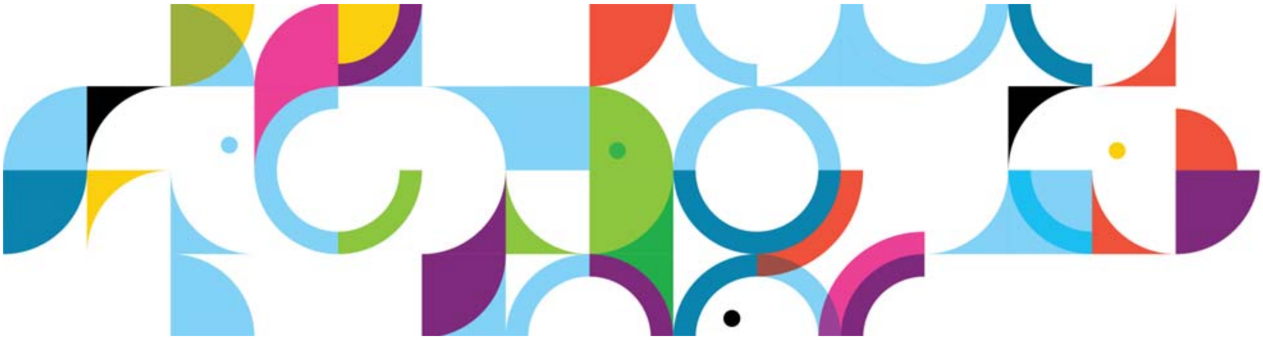
IBM Connections 4 Public Deployment Scenarios

Deployment Scenarios

ERC 1.0



Trademarks

IBM® and the IBM logo are registered trademarks of International Business Machines Corporation.

The following are trademarks of International Business Machines Corporation, registered in many jurisdictions worldwide:

AIX®
Cognos®
DB™
DB2 Universal Database™
DB2®
Domino®
Lotus®
LotusScript®
Notes®
Power®
Quickr®
Rational®
Sametime®
System z®
Tivoli®
WebSphere®
400®

Intel and Xeon are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

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

UNIX is a registered trademark of The Open Group in the United States and other countries.

Java™ and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

Other product and service names might be trademarks of IBM or other companies.

January 2013 edition

The information contained in this document has not been submitted to any formal IBM test and is distributed on an "as is" basis without any warranty either express or implied. The use of this information or the implementation of any of these techniques is a customer responsibility and depends on the customer's ability to evaluate and integrate them into the customer's operational environment. While each item may have been reviewed by IBM for accuracy in a specific situation, there is no guarantee that the same or similar results will result elsewhere. Customers attempting to adapt these techniques to their own environments do so at their own risk.

IBM Connections 4: PDS documentation with snapshot: AIX and proxy

About the author

Rong Sun is a software engineer with IBM Collaboration Solutions.

Overview

This scenario explains how to deploy IBM® Connections 4.0 in a network deployment that involves multiple computers with one IBM WebSphere cell that contains two nodes, both of which host IBM® Connections 4.0. This scenario is typical of an enterprise-level production deployment. This article is an end-to-end guide to deploy this type of configuration with all prerequisites. You can also follow this guide in situations in which more than two nodes are being deployed.

- The proxy server use IBM edge server.
- The `dm&ihs.company.com` computer shares Deployment Manager and IBM HTTP Server.
- The database server hosts all application databases in a single instance.
- The Topology type is Medium Deployment.
- Cognos/Metrics is installed but not deployed.

Systems and naming conventions that are used in this document

Computer name	Applications	Version#	OS	RAM	VM or HW
dm&ihs.company.com	Deployment Manager / HTTP	7.0.0.21	AIX6.1 64 Bit	4G	HW
node1.company.com	Node1	7.0.0.21	AIX6.1 64 Bit	16G	HW
node2.company.com	Node2	7.0.0.21	AIX6.1 64 Bit	16G	HW
db2.company.com	RDBMS Tivoli Directory Integrator	DB2v9.7.4 Tivoli Directory Integrator V7.0 fp5	AIX6.1 64 Bit	16G	HW
ldap_edir.company.com	eDir 8.8.5			2G	VM
proxy.company.com	edge cp		Win2003	1G	VM

Contents

1. Topology

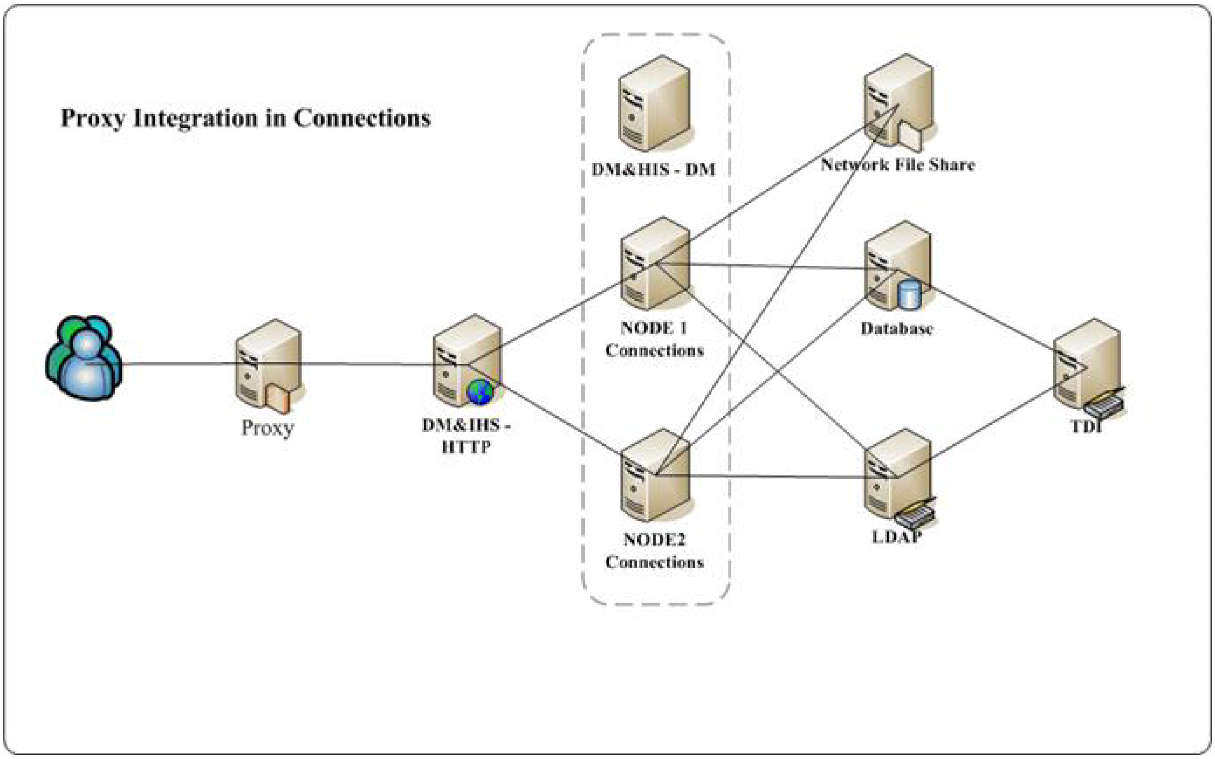


Figure 1. Topology: Proxy Integration in Connections

2. Pre-installation

Install base software and apply fix packs and interim fixes

Install WebSphere Application Server

Install WebSphere Application Server 7.0 as Deployment Manager and Nodes, follow the normal steps for WebSphere Application Server installation.

Install Fixpack for WebSphere Application Server

Install WebSphere Update installer in the normal way, and use the update installer to apply the WebSphere Application Server 70021 fix pack. (See snapshot of installation in Install fix pack for IBM HTTP Server.)

Then, apply the needed interim fixes for Connections 4.0 to both Deployment Manager and Node WebSphere Application Server:

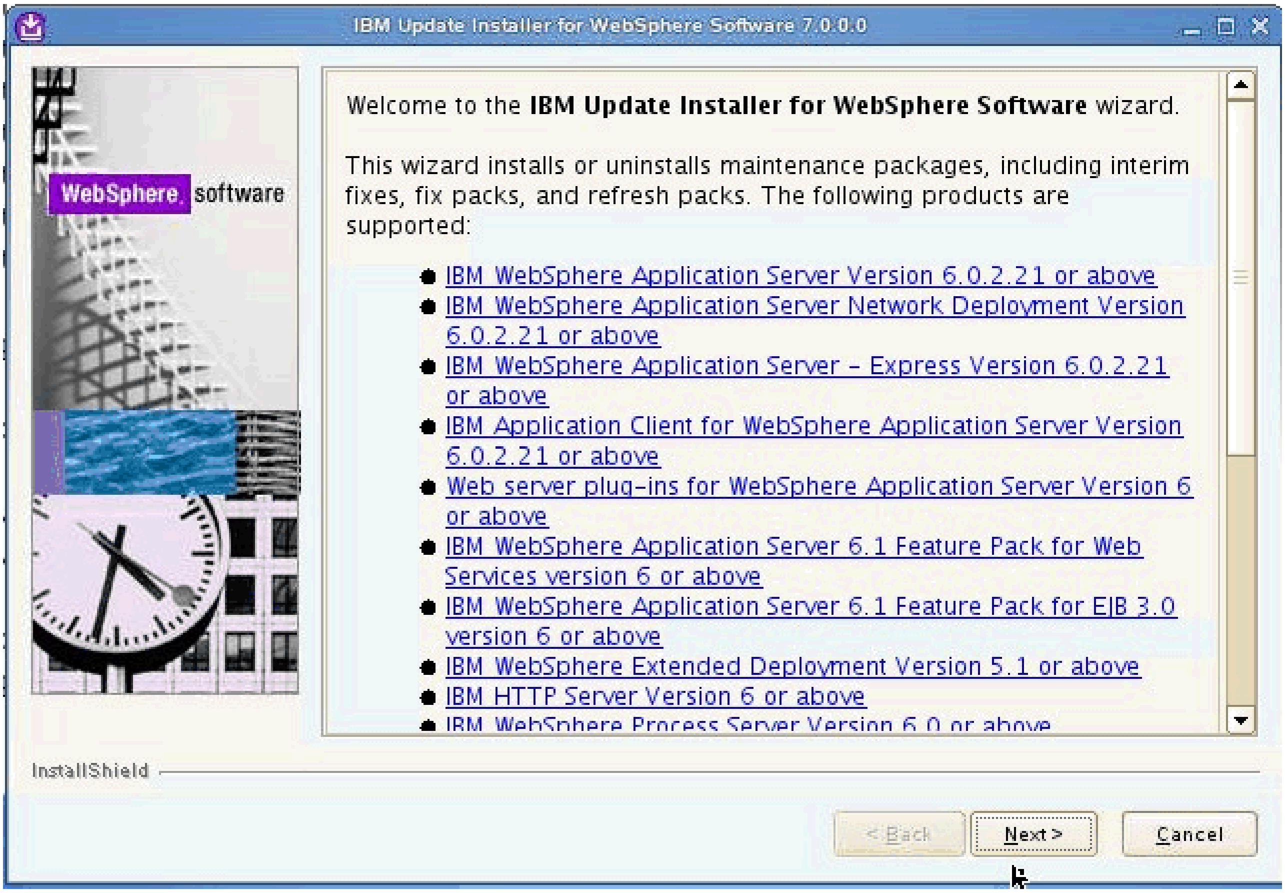
WebSphere Application Server Required Fixes for 7.0.0.21:

1. PM53930
2. PM56596
3. PM60895
4. PM51981
5. PM65486

Information

For further information, see:
`http://publib.boulder.ibm.com/infocenter/prodguid/v1r0/clarity-reports/report/html/prereqsForProduct?deliverableId=1284667107599`

__ 1. Open the IBM Update Installer for WebSphere Software wizard and click **Next.**



IBM Update Installer for WebSphere Software 7.0.0.0

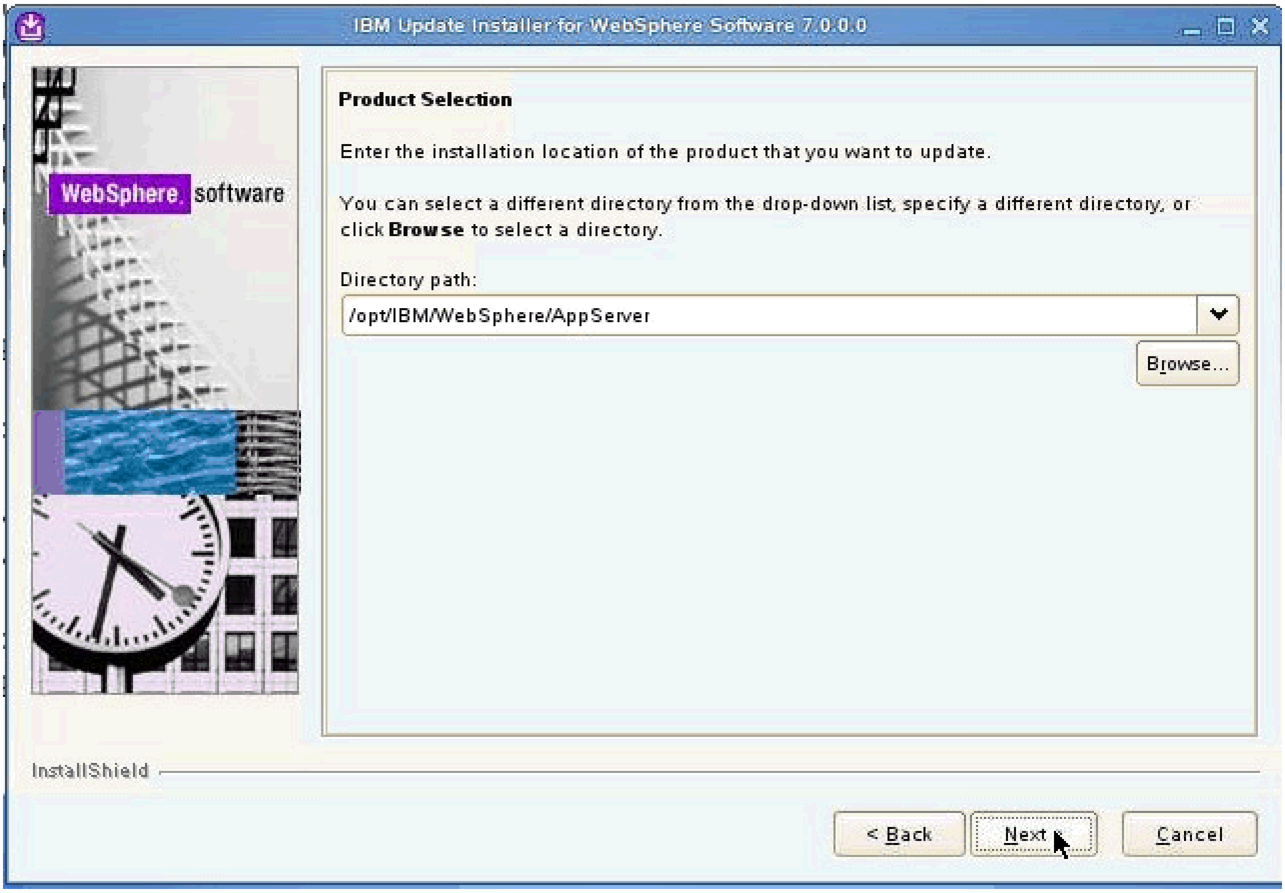
Welcome to the **IBM Update Installer for WebSphere Software** wizard.

This wizard installs or uninstalls maintenance packages, including interim fixes, fix packs, and refresh packs. The following products are supported:

- IBM WebSphere Application Server Version 6.0.2.21 or above
- IBM WebSphere Application Server Network Deployment Version 6.0.2.21 or above
- IBM WebSphere Application Server - Express Version 6.0.2.21 or above
- IBM Application Client for WebSphere Application Server Version 6.0.2.21 or above
- Web server plug-ins for WebSphere Application Server Version 6 or above
- IBM WebSphere Application Server 6.1 Feature Pack for Web Services version 6 or above
- IBM WebSphere Application Server 6.1 Feature Pack for EJB 3.0 version 6 or above
- IBM WebSphere Extended Deployment Version 5.1 or above
- IBM HTTP Server Version 6 or above
- IBM WebSphere Process Server Version 6.0 or above

Figure 2. IBM Update Installer for WebSphere Software wizard: Welcome screen

__ 2. Enter the installation location for the product you want to install and click **Next.**



Product Selection

Enter the installation location of the product that you want to update.

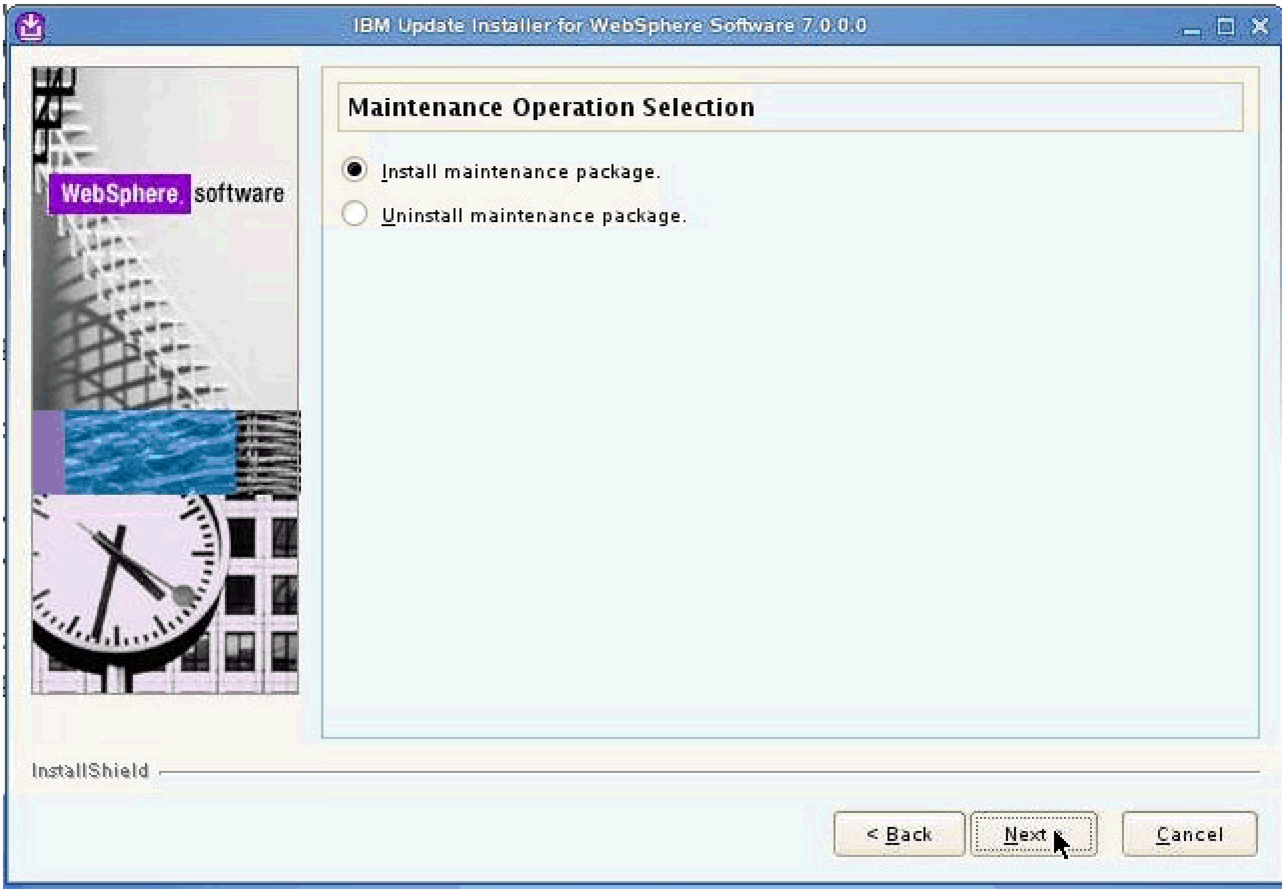
You can select a different directory from the drop-down list, specify a different directory, or click **Browse** to select a directory.

