

***Installing and configuring IBM Workplace
Services Express Version 2.5 on IBM
iSeries systems***

by Dan Hill

IBM eServer Solutions Enablement

November 2005

Table of contents

Abstract	3
Introduction	3
Prerequisites	3
Workplace Services Express: Installation and configuration steps	4
Step 1: Reviewing pre-installation requirements	4
Step 2: Checking prerequisites: LPPs	5
Determining software packages.....	5
Step 3: Installing WebSphere Application Server V5.0 Enterprise Enablement	5
Installing WebSphere Application Server option *BASE	6
Installing WebSphere PTFs	6
Installing WebSphere Enterprise Enablement	6
Step 4: Installing group PTFs	11
Step 5: Installing individual PTFs	12
Step 6: Installing Workplace Services Express V2.5	12
Step 7: Configuring a Workplace Services Express instance	19
Fix for external HTTP server	35
Summary	39
Additional information	40
Appendix A: LDAP configuration	41

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

Abstract

IBM® Workplace™ Services Express on the IBM iSeries™ platform is a solution bundle designed to deliver superior collaborative capabilities to small and medium-sized businesses in a single, highly reliable, integrated package. This out-of-the-box collaboration solution has an integrated portal designed for the small to midsized market and makes it easier as well as less costly for these businesses to purchase, deploy, and manage software and hardware.

This Lab helps users install Workplace Services Express on the IBM iSeries platform.

Introduction

IBM Workplace Services Express is designed for small and medium-sized organizations as well as departments in large enterprises. IBM Workplace Services Express on the iSeries platform allows online work areas for team collaboration on documents and projects, instant messaging capabilities, as well as an integrated portal that links to a company's business applications. These functions increase an organization's employee productivity while saving valuable time and resources.

Because Workplace Services Express is built on open standards, it contains application programming interfaces (APIs) that allow solution providers and other third-party developers to build extensions to the product for specific business needs. This lab will familiarize you with Workplace Services Express by helping you install and configure the product.

Prerequisites

You will need to obtain the CDs, or the electronic image, for Workplace Services Express Version 2.5. You can order these CDs either through your IBM representative or download the e-image through the Software Access Catalog link provided in the **Additional information** section.

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

Workplace Services Express: Installation and configuration steps

Installation of Workplace Services Express consists of the following steps:

- ___ 1. Review pre-installation requirements.
- ___ 2. Check prerequisites: licensed program products (LPPs).
- ___ 3. Install IBM WebSphere® Application Server V5.0 Enterprise Enablement.
- ___ 4. Install group program temporary fixes (PTFs).
- ___ 5. Install individual PTFs.
- ___ 6. Install Workplace Services Express.
- ___ 7. Prepare for rich client setup.
- ___ 8. Configure Workplace Services Express instance.

Step 1: Reviewing pre-installation requirements

Review these requirements before installing Workplace Services Express:

Hardware

Here are the basic system's hardware requirements needed:

- eServer™ i5 model 520 1-way (2400 CPW)
- Four gigabytes main storage
- Fifteen gigabytes of disk space for installation of Workplace Services Express and WebSphere Application Server V5.0.2 Enterprise Enablement
- Four gigabytes of disk space for each WebSphere Application Server instance configured for use with Workplace Services Express

i5/OS user profiles

To install and configure Workplace Services Express on the IBM i5/OS® operating environment, you must have a user profile with the following special authorities:

- *ALLOBJ
- *IOSYSCFG
- *JOBCTL

Setting the time on i5/OS

Before installing the Workplace Services Express software, ensure that the Universal Time Coordinated (UTC) offset system value is set correctly by running the following command from an i5/OS command line (example below is for Central Standard Time):

```
CHGSYSVAL SYSVAL(QTIMZON) VALUE(QN0600CST)
```

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

Step 2: Checking prerequisites: LPPs

Here is a checklist to make sure that the required programs are installed on your server. The following programs are usually installed with V5R3:

- 722SS1 i5/OS V5R3
- 5722JV1 (Option *BASE) IBM Developer Kit for Java™
- 5722JV1 (Option 5) IBM Developer Toolkit for Java (Version 1.3)
- 5722JV1 (Option 6) IBM Developer Toolkit for Java (Version 1.4)
- 5722SS1 (Option 12) Host Servers
- 5722SS1 (Option 30) QShell Interpreter
- 5722SS1 (Option 33) Portable Application Solution Environment (PASE)
- 5722DG1 IBM HTTP Server for iSeries
- 5722TC1 TCP/IP utilities
- 5733WS5 (Option *BASE) WebSphere Application Server V5.0
- 5733WS5 (Option 1) WebSphere Application Server V5.0 Client development and run time
- 5733WS5 (Option 2) WebSphere Application Server V5.0 Application server run time
- 5722AC3 Crypto Access Provider 128-bit
- 5799PTL iSeries Tools for Developers PRPQ

You can download 5799PTL (iSeries Tools for Developers PRPQ) product from the link provided in the **Additional information** section. Select the **Trials and betas** link in the left navigation column and then enter 5799PTL in the **Search for free trials and betas** selection box.

Determining software packages

To determine which software packages you have installed, perform the following items:

- ___ 1. Sign onto your iSeries system.
- ___ 2. Enter the **Display Software Resources** (DSPSFWRSC) command on an i5/OS command line. This will bring up the Display Software Resources status screen, which shows all installed software except IBM Workplace.

Step 3: Installing WebSphere Application Server V5.0 Enterprise Enablement

IBM Workplace Services Express requires functions that are not available with standard versions of WebSphere Application Server on IBM i5/OS. To add these functions, you must install IBM Enterprise Enablement for WebSphere Application Server for iSeries (WebSphere Application Server V5.0 Enterprise Enablement).

Before installing WebSphere Application Server V5.0 Enterprise Enablement, you must have the following software installed:

Program	Option	Description
5722SS1		i5/OS V5R3
5733WS5	*BASE	WebSphere Application Server V5.0
5733WS5	2	WebSphere Application Server V5.0 runtime

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

Installing WebSphere Application Server option *BASE

Before you get started, install (if needed) WebSphere Application Server, option *BASE, on your iSeries system. To do this:

- ___ 1. Start a 5250 session and type **GO LICPGM**.
- ___ 2. Select option 10 and check for the following:
 - 5733WS5 (Option *BASE) WebSphere Application Server V5.0
 - 5733WS5 (Option 2) WebSphere Application Server V5.0 Application server runtime

If WebSphere Application Server option Base is not already installed, you can install it by using a remote install or a local install. As a refresher, a remote install allows you to install WebSphere Application Server from a PC to an iSeries system. A local install enables you to install WebSphere Application Server on your iSeries system from a CD.

Using the remote install:

You can follow the download directions at <http://xxx:update> with url for download whitpapter

- to download the install files and copy them to your PC or create the install CDs.
- If you created the CDs, insert the CD labeled **WebSphere Application Server Base for iSeries, V5.0 (1-1)** in your Microsoft® Windows® workstation. The InstallShield® setup program automatically starts.
- If you copied the files to your PC, run the **Setup.exe** file located in the root directory of the first CD image.
- Accept all default settings during install.
- During the install process, you will be prompted to insert CD 2. At this time, insert the CD labeled, **WebSphere Application Server Base for iSeries, V5.0 (1-2)**, or point to the root directory of the second CD image.

Installing WebSphere PTFs

If WebSphere Application Server option *BASE was installed on your system prior to the beginning of this installation process, check to see if the required PTFs are already on the system.

Group PTFs

Check to see if group PTF SF99287 level 7 or later is installed.

Installing WebSphere Enterprise Enablement

Here are the processes required for installing WebSphere Enterprise Enablement:

- ___ 1. Stop the WebSphere Application Server and login to a 5250 session. Type the command:
ENDSBS SBS(QEJBAS5) OPTION(*IMMED)

WebSphere Enterprise Enablement is installed through remote install. You can follow the download directions at <http://xxx:update> with url for download whitpapter

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

- ___ 2. to get the install files copied to your PC or create the install CDs.

If you created CDs, insert the CD labeled **WebSphere Application Server Enterprise Enablement for iSeries** into the CD drive on a workstation. The setup program will start automatically. If not, you can manually launch the program by double-clicking the install400.bat file in the root directory of the CD.

If you copied the files to your PC, run the install400.bat file in the root directory for the **WebSphere Application Server Enterprise Enablement for iSeries** CD image

- ___ 3. Enter the iSeries host name, user ID, and password and click **OK** (Figure 1).

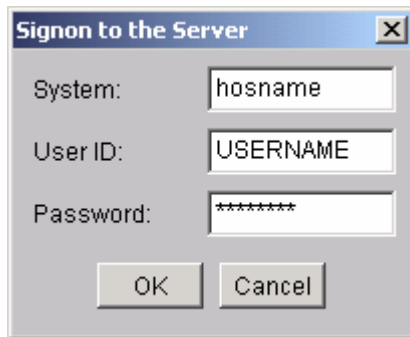


Figure 1: Authentication screen

- ___ 4. Select install language.

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

5. Click **Next** on the information screen (Figure 2).

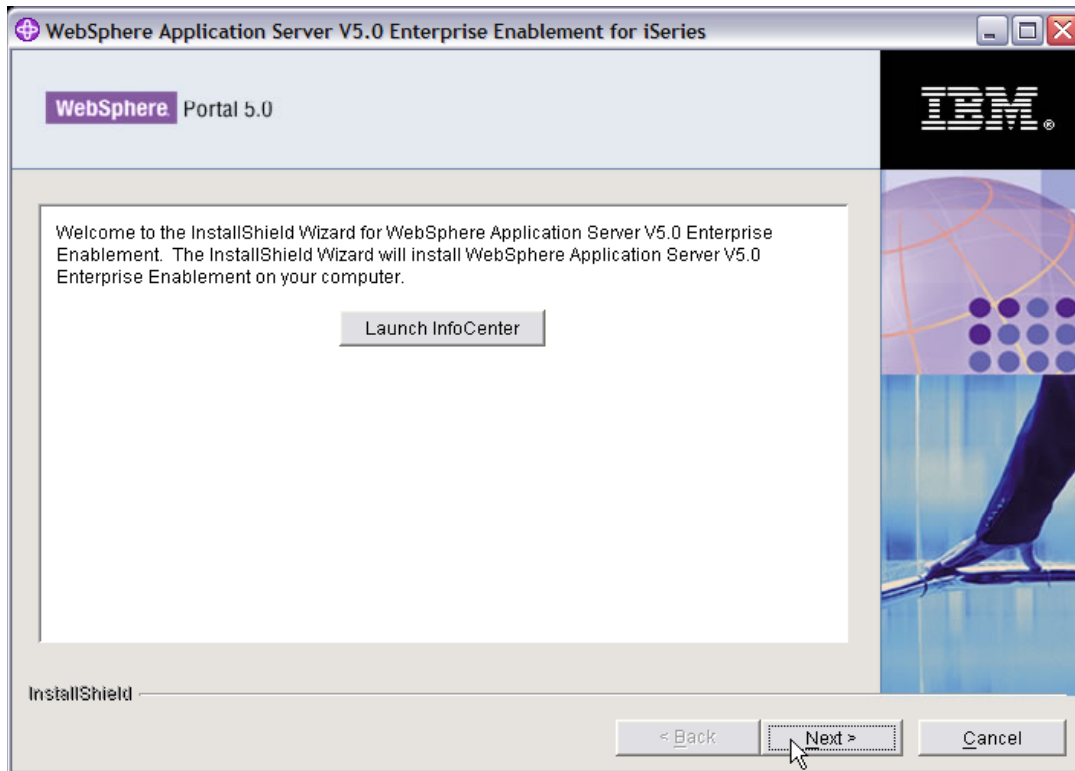


Figure 2: First screen for WebSphere Application Server V5.0 Enterprise Enablement Portal V5.0 wizard

6. Accept the license agreement and click **Next** (Figure 3).

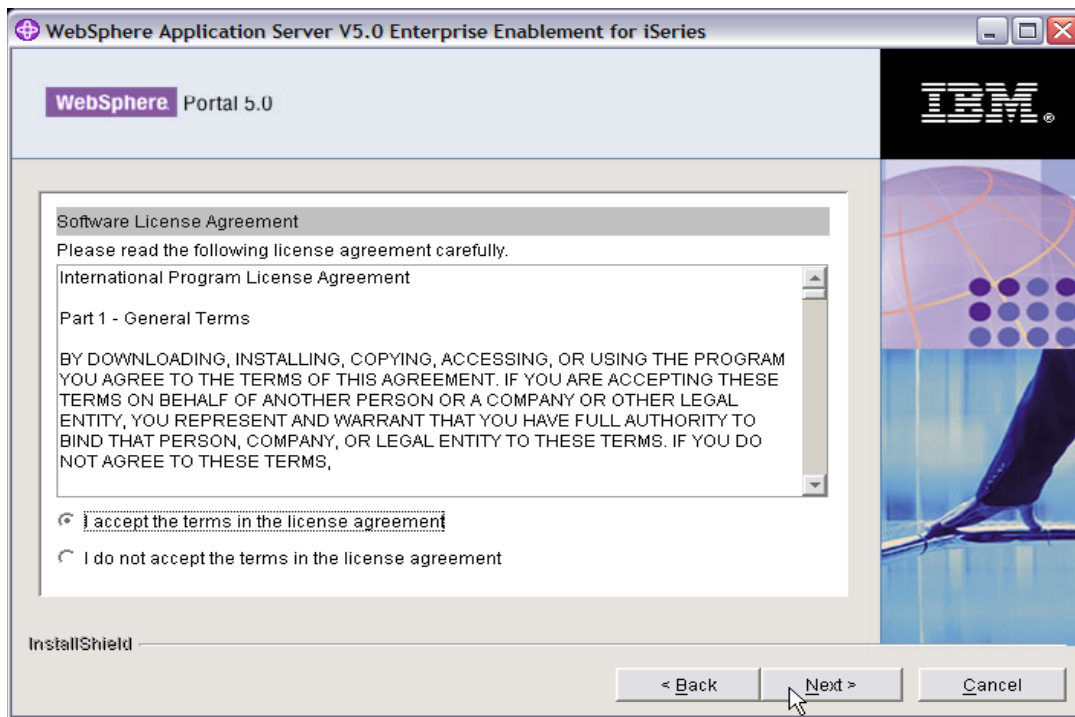


Figure 3: Second screen for WebSphere Application Server V5.0 Enterprise Enablement Portal V5.0 wizard

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

- ___ 7. Select **WebSphere Application Server V5.0 Enterprise Enablement - Option 10** and click **Next** (Figure 4).

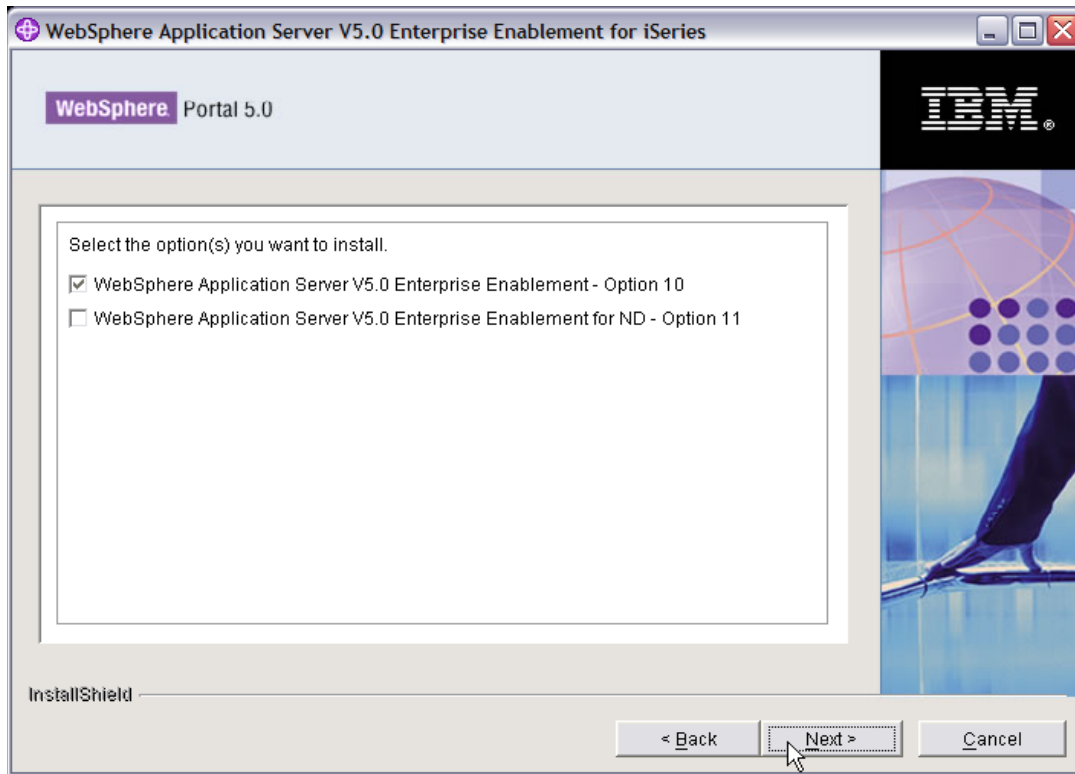


Figure 4: Third screen for WebSphere Application Server V5.0 Enterprise Enablement Portal V5.0 wizard

- ___ 8. Review the install summary information and click **Next** (Figure 5).

