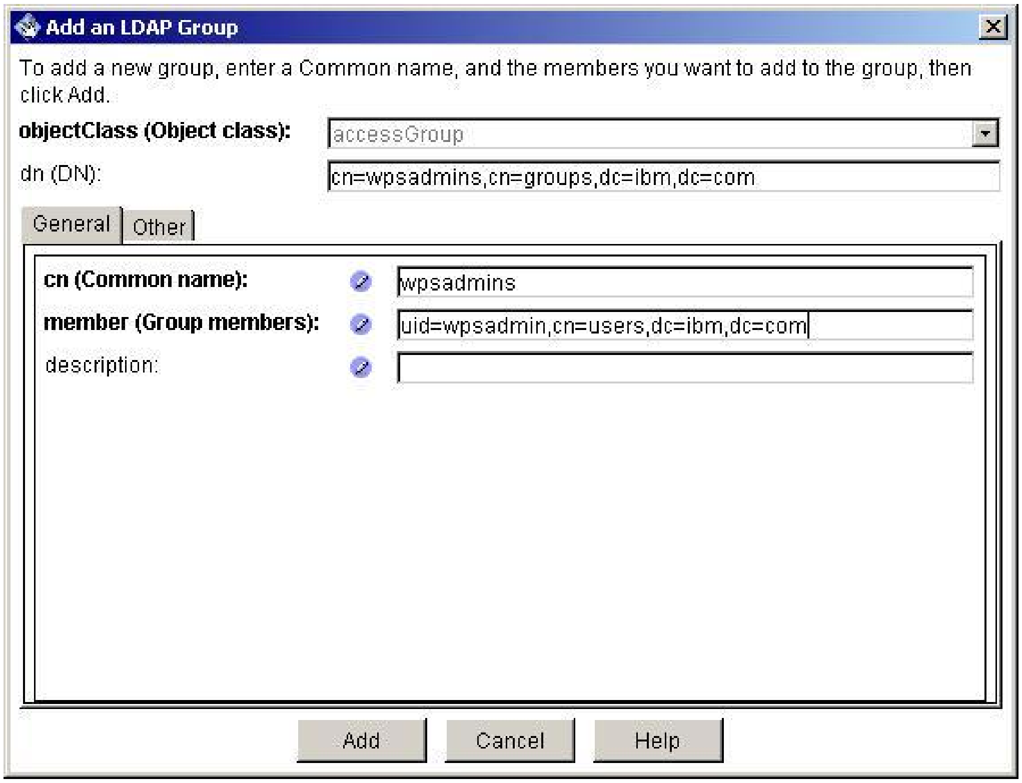
Select an Entry type, enter the Parent DN, modify the Entry RDN, then click OK.

Entry type: Access group

Parent DN: cn=groups,dc=ibm,dc=com

Entry RDN: cn=wpsadmins

Select “Access group” from the “Entry type” pull down list. Enter “cn=wpsadmins” in the “Entry RDN” field and press “OK” to continue.



Add an LDAP Group

To add a new group, enter a Common name, and the members you want to add to the group, then click Add.

**objectClass (Object class):** accessGroup

dn (DN): cn=wpsadmins,cn=groups,dc=ibm,dc=com

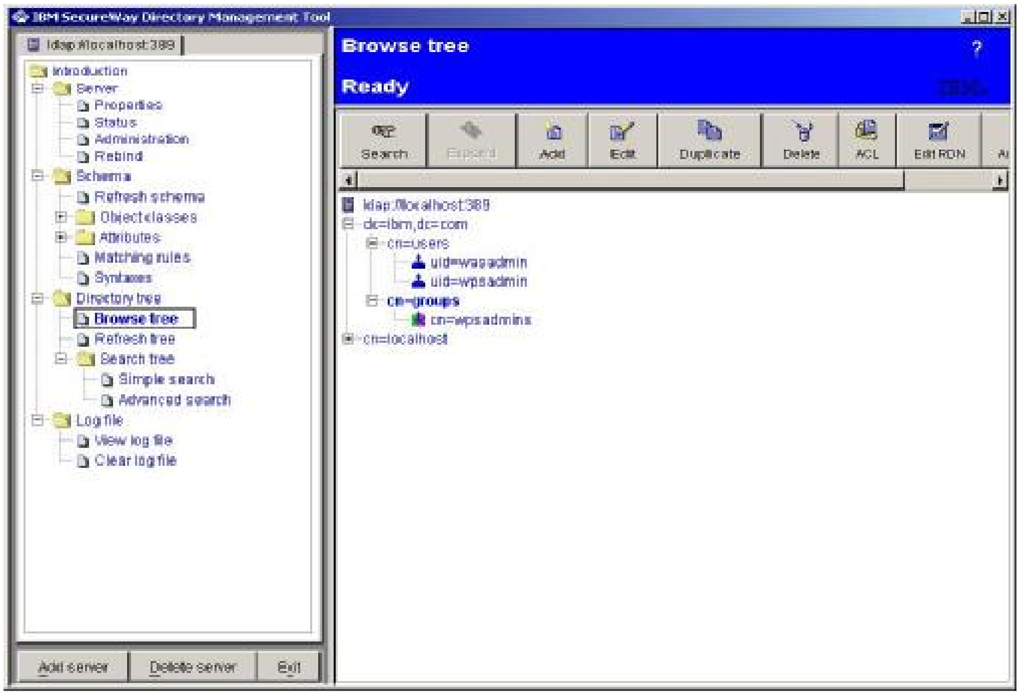
General | Other

**cn (Common name):** wpsadmins

**member (Group members):** uid=wpsadmin,cn=users,dc=ibm,dc=com

description:

Enter “uid=wpsadmin,cn=users,dc=ibm,dc=com” in the “member” field and press “Add” to add the group to LDAP.

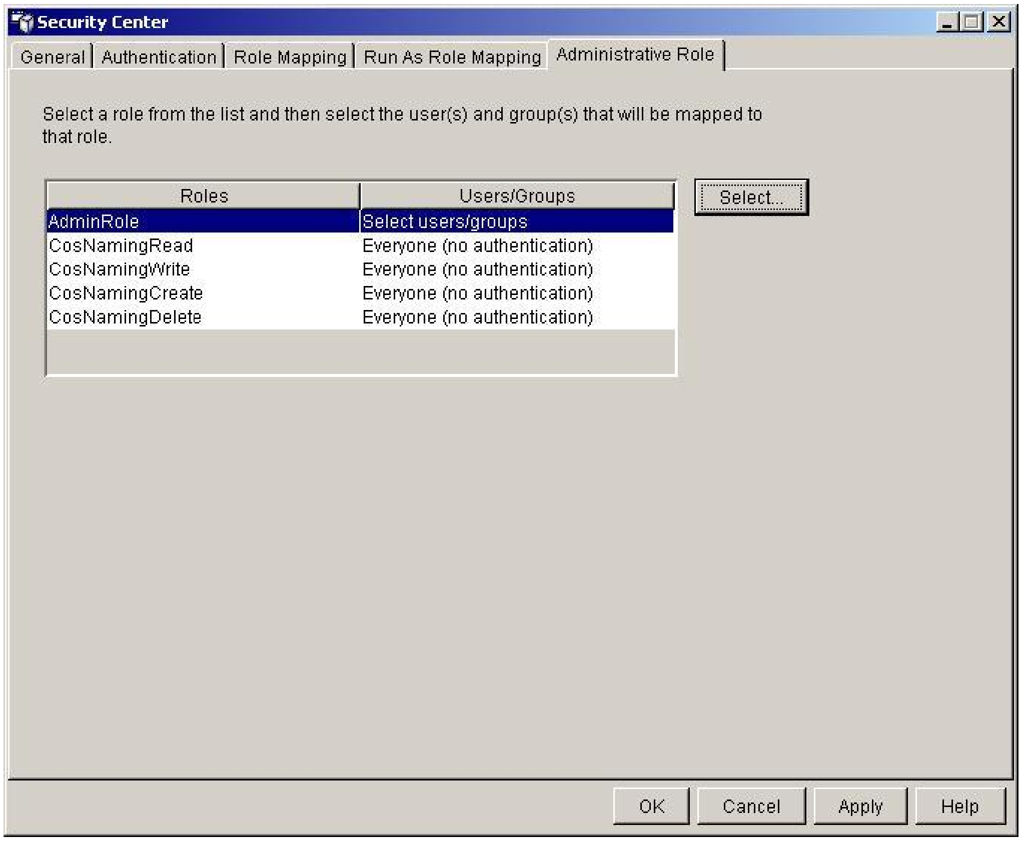


Press the “Exit” button to close the DMT.

## Continue WebSphere Personalization and WPS Install

Now that the LDAP entries for WPS have been modified, we can continue the WPS installation steps.

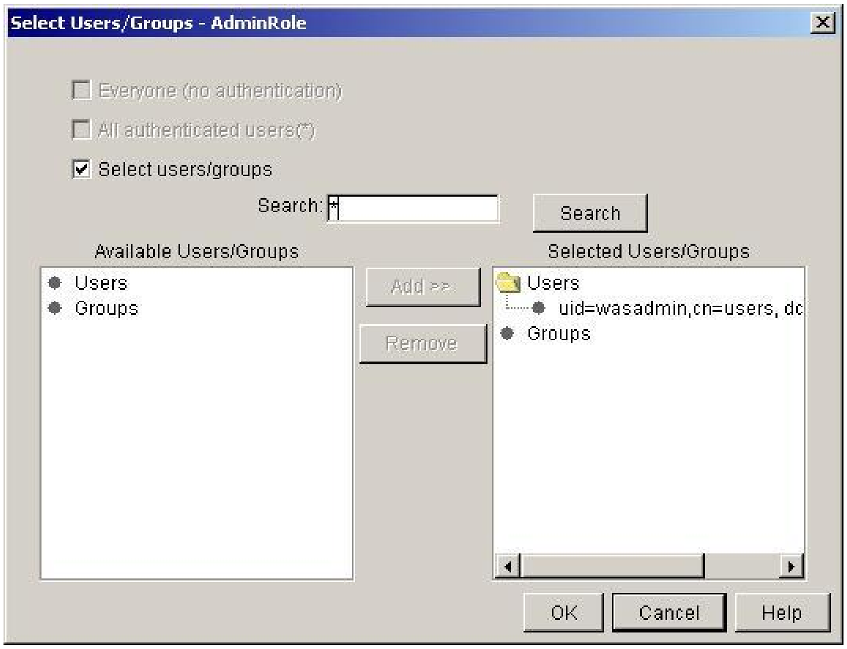
Start the WAS Console and invoke the "Security Center". Select the "Administrative Role" tab.



Select a role from the list and then select the user(s) and group(s) that will be mapped to that role.

| Roles | Users/Groups |
|---|---|
| AdminRole | Select users/groups |
| CosNamingRead | Everyone (no authentication) |
| CosNamingWrite | Everyone (no authentication) |
| CosNamingCreate | Everyone (no authentication) |
| CosNamingDelete | Everyone (no authentication) |

Select the "AdminRole" entry and press the "Select…" button.



Select Users/Groups - AdminRole

☐ Everyone (no authentication)

☐ All authenticated users(*)

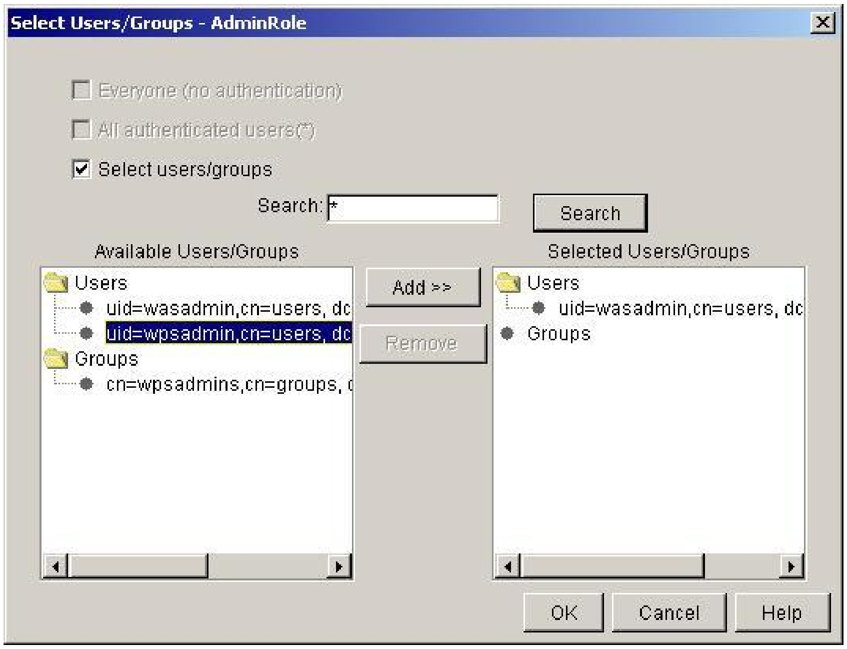
☑ Select users/groups

Search: *

Available Users/Groups
- Users
- Groups

Selected Users/Groups
- Users
  - uid=wasadmin,cn=users, dc
- Groups

Select the “Select users/groups” checkbox, enter “*” in the “Search” field and press the “Search” button.



Select Users/Groups - AdminRole

☐ Everyone (no authentication)

☐ All authenticated users(*)

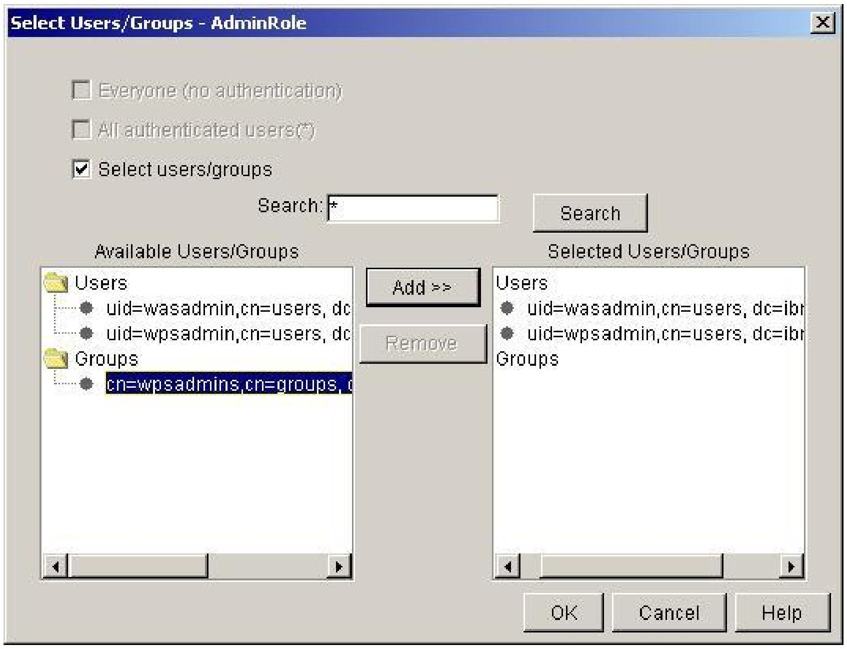
☑ Select users/groups

Search: *

Available Users/Groups
- Users
  - uid=wasadmin,cn=users, dc
  - uid=wpsadmin,cn=users, dc
- Groups
  - cn=wpsadmins,cn=groups, c

Selected Users/Groups
- Users
  - uid=wasadmin,cn=users, dc
- Groups

Select the entry for “wpsadmin” and press the “Add >>” button.



Select Users/Groups - AdminRole

□ Everyone (no authentication)

□ All authenticated users(*)

☑ Select users/groups

Search: *

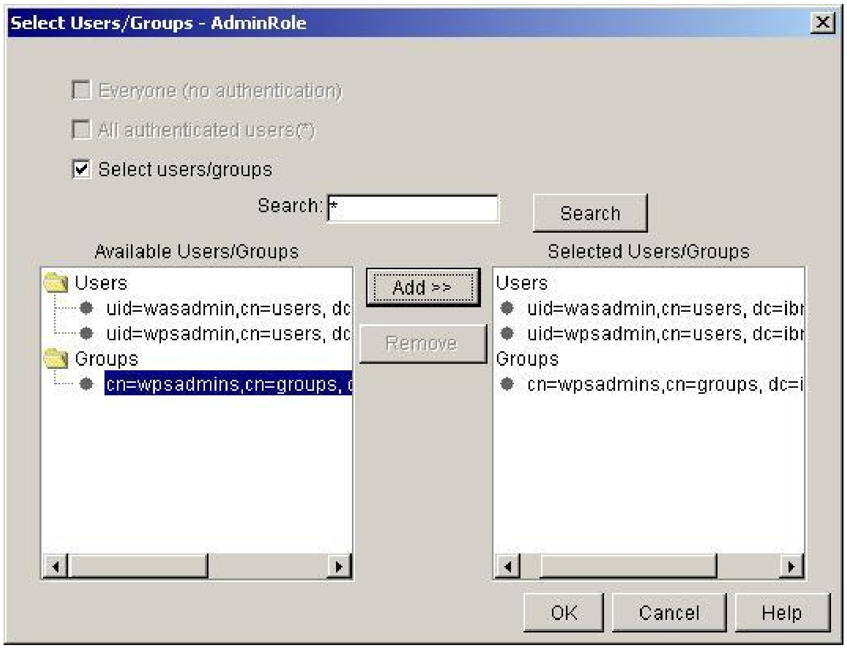
Available Users/Groups

- Users
  - uid=wasadmin,cn=users, dc
  - uid=wpsadmin,cn=users, dc
- Groups
  - cn=wpsadmins,cn=groups, c

Selected Users/Groups

- Users
  - uid=wasadmin,cn=users, dc=ibr
  - uid=wpsadmin,cn=users, dc=ibr
- Groups

Select the entry for “wpsadmins” and press the “Add >>” button.



Select Users/Groups - AdminRole

□ Everyone (no authentication)

□ All authenticated users(*)

☑ Select users/groups

Search: *

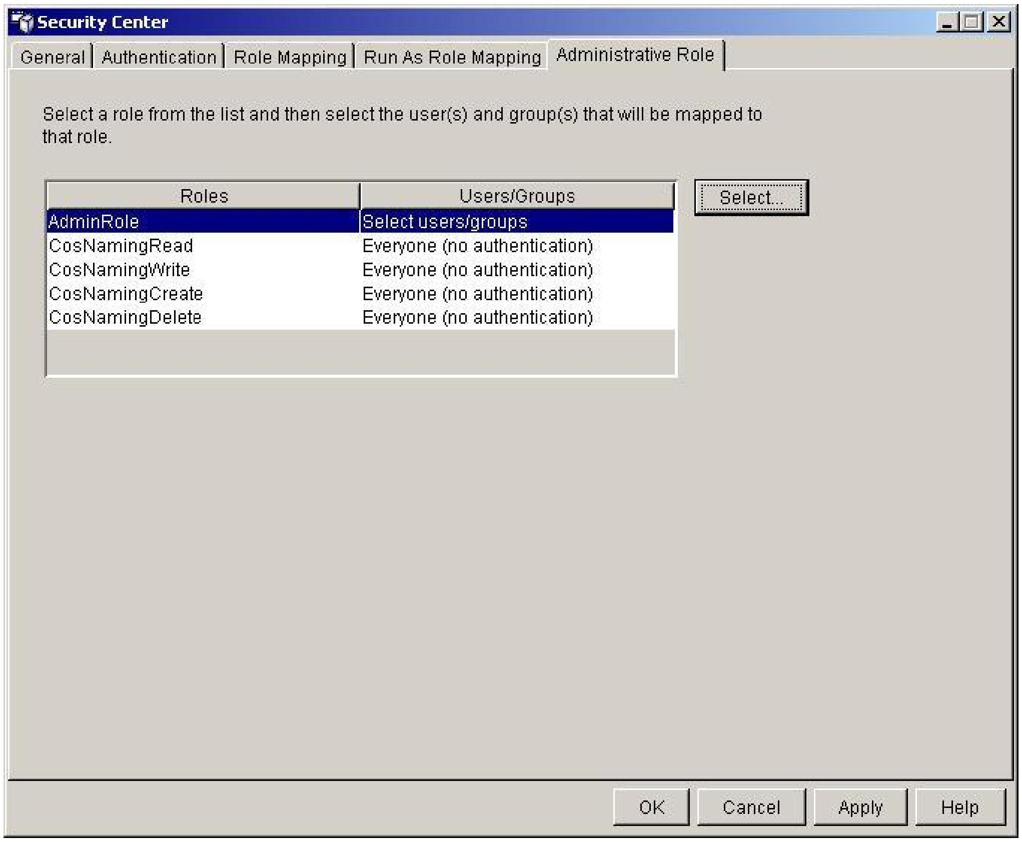
Available Users/Groups

- Users
  - uid=wasadmin,cn=users, dc
  - uid=wpsadmin,cn=users, dc
- Groups
  - cn=wpsadmins,cn=groups, c

Selected Users/Groups

- Users
  - uid=wasadmin,cn=users, dc=ibr
  - uid=wpsadmin,cn=users, dc=ibr
- Groups
  - cn=wpsadmins,cn=groups, dc=i

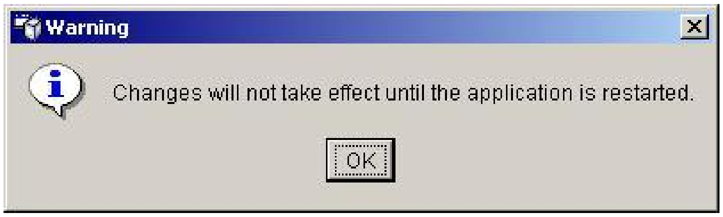
Press “OK” to continue.



Select a role from the list and then select the user(s) and group(s) that will be mapped to that role.

| Roles | Users/Groups |
|---|---|
| AdminRole | Select users/groups |
| CosNamingRead | Everyone (no authentication) |
| CosNamingWrite | Everyone (no authentication) |
| CosNamingCreate | Everyone (no authentication) |
| CosNamingDelete | Everyone (no authentication) |

Press “Apply” to save the changes.



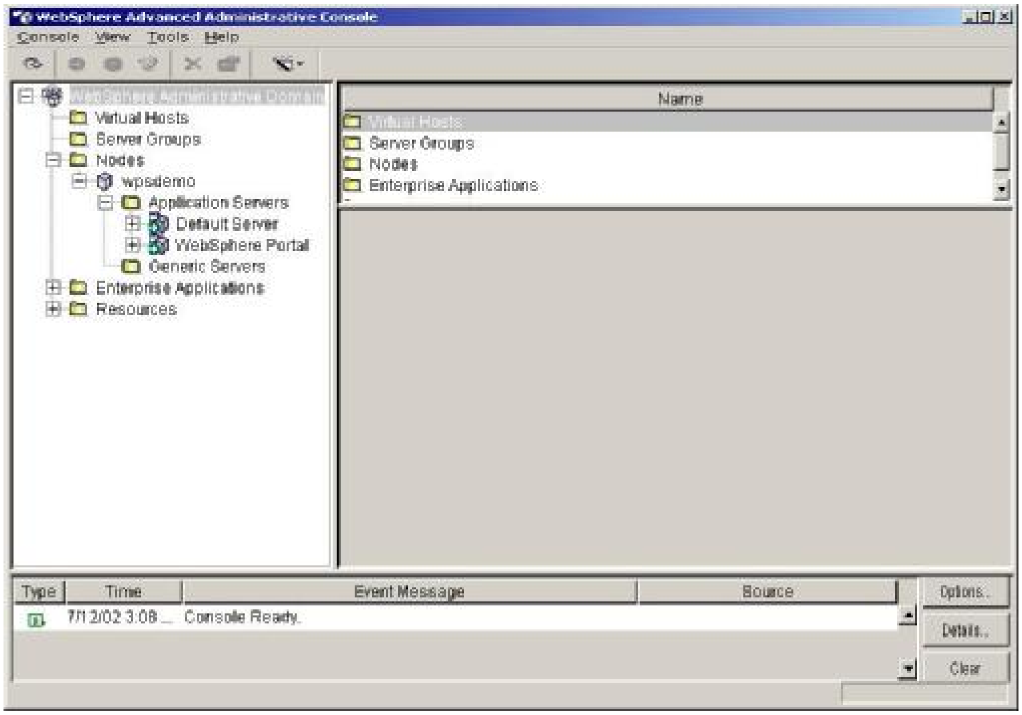
Changes will not take effect until the application is restarted.

Press “OK” to continue.

Close the Security Center and WAS Console.

Stop the WAS Admin Server.  Restart the WAS Admin Server.

Start the WAS Console.

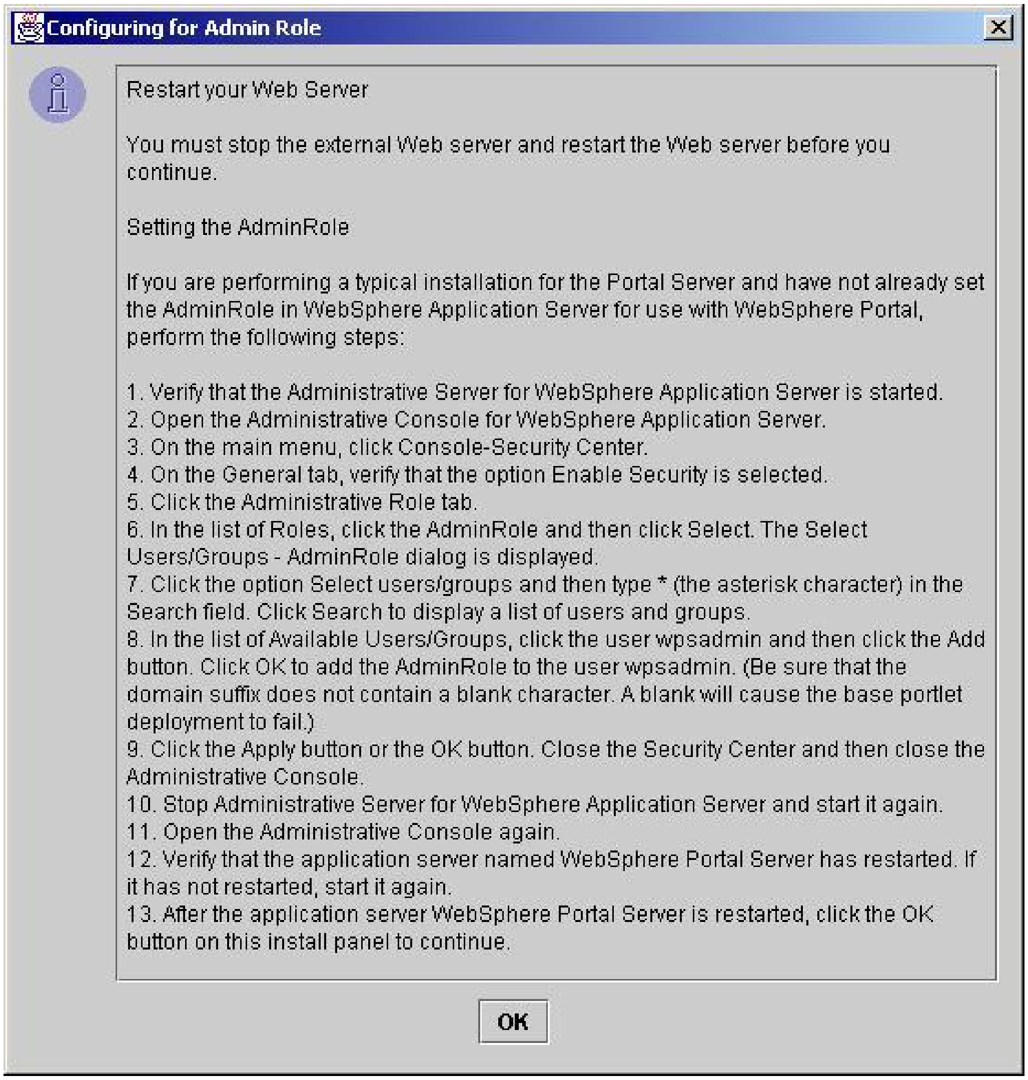


| Type | Time | Event Message | Source |
|---|---|---|---|
| | 7/12/02 3:08 ... | Console Ready. | |

Ensure the "WebSphere Portal Server" application server started successfully - this is indicated by the green icon next to the application server name. If there is a red icon next to the application server, it can be restarted by right-mouse clicking over the application server entry and selecting "Start" (you have to select "Force Stop" first, depending on how the application server failed).

Close the WAS Console.

Switch back to the WPS Installation screen.



Restart your Web Server

You must stop the external Web server and restart the Web server before you continue.

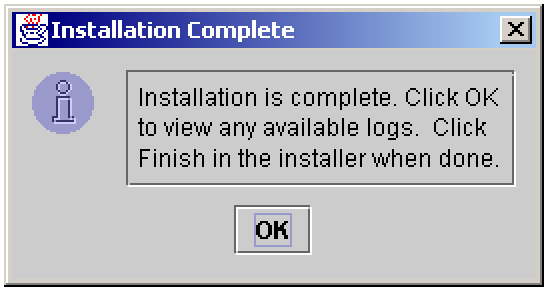
Setting the AdminRole

If you are performing a typical installation for the Portal Server and have not already set the AdminRole in WebSphere Application Server for use with WebSphere Portal, perform the following steps:

1. Verify that the Administrative Server for WebSphere Application Server is started.
2. Open the Administrative Console for WebSphere Application Server.
3. On the main menu, click Console-Security Center.
4. On the General tab, verify that the option Enable Security is selected.
5. Click the Administrative Role tab.
6. In the list of Roles, click the AdminRole and then click Select. The Select Users/Groups - AdminRole dialog is displayed.
7. Click the option Select users/groups and then type * (the asterisk character) in the Search field. Click Search to display a list of users and groups.
8. In the list of Available Users/Groups, click the user wpsadmin and then click the Add button. Click OK to add the AdminRole to the user wpsadmin. (Be sure that the domain suffix does not contain a blank character. A blank will cause the base portlet deployment to fail.)
9. Click the Apply button or the OK button. Close the Security Center and then close the Administrative Console.
10. Stop Administrative Server for WebSphere Application Server and start it again.
11. Open the Administrative Console again.
12. Verify that the application server named WebSphere Portal Server has restarted. If it has not restarted, start it again.
13. After the application server WebSphere Portal Server is restarted, click the OK button on this install panel to continue.

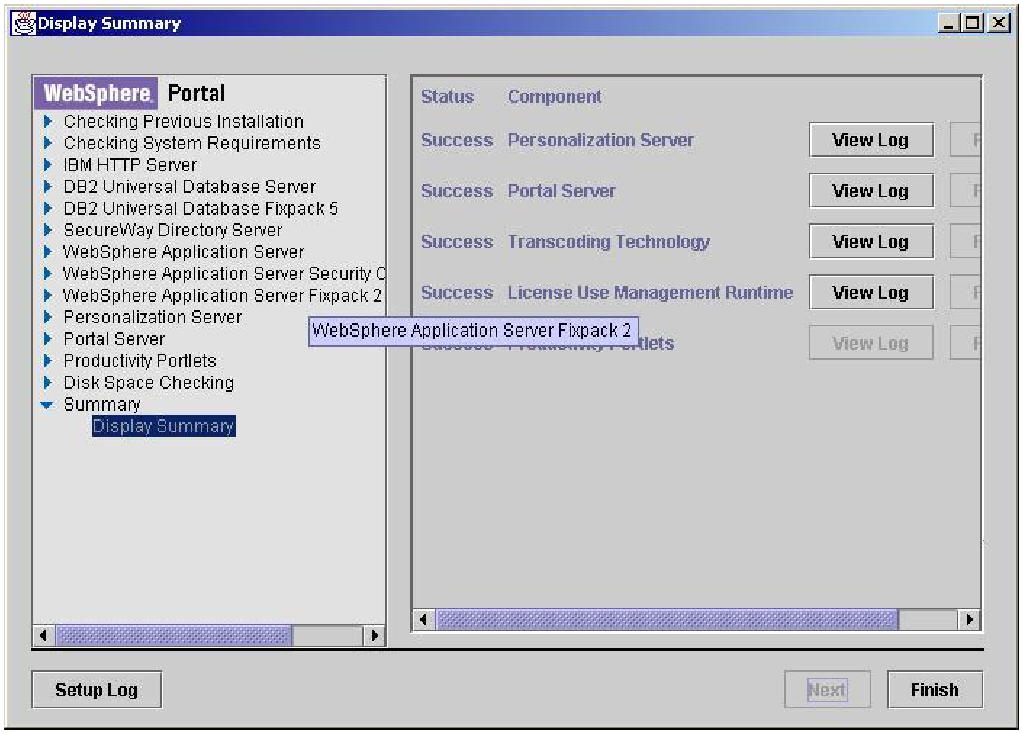
Press “OK” to continue the WPS installation progam.

Note that some of the next installation steps performed by the WPS installation program may take quite some time to complete.



Installation is complete. Click OK to view any available logs. Click Finish in the installer when done.

Press “OK” to continue.


Display Summary
WebSphere Portal
Checking Previous Installation
Checking System Requirements
IBM HTTP Server
DB2 Universal Database Server
DB2 Universal Database Fixpack 5
SecureWay Directory Server
WebSphere Application Server
WebSphere Application Server Security C
WebSphere Application Server Fixpack 2
Personalization Server
Portal Server
Productivity Portlets
Disk Space Checking
Summary
Display Summary
WebSphere Application Server Fixpack 2
Setup Log
Next
Finish

| Status | Component | |
|---|---|---|
| Success | Personalization Server | View Log |
| Success | Portal Server | View Log |
| Success | Transcoding Technology | View Log |
| Success | License Use Management Runtime | View Log |
| Success | Productivity Portlets | View Log |

Press “Finish” to close the WPS install program.

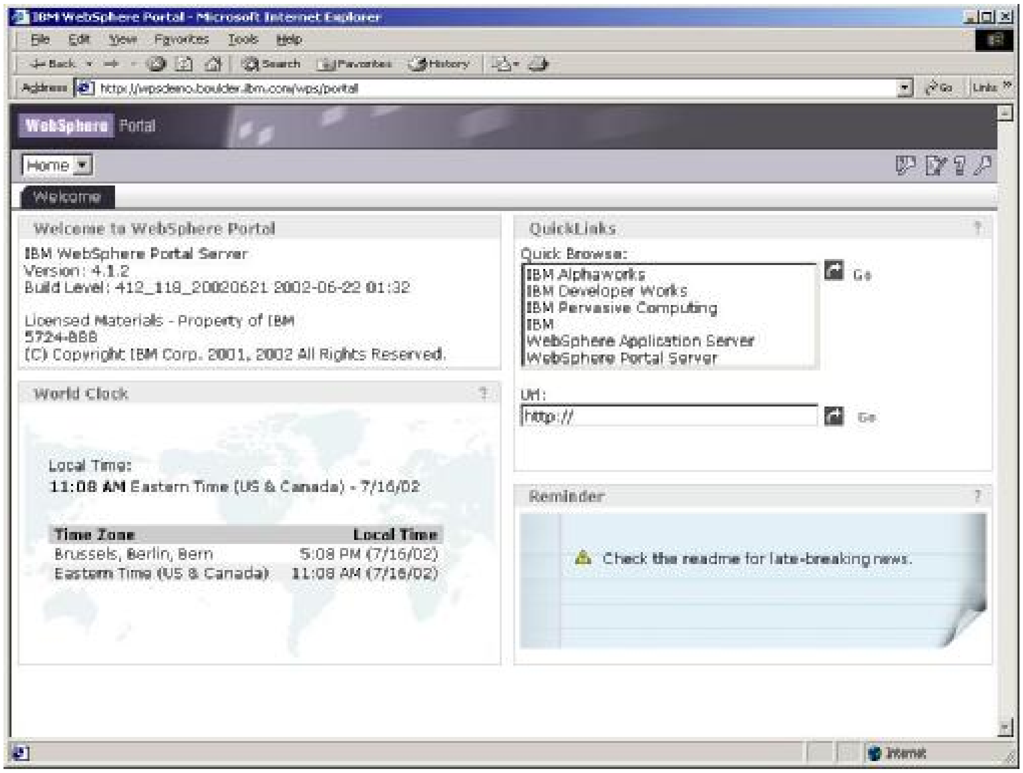
Shutdown and restart the system.

Ensure DB2 and IHS are running.  Start LDAP and WAS servers.

Ensure “WebSphere Portal Server” application server has successfully started.

## Test WPS Configuration

Display the “public” portal page: http://wpsdemo.boulder.ibm.com/wps/portal.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Go Links
WebSphere Portal
Home
Welcome
Go
Go
Internet

Address: http://wpsdemo.boulder.ibm.com/wps/portal

Welcome to WebSphere Portal

IBM WebSphere Portal Server
Version: 4.1.2
Build Level: 412_118_20020621 2002-06-22 01:32

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QuickLinks

Quick Browse:
IBM AlphaWorks
IBM Developer Works
IBM Pervasive Computing
IBM
WebSphere Application Server
WebSphere Portal Server

Url: http://

World Clock

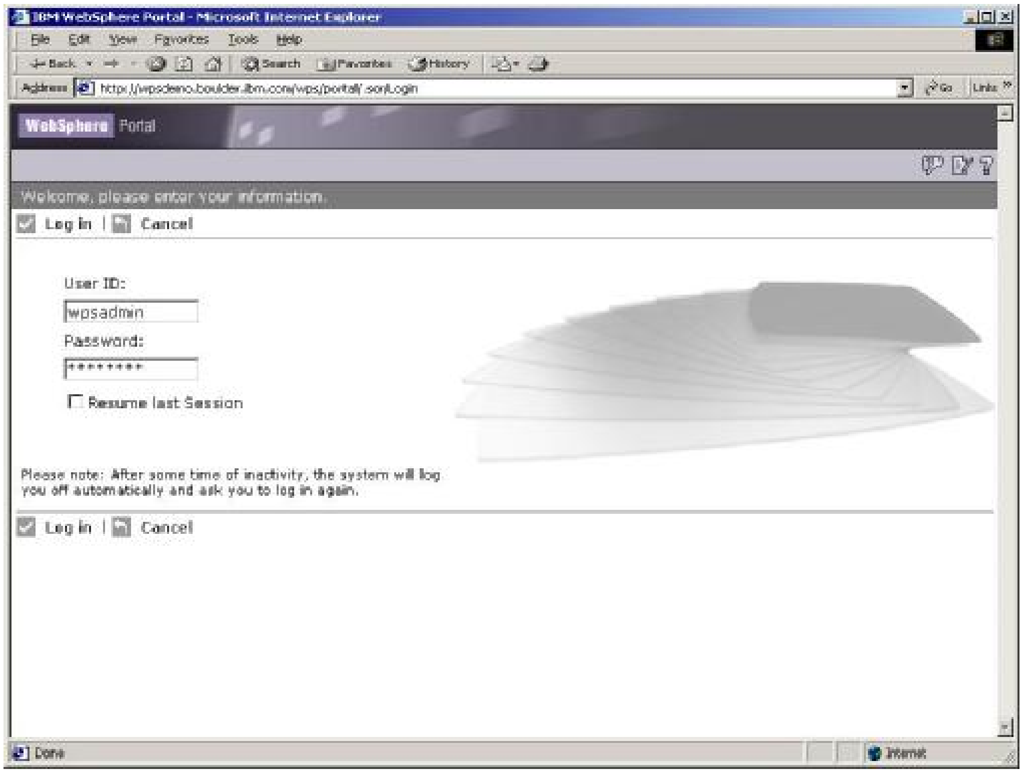
Local Time:
11:08 AM Eastern Time (US & Canada) - 7/16/02

| Time Zone | Local Time |
|---|---|
| Brussels, Berlin, Bern | 5:08 PM (7/16/02) |
| Eastern Time (US & Canada) | 11:08 AM (7/16/02) |

Reminder

Check the readme for late-breaking news.

Press the Log in button (i.e. the key icon) in the top right-hand corner of the portal page.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Go Links
WebSphere Portal
Log in
Cancel
Log in
Cancel
Done
Internet

Address: http://wpsdemo.boulder.ibm.com/wps/portal/.scr/Login

Welcome, please enter your information.

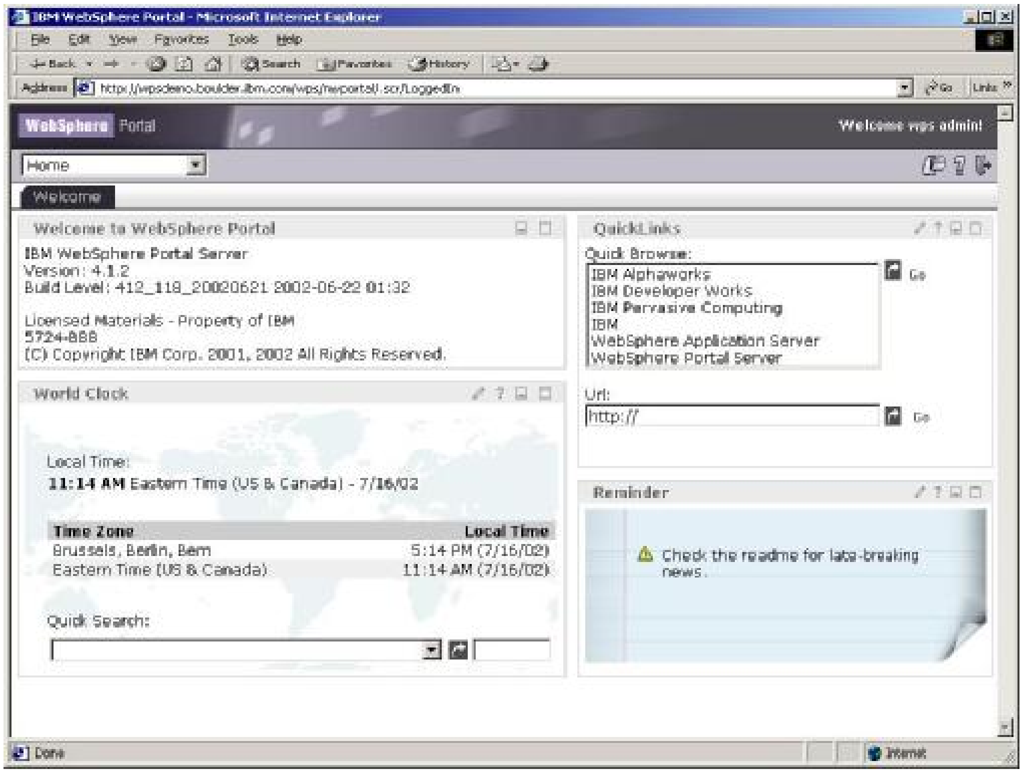
User ID: wpsadmin

Password: ********

□ Resume last Session

Please note: After some time of inactivity, the system will log you off automatically and ask you to log in again.

Enter “wpsadmin” and “passw0rd” in the userid and password fields and press the “Log in” button to login to WPS.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address http://wpsdemo.boulder.ibm.com/wps/myportal/.scr/LoggedIn
Go Links
WebSphere Portal
Welcome wps admin!
Home
Welcome
Done
Internet

Welcome to WebSphere Portal

IBM WebSphere Portal Server
Version: 4.1.2
Build Level: 412_118_20020621 2002-06-22 01:32

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World Clock

Local Time:
**11:14 AM** Eastern Time (US & Canada) - 7/16/02

| Time Zone | Local Time |
|---|---|
| Brussels, Berlin, Bern | 5:14 PM (7/16/02) |
| Eastern Time (US & Canada) | 11:14 AM (7/16/02) |

Quick Search:

QuickLinks

Quick Browse:
IBM Alphaworks
IBM Developer Works
IBM Pervasive Computing
IBM
WebSphere Application Server
WebSphere Portal Server

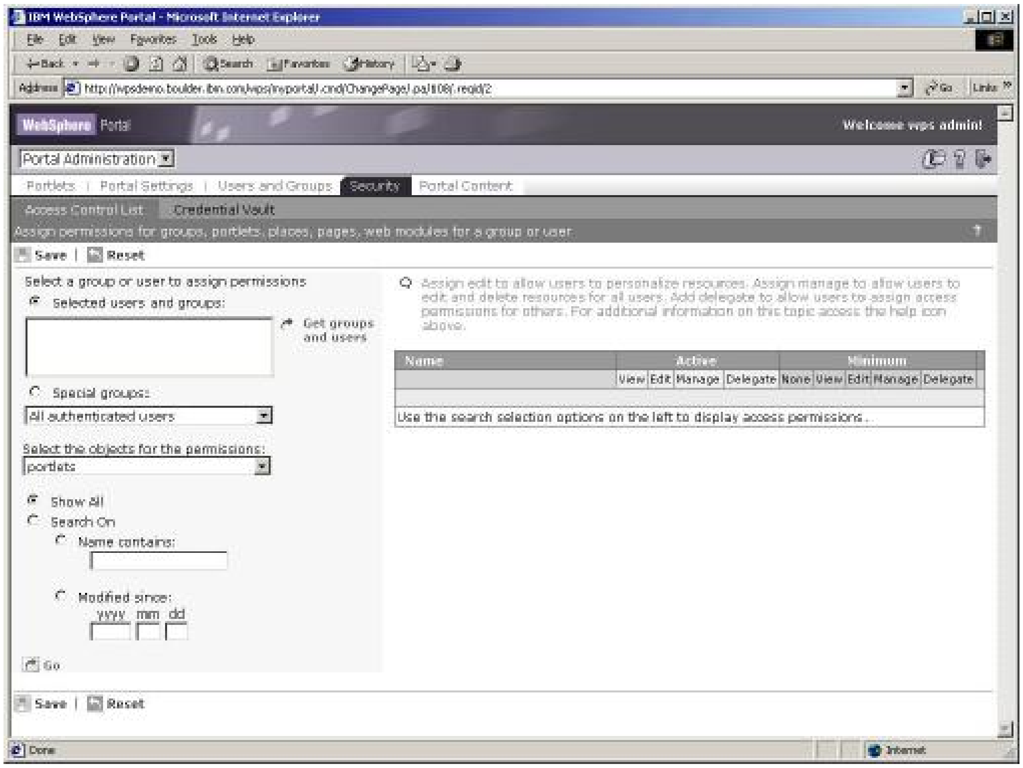
Url:
http://

Reminder

Check the readme for late-breaking news.

The “private” WPS page should now be displayed. Note the welcome message - the name component comes from the common name attribute in LDAP.

Select the “Portal Administration” page group from the pull-down menu in the top left-hand corner of the portal. Then select the “Security” page tab.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address
Go Links
WebSphere Portal
Welcome wps admin!
Portal Administration
Portlets | Portal Settings | Users and Groups | Security | Portal Content
Access Control List | Credential Vault
Save | Reset
Get groups and users
Go
Save | Reset
Done
Internet

http://wpsdemo.boulder.ibm.com/wps/myportal/.cmd/ChangePage/.pa/108/.reqid/2

Assign permissions for groups, portlets, places, pages, web modules for a group or user.

Select a group or user to assign permissions

● Selected users and groups:

○ Special groups: All authenticated users

Select the objects for the permissions: portlets

● Show All

○ Search On

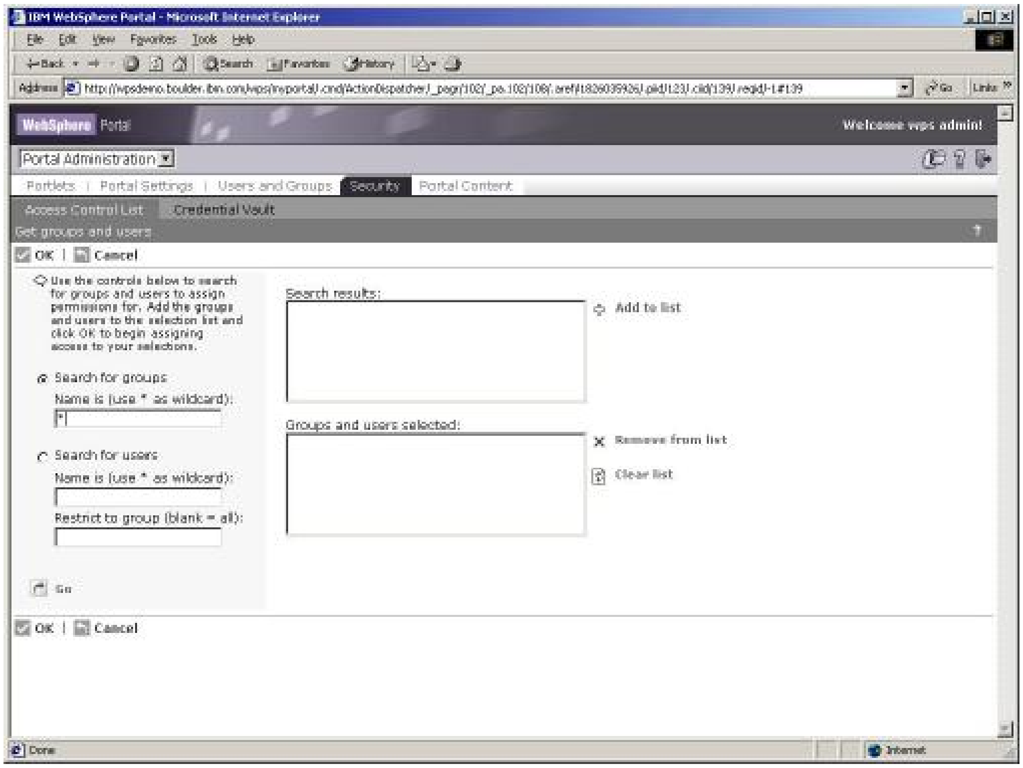
○ Name contains:

○ Modified since: yyyy mm dd

Assign edit to allow users to personalize resources. Assign manage to allow users to edit and delete resources for all users. Add delegate to allow users to assign access permissions for others. For additional information on this topic access the help icon above.

| Name | Active | | | | Minimum | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | View | Edit | Manage | Delegate | None | View | Edit | Manage | Delegate |
| Use the search selection options on the left to display access permissions. | | | | | | | | | |

Select the "Get groups and users" button.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address
Go Links
WebSphere Portal
Welcome wps admin!
Portal Administration
Portlets | Portal Settings | Users and Groups | Security | Portal Content
Access Control List | Credential Vault
Get groups and users
OK | Cancel
Add to list
Remove from list
Clear list
Go
OK | Cancel
Done
Internet

http://wpsdemo.boulder.ibm.com/wps/myportal/.cmd/ActionDispatcher/_pagr/102/_pa.102/108/.aref/t826035926/.pid/123/.cid/139/.reqid/-1#139

Use the controls below to search for groups and users to assign permissions for. Add the groups and users to the selection list and click OK to begin assigning access to your selections.

● Search for groups

Name is (use * as wildcard): *

○ Search for users

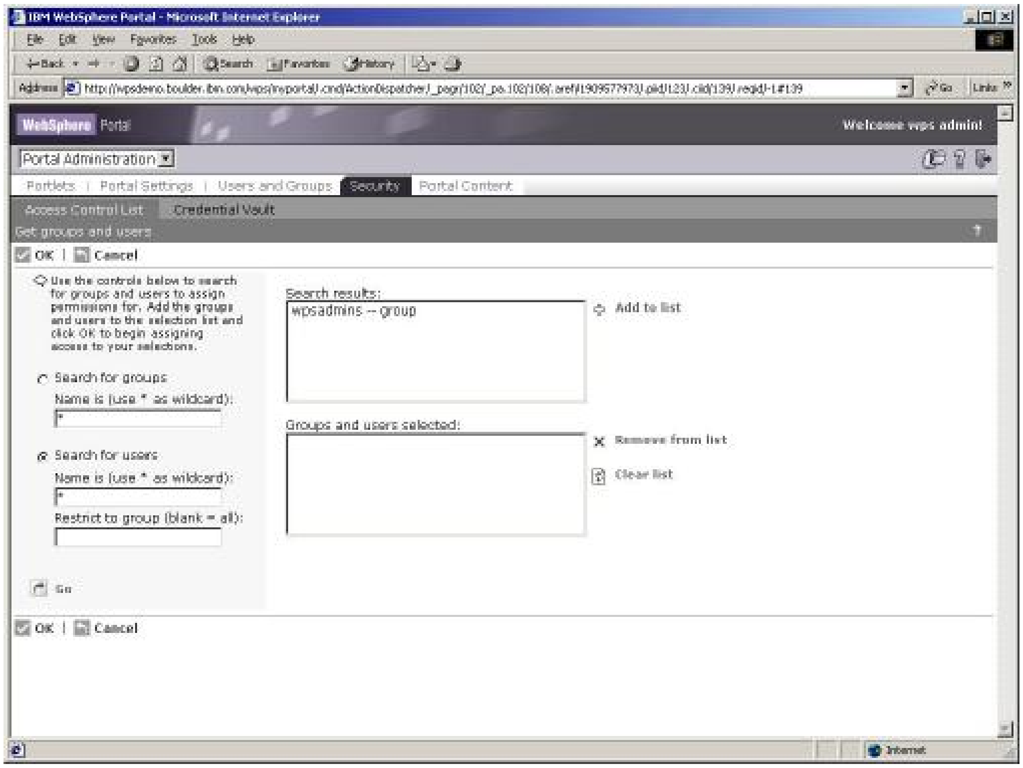
Name is (use * as wildcard):

Restrict to group (blank = all):

Search results:

Groups and users selected:

Select the radio button next to "Search for groups" and enter "*" in the associated search field. Press the "Go" button.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address http://wpsdemo.boulder.ibm.com/wps/myportal/.cmd/ActionDispatcher/_pagr/102/_pa.102/108/.aref/1909577973/.pid/123/.cid/139/.reqid/-1#139
Go Links
WebSphere Portal
Welcome wps admin!
Portal Administration
Portlets | Portal Settings | Users and Groups | Security | Portal Content
Access Control List Credential Vault
Get groups and users
OK | Cancel
Add to list
Remove from list
Clear list
Go
OK | Cancel
Internet

Use the controls below to search for groups and users to assign permissions for. Add the groups and users to the selection list and click OK to begin assigning access to your selections.