Directory path:

/opt/IBM/WebSphere/AppServer

Figure 3. IBM Update Installer for WebSphere Software wizard: Installation location screen

__ 3. On the Maintenance Operation Selection screen, select the option "Install maintenance package" and click **Next.**



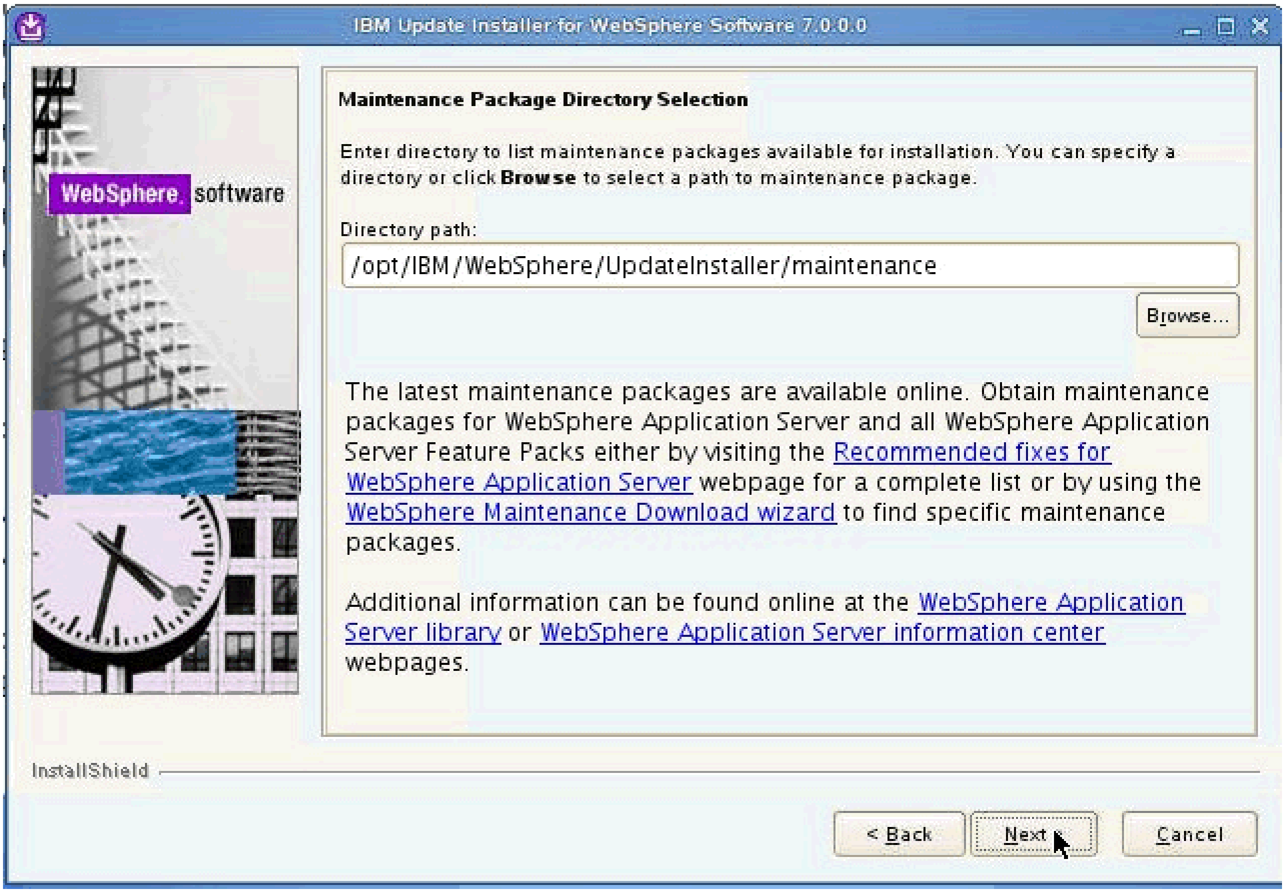
Maintenance Operation Selection

● Install maintenance package.

○ Uninstall maintenance package.

Figure 4. IBM Update Installer for WebSphere Software wizard: Maintenance Operation Selection screen

__ 4. Select the package directory and click **Next**.



Maintenance Package Directory Selection

Enter directory to list maintenance packages available for installation. You can specify a directory or click **Browse** to select a path to maintenance package.

Directory path:

/opt/IBM/WebSphere/UpdateInstaller/maintenance

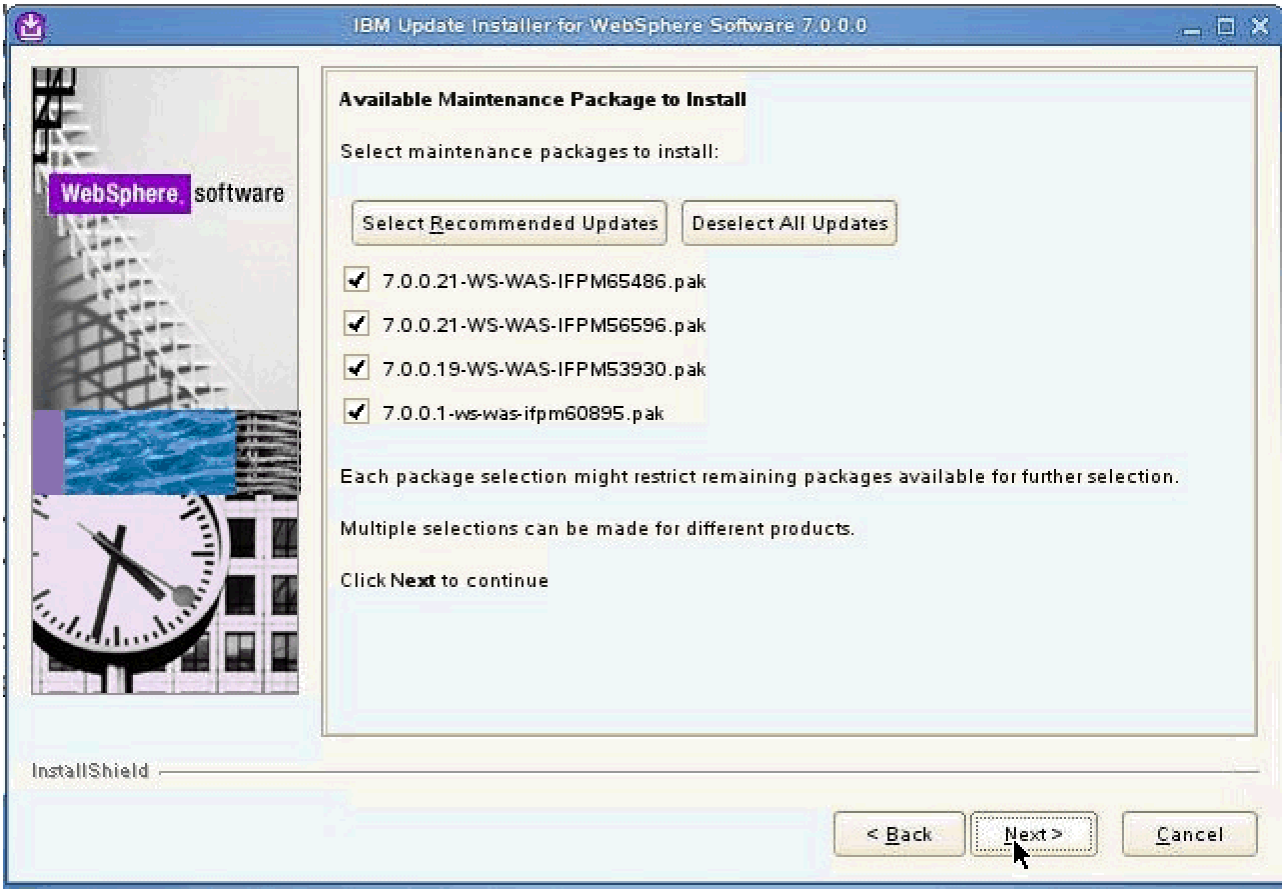
Browse...

The latest maintenance packages are available online. Obtain maintenance packages for WebSphere Application Server and all WebSphere Application Server Feature Packs either by visiting the Recommended fixes for WebSphere Application Server webpage for a complete list or by using the WebSphere Maintenance Download wizard to find specific maintenance packages.

Additional information can be found online at the WebSphere Application Server library or WebSphere Application Server information center webpages.