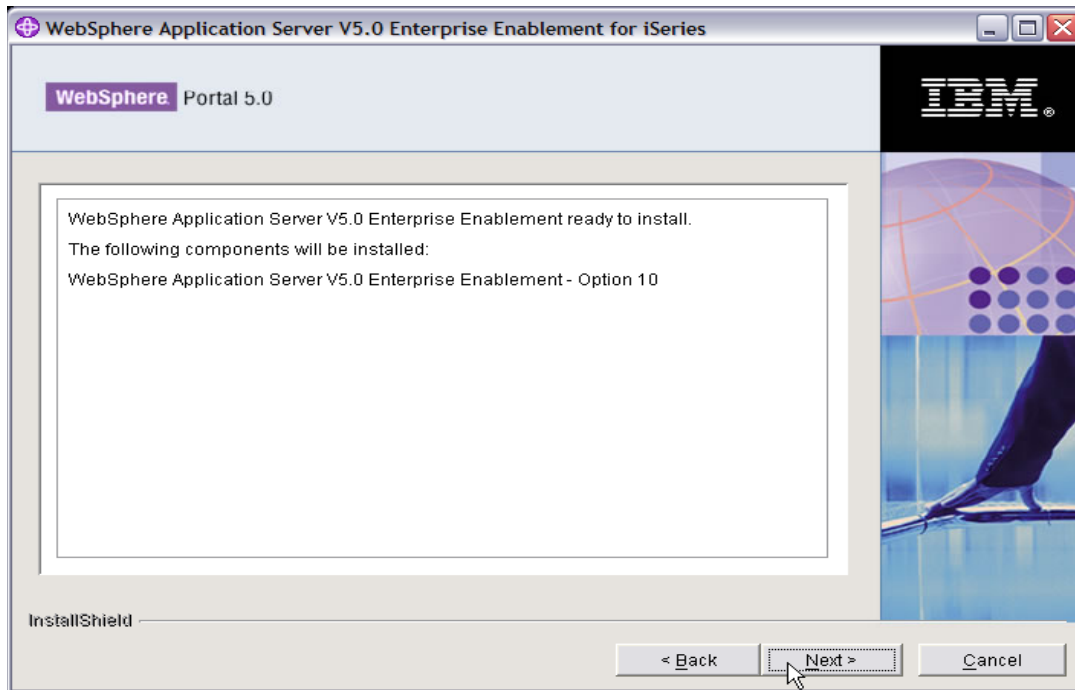


Figure 5: Fourth screen for WebSphere Application Server V5.0 Enterprise Enablement Portal V5.0 wizard

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

- ___ 9. InstallShield shows the installation progress (Figure 6). Wait until the install finishes; this takes several minutes. Take note of the name of the log file that you need to check to verify the installation: `/tmp/InstallShield/WASPME/logs/pmeininstalllog.txt`

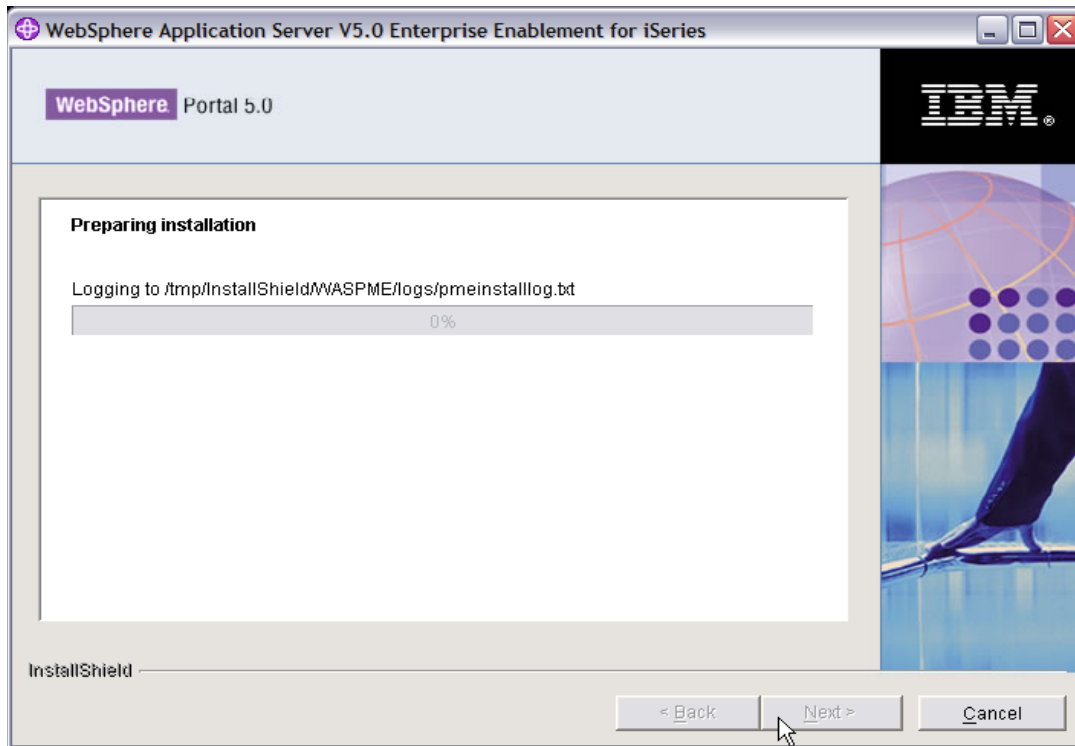


Figure 6: Fifth screen for WebSphere Application Server V5.0 Enterprise Enablement Portal V5.0 wizard

- ___ 10. When WebSphere Application Server V5.0 Enterprise Enablement finishes installing, the installation program will display a confirmation panel and click **Finish** (Figure 7).
(Note: You might get a blank InstallShield screen for a few minutes. Do not cancel out of the screen; wait until the confirmation panel is displayed.)

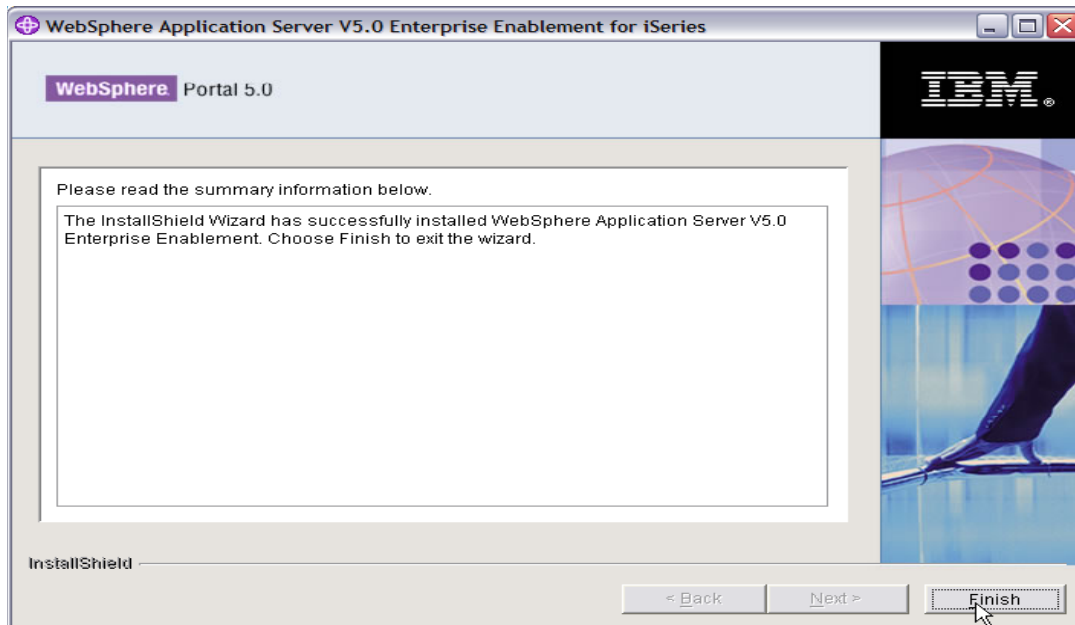


Figure 7: Sixth screen for WebSphere Application Server V5.0 Enterprise Enablement Portal V5.0 wizard

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

- ___ 11. Verify the WebSphere Enterprise Enablement installation:
 - Review the messages in the install log by typing the following command in a 5250 session:
`wrklnk \ /tmp/InstallShield/WASPME/logs'`
 - Select option **5, Display**, which is located by the file **pmeinсталlog.txt**, and look for error messages. If there are no informational messages or error messages, continue with the next item.

- ___ 12. Verify that WebSphere Enterprise Enablement (option 10) is installed (Figure 8):
 - On an iSeries system command prompt, type:
`Go LICPGM > Option 10 (Display installed licensed programs)`
 - Verify that 5733WS5 option 10 is installed.

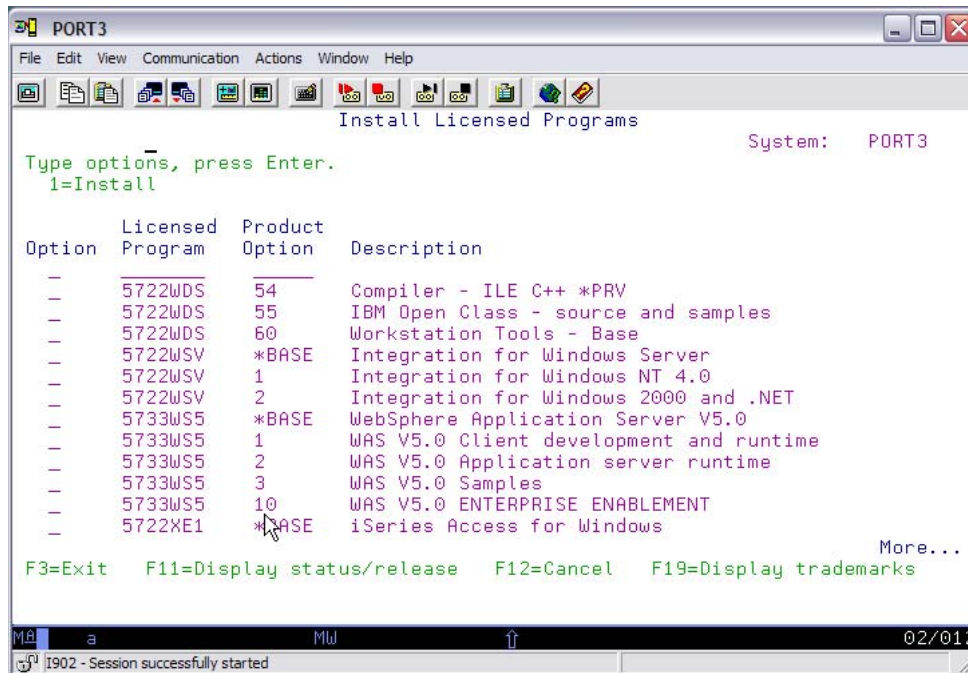


Figure 8: Install Licensed Programs screen

Step 4: Installing group PTFs

Check to make sure the required PTFs are already on the system. (Refer to the PTF ordering link in the **Additional information** section of this lab.) The group PTFs you will need are listed below:

- SF99530 Cumulative PTF package, level 5102 or higher
- SF99287 WebSphere Application Server V5.0 (Base Edition), level 7 or higher
- SF99503 IBM DB2 Universal Database™ (DB2® UDB) for iSeries, level 4 or higher
- SF99099 IBM HTTP Server, level 5 or higher
- SF99282 WebSphere Portal Express/Express Plus Service Pack level 3 or higher
- SF99269 Java, level 5 or higher

To determine if the correct group PTF packages are installed, perform the following processes:

- ___ 1. Sign on to your server.
- ___ 2. Enter the **Work with PTF Groups** command on an i5/OS command line:
`WRKPTFGRP *all`

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

The **Work with PTF Groups** status screen lists the PTF group level and what group PTFs have been applied to your server.

Download group PTFs as needed from the IBM PTF Fix Central Web site listed in the **Additional information** section of this lab.

Step 5: Installing individual PTFs

After installing all required group PTFs, ensure that the following individual PTFs are installed:

Product	PTF	Comment
5722SS1	SI17277	OSP-DB-MSGSQL0514 PREPARED STMT NOT USED FOR 2ND OPEN
	SI17314	OSP-DB-MSGSQL0501 switching between NTS transactions
	SI17480	OSP-DB msgCPD0013 f/QCANPARS t/QDBOPEN per msgCPF32A4
	SI17274	OSP-DB-MSGSQL0514 PREPARED STMT NOT USED FOR 2ND OPEN
	SI17551	Database fix
5799PTL	SI09622	OSP-INCORROUT vnc does not start
5722999	MF34923	
	MF34851	
	MF34853	
	MF34854	
	MF34855	
	MF34856	
5733WS5	SI17024	

Single PTFs can be downloaded from the IBM PTF Web site listed in the **Additional information** section.

To determine whether the correct individual PTF packages are installed, perform the following processes:

- ___ 1. Sign on to your server.
- ___ 2. Enter the Display PTF Status command on an i5/OS command line:
`DSPPTF LICPGM(product)`

The **Display PTF Status** screen is shown. This screen lists the PTFs that have been applied to your server.

Step 6: Installing Workplace Services Express V2.5

Workplace Services Express V2.5 can be installed remotely. You can follow the download directions at <http://xxx:update> with url for download whitpapter to get the install files copied to your PC

If you have the DVD:

- ___ 1. Insert the Workplace Services Express installation DVD into the DVD-ROM drive of your workstation.

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

2. From a command prompt, change to the WSEServer directory of the installation DVD (for example, **cd D:\WSEServer**) and run **install400.bat** .

If you downloaded the e-image following the instructions at <http://xxx:update> with url for download whitpapter

1. Manually launch the install program by double-clicking the **install400.bat** file in the WSEServer directory.
2. Enter the iSeries hostname, user ID, and password. The user ID will have *ALLOBJ, *IOSYSCFG, and *JOBCTL authorities and click **OK** (Figure 9).

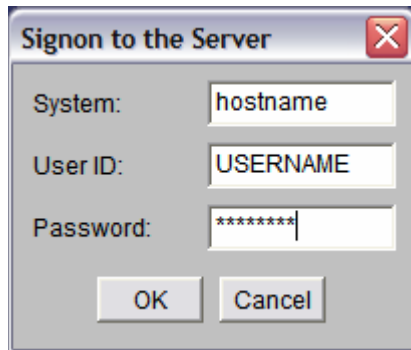


Figure 9: Authentication screen

3. Select install language and click **OK** (Figure 10).



Figure 10: Select language for installation

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

- ___ 4. Click **Next** on the information screen (Figure 11).