○ Search for groups

Name is (use * as wildcard): *

● Search for users

Name is (use * as wildcard): *

Restrict to group (blank = all):

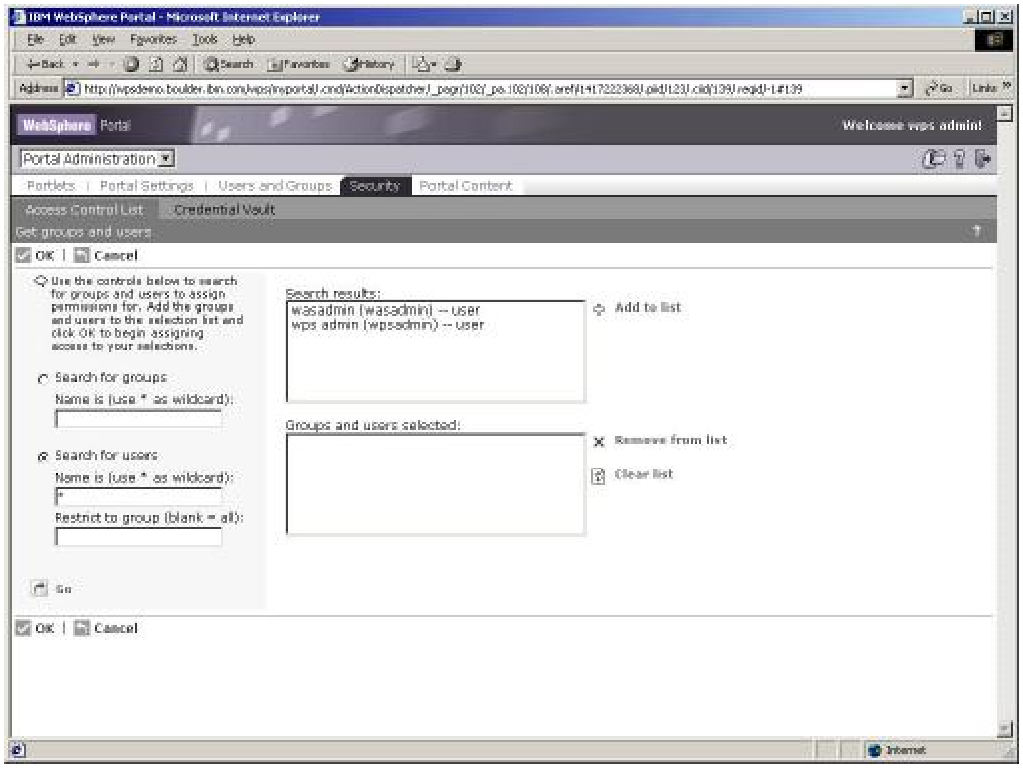
Search results:

wpsadmins -- group

Groups and users selected:

If the "wpsadmins" group was correctly created as an "accessGroup" and if WPS was correctly configured to use "accessGroup" object classes, "wpsadmins – group" should appear in the "Search results" window.

Now repeat the process to check the user entries are correctly defined. Select the "Search for users'" radio button, enter "*" in the associated search field and press the "Go" button.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address http://wpsdemo.boulder.ibm.com/wps/myportal/.cmd/ActionDispatcher/_pagr/102/_pa.102/108/.aref/1417222368/.piid/123/.ciid/139/.reqid/-1#139
Go Links
WebSphere Portal
Welcome wps admin!
Portal Administration
Portlets | Portal Settings | Users and Groups | Security | Portal Content
Access Control List
Credential Vault
Get groups and users
OK | Cancel
Add to list
Remove from list
Clear list
Go
OK | Cancel
Internet

Use the controls below to search for groups and users to assign permissions for. Add the groups and users to the selection list and click OK to begin assigning access to your selections.

○ Search for groups

Name is (use * as wildcard):

● Search for users

Name is (use * as wildcard): *

Restrict to group (blank = all):

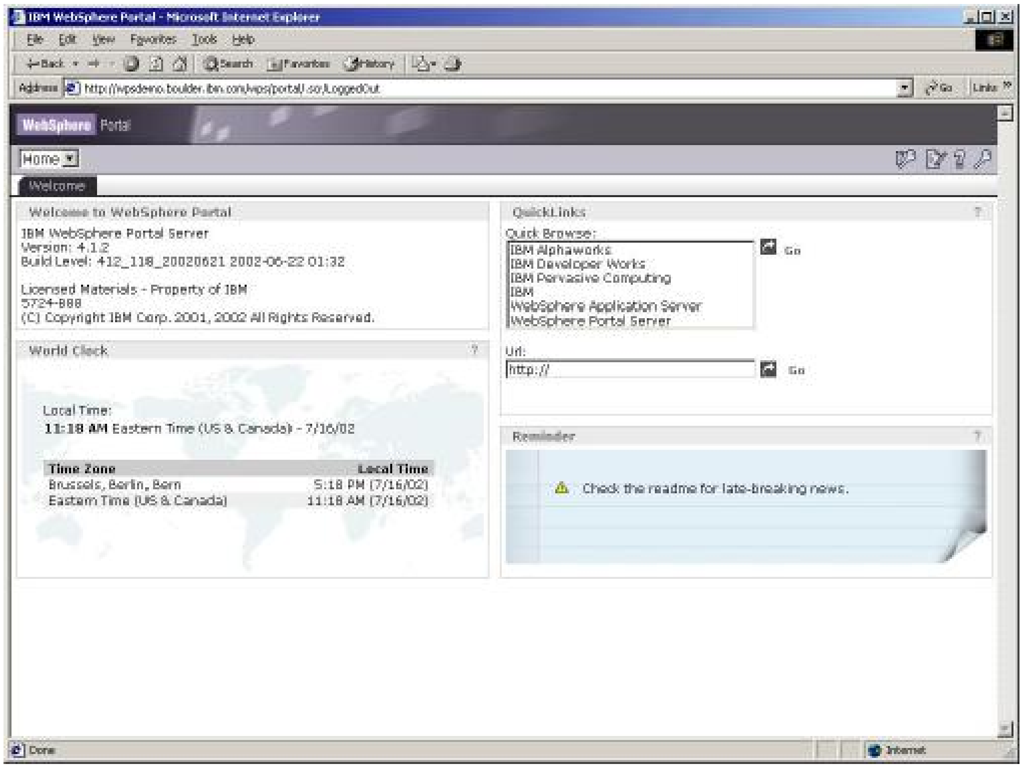
Search results:

wasadmin (wasadmin) -- user
wps admin (wpsadmin) -- user

Groups and users selected:

If the user and object class modifications defined earlier in this document were done correctly, two user entries: wasadmin and wpsadmin, should appear in the "Search results" window.

We will return to this window later to actually set some security policy, but for now press the logout button (i.e. the open door with an arrow) in the top right-corner of the portal.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address http://wpsdemo.boulder.ibm.com/wps/portal/.scr/LoggedOut
Go Links
WebSphere Portal
Home
Welcome
Done
Internet

Welcome to WebSphere Portal

IBM WebSphere Portal Server
Version: 4.1.2
Build Level: 412_118_20020621 2002-06-22 01:32

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World Clock

Local Time:
**11:18 AM** Eastern Time (US & Canada) - 7/16/02

| Time Zone | Local Time |
|---|---|
| Brussels, Berlin, Bern | 5:18 PM (7/16/02) |
| Eastern Time (US & Canada) | 11:18 AM (7/16/02) |

QuickLinks

Quick Browse:
IBM Alphaworks
IBM Developer Works
IBM Pervasive Computing
IBM
WebSphere Application Server
WebSphere Portal Server

Url:
http://

Reminder

Check the readme for late-breaking news.

The public portal page should once again be displayed.

## Step 6 Install and configure TAM

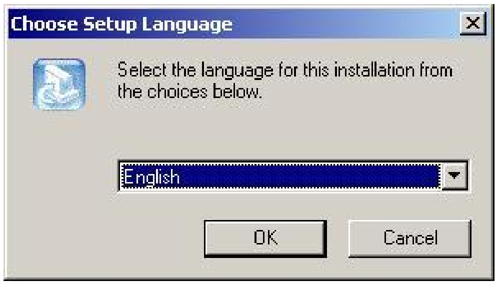
### Install and Configure Access Manager Base Packages

*Install Access Manager Base Packages*

Ensure the LDAP server is running.

Run the installation program from the TAM 3.9 Base CD:

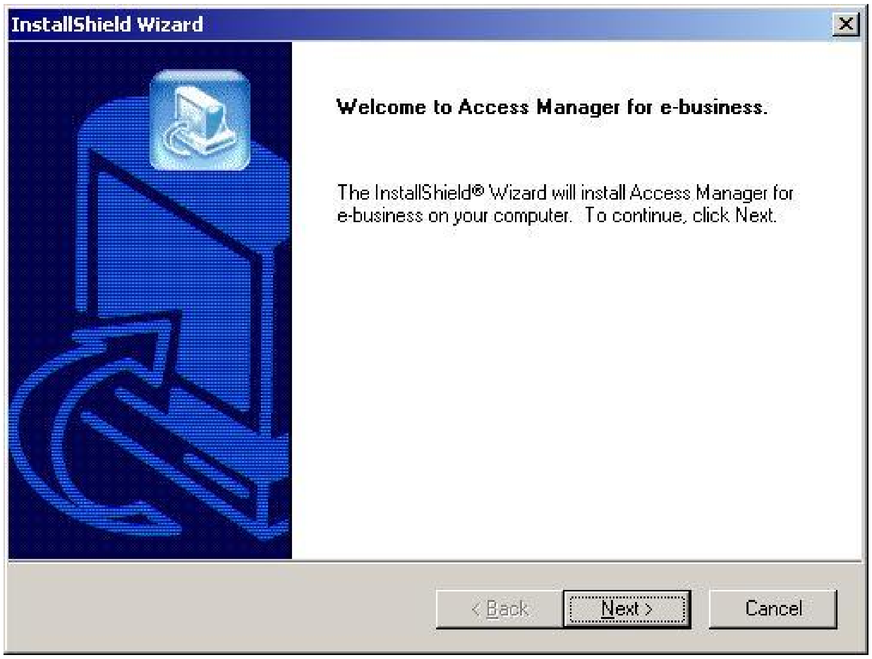
```
D:\windows\PolicyDirector\Disk Images\Disk1\setup.exe
```



Select the language for this installation from the choices below.

English

Press “OK” to continue.

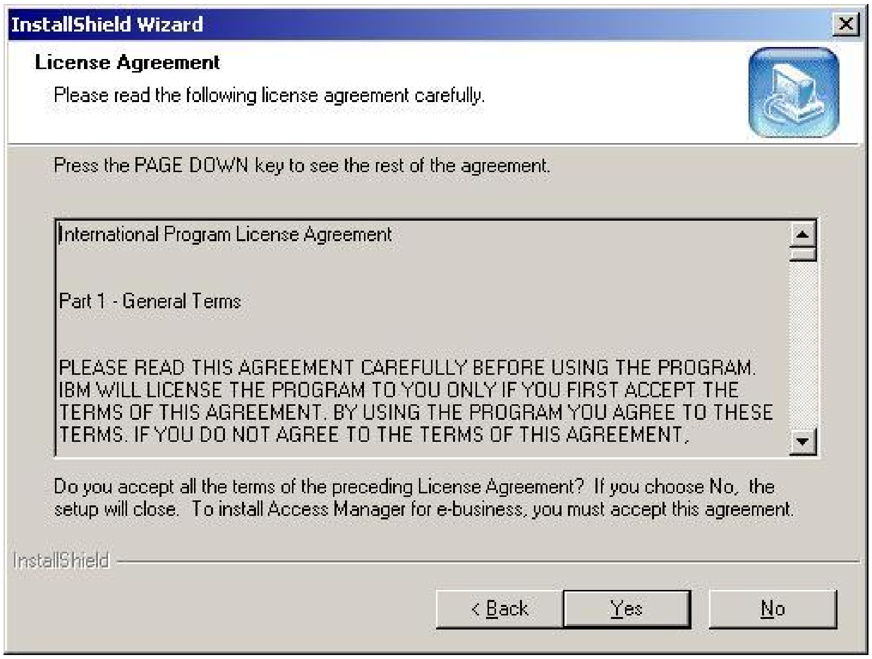


InstallShield Wizard

**Welcome to Access Manager for e-business.**

The InstallShield® Wizard will install Access Manager for e-business on your computer. To continue, click Next.

Press "Next" to continue.



InstallShield Wizard

**License Agreement**

Please read the following license agreement carefully.

Press the PAGE DOWN key to see the rest of the agreement.

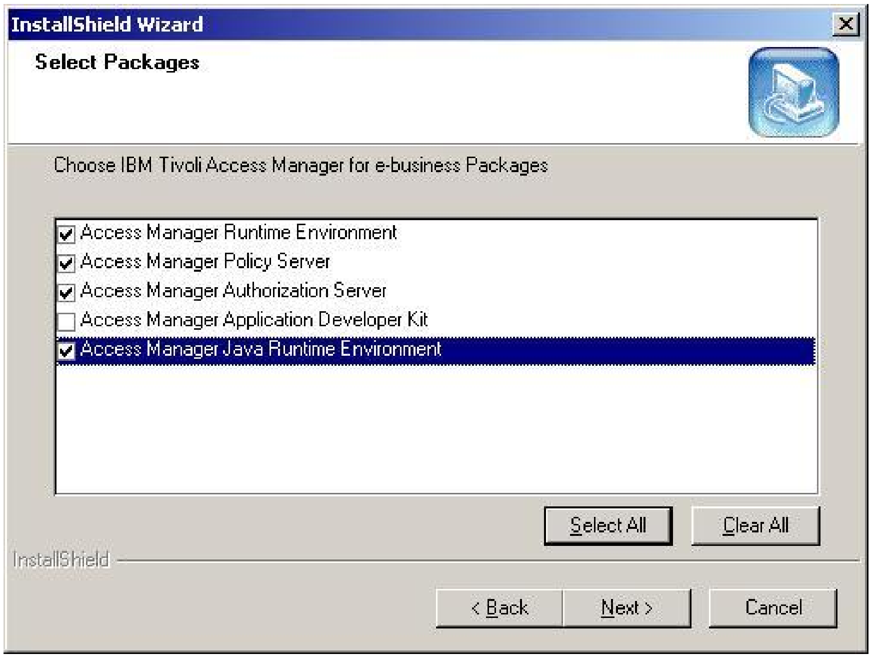
International Program License Agreement

Part 1 - General Terms

PLEASE READ THIS AGREEMENT CAREFULLY BEFORE USING THE PROGRAM. IBM WILL LICENSE THE PROGRAM TO YOU ONLY IF YOU FIRST ACCEPT THE TERMS OF THIS AGREEMENT. BY USING THE PROGRAM YOU AGREE TO THESE TERMS. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT,

Do you accept all the terms of the preceding License Agreement? If you choose No, the setup will close. To install Access Manager for e-business, you must accept this agreement.

Press "Yes" to continue.

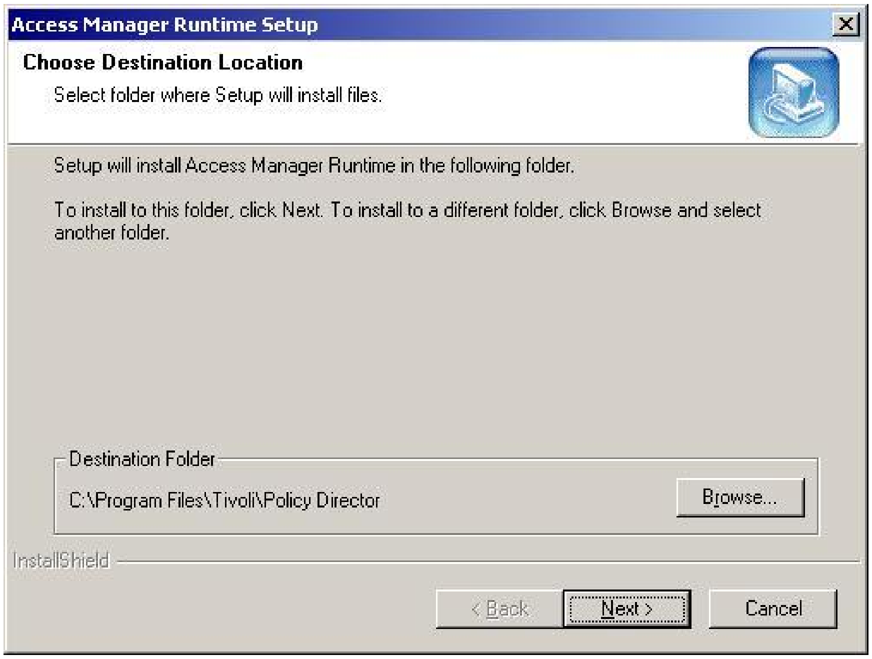


Choose IBM Tivoli Access Manager for e-business Packages

☑ Access Manager Runtime Environment
☑ Access Manager Policy Server
☑ Access Manager Authorization Server
☐ Access Manager Application Developer Kit
☑ Access Manager Java Runtime Environment

Select the following packages and press "Next" continue:

- Access Manager Runtime Environment
- Access Manager Policy Server
- Access Manager Authorization Server
- Access Manager Java Runtime Environment.

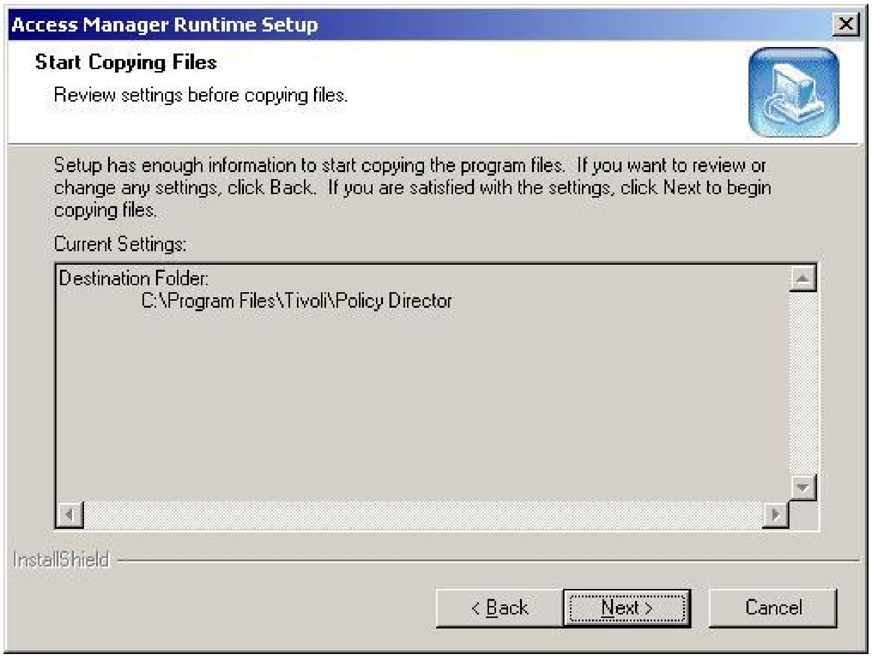

Access Manager Runtime Setup
Choose Destination Location
Select folder where Setup will install files.
Destination Folder
Browse...
InstallShield
< Back
Next >
Cancel

Setup will install Access Manager Runtime in the following folder.

To install to this folder, click Next. To install to a different folder, click Browse and select another folder.

Destination Folder: C:\Program Files\Tivoli\Policy Director

Press "Next" to accept the default install location and continue.



Access Manager Runtime Setup

Start Copying Files

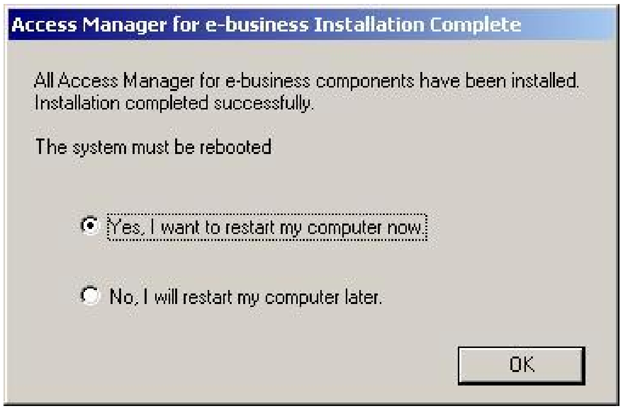
Review settings before copying files.

Setup has enough information to start copying the program files. If you want to review or change any settings, click Back. If you are satisfied with the settings, click Next to begin copying files.

Current Settings:

Destination Folder:
C:\Program Files\Tivoli\Policy Director

Press "Next" to continue.



Access Manager for e-business Installation Complete

All Access Manager for e-business components have been installed. Installation completed successfully.

The system must be rebooted

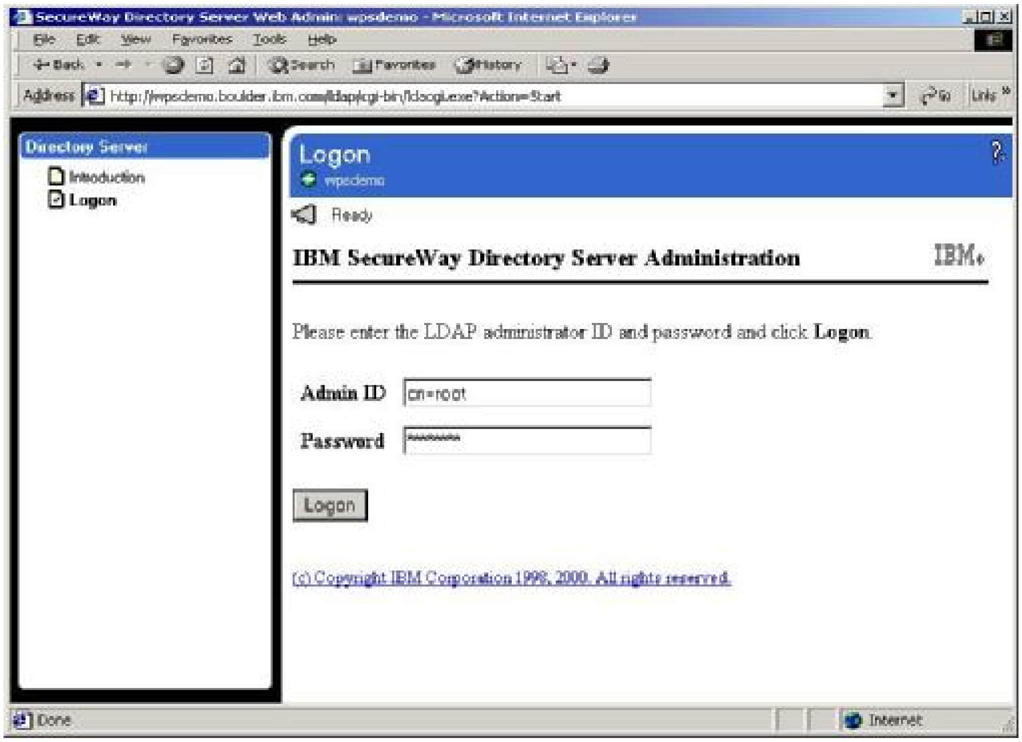
● Yes, I want to restart my computer now.

○ No, I will restart my computer later.

The selected packages have now been installed. Ensure the "Yes, I want to restart my computer now" radio button is selected and press "OK" to reboot.

### *Add "secAuthority=Default" Suffix to LDAP*

Once the system has restarted, ensure the LDAP server is started. Before configuring Access Manager, we need to add a suffix to LDAP. Run the LDAP server administration program: http://wpsdemo.boulder.ibm.com/ldap.



SecureWay Directory Server Web Admin: wpsdemo - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address http://wpsdemo.boulder.ibm.com/ldap/cgi-bin/ldacgi.exe?Action=Start
Links
Directory Server
Introduction
Logon
Logon
wpsdemo
Ready
IBM
Logon
Done
Internet

IBM SecureWay Directory Server Administration

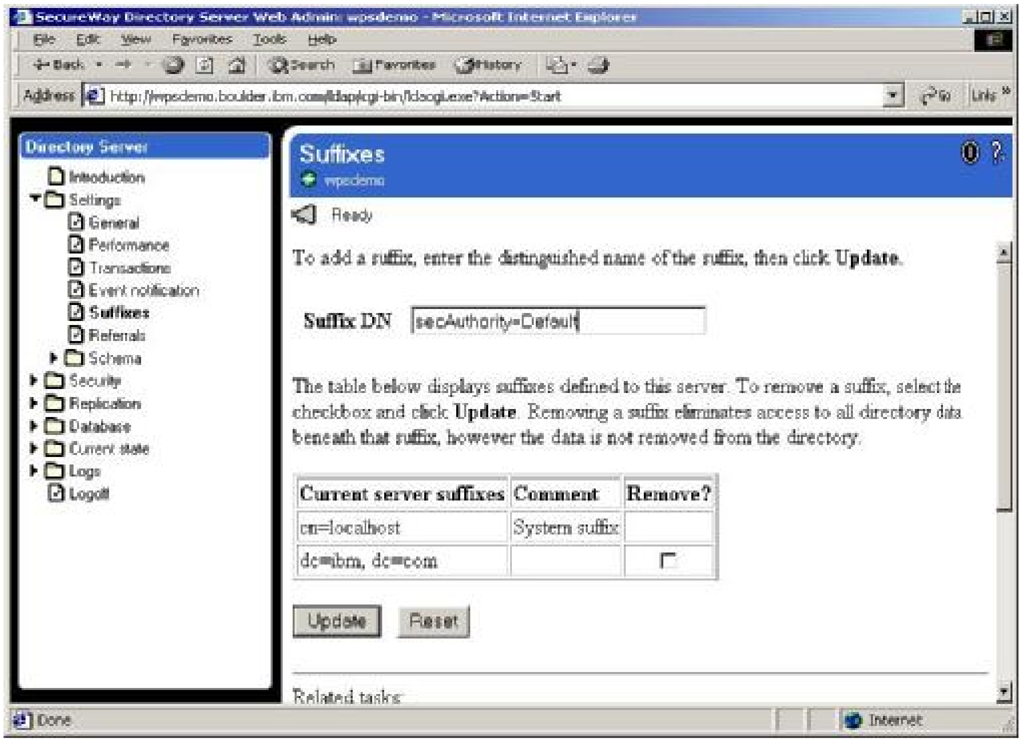
Please enter the LDAP administrator ID and password and click **Logon**.

**Admin ID** cn=root

**Password** ********

(c) Copyright IBM Corporation 1998, 2000. All rights reserved.

Enter "cn=root" and "passw0rd" in the appropriate fields and pres "Logon" to loginto the administration application.



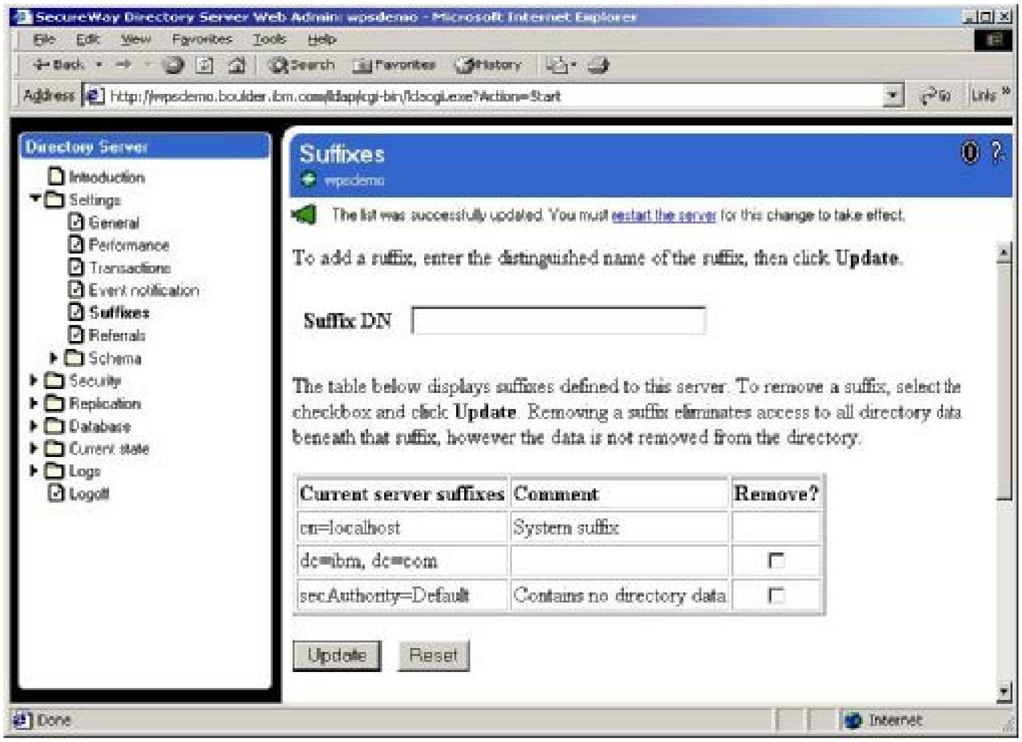
To add a suffix, enter the distinguished name of the suffix, then click **Update**.

**Suffix DN** secAuthority=Default

The table below displays suffixes defined to this server. To remove a suffix, select the checkbox and click **Update**. Removing a suffix eliminates access to all directory data beneath that suffix, however the data is not removed from the directory.

| Current server suffixes | Comment | Remove? |
|---|---|---|
| cn=localhost | System suffix | |
| dc=ibm, dc=com | | □ |

Select "Suffixes" from the menu panel. Enter "secAuthority=Default" in the "Suffix DN" field and press the "Update" button to add the new suffix.


SecureWay Directory Server Web Admin: wpsdemo - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address http://wpsdemo.boulder.ibm.com/ldap/cgi-bin/ldacgi.exe?Action=Start
Directory Server
Introduction
Settings
General
Performance
Transactions
Event notification
Suffixes
Referrals
Schema
Security
Replication
Database
Current state
Logs
Logoff
Suffixes
wpsdemo
Update
Reset
Done
Internet

The list was successfully updated. You must restart the server for this change to take effect.

To add a suffix, enter the distinguished name of the suffix, then click **Update**.

**Suffix DN**

The table below displays suffixes defined to this server. To remove a suffix, select the checkbox and click **Update**. Removing a suffix eliminates access to all directory data beneath that suffix, however the data is not removed from the directory.

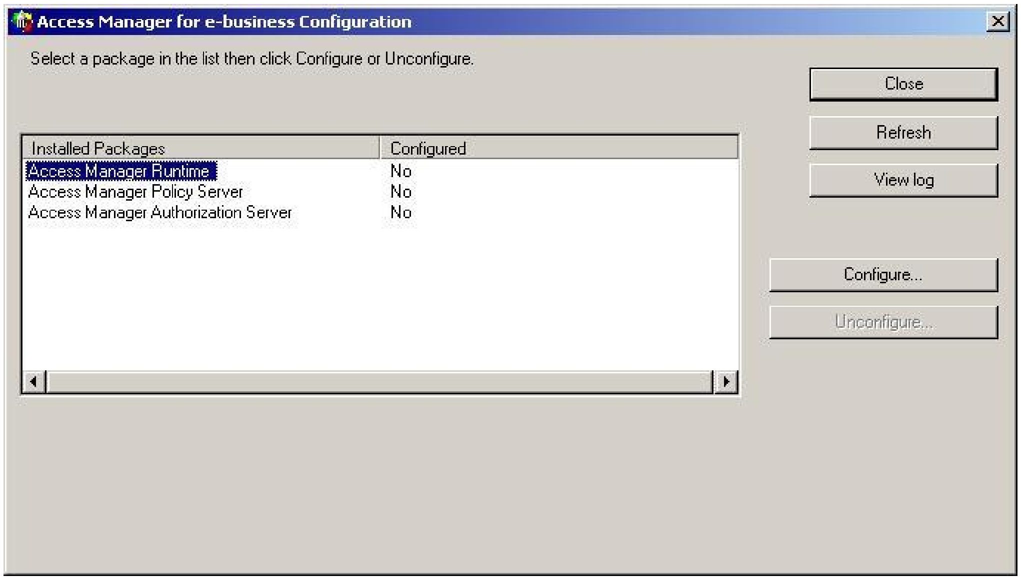
| Current server suffixes | Comment | Remove? |
|---|---|---|
| cn=localhost | System suffix | |
| dc=ibm, dc=com | | □ |
| secAuthority=Default | Contains no directory data | □ |

The "secAuthority=Default" suffix should now appear in the "Current server suffixes" list. Press the "restart the server" link at the top of the page.

Once the status message has changed to "The Directory Server is running", you can exit the LDAP administration program.

### *Configure Access Manager Runtime*

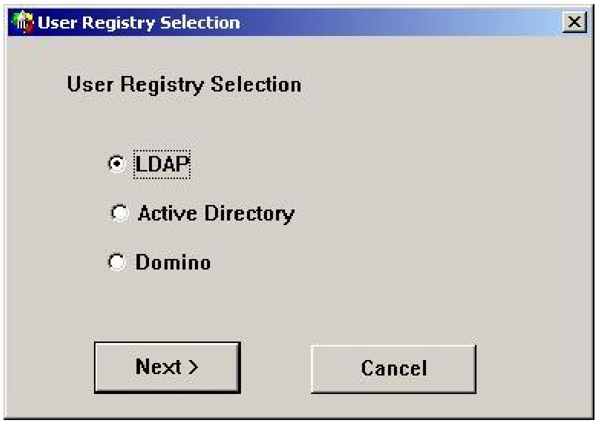
Run the Access Manager configuration program: "Start->Programs-> Access Manager for e-business->Configuration".



Select a package in the list then click Configure or Unconfigure.

| Installed Packages | Configured |
|---|---|
| Access Manager Runtime | No |
| Access Manager Policy Server | No |
| Access Manager Authorization Server | No |

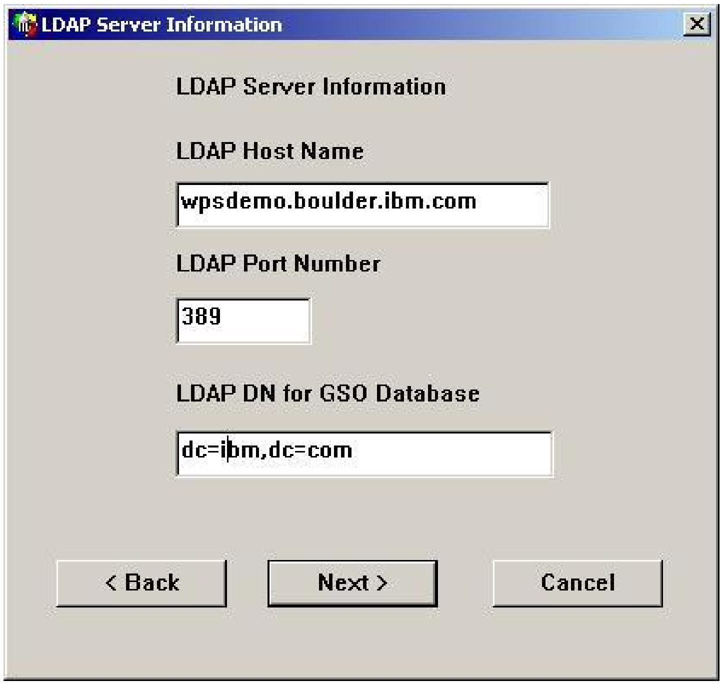
Select the “Access Manager Runtime” entry and press the “Configure” button.



User Registry Selection

● LDAP
○ Active Directory
○ Domino

Ensure the LDAP radio button is selected and press “Next” to continue.



LDAP Server Information

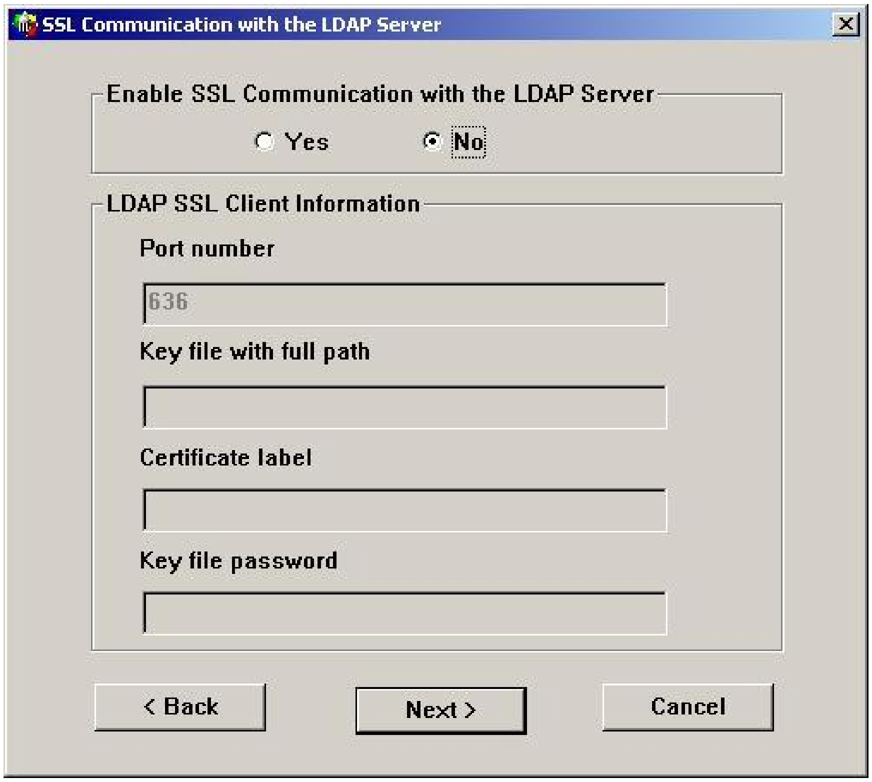
LDAP Host Name: wpsdemo.boulder.ibm.com

LDAP Port Number: 389

LDAP DN for GSO Database: dc=ibm,dc=com

Enter the following field values, then press “Next” to continue:

- LDAP Host Name: wpsdemo.boulder.ibm.com
- LDAP Port Number: 389
- LDAP DN for GSO Database: dc=ibm,dc=com



SSL Communication with the LDAP Server

Enable SSL Communication with the LDAP Server

○ Yes ● No

LDAP SSL Client Information

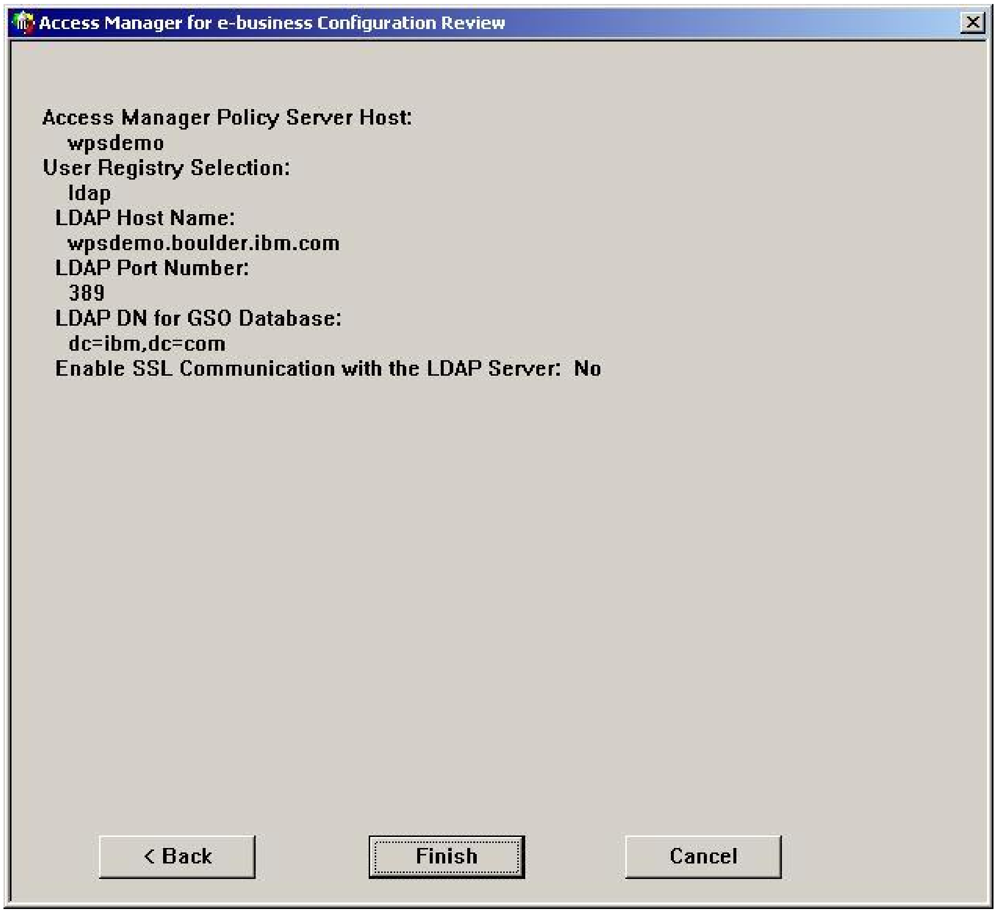
Port number: 636

Key file with full path:

Certificate label:

Key file password:

Select the “No” radio button and press “Next” to continue.

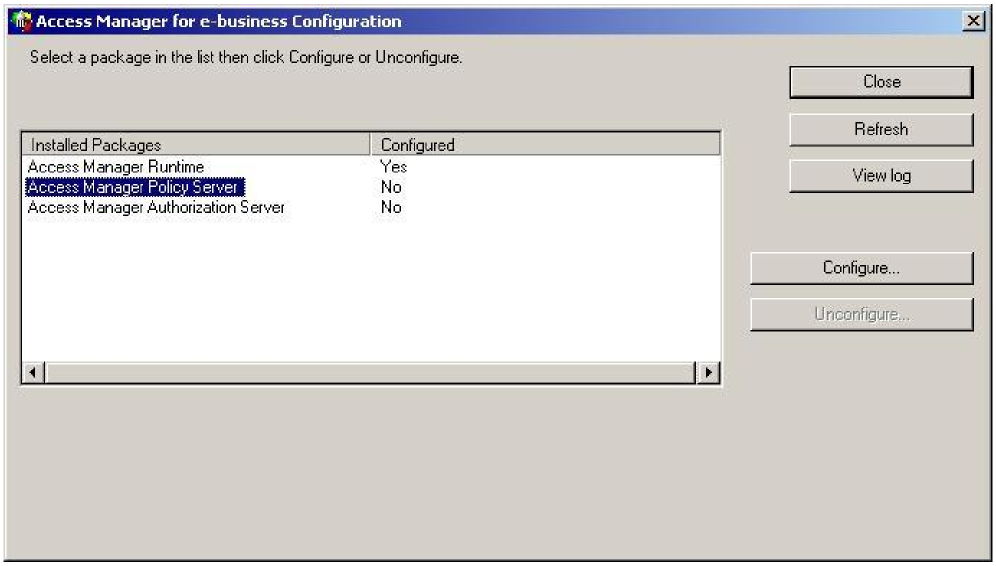


Access Manager for e-business Configuration Review

Access Manager Policy Server Host:
wpsdemo
User Registry Selection:
ldap
LDAP Host Name:
wpsdemo.boulder.ibm.com
LDAP Port Number:
389
LDAP DN for GSO Database:
dc=ibm,dc=com
Enable SSL Communication with the LDAP Server: No

Press “Finish” to configure the Access Manager runtime environment.

### *Configure Access Manager Policy Server*

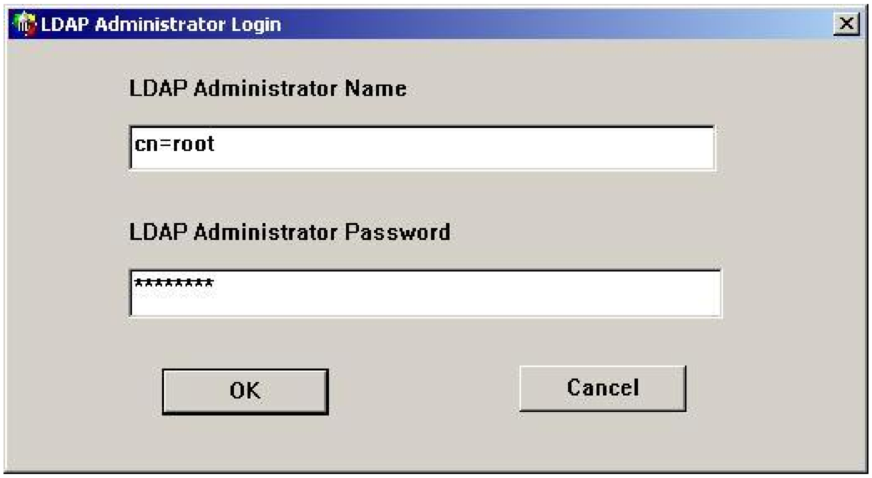


Access Manager for e-business Configuration

Select a package in the list then click Configure or Unconfigure.

| Installed Packages | Configured |
|---|---|
| Access Manager Runtime | Yes |
| Access Manager Policy Server | No |
| Access Manager Authorization Server | No |

Select the “Access Manager Policy Server” entry and press “Configure”.



LDAP Administrator Login

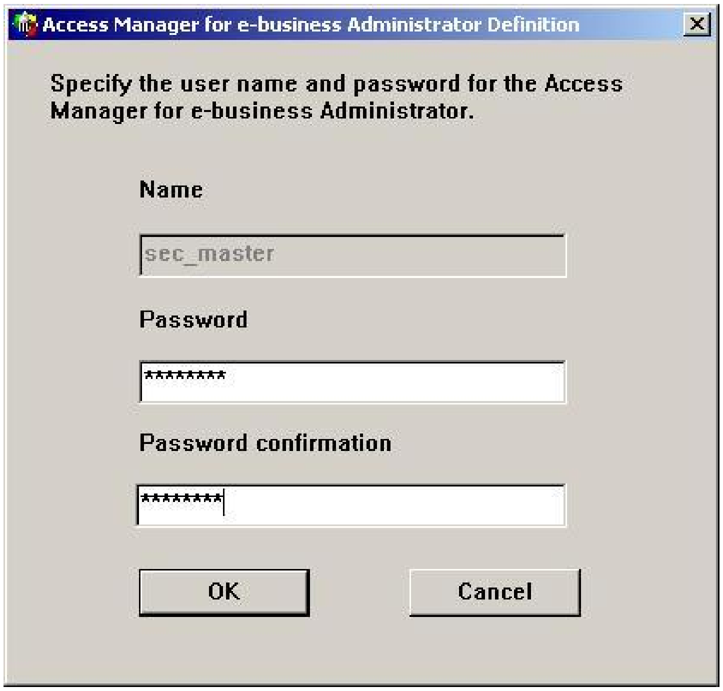
LDAP Administrator Name

cn=root

LDAP Administrator Password

********

Enter “cn=root” and “passw0rd” in the appropriate fields and press “OK”.



Access Manager for e-business Administrator Definition

Specify the user name and password for the Access Manager for e-business Administrator.

Name

sec_master

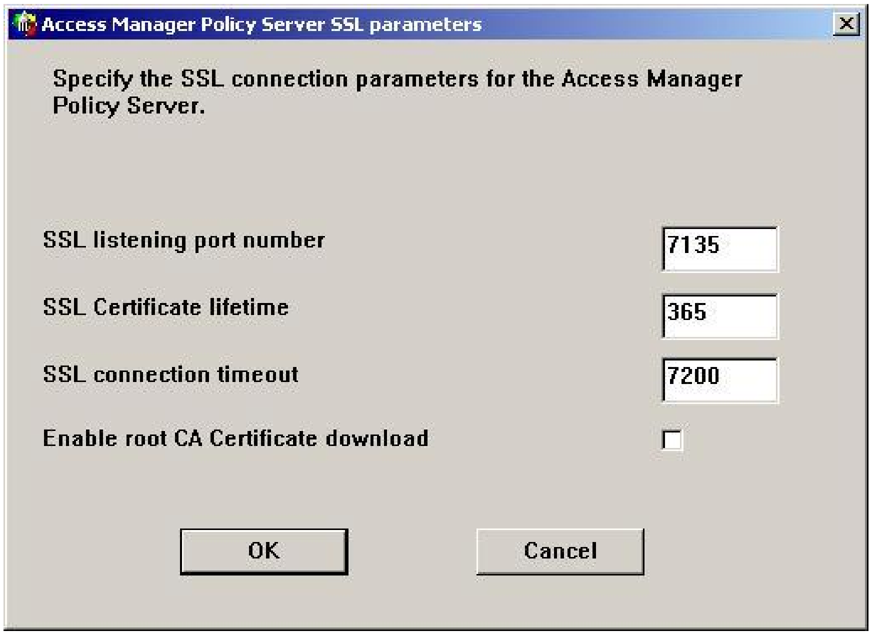
Password

********

Password confirmation

********

Enter the password to use for the “sec_master” user:  “passw0rd”.



Access Manager Policy Server SSL parameters

Specify the SSL connection parameters for the Access Manager Policy Server.

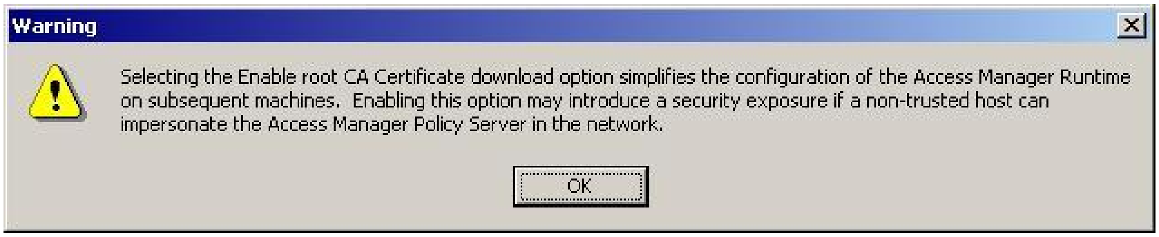
SSL listening port number: 7135

SSL Certificate lifetime: 365

SSL connection timeout: 7200

Enable root CA Certificate download □

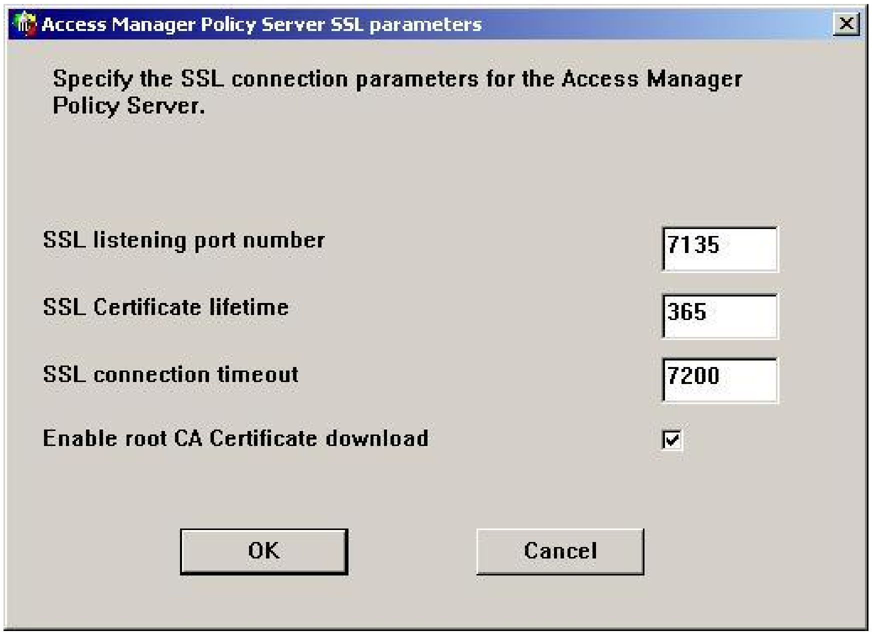
Select the “Enable root CA Certificate download” checkbox.