Figure 5. IBM Update Installer for WebSphere Software wizard: Maintenance Package Directory Selection screen

__ 5. Select the packages to install and click **Next**.



IBM Update Installer for WebSphere Software 7.0.0.0
WebSphere software

Available Maintenance Package to Install

Select maintenance packages to install:

Select Recommended Updates
Deselect All Updates

☑ 7.0.0.21-WS-WAS-IFPM65486.pak

☑ 7.0.0.21-WS-WAS-IFPM56596.pak

☑ 7.0.0.19-WS-WAS-IFPM53930.pak

☑ 7.0.0.1-ws-was-ifpm60895.pak

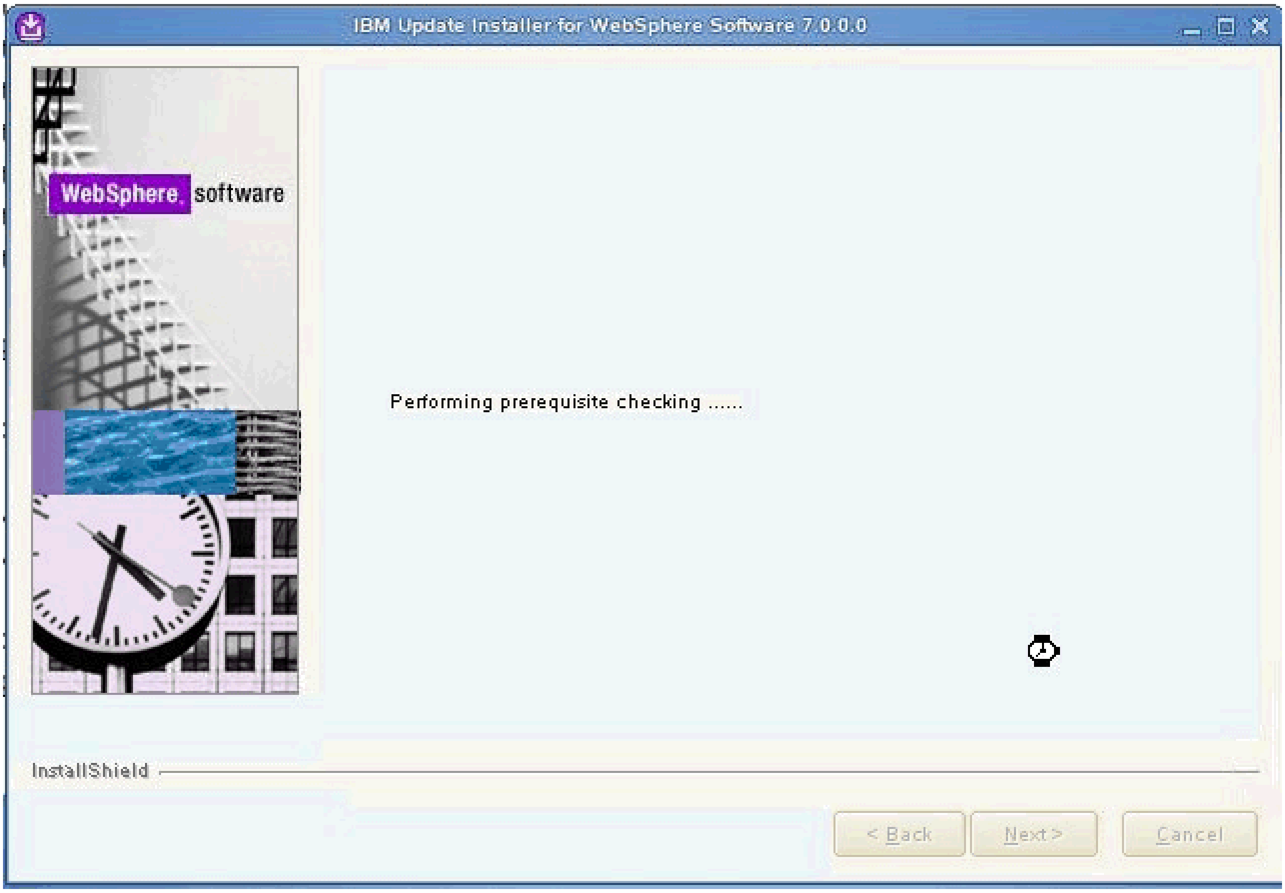
Each package selection might restrict remaining packages available for further selection.

Multiple selections can be made for different products.

Click **Next** to continue

Figure 6. IBM Update Installer for WebSphere Software wizard: Available Maintenance Package to Install screen

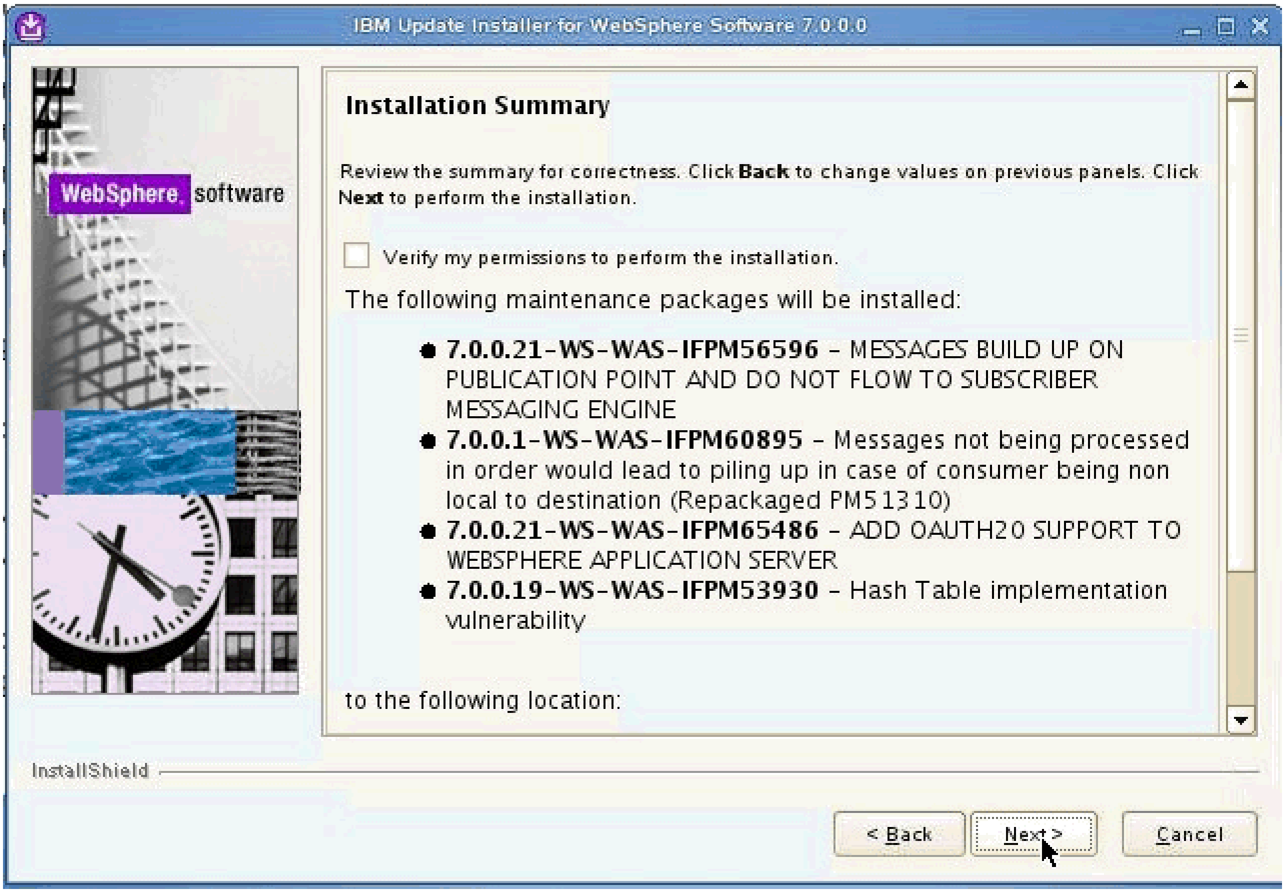
The installation wizard checks for prerequisites.


IBM Update Installer for WebSphere Software 7.0.0.0

Performing prerequisite checking ......

Figure 7. IBM Update Installer for WebSphere Software wizard: Prerequisite checking

__ 6. Verify the installation summary and click **Next**.



Installation Summary

Review the summary for correctness. Click **Back** to change values on previous panels. Click **Next** to perform the installation.

□ Verify my permissions to perform the installation.

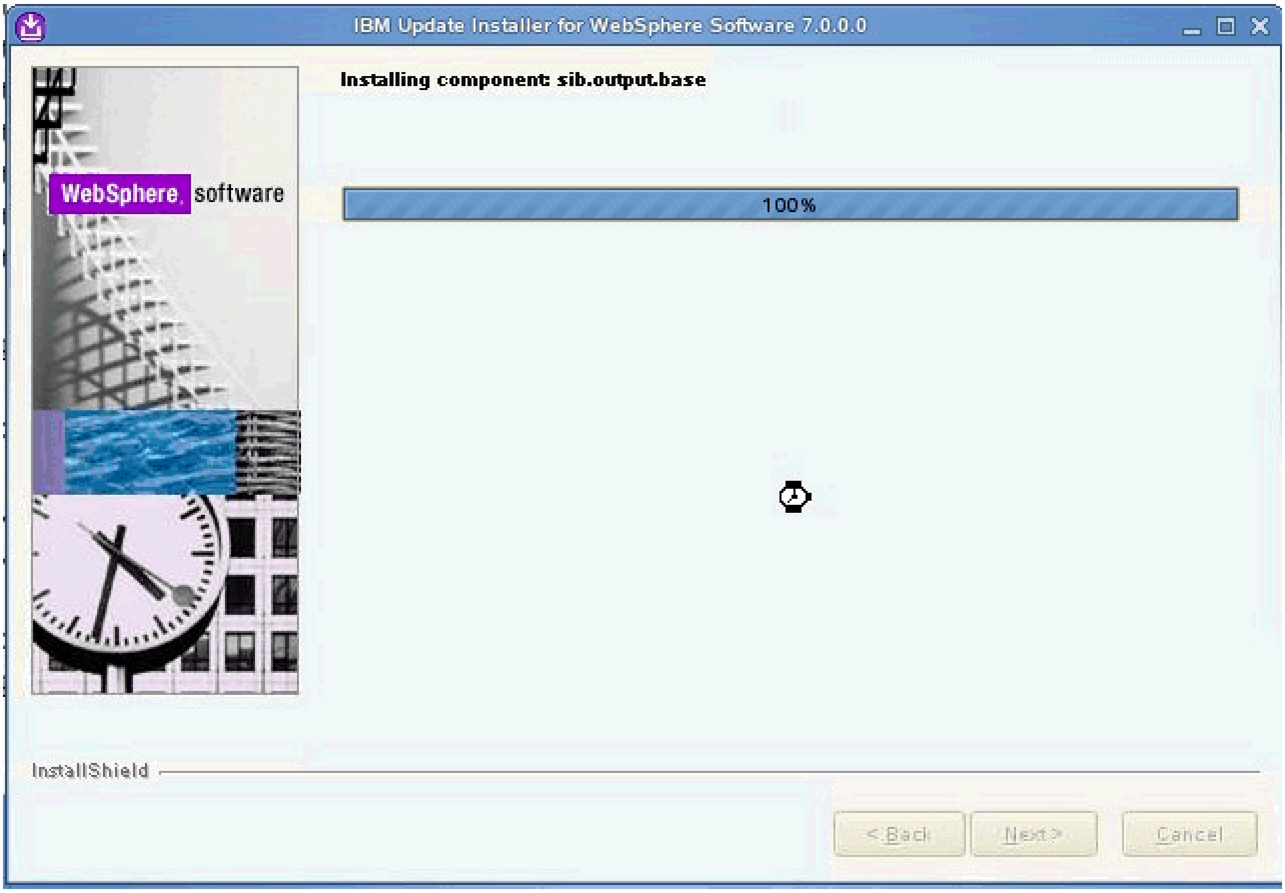
The following maintenance packages will be installed:

- **7.0.0.21-WS-WAS-IFPM56596** - MESSAGES BUILD UP ON PUBLICATION POINT AND DO NOT FLOW TO SUBSCRIBER MESSAGING ENGINE
- **7.0.0.1-WS-WAS-IFPM60895** - Messages not being processed in order would lead to piling up in case of consumer being non local to destination (Repackaged PM51310)
- **7.0.0.21-WS-WAS-IFPM65486** - ADD OAUTH20 SUPPORT TO WEBSPHERE APPLICATION SERVER
- **7.0.0.19-WS-WAS-IFPM53930** - Hash Table implementation vulnerability

to the following location:

Figure 8. IBM Update Installer for WebSphere Software wizard: Installation summary screen

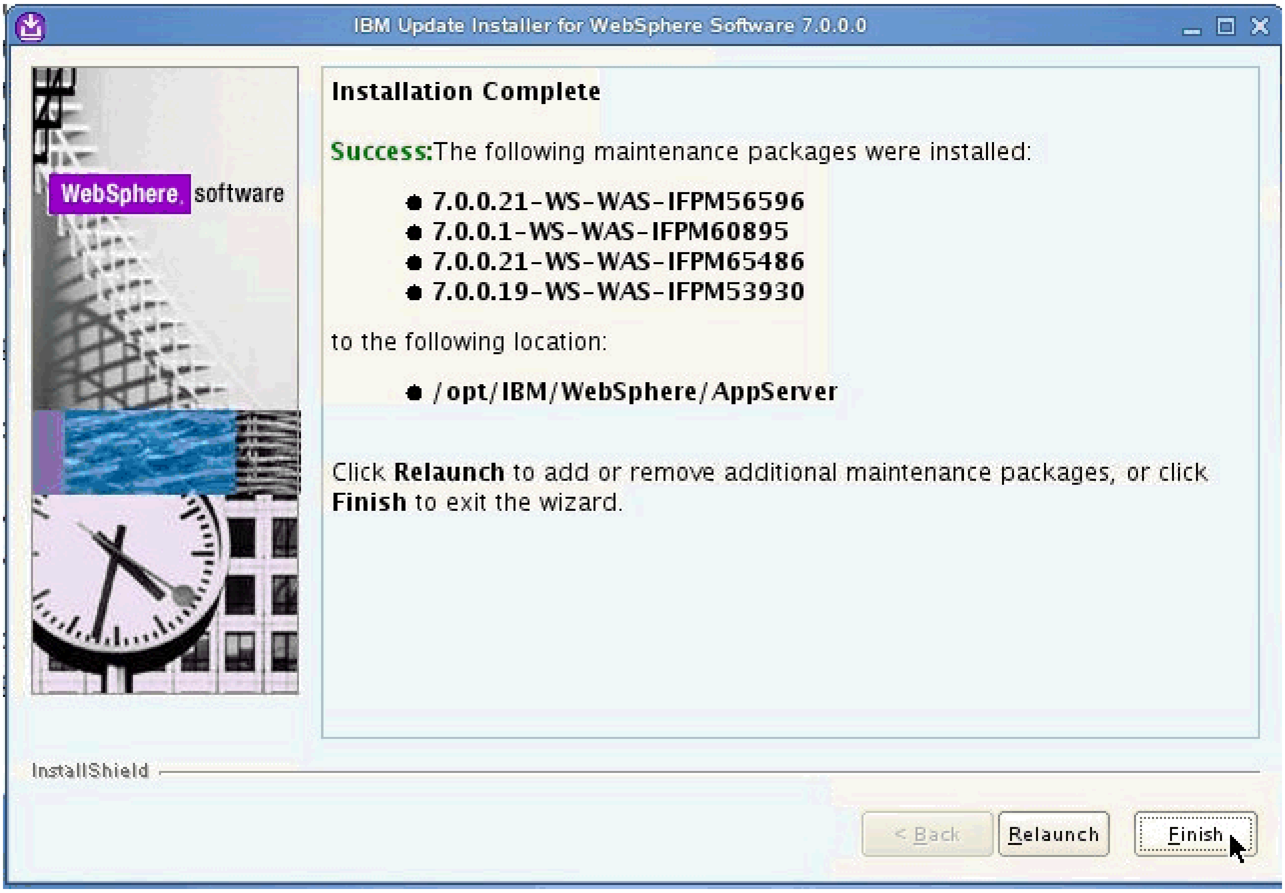
The installation starts.



Installing component: sib.output.base

Figure 9. IBM Update Installer for WebSphere Software wizard: Installation in progress

__ 7. The installation completes. Click **Finish**.



Installation Complete

Success: The following maintenance packages were installed:

- **7.0.0.21-WS-WAS-IFPM56596**
- **7.0.0.1-WS-WAS-IFPM60895**
- **7.0.0.21-WS-WAS-IFPM65486**
- **7.0.0.19-WS-WAS-IFPM53930**

to the following location:

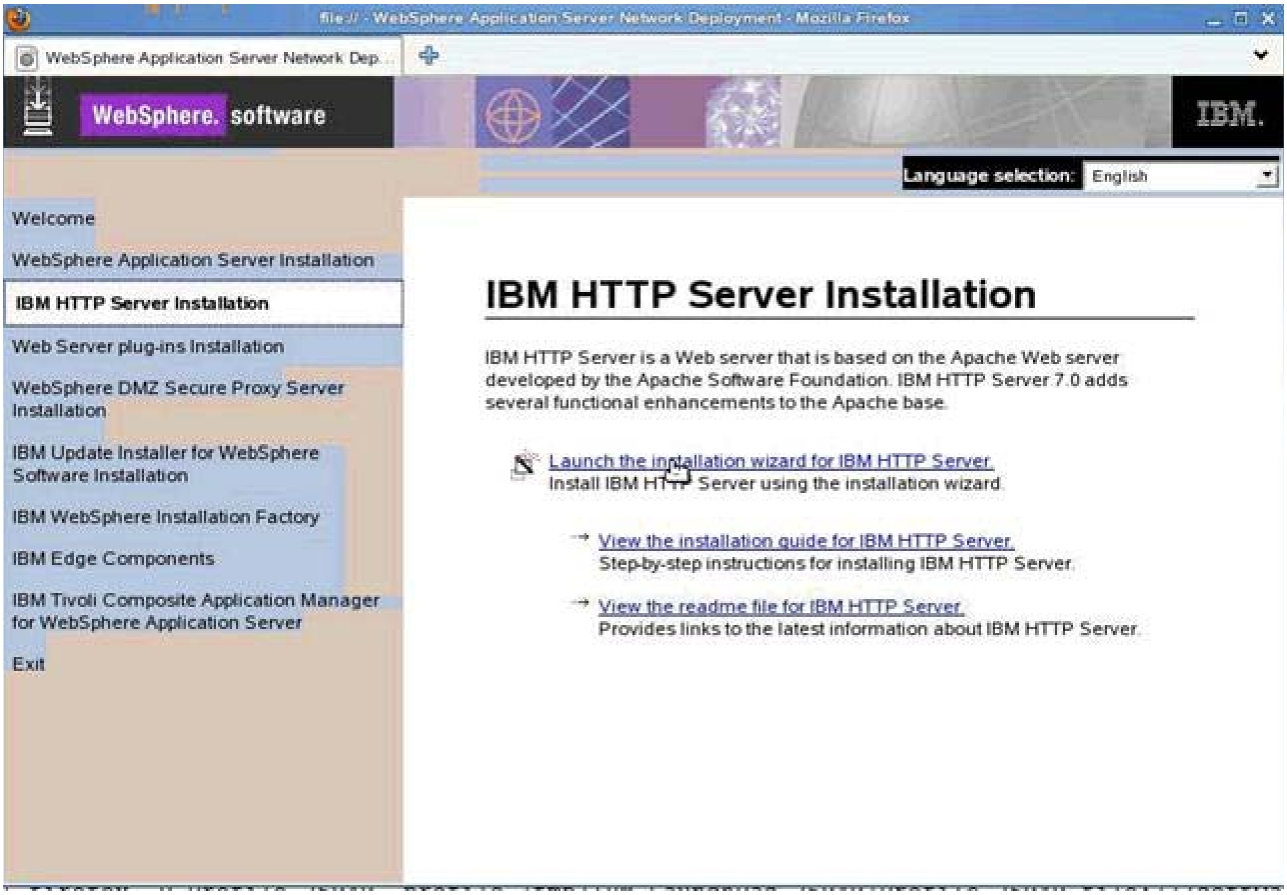
- **/opt/IBM/WebSphere/AppServer**

Click **Relaunch** to add or remove additional maintenance packages, or click **Finish** to exit the wizard.