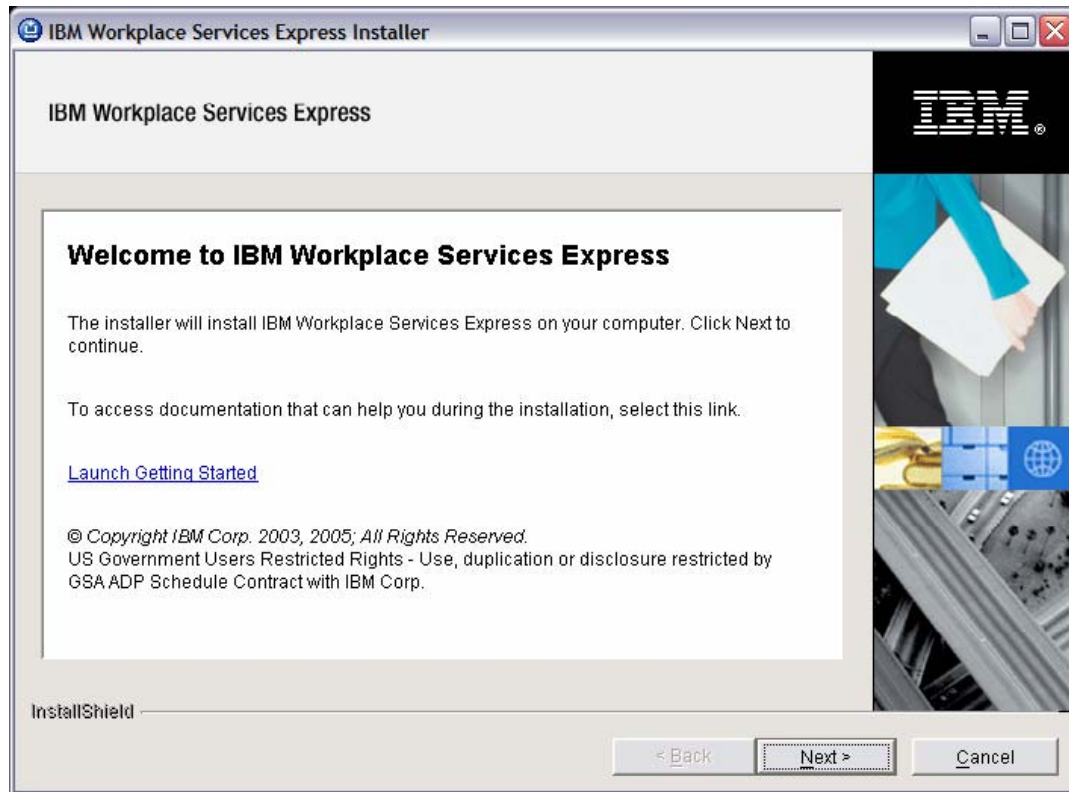


Figure 11: First screen for IBM Workplace Services Express Installer wizard screen

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

- ___ 5. The install process validates that the i5/OS LPPs are installed (Figure 12).

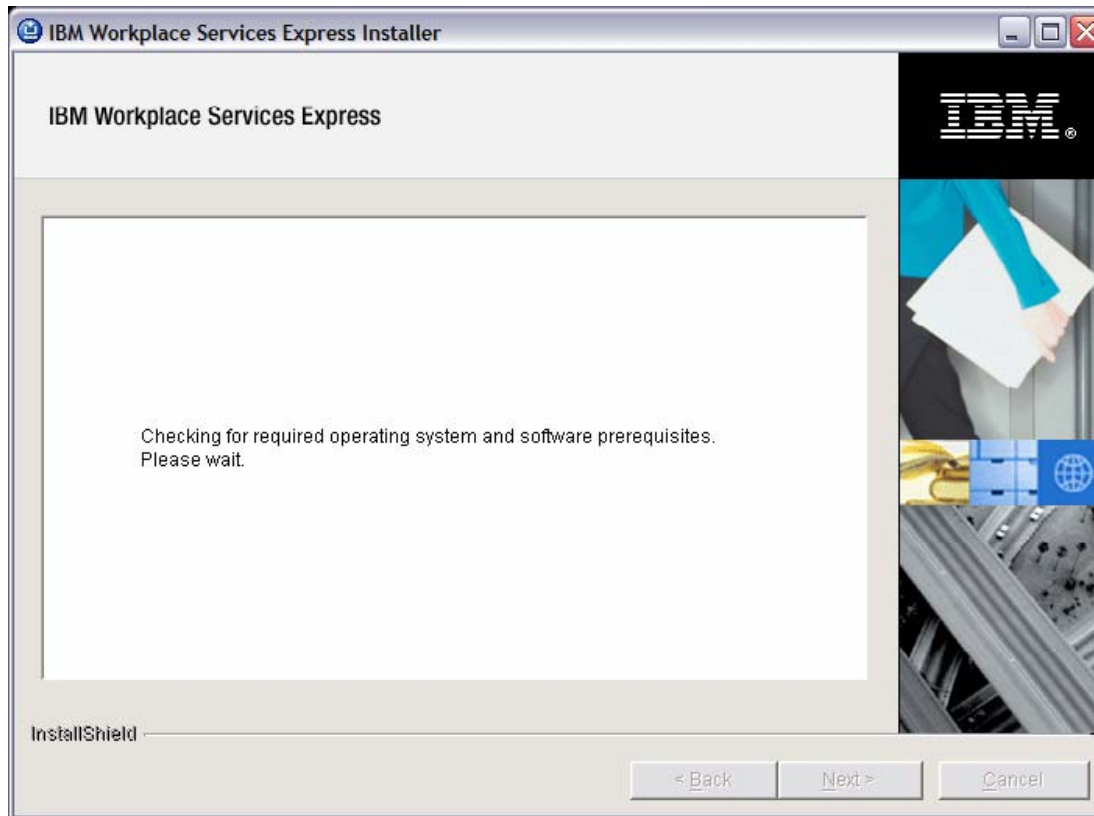


Figure 12: Second screen for IBM Workplace Services Express Installer wizard

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

If all of the prerequisites are met and Workplace is not already installed on the system, then you will get the Software License Agreement screen.

- __ 6. Accept the terms to the license agreement (Figure 13) and click **Next**.

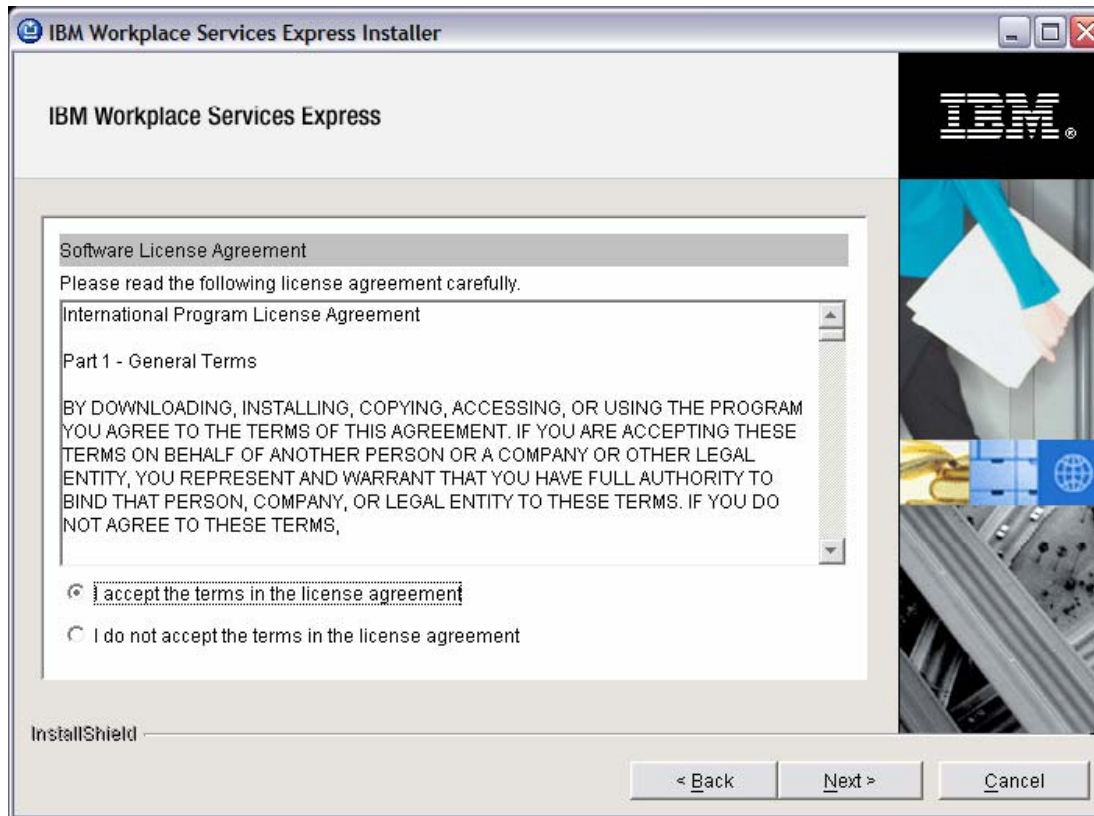


Figure 13: Fifth screen for IBM Workplace Services Express Installer wizard

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

7. On the Summary screen, review the install location and click **Next** to start the installation (Figure 14). (**Note:** For the i5/OS operating environment, the install location will be the only entry in the summary section.)

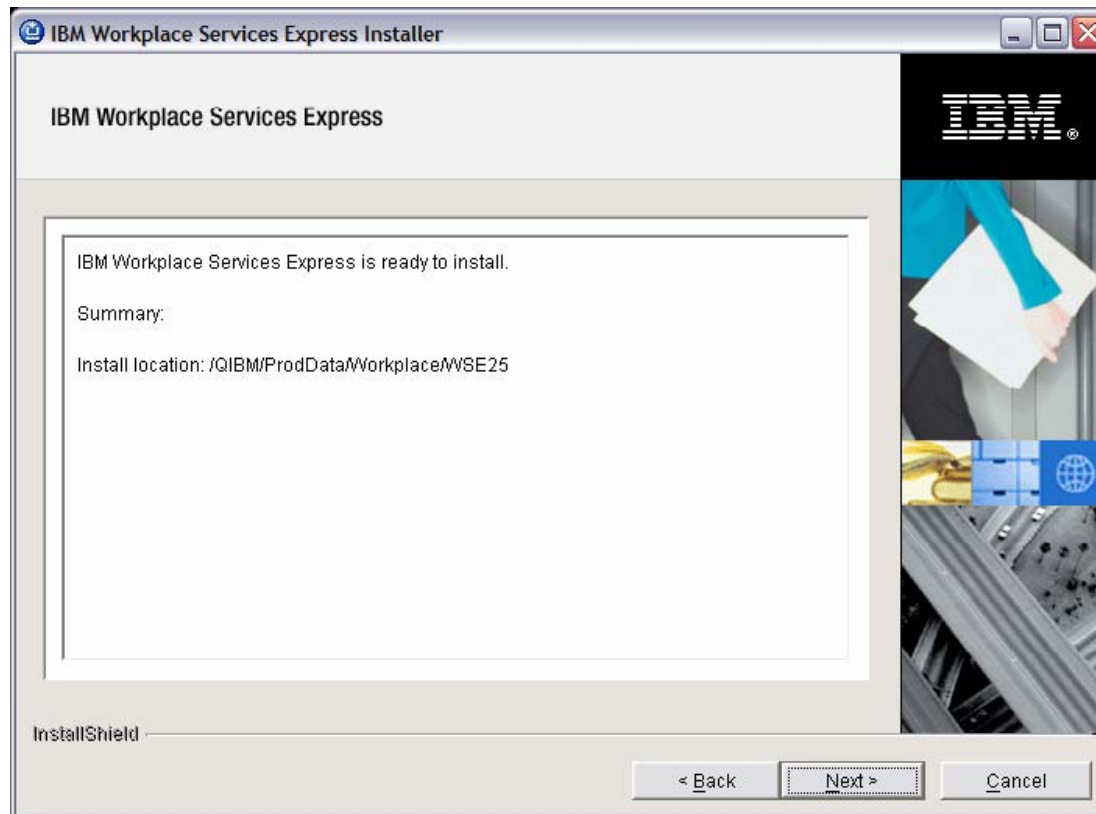


Figure 14: Seventh screen for IBM Workplace Services Express Installer wizard

**Installing and configuring IBM Workplace Services Express Version 2.5
on IBM iSeries systems**

- ___ 8. When the install starts, the program displays a progress bar (Figure 15).

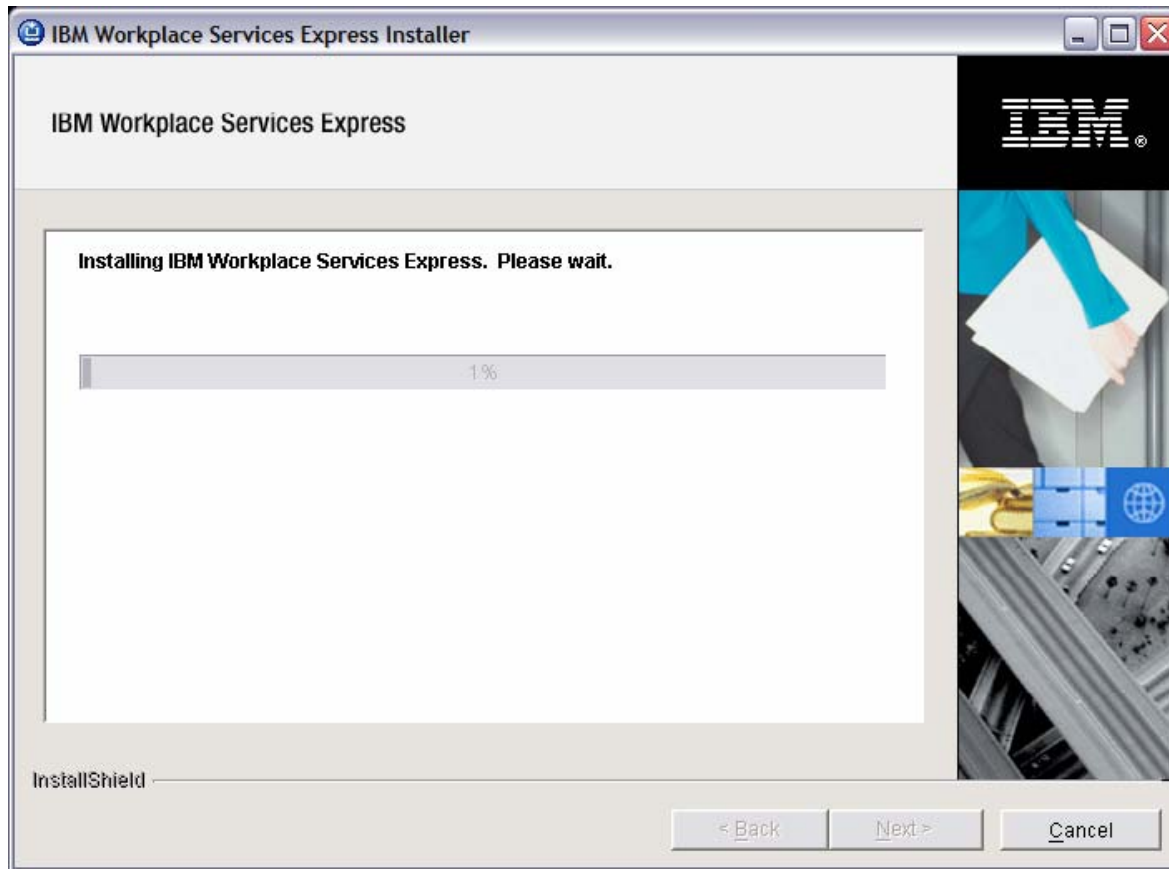


Figure 15: Eighth screen for IBM Workplace Services Express Installer wizard

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

- ___ 9. When the installation completes, you will receive confirmation that the installation was successful (Figure 16).