Warning

Selecting the Enable root CA Certificate download option simplifies the configuration of the Access Manager Runtime on subsequent machines. Enabling this option may introduce a security exposure if a non-trusted host can impersonate the Access Manager Policy Server in the network.

As we are in a stand-alone demo environment, press “OK” to acknowledge the warning message.



Access Manager Policy Server SSL parameters

Specify the SSL connection parameters for the Access Manager Policy Server.

SSL listening port number: 7135

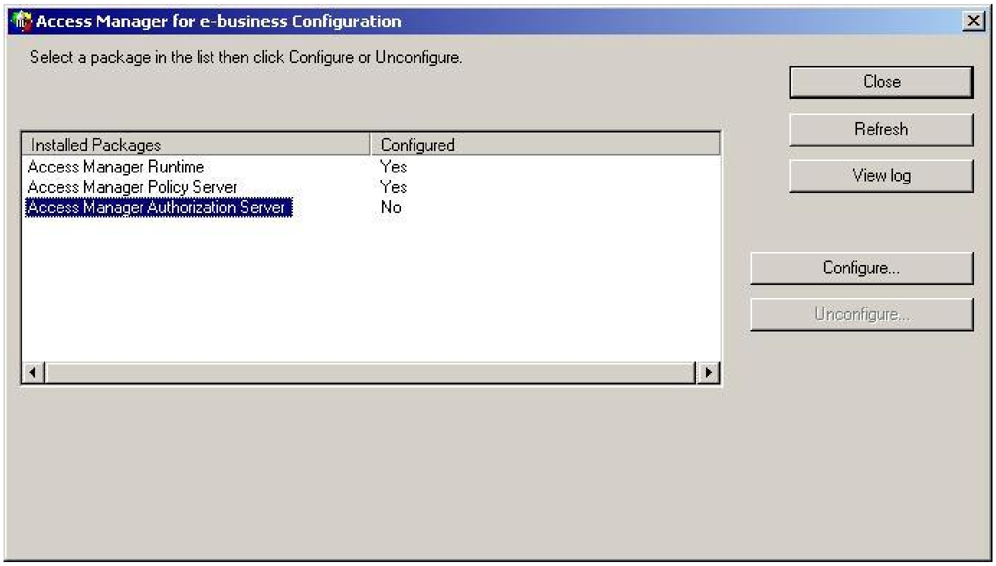
SSL Certificate lifetime: 365

SSL connection timeout: 7200

Enable root CA Certificate download ☑

Press “OK” to configure the Access Manager Policy Server.

### *Configure Access Manager Authorization Server*

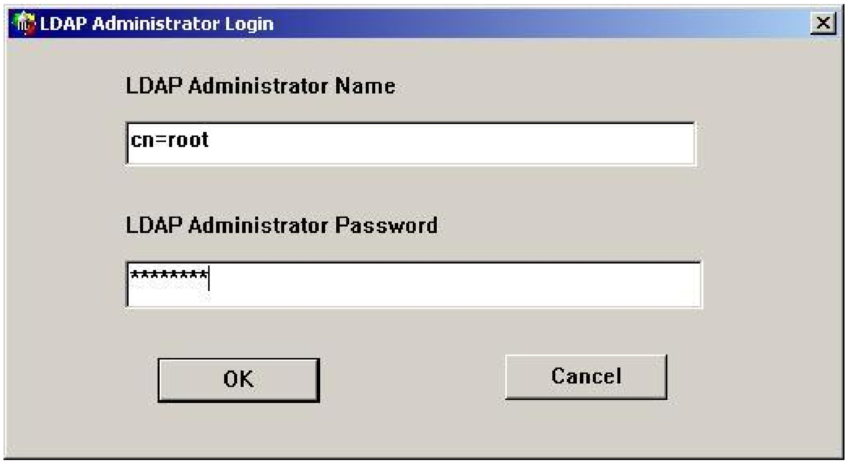


Access Manager for e-business Configuration

Select a package in the list then click Configure or Unconfigure.

| Installed Packages | Configured |
|---|---|
| Access Manager Runtime | Yes |
| Access Manager Policy Server | Yes |
| Access Manager Authorization Server | No |

Select the “Access Manager Authorization Server” entry and press “Configure”.

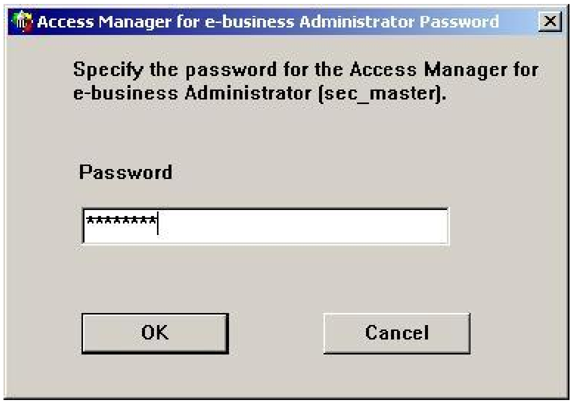


LDAP Administrator Login

LDAP Administrator Name: cn=root

LDAP Administrator Password: ********

Enter “cn=root” and “passw0rd” in the appropriate fields and press “OK” to continue.

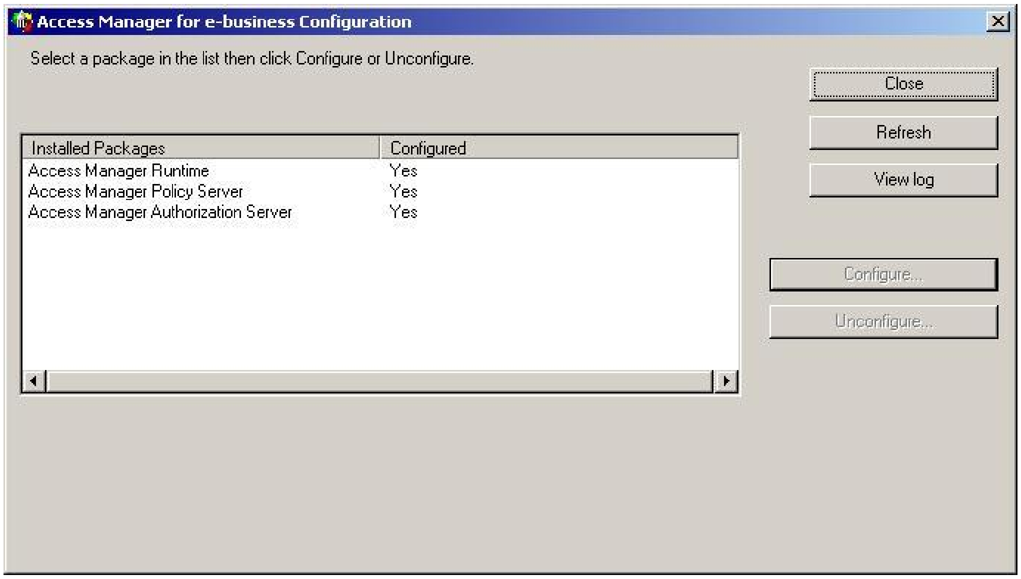


Access Manager for e-business Administrator Password

Specify the password for the Access Manager for e-business Administrator (sec_master).

Password: ********

Enter the password for sec_master (passw0rd) and press "OK" to configure the Authorization Server.



Access Manager for e-business Configuration

Select a package in the list then click Configure or Unconfigure.

| Installed Packages | Configured |
|---|---|
| Access Manager Runtime | Yes |
| Access Manager Policy Server | Yes |
| Access Manager Authorization Server | Yes |

Configuration of the Access Manager Base package is now complete. Press the "Close" button.

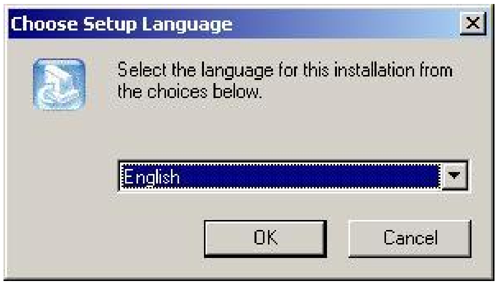
## Install and Configure Access Manager Web Portal Manager

### *Install Web Portal Manager*

Ensure the LDAP server is running.

Run the installation program from the TAM 3.9 WPM CD:

```
D:\ windows\PolicyDirector\Disk Images\Disk1\setup.exe
```

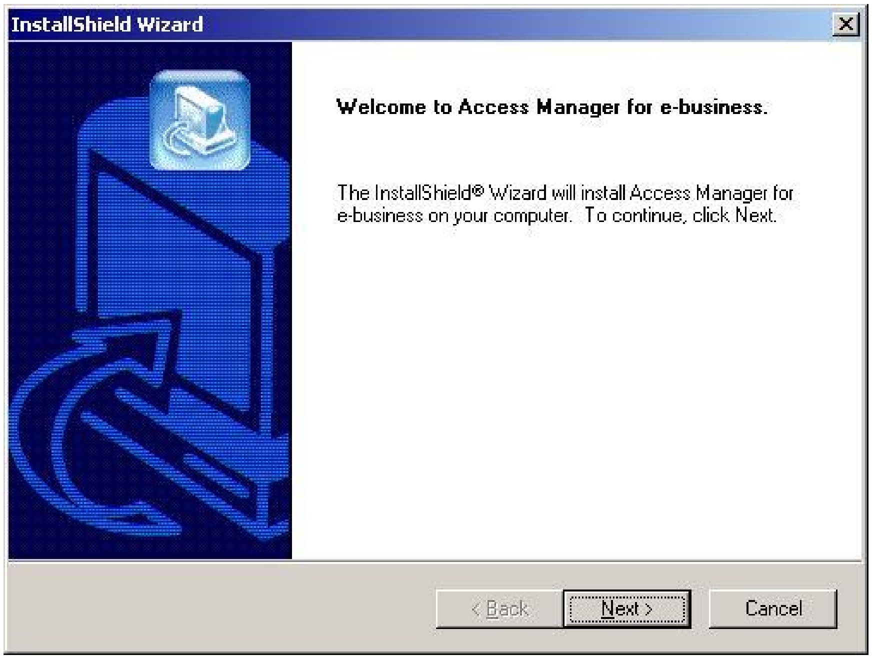


Choose Setup Language

Select the language for this installation from the choices below.

English

Press “OK” to continue.

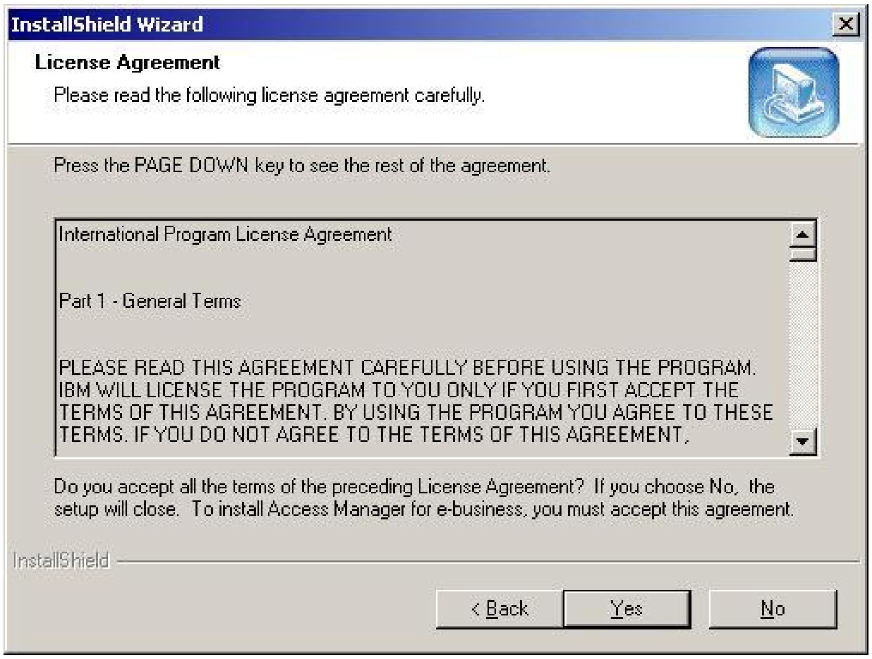


InstallShield Wizard

Welcome to Access Manager for e-business.

The InstallShield® Wizard will install Access Manager for e-business on your computer. To continue, click Next.

Press “Next” to continue.



InstallShield Wizard

**License Agreement**

Please read the following license agreement carefully.

Press the PAGE DOWN key to see the rest of the agreement.

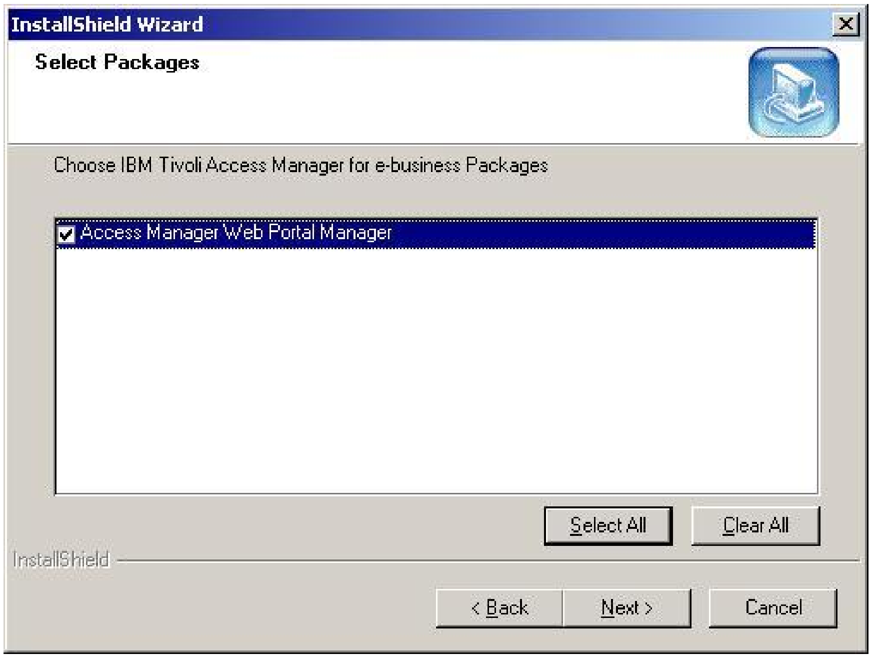
International Program License Agreement

Part 1 - General Terms

PLEASE READ THIS AGREEMENT CAREFULLY BEFORE USING THE PROGRAM. IBM WILL LICENSE THE PROGRAM TO YOU ONLY IF YOU FIRST ACCEPT THE TERMS OF THIS AGREEMENT. BY USING THE PROGRAM YOU AGREE TO THESE TERMS. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT,

Do you accept all the terms of the preceding License Agreement? If you choose No, the setup will close. To install Access Manager for e-business, you must accept this agreement.

Press “Yes” to continue.



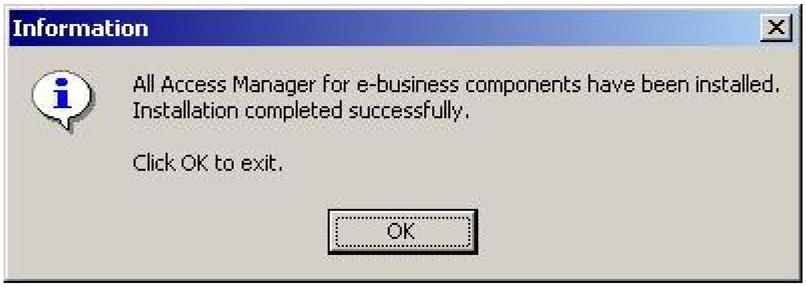
InstallShield Wizard

**Select Packages**

Choose IBM Tivoli Access Manager for e-business Packages

☑ Access Manager Web Portal Manager

Select the checkbox next to “Access Manager Web Portal Manager” and press “Next” to install the Access Manager Web Portal Manager.



All Access Manager for e-business components have been installed.
Installation completed successfully.

Click OK to exit.

Press “OK” to exit the installation program.

### *Deploy Web Portal Manager Application in WebSphere Application Server*

The TAM Web Portal Manager configuration program requires a WebSphere Advanced Edition, Single Server version to host the WPM application. As we have a different version of the WebSphere Advanced Edition server installed, we will use the WebSphere Administration Console to deploy the WPM application.

Ensure the LDAP server and WebSphere Application server are both running.

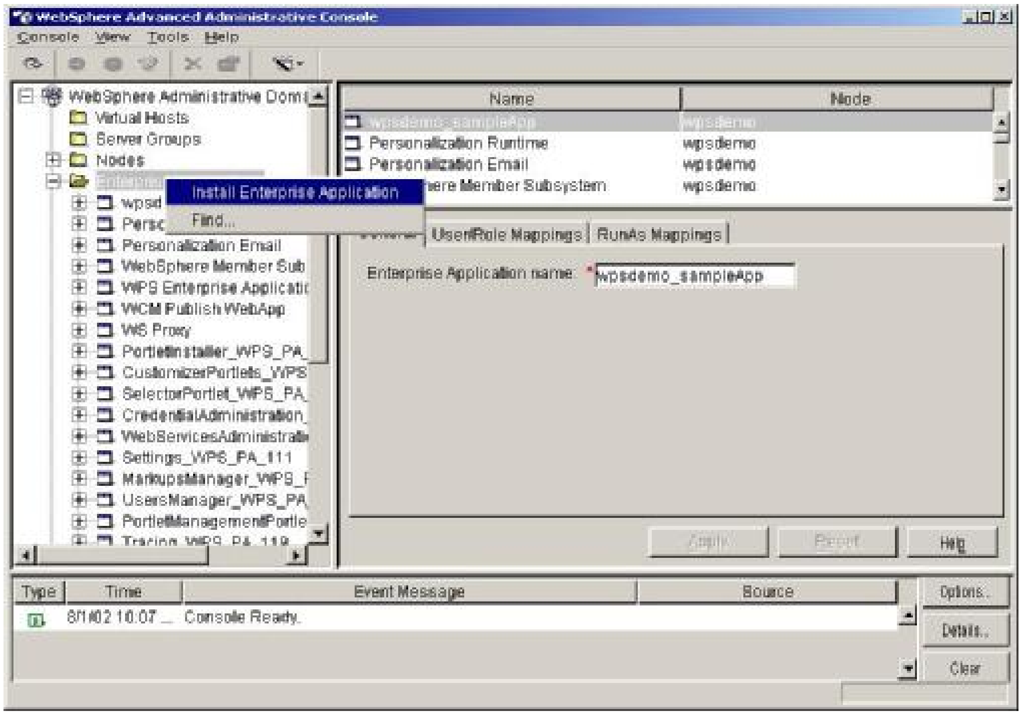
Copy `pdwpm.ear` from:

```
   C:\Program Files\Tivoli\Policy Director\java\export\pdwpm
```

to

```
   C:\WebSphere\AppServer\InstallableApps
```

Start the WebSphere Administration Console.

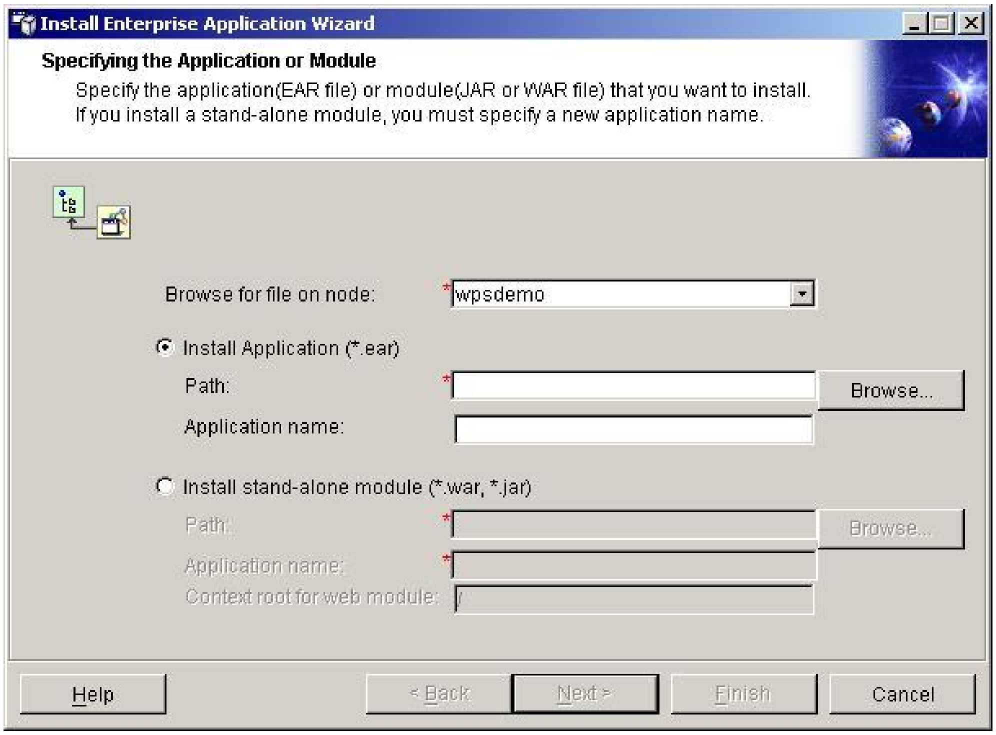


| Name | Node |
|---|---|
| wpsdemo_sampleApp | wpsdemo |
| Personalization Runtime | wpsdemo |
| Personalization Email | wpsdemo |
| ...ere Member Subsystem | wpsdemo |

Enterprise Application name: * wpsdemo_sampleApp

| Type | Time | Event Message | Source |
|---|---|---|---|
| i | 8/1/02 10:07 ... | Console Ready. | |

Highlight “Enterprise Applications”, right mouse click and select “Install Enterprise Application”.



Install Enterprise Application Wizard

**Specifying the Application or Module**

Specify the application(EAR file) or module(JAR or WAR file) that you want to install.
If you install a stand-alone module, you must specify a new application name.

Browse for file on node: * wpsdemo

● Install Application (*.ear)

Path: *

Application name:

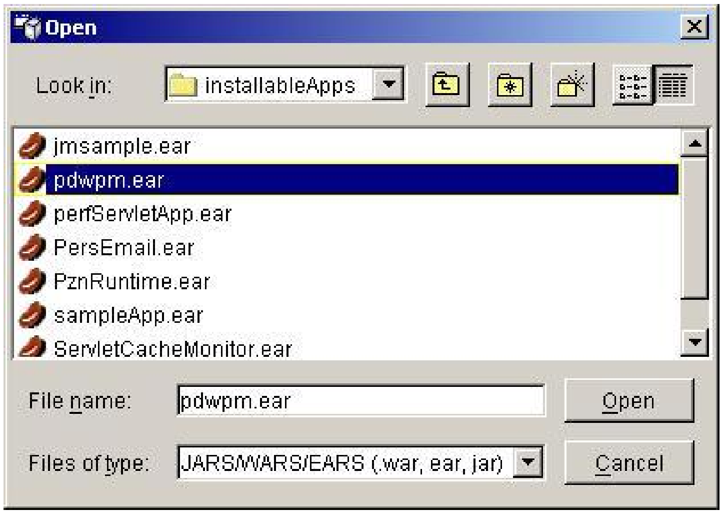
○ Install stand-alone module (*.war, *.jar)

Path: *

Application name: *

Context root for web module: /

Press the “Browse…” button to select the EAR file.



Open

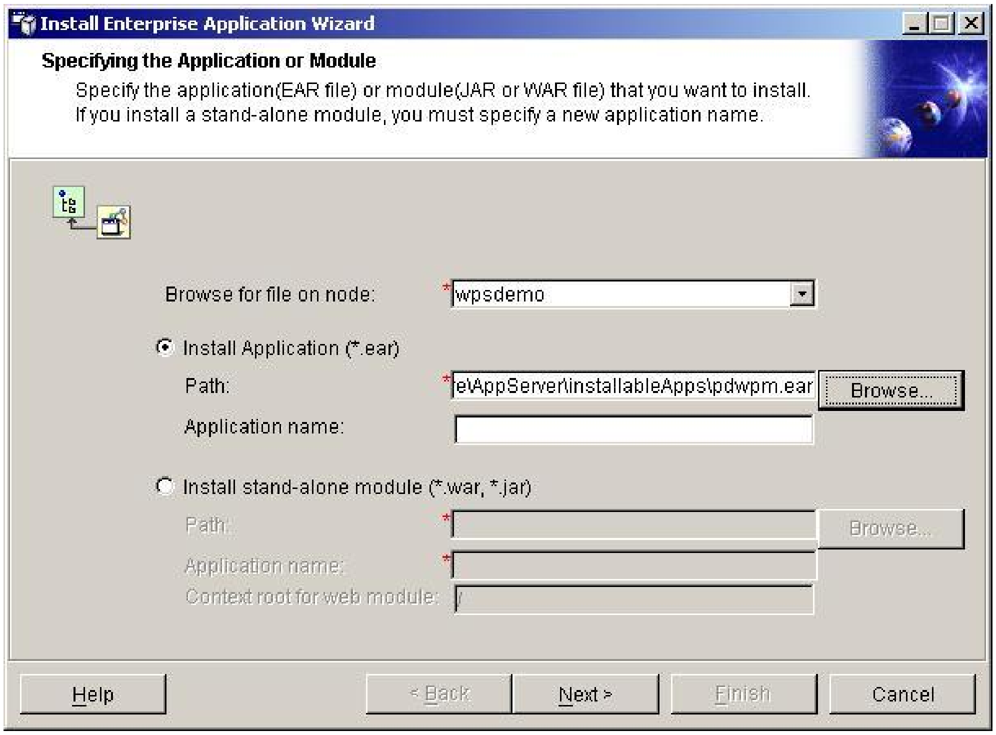
Look in: installableApps

jmsample.ear
pdwpm.ear
perfServletApp.ear
PersEmail.ear
PznRuntime.ear
sampleApp.ear
ServletCacheMonitor.ear

File name: pdwpm.ear

Files of type: JARS/WARS/EARS (.war, ear, jar)

Highlight “pdwpm.ear” and press the “Open” button to continue.



Install Enterprise Application Wizard

**Specifying the Application or Module**

Specify the application(EAR file) or module(JAR or WAR file) that you want to install.
If you install a stand-alone module, you must specify a new application name.

Browse for file on node: * wpsdemo

● Install Application (*.ear)

Path: * e\AppServer\installableApps\pdwpm.ear

Application name:

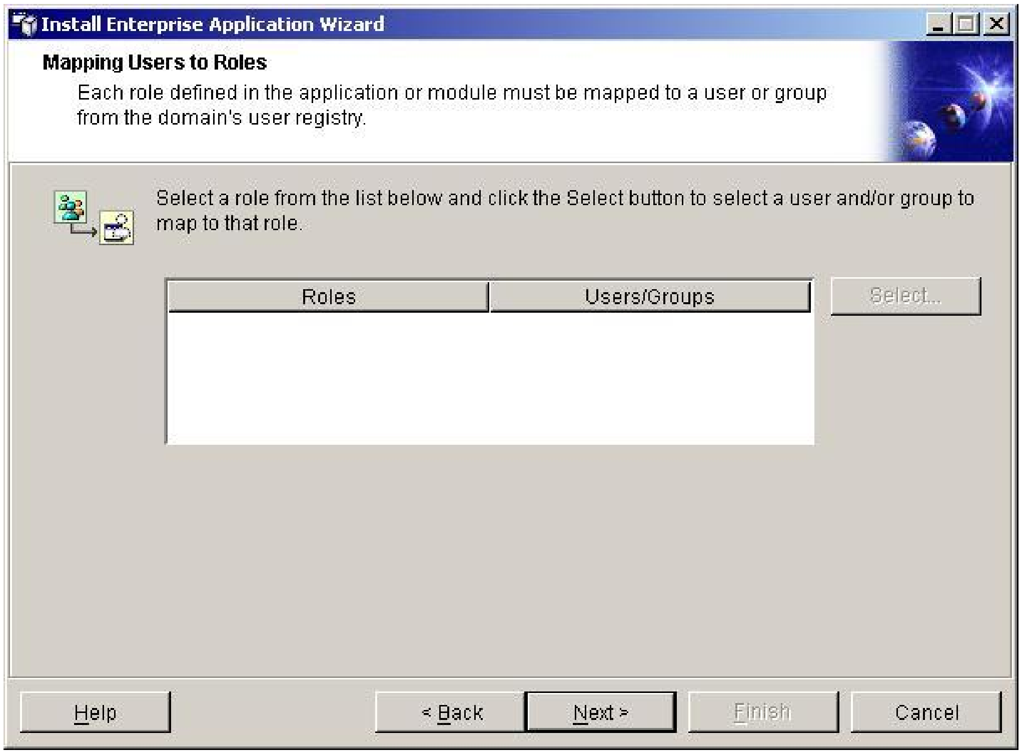
○ Install stand-alone module (*.war, *.jar)

Path: *

Application name: *

Context root for web module: /

Press “Next>” to continue.



Install Enterprise Application Wizard

**Mapping Users to Roles**

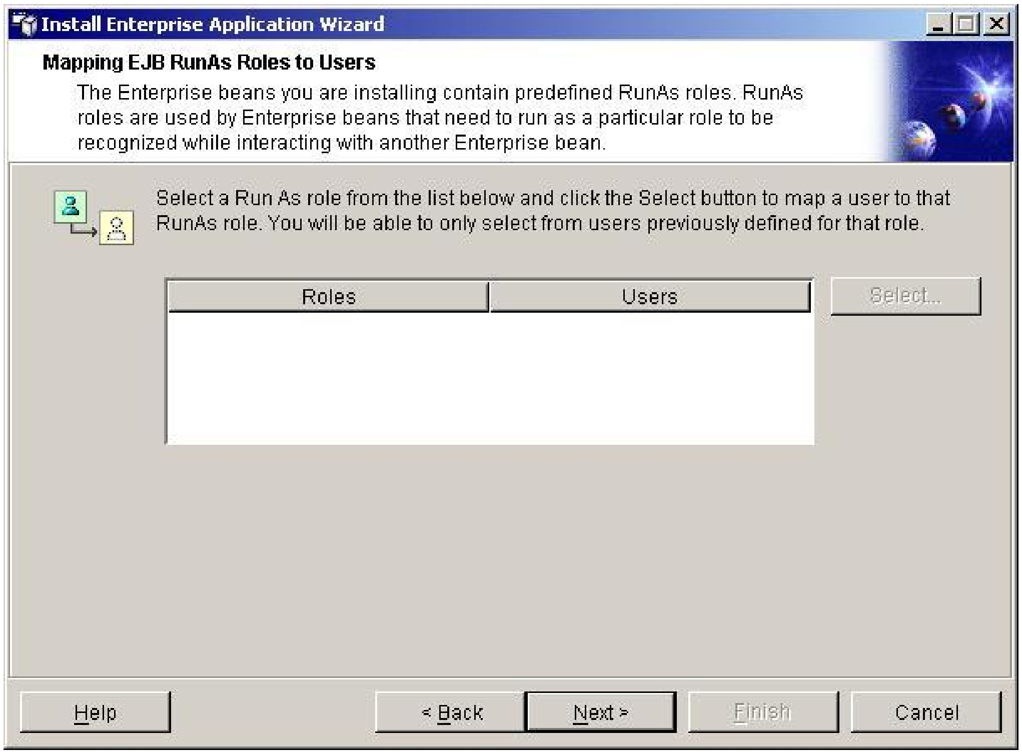
Each role defined in the application or module must be mapped to a user or group from the domain's user registry.

Select a role from the list below and click the Select button to select a user and/or group to map to that role.

| Roles | Users/Groups |
|---|---|

As the Web Portal Manager does not contain any EJBs, we have little to do in the following series of screens.

Press “Next>” to continue.



Install Enterprise Application Wizard

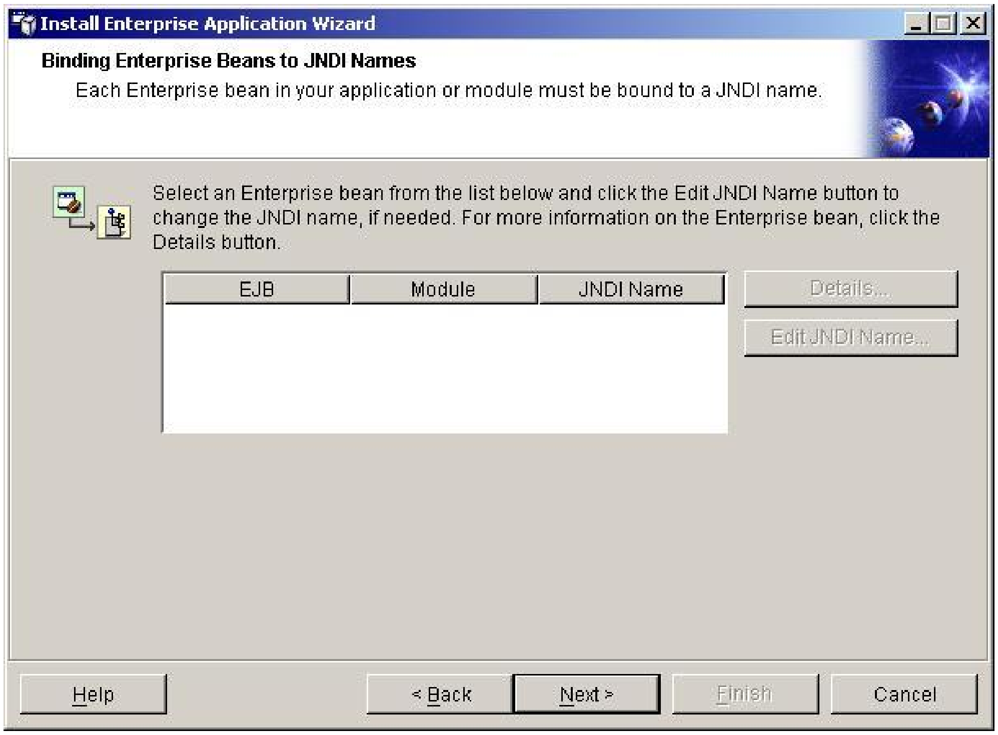
**Mapping EJB RunAs Roles to Users**

The Enterprise beans you are installing contain predefined RunAs roles. RunAs roles are used by Enterprise beans that need to run as a particular role to be recognized while interacting with another Enterprise bean.

Select a Run As role from the list below and click the Select button to map a user to that RunAs role. You will be able to only select from users previously defined for that role.

| Roles | Users |
|---|---|

Press “Next>” to continue.



Install Enterprise Application Wizard

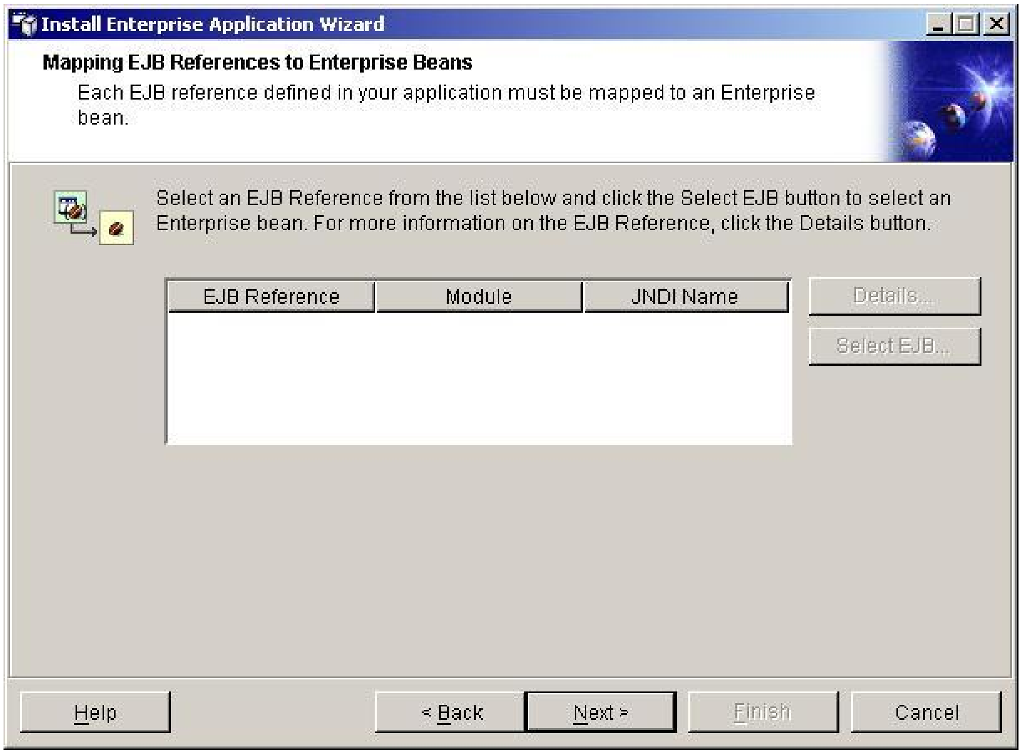
**Binding Enterprise Beans to JNDI Names**

Each Enterprise bean in your application or module must be bound to a JNDI name.

Select an Enterprise bean from the list below and click the Edit JNDI Name button to change the JNDI name, if needed. For more information on the Enterprise bean, click the Details button.

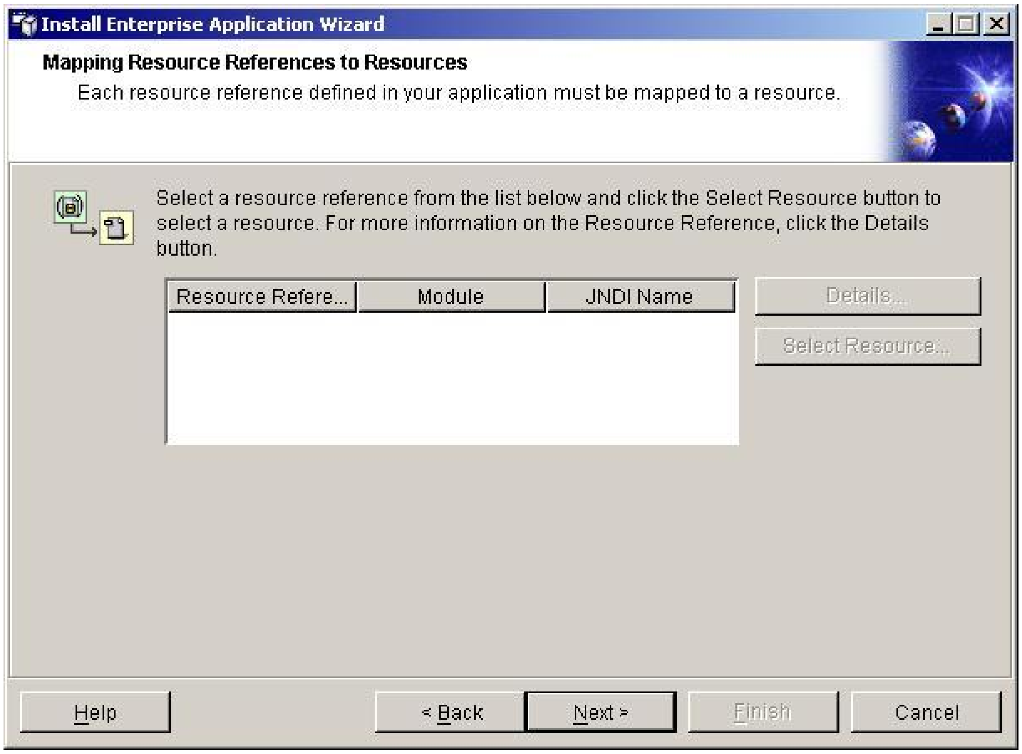
| EJB | Module | JNDI Name |
|---|---|---|

Press “Next>” to continue.



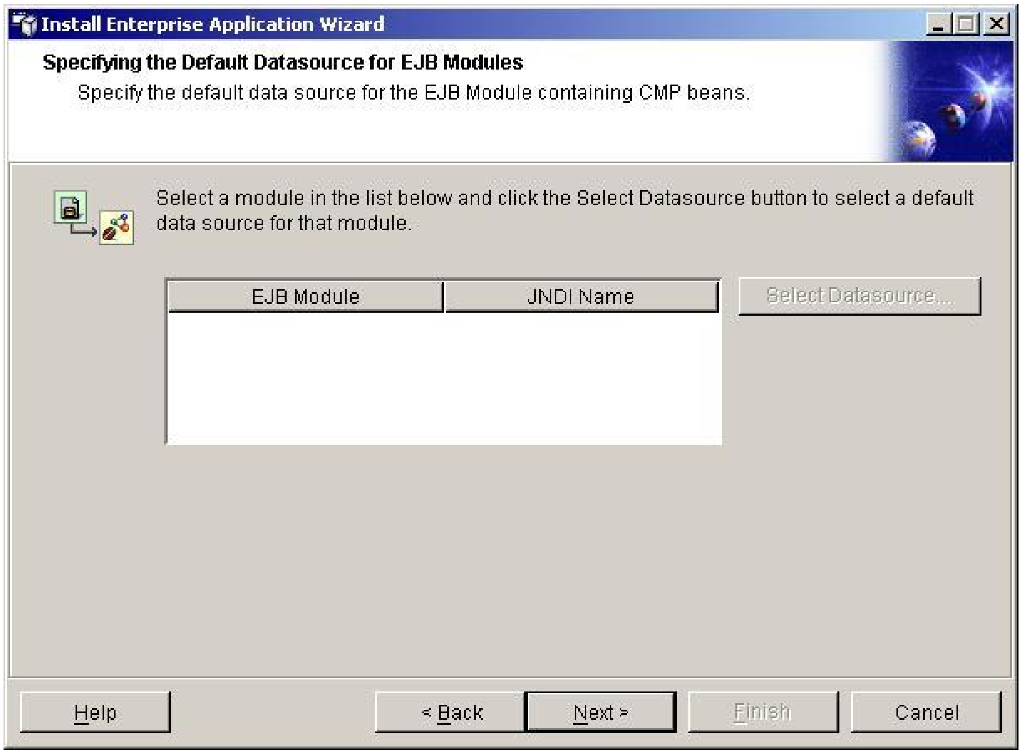
Install Enterprise Application Wizard
Mapping EJB References to Enterprise Beans
Each EJB reference defined in your application must be mapped to an Enterprise bean.
Select an EJB Reference from the list below and click the Select EJB button to select an Enterprise bean. For more information on the EJB Reference, click the Details button.
EJB Reference
Module
JNDI Name
Details...
Select EJB...
Help
< Back
Next >
Finish
Cancel

Press “Next>” to continue.



Install Enterprise Application Wizard
Mapping Resource References to Resources
Each resource reference defined in your application must be mapped to a resource.
Select a resource reference from the list below and click the Select Resource button to select a resource. For more information on the Resource Reference, click the Details button.
Resource Refere...
Module
JNDI Name
Details...
Select Resource...
Help
< Back
Next >
Finish
Cancel

Press “Next>” to continue.



Install Enterprise Application Wizard

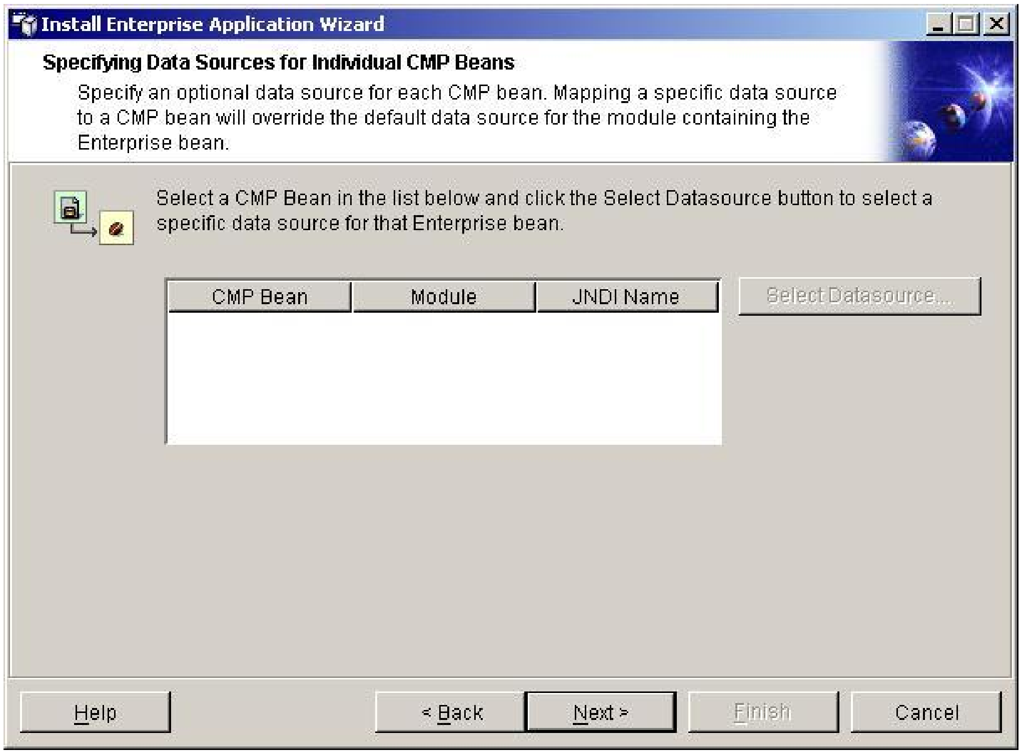
**Specifying the Default Datasource for EJB Modules**

Specify the default data source for the EJB Module containing CMP beans.

Select a module in the list below and click the Select Datasource button to select a default data source for that module.

| EJB Module | JNDI Name |
|---|---|

Press “Next>” to continue.



Install Enterprise Application Wizard

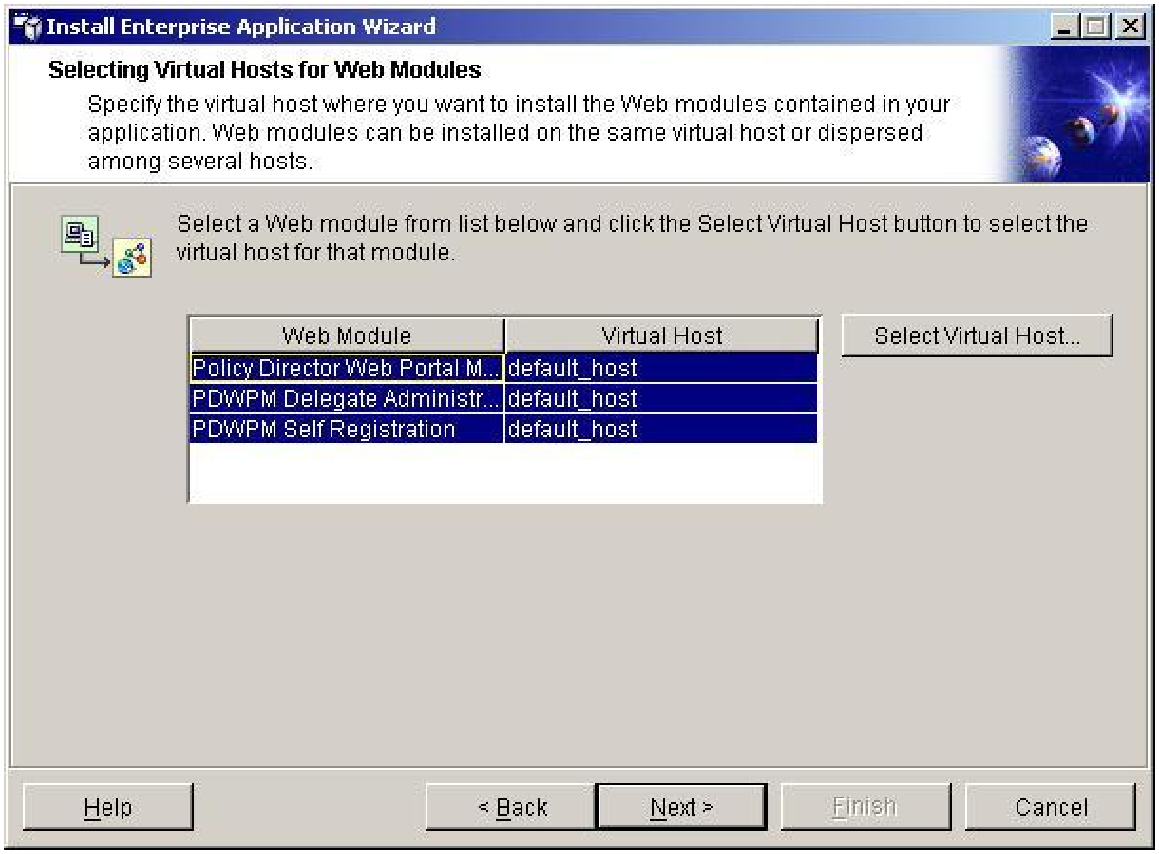
**Specifying Data Sources for Individual CMP Beans**

Specify an optional data source for each CMP bean. Mapping a specific data source to a CMP bean will override the default data source for the module containing the Enterprise bean.

Select a CMP Bean in the list below and click the Select Datasource button to select a specific data source for that Enterprise bean.

| CMP Bean | Module | JNDI Name |
|---|---|---|

Press “Next>” to continue.



Install Enterprise Application Wizard

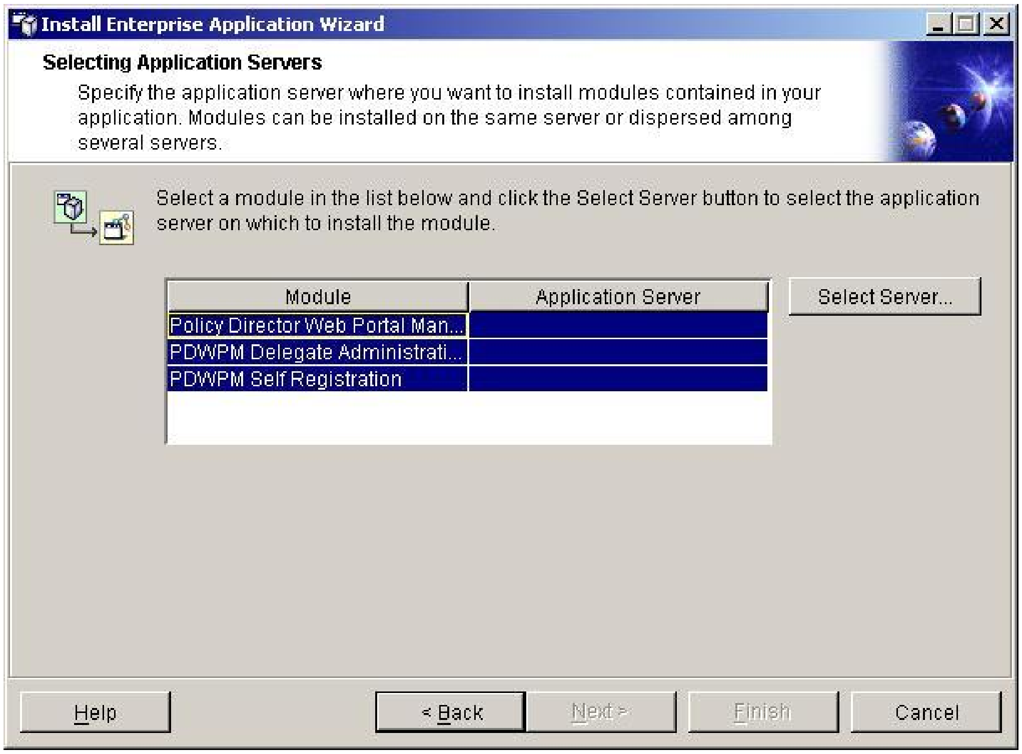
**Selecting Virtual Hosts for Web Modules**

Specify the virtual host where you want to install the Web modules contained in your application. Web modules can be installed on the same virtual host or dispersed among several hosts.

Select a Web module from list below and click the Select Virtual Host button to select the virtual host for that module.

| Web Module | Virtual Host |
|---|---|
| Policy Director Web Portal M... | default_host |
| PDWPM Delegate Administr... | default_host |
| PDWPM Self Registration | default_host |

Highlight all three Web Portal Manager web modules and press “Next>” to load them into the default host.