Figure 10. IBM Update Installer for WebSphere Software wizard: Installation completion screen

Install IBM HTTP Server

__ 1. Under WebSphere Application Server Network Deployment > IBM HTTP Server Installation, click **Launch the installation wizard for IBM HTTP Server**.


file:// - WebSphere Application Server Network Deployment - Mozilla Firefox
WebSphere Application Server Network Dep...
WebSphere. software
IBM.
Language selection: English
Welcome
WebSphere Application Server Installation
IBM HTTP Server Installation
Web Server plug-ins Installation
WebSphere DMZ Secure Proxy Server Installation
IBM Update Installer for WebSphere Software Installation
IBM WebSphere Installation Factory
IBM Edge Components
IBM Tivoli Composite Application Manager for WebSphere Application Server
Exit

IBM HTTP Server Installation

IBM HTTP Server is a Web server that is based on the Apache Web server developed by the Apache Software Foundation. IBM HTTP Server 7.0 adds several functional enhancements to the Apache base.

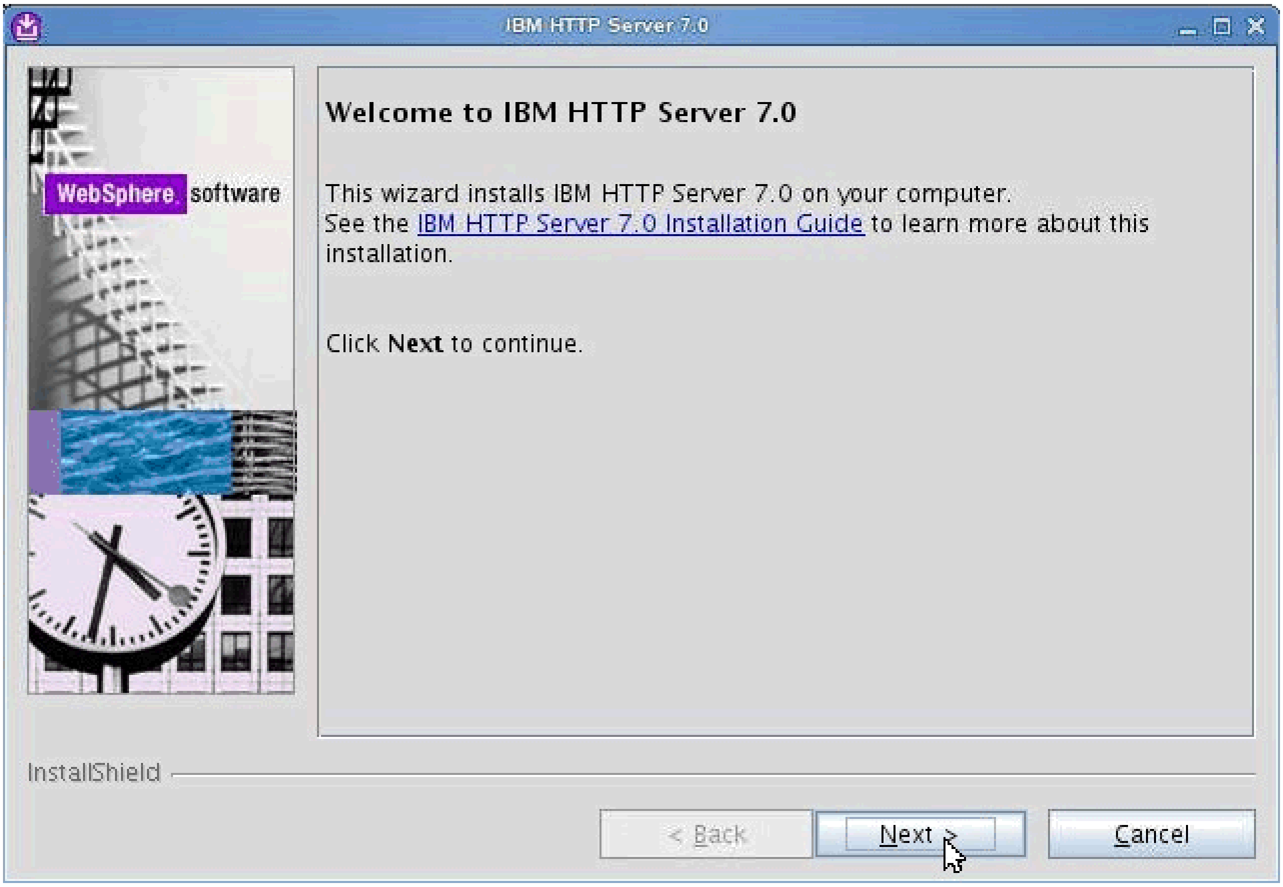
Launch the installation wizard for IBM HTTP Server.
Install IBM HTTP Server using the installation wizard.

View the installation guide for IBM HTTP Server.
Step-by-step instructions for installing IBM HTTP Server.

View the readme file for IBM HTTP Server.
Provides links to the latest information about IBM HTTP Server.

Figure 11. WebSphere Application Server Network Deployment

__ 2. The installation wizard for IBM HTTP Server 7.0 opens. Click **Next.**



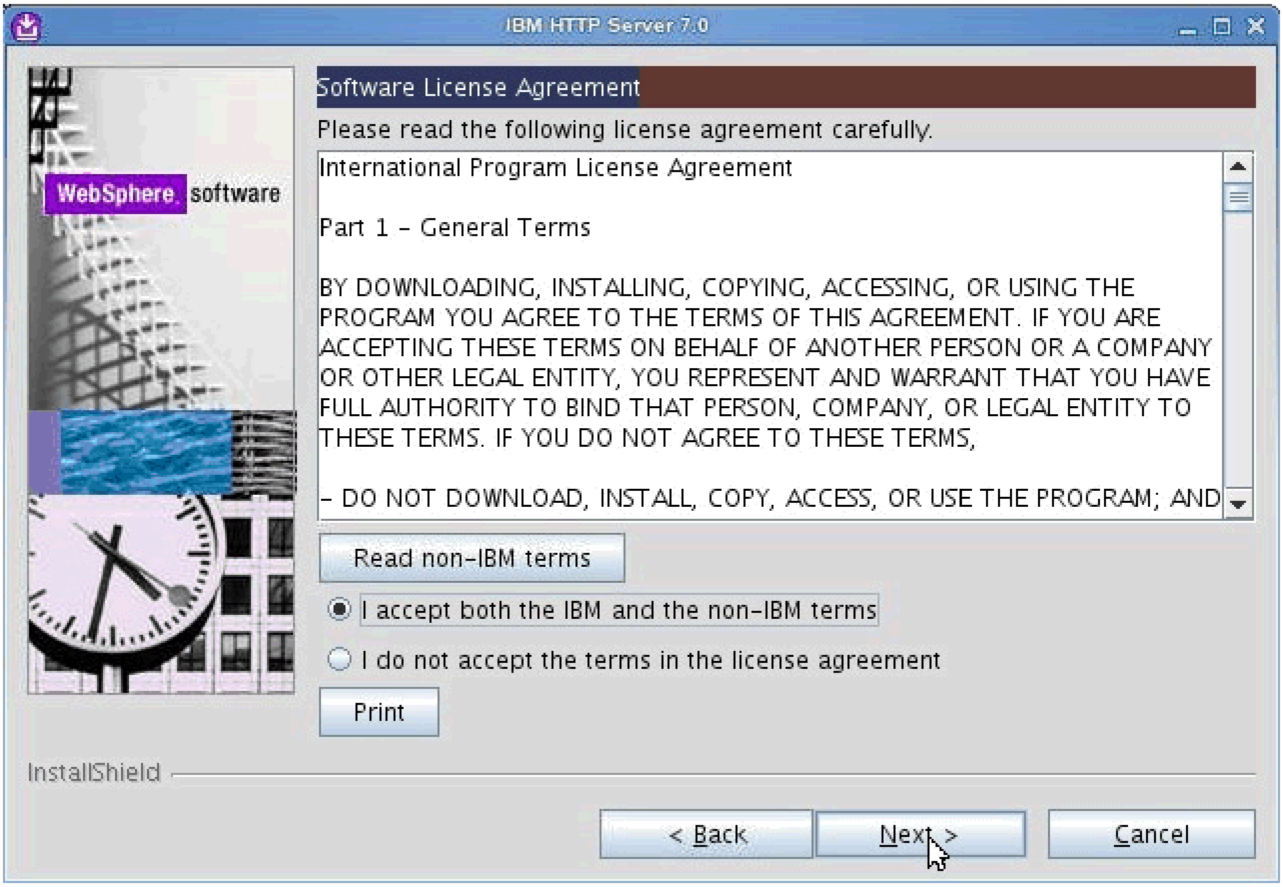
Welcome to IBM HTTP Server 7.0

This wizard installs IBM HTTP Server 7.0 on your computer.
See the IBM HTTP Server 7.0 Installation Guide to learn more about this installation.

Click **Next** to continue.

Figure 12. IBM HTTP Server 7.0 installation wizard: Welcome screen

___ 3. Accept both the IBM and the non-IBM terms and click **Next**.



Please read the following license agreement carefully.