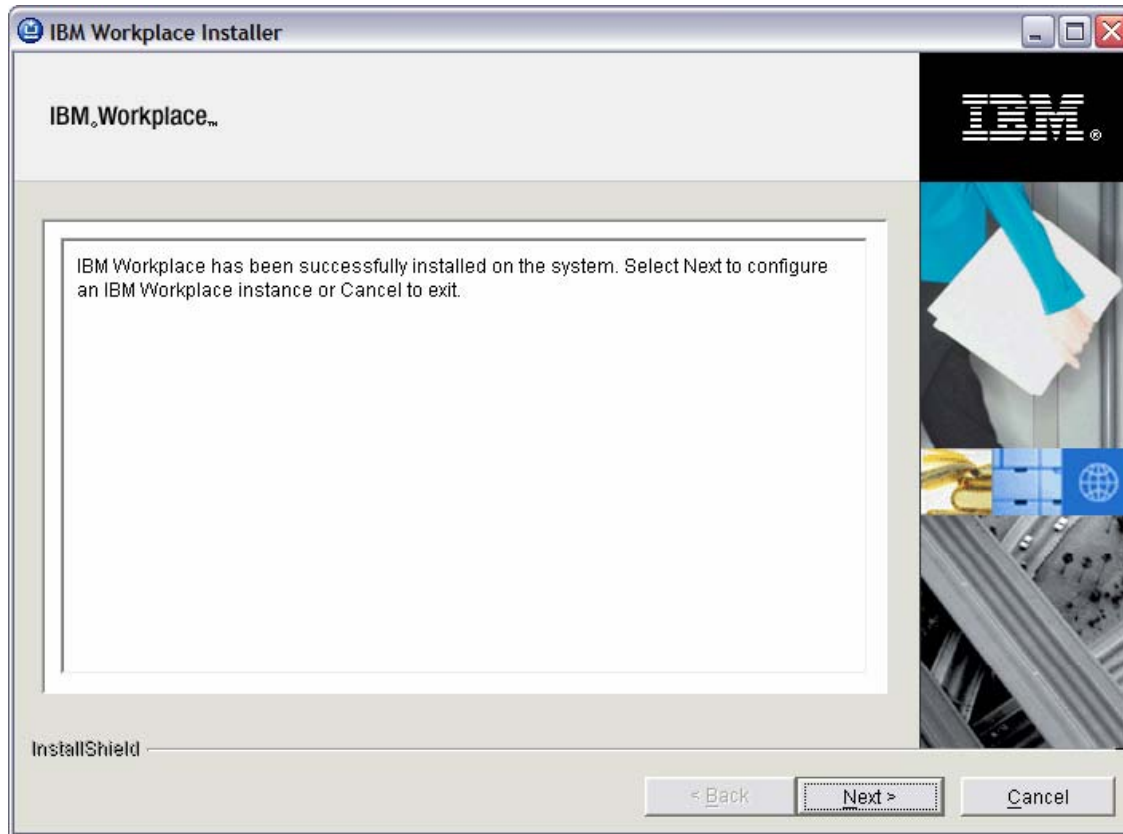


Figure 16: IBM Workplace successfully installed

- ___ 10. Verify installation. The code will be in the `/qibm/proddata/lotus/workplace/WSE25` directory.

Step 7: Configuring a Workplace Services Express instance

In this section, you will use the Workplace configuration wizard included in IBM Web Administration for iSeries to configure a working instance of Workplace. The following components will be configured:

- WebSphere Portal instance
- DB2 UDB collection and tables for storing portal information
- Database user profile
- IBM HTTP Server
- WebSphere Application Server instances

If you just finished the install of Workplace Services Express and you are continuing on, you will be on the topologies screen and you can skip to item two, below. If not:

- ___ 1. Run items one through five in step 6 above (Installing Workplace Services Express V2.5) which will get you to a screen stating that Workplace has already been installed.

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

__ 2. Click **Next** (Figure 17).

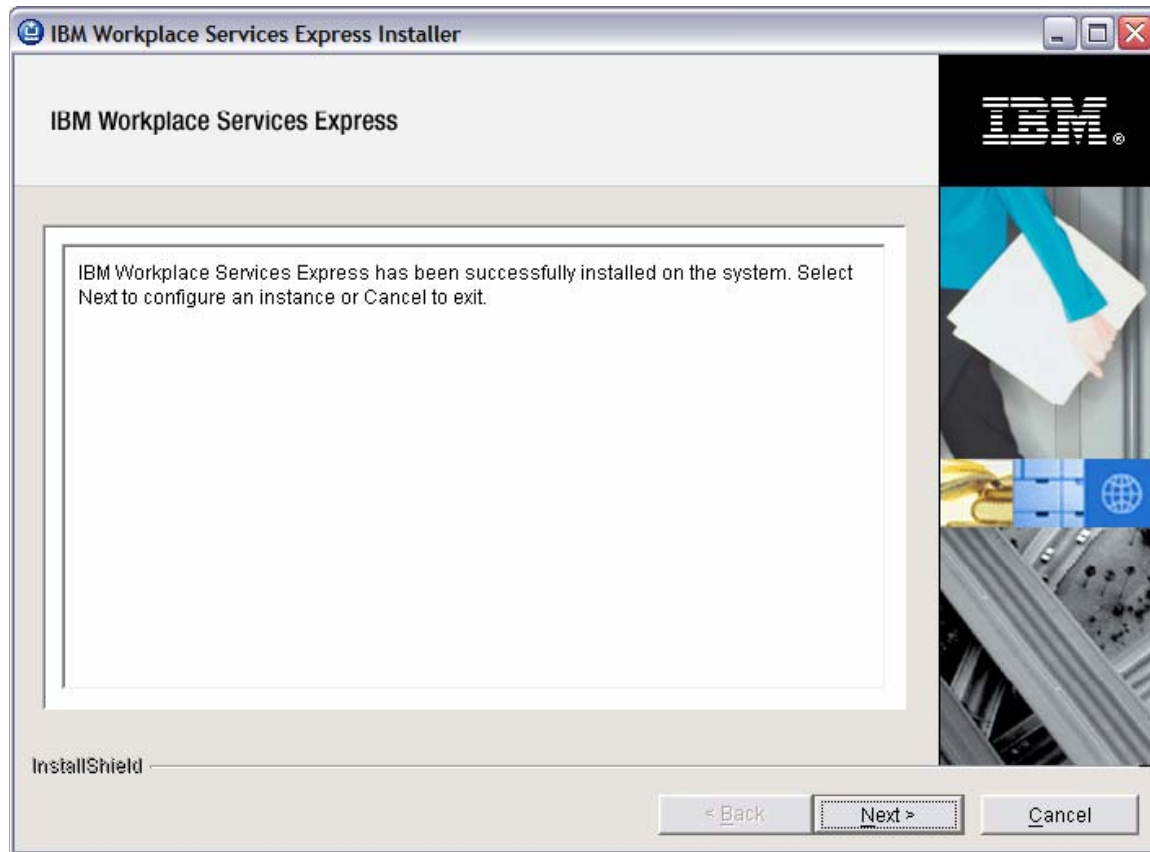


Figure 17: IBM Workplace Services Express Installer wizard, screen 11

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

- ___ 3. Choose the **IBM Workplace setup wizard for i5/OS** option and click **Next** (Figure 18).

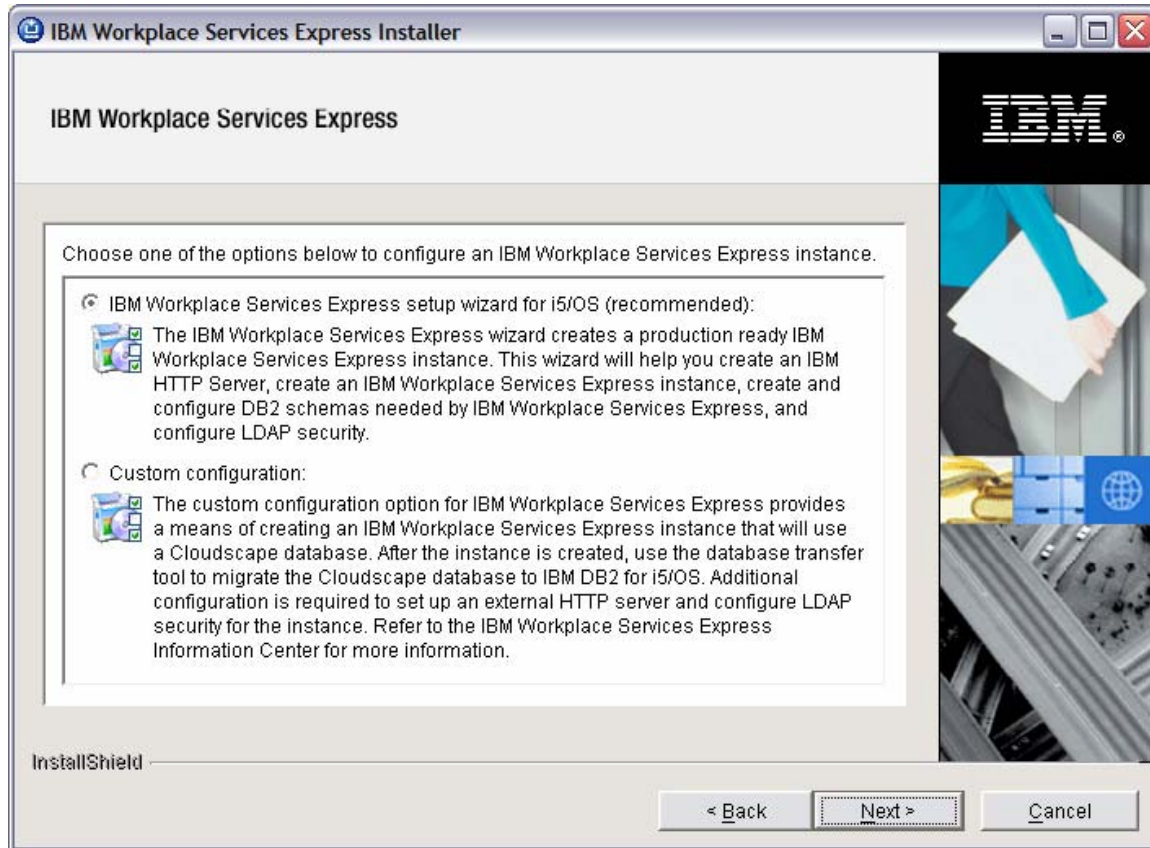


Figure 18: Thirteenth screen of IBM Workplace Services Express Installer wizard

- ___ 4. By selecting **IBM Workplace setup wizard for i5/OS** on the panel shown in Figure 18, the next panel will indicate whether the installation program was able to detect and start the IBM HTTP Administration Server.
- If the IBM HTTP Administration Server is started, you can select **Launch the i5/OS setup wizard for IBM Workplace** (Figure 19) and then **Finish** to exit the installation program and immediately begin configuration of Workplace.
 - If the installation program indicates it was unable to start the IBM HTTP Administration Server, or if you do not wish to begin configuration immediately, click **Finish** to exit the installation program. To configure Workplace Services Express, you will need to manually start the IBM HTTP Server and the Create IBM Workplace wizard.

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

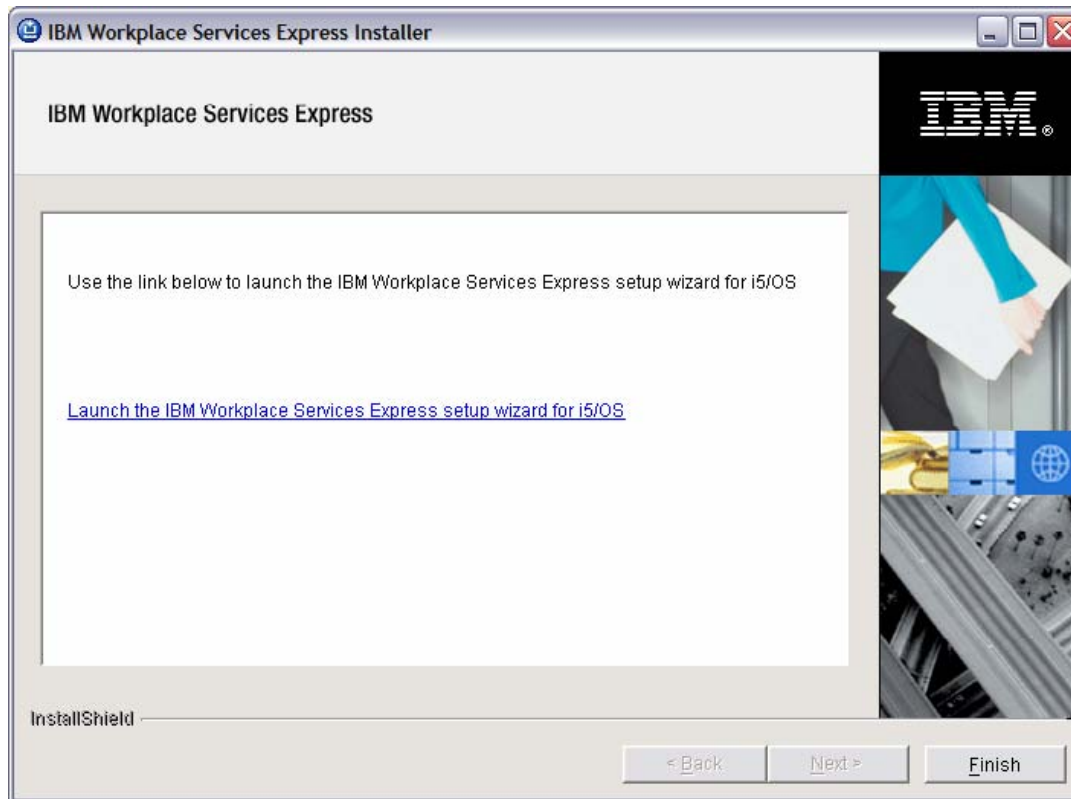


Figure 19: Fourteenth screen of the IBM Workplace Services Express Installer wizard

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

- If the HTTP Administration Server instance is up and running on the iSeries system, skip to item 7, below.
- If the HTTP Administration Server instance is not up and running on the iSeries system, you will get the screen in Figure 20.

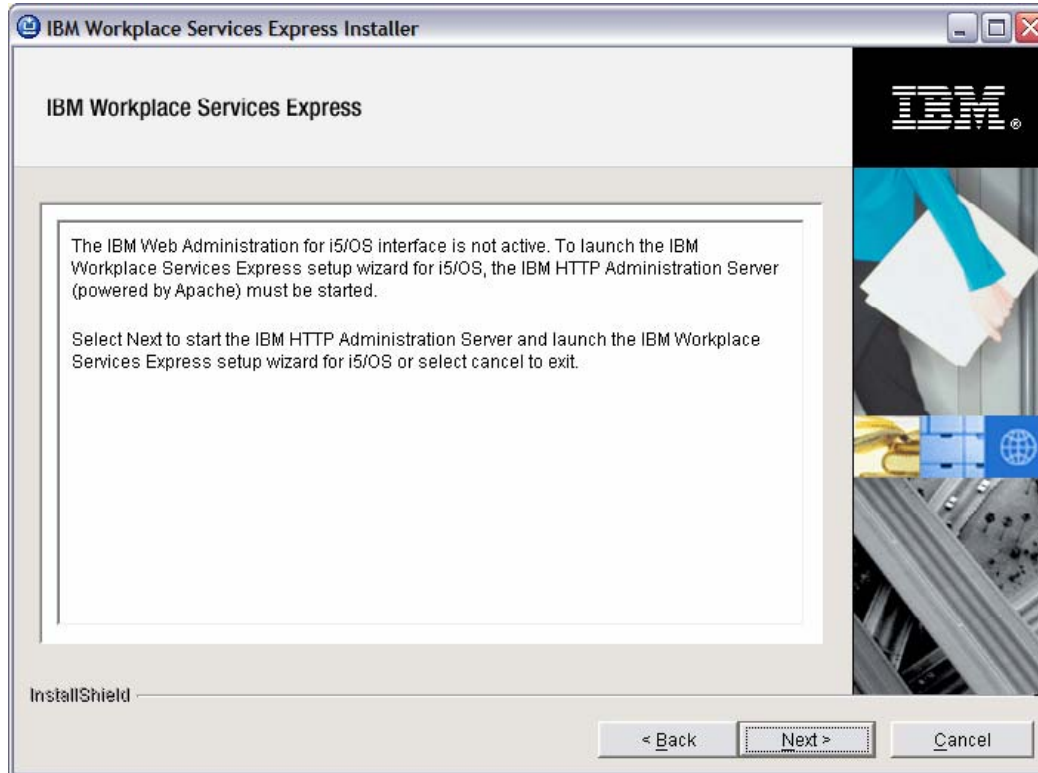


Figure 20: Fifteenth screen of the IBM Workplace Services Express Installer wizard

5. Click **Next** to start the HTTP Administration Server instance.
6. You will get a signon window. Sign in using your iSeries user ID and password (Figure 21).