Install Enterprise Application Wizard

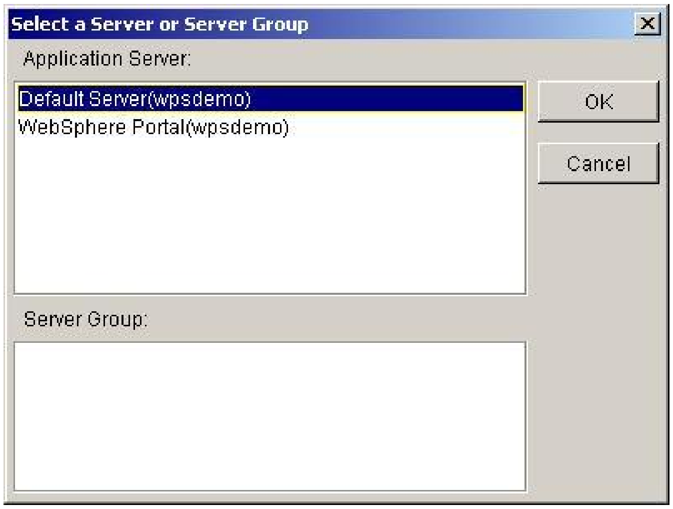
**Selecting Application Servers**

Specify the application server where you want to install modules contained in your application. Modules can be installed on the same server or dispersed among several servers.

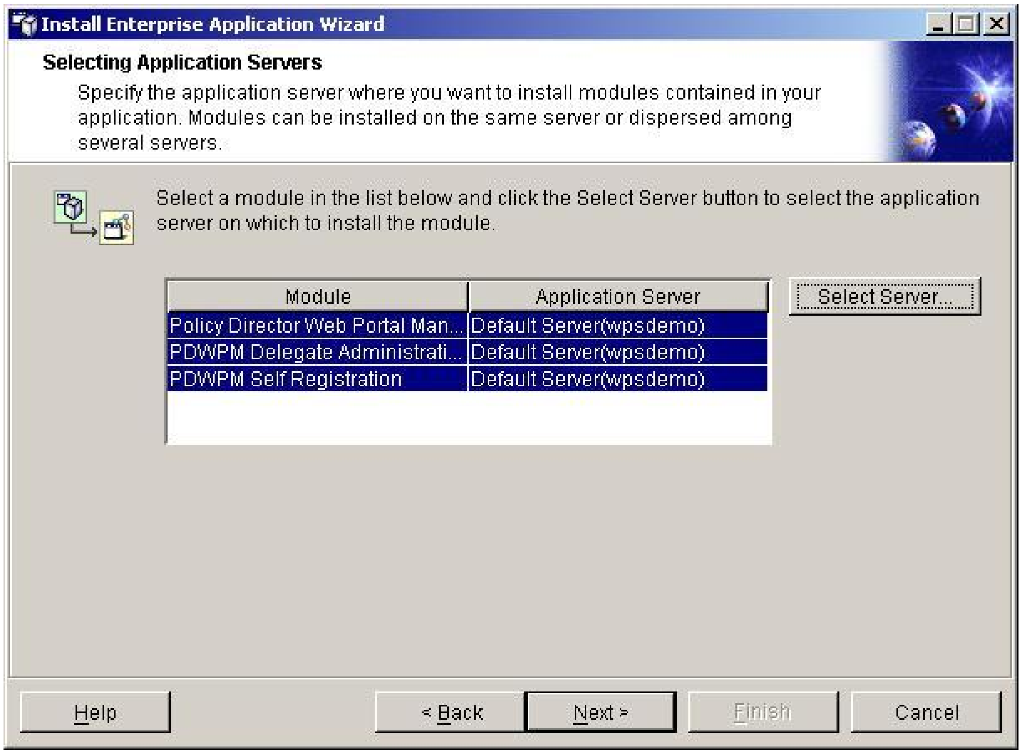
Select a module in the list below and click the Select Server button to select the application server on which to install the module.

| Module | Application Server |
|---|---|
| Policy Director Web Portal Man... | |
| PDWPM Delegate Administrati... | |
| PDWPM Self Registration | |

Highlight all three Web Portal Manager web modules and press "Select Server…".



Select "Default Server(wpsdemo)" entry and press "OK" to select the default application server.

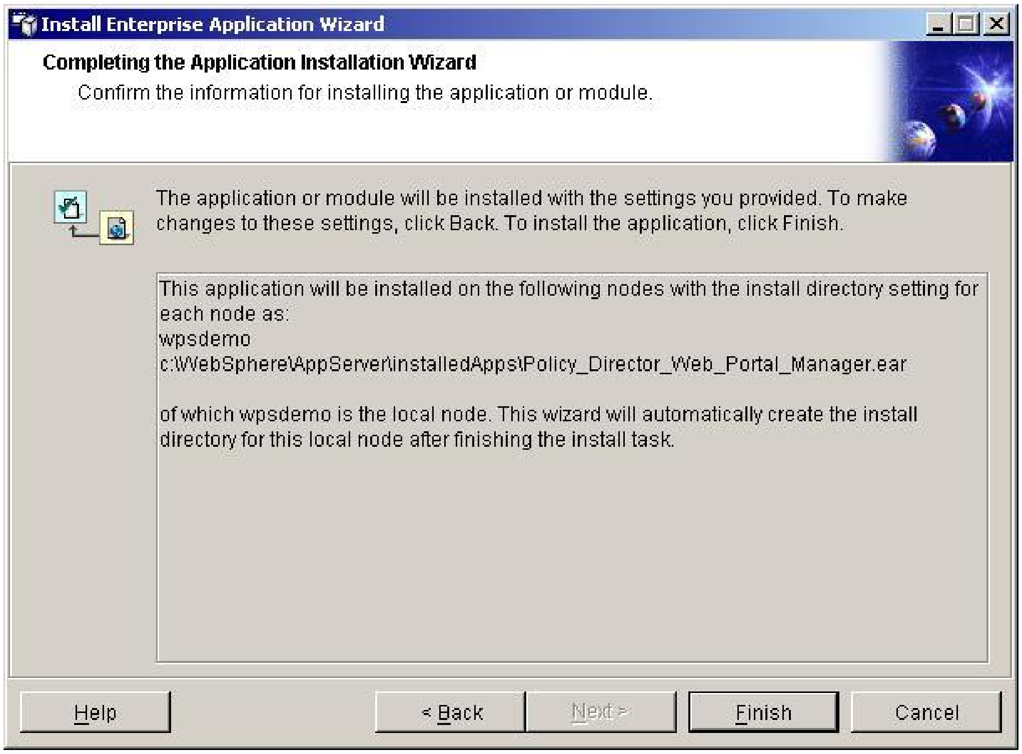

Install Enterprise Application Wizard
Selecting Application Servers
Select Server...
Help
< Back
Next >
Finish
Cancel

Specify the application server where you want to install modules contained in your application. Modules can be installed on the same server or dispersed among several servers.

Select a module in the list below and click the Select Server button to select the application server on which to install the module.

| Module | Application Server |
|---|---|
| Policy Director Web Portal Man... | Default Server(wpsdemo) |
| PDWPM Delegate Administrati... | Default Server(wpsdemo) |
| PDWPM Self Registration | Default Server(wpsdemo) |

Press "Next>" to continue.



**Completing the Application Installation Wizard**

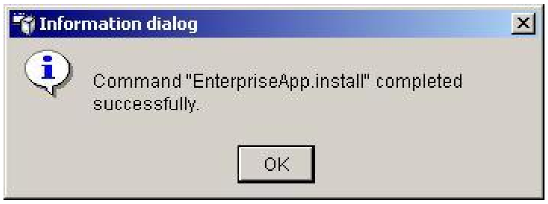
Confirm the information for installing the application or module.

The application or module will be installed with the settings you provided. To make changes to these settings, click Back. To install the application, click Finish.

This application will be installed on the following nodes with the install directory setting for each node as:
wpsdemo
c:\WebSphere\AppServer\installedApps\Policy_Director_Web_Portal_Manager.ear

of which wpsdemo is the local node. This wizard will automatically create the install directory for this local node after finishing the install task.

Press “Finish” to deploy the Web Portal Manager web application.

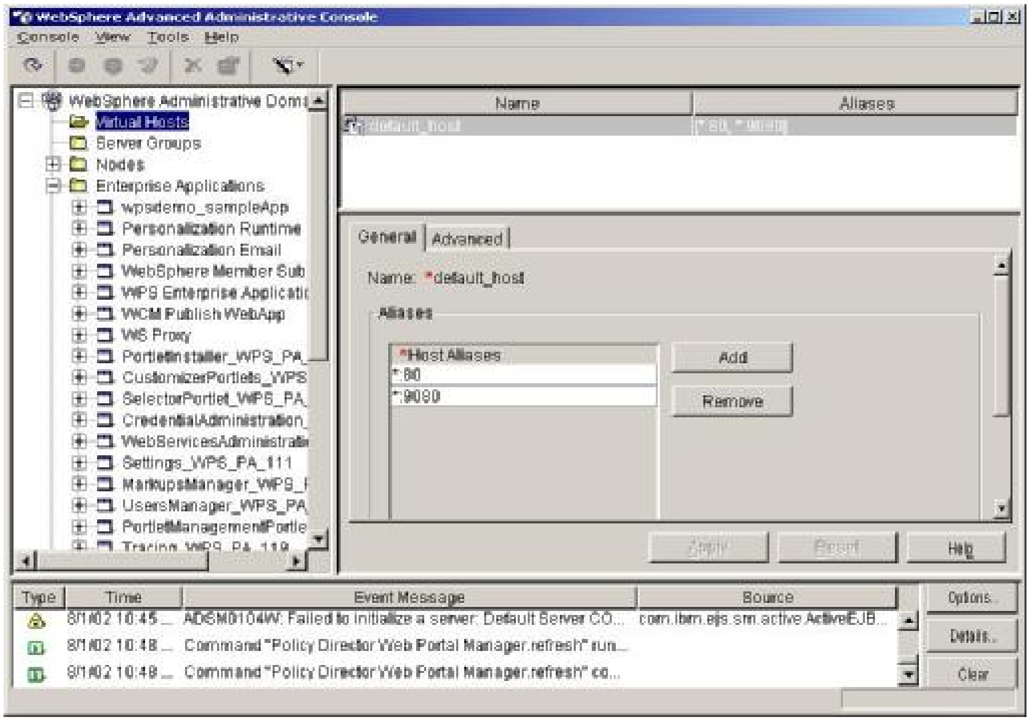


Command "EnterpriseApp.install" completed successfully.

Press “OK” to continue.

### *Configure New Virtual Host in WebSphere Application Server*

From the WebSphere Administration Console, select the “Virtual Hosts” entry in the left-hand panel.



| Name | Aliases |
|---|---|
| default_host | *:80, *:9080 |

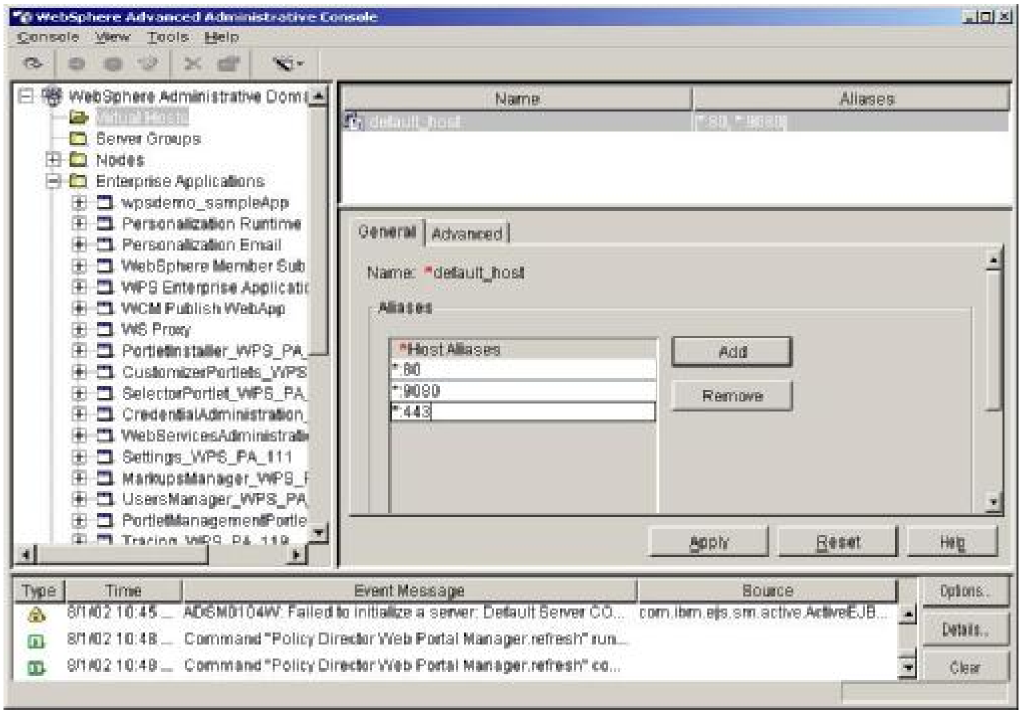
Name: *default_host

Aliases

| *Host Aliases |
|---|
| *:80 |
| *:9080 |

| Type | Time | Event Message | Source |
|---|---|---|---|
| | 8/1/02 10:45 ... | ADSM0104W: Failed to initialize a server: Default Server CO... | com.ibm.ejs.sm.active.ActiveEJB... |
| | 8/1/02 10:48 ... | Command "Policy Director Web Portal Manager.refresh" run... | |
| | 8/1/02 10:49 ... | Command "Policy Director Web Portal Manager.refresh" co... | |

Press the “Add” button.



| Name | Aliases |
|---|---|
| default_host | *:80, *:9080 |

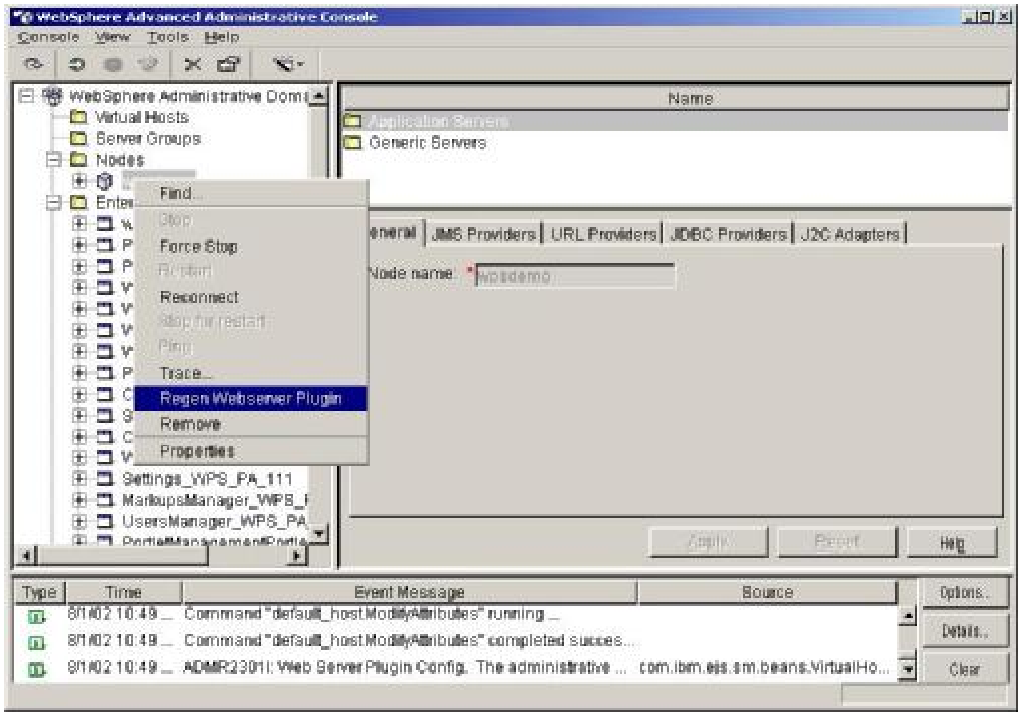
Name: *default_host

Aliases

| *Host Aliases |
|---|
| *:80 |
| *:9080 |
| *:443 |

| Type | Time | Event Message | Source |
|---|---|---|---|
| | 8/1/02 10:45 ... | ADSM0104W: Failed to initialize a server: Default Server CO... | com.ibm.ejs.sm.active.ActiveEJB... |
| | 8/1/02 10:48 ... | Command "Policy Director Web Portal Manager.refresh" run... | |
| | 8/1/02 10:49 ... | Command "Policy Director Web Portal Manager.refresh" co... | |

Enter “*:443” in the blank Host Alias field and press the “Apply” button.



Node name: * wpsdemo

| Type | Time | Event Message | Source |
|---|---|---|---|
| | 8/1/02 10:49 ... | Command "default_host.ModifyAttributes" running ... | |
| | 8/1/02 10:49 ... | Command "default_host.ModifyAttributes" completed succes... | |
| | 8/1/02 10:49 ... | ADMR2301I: Web Server Plugin Config. The administrative ... | com.ibm.ejs.sm.beans.VirtualHo... |

Select the entry for the WPSDEMO node in the left-hand panel, right mouse click and select the “Regen Webserver plugin” menu item.

Once the plug-in has been regenerated the following message will appear in the log panel at the bottom of the WebSphere Administration Console.

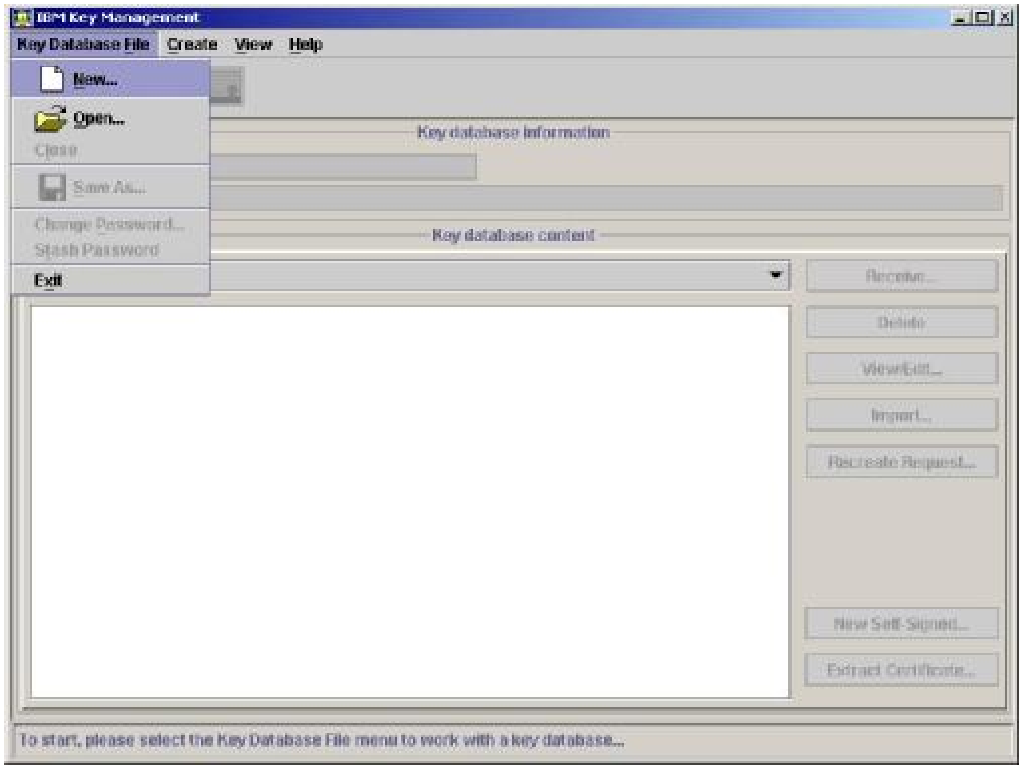
```
ADGU1077I: Plugin regeneration completed successfully on node
    wpsdemo.
```

### *Create a New KeyRing for the IBM HTTP Server*

Make a new directory: `C:\Program Files\IBM HTTP Server\keytab`

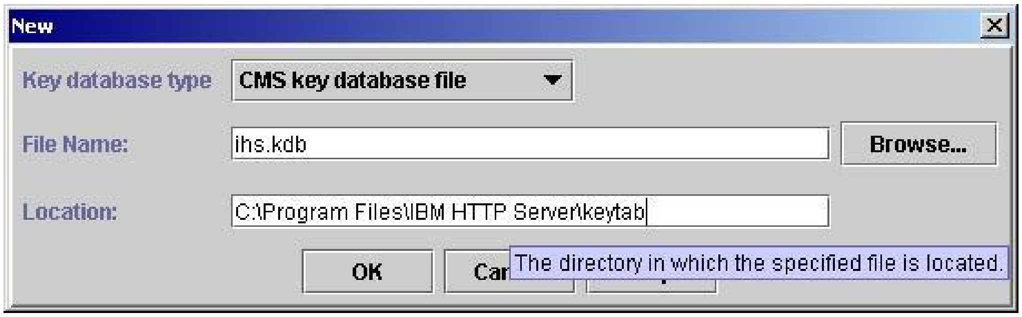
Start the IBM Key Management Utility:

Start->Programs->IBM HTTP Server->Start Key Management Utility



To start, please select the Key Database File menu to work with a key database...

Select “Key database File->New…” from the menu bar.



Key database type: CMS key database file

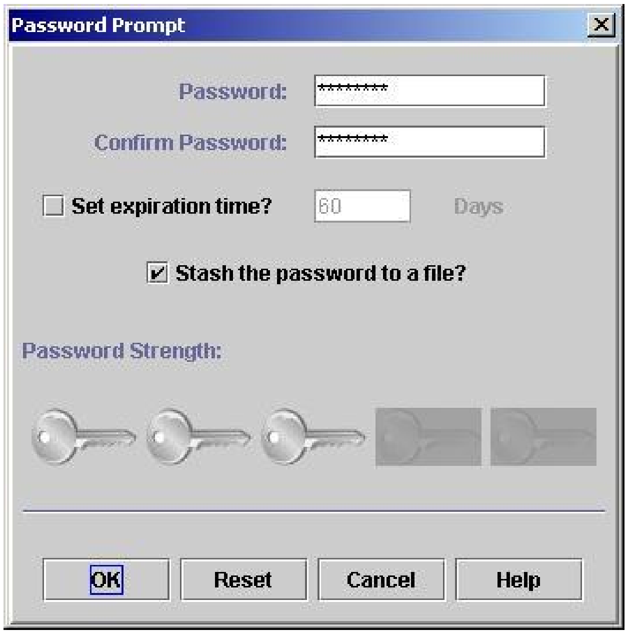
File Name: ihs.kdb

Location: C:\Program Files\IBM HTTP Server\keytab

The directory in which the specified file is located.

Ensure “CMS key database file” is shown. Enter the following field values, then press “OK” to continue:

- File Name: ihs.kdb
- Location: C:\Program Files\IBM HTTP Server\keytab



Password Prompt

Password: *********

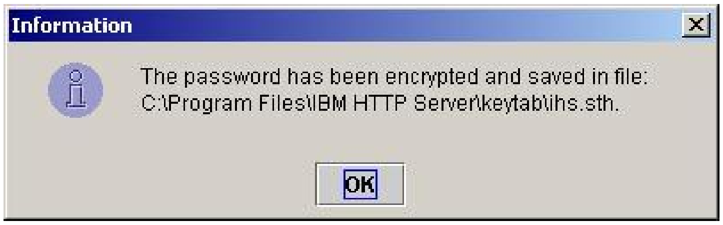
Confirm Password: *********

□ Set expiration time? 60 Days

☑ Stash the password to a file?

Password Strength:

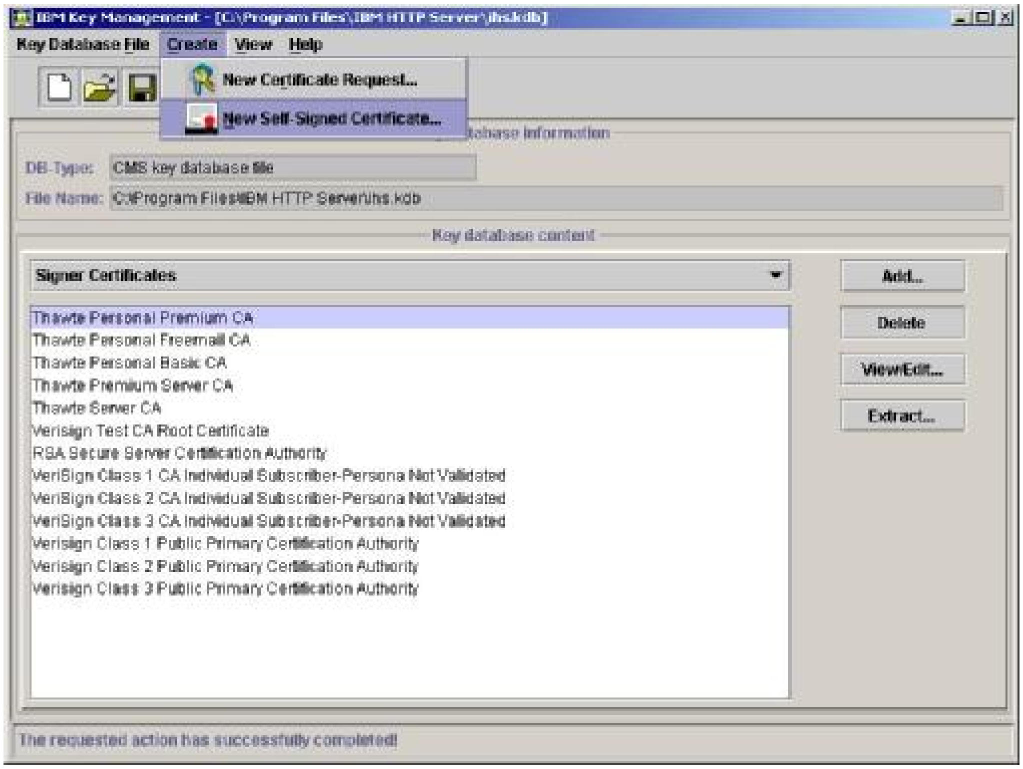
Enter "passw0rd" in the password fields. Select the "Stash the password to a file?" radio button and press "OK" to continue.



Information

The password has been encrypted and saved in file:
C:\Program Files\IBM HTTP Server\keytab\ihs.sth.

Press "OK" to continue.



IBM Key Management - [C:\Program Files\IBM HTTP Server\ihs.kdb]

DB-Type: CMS key database file

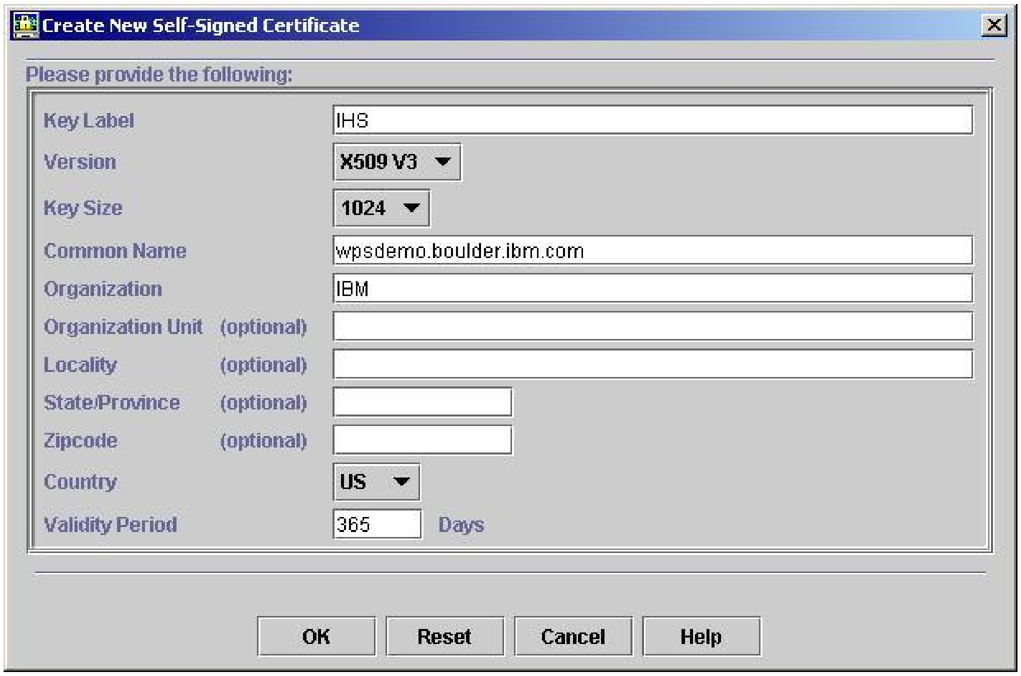
File Name: C:\Program Files\IBM HTTP Server\ihs.kdb

Signer Certificates

- Thawte Personal Premium CA
- Thawte Personal Freemail CA
- Thawte Personal Basic CA
- Thawte Premium Server CA
- Thawte Server CA
- Verisign Test CA Root Certificate
- RSA Secure Server Certification Authority
- VeriSign Class 1 CA Individual Subscriber-Persona Not Validated
- VeriSign Class 2 CA Individual Subscriber-Persona Not Validated
- VeriSign Class 3 CA Individual Subscriber-Persona Not Validated
- Verisign Class 1 Public Primary Certification Authority
- Verisign Class 2 Public Primary Certification Authority
- Verisign Class 3 Public Primary Certification Authority

The requested action has successfully completed!

Select "Create->New Self-Signed Certificate" from the menu bar.



Create New Self-Signed Certificate

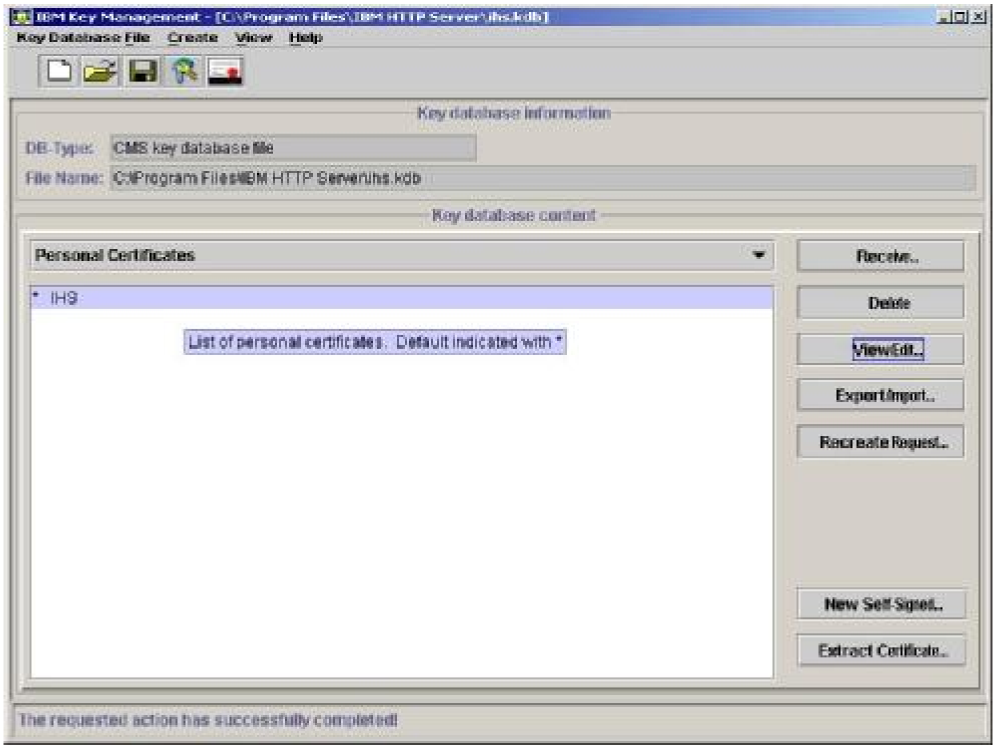
Please provide the following:

| | | |
|---|---|---|
| Key Label | | IHS |
| Version | | X509 V3 |
| Key Size | | 1024 |
| Common Name | | wpsdemo.boulder.ibm.com |
| Organization | | IBM |
| Organization Unit | (optional) | |
| Locality | (optional) | |
| State/Province | (optional) | |
| Zipcode | (optional) | |
| Country | | US |
| Validity Period | | 365 Days |

Enter the following field values and press "OK" to create a new self-signed certificate.

- Key Label: IHS
- Version: X509 V3

- Key Size: 1024
- Common Name: wpsdemo.boulder.ibm.com
- Organization: IBM
- Country: US
- Validity Period: 365



DB-Type: CMS key database file
File Name: C:\Program Files\IBM HTTP Server\ihs.kdb

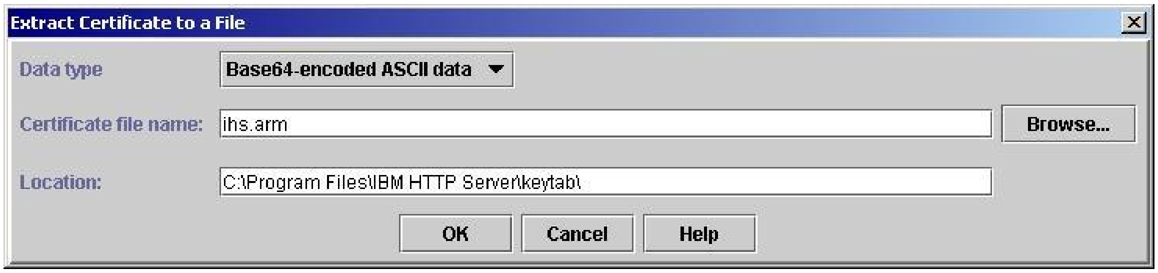
* IHS

List of personal certificates. Default indicated with *

The requested action has successfully completed!

Later we will need the certificate for the Certification Authority that signed our self-signed certificate, so we will export it now while we have the keystore open.

Press the “Extract Certificate…” button.



Data type: Base64-encoded ASCII data
Certificate file name: ihs.arm
Location: C:\Program Files\IBM HTTP Server\keytab\

Enter the following field values and press “OK” to extract the CA certificate.

- Data type: Base64-encoded ASCII data
- Certificate file name: ihs.arm

- Location: C:\Program Files\IBM HTTP Server\keytab\

Once the certificate has been extracted, close the IBM Key Management Utility.

### *Configure IBM HTTP Server for SSL*

Add the following lines to the end of “C:\Program Files\IBM HTTP Server\conf\httpd.conf”:

```
Listen 443
LoadModule ibm_ssl_module modules/IBMModuleSSL128.dll
<virtualhost :443>
SSLEnable
Keyfile "C:\Program Files\IBM HTTP Server\keytab\ihs.kdb"
SSLV2Timeout 100
SSLV3Timeout 1000
</virtualhost>
```

### *Configure WebSphere Portal Server for SSL*

Modify the highlighted values in “C:\WebSphere\AppServer\lib\app\config\services\ConfigService.properties”:

```
…
# Login redirect parameters
#
# Default: true, false, <none>
redirect.login     = true
redirect.login.ssl = true
redirect.login.url =

…

# The parameters of the (virtual) host that the portal is accessed through
#
# Default: localhost (host.name)
host.name        =wpsdemo.boulder.ibm.com
host.port.http   =80
host.port.https  =443

…
```

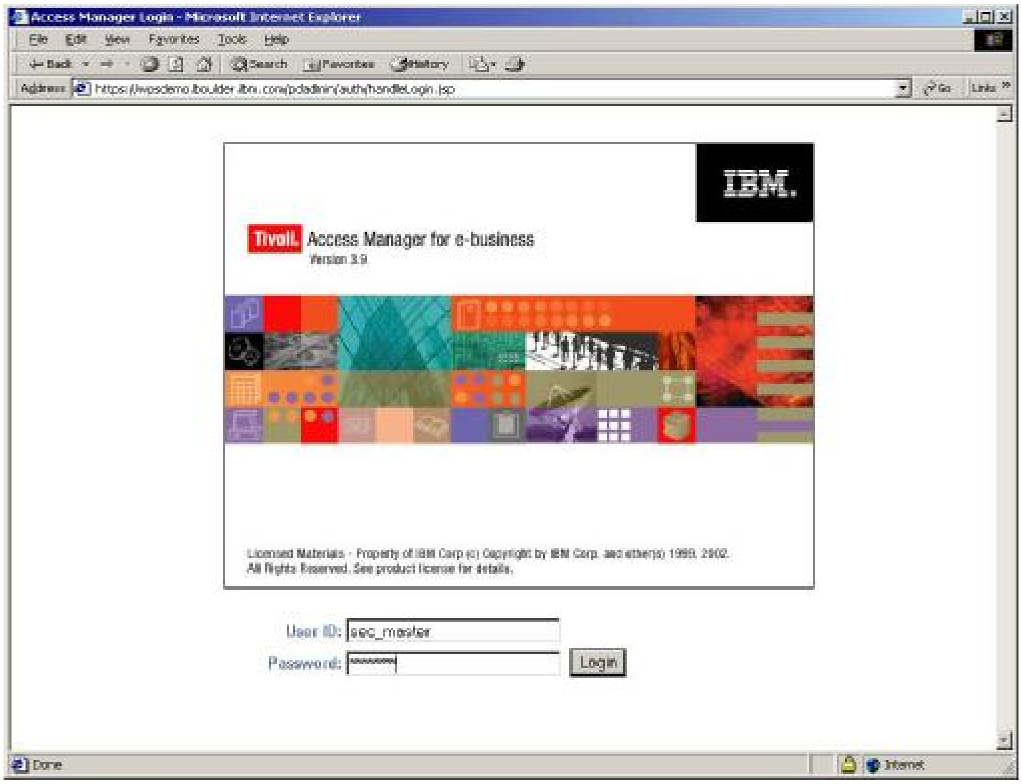
Stop and restart the IBM HTTP Server. Stop and restart the WebSphere Application Server. Ensure the Default Server and WebSphere Portal application servers are started.

### *Test the Configuration and Create a Test User*

Display the following URL in a browser: http://wpsdemo.boulder.ibm.com. Confirm that the IBM HTTP Server welcome page is displayed.

Display the following URL in a browser: https://wpsdemo.boulder.ibm.com. Accept the server certificate presented by the IBM HTTP Server. Confirm that the IBM HTTP Server welcome page is displayed.

Display the following URL in a browser: https://wpsdemo.boulder.ibm.com/pdadmin.



Access Manager Login - Microsoft Internet Explorer

Address https://wpsdemo.boulder.ibm.com/pdadmin/auth/handleLogin.jsp

Tivoli Access Manager for e-business
Version 3.9

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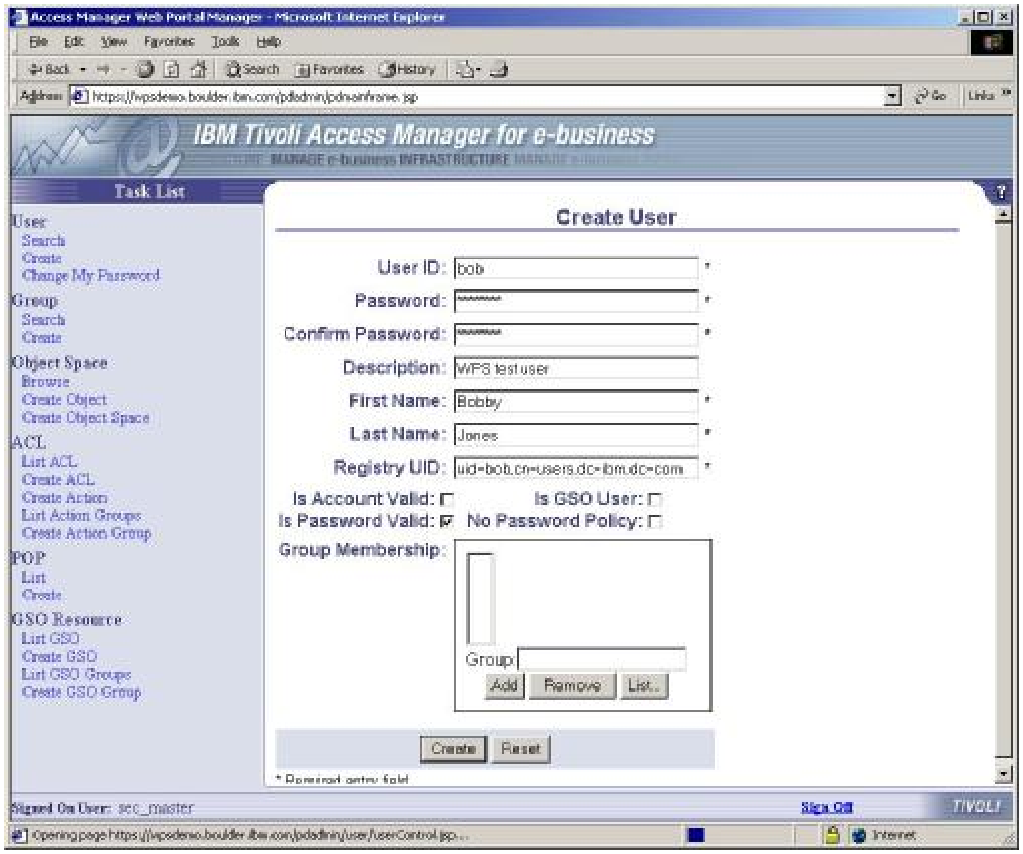
All Rights Reserved. See product license for details.

User ID: sec_master
Password: ********

Enter “sec_master” and “passw0rd” in the User ID and Password fields and press the “Login” button.

Select “User->Create” from the left-hand menu panel.


Access Manager Web Portal Manager - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address https://wpsdemo.boulder.ibm.com/pdadmin/pdmainframe.jsp
Go Links
IBM Tivoli Access Manager for e-business
MANAGE e-business INFRASTRUCTURE
Task List
User
Search
Create
Change My Password
Group
Search
Create
Object Space
Browse
Create Object
Create Object Space
ACL
List ACL
Create ACL
Create Action
List Action Groups
Create Action Group
POP
List
Create
GSO Resource
List GSO
Create GSO
List GSO Groups
Create GSO Group
Add
Remove
List...
Create
Reset
Sign Off
TIVOLI
Opening page https://wpsdemo.boulder.ibm.com/pdadmin/user/userControl.jsp...
Internet

Create User

User ID: bob *

Password: ******** *

Confirm Password: ******** *

Description: WPS test user

First Name: Bobby *

Last Name: Jones *

Registry UID: uid=bob,cn=users,dc=ibm,dc=com *

Is Account Valid: □ Is GSO User: □

Is Password Valid: ☑ No Password Policy: □

Group Membership:

Group:

* Required entry field

Signed On User: sec_master

Enter the following field values:

| | |
|---|---|
| User ID: | bob |
| Password: | passw0rd |
| Confirm Password: | passw0rd |
| Description: | WPS test user |
| First Name: | Bobby |
| Last Name: | Jones |
| Registry UID: | uid=bob,cn=users,dc=ibm,dc=com |

Select the “Is Password Valid” check box. Do not select the “Is Account Valid” check box - we will enable the user “bob” later on.

Press the “Create” button to create the test user. You can then logoff the Web Portal Manager.

### Configure Access Manager Java Runtime

*Edit Configuration Script*

In some environments it is necessary to modify the script used to configure the Access Manager Java Runtime to ensure the correct version of Java is run. We will edit the script here just to be sure.

Edit the file "C:\Program Files\Tivoli\Policy Director\sbin\pdjrtecfg.bat. Add the text in bold:

```
%WAS_HOME%\java\jre\bin\java  -Djava.ext.dirs
-Dpd.home="%PD_HOME%"  -cp "%PDJ_CLASSPATH%"
com.tivoli.pd.jcfg.PDJrteCfg %1 %2 %3 %4 %5 %6 %7 %8 %9
```

(Note: the command needs to entered on a single line)

*Configure Java Runtime*

Run the "pdjrtecfg.bat" configuration script as follows (commands typed are in bold):

```
C:\>
C:\>cd %PD_HOME%\sbin
C:\PROGRA~1\Tivoli\POLICY~1\sbin>pdjrtecfg.bat -action config -java_home
%WAS_HOME%\java\jre
c:\WebSphere\AppServer\java\jre\PolicyDirector directory does not exist.
Creating...
C:\PROGRA~1\Tivoli\POLICY~1\sbin>
```

(Note: type each command on a single line and let the Command Window wrap as needed)

Run the "SvrSslCfg" configuration program as follows (commands typed are in bold):

```
C:\>
C:\>C:\PROGRA~1\Tivoli\POLICY~1\sbin>%WAS_HOME%\java\jre\bin\java
com.tivoli.mts.SvrSslCfg pdwps passw0rd wpsdemo.boulder.ibm.com
wpsdemo.boulder.ibm.com 7135 7136
C:\PROGRA~1\Tivoli\POLICY~1\sbin>
```

(Note: type each command on a single line and let the Command Window wrap as needed)

## Step 7 Configure WPS for TAM authentication

In this step we configure WebSphere Portal Server to use the Access Manager JAAS APi to perform authentication (replacing the standard WebSphere Portal Server authentication).

## Import WPS Users and Groups into Access Manager

As a first step, we import the existing WebSphere Portal Server users and groups into Access Manager - this will add the auxiliary LDAP class information required by Access Manager.

From the Start menu run “Programs->Access Manager for e-business->Administration Command Prompt”. Enter the commands shown in bold:

```
pdadmin> login -a sec_master
Enter Password:passw0rd
pdadmin> user import wpsadmin uid=wpsadmin,cn=users,dc=ibm,dc=com
pdadmin> user modify wpsadmin account-valid yes
pdadmin> user modify wpsadmin password-valid yes
pdadmin>
pdadmin> group import wpsadmins cn=wpsadmins,cn=groups,dc=ibm,dc=com
pdadmin>
```

## Edit “portallogin.properties”

Add the lines shown in bold to “C:\WebSphere\PortalServer\app\wps.ear\wps.war\WEB-INF\conf\portallogin.properties”:

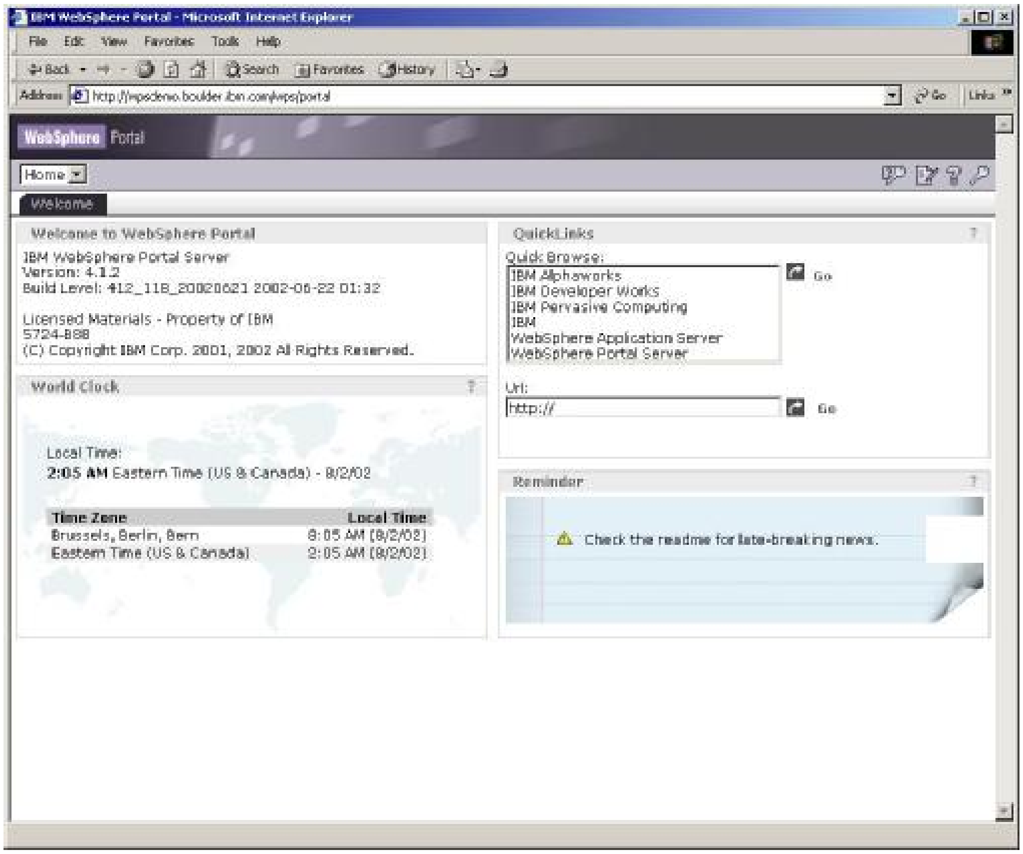
```
WpsNewSubject {
    com.ibm.websphere.security.auth.module.proxy.WSLoginModuleProxy
        required delegate=com.ibm.wps.sso.GetCORBACredentialLoginModule;
    com.ibm.websphere.security.auth.module.proxy.WSLoginModuleProxy
        required delegate=com.ibm.wps.sso.CORBACredentialLoginModule;
    com.ibm.websphere.security.auth.module.proxy.WSLoginModuleProxy
        required delegate=com.ibm.wps.sso.UserDNGroupDNLoginModule;
    com.ibm.websphere.security.auth.module.proxy.WSLoginModuleProxy
        required delegate=com.ibm.wps.sso.UserIdPasswordLoginModule;
    com.ibm.websphere.security.auth.module.proxy.WSLoginModuleProxy
        required delegate=com.ibm.wps.sso.UserIdPrincipalLoginModule;
    com.ibm.websphere.security.auth.module.proxy.WSLoginModuleProxy
        required delegate=com.ibm.wps.sso.PasswordCredentialLoginModule;
    com.ibm.websphere.security.auth.module.proxy.WSLoginModuleProxy
        required delegate=com.ibm.wps.sso.LTPATokenLoginModule;
    com.ibm.websphere.security.auth.module.proxy.WSLoginModuleProxy
        required delegate=com.tivoli.mts.PDLoginModule;
};

WpsSubjectExists {
    com.ibm.websphere.security.auth.module.proxy.WSLoginModuleProxy
        required delegate=com.ibm.wps.sso.GetCORBACredentialLoginModule;
```

```
            required delegate=com.ibm.wps.sso.CORBACredentialLoginModule;
        com.ibm.websphere.security.auth.module.proxy.WSLoginModuleProxy
            required delegate=com.ibm.wps.sso.LTPATokenLoginModule;
        com.ibm.websphere.security.auth.module.proxy.WSLoginModuleProxy
            required delegate=com.tivoli.mts.PDLoginModule;
    };
```

Stop and restart the WebSphere Portal application server.

## Test the Configuration

Display the following URL in a browser: https://wpsdemo.boulder.ibm.com/wps/portal.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address http://wpsdemo.boulder.ibm.com/wps/portal
Go Links
WebSphere Portal
Home
Welcome

Welcome to WebSphere Portal

IBM WebSphere Portal Server
Version: 4.1.2
Build Level: 412_118_20020621 2002-06-22 01:32

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QuickLinks

Quick Browse:
IBM Alphaworks
IBM Developer Works
IBM Pervasive Computing
IBM
WebSphere Application Server
WebSphere Portal Server
Go

Url: http://
Go

World Clock

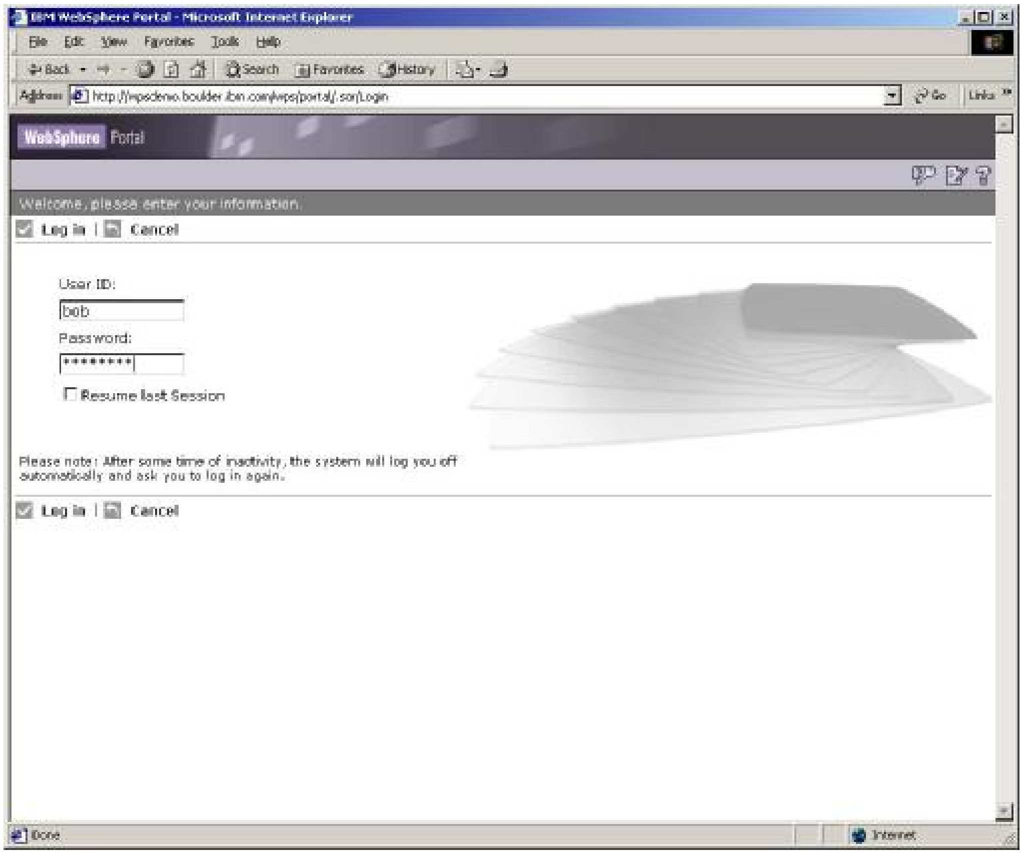
Local Time:
**2:05 AM** Eastern Time (US & Canada) - 8/2/02

| Time Zone | Local Time |
|---|---|
| Brussels, Berlin, Bern | 8:05 AM (8/2/02) |
| Eastern Time (US & Canada) | 2:05 AM (8/2/02) |

Reminder

⚠ Check the readme for late-breaking news.