International Program License Agreement

Part 1 - General Terms

BY DOWNLOADING, INSTALLING, COPYING, ACCESSING, OR USING THE PROGRAM YOU AGREE TO THE TERMS OF THIS AGREEMENT. IF YOU ARE ACCEPTING THESE TERMS ON BEHALF OF ANOTHER PERSON OR A COMPANY OR OTHER LEGAL ENTITY, YOU REPRESENT AND WARRANT THAT YOU HAVE FULL AUTHORITY TO BIND THAT PERSON, COMPANY, OR LEGAL ENTITY TO THESE TERMS. IF YOU DO NOT AGREE TO THESE TERMS,

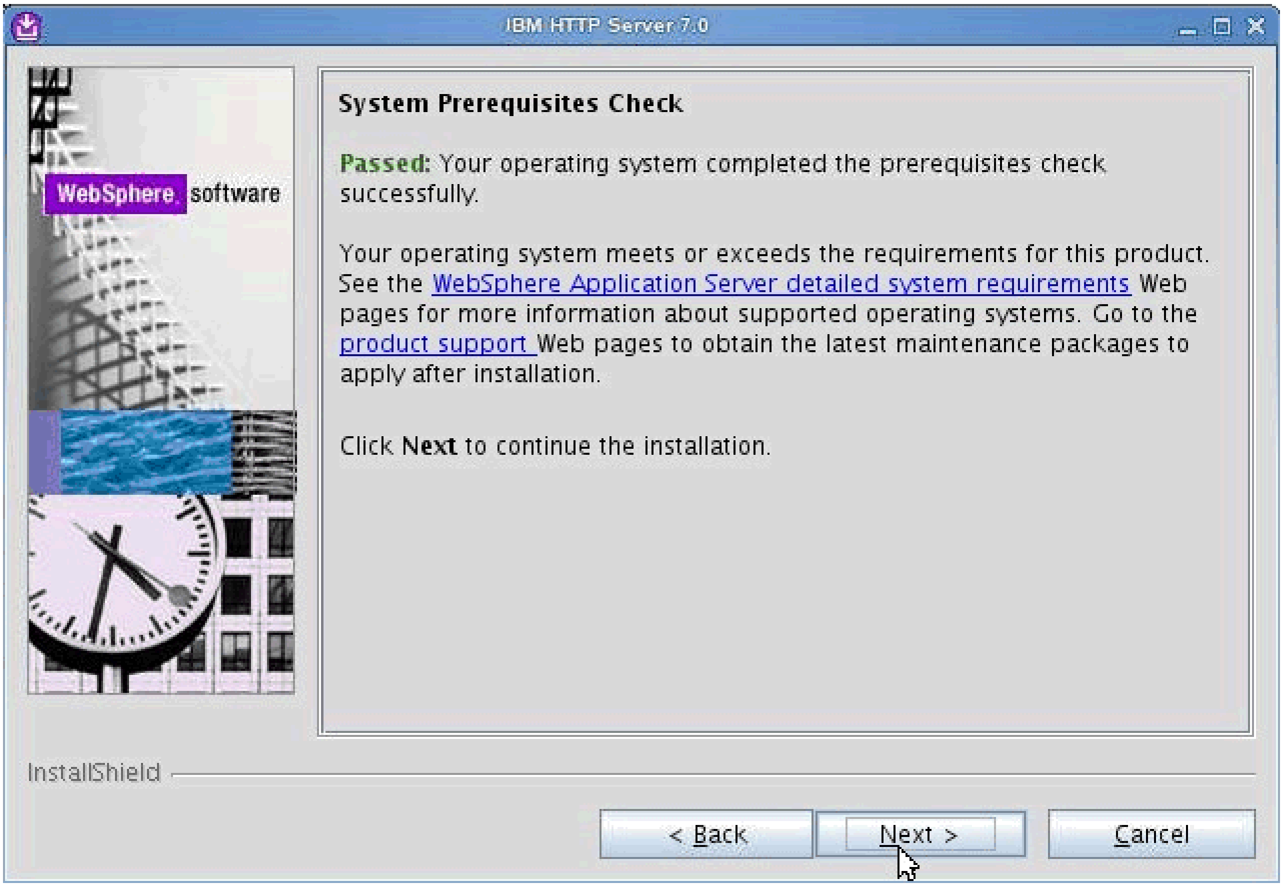
- DO NOT DOWNLOAD, INSTALL, COPY, ACCESS, OR USE THE PROGRAM; AND

● I accept both the IBM and the non-IBM terms

○ I do not accept the terms in the license agreement

Figure 13. IBM HTTP Server 7.0 installation wizard: Software License Agreement screen

__ 4. The prerequisites are checked. Click **Next** if passed.



System Prerequisites Check

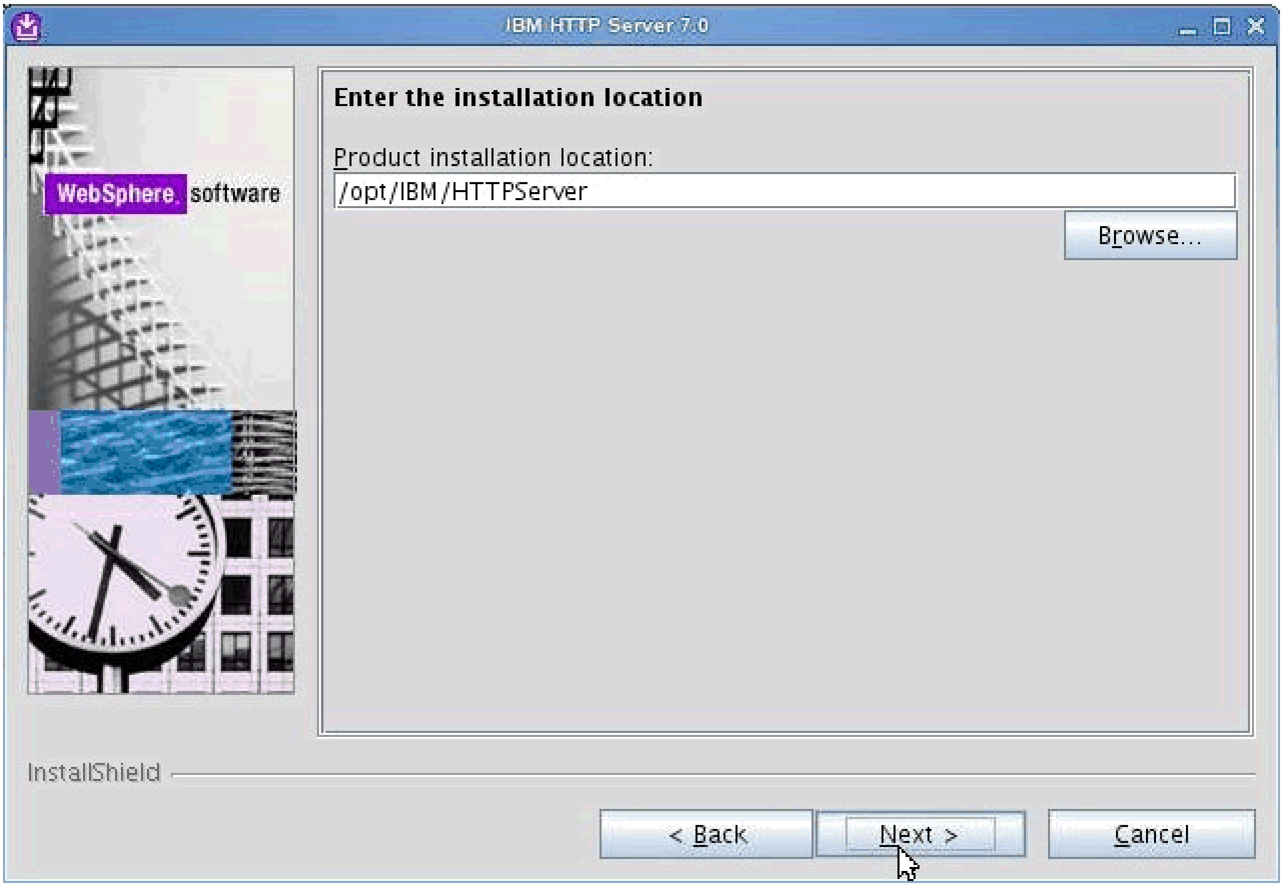
Passed: Your operating system completed the prerequisites check successfully.

Your operating system meets or exceeds the requirements for this product. See the WebSphere Application Server detailed system requirements Web pages for more information about supported operating systems. Go to the product support Web pages to obtain the latest maintenance packages to apply after installation.

Click **Next** to continue the installation.

Figure 14. IBM HTTP Server 7.0 installation wizard: System Prerequisites Check screen

__ 5. Select the product installation location and click **Next**.



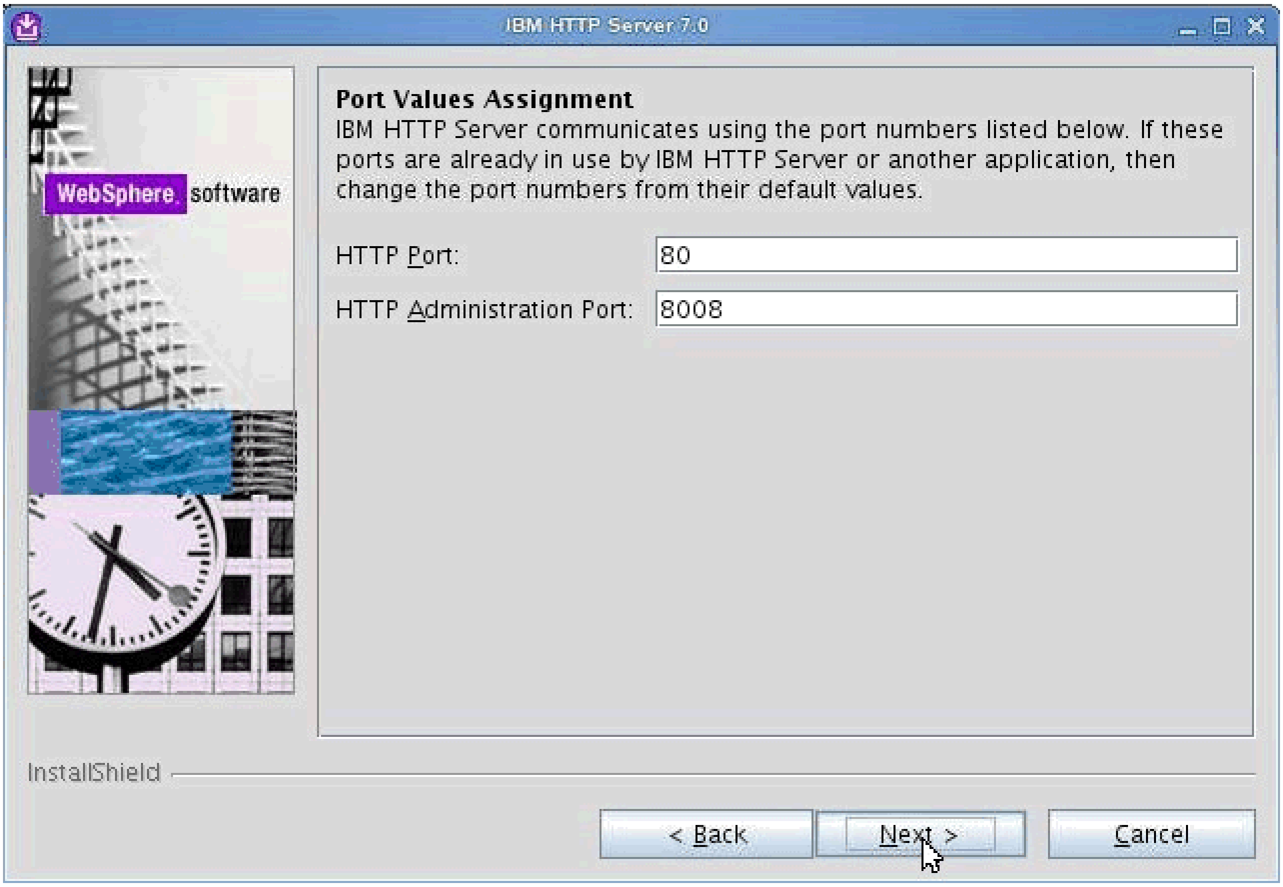
Enter the installation location

Product installation location:

/opt/IBM/HTTPServer

Figure 15. IBM HTTP Server 7.0 installation wizard: Installation location screen

__ 6. Assign the values for the HTTP Port and the HTTP Administration Port and click **Next**.



Port Values Assignment

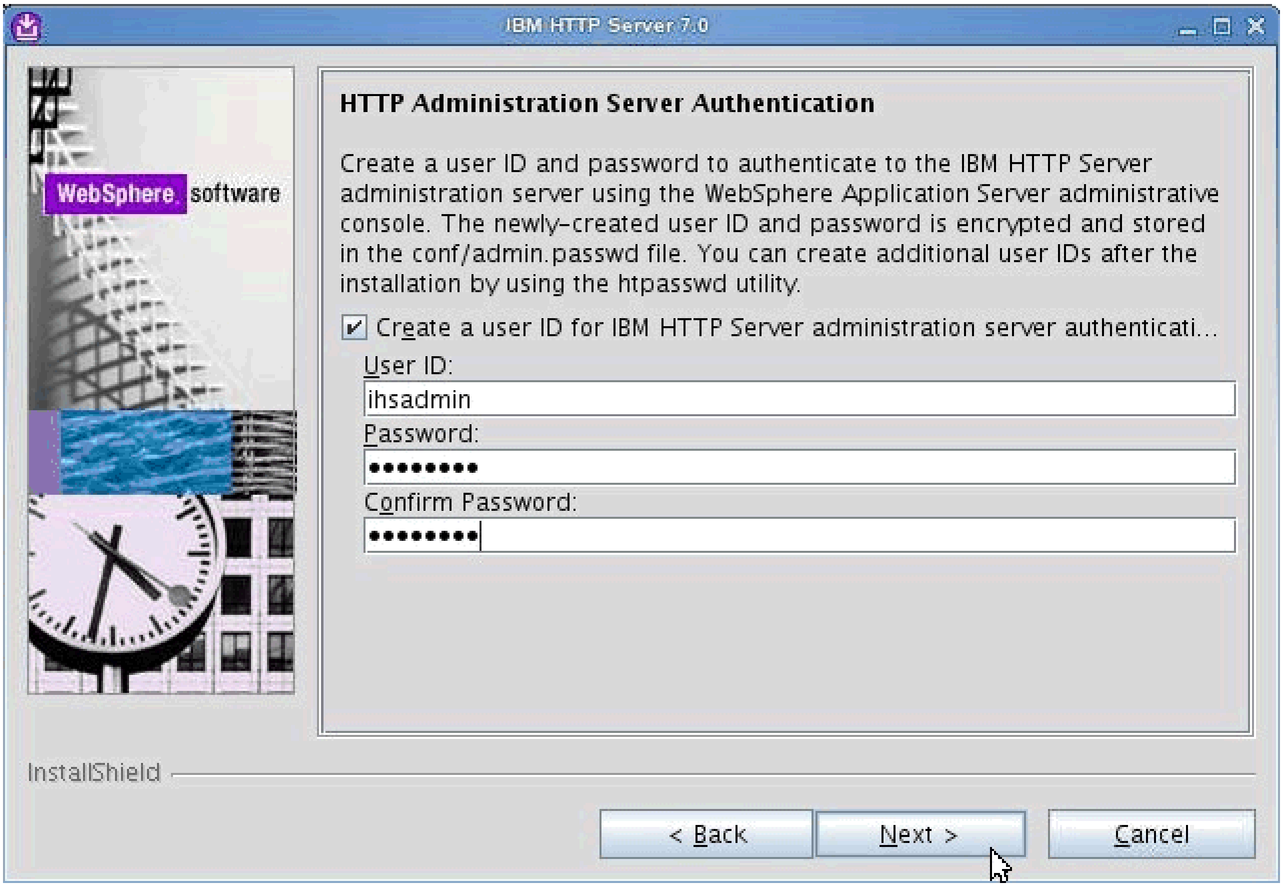
IBM HTTP Server communicates using the port numbers listed below. If these ports are already in use by IBM HTTP Server or another application, then change the port numbers from their default values.

HTTP Port: 80

HTTP Administration Port: 8008

Figure 16. IBM HTTP Server 7.0 installation wizard: Port Values Assignment screen

__ 7. Create a user/password to authenticate to the IBM HTTP Server administration and click **Next**.



HTTP Administration Server Authentication

Create a user ID and password to authenticate to the IBM HTTP Server administration server using the WebSphere Application Server administrative console. The newly-created user ID and password is encrypted and stored in the conf/admin.passwd file. You can create additional user IDs after the installation by using the htpasswd utility.

☑ Create a user ID for IBM HTTP Server administration server authenticati...

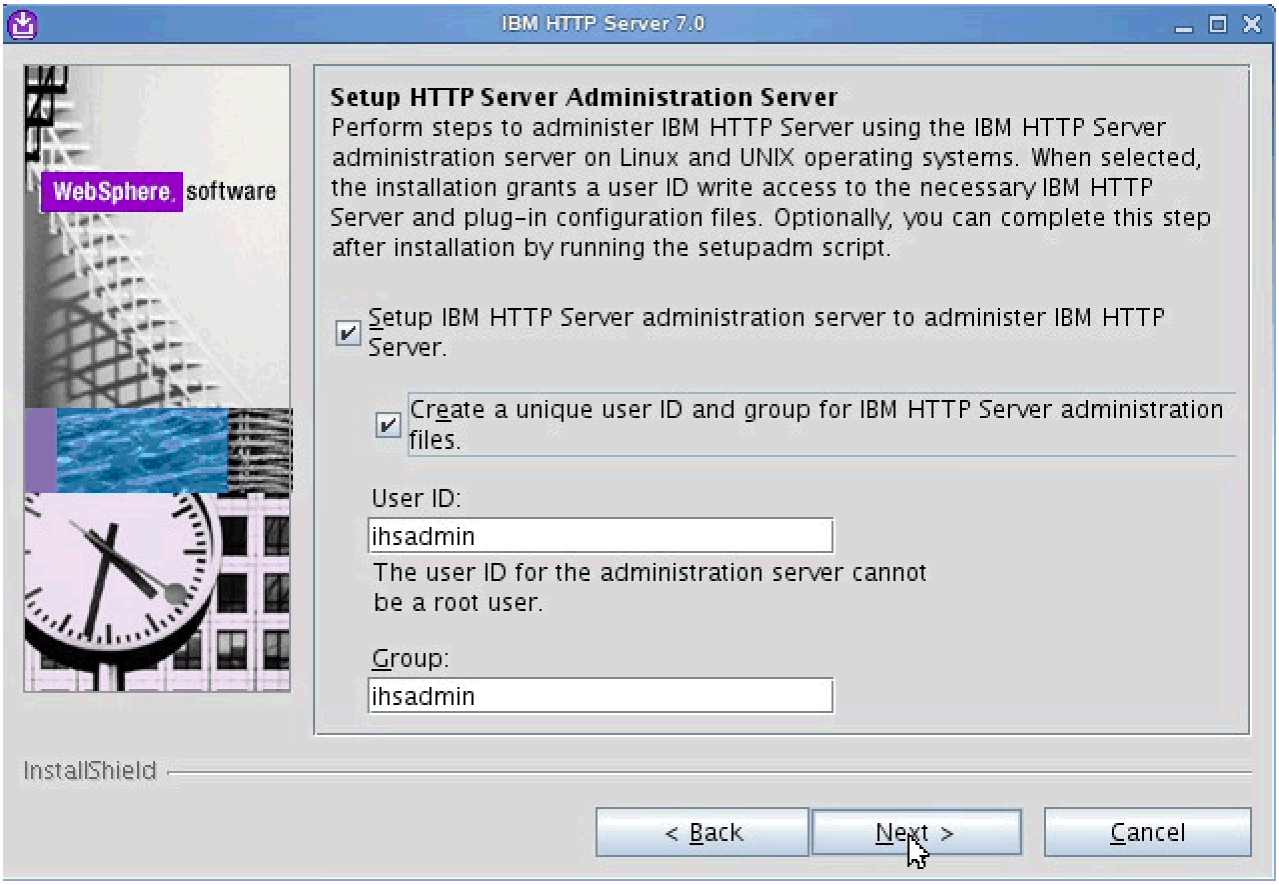
User ID: ihsadmin

Password: ●●●●●●●●

Confirm Password: ●●●●●●●●

Figure 17. IBM HTTP Server 7.0 installation wizard: HTTP Administration server Authentication screen

__ 8. Setup IBM HTTP Server administration server and click **Next.**



Setup HTTP Server Administration Server

Perform steps to administer IBM HTTP