Figure 21: Authentication screen

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

- ___ 7. A browser window will launch and bring you into the **Create IBM Workplace** wizard.

You can also open a browser and logon to IBM Web Administration for i5/OS:
`http://hostname:2001/`
(where *hostname* is the name of the server where Workplace is installed).

If the Web Administration instance is not running, on an i5/OS command line, run:
STRTCPSVR SERVER(*HTTP) HTTPSVR(*ADMIN)

- ___ 8. Once the Web Administration instance loads in the browser,
click **IBM HTTP Server for iSeries** (Figure 22).

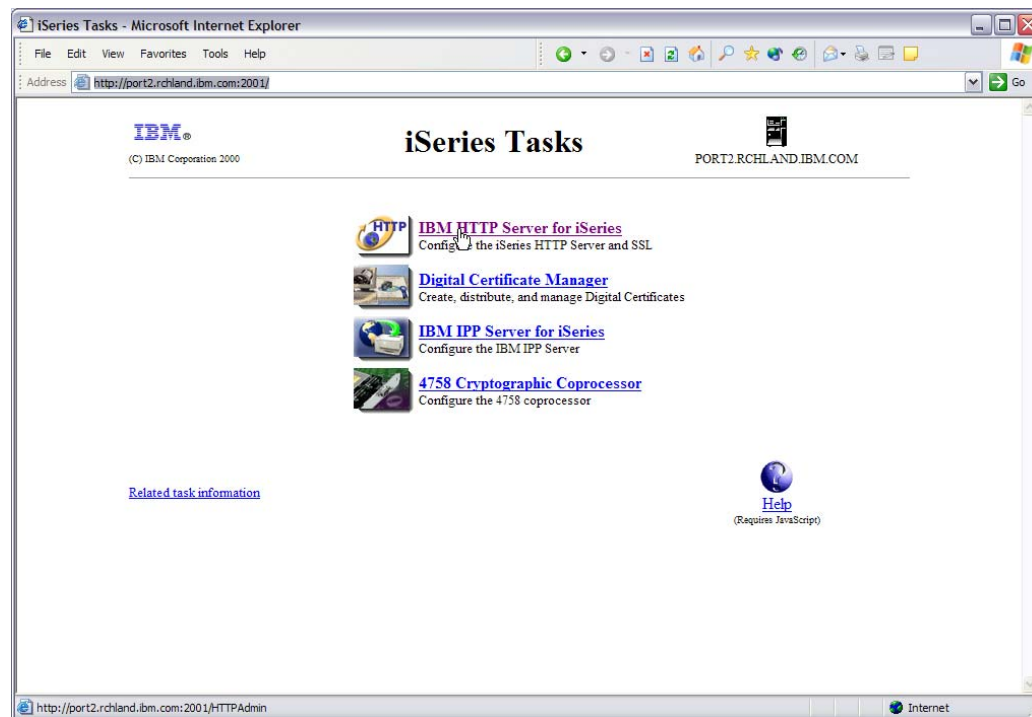


Figure 22: IBM Web Administration browser window

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

9. Click the **Create IBM Workplace** link (Figure 23) on the left navigation bar (circled in red).

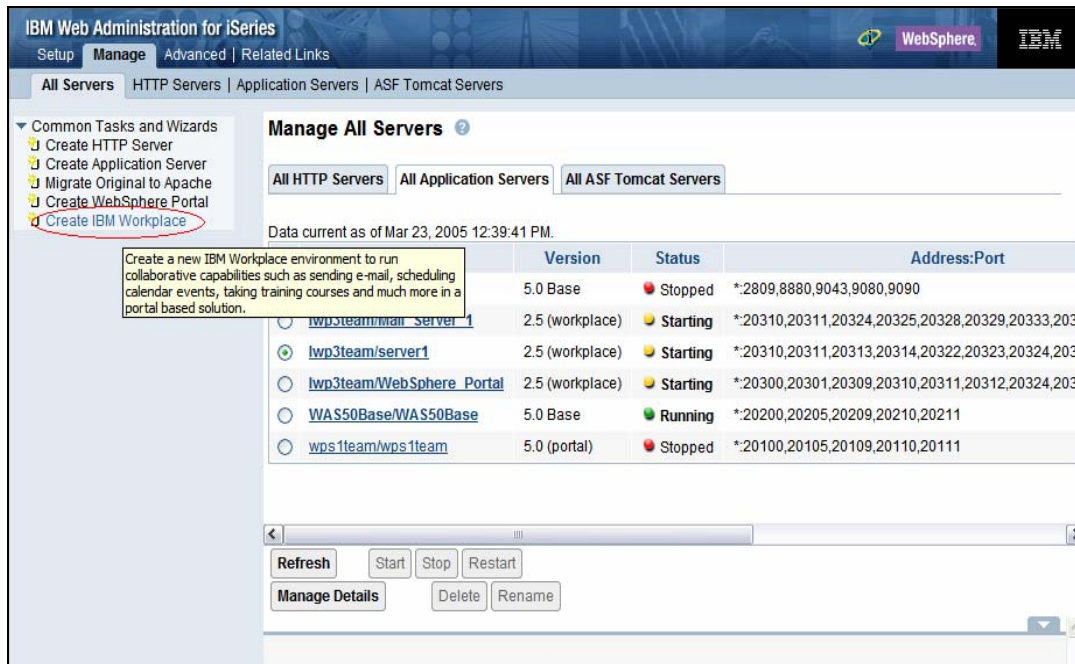


Figure 23: Click **Create IBM Workplace**

10. The **Create IBM Workplace** welcome page (Figure 24) provides an overview of the components configured by the wizard. Read the information and click **Next**.

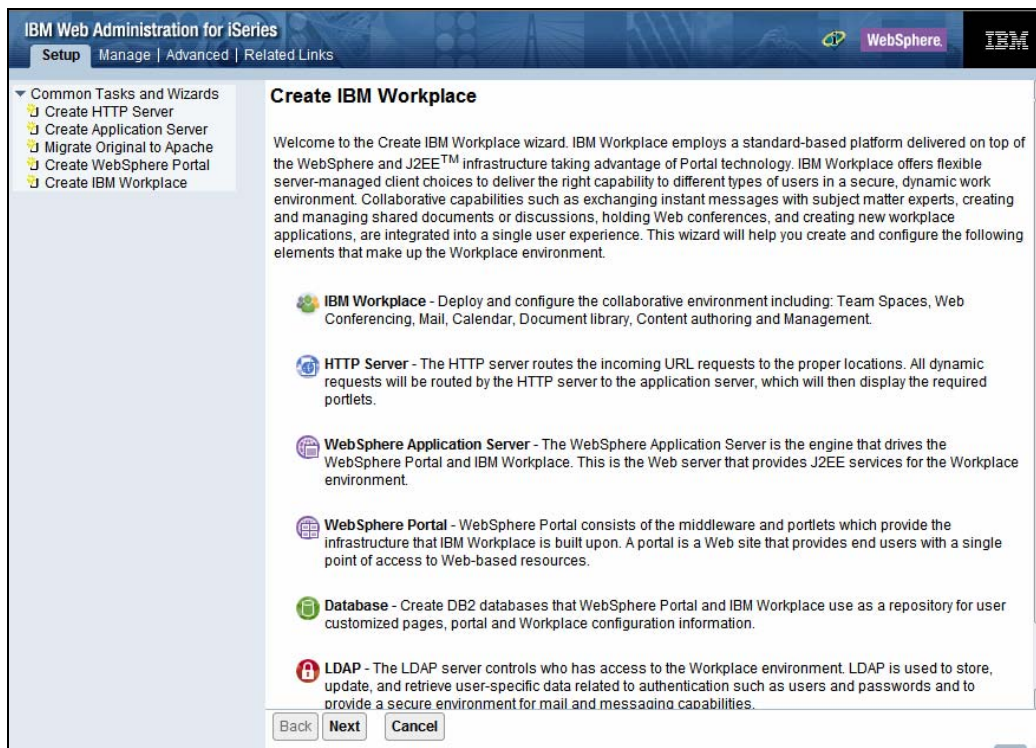


Figure 24: Create IBM Workplace welcome screen

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

- ___ 11. If WCS and WSE are both installed on this system, select which offering you want to use to create this instance (Figure 25).

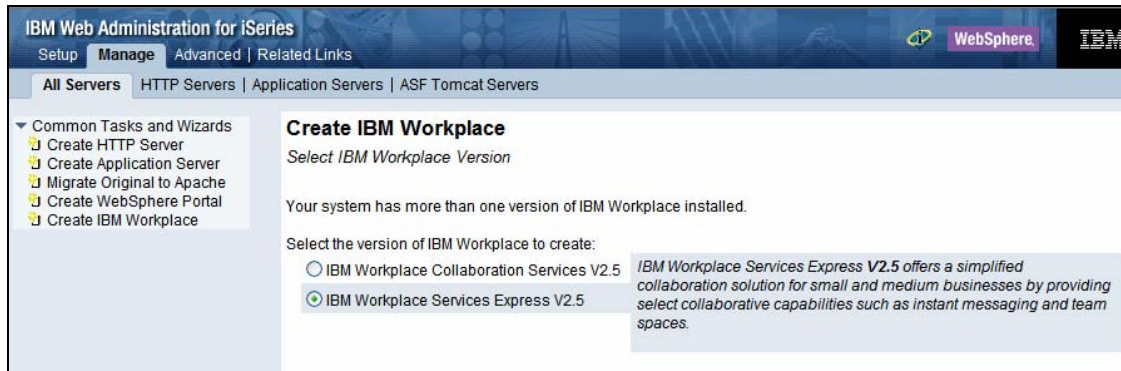


Figure 25: Select IBM Workplace Version screen

- ___ 12. Specify a unique name for the servers that will make up this Workplace environment (Figure 26) and click **Next**.

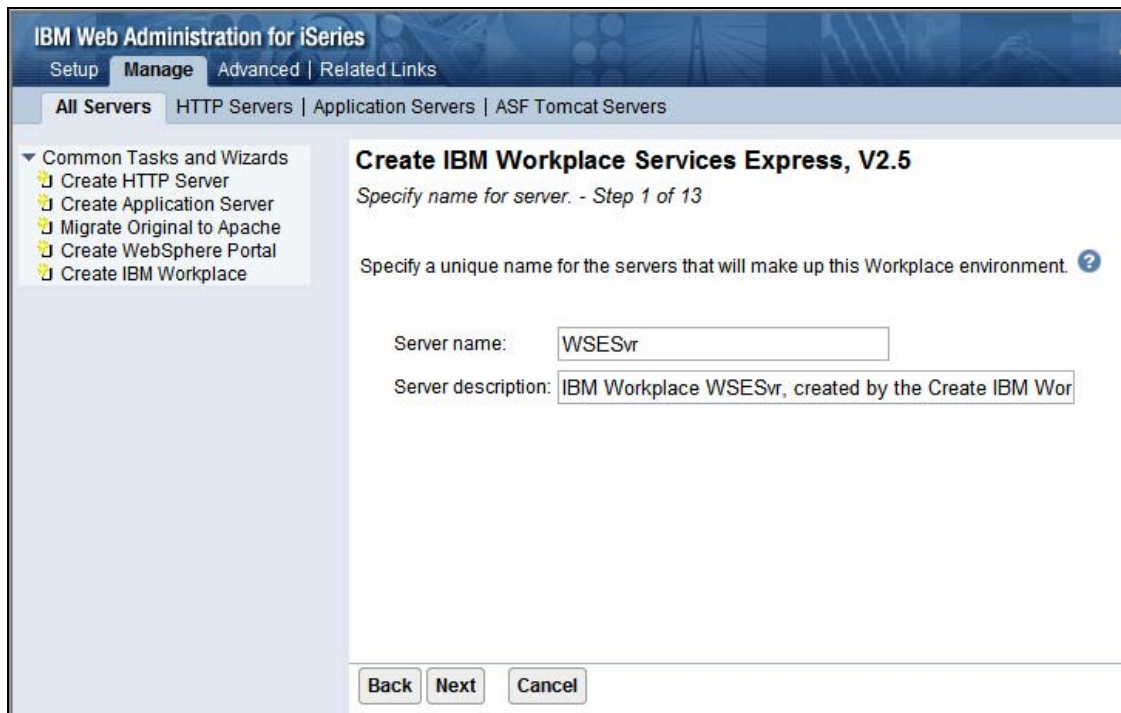


Figure 26: Specify a unique server name screen

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

- ___ 13. Specify the Workplace Collaboration Components (Figure 27) and click **Next**.

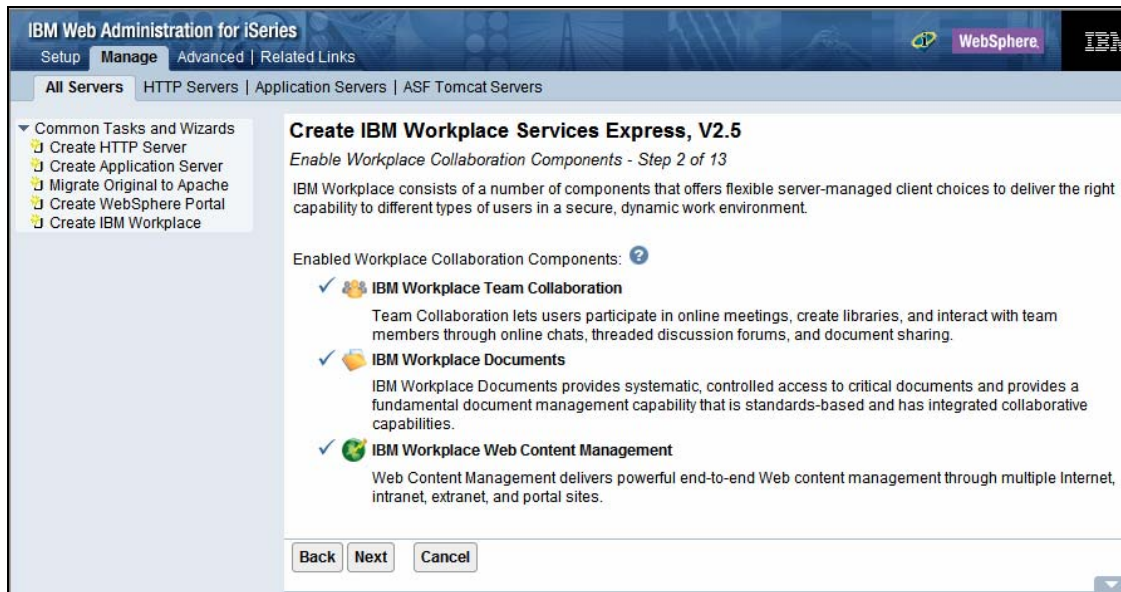


Figure 27: Enable Workplace Collaboration Components screen

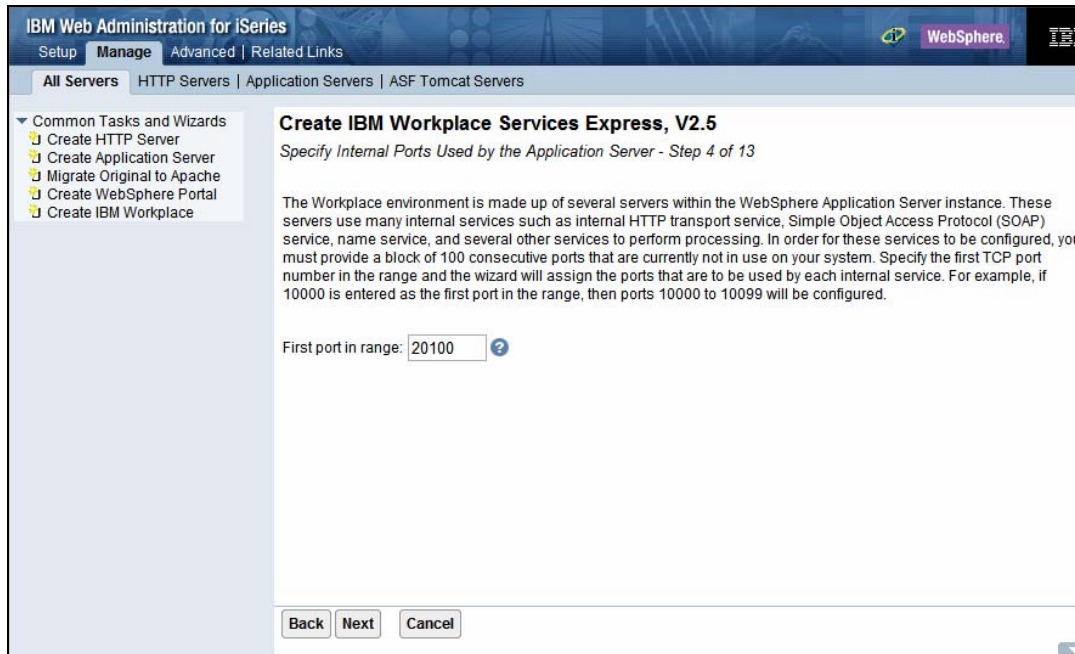
- ___ 14. On the **Specify Host Name** panel, select the host name you prefer for your Workplace environment instance to use (Figure 28) and click **Next**.