This is the "public portal page. Press the Key icon in the top right corner of the portal page to log in to WebSphere Portal.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address
Go Links
WebSphere Portal
Done
Internet

http://wpsdemo.boulder.ibm.com/wps/portal/.scr/Login

Welcome, please enter your information.

☑ Log in | Cancel

User ID: bob

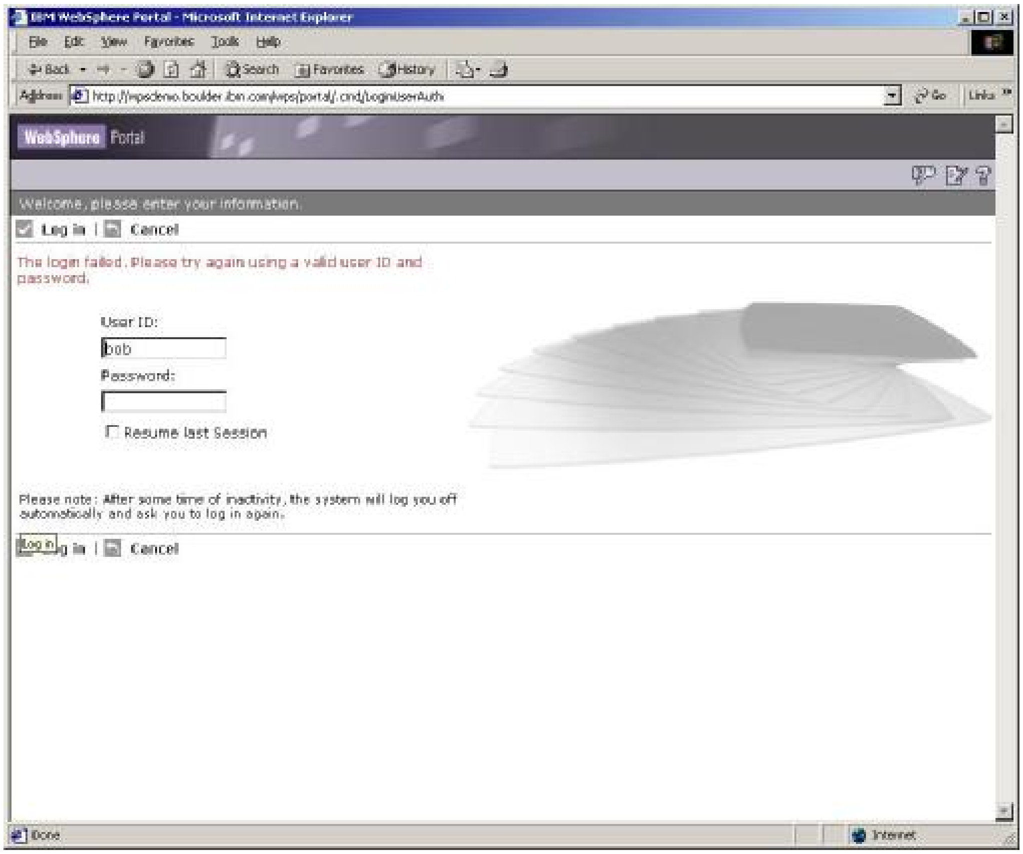
Password: ********

□ Resume last Session

Please note: After some time of inactivity, the system will log you off automatically and ask you to log in again.

☑ Log in | Cancel

Enter “bob” and “passw0rd” in the userid and password fields and press the “Log in” button.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address http://wpsdemo.boulder.ibm.com/wps/portal/.cmd/LoginUserAuth
Go Links
WebSphere Portal
Log in | Cancel
Log in | Cancel
Done
Internet

Welcome, please enter your information.

The login failed. Please try again using a valid user ID and password.

User ID: bob

Password:

☐ Resume last Session

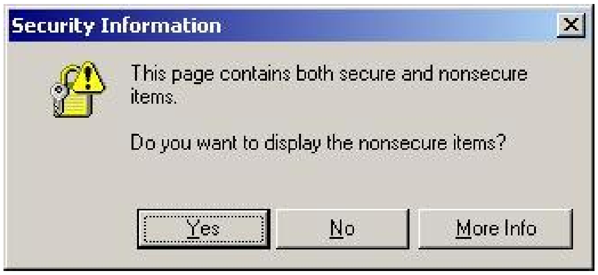
Please note: After some time of inactivity, the system will log you off automatically and ask you to log in again.

Remembering back to when we created the “bob” user id in Access Manager, we created it as disabled, so the error message shown in the screen image is expected - it confirms that Access Manager is indeed being used for authentication.

Run the Access Manager Configuration Program again and enter the commands shown in bold below.

```
pdadmin> login -a sec_master
Enter Password:passw0rd
pdadmin> user modify bob account-valid yes
pdadmin>
```

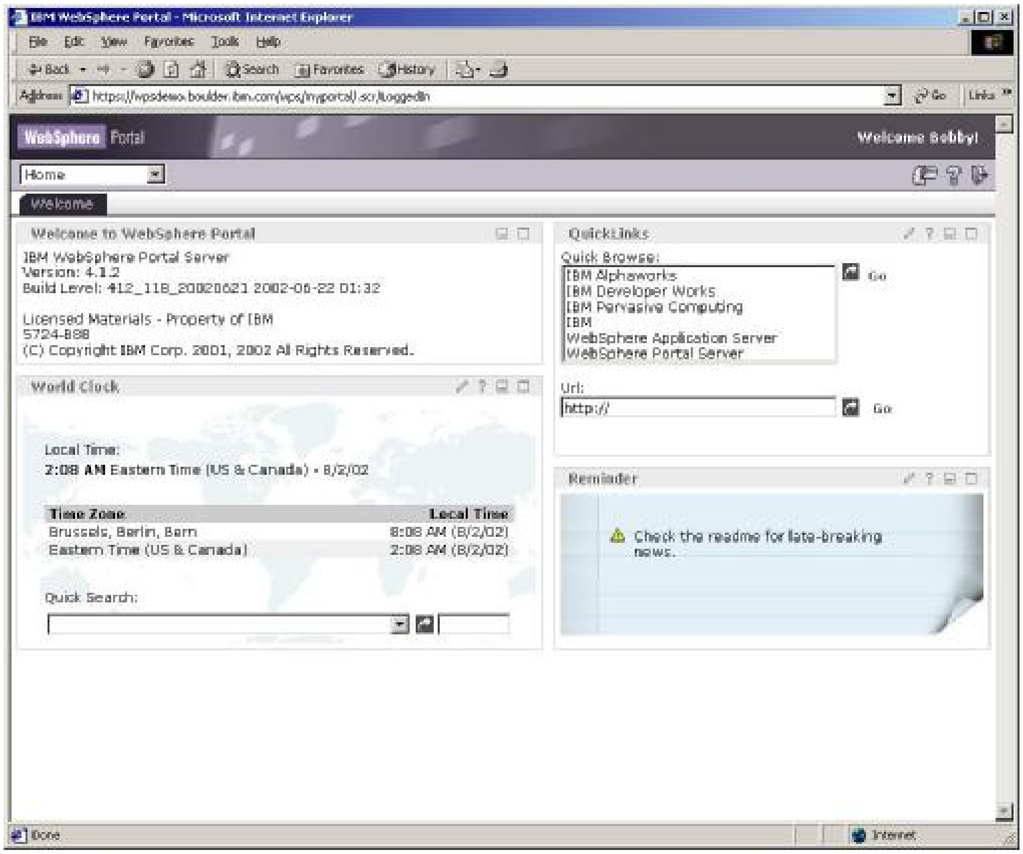
Re-enter “bob” and “passsw0rd” in the userid and password fields and press “Log in”.



This page contains both secure and nonsecure items.

Do you want to display the nonsecure items?

In WPS version 4.1.2, images are accessed via absolute URLs to the HTTP port of the web server, even when the base page is accessed via HTTPS. So depending on your browser security settings, you may see an error message similar to the above screen image whenever you access a secure page in the WebSphere Portal Server. Once we configure Access Manager WebSEAL in front of the IBM HTTP Server (later in this document) this message will no longer appear. For now press “Yes” whenever this message appears.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address
Go Links
WebSphere Portal
Home
Welcome
Done
Internet

https://wpsdemo.boulder.ibm.com/wps/myportal/.scr/Loggedin

Welcome Bobby!

Welcome to WebSphere Portal

IBM WebSphere Portal Server
Version: 4.1.2
Build Level: 412_118_20020621 2002-06-22 01:32

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World Clock

Local Time:
**2:08 AM** Eastern Time (US & Canada) - 8/2/02

| Time Zone | Local Time |
|---|---|
| Brussels, Berlin, Bern | 8:08 AM (8/2/02) |
| Eastern Time (US & Canada) | 2:08 AM (8/2/02) |

Quick Search:

QuickLinks

Quick Browse:
IBM Alphaworks
IBM Developer Works
IBM Pervasive Computing
IBM
WebSphere Application Server
WebSphere Portal Server
Go

Url:
http://
Go

Reminder

Check the readme for late-breaking news.

This is the “private portal page” for user “bob” - note the Welcome message in the top right hand corner of the portal. Ensure that the URL shows that the page was accessed via HTTPS.

Press the icon comprising a door with an arrow (immediately below the Welcome message) to logout of the WebSphere Portal.

The “public portal page” (accessed over HTTP) should now appear again.

## Step 8 Configure WPS for TAM authorization

In this step we configure WebSphere portal Server to use the Access Manager JAAS API for determining access control rights to specific portal resources.

## Modify WPS Configuration Files

### *Modify "services.properties"*

Modify the entry shown in bold below in:
"C:\WebSphere\AppServer\lib\app\config\services.properties":

```
…
com.ibm.wps.services.authorization.AccessControlService         =
com.ibm.wps.services.authorization.AccessControlImpl
com.ibm.wps.services.authorization.ExternalAccessControlService =
com.ibm.wps.services.authorization.PDExternalAccessControlImpl
com.ibm.wps.services.registry.RegistryService                   =
com.ibm.wps.services.registry.RegistryServiceImpl
…
```

### *Modify "ExternalAccessControlService.properties"*

Modify the entries shown in bold below in:
"C:\WebSphere\AppServer\lib\app\config\services\ExternalAccessControlService.properties":

```
# Licensed Materials - Property of IBM, 5724-B88, (C) Copyright IBM Corp.
2001, 2002 - All Rights reserved.

# ------------------------------------------------ #
# Properties of the External Access Control Service #
# ------------------------------------------------ #

## This flag indicates whether the configuration in this file
## has been configured to connect  to the External Security Manager
accesscontrol.ready=true



## -----------------------------------------
## Access Manager configuration
## ------------------------------------------

## After completing the PDJRTE and SrvSslCfg configuration,
## the following directives are needed to
## all WP to use Access Manager as an External Security Manager



## Set accesscontrol.pdroot to the root of your Protected Object Space for
Portal
```

```
## Provide the user and  password for used to create and access the objects
## in the Protected Object Space
accesscontrol.pduser=sec_master
accesscontrol.pdpw=passw0rd

## Specify the location of the Access Manager propeties file for JRTE
accesscontrol.pdurl=file:///c:/websphere/appserver/java/jre/PdPerm.properties

## Specify whether to create ACLs in  Access Manager for EVERY resource
stored externally
## Note: The Access Manager administrator will be responsible for all ACL
linkages between
## TAM and WP
## values:
##      true - if an TAM ACL will be created for EVERY resource
##      false - if no ACLs will be created for WP objects
accesscontrol.createAcl=true
```

### *Modify "AccessControlService.properties"*

The following change reduces the time WebSphere Portal Manager caches the results of earlier access control decisions - which is appropriate for a demonstration environment, but not a production environment.

Modify the entry shown in bold below in:
"C:\WebSphere\AppServer\lib\app\config\services\AccessControlService.properties":

```
# Licensed Materials - Property of IBM, 5724-B88, (C) Copyright IBM Corp.
2001, 2002 - All Rights reserved.

# --------------------------------------- #
# Properties of the Access Control Service #
# --------------------------------------- #

# The maximum age of a cached permission in milliseconds
# Default: 60000
accesscontrol.maxcacheage=50
accesscontrol.tracelevel=2
```

### *Modify “ConfigService.properties”*

By default, if a page accessed by a particular user contains a portlet that the user does not have sufficient access rights to view, then the portlet is not shown. The following change configures WebSphere Portal Server to show all portlets on the page, and for those that the user does not have view rights for, the contents of the portlet are replaced with an appropriate message. This change is useful in a demonstration environment, but is probably not appropriate for a production environment.

Modify the entry shown in bold below in:
“C:\WebSphere\AppServer\lib\app\config\services\AccessControlService.properties”:

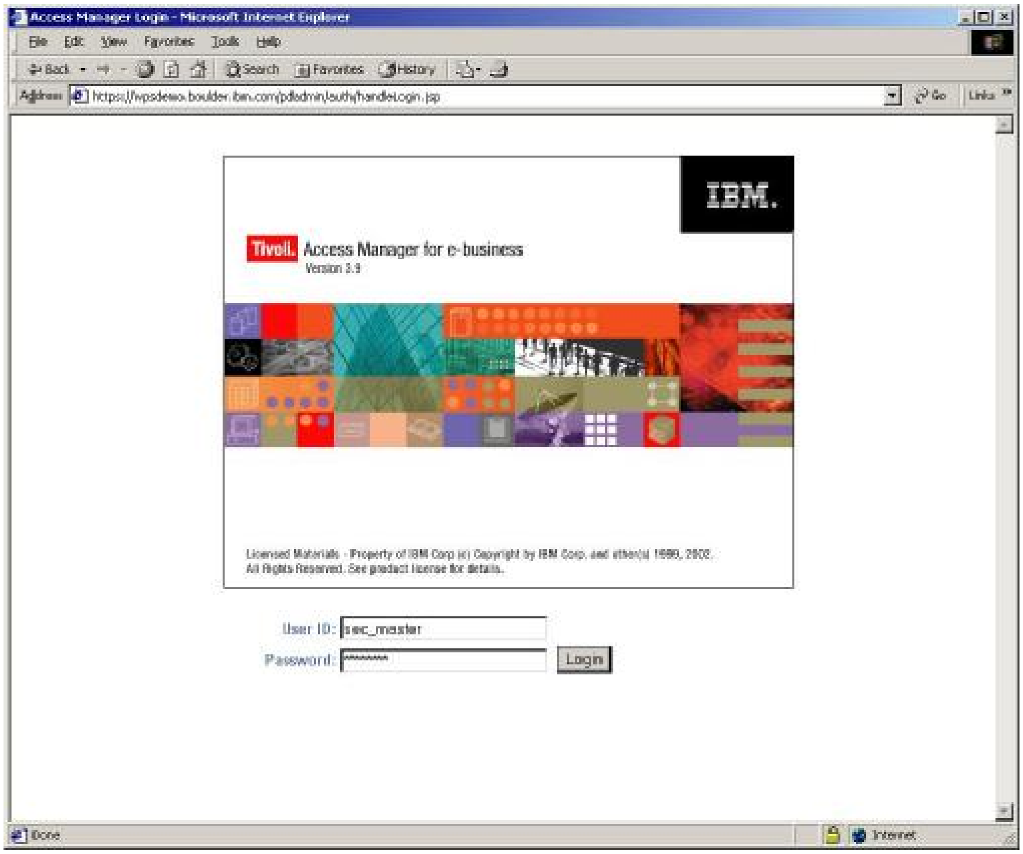
```
…
# Flag that determines whether portlets without authorization should
# show up with a warning.
#
# Default: false
portlets.unauthorized.visible = true

…
```

Stop and restart the WebSphere Portal application server.

## Authorize wpsadmins Group to Move Control of Resources to Access Manager

### *Create Access Manager ACL for “EXTERNAL_ACL” Object*

Start the Access Manager Web Portal Manager in a browser window:
https://wpsdemo.boulder.ibm.com/pdadmin.


Access Manager Login - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address https://wpsdemo.boulder.ibm.com/pdadmin/auth/handleLogin.jsp
Go Links
IBM.
Tivoli. Access Manager for e-business
Version 3.9
Done
Internet

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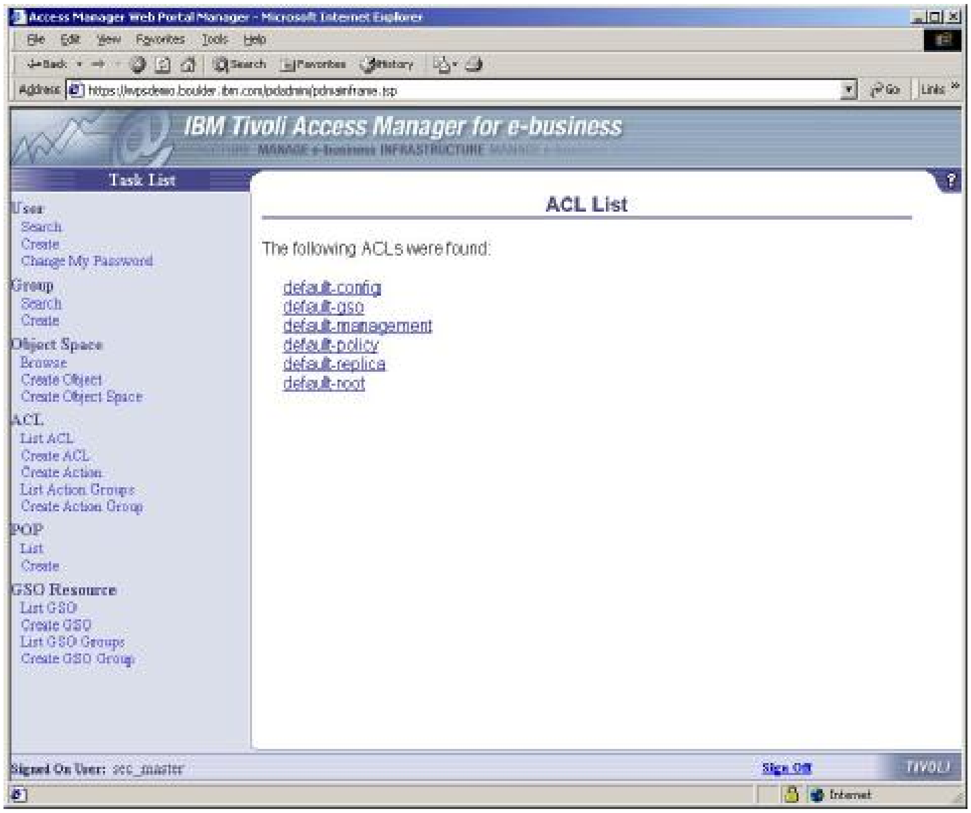
User ID: sec_master
Password: ********
Login

Enter “sec_master” and “passw0rd” in the user id and password fields. Press “Login”.

Select “ACLs->List ACLs” from the (left-hand) menu panel.

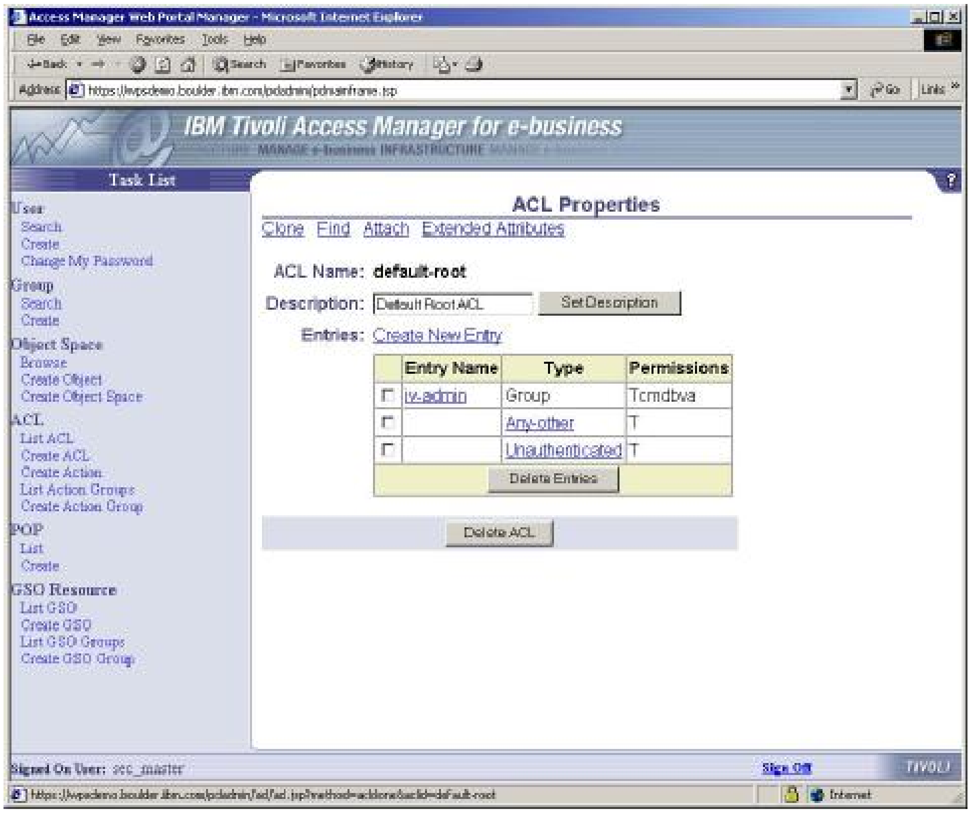

Access Manager Web Portal Manager - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address https://wpsdemo.boulder.ibm.com/pdadmin/pdmainframe.jsp
Go Links
IBM Tivoli Access Manager for e-business
MANAGE e-business INFRASTRUCTURE
Task List
User
Search
Create
Change My Password
Group
Search
Create
Object Space
Browse
Create Object
Create Object Space
ACL
List ACL
Create ACL
Create Action
List Action Groups
Create Action Group
POP
List
Create
GSO Resource
List GSO
Create GSO
List GSO Groups
Create GSO Group
Signed On User: sec_master
Sign Off
TIVOLI
Internet

ACL List

The following ACLs were found:

- default-config
- default-gso
- default-management
- default-policy
- default-replica
- default-root

Select the “default-root” entry.


Access Manager Web Portal Manager - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address https://wpsdemo.boulder.ibm.com/pdadmin/pdmainframe.jsp
Go Links
IBM Tivoli Access Manager for e-business
MANAGE e-business INFRASTRUCTURE
Task List
User
Search
Create
Change My Password
Group
Search
Create
Object Space
Browse
Create Object
Create Object Space
ACL
List ACL
Create ACL
Create Action
List Action Groups
Create Action Group
POP
List
Create
GSO Resource
List GSO
Create GSO
List GSO Groups
Create GSO Group
Signed On User: sec_master
Sign Off
TIVOLI
Internet

ACL Properties

Clone Find Attach Extended Attributes

ACL Name: default-root

Description: Default Root ACL [Set Description]

Entries: Create New Entry

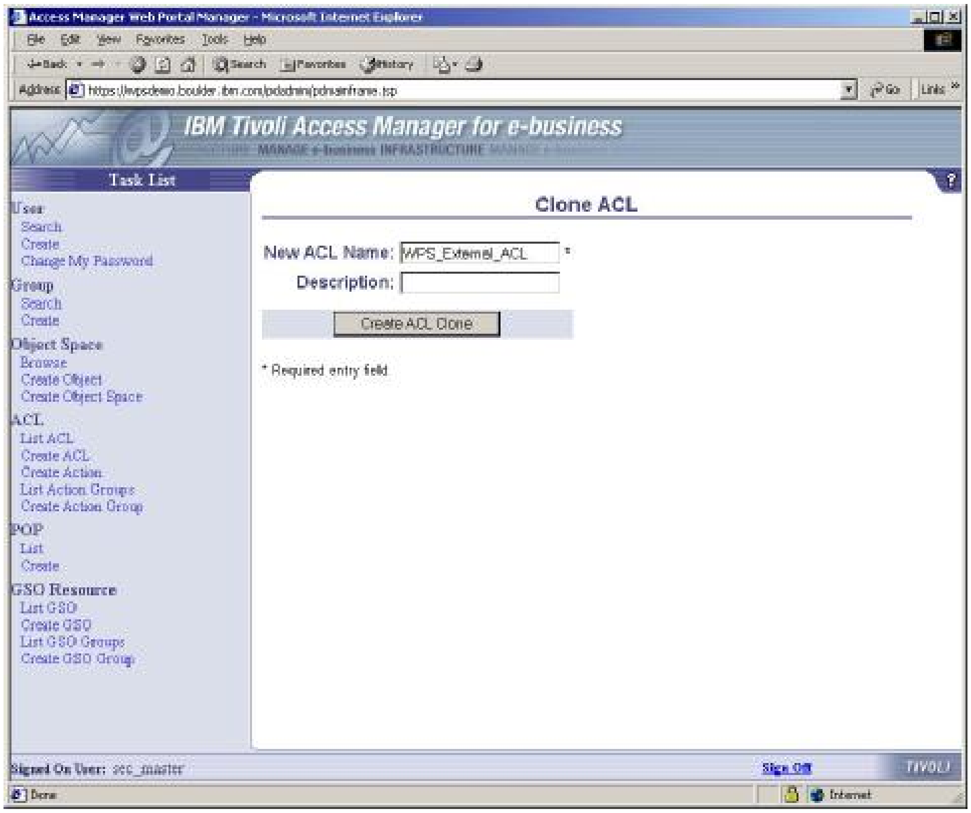
| | Entry Name | Type | Permissions |
|---|---|---|---|
| □ | iv-admin | Group | Tcmdbva |
| □ | | Any-other | T |
| □ | | Unauthenticated | T |

[Delete Entries]

[Delete ACL]

https://wpsdemo.boulder.ibm.com/pdadmin/acl/acl.jsp?method=acldone&aclid=default-root

Select the “Clone” link.



Clone ACL

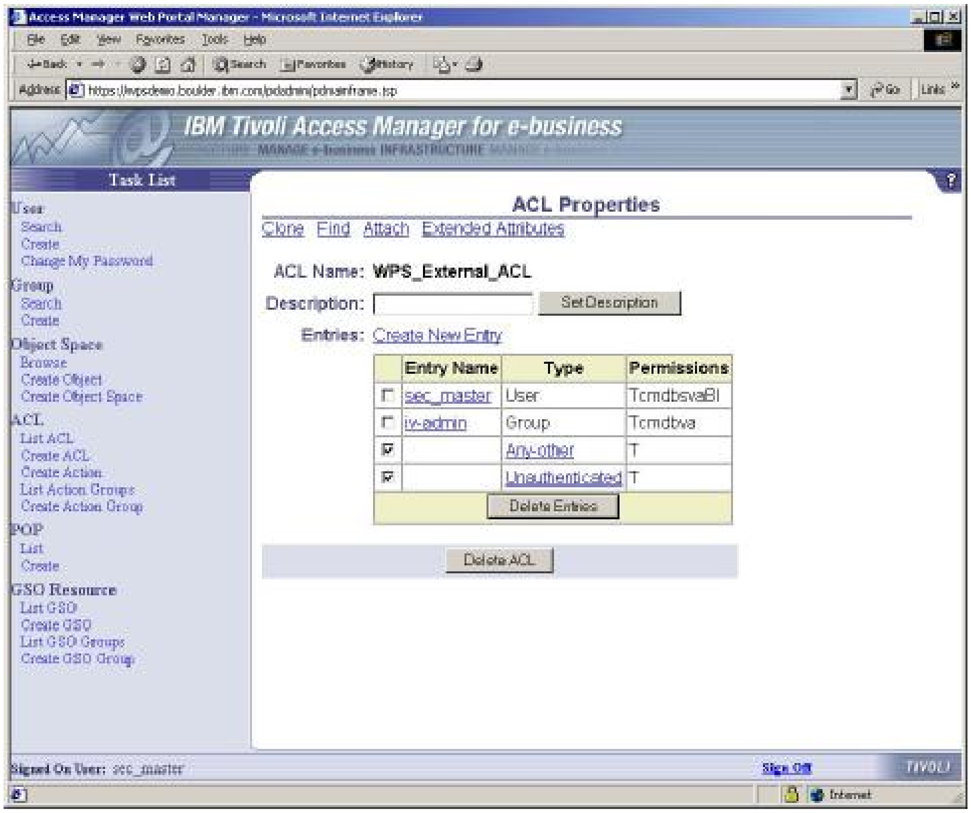
New ACL Name: WPS_External_ACL *

Description:

* Required entry field

Signed On User: sec_master

Enter “WPS_EXTERNAL_ACL” in the “New ACL Name” field and press the “Create ACL Clone” button.


Access Manager Web Portal Manager - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address https://wpsdemo.boulder.ibm.com/pdadmin/pdmainframe.jsp
Go Links
IBM Tivoli Access Manager for e-business
MANAGE e-business INFRASTRUCTURE
Task List
User
Search
Create
Change My Password
Group
Search
Create
Object Space
Browse
Create Object
Create Object Space
ACL
List ACL
Create ACL
Create Action
List Action Groups
Create Action Group
POP
List
Create
GSO Resource
List GSO
Create GSO
List GSO Groups
Create GSO Group
Signed On User: sec_master
Sign Off
TIVOLI
Internet

ACL Properties

Clone Find Attach Extended Attributes

ACL Name: WPS_External_ACL

Description: [ ] Set Description

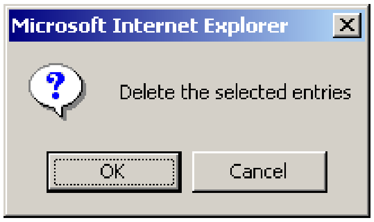
Entries: Create New Entry

| | Entry Name | Type | Permissions |
|---|---|---|---|
| □ | sec_master | User | TcmdbsvaBl |
| □ | iv-admin | Group | Tcmdbva |
| ☑ | | Any-other | T |
| ☑ | | Unauthenticated | T |

Delete Entries

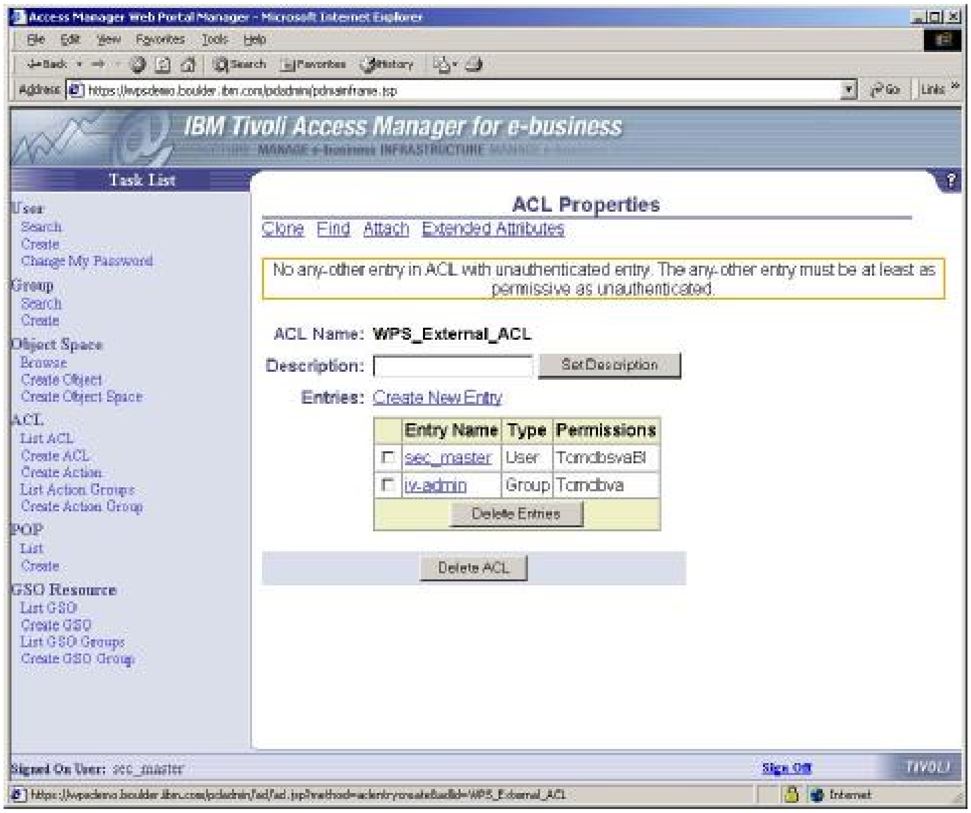
Delete ACL

Click the checkboxes next to the “Any-other” and “Unauthenticated” entries and press the “Delete Entries” button.



Delete the selected entries

Press “OK” to continue.


Access Manager Web Portal Manager - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address https://wpsdemo.boulder.ibm.com/pdadmin/pdmainframe.jsp
Go Links
IBM Tivoli Access Manager for e-business
MANAGE e-business INFRASTRUCTURE
Task List
User
Search
Create
Change My Password
Group
Search
Create
Object Space
Browse
Create Object
Create Object Space
ACL
List ACL
Create ACL
Create Action
List Action Groups
Create Action Group
POP
List
Create
GSO Resource
List GSO
Create GSO
List GSO Groups
Create GSO Group
Clone Find Attach Extended Attributes
Set Description
Create New Entry
Delete Entries
Delete ACL
Signed On User: sec_master
Sign Off
TIVOLI
https://wpsdemo.boulder.ibm.com/pdadmin/acl/acl.jsp?method=aclentrycreate&aclid=WPS_External_ACL
Internet

## ACL Properties

No any-other entry in ACL with unauthenticated entry. The any-other entry must be at least as permissive as unauthenticated.

ACL Name: WPS_External_ACL

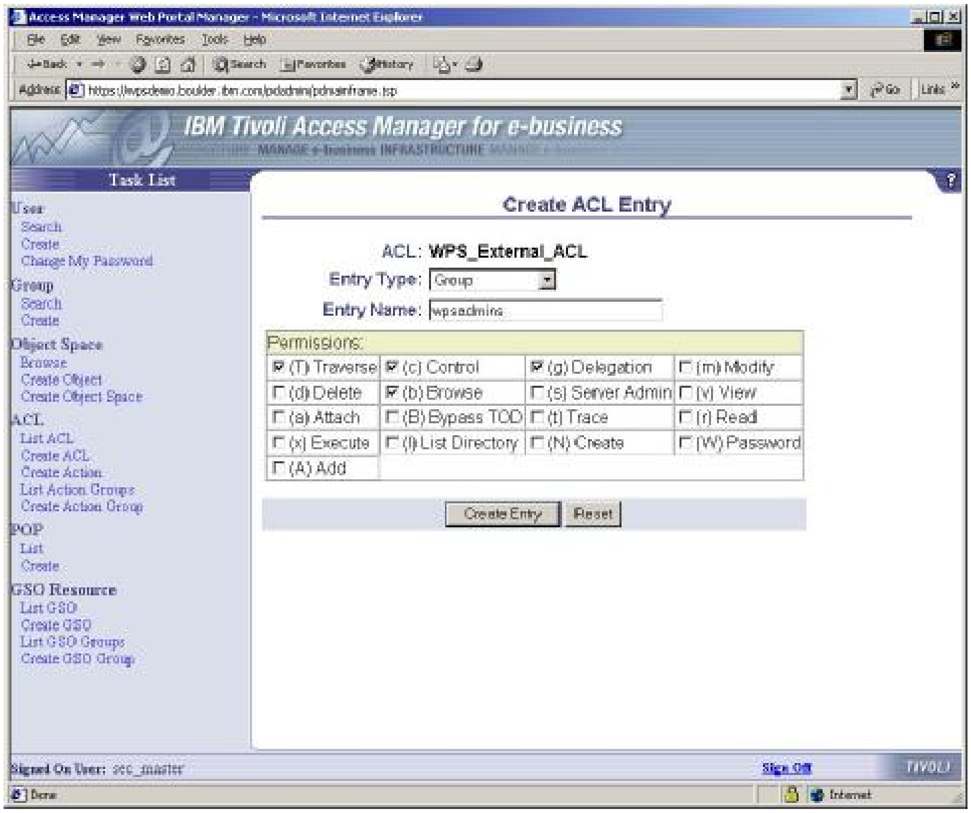
Description:

Entries: Create New Entry

| | Entry Name | Type | Permissions |
|---|---|---|---|
| □ | sec_master | User | TcmdbsvaBl |
| □ | iv-admin | Group | Tcmdbva |

Ignore the warning message, as it does not apply (because we also deleted the “Unauthenticated” entry).

Click the “Create New Entry” link.



Create ACL Entry

ACL: WPS_External_ACL
Entry Type: Group
Entry Name: wpsadmins

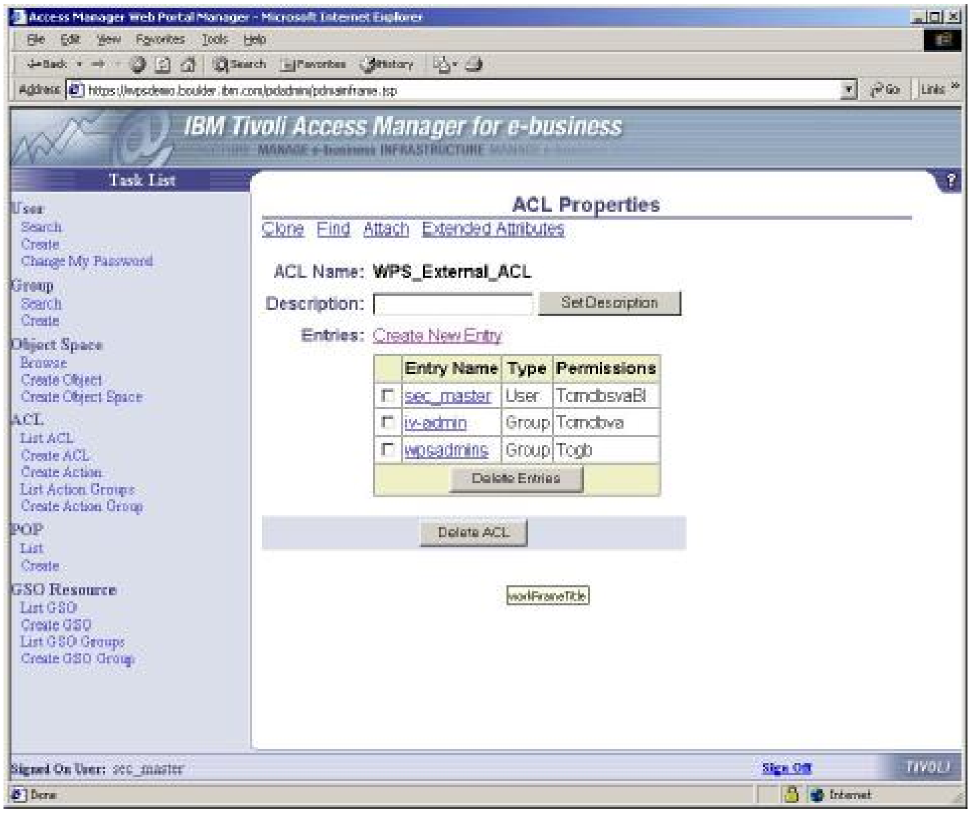
| Permissions: | | | |
|---|---|---|---|
| ☑ (T) Traverse | ☑ (c) Control | ☑ (g) Delegation | □ (m) Modify |
| □ (d) Delete | ☑ (b) Browse | □ (s) Server Admin | □ (v) View |
| □ (a) Attach | □ (B) Bypass TOD | □ (t) Trace | □ (r) Read |
| □ (x) Execute | □ (l) List Directory | □ (N) Create | □ (W) Password |
| □ (A) Add | | | |

Create Entry Reset

Select “Group” from the pull-down list. Enter “wpsadmins” in the “Entry name” field. Click the check boxes next to the following permissions:

- (T) Traverse
- (c) Control
- (b) Browser
- (g) Delegation.

Press the “Create Entry” button.



ACL Properties

Clone Find Attach Extended Attributes

ACL Name: WPS_External_ACL

Description: [ ] Set Description

Entries: Create New Entry

| | Entry Name | Type | Permissions |
|---|---|---|---|
| □ | sec_master | User | TcmdbsvaBl |
| □ | iv-admin | Group | Tcmdbva |
| □ | wpsadmins | Group | Tcgb |

Delete Entries

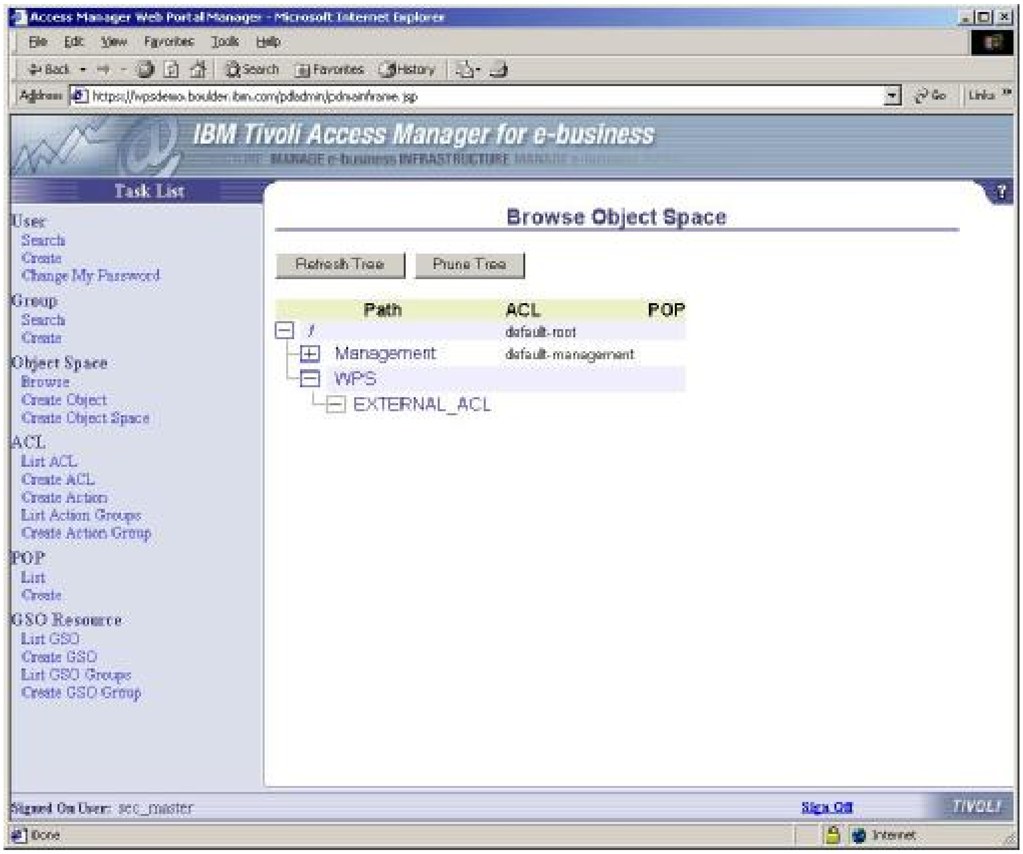
Delete ACL

workFrameTitle

The resulting ACL should appear as shown in the above screen image.

### *Attach the Access Manager ACL to "EXTERNAL_ACL" Object*

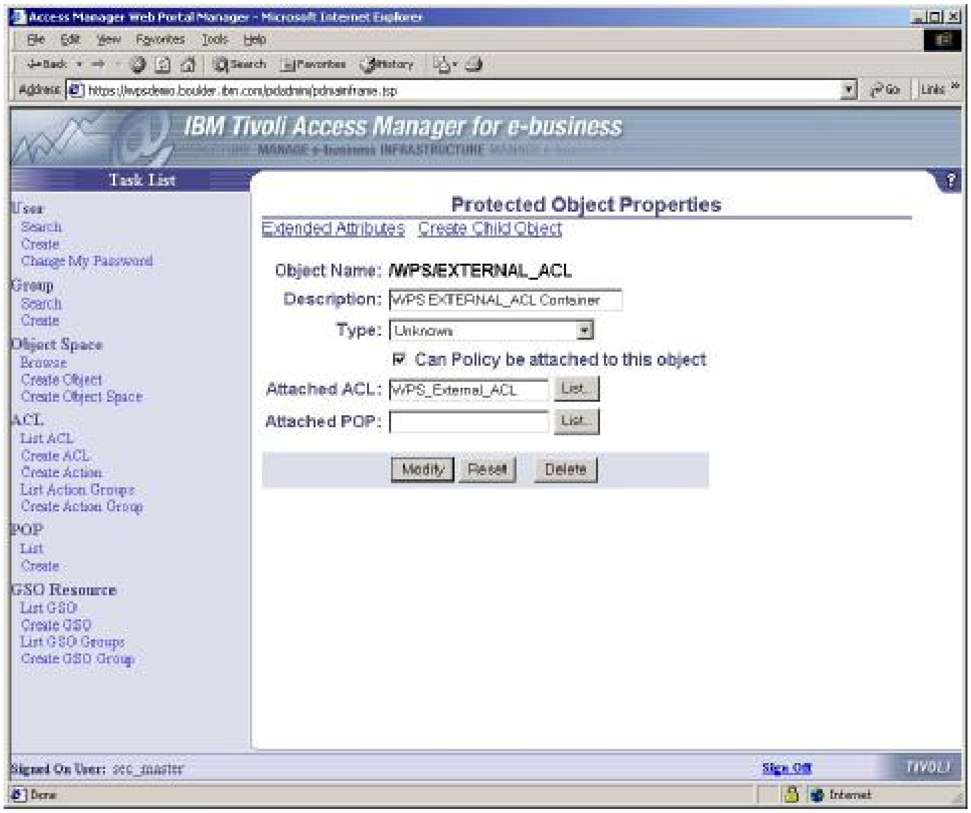
Select "Object Space -> Browse" from (left-hand) menu panel. Expand the root level of the object tree. Notice that the WebSphere Portal Server has created a container object called "/WPS". Expand the "/WPS" sub-tree.



| Path | ACL | POP |
|---|---|---|
| / | default-root | |
| Management | default-management | |
| WPS | | |
| EXTERNAL_ACL | | |

You should see an object called "EXTERNAL_ACL" under the "WPS" container - as shown in the above screen image.

Click the "EXTERNAL_ACL" link to edit the object.



Protected Object Properties

Object Name: /WPS/EXTERNAL_ACL

Description: WPS EXTERNAL_ACL Container

Type: Unknown

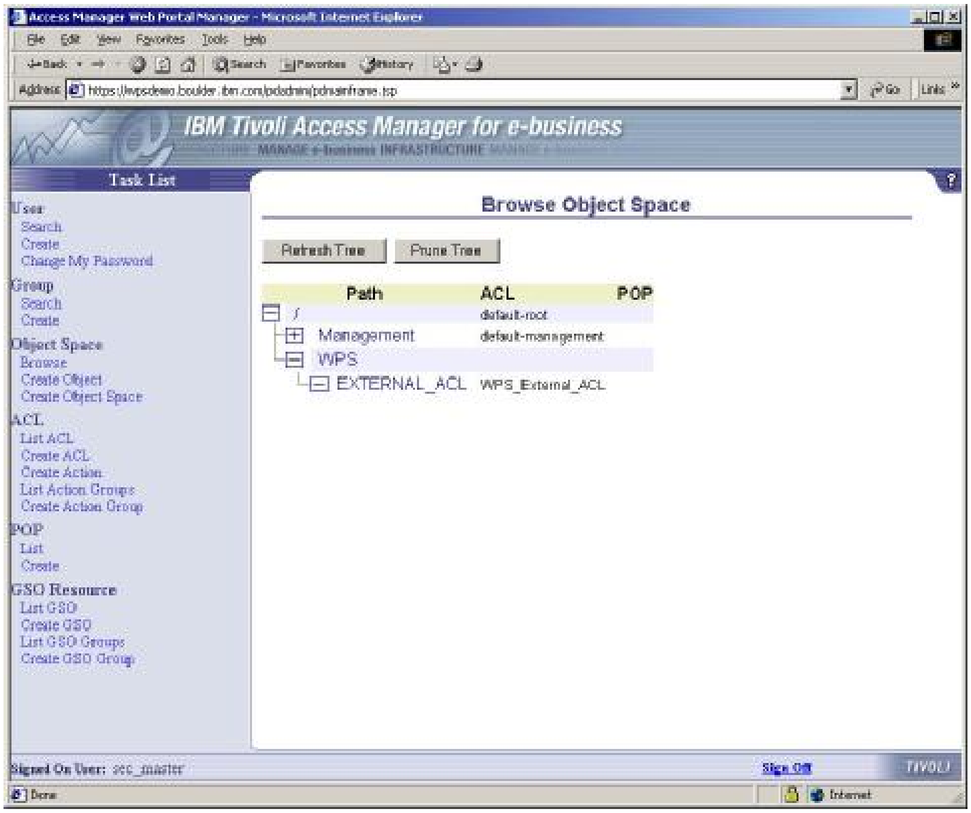
☑ Can Policy be attached to this object

Attached ACL: WPS_External_ACL

Attached POP:

Enter “WPS_EXTERNAL_ACL” in the “Attached ACL” field and press the “Modify” button,

Select “Object Space->Browse” from the menu panel. Press the “Refresh Tree” button and expand the WPS sub-tree.



| Path | ACL | POP |
|---|---|---|
| / | default-root | |
| Management | default-management | |
| WPS | | |
| EXTERNAL_ACL | WPS_External_ACL | |

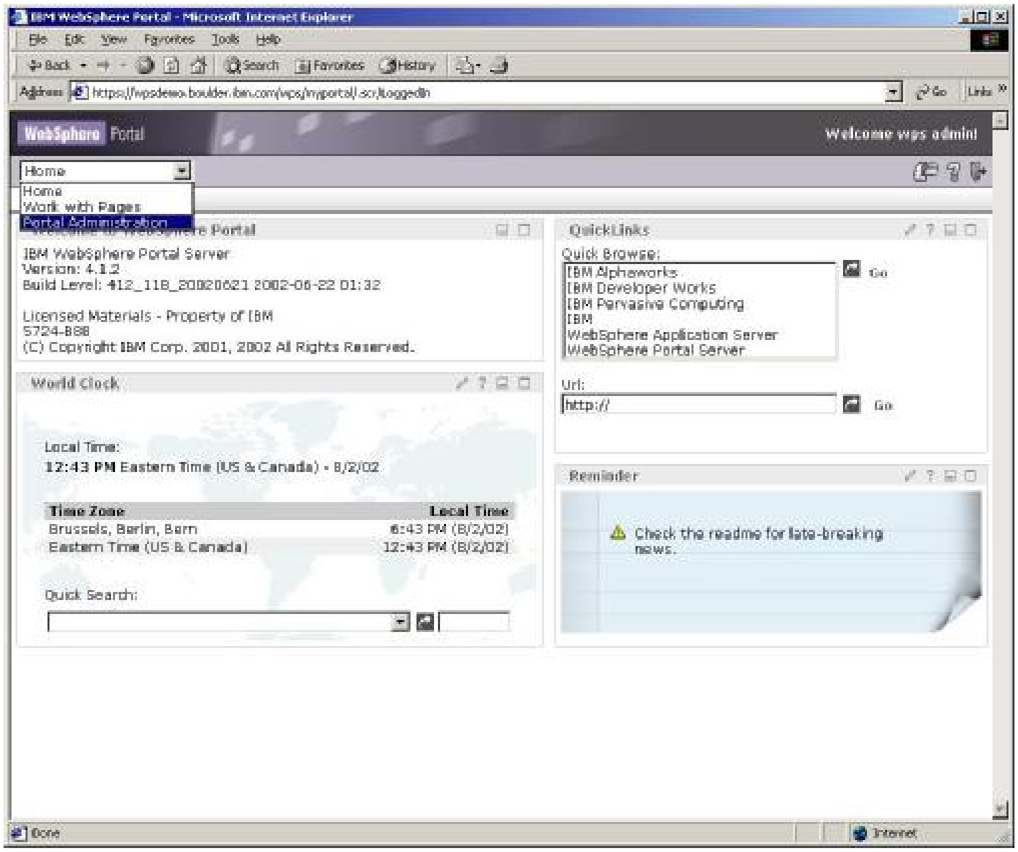
Signed On User: sec_master

You should now see the ACL attached to the EXTERNAL_ACL object.

## Test the Configuration

In a new browser window (keeping the Access Manager Web portal Manager window open for later use), display the URL: http://wpsdemo.boulder.ibm.com/wps/portal.

Press the Log in button (i.e. the key icon in the top right-hand corner) and authenticate as “wpsadmin” (passw0rd).



IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address https://wpsdemo.boulder.ibm.com/wps/myportal/.scr/Loggedin
WebSphere Portal
Welcome wps admin!
Home
Home
Work with Pages
Portal Administration
Welcome to WebSphere Portal
QuickLinks
World Clock
Reminder
Go
Done
Internet

IBM WebSphere Portal Server
Version: 4.1.2
Build Level: 412_118_20020621 2002-06-22 01:32

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(C) Copyright IBM Corp. 2001, 2002 All Rights Reserved.

Quick Browse:
IBM Alphaworks
IBM Developer Works
IBM Pervasive Computing
IBM
WebSphere Application Server
WebSphere Portal Server

Url:
http://

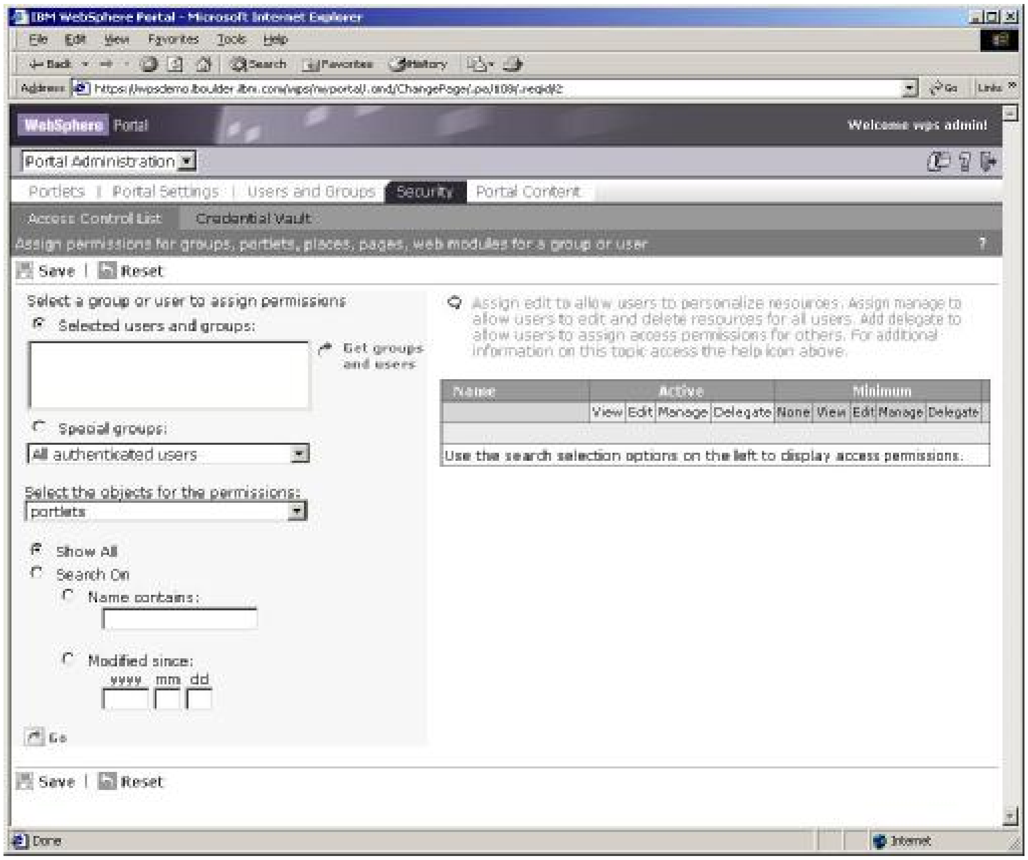
Local Time:
**12:43 PM** Eastern Time (US & Canada) - 8/2/02

| Time Zone | Local Time |
|---|---|
| Brussels, Berlin, Bern | 6:43 PM (8/2/02) |
| Eastern Time (US & Canada) | 12:43 PM (8/2/02) |

Quick Search:

Check the readme for late-breaking news.

Select "Portal Administration" from the pull-down list of authorized page-groups (or places).


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address https://wpsdemo.boulder.ibm.com/wps/myportal/.cmd/ChangePage/.pe/_t08/.reqid/2
Go Links
WebSphere Portal
Welcome wps admin!
Portal Administration
Portlets | Portal Settings | Users and Groups | Security | Portal Content
Access Control List Credential Vault
?
Save | Reset
Get groups and users
Go
Save | Reset
Done
Internet

Assign permissions for groups, portlets, places, pages, web modules for a group or user

Select a group or user to assign permissions

● Selected users and groups:

○ Special groups:

All authenticated users

Select the objects for the permissions:

portlets

● Show All

○ Search On

○ Name contains:

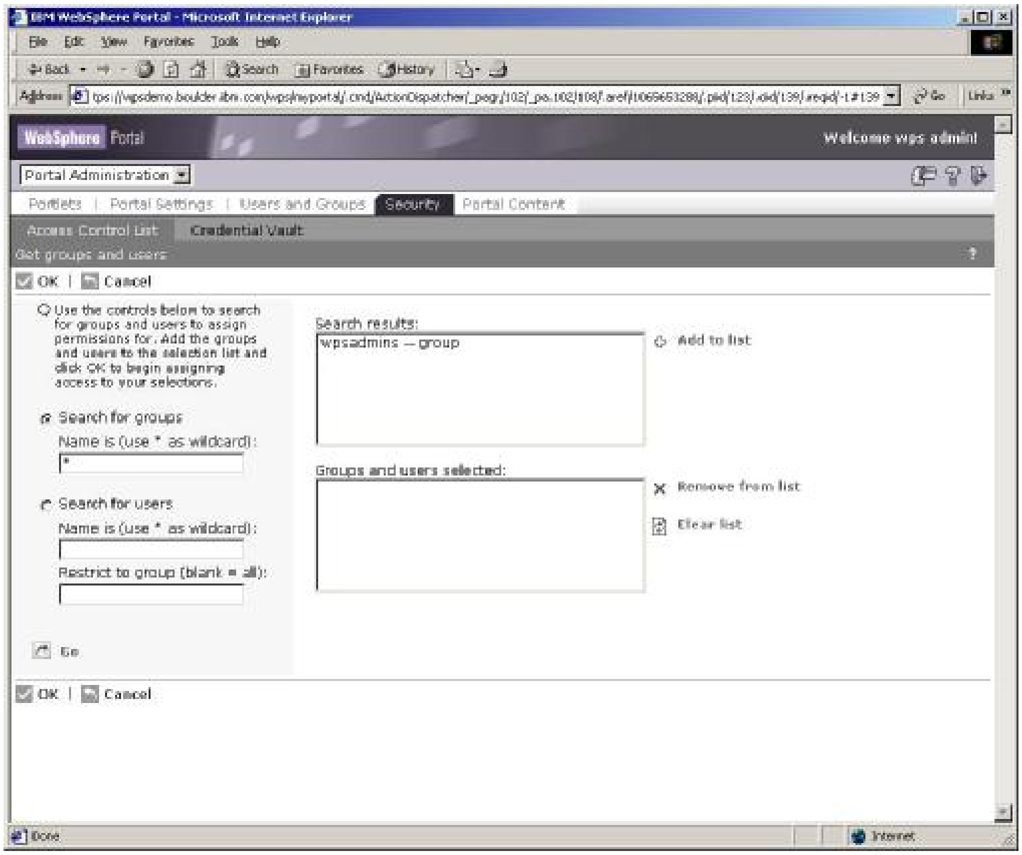
○ Modified since:

yyyy mm dd

Assign edit to allow users to personalize resources. Assign manage to allow users to edit and delete resources for all users. Add delegate to allow users to assign access permissions for others. For additional information on this topic access the help icon above.

| Name | Active | | | | Minimum | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | View | Edit | Manage | Delegate | None | View | Edit | Manage | Delegate |
| Use the search selection options on the left to display access permissions. | | | | | | | | | |

Select the "Selected users and groups" radio button and click the "Get groups and users" link.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address
Go
Links
WebSphere Portal
Welcome wps admin!
Portal Administration
Portlets | Portal Settings | Users and Groups | Security | Portal Content
Access Control List
Credential Vault
Get groups and users
OK | Cancel
Search results:
Add to list
Groups and users selected:
Remove from list
Clear list
Go
OK | Cancel
Done
Internet

Use the controls below to search for groups and users to assign permissions for. Add the groups and users to the selection list and click OK to begin assigning access to your selections.

● Search for groups

Name is (use * as wildcard): *

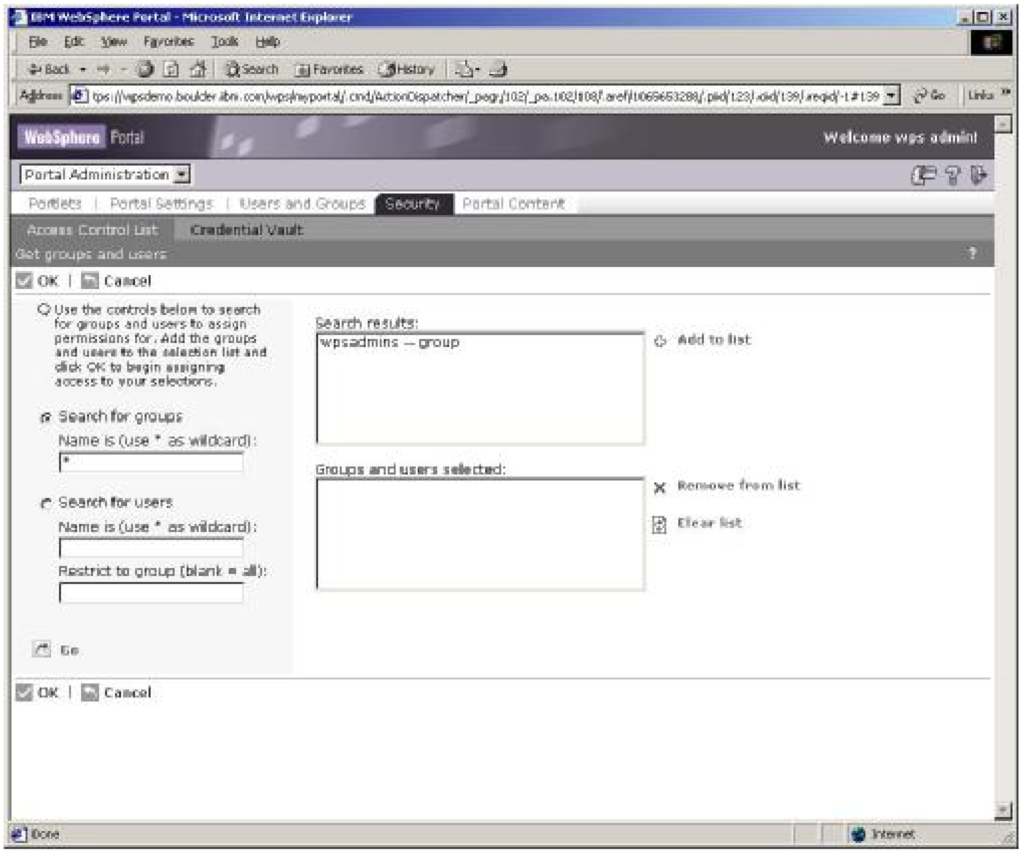
○ Search for users

Name is (use * as wildcard):

Restrict to group (blank = all):

Search results: wpsadmins -- group

Select the "Search for groups" radio button. Enter "*" in the corresponding search field. Click the "Go" link.



Address: tps://wpsdemo.boulder.ibm.com/wps/myportal/.cmd/ActionDispatcher/_pagr/102/_pa.102/108/.aref/1069653288/.piid/123/.sid/139/.reqid/-1#139

Use the controls below to search for groups and users to assign permissions for. Add the groups and users to the selection list and click OK to begin assigning access to your selections.

● Search for groups

Name is (use * as wildcard): *

○ Search for users

Name is (use * as wildcard):

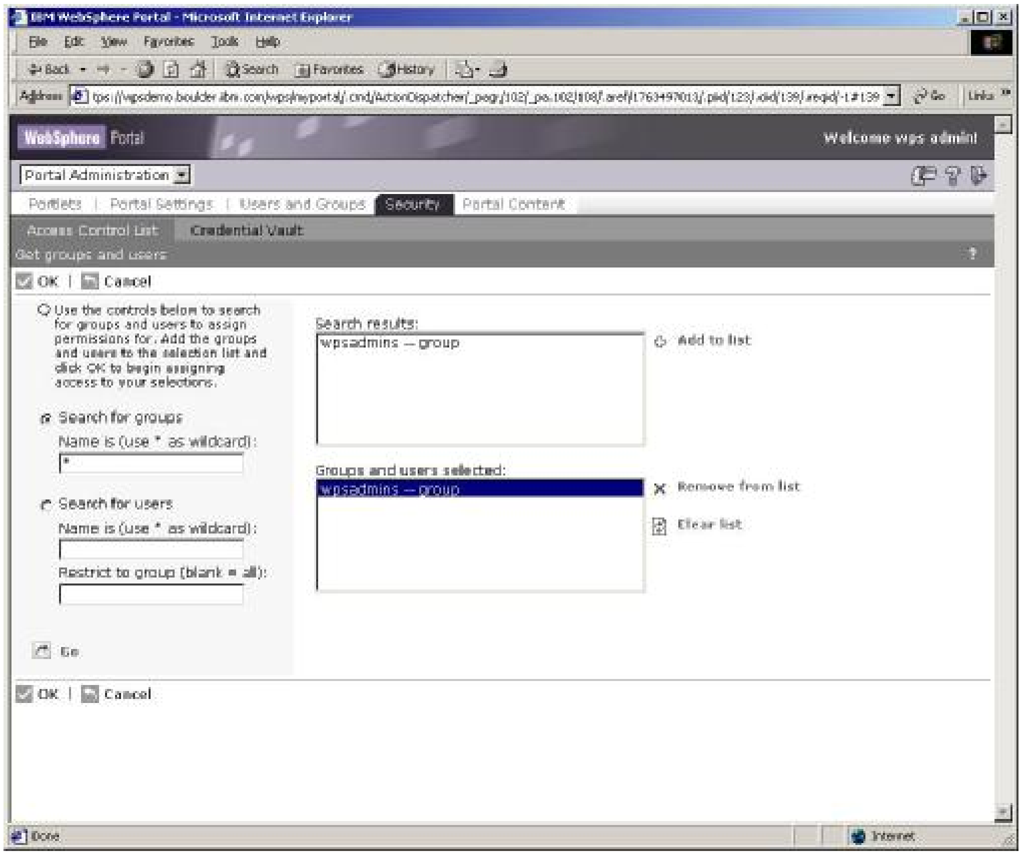
Restrict to group (blank = all):

Search results:

wpsadmins -- group

Groups and users selected:

Select the “wpsadmins -- group” entry in the search results panel and click the “Add to list” link.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address tps://wpsdemo.boulder.ibm.com/wps/myportal/.cmd/ActionDispatcher/_pagr/102/_pa.102/108/.aref/1763497013/.piid/123/.xsid/139/.reqid/-1#139
Go Links
WebSphere Portal
Welcome wps admin!
Portal Administration
Portlets | Portal Settings | Users and Groups Security Portal Content
Access Control List Credential Vault
Get groups and users
OK | Cancel
Add to list
Remove from list
Clear list
Go
OK | Cancel
Done
Internet

Use the controls below to search for groups and users to assign permissions for. Add the groups and users to the selection list and click OK to begin assigning access to your selections.

● Search for groups

Name is (use * as wildcard): *

○ Search for users

Name is (use * as wildcard):

Restrict to group (blank = all):

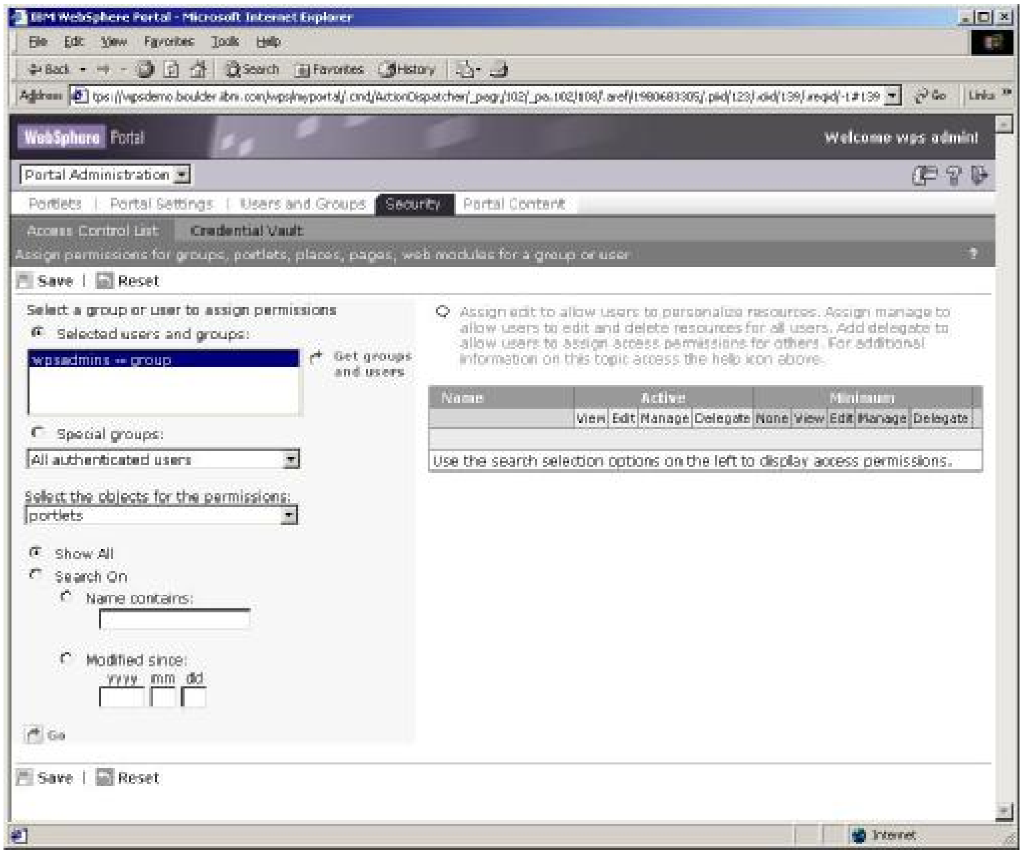
Search results:

wpsadmins -- group

Groups and users selected:

wpsadmins -- group

Press “OK” to continue.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Go Links
WebSphere Portal
Welcome wps admin!
Portlets | Portal Settings | Users and Groups Security Portal Content
Access Control List Credential Vault
Save | Reset
Get groups and users
Go
Save | Reset
Internet

Address: tps://wpsdemo.boulder.ibm.com/wps/myportal/.cmd/ActionDispatcher/_pagr/102/_pa.102/108/.aref/1980683305/.pid/123/.xid/139/.reqid/-1#139

Portal Administration

Assign permissions for groups, portlets, places, pages, web modules for a group or user

Select a group or user to assign permissions

● Selected users and groups:

wpsadmins -- group

○ Special groups:

All authenticated users

Select the objects for the permissions:

portlets

● Show All

○ Search On

○ Name contains:

○ Modified since:

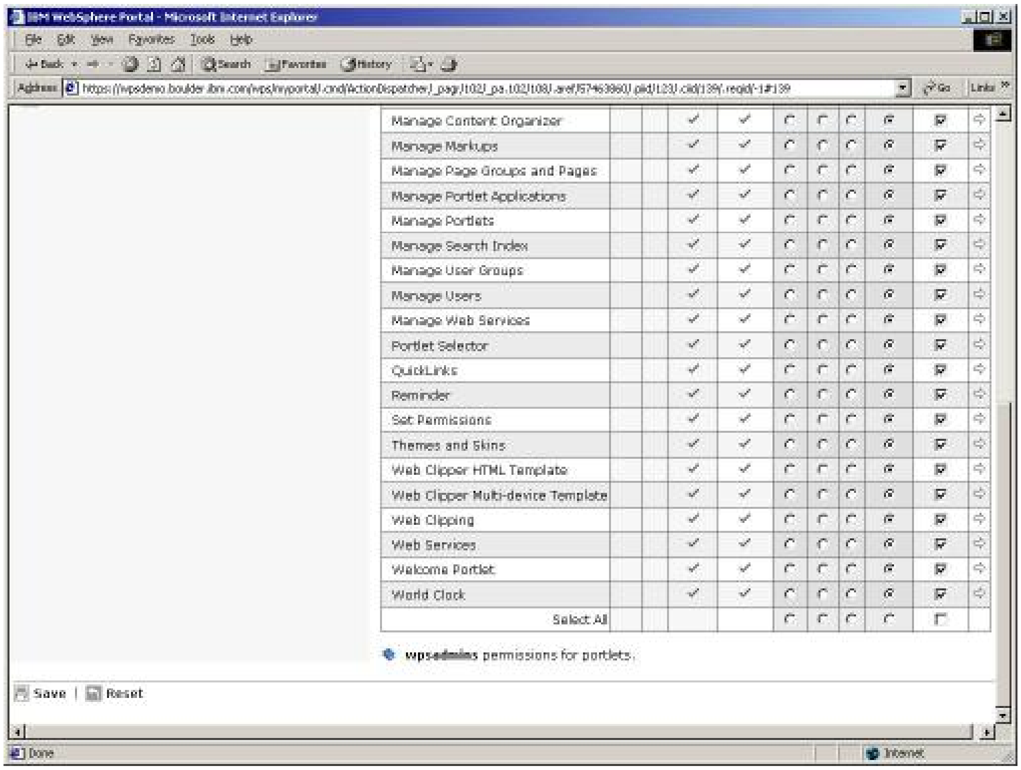
yyyy mm dd

Assign edit to allow users to personalize resources. Assign manage to allow users to edit and delete resources for all users. Add delegate to allow users to assign access permissions for others. For additional information on this topic access the help icon above.

| Name | Active | | | | Minimum | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | View | Edit | Manage | Delegate | None | View | Edit | Manage | Delegate |
| Use the search selection options on the left to display access permissions. | | | | | | | | | |

Click the “Go” link to display all of the porlets accessible by members of the wpadmins group - which should be all of the portlets.

Scroll down to the “World Clock” portlet.

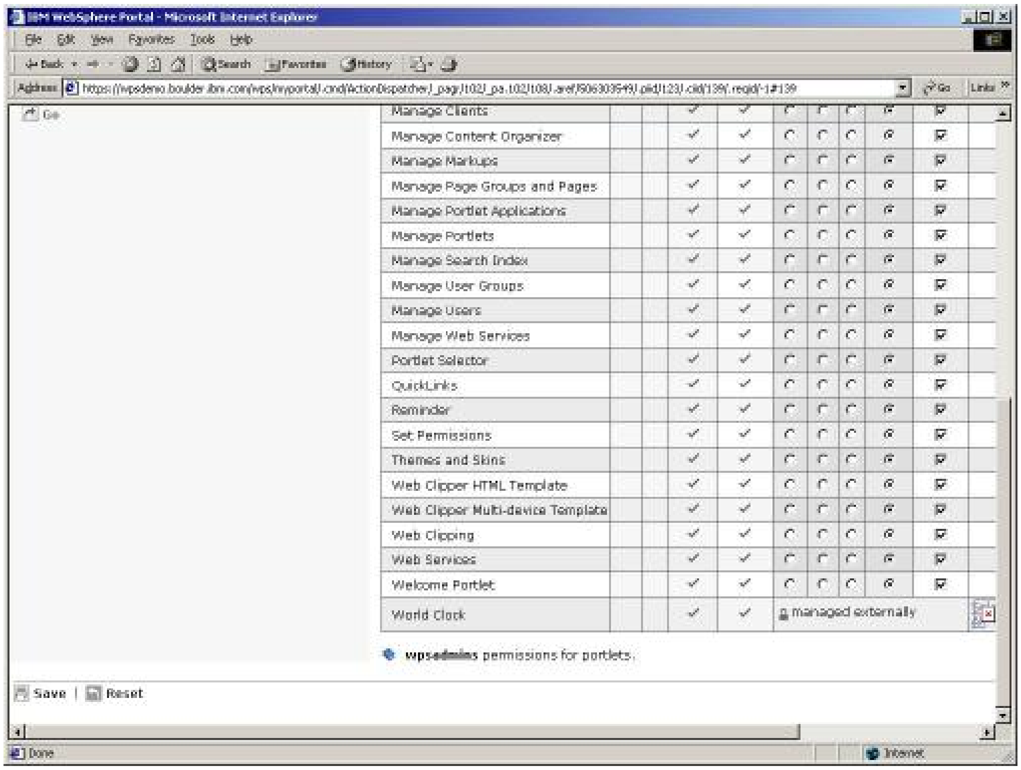


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address https://wpsdemo.boulder.ibm.com/wps/myportal/.cmd/ActionDispatcher/_pagr/102/_pa.102/108/.aref/57463860/.piid/123/.cid/139/.reqid/-1#139
Go Links

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Manage Content Organizer | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | ⇨ |
| Manage Markups | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | ⇨ |
| Manage Page Groups and Pages | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | ⇨ |
| Manage Portlet Applications | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | ⇨ |
| Manage Portlets | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | ⇨ |
| Manage Search Index | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | ⇨ |
| Manage User Groups | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | ⇨ |
| Manage Users | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | ⇨ |
| Manage Web Services | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | ⇨ |
| Portlet Selector | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | ⇨ |
| QuickLinks | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | ⇨ |
| Reminder | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | ⇨ |
| Set Permissions | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | ⇨ |
| Themes and Skins | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | ⇨ |
| Web Clipper HTML Template | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | ⇨ |
| Web Clipper Multi-device Template | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | ⇨ |
| Web Clipping | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | ⇨ |
| Web Services | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | ⇨ |
| Welcome Portlet | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | ⇨ |
| World Clock | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | ⇨ |
| Select All | | | | | ○ | ○ | ○ | ○ | ☐ | |

**wpsadmins** permissions for portlets.

Click the arrow icon on the right-hand end of the line for the “World Clock” portlet - this will move control of this portlet to Access Manager (once the screen is saved).



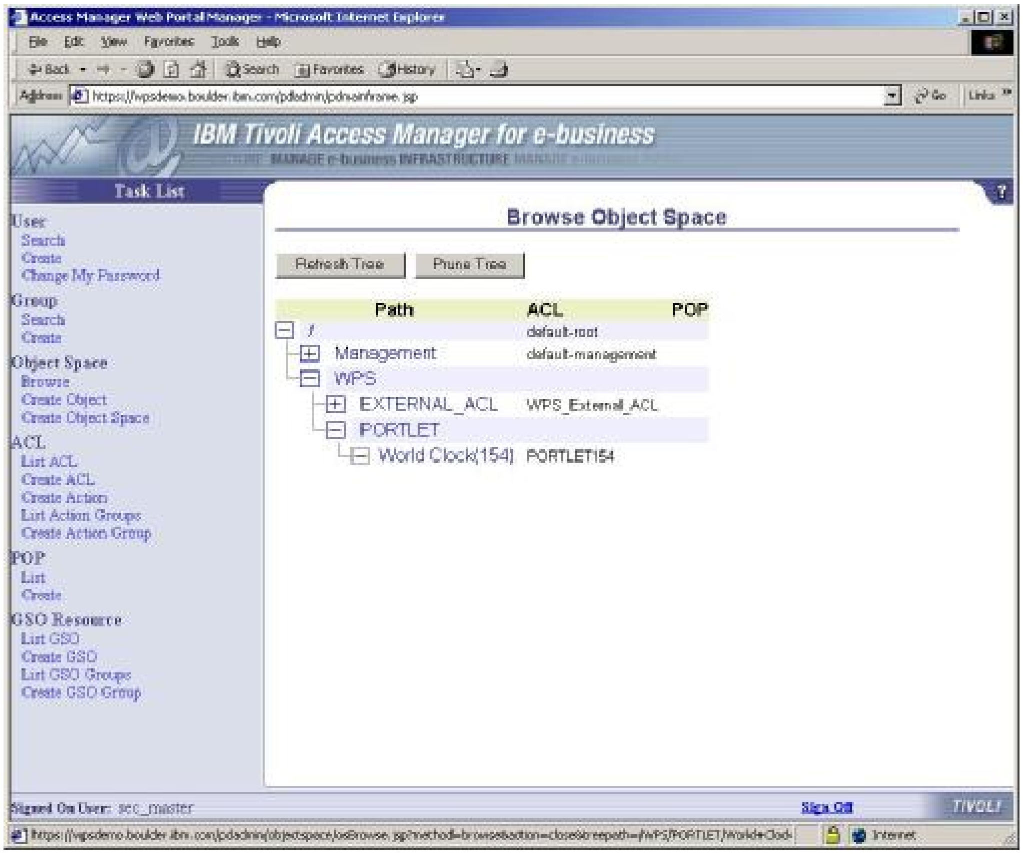
IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address https://wpsdemo.boulder.ibm.com/wps/myportal/.cmd/ActionDispatcher/_pagr/102/_pa.102/108/.aref/506303549/.piid/123/.cid/139/.reqid/-1#139
Go Links
Go

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Manage Clients | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | |
| Manage Content Organizer | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | |
| Manage Markups | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | |
| Manage Page Groups and Pages | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | |
| Manage Portlet Applications | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | |
| Manage Portlets | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | |
| Manage Search Index | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | |
| Manage User Groups | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | |
| Manage Users | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | |
| Manage Web Services | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | |
| Portlet Selector | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | |
| QuickLinks | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | |
| Reminder | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | |
| Set Permissions | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | |
| Themes and Skins | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | |
| Web Clipper HTML Template | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | |
| Web Clipper Multi-device Template | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | |
| Web Clipping | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | |
| Web Services | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | |
| Welcome Portlet | | | ✓ | ✓ | ○ | ○ | ○ | ● | ☑ | |
| World Clock | | | ✓ | ✓ | managed externally | | | | | ☒ |

**wpsadmins** permissions for portlets.

Press the “Save” button. WebSphere Portal Server will now create an entry in the Access Manager object space and attach a default ACL.

Switch to the Web Portal Manager browser window. Press the “Refresh Tree” button in the object space and expand the WPS sub-tree.



Browse Object Space

Refresh Tree Prune Tree

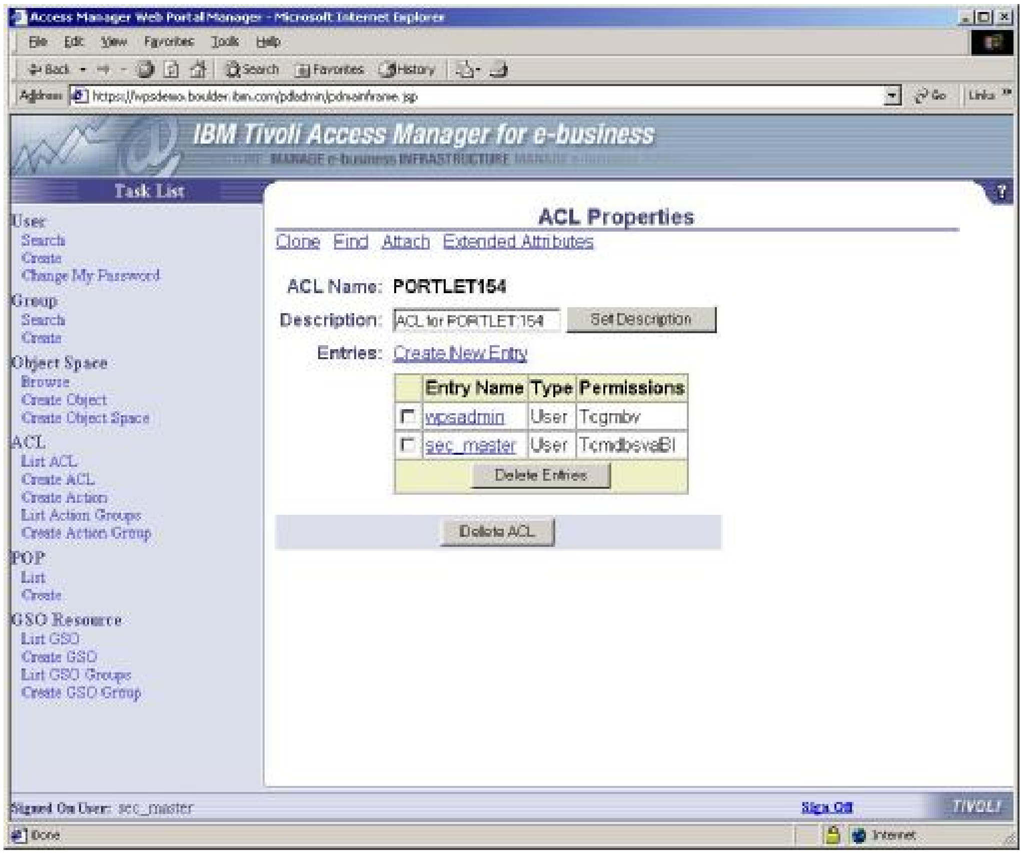
| Path | ACL | POP |
|---|---|---|
| ⊟ / | default-root | |
| ⊞ Management | default-management | |
| ⊟ WPS | | |
| ⊞ EXTERNAL_ACL | WPS_External_ACL | |
| ⊟ PORTLET | | |
| ⊟ World Clock(154) | PORTLET154 | |

Signed On User: sec_master

https://wpsdemo.boulder.ibm.com/pdadmin/objectspace/osBrowse.jsp?method=browse&action=close&treepath=/WPS/PORTLET/World+Clock

You should now see the entry and associated default ACL for the World Clock portlet (as shown in the above screen image).

Click the “PORTLET154” link to edit the ACL.



ACL Properties

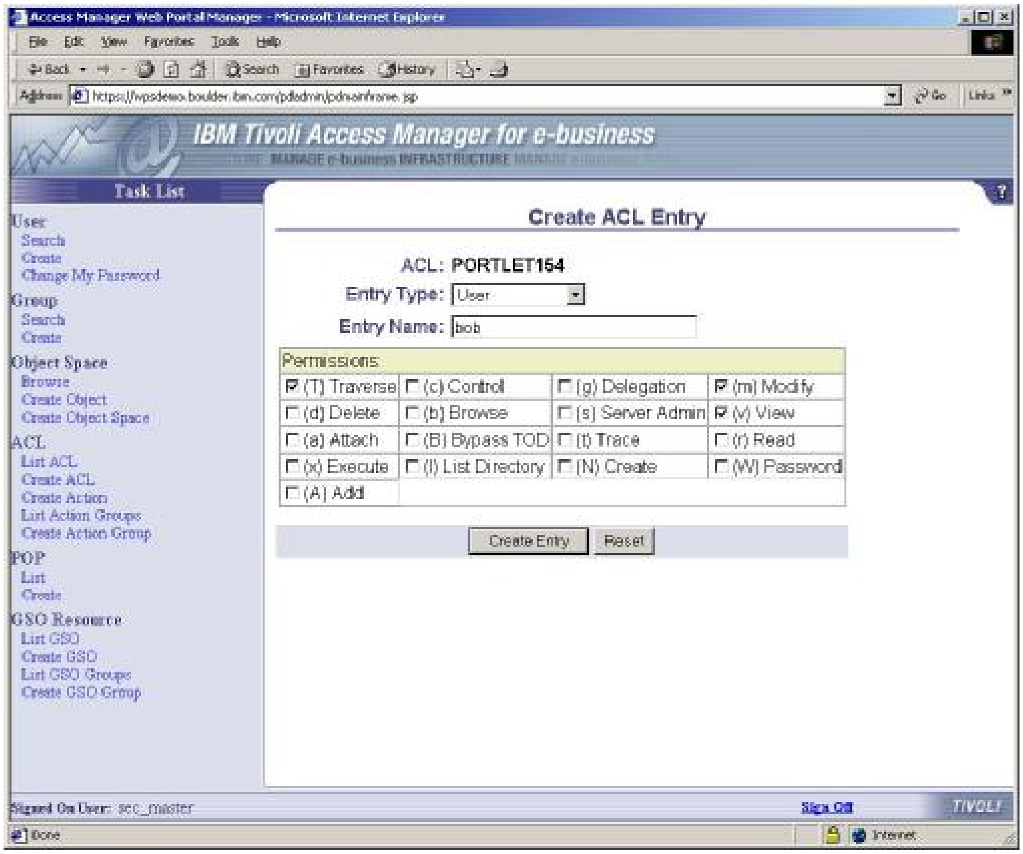
ACL Name: PORTLET154

Description: ACL for PORTLET154

Entries: Create New Entry

| | Entry Name | Type | Permissions |
|---|---|---|---|
| □ | wpsadmin | User | Tcgmbv |
| □ | sec_master | User | TcmdbsvaBl |

Click the "Create New Entry" link.



Create ACL Entry

ACL: PORTLET154

Entry Type: User

Entry Name: bob

Permissions:

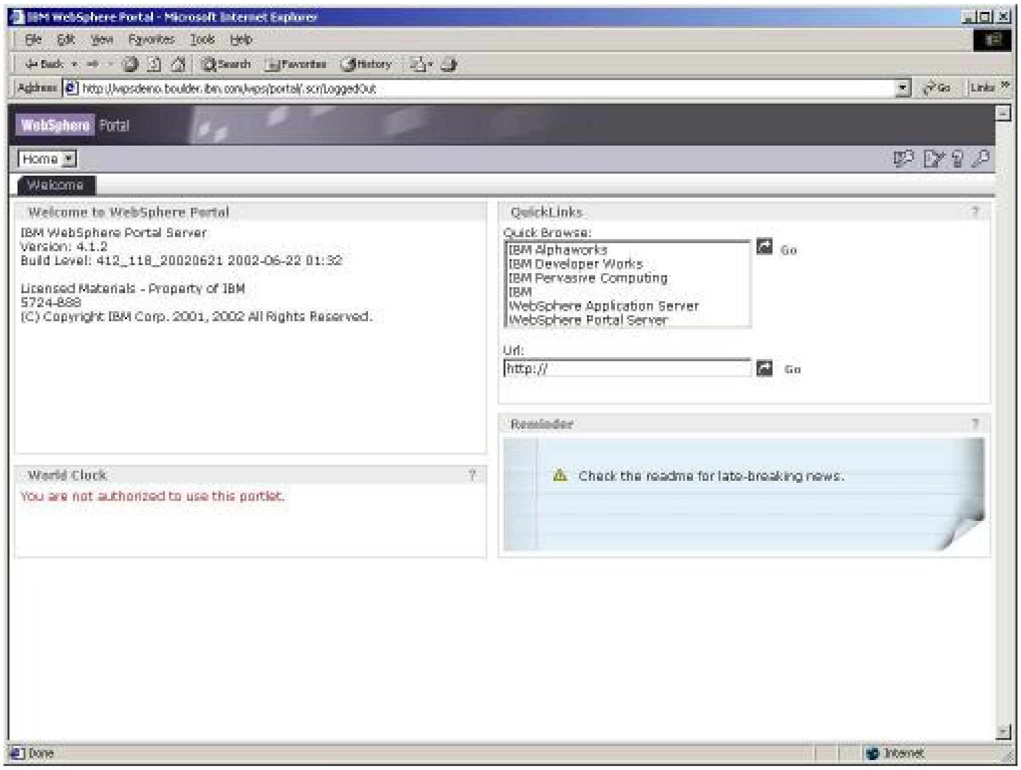
| | | | |
|---|---|---|---|
| ☑ (T) Traverse | □ (c) Control | □ (g) Delegation | ☑ (m) Modify |
| □ (d) Delete | □ (b) Browse | □ (s) Server Admin | ☑ (v) View |
| □ (a) Attach | □ (B) Bypass TOD | □ (t) Trace | □ (r) Read |
| □ (x) Execute | □ (l) List Directory | □ (N) Create | □ (W) Password |
| □ (A) Add | | | |

Select “User” from the pull-down list. Enter “bob” in the “Entry name” field and select the check boxes associated with the following permissions:

- (T) Traverse
- (m) Modify
- (v) View

Press the “Create Entry button”.

Return to the WebSphere Portal browser window and logoff the “wpsadmin” user - this will display the public portal page.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address
Go
Links
WebSphere Portal
Home
Welcome
Done
Internet

http://wpsdemo.boulder.ibm.com/wps/portal/.scr/LoggedOut

Welcome to WebSphere Portal

IBM WebSphere Portal Server
Version: 4.1.2
Build Level: 412_118_20020621 2002-06-22 01:32

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Go

Url:
http://
Go

World Clock

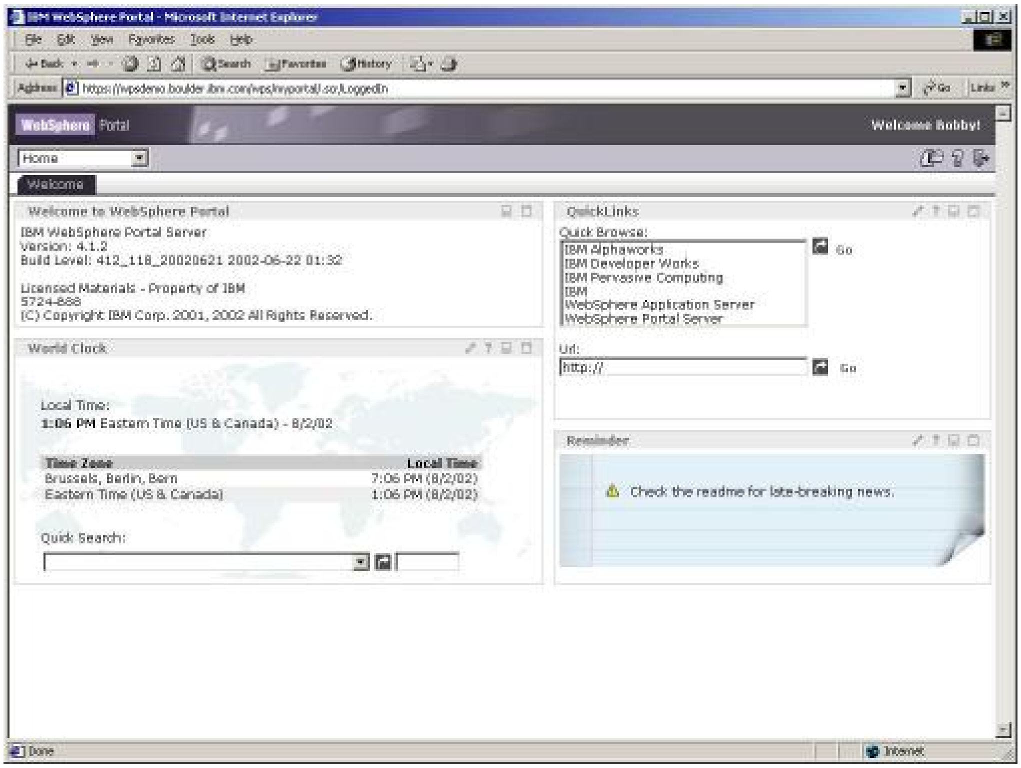
You are not authorized to use this portlet.

Reminder

⚠ Check the readme for late-breaking news.

Note that an unauthenticated user cannot now view the World Clock portlet - this is consistent with the Access Manager ACL we just edited.

Now login to the WebSphere Portal as “bob” (passw0rd).


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address
Go
Links
WebSphere Portal
Home
Welcome
Done
Internet

https://wpsdemo.boulder.ibm.com/wps/myportal/.scr/LoggedIn

Welcome Bobby!

Welcome to WebSphere Portal

IBM WebSphere Portal Server
Version: 4.1.2
Build Level: 412_118_20020621 2002-06-22 01:32

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World Clock

Local Time:
**1:06 PM** Eastern Time (US & Canada) - 8/2/02

| Time Zone | Local Time |
|---|---|
| Brussels, Berlin, Bern | 7:06 PM (8/2/02) |
| Eastern Time (US & Canada) | 1:06 PM (8/2/02) |

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Url:
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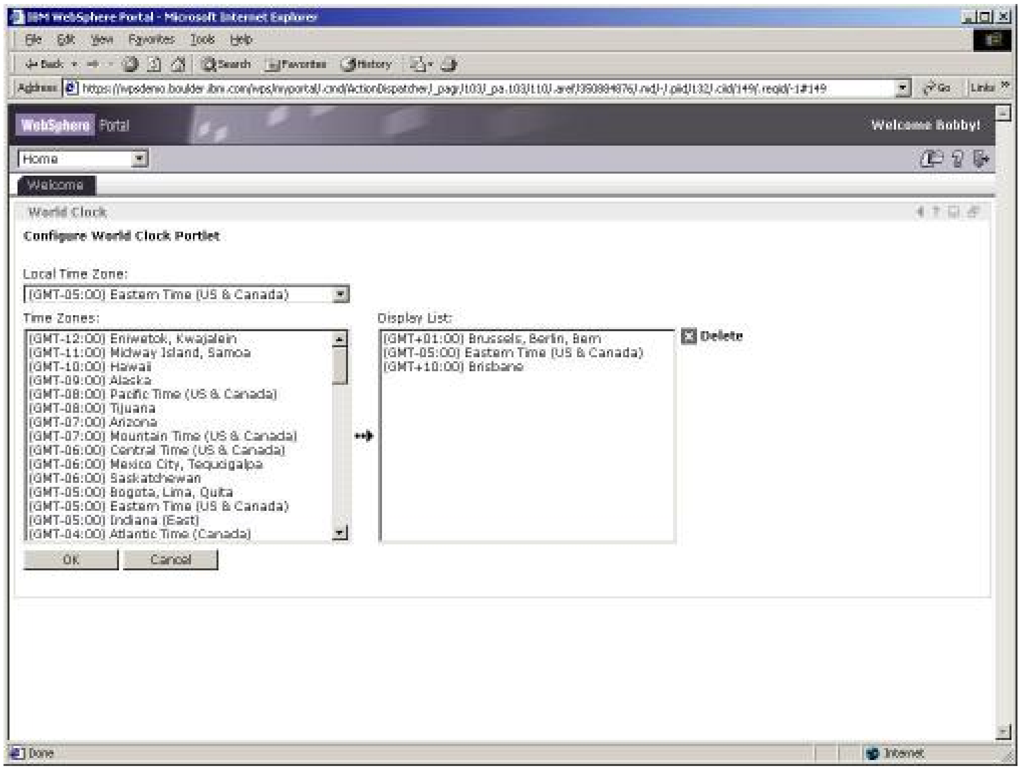
Go

Reminder

⚠ Check the readme for late-breaking news.

Note that “bob” has can view the World Clock portlet. Also note that World Clock portlet menu bar shows a small pencil icon - this shows that “bob” also has “edit” permission (i.e. the “m” Access Manager permission character in WPS 4.1.2).

Click the pencil icon for the World Clock portlet. Select your favorite time zone from the list in the left-hand panel and click the arrow icon between the panels to copy it to the right-hand panel.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address https://wpsdemo.boulder.ibm.com/wps/myportal/.cmd/ActionDispatcher/_pagr/103/_pa.103/110/.aref/350884876/.rvd/-/.pid/132/.cid/149/.reqid/-1#149
Go Links
WebSphere Portal
Welcome Bobby!
Home
Welcome
World Clock
Done
Internet

Configure World Clock Portlet

Local Time Zone: (GMT-05:00) Eastern Time (US & Canada)

Time Zones:

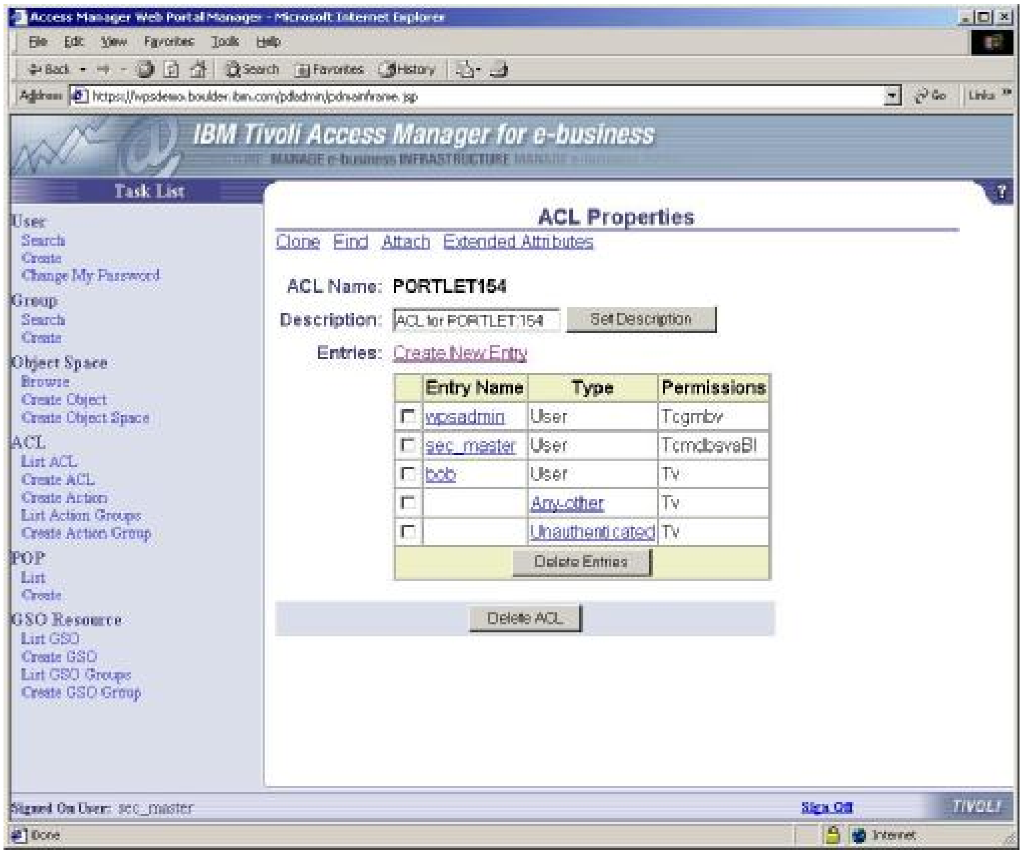
(GMT-12:00) Eniwetok, Kwajalein
(GMT-11:00) Midway Island, Samoa
(GMT-10:00) Hawaii
(GMT-09:00) Alaska
(GMT-08:00) Pacific Time (US & Canada)
(GMT-08:00) Tijuana
(GMT-07:00) Arizona
(GMT-07:00) Mountain Time (US & Canada)
(GMT-06:00) Central Time (US & Canada)
(GMT-06:00) Mexico City, Tegucigalpa
(GMT-06:00) Saskatchewan
(GMT-05:00) Bogota, Lima, Quita
(GMT-05:00) Eastern Time (US & Canada)
(GMT-05:00) Indiana (East)
(GMT-04:00) Atlantic Time (Canada)

Display List:

(GMT+01:00) Brussels, Berlin, Bern
(GMT-05:00) Eastern Time (US & Canada)
(GMT+10:00) Brisbane

Press “OK” to add the new time zone to the World Clock portlet for “bob”. You should now see the new timezone in the World Clock portlet.

Modify the “PORTLET154” ACL so that “bob” now only has “Tv” permissions. Also add entries for the special categories “any-other” and “unauthenticated”, giving them “Tv” permissions.