Figure 28: Specify Host Name for Workplace Environment screen

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

- ___ 15. Workplace Services Express uses a block of 100 consecutive ports. Specify the first port in the port range the Workplace environment will use (Figure 29) and click **Next**.



IBM Web Administration for iSeries

Setup **Manage** Advanced | Related Links

All Servers HTTP Servers | Application Servers | ASF Tomcat Servers

Common Tasks and Wizards

- Create HTTP Server
- Create Application Server
- Migrate Original to Apache
- Create WebSphere Portal
- Create IBM Workplace

Create IBM Workplace Services Express, V2.5

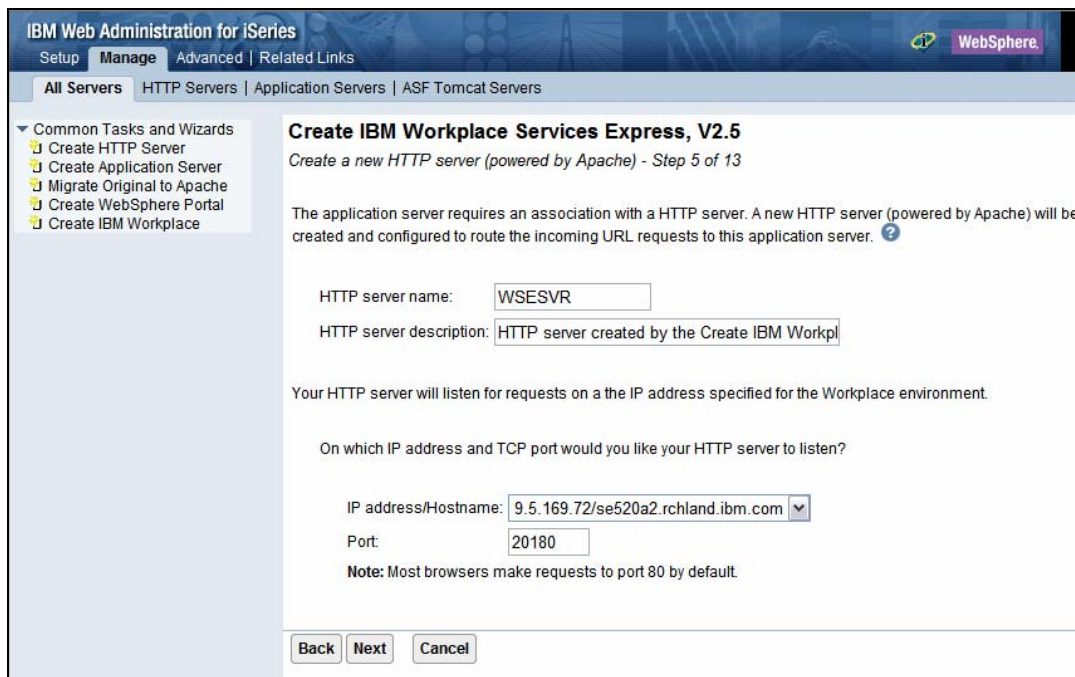
Specify Internal Ports Used by the Application Server - Step 4 of 13

The Workplace environment is made up of several servers within the WebSphere Application Server instance. These servers use many internal services such as internal HTTP transport service, Simple Object Access Protocol (SOAP) service, name service, and several other services to perform processing. In order for these services to be configured, you must provide a block of 100 consecutive ports that are currently not in use on your system. Specify the first TCP port number in the range and the wizard will assign the ports that are to be used by each internal service. For example, if 10000 is entered as the first port in the range, then ports 10000 to 10099 will be configured.

First port in range:

Figure 29: Specify Internal Port range screen

- ___ 16. Enter the HTTP server name and description. Then select the IP address and port values for the HTTP server (Figure 30) and click **Next**.



IBM Web Administration for iSeries

Setup **Manage** Advanced | Related Links

All Servers HTTP Servers | Application Servers | ASF Tomcat Servers

Common Tasks and Wizards

- Create HTTP Server
- Create Application Server
- Migrate Original to Apache
- Create WebSphere Portal
- Create IBM Workplace

Create IBM Workplace Services Express, V2.5

Create a new HTTP server (powered by Apache) - Step 5 of 13

The application server requires an association with a HTTP server. A new HTTP server (powered by Apache) will be created and configured to route the incoming URL requests to this application server.

HTTP server name:

HTTP server description:

Your HTTP server will listen for requests on a the IP address specified for the Workplace environment.

On which IP address and TCP port would you like your HTTP server to listen?

IP address/Hostname:

Port:

Note: Most browsers make requests to port 80 by default.

Figure 30: Create new HTTP server name screen

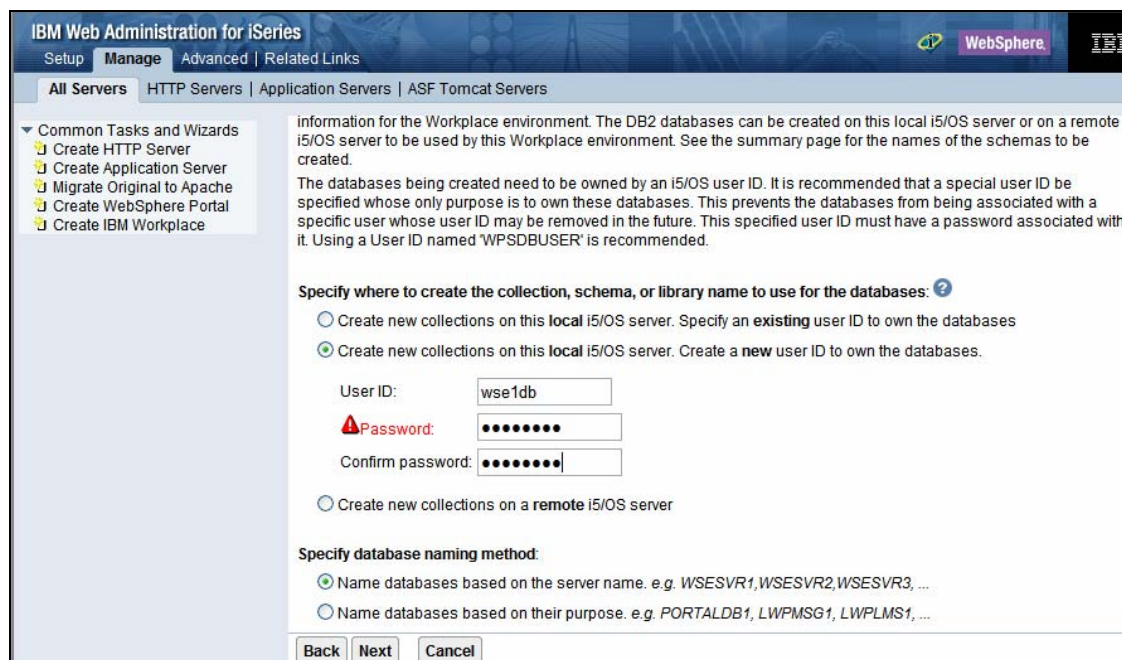
Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

- ___ 17. Next, specify the DB2 UDB information. Select **Create new collections on this local i5/OS server. Create a new user ID to own the databases.**

You can also select to use an existing user ID if you have one, although this is not recommended.

Select **Name databases based on the server name. e.g. WSESVR1, WSESVR2, WSESVR3, ...** (Figure 31) and click **Next**.

NOTE: The databases being created need to be owned by an i5/OS user ID. It is recommended that a special user ID be specified whose purpose is to own the database. This prevents the database from being associated with a specific user whose user ID might be removed in the future. This specified user ID must have a password associated with it. A user ID named wse1db is recommended.



The screenshot shows the 'IBM Web Administration for iSeries' interface. The main content area is titled 'information for the Workplace environment. The DB2 databases can be created on this local i5/OS server or on a remote i5/OS server to be used by this Workplace environment. See the summary page for the names of the schemas to be created. The databases being created need to be owned by an i5/OS user ID. It is recommended that a special user ID be specified whose only purpose is to own these databases. This prevents the databases from being associated with a specific user whose user ID may be removed in the future. This specified user ID must have a password associated with it. Using a User ID named 'WPSDBUSER' is recommended.'

Specify where to create the collection, schema, or library name to use for the databases:

- Create new collections on this local i5/OS server. Specify an existing user ID to own the databases
- Create new collections on this local i5/OS server. Create a new user ID to own the databases.
- Create new collections on a remote i5/OS server

User ID:

Password:

Confirm password:

Specify database naming method:

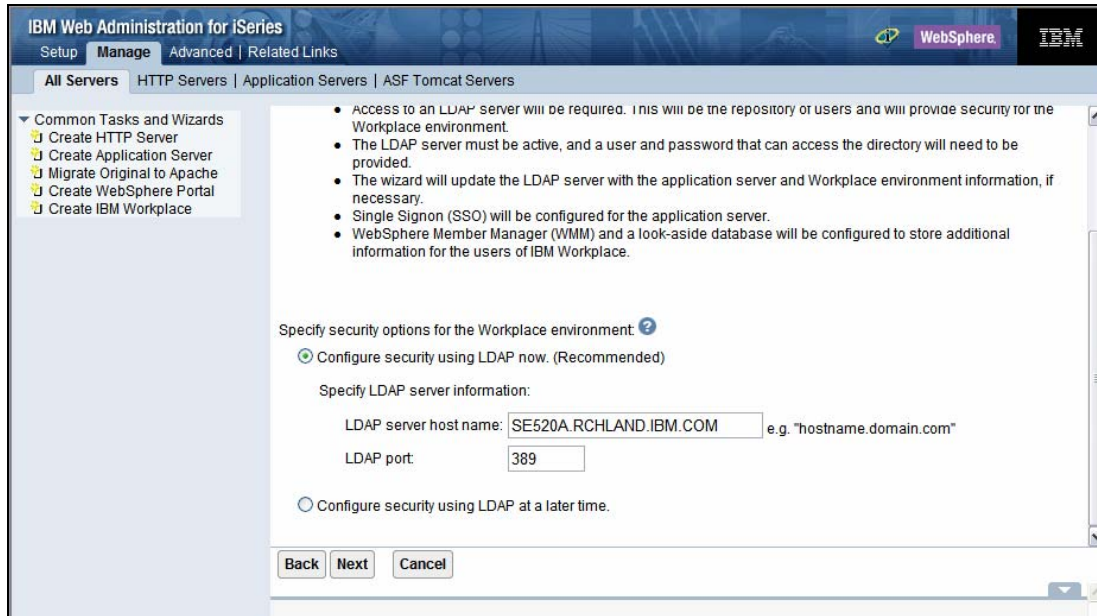
- Name databases based on the server name. e.g. WSESVR1, WSESVR2, WSESVR3, ...
- Name databases based on their purpose. e.g. PORTALDB1, LWPMSG1, LWPLMS1, ...

Buttons: Back, Next, Cancel

Figure 31: Specify DB2 UDB information

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

18. Select the security setting. Leave the default **Configure security using LDAP now. (Recommended)** selected and enter the host name and port for the Lightweight Directory Access Protocol (LDAP) server you plan to use to secure this Workplace instance (Figure 32) and click **Next**.



The screenshot shows the 'IBM Web Administration for iSeries' interface. The 'Manage' tab is active, and the 'All Servers' section is expanded to show 'Common Tasks and Wizards'. The 'Create IBM Workplace' wizard is selected. The main content area displays the following information:

- Access to an LDAP server will be required. This will be the repository of users and will provide security for the Workplace environment.
- The LDAP server must be active, and a user and password that can access the directory will need to be provided.
- The wizard will update the LDAP server with the application server and Workplace environment information, if necessary.
- Single Signon (SSO) will be configured for the application server.
- WebSphere Member Manager (WMM) and a look-aside database will be configured to store additional information for the users of IBM Workplace.

Specify security options for the Workplace environment:

Configure security using LDAP now. (Recommended)

Specify LDAP server information:

LDAP server host name: e.g. "hostname.domain.com"

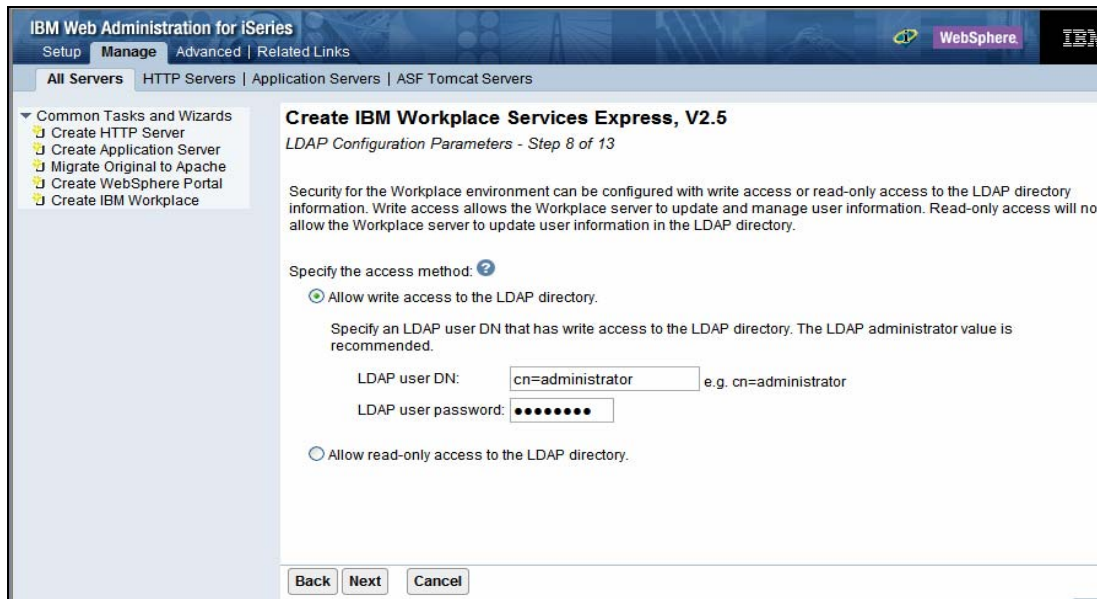
LDAP port:

Configure security using LDAP at a later time.

Buttons: Back, Next, Cancel

Figure 32: IBM Web Administration for iSeries: Create IBM Workplace Services Express V2.5: Enter the hostname and port for the LDAP server

19. Leave the default security setting **Allow write access to the LDAP directory** selected. Enter the LDAP administrator user ID and password (Figure 33) and click **Next**.



The screenshot shows the 'IBM Web Administration for iSeries' interface. The 'Manage' tab is active, and the 'All Servers' section is expanded to show 'Common Tasks and Wizards'. The 'Create IBM Workplace' wizard is selected. The main content area displays the following information:

Create IBM Workplace Services Express, V2.5

LDAP Configuration Parameters - Step 8 of 13

Security for the Workplace environment can be configured with write access or read-only access to the LDAP directory information. Write access allows the Workplace server to update and manage user information. Read-only access will not allow the Workplace server to update user information in the LDAP directory.

Specify the access method:

Allow write access to the LDAP directory.

Specify an LDAP user DN that has write access to the LDAP directory. The LDAP administrator value is recommended.

LDAP user DN: e.g. cn=admin

LDAP user password:

Allow read-only access to the LDAP directory.