ACL Properties

Clone Find Attach Extended Attributes

ACL Name: PORTLET154

Description: ACL for PORTLET154 Set Description

Entries: Create New Entry

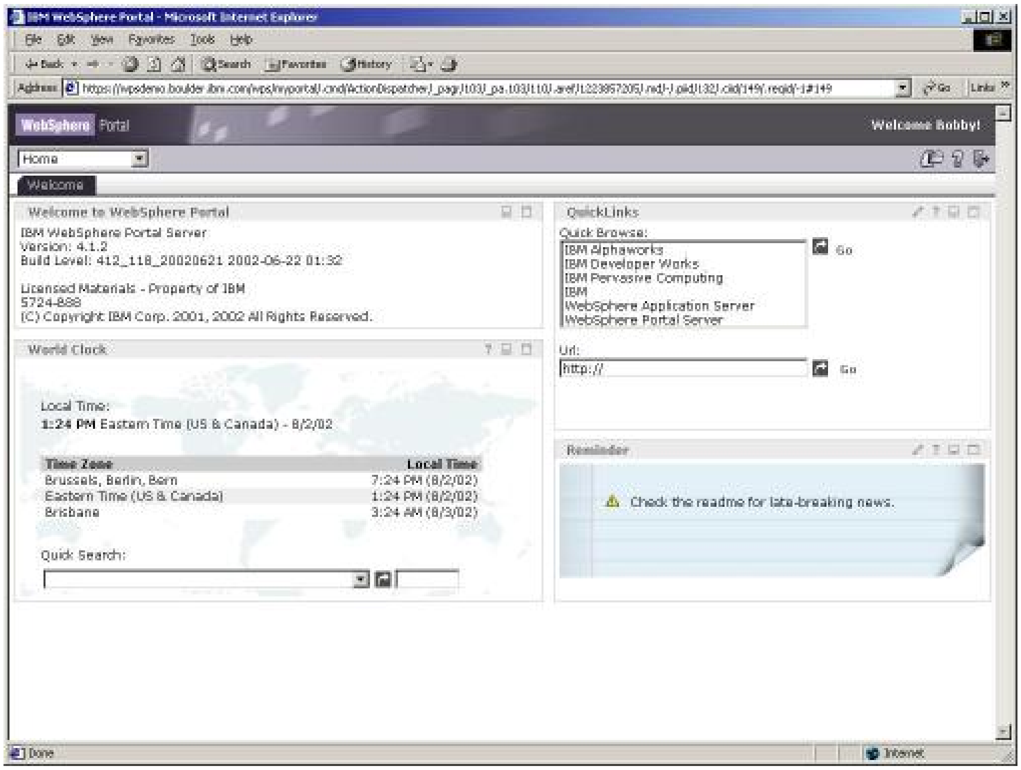
| | Entry Name | Type | Permissions |
|---|---|---|---|
| □ | wpsadmin | User | Tcgmbv |
| □ | sec_master | User | TcmdbsvaBl |
| □ | bob | User | Tv |
| □ | | Any-other | Tv |
| □ | | Unauthenticated | Tv |

Delete Entries

Delete ACL

The modified ACL should appear as shown in the above screen image.

Return to the WebSphere Portal browser window and press the refresh button while holding down the Shift key.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address
Go Links
WebSphere Portal
Home
Welcome
Go
Done
Internet

https://wpsdemo.boulder.ibm.com/wps/myportal/.cmd/ActionDispatcher/_pagr/103/_pa.103/110/.aref/1223857205/.md/-/.pid/132/.cid/149/.reqid/-1#149

Welcome Bobby!

Welcome to WebSphere Portal

IBM WebSphere Portal Server
Version: 4.1.2
Build Level: 412_118_20020621 2002-06-22 01:32

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World Clock

Local Time:
**1:24 PM** Eastern Time (US & Canada) - 8/2/02

| Time Zone | Local Time |
|---|---|
| Brussels, Berlin, Bern | 7:24 PM (8/2/02) |
| Eastern Time (US & Canada) | 1:24 PM (8/2/02) |
| Brisbane | 3:24 AM (8/3/02) |

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WebSphere Portal Server

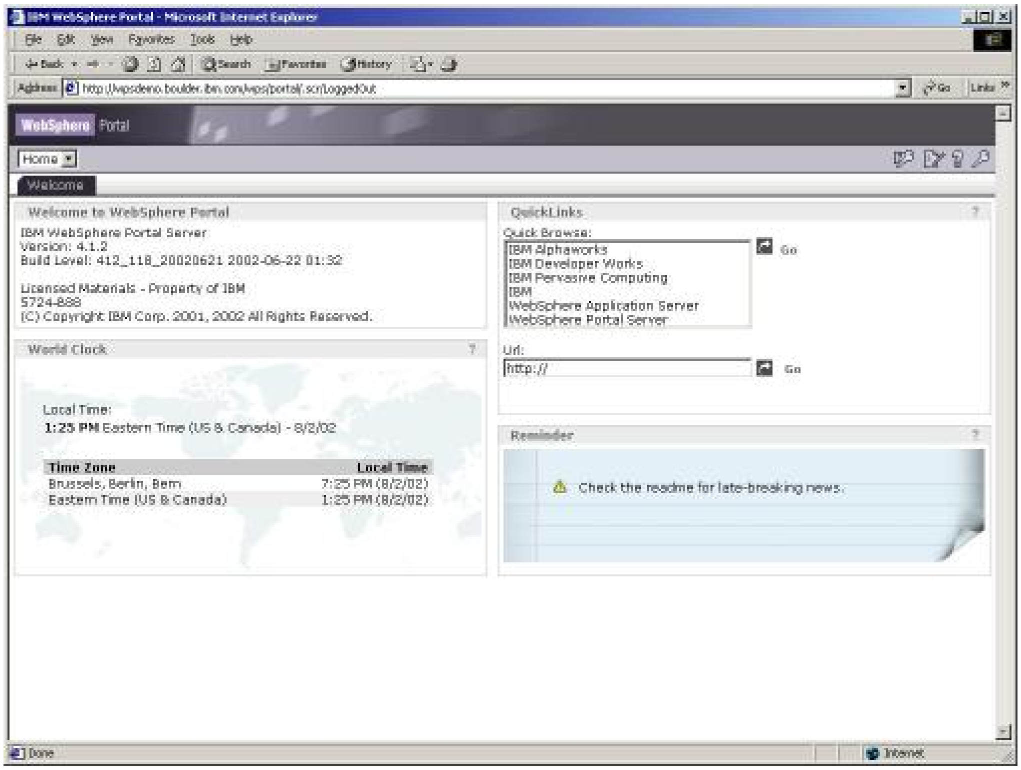
Url:
http://

Reminder

Check the readme for late-breaking news.

The pencil icon should now not appear for the World Clock portlet for “bob”.

Press the log off icon (door with an arrow) to return to the public portal page.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address
Go Links
WebSphere Portal
Home
Welcome
Go
Done
Internet

http://wpsdemo.boulder.ibm.com/wps/portal/.scr/LoggedOut

Welcome to WebSphere Portal

IBM WebSphere Portal Server
Version: 4.1.2
Build Level: 412_118_20020621 2002-06-22 01:32

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World Clock

Local Time:
**1:25 PM** Eastern Time (US & Canada) - 8/2/02

| Time Zone | Local Time |
|---|---|
| Brussels, Berlin, Bern | 7:25 PM (8/2/02) |
| Eastern Time (US & Canada) | 1:25 PM (8/2/02) |

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WebSphere Portal Server

Url:
http://

Reminder

Check the readme for late-breaking news.

Note that since we have added view permission for unauthenticated users to the Access Manager ACL associated with the World Clock portlet, the portlet now appears on the public portal page.

## Step 9 Configure SSO from WebSEAL to WPS

In this step we will configure the Access Manager reverse proxy server (WebSEAL) to sit in front of the IBM HTTP Server. As mentioned in the introduction, this is an optional -- but strongly recommended -- step.

### Change Ports Used by IHS and WebSphere

At this stage in the installation process, the IBM Web Server is listening on ports 80 and 443. We will now move these to 81 and 444, to free up ports 80 and 443 for use by WebSEAL.

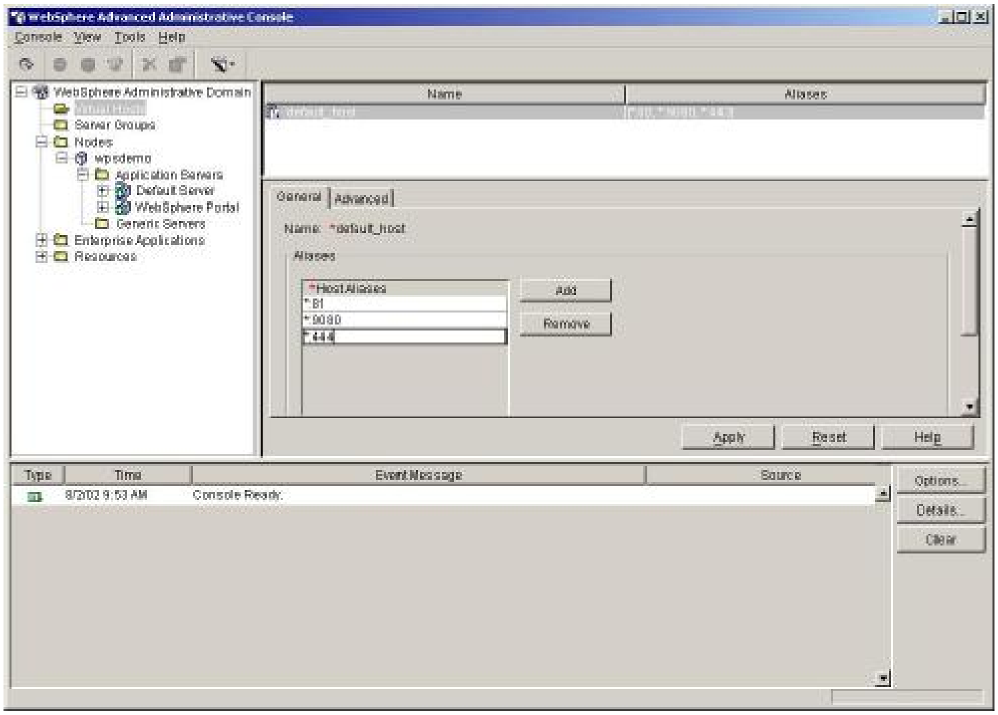
#### *Change IHS Listening Ports*

Edit “C:\Program Files\IBM HTTP Server\conf\httpd.conf” and modify the entries shown in bold below:

```
…
# Port: The port the standalone listens to.
Port 81
…
Listen 444
LoadModule ibm_ssl_module modules/IBMModuleSSL128.dll
<virtualhost :444>
SSLEnable
Keyfile "C:\Program Files\IBM HTTP Server\keytab\ihs.kdb"
SSLV2Timeout 100
SSLV3Timeout 1000
</virtualhost>
```

#### *Modify the Virtual Host Definitions in WebSphere*

Start the WebSphere Administration Console and select the “Virtual Hosts”: entry from the left-hand panel.



WebSphere Advanced Administrative Console

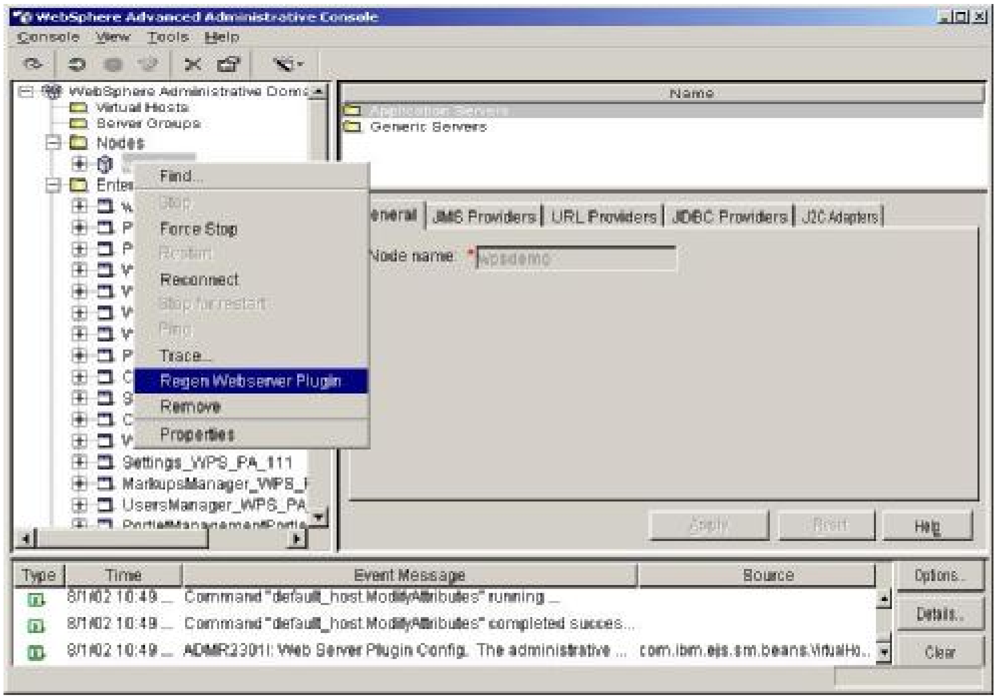
| Name | Aliases |
|---|---|
| default_host | *:80, *:9080, *:443 |

Name: *default_host

| *Host Aliases |
|---|
| *:81 |
| *:9080 |
| *:444 |

| Type | Time | Event Message | Source |
|---|---|---|---|
|  | 8/2/02 9:53 AM | Console Ready. |  |

In the list of aliases replace “80” with “81” and “443” with “444”. Press the “Apply” button.



WebSphere Advanced Administrative Console

Node name: *wpsdemo

| Type | Time | Event Message | Source |
|---|---|---|---|
|  | 8/1/02 10:49 ... | Command "default_host.ModifyAttributes" running ... |  |
|  | 8/1/02 10:49 ... | Command "default_host.ModifyAttributes" completed succes... |  |
|  | 8/1/02 10:49 ... | ADMR2301I: Web Server Plugin Config. The administrative ... | com.ibm.ejs.sm.beans.VirtualHo... |

Select the entry for the WPSDEMO node in the left-hand panel, right mouse click and select the “Regen Webserver plugin” menu item.

Once the plug-in has been regenerated the following message will appear in the log panel at the bottom of the WebSphere Administration Console.

```
ADGU1077I: Plugin regeneration completed successfully on node
   wpsdemo.
```

### *Configure WebSphere Portal Server to Use Different Ports*

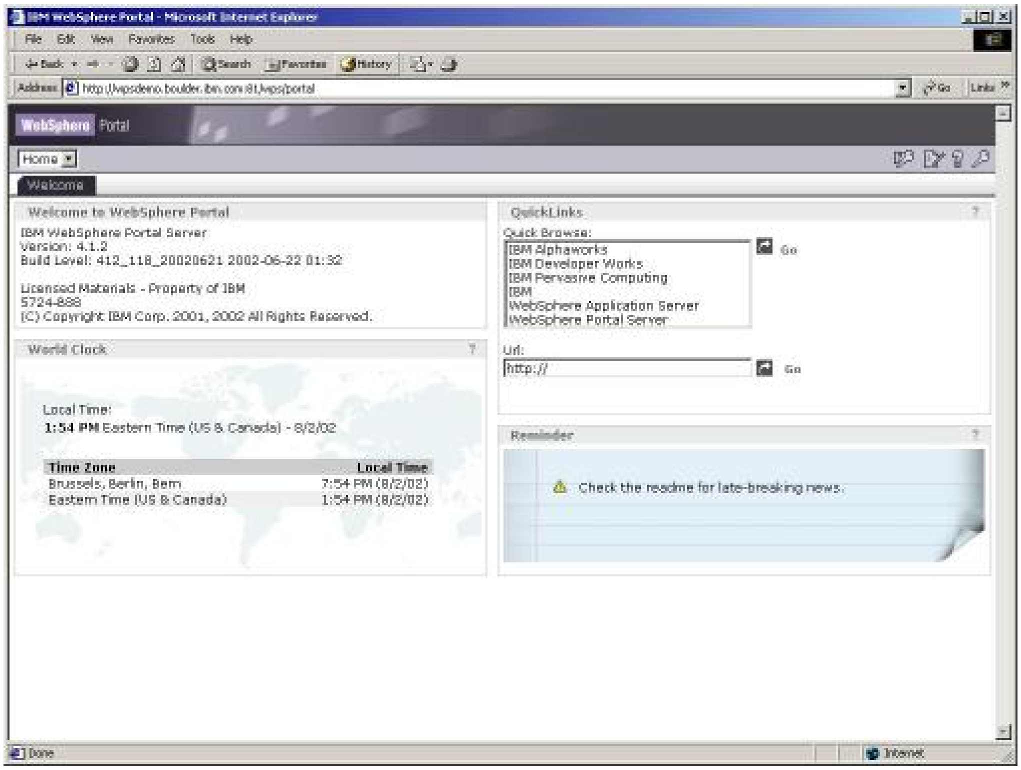
Modify the entries shown in bold below in "C:\WebSphere\AppServer\lib\app\config\services\ConfigService.properties":

```
…

# The parameters of the (virtual) host that the portal is accessed through
#
# Default: localhost (host.name)
host.name        =wpsdemo.boulder.ibm.com
host.port.http   =81
host.port.https  =444

…
```

Stop and restart the IBM HTTP Server. Stop and restart the WebSphere Application Server. Ensure the Default Server and WebSphere Portal application servers are started.

### *Test the Configuration*

Display the following URL in browser window:
http://wpsdemo.boulder.ibm.com:81/wps/portal (note the use of port 81).


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address
Go Links
WebSphere Portal
Home
Welcome
Go
Go
Done
Internet

http://wpsdemo.boulder.ibm.com:81/wps/portal

Welcome to WebSphere Portal

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Build Level: 412_118_20020621 2002-06-22 01:32

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World Clock

Local Time:
**1:54 PM** Eastern Time (US & Canada) - 8/2/02

| Time Zone | Local Time |
|---|---|
| Brussels, Berlin, Bern | 7:54 PM (8/2/02) |
| Eastern Time (US & Canada) | 1:54 PM (8/2/02) |

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WebSphere Application Server
WebSphere Portal Server

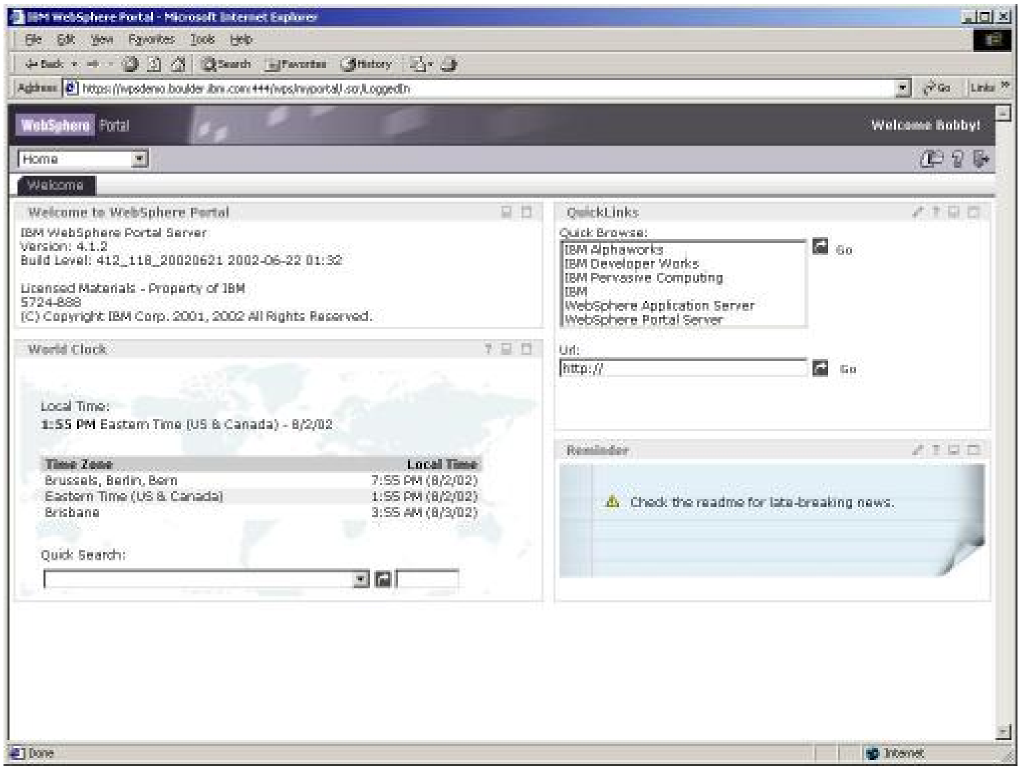
Url:
http://

Reminder

⚠ Check the readme for late-breaking news.

The public portal page should now be displayed (via port 81).

Login as user “bob” (passw0rd).


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address
Go Links
WebSphere Portal
Home
Welcome
Go
Go
Done
Internet

https://wpsdemo.boulder.ibm.com:444/wps/myportal/.scr/LoggedIn

Welcome Bobby!

Welcome to WebSphere Portal

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Version: 4.1.2
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World Clock

Local Time:
**1:55 PM** Eastern Time (US & Canada) - 8/2/02

| Time Zone | Local Time |
|---|---|
| Brussels, Berlin, Bern | 7:55 PM (8/2/02) |
| Eastern Time (US & Canada) | 1:55 PM (8/2/02) |
| Brisbane | 3:55 AM (8/3/02) |

Quick Search:

QuickLinks

Quick Browse:
IBM Alphaworks
IBM Developer Works
IBM Pervasive Computing
IBM
WebSphere Application Server
WebSphere Portal Server

Url:
http://

Reminder

⚠ Check the readme for late-breaking news.

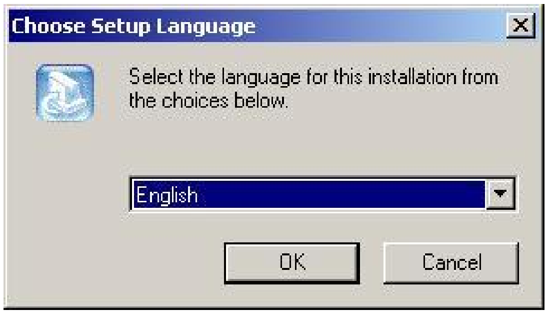
The private portal page for “bob” should now be displayed using HTTPS via port 444.

Press the “Log out” icon.

## Install Access Manager WebSEAL

Run the WebSEAL setup program:

```
D:\windows\PolicyDirector\Disk Images\Disk1\WebSEAL\Disk Images\Disk1\setup.exe
```

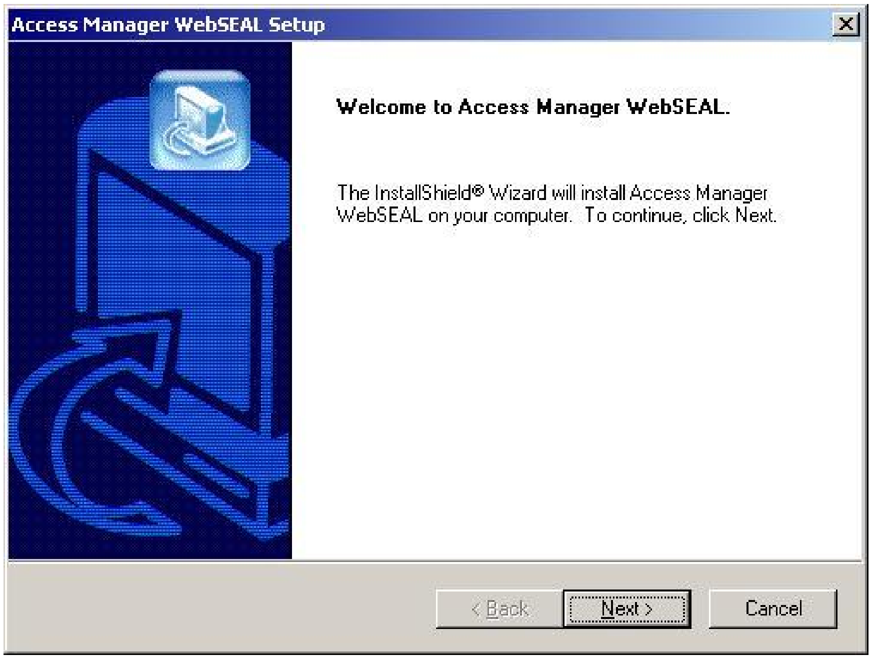


Choose Setup Language

Select the language for this installation from the choices below.

English

Press “OK” to continue.

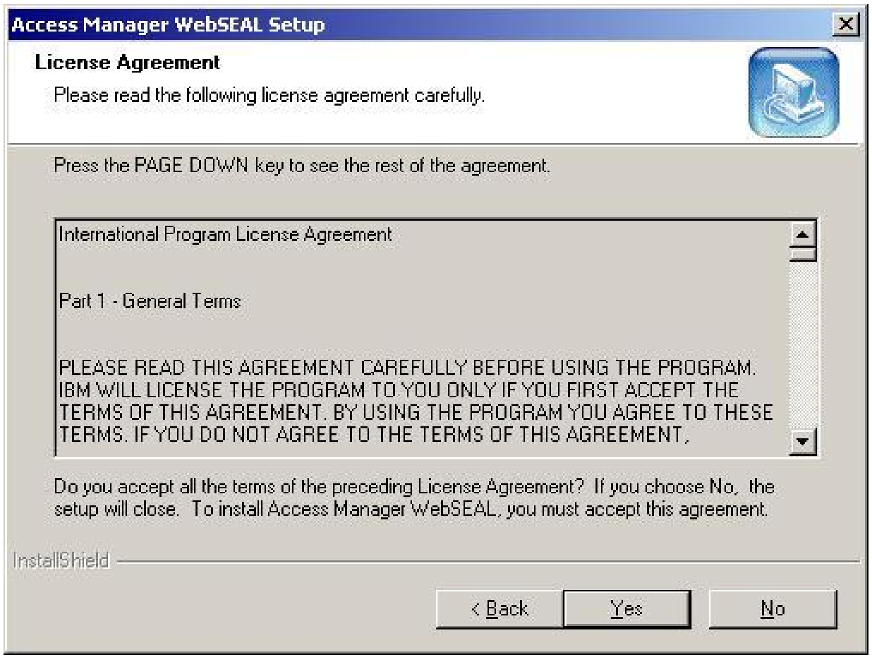


Access Manager WebSEAL Setup

Welcome to Access Manager WebSEAL.

The InstallShield® Wizard will install Access Manager WebSEAL on your computer. To continue, click Next.

Press “Next>” to continue.



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Please read the following license agreement carefully.

Press the PAGE DOWN key to see the rest of the agreement.

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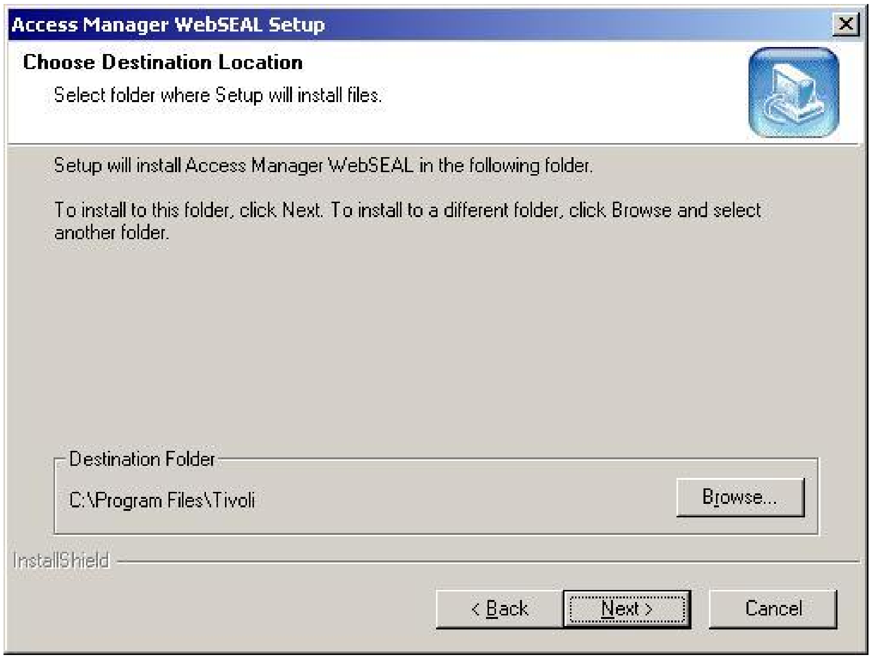
Part 1 - General Terms

PLEASE READ THIS AGREEMENT CAREFULLY BEFORE USING THE PROGRAM. IBM WILL LICENSE THE PROGRAM TO YOU ONLY IF YOU FIRST ACCEPT THE TERMS OF THIS AGREEMENT. BY USING THE PROGRAM YOU AGREE TO THESE TERMS. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT,

Do you accept all the terms of the preceding License Agreement? If you choose No, the setup will close. To install Access Manager WebSEAL, you must accept this agreement.

Press “Yes” to continue.



**Choose Destination Location**

Select folder where Setup will install files.

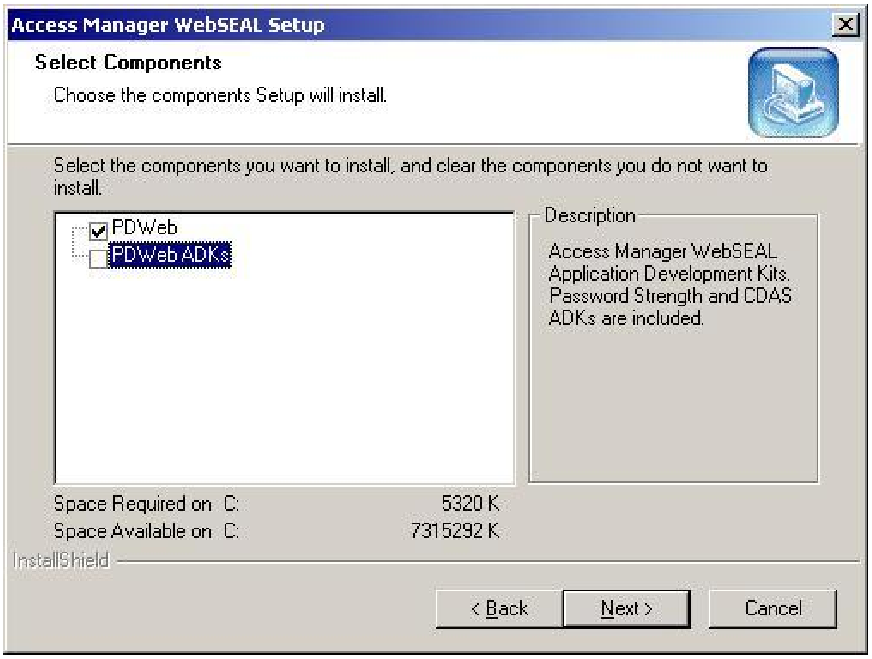
Setup will install Access Manager WebSEAL in the following folder.

To install to this folder, click Next. To install to a different folder, click Browse and select another folder.

Destination Folder

C:\Program Files\Tivoli

Press “Next>” to accept the default install location.



Access Manager WebSEAL Setup

**Select Components**

Choose the components Setup will install.

Select the components you want to install, and clear the components you do not want to install.

- ☑ PDWeb
- □ PDWeb ADKs

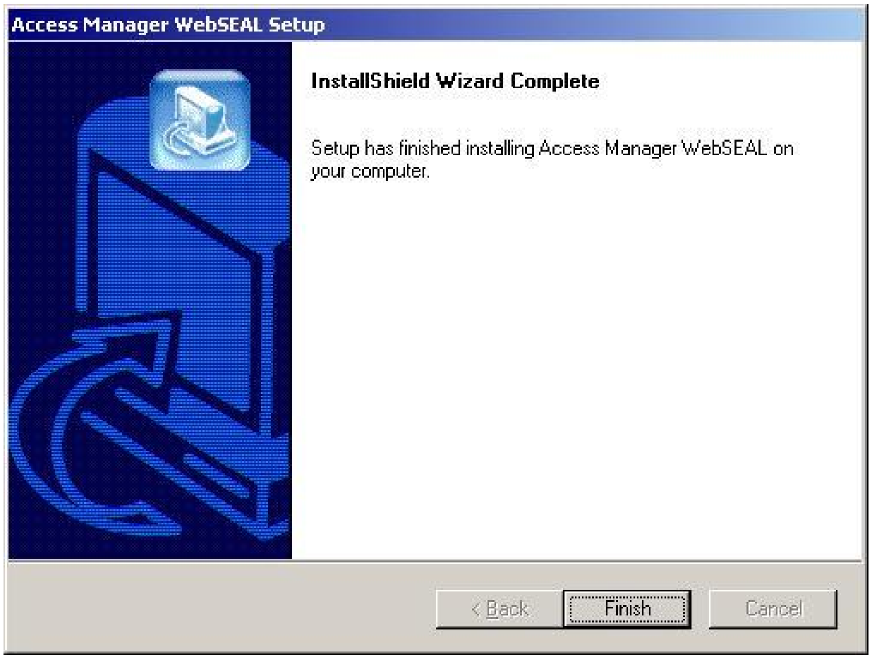
Description

Access Manager WebSEAL Application Development Kits. Password Strength and CDAS ADKs are included.

Space Required on C: 5320 K

Space Available on C: 7315292 K

Ensure “PDWeb” is selected. We will not need the PDWeb ADKs so you can deselect that package. Press “Next>” to continue.



Access Manager WebSEAL Setup

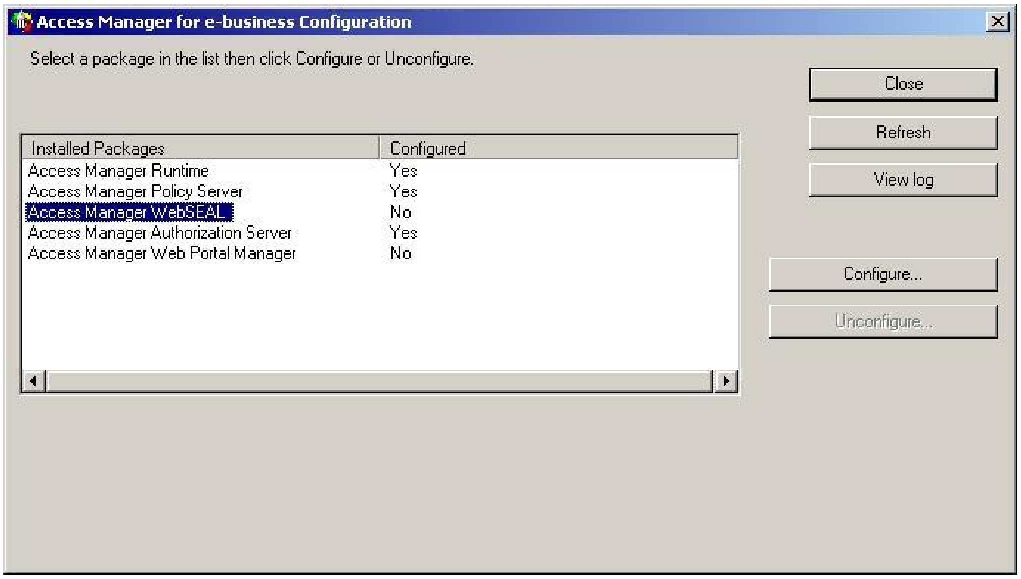
**InstallShield Wizard Complete**

Setup has finished installing Access Manager WebSEAL on your computer.

Press “Finish” to install Access Manager WebSEAL.

### Configure Access Manager WebSEAL

Run the Access Manager configuration program: “Start->Programs-> Access Manager for e-business->Configuration”.

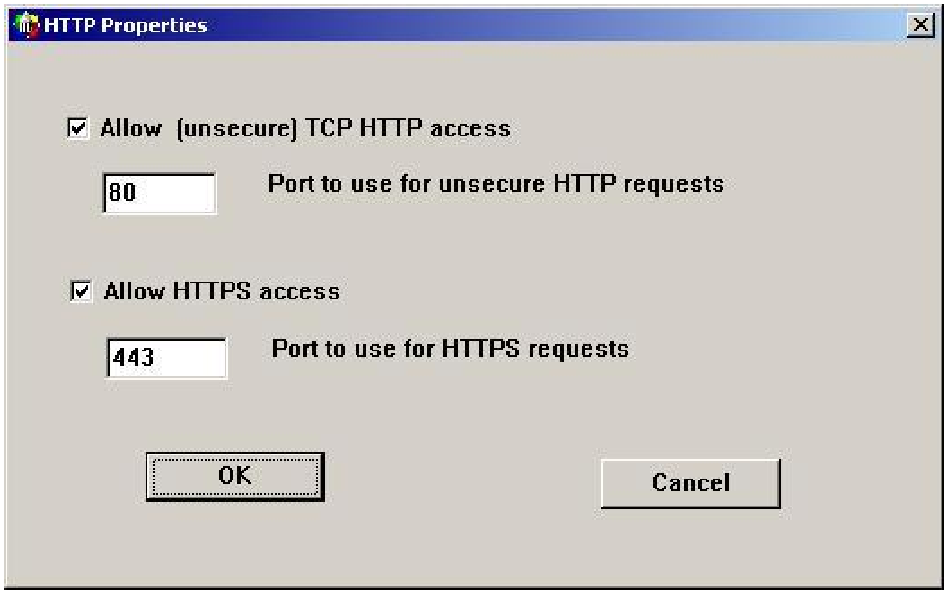


Access Manager for e-business Configuration

Select a package in the list then click Configure or Unconfigure.

| Installed Packages | Configured |
|---|---|
| Access Manager Runtime | Yes |
| Access Manager Policy Server | Yes |
| Access Manager WebSEAL | No |
| Access Manager Authorization Server | Yes |
| Access Manager Web Portal Manager | No |

Select “Access Manager WebSEAL” and press the “Configure…” button.



HTTP Properties

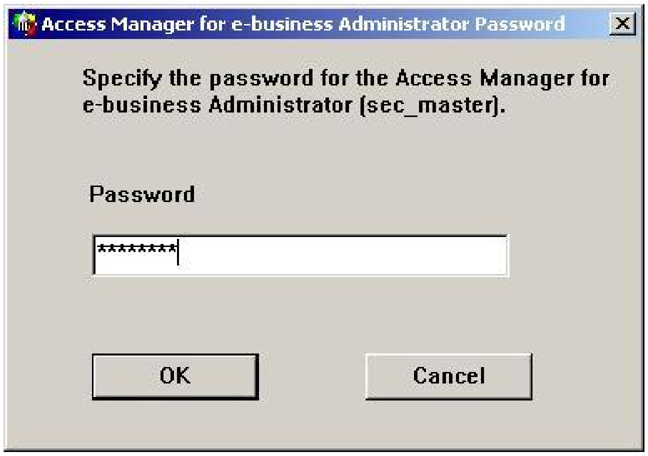
☑ Allow (unsecure) TCP HTTP access

80 Port to use for unsecure HTTP requests

☑ Allow HTTPS access

443 Port to use for HTTPS requests

Press “OK” to accept the default ports.

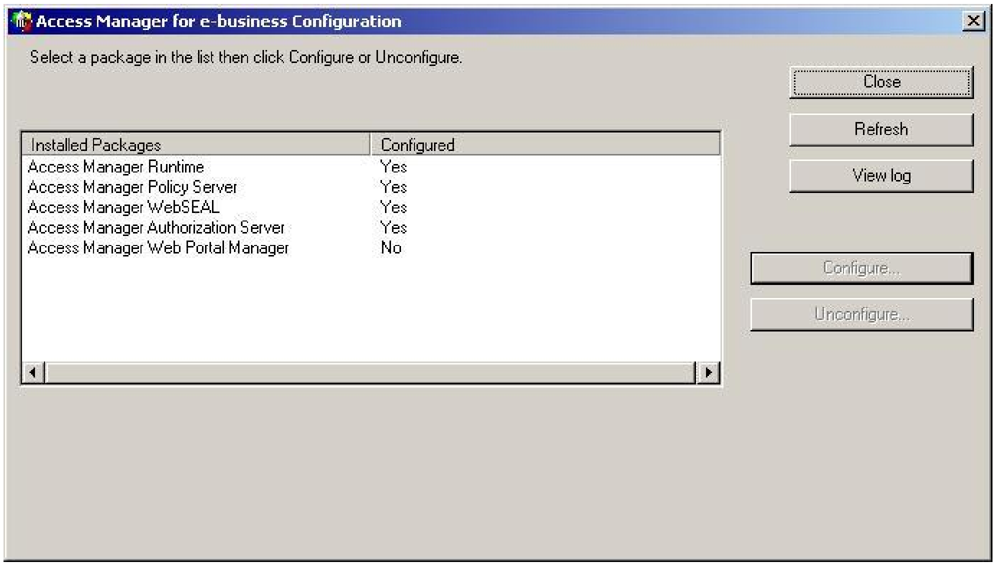


Access Manager for e-business Administrator Password

Specify the password for the Access Manager for e-business Administrator (sec_master).

Password: ********

Enter the password for “sec_master” (passw0rd) and press “OK” to continue.



Access Manager for e-business Configuration

Select a package in the list then click Configure or Unconfigure.

| Installed Packages | Configured |
|---|---|
| Access Manager Runtime | Yes |
| Access Manager Policy Server | Yes |
| Access Manager WebSEAL | Yes |
| Access Manager Authorization Server | Yes |
| Access Manager Web Portal Manager | No |

Once the configuration is complete, press “Close” to exit the configuration program.

## Configure Junctions from WebSEAL to the IBM HTTP Server

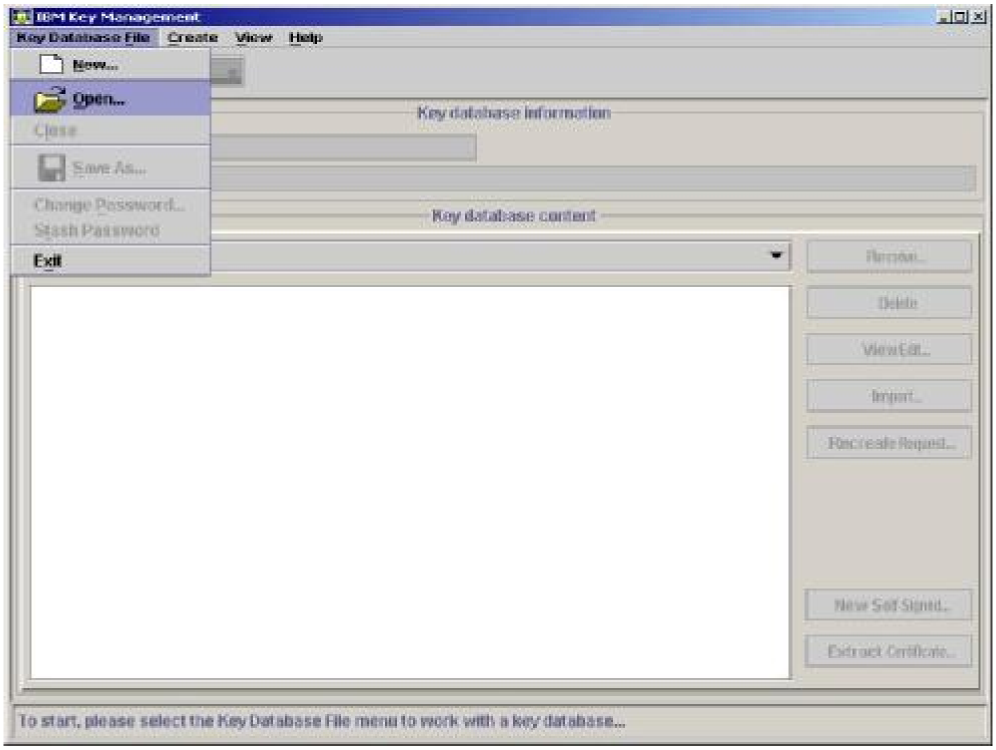
In this section we will configure two connections (termed “junctions”) from the WebSEAL reverse proxy server to the IBM HTTP Server - one connection will be HTTP and the other will be HTTPS.

### *Load the IBM HTTP Server CA certificate into the WebSEAL Keyring*

As we used a self-signed certificate as the server certificate for the IBM HTTP Server, we need to load the associated CA certificate into the keyring used by WebSEAL for SSL junctions.

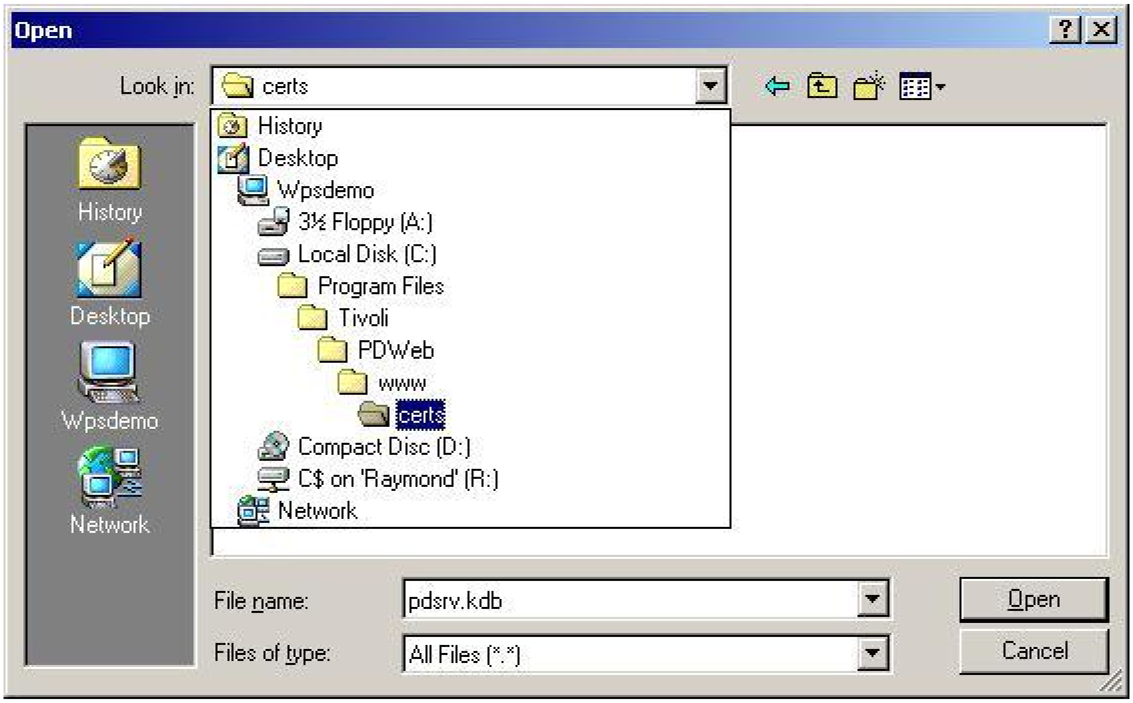
Start the IBM Key Management Utility:

Start->Programs->IBM HTTP Server->Start Key Management Utility



To start, please select the Key Database File menu to work with a key database...

Select “Key Database File -> Open” from the menu bar.

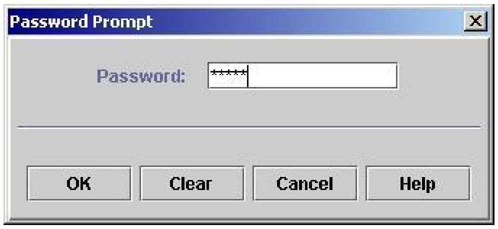


Look in: certs

File name: pdsrv.kdb

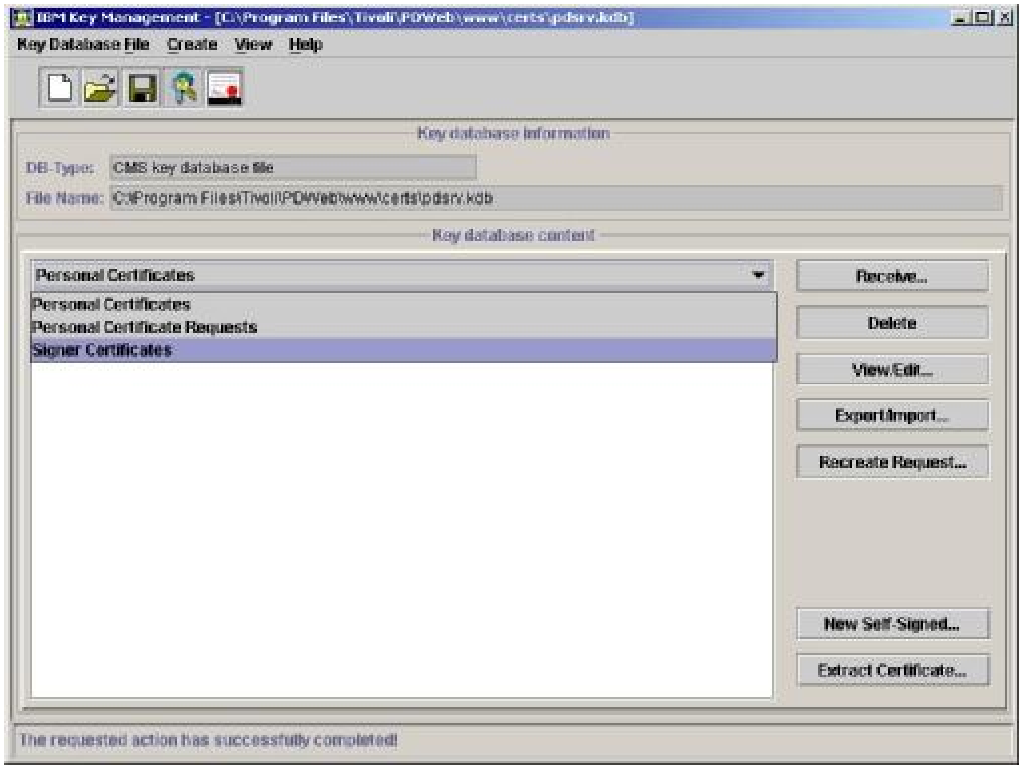
Files of type: All Files (*.*)

Change the directory to “C:\Program Files\Tivoli\PDWeb\www\certs” and enter “pdsrv.kdb” in the File name field - this is the keyring used by WebSEAL to store acceptable CA certificates for SSL junctions. Press the “Open” button to open the keyring.



Password: *****

Enter the default password for the WebSEAL keyring, “pdsrv”, and press “OK” to continue.



IBM Key Management - [C:\Program Files\Tivoli\PDWeb\www\certs\pdsrv.kdb]

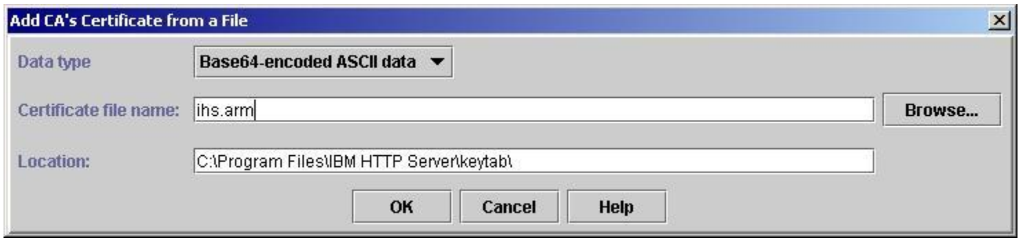
DB-Type: CMS key database file

File Name: C:\Program Files\Tivoli\PDWeb\www\certs\pdsrv.kdb

The requested action has successfully completed!

Select “Signer Certificates” from the pull-down menu.

Press the “Add” button.



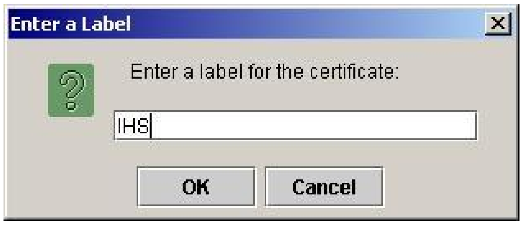
Data type: Base64-encoded ASCII data

Certificate file name: ihs.arm

Location: C:\Program Files\IBM HTTP Server\keytab\

Enter the following filed values and press “OK” to continue:

| | |
|---|---|
| Data type: | Base64-encoded ASCII data |
| Certificate file name: | ihs.arm |
| Location: | C:\Program Files\IBM HTTP Server\keytab\ |



Enter “IHS" as the label for the new certificate and press “OK” to continue.

Exit the IBM Key Management utility.