Buttons: Back, Next, Cancel

Figure 33: Enter LDAP administrator user ID and password

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

- ___ 20. Enter the location of the users and groups for the Workplace environment in the LDAP directory. You can use the **Browse** button to browse the LDAP directory and select the location through the wizard (Figure 34) and click **Next**.

IBM Web Administration for iSeries
Setup Manage Advanced | Related Links WebSphere IBM

All Servers HTTP Servers | Application Servers | ASF Tomcat Servers

Common Tasks and Wizards
Create HTTP Server
Create Application Server
Migrate Original to Apache
Create WebSphere Portal
Create IBM Workplace

Create IBM Workplace Services Express, V2.5

LDAP Configuration Parameters - Step 9 of 13

IBM Workplace utilizes LDAP to store user information for authentication purposes. Below is where the users and groups for the Workplace environment will reside in your LDAP directory.

Information describing user entries ?

Parent DN: Browse

Object class:

Naming attribute:

Information describing the administrative group entry

Parent DN: Browse

Object class:

Naming attribute:

Member attribute: uniqueMember

Back Next Cancel

Figure 34: Enter LDAP user and group locations

- ___ 21. Leave the default administrative group name and administrator user ID (wpsadmin in this example). Enter in the administrator password (Figure 35) and click **Next**.

IBM Web Administration for iSeries
Setup Manage Advanced | Related Links WebSphere IBM

All Servers HTTP Servers | Application Servers | ASF Tomcat Servers

Common Tasks and Wizards
Create HTTP Server
Create Application Server
Migrate Original to Apache
Create WebSphere Portal
Create IBM Workplace

Create IBM Workplace Services Express, V2.5

LDAP Administrative Group and Administrative User - Step 10 of 13

IBM Workplace requires an administrative group and user entry in the LDAP directory. If the group and user entries do not already exist, the wizard will create them. If the group and user entries already exist, the wizard will validate that they are correct. The wizard will also ensure that the administrator user is added to the administrative group.

Note: The administrator user name specified here is the Workplace administrator, the WebSphere Application Server administrator, and the LDAP authentication user.

Workplace administrative group information: ?

Group name: Browse

Workplace administrator information:

User name: Browse

Password: Important - Keep this for future reference

Confirm password:

Back Next Cancel

Figure 35: Enter administrative group and user information

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

- ___ 22. To set up single signon (SSO), select **Include other Web servers in your SSO environment**. Leave the default of **Limit SSO domain to this Web Server's hostname** and click **Next** (Figure 36).



Figure 36: Include other Web servers in your SSO environment

- ___ 23. Review the summary information. You can use the **Edit** button to make changes to any of the values you have entered so far. You can use the **Printable Summary** button to get a paged view of this information that can then be printed off (Figure 37) and click **Finish**. (**Note:** It might take up to five hours to configure a Workplace instance.)

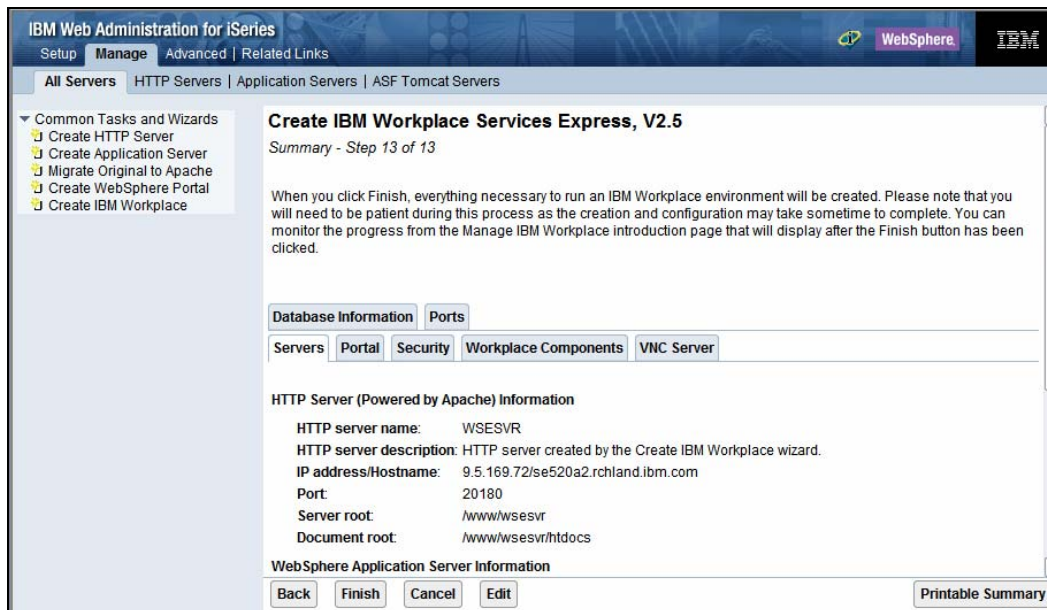


Figure 37: Summary

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

__ 24. Once the installation starts, you will get a progress screen (Figure 38).

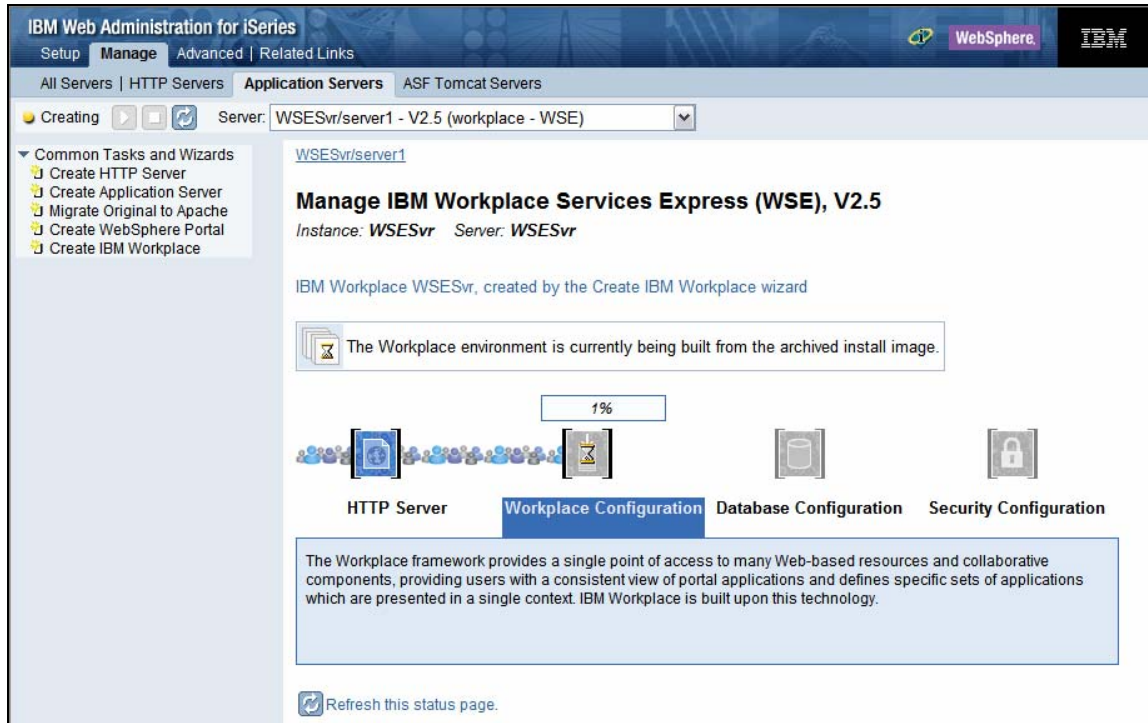


Figure 38: Progress screen

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

25. After the wizard is finished, click the URL circled in red to launch the Workplace Services Express server instance in a browser (Figure 39). (**Note:** Click the link circled in blue to view the logs for each process in the creation of the Workplace Services Express instance. If there were errors, you can view the logs by following these links.)

The screenshot displays the IBM Web Administration for iSeries interface. The main content area is titled "Manage IBM Workplace Services Express (WSE), V2.5" and shows the instance "WSESvr/server1 - V2.5 (workplace - WSE)". A message box states: "The WebSphere Application Server instance WSESvr has been configured as an IBM Workplace environment. To manage all aspects of this server click on the 'Launch Administrative Console' and sign in with an authorized user. To access your Workplace environment click on the following URL: <http://se520a2.rchland.ibm.com/lwp/workplace>". The URL is circled in red. Below this, there are navigation tabs for "HTTP Server", "Workplace Configuration", "Database Configuration", and "Security Configuration". A text box explains the Workplace framework and includes a link: "[View the detailed list of tasks for the Workplace Configuration step.](#)", which is circled in blue. A "Refresh this status page." button is located at the bottom.

Figure 39: Launch server instance

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

Fix for external HTTP server

There is a known issue with the configuration of the external HTTP server where you might not be able to access the Workplace Services Express instance using the external HTTP port. If this is the case, check the following:

- ___ 1. In the IBM Web Administration for iSeries graphical user interface (GUI), click **Application Servers**.
- ___ 2. Select your Workplace Services Express WebSphere_Portal server instance and click the **View HTTP Servers** link.

If the **Associated Virtual Host** field is blank (Figure 40), continue following these instructions.

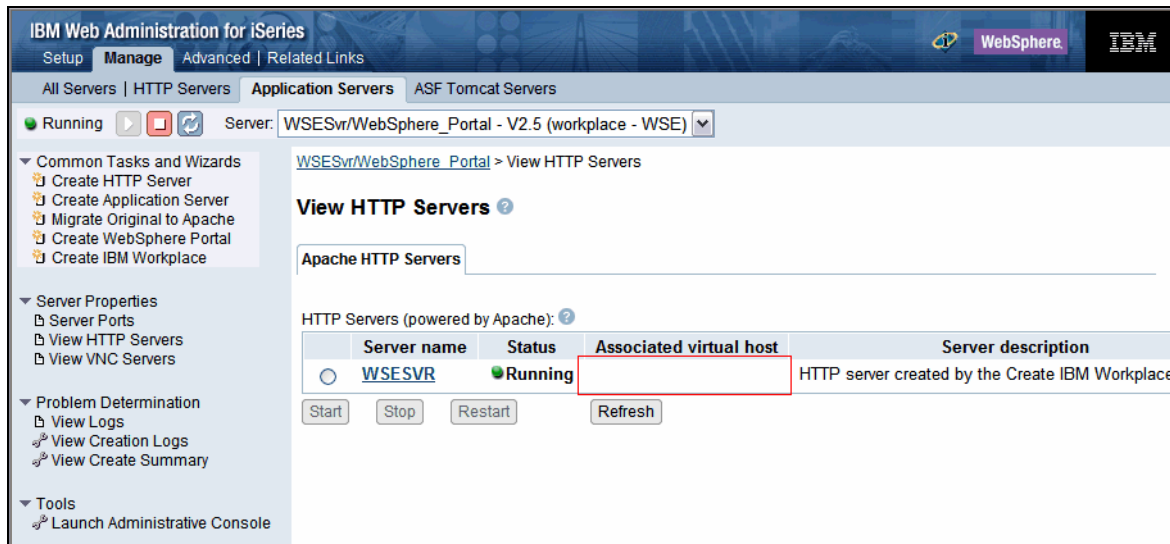


Figure 40: Associated virtual host field

- ___ 3. Click the Launch Administrative Console at the bottom left of the screen in Figure 40.
- ___ 4. Log into the administrative console using user ID wpsadmin and password wpsadmin (or whatever you set for the portal administrative user ID and password).

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

- ___ 5. Click **Environment > Virtual Hosts** and click **default_host** (Figure 41).

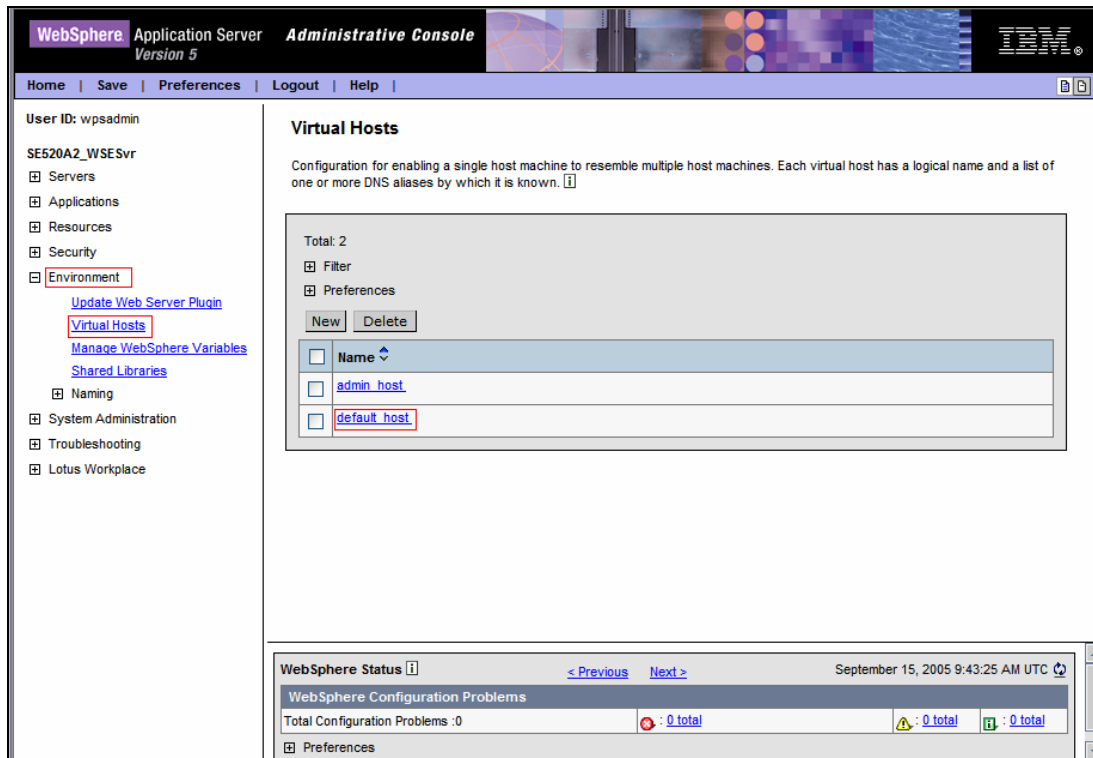


Figure 41: Virtual Hosts screen

- ___ 6. Under **Additional Properties** click **Host Aliases** (Figure 42).

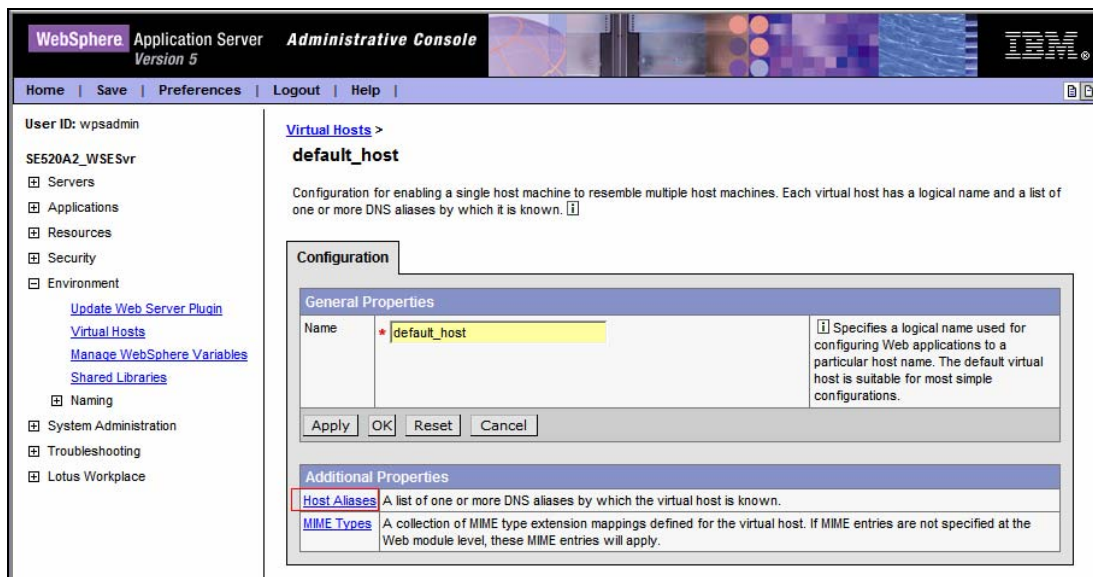


Figure 42: Host Aliases

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

7. Edit the port 80 entry (Figure 43) by changing it to the port of the external HTTP server you entered into the configuration wizard; or leave the port 80 entry and add your external HTTP port (Figure 44).