### *Define WebSEAL Junctions to the IBM HTTP Server*

Run the Access Manager Configuration Program again and enter the commands shown in bold below.

```
pdadmin> login -a sec_master
Enter Password:passw0rd
pdadmin> server task webseald-wpsdemo create -t tcp -h
wpsdemo.boulder.ibm.com -p 81 -j -w -i -c iv-user /was
Created junction at /was
pdadmin>
pdadmin> server task webseald-wpsdemo create -t ssl -h
wpsdemo.boulder.ibm.com -p 444 -j -w -i -c iv-user /wass
Created junction at /wass
pdadmin>
```

(Note: type each command on a single line and let the Command Window wrap as needed)

## Configure WebSEAL for URL Filtering and Forms-Based Authentication

### *Edit “webseald.conf”*

In order to configure WebSEAL to rewrite the absolute URLs produced by WebSphere Portal Server we need to perform a minor configuration change in the primary WebSEAL configuration file. We will also configure WebSEAL to use forms-based authentication (rather than the default, Basic Authentication).

Modify the values shown in bold below in
“C:\Program Files\Tivoli\PDWeb\etc\webseald.conf”:

```
…
[script-filtering]
# When script filtering support is enabled with the "-j" option in
# pdadmin, filtering of absolute urls between html <script>
# tags can be enabled.
#
```

```
# html schema:server format will be filtered.
script-filter = yes
…
[ba]
#----------------------
# BASIC AUTHENTICATION
#----------------------
# Enable authentication using the Basic Authentication mechanism
# One of <http, https, both, none>
ba-auth = none
…
[forms]
#----------------------
# FORMS
#----------------------
# Enable authentication using forms
# One of <http, https, both, none>
forms-auth = https
```

## Define a Security Policy in Access Manager for WebSphere Portal Servlets

### *Define Access Manager Objects for the WebSphere Portal Servlets*

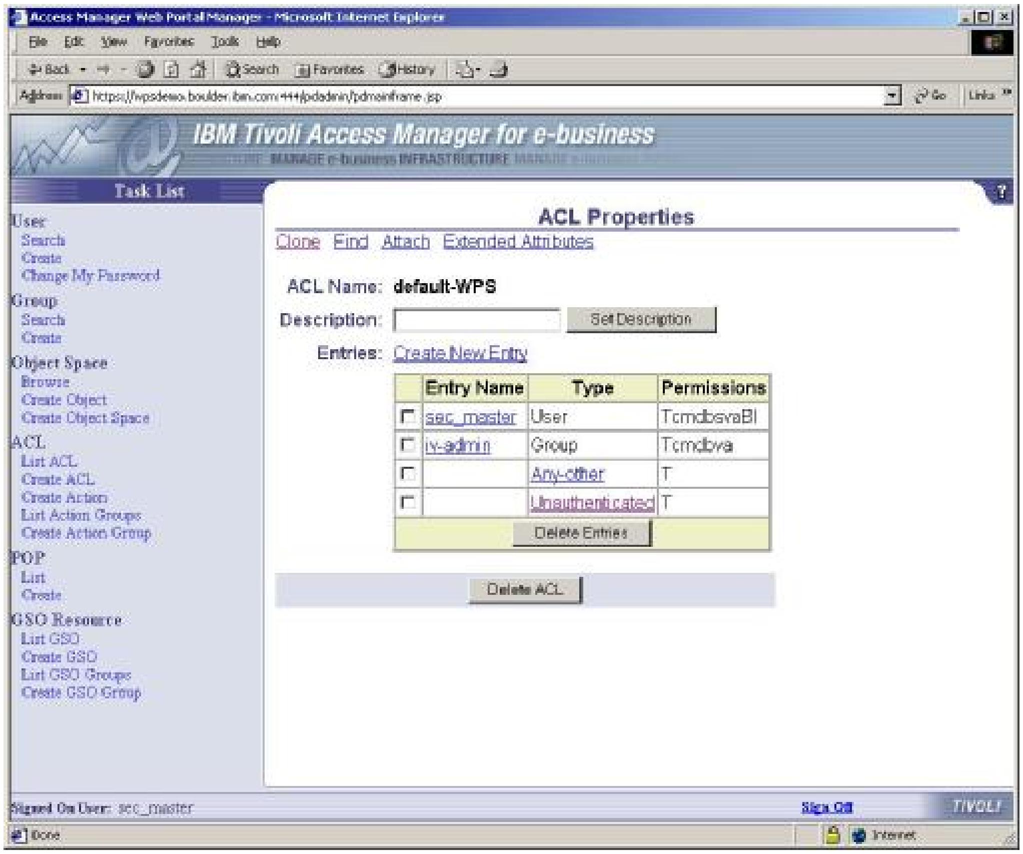
Create a file “dynurl.conf” in “C:\Program Files\Tivoli\PDWeb\www\lib” containing the following lines:

```
/was/wps/portal          /was/wps/portal/*
/was/wps/myportal        /was/wps/myportal/*
/wass/wps/portal         /wass/wps/portal/*
/wass/wps/myportal       /wass/wps/myportal/*
```

Stop and restart the WebSEAL server (e.g. using the Services Control Panel).

### *Create ACLs for WebSphere Portal Server Servlets*

Using the Access Manager Web Portal Manager (which is now accessed via https://wpsdemo.boulder.ibm.com:444/pdadmin) create the ACLs shown in the following series of screen images:



ACL Properties

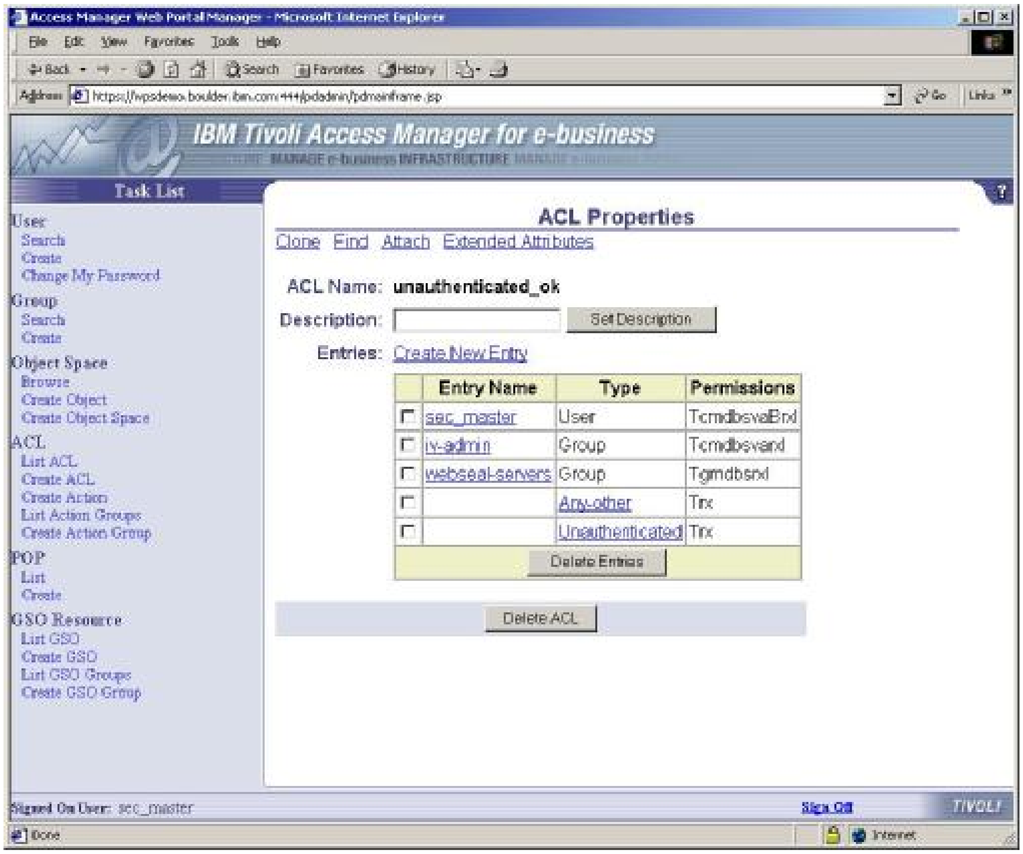
ACL Name: default-WPS

Description:

Entries: Create New Entry

| | Entry Name | Type | Permissions |
|---|---|---|---|
| □ | sec_master | User | TcmdbsvaBl |
| □ | iv-admin | Group | Tcmdbva |
| □ | | Any-other | T |
| □ | | Unauthenticated | T |

Signed On User: sec_master



ACL Properties

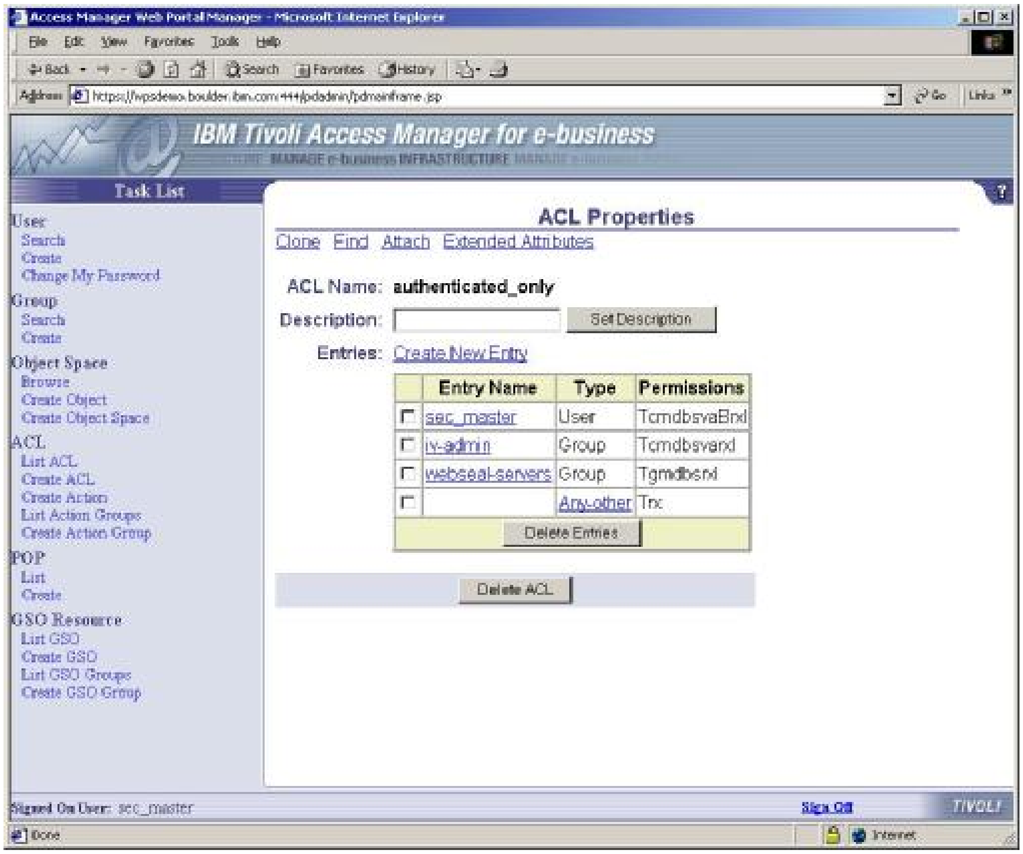
ACL Name: unauthenticated_ok

Description:

Entries: Create New Entry

| | Entry Name | Type | Permissions |
|---|---|---|---|
| □ | sec_master | User | TcmdbsvaBrx |
| □ | iv-admin | Group | Tcmdbsvarxl |
| □ | webseal-servers | Group | Tgmdbsrxl |
| □ | | Any-other | Trx |
| □ | | Unauthenticated | Trx |

Signed On User: sec_master



ACL Properties

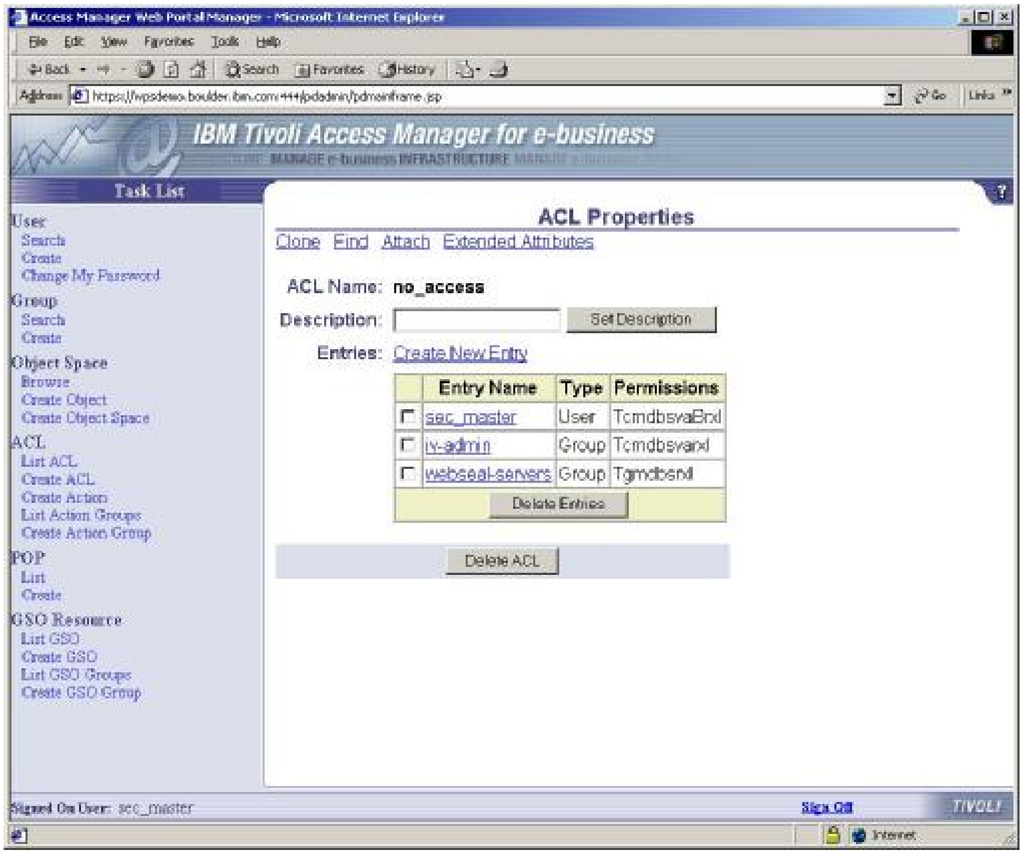
ACL Name: authenticated_only

Description:

Entries: Create New Entry

| | Entry Name | Type | Permissions |
|---|---|---|---|
| □ | sec_master | User | TcmdbsvaBrxl |
| □ | iv-admin | Group | Tcmdbsvarxl |
| □ | webseal-servers | Group | Tgmdbsrxl |
| □ | | Any-other | Trx |

Signed On User: sec_master



ACL Properties

ACL Name: no_access

Description:

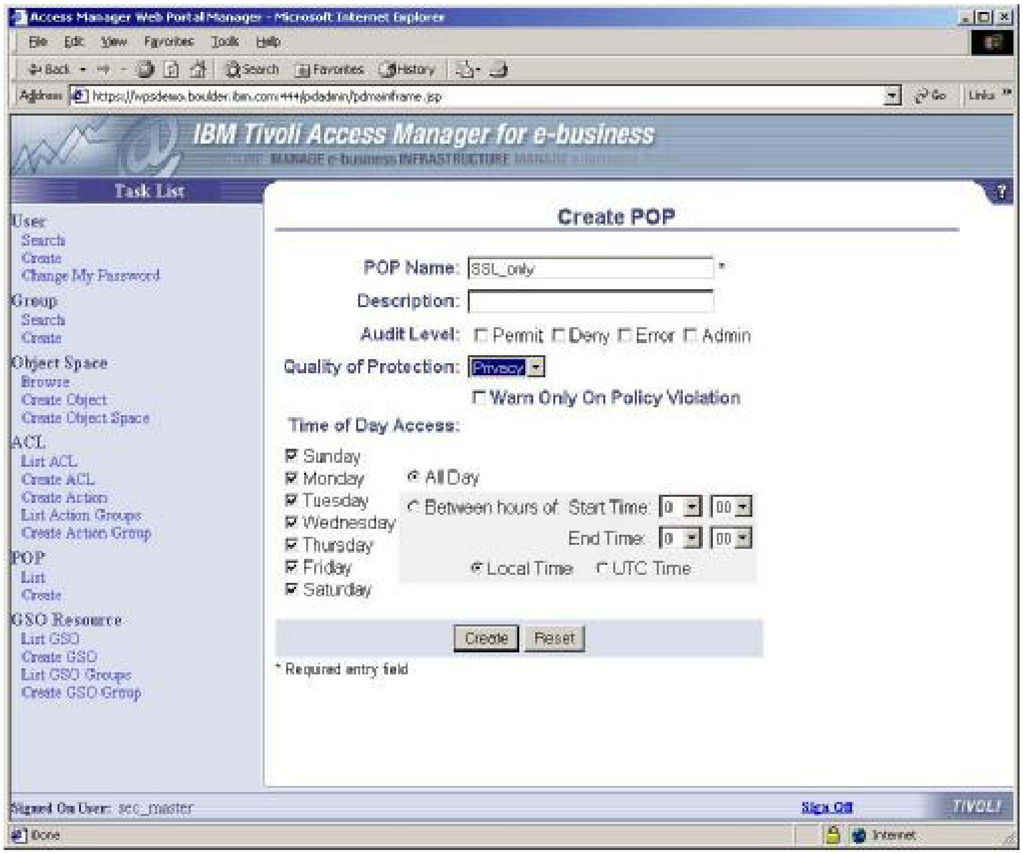
Entries: Create New Entry

| | Entry Name | Type | Permissions |
|---|---|---|---|
| □ | sec_master | User | TcmdbsvaBrxl |
| □ | iv-admin | Group | Tcmdbsvarxl |
| □ | webseal-servers | Group | Tgmdbsrxl |

Signed On User: sec_master

### *Create POP for WebSphere Portal Server*

Using the Access Manager Web Portal Manager (which is now accessed via https://wpsdemo.boulder.ibm.com:444/pdadmin) create the Protected Object Policy (POP) shown in the following screen image:



Create POP

POP Name: SSL_only *

Description:

Audit Level: □ Permit □ Deny □ Error □ Admin

Quality of Protection: Privacy

□ Warn Only On Policy Violation

Time of Day Access:

☑ Sunday
☑ Monday
☑ Tuesday
☑ Wednesday
☑ Thursday
☑ Friday
☑ Saturday

● All Day

○ Between hours of: Start Time: 0 00

End Time: 0 00

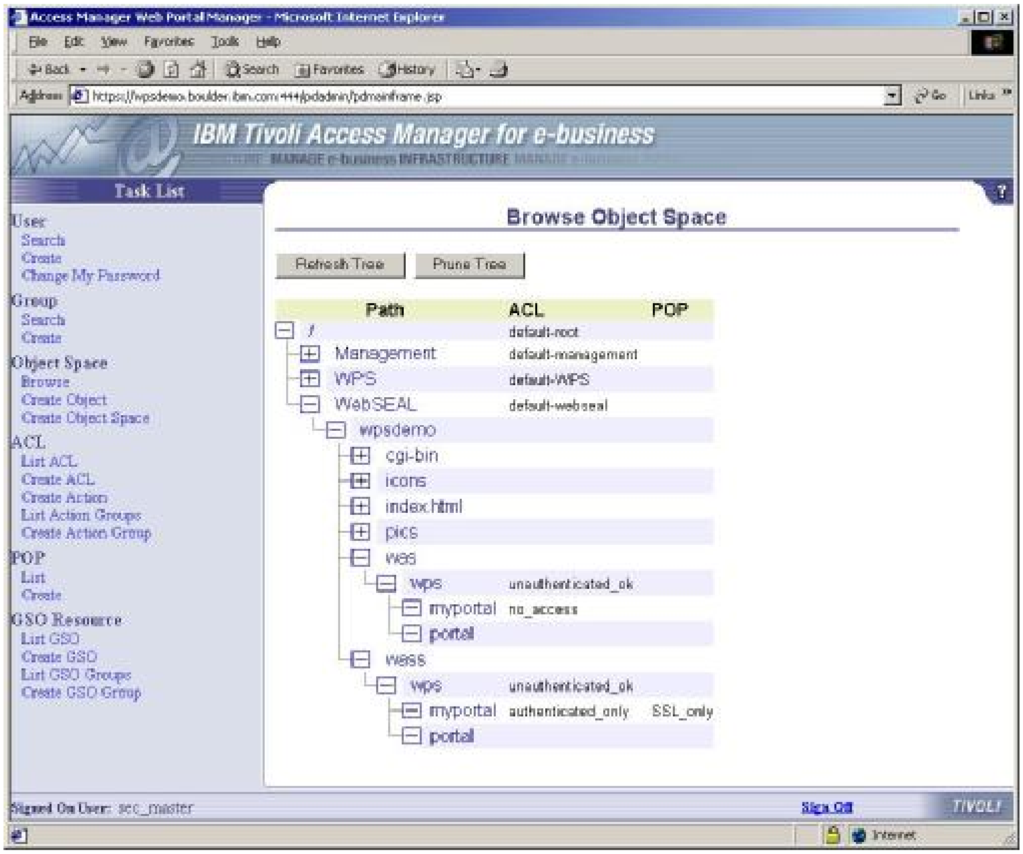
● Local Time ○ UTC Time

* Required entry field

Signed On User: sec_master

### *Attach ACLs and POP to Objects for WebSphere Portal Server*

Using the Access Manager Web Portal Manager (which is now accessed via https://wpsdemo.boulder.ibm.com:444/pdadmin) attach the Access Control Lists (ACLs) and the Protected Object Policy (POP) we just created to the Access Manager objects as shown in the following screen image:



| Path | ACL | POP |
|---|---|---|
| / | default-root | |
| Management | default-management | |
| WPS | default-WPS | |
| WebSEAL | default-webseal | |
| wpsdemo | | |
| cgi-bin | | |
| icons | | |
| index.html | | |
| pics | | |
| wes | | |
| wps | unauthenticated_ok | |
| myportal | no_access | |
| portal | | |
| wess | | |
| wps | unauthenticated_ok | |
| myportal | authenticated_only | SSL_only |
| portal | | |

## Modify the WebSphere Portal Login/Logout Functions to work with WebSEAL

### *Replace "Login.jsp"*

Edit the file:

C:\WebSphere\PortalServer\app\wps.ear\wps.war\screens\html\Login.jsp

and replace its contents with the following:

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0//EN">


<html>
<head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <meta http-equiv="Refresh"
</head>
<body>


<BR><BR>
Redirecting to personalized portal page ... select <a
href="https://wpsdemo.boulder.ibm.com/wass/wps/myportal">here</a> if your
browser does not automatically redirect.
</body>
</html>
```

(Note: Except for the line beginning with “Redirecting”, any lines not beginning with “<” are continuations of the preceding line and should be entered as such).

### *Create “wpslogout.html”*

Create the file:

C:\Program Files\Tivoli\PDWeb\www\lib\html\C\wpslogout.html

with the following contents:

```
<html>
<head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <meta http-equiv="Refresh"
content="2;URL=http://wpsdemo.boulder.ibm.com/was/wps/portal">

<title>PKMS Administration: User Log Out</title>
</head>
<body bgcolor="#FFFFFF" text="#000000">
<font size="+2"><b>User %USERNAME% has logged out.</b></font>



<BR><BR>
<BR><BR>
Redirecting to personalized portal page ... select <a
href="http://wpsdemo.boulder.ibm.com/was/wps/portal">here</a> if your browser
does not automatically redirect after 2 seconds.
</body>
</html>
```

(Note: Except for the line beginning with “Redirecting”, any lines not beginning with “<” are continuations of the preceding line and should be entered as such).

### *Edit “ConfigService.properties”*

Edit the file:

C:\WebSphere\AppServer\lib\app\config\services\ConfigServices.properties

and modify the entries shown in bold below:

```
...
# Logout redirect parameters
#
# Default: false, false, <none>

redirect.logout     = true
redirect.logout.ssl = true
redirect.logout.url =
https://wpsdemo.boulder.ibm.com/pkmslogout?filename=wpslogout.html
...
# Determines the level that persistent session should operate on
#
#    0 -> do not use persistent window state
#    1 -> use persistent window state, but start with the default page
#    2 -> use persistent window state and start with the page the user
visited before logging out
#
# Default: 2
persistent.session.level = 1

# Determines whether the user get the option to resume the session
#
#
0 -> the user has no option to resume or not resume as the case may be
#    1 -> the user is presented with an option to resume the session at login
#
# Default: 1
persistent.session.option = 0
```

(Note:  the value for "redirect.logout.url" should appear on the same line s the keyword - not on the following line as shown above.

## Configure SSO from WebSEAL to WebSphere Application Server

### *Edit "trustedservers.properties"*

Edit the file:

C:\ WebSphere\AppServer\properties\trustedservers.properties

and add the entry shown in bold below:

```
# Trust Association Properties
```

```
com.ibm.websphere.security.trustassociation.enabled=true

#Use this property to specify the types of reverse proxy
#servers that will be loaded at runtime
com.ibm.websphere.security.trustassociation.types=webseal
…
```

### *Edit “webseal.properties”*

Edit the file:

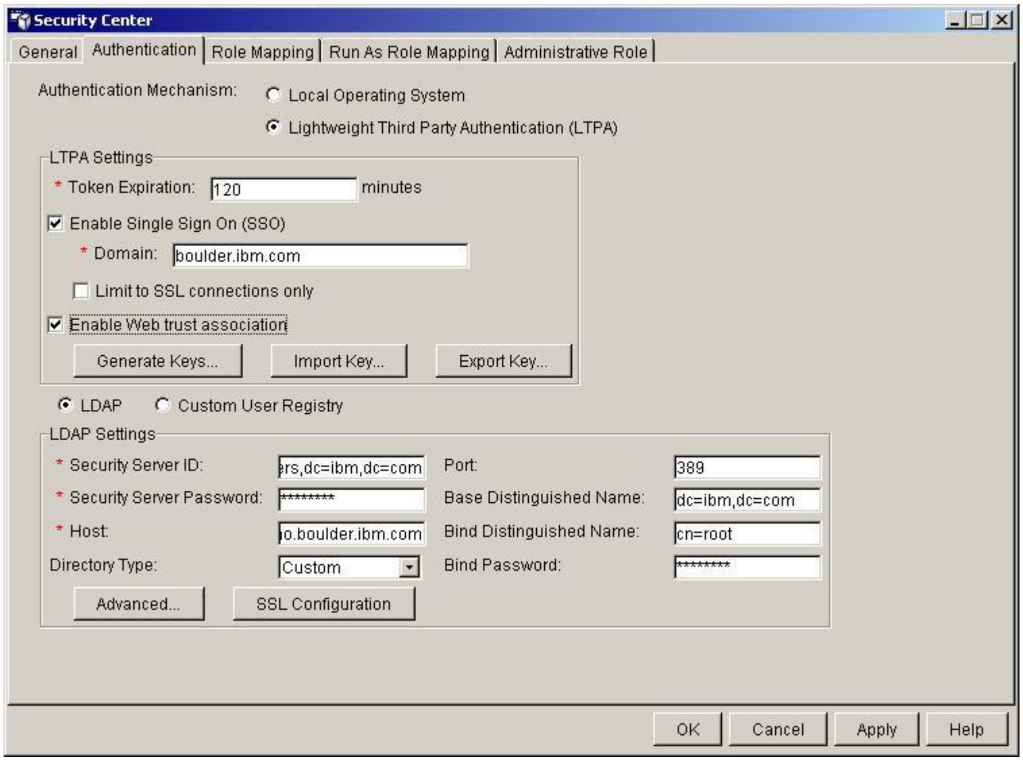
C:\ WebSphere\AppServer\properties\webseal.properties

and modify the entries shown in bold below:

```
# WebSeal Trust Association Interceptor Configuration file
# IBM WebSphere Application WebSphere Version 4.0, 2001

#Uncomment and use this property to specify the header name(s)
#you expect to exist in the HTTP Request
com.ibm.websphere.security.webseal.id=iv-user

#Uncomment and use this property to specify where you expect the WebSeal
server(s) to be.
com.ibm.websphere.security.webseal.hostnames=wpsdemo.boulder.ibm.com, wpsdemo

#Uncomment and use this property to specify the port(s) from which the
WebSeal server(s)
#receive user requets
com.ibm.websphere.security.webseal.ports=443

#For WebSeal 3.71, if basic login (username/password) is used, uncomment and
use this property
# to specify the id that the webseal server must use to validate trust with
the interceptor
# NOTE: For WebSeal 3.6, Do not uncomment this line
#com.ibm.websphere.security.webseal.loginId=LoginID

#For mutual SSL (client certificate), uncomment and use this property to
specify mutualSSL's value
com.ibm.websphere.security.webseal.mutualSSL=true
```

### *Enable Trust Association Interceptor in WebSphere*

Start the WebSphere Administration Console. Select "Console->Security Center" from the menu bar.



Authentication Mechanism: ○ Local Operating System ● Lightweight Third Party Authentication (LTPA)

LTPA Settings

* Token Expiration: 120 minutes

☑ Enable Single Sign On (SSO)

* Domain: boulder.ibm.com

□ Limit to SSL connections only

☑ Enable Web trust association

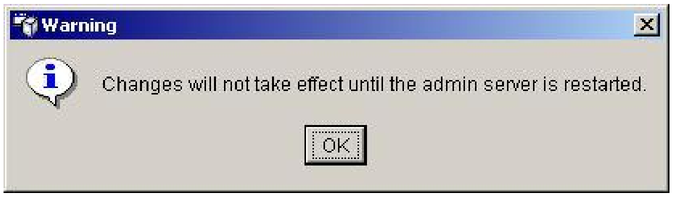
● LDAP ○ Custom User Registry

LDAP Settings

| | | | |
|---|---|---|---|
| * Security Server ID: | ers,dc=ibm,dc=com | Port: | 389 |
| * Security Server Password: | ******** | Base Distinguished Name: | dc=ibm,dc=com |
| * Host: | o.boulder.ibm.com | Bind Distinguished Name: | cn=root |
| Directory Type: | Custom | Bind Password: | ******** |

Select the "Authentication" tab. Select the "Enable Web Trust association" radio button.

Press "OK" to continue.



Changes will not take effect until the admin server is restarted.

Press "OK" to continue.

Stop and restart the WebSphere Application Server. Ensure the Default Server and WebSphere Portal applications start.

Search in "C:\WebSphere\PortalServer\log\appserver-out.log" for messages of the form:

```
[8/2/02 15:21:23:025 MDT] 6817fafa TrustAssociat A SECJ0121A: Trust
Association Init class
com.ibm.ws.security.web.WebSealTrustAssociationInterceptor loaded
successfully
```

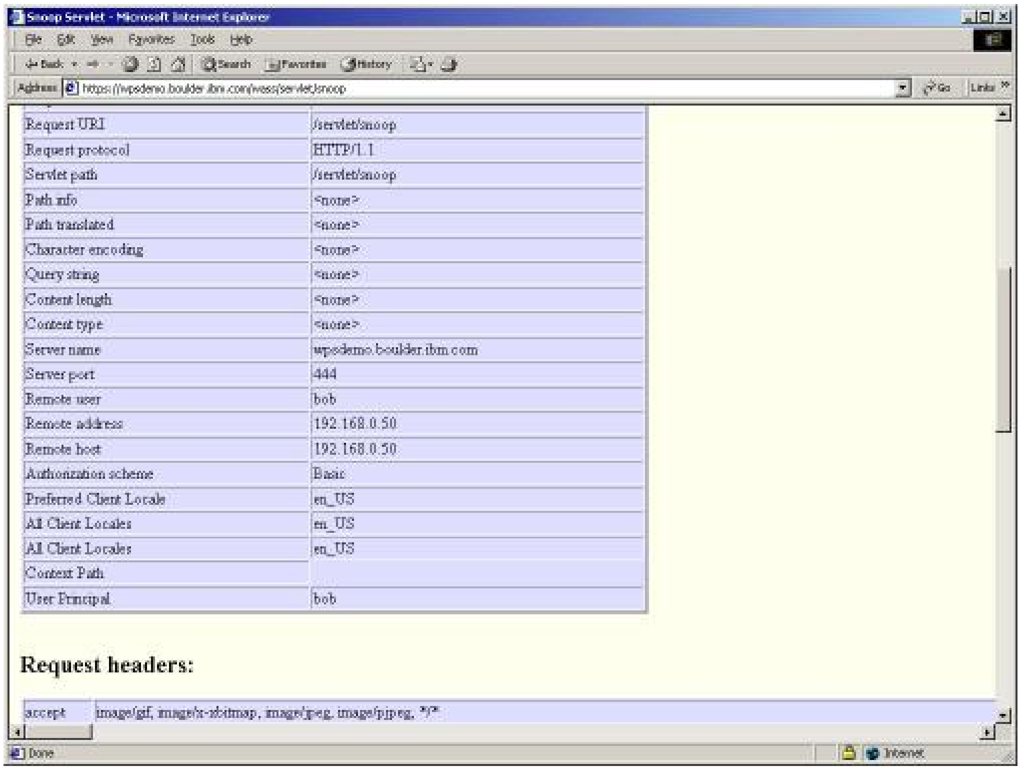
```
[8/2/02 15:21:23:336 MDT] 6817fafa WebSealTrustA W PD Authentication Disabled
[8/2/02 15:21:23:436 MDT] 6817fafa TrustAssociat A SECJ0122A: Trust
Association Init Interceptor signature: WebSeal Interceptor Version 1.1
[8/2/02 15:21:23:626 MDT] 6817fafa TrustAssociat A SECJ0120A: Trust
Association Init loaded 1 interceptor(s)
```

Do not be alarmed by the Authentication Disabled message - this message appears because we set "…mutualSSL=true" in the webseal.properties file and does not imply that the TAI is not functioning.

## Test the Configuration

### *Run the Snoop Servlet*

Display the URL https://wpsdemo.boulder.ibm.com/wass/servlet/snoop" in a browser window. Authenticate to WebSEAL when requested as user "bob" (passw0rd).



Snoop Servlet - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address https://wpsdemo.boulder.ibm.com/wass/servlet/snoop
Go Links
Done
Internet

| | |
|---|---|
| Request URI | /servlet/snoop |
| Request protocol | HTTP/1.1 |
| Servlet path | /servlet/snoop |
| Path info | <none> |
| Path translated | <none> |
| Character encoding | <none> |
| Query string | <none> |
| Content length | <none> |
| Content type | <none> |
| Server name | wpsdemo.boulder.ibm.com |
| Server port | 444 |
| Remote user | bob |
| Remote address | 192.168.0.50 |
| Remote host | 192.168.0.50 |
| Authorization scheme | Basic |
| Preferred Client Locale | en_US |
| All Client Locales | en_US |
| All Client Locales | en_US |
| Context Path | |
| User Principal | bob |

**Request headers:**

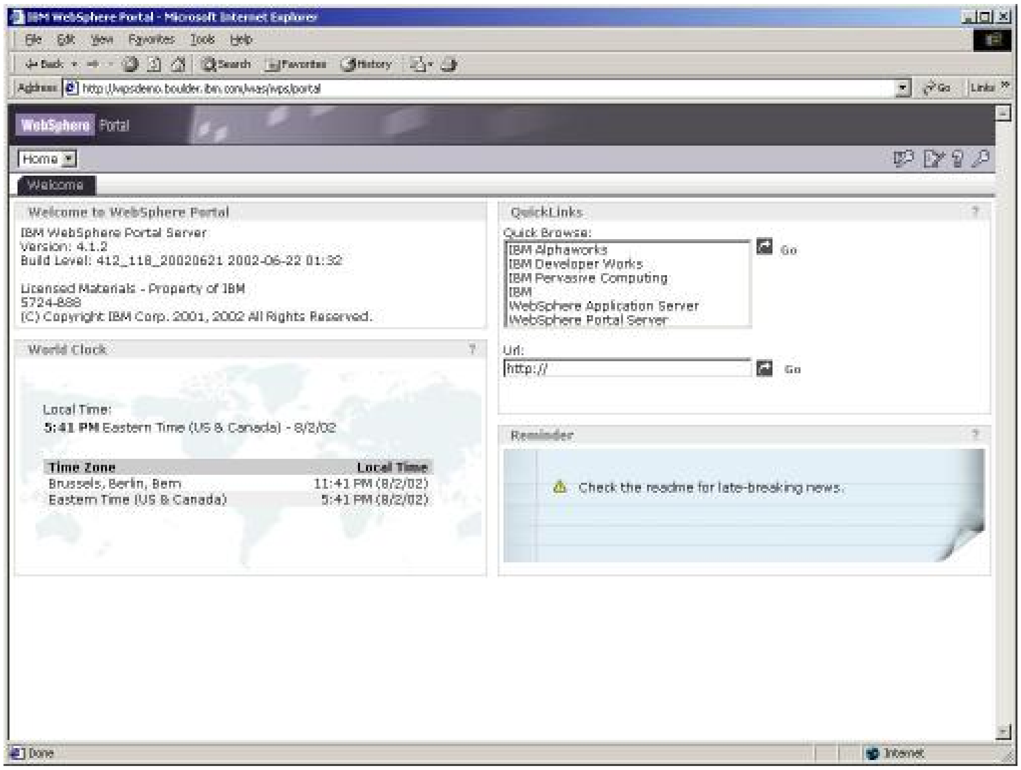
| | |
|---|---|
| accept | image/gif, image/x-xbitmap, image/jpeg, image/pjpeg, */* |

Scroll down to the "User Principal" value. It should be set to "bob"

Enter https://wpsdemo.boulder.ibm.com/pkmslogout in the URL line of the browser window to logout of WebSEAL.

### *Run the WebSphere Portal Server*

Display the URL http://wpsdemo.boulder.ibm.com/was/wps/portal in a browser window.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address http://wpsdemo.boulder.ibm.com/was/wps/portal
Go Links
WebSphere Portal
Home
Welcome
Done
Internet

Welcome to WebSphere Portal

IBM WebSphere Portal Server
Version: 4.1.2
Build Level: 412_118_20020621 2002-06-22 01:32

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Local Time:
**5:41 PM** Eastern Time (US & Canada) - 8/2/02

| Time Zone | Local Time |
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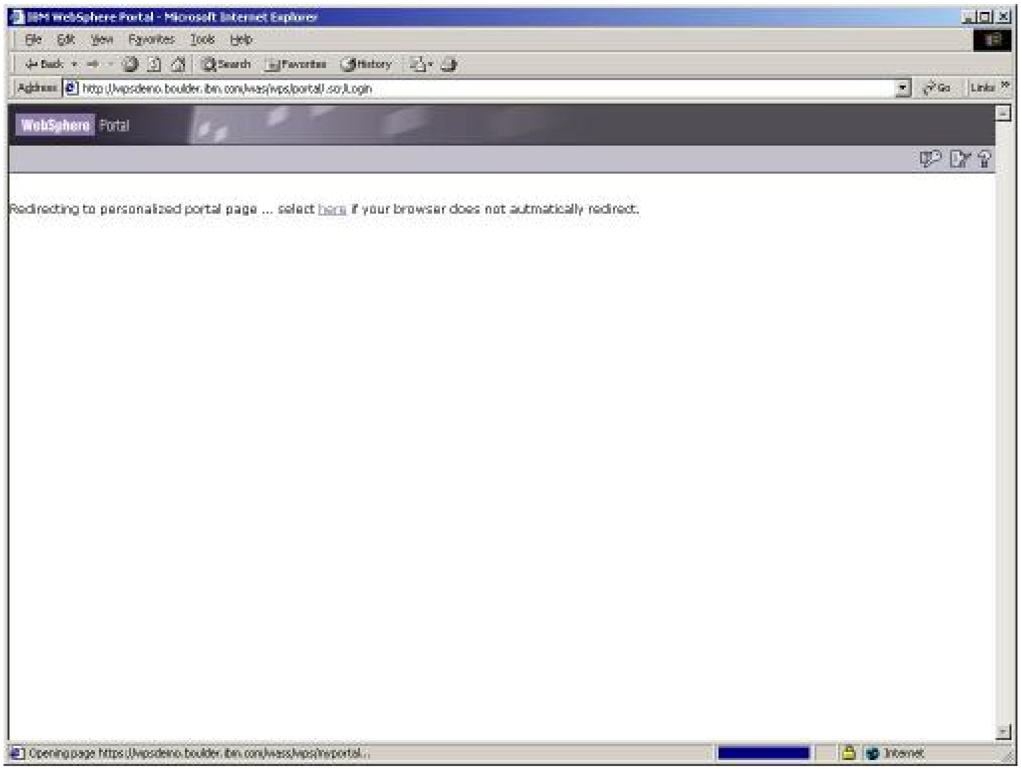
| Brussels, Berlin, Bern | 11:41 PM (8/2/02) |
| Eastern Time (US & Canada) | 5:41 PM (8/2/02) |

Reminder

Check the readme for late-breaking news.

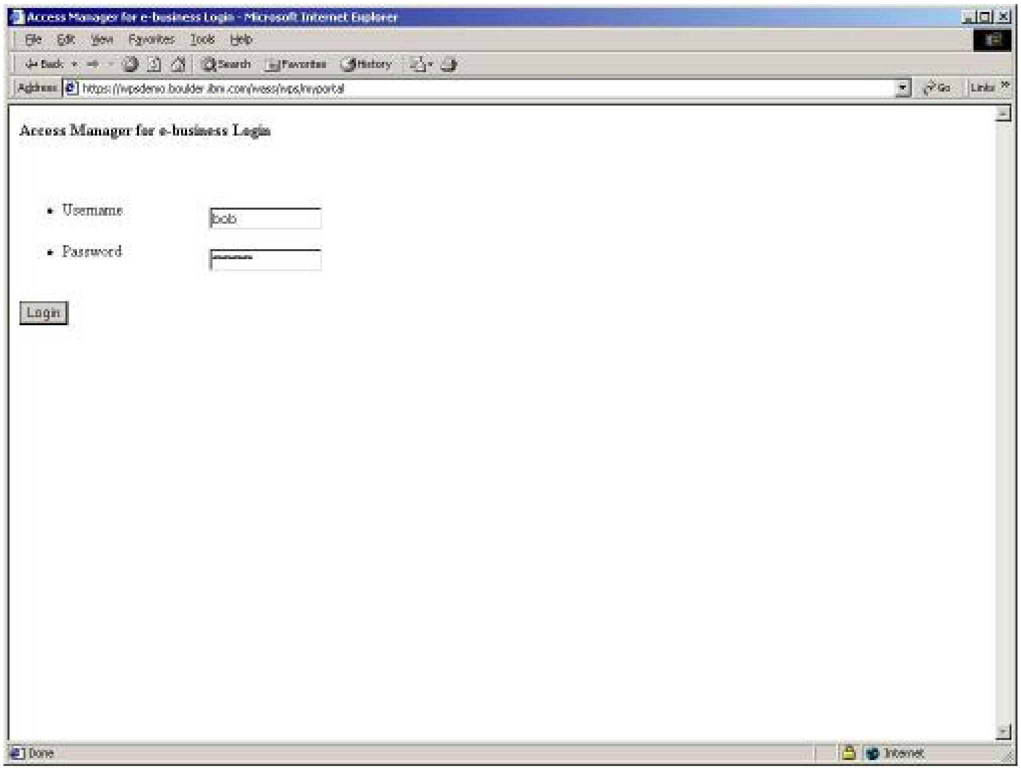
Press the Log in icon (i.e. the key in the top right hand corner of the portal page).

You may see the following screen:


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address http://wpsdemo.boulder.ibm.com/was/wps/portal/.scr/Login
Go Links
WebSphere Portal
Opening page https://wpsdemo.boulder.ibm.com/wass/wps/myportal...
Internet

Redirecting to personalized portal page ... select here if your browser does not autmatically redirect.

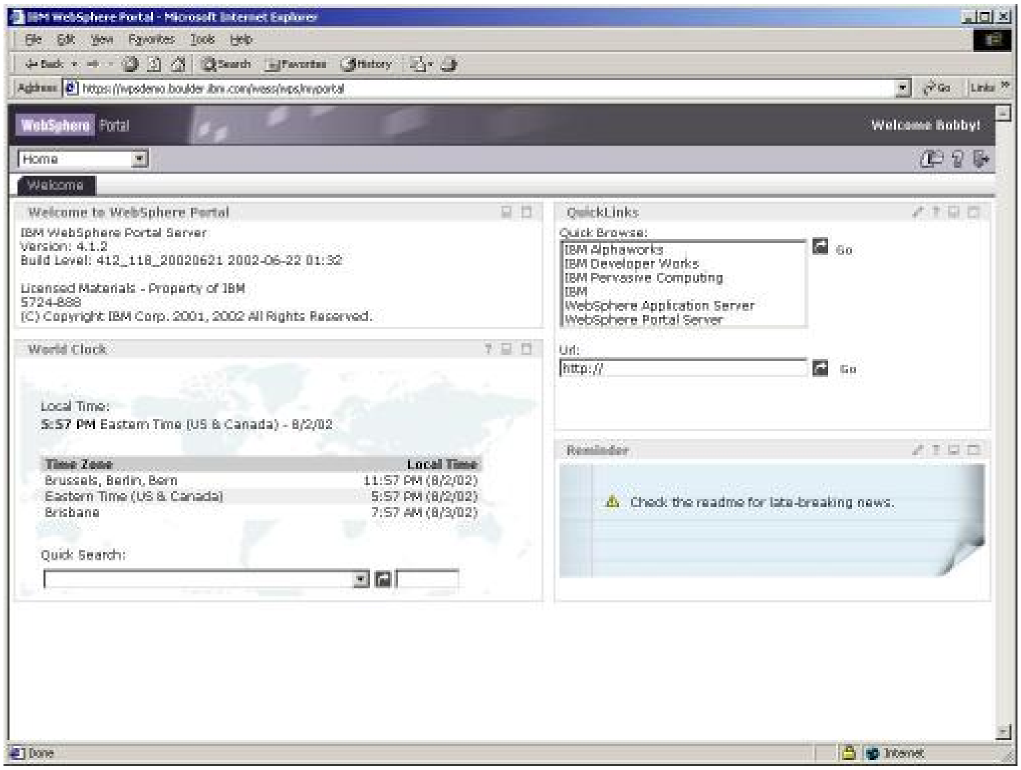
If you are not redirected to the Access Manager login page within a few seconds, click the “here” link.


Access Manager for e-business Login - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address https://wpsdemo.boulder.ibm.com/wess/wps/myportal
Go Links
Done
Internet

**Access Manager for e-business Login**

- Username: bob
- Password: ******

Enter “bob” and “passw0rd” in the appropriate fields and press the “Login” button.


IBM WebSphere Portal - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address https://wpsdemo.boulder.ibm.com/wess/wps/myportal
Go Links
WebSphere Portal
Welcome Bobby!
Home
Welcome
Done
Internet

Welcome to WebSphere Portal

IBM WebSphere Portal Server
Version: 4.1.2
Build Level: 412_118_20020621 2002-06-22 01:32

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Quick Search:

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WebSphere Application Server
WebSphere Portal Server

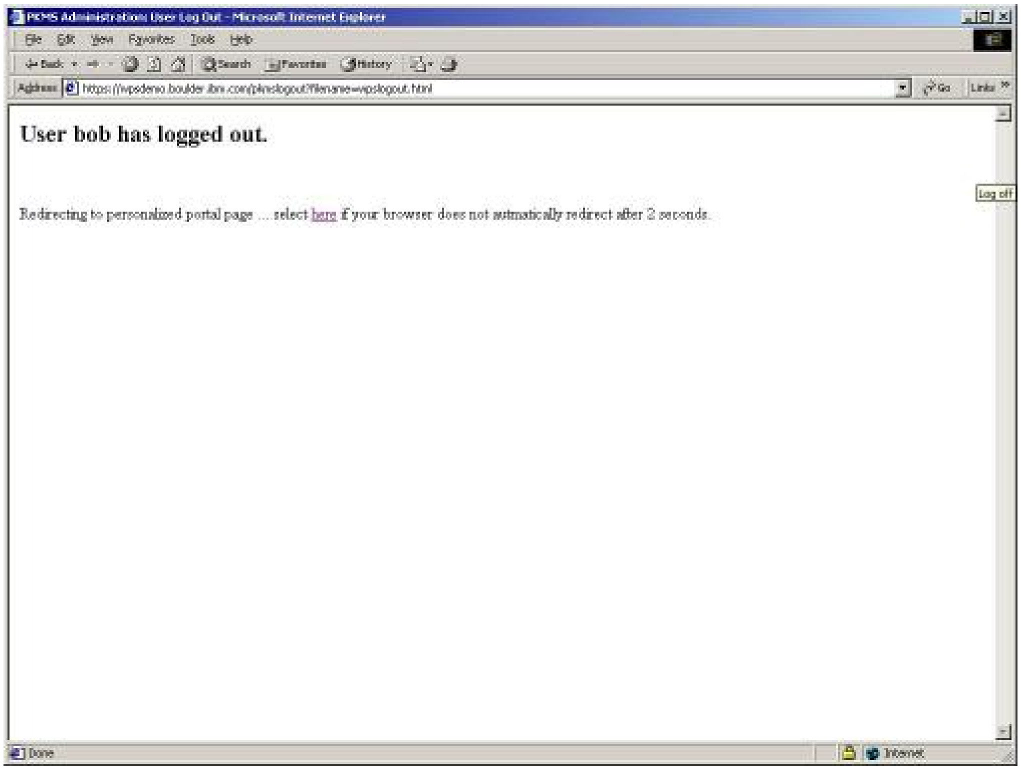
Url: http://

Reminder

⚠ Check the readme for late-breaking news.

Note that user “bob” is now authenticated to the WebSphere Portal Server.

Press the Log out icon (i.e. the door with an arrow in the top right-hand corner of the portal page).

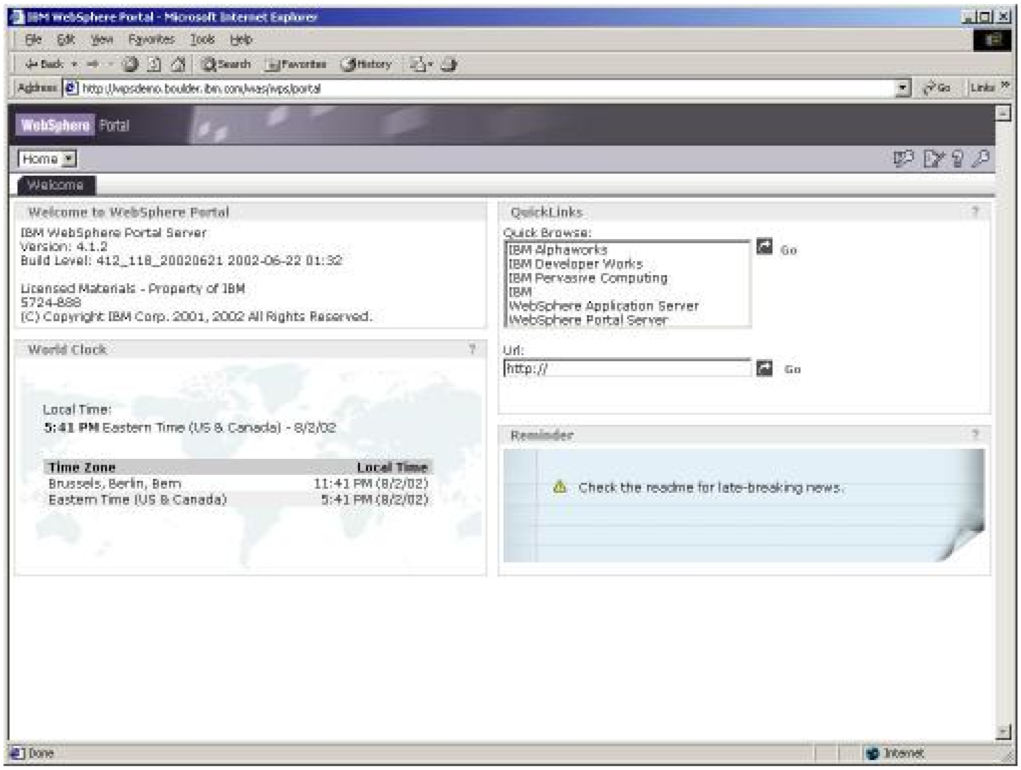

PKMS Administration: User Log Out - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address
Go Links
Log off
Done
Internet

https://wpsdemo.boulder.ibm.com/pkmslogout?filename=wpslogout.html

**User bob has logged out.**

Redirecting to personalized portal page ... select here if your browser does not automatically redirect after 2 seconds.

If this page does not redirect to the WebSphere Portal public page within a few seconds, click the “here” link.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File Edit View Favorites Tools Help
Back Search Favorites History
Address http://wpsdemo.boulder.ibm.com/wps/wps/portal
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Welcome to WebSphere Portal

IBM WebSphere Portal Server
Version: 4.1.2
Build Level: 412_118_20020621 2002-06-22 01:32

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*** END ***