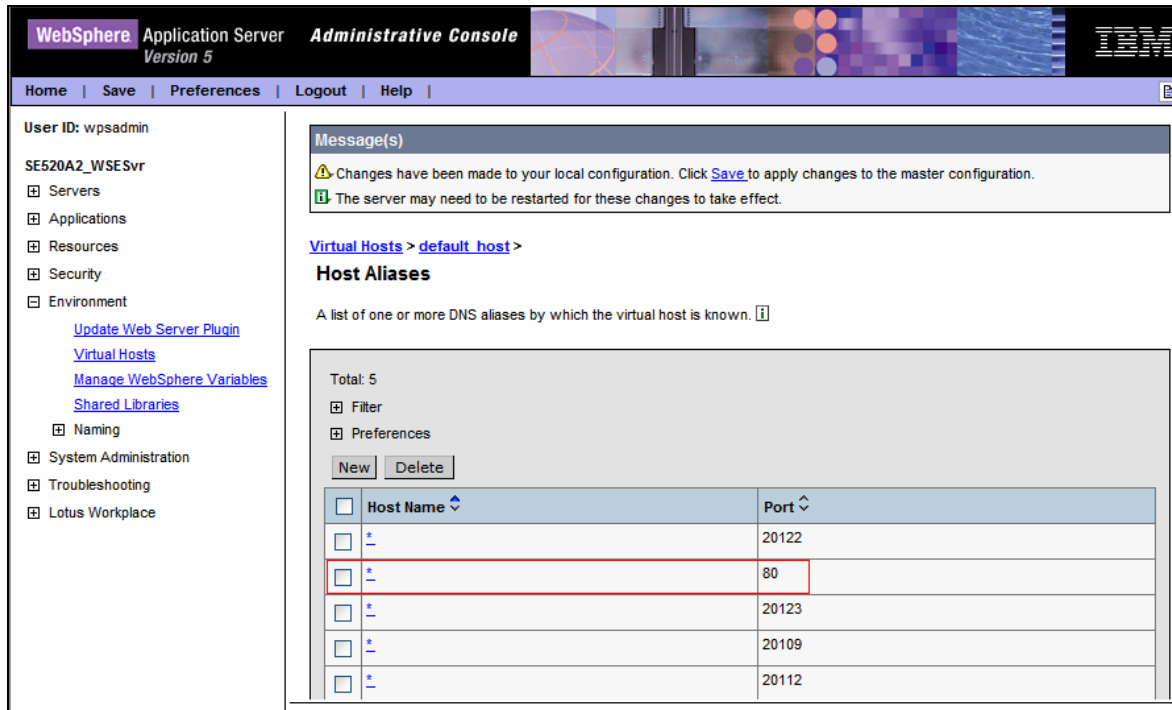


Figure 43: Edit port 80 entry

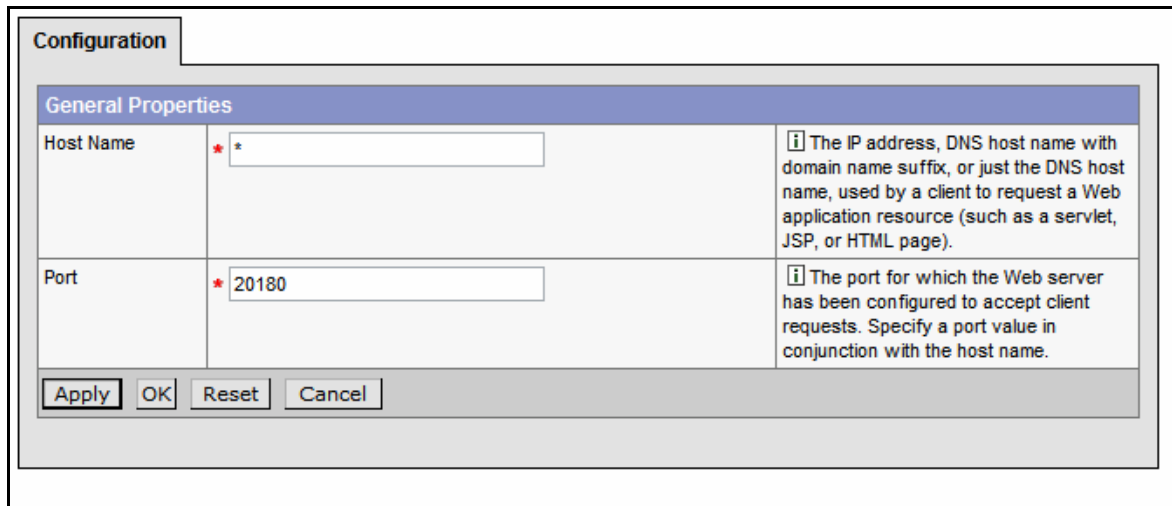


Figure 44: Add external HTTP port

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

- ___ 8. Click **Save** to apply the changes (Figure 45).

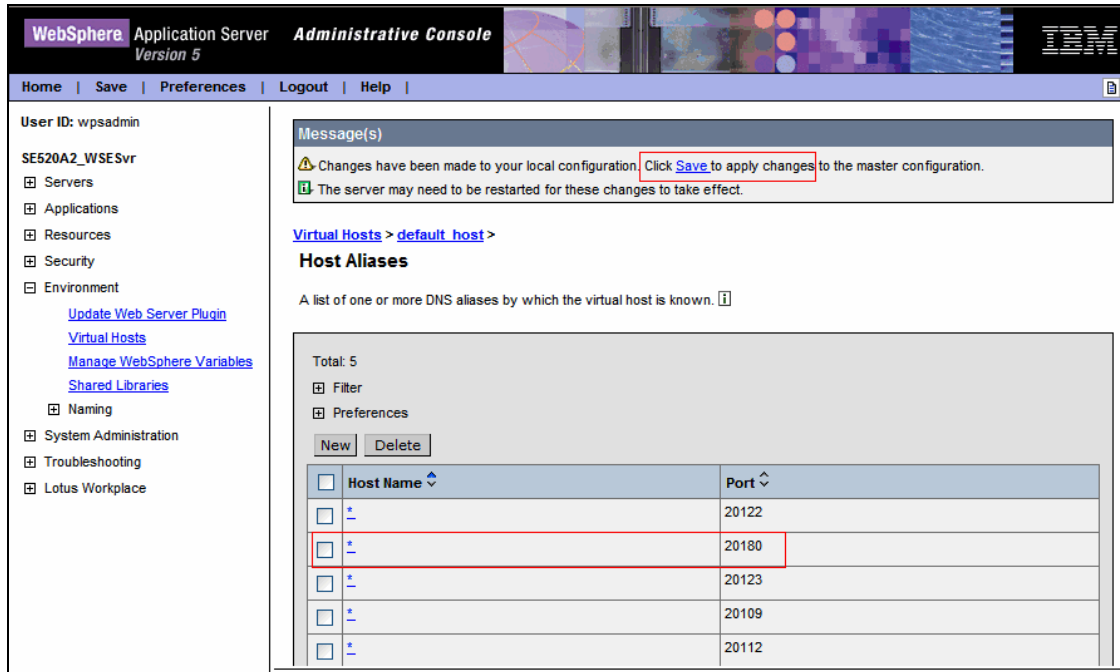


Figure 45: Apply changes

- ___ 9. Click **Environment > Update Web Server Plugin**.
___ 10. Click the **OK** button to regenerate the Web server plugin configuration (Figure 46).

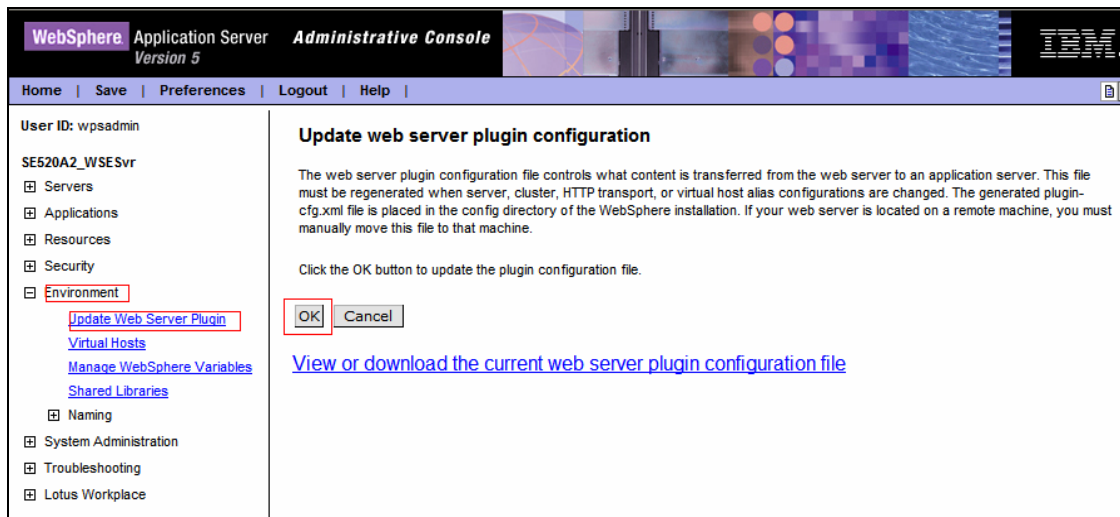


Figure 46: Regenerate Web server plugin configuration

- ___ 11. Log out of the administrative console and restart the Workplace Services Express instance.

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

- ___ 12. You will now see the **Associated virtual host** field filled in with the value **default_host** (Figure 47).



The screenshot displays the IBM Web Administration for iSeries interface. The main content area shows the 'View HTTP Servers' page for the 'WSESvr/WebSphere_Portal' server. A table lists the HTTP servers, with the 'WSESVR' server highlighted. The 'Associated virtual host' column for this server is highlighted with a red box and contains the value 'default_host'. The table has the following structure:

Server name	Status	Associated virtual host	Server description
WSESVR	Running	default_host	HTTP server created by the Create IBM Workplace

Figure 47: Fill in the Associated virtual host field

Summary

In this lab, you have learned how to install and configure Workplace Services Express V2.5 on an iSeries system. You can find the latest information on Workplace Services Express V2.5 at the IBM Workplace Services Express Information Center Web site listed in the **Additional information** section.

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

Additional information

These Web sites provide useful references to supplement the information contained within this lab.

- IBM Software Access Catalog
ibm.com/developerworks/workplace/downloads/more.html

- Ordering iSeries PTFs
www-912.ibm.com/supporthome.nsf/document/10000069

- IBM PTF Fix Central for group PTF downloads
ibm.com/eserver/support/fixes/fcgui.jsp

- IBM PTF Web site
ibm.com/servers/eserver/support/series/fixes/

IBM Workplace Managed Client™ V2.5

www-142.ibm.com/software/workplace/products/product5.nsf/wdocs/workplaceclienttech

- IBM Workplace Services Express information center
publib.boulder.ibm.com/infocenter/wseic/v2r5/index.jsp

- IBM Software Mall
ibm.com/software
Download 5799PTL (iSeries Tools for Developers PRPQ) product from this site.

- IBM Workplace technical resources
ibm.com/developerworks/workplace

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

Appendix A: LDAP configuration

To set up a new branch in the LDAP directory, follow the instructions below. This setup is only required once for each Workplace server host name.

- ___1. Start the iSeries Operations Navigator and connect to the host that contains the LDAP server.
- ___2. Click **Network > Servers > TCP/IP**.
- ___3. Right-click **IBM Directory Server** and then click **Properties**.
- ___4. Click the **Databases/Suffixes** tab then fill in the new suffix (for example: o=LWP_<my_host_name>) and click **Add**, then **OK**.

Note: If you are using V5R3 or later of iSeries Operations Navigator, you do not have to restart the server for new suffix to take effect.

To load entries into your new LDAP branch you can create an .ldif file and import the file into the LDAP server:

- ___1. Create a new text .ldif file (for example: Lwpusers.ldif).
- ___2. Copy, paste, and modify the following entries to match your environment:

```
# NOTE: you must edit this file before importing it
```

```
dn: o=LWP_MY_HOST_NAME
objectclass: organization
objectclass: top
```

```
dn: cn=users,o=LWP_MY_HOST_NAME
objectclass: container
objectclass: top
cn: users
```

```
dn: cn=groups,o=LWP_MY_HOST_NAME
objectclass: top
objectclass: container
cn: groups
```

```
#####
#
#                               WPSADMIN
#
#####
```

```
dn: uid=wpsadmin,cn=users,o=LWP_MY_HOST_NAME
objectclass: organizationalPerson
objectclass: person
objectclass: top
objectclass: inetOrgPerson
uid: wpsadmin
userpassword: wpsadmin
sn: admin
givenName: wps
cn: wps admin
mail: wpsadmin@MY_HOST_NAME
```

```
#####
#
```

**Installing and configuring IBM Workplace Services Express Version 2.5
on IBM iSeries systems**

```
#                               WPSBIND
#
#####

dn: uid=wpsbind,cn=users,o=LWP_MY_HOST_NAME
objectclass: top
objectclass: person
objectclass: organizationalPerson
objectclass: inetOrgPerson
uid: wpsbind
userpassword: wpsbind
sn: bind
givenName: wps
cn: wps bind

#####
#
#                               WPSADMINS
#
#####

dn: cn=wpsadmins,cn=groups,o=LWP_MY_HOST_NAME
objectclass: groupOfUniqueNames
objectclass: top
uniquemember: uid=wpsadmin,cn=users,o=LWP_MY_HOST_NAME
cn: wpsadmins

#####
#
#                               LWP USERS
#
#####

dn: uid=user1,cn=users,o=LWP_MY_HOST_NAME
objectclass: organizationalPerson
objectclass: person
objectclass: top
objectclass: inetOrgPerson
uid: user1
userpassword: password
sn: user1
givenName: LWP
cn: LWP Users1
mail: user1@MY_HOST_NAME

dn: uid=user2,cn=users,o=LWP_MY_HOST_NAME
objectclass: organizationalPerson
objectclass: person
objectclass: top
objectclass: inetOrgPerson
uid: user2
userpassword: password
sn: user2
givenName: LWP
cn: LWP Users2
mail: user2@MY_HOST_NAME
```

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

- ___5. Copy this file to any directory on the integrated file system (IFS).
- ___6. Stop the LDAP server by right-clicking **IBM Directory Server** and then click **Stop**.
- ___7. Right-click **IBM Directory Server** and click **Tools > Import File** and select the .ldif file you copied to the iSeries system. This will create all the users and groups in the branch specified in the .ldif file.
- ___8. Right-click **IBM Directory Server** and then click **Start**.

To verify the LDAP server and directory are working correctly:

- ___1. Log into the iSeries system.
- ___2. Start Qshell Interpreter by running the **strqsh** command.
- ___3. Run the following command edited for your environment:
ldapsearch -h <hostname> -b <base dn for search> "uid=wpsadmin"

That is:

```
> ldapsearch -h se520a.rchland.ibm.com -b o=lwp_se520a "uid=wpsadmin"
uid=wpsadmin,cn=users,o=LWP_se520a
objectclass=organizationalPerson
objectclass=person
objectclass=top
objectclass=inetOrgPerson
uid=wpsadmin
sn=admin
givenName=wps
cn=wps admin
mail=wpsadmin@se520a.rchland.ibm.com
$
```

Installing and configuring IBM Workplace Services Express Version 2.5 on IBM iSeries systems

Trademarks

© IBM Corporation 1994-2005. All rights reserved.

References in this document to IBM products or services do not imply that IBM intends to make them available in every country.

The following terms are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both: IBM, the IBM logo, eServer, iSeries, Workplace, WebSphere, i5/OS, DB2 Universal Database, DB2, Workplace Managed Client, Lotus, and ibm.com.

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

Other company, product, or service names may be trademarks or service marks of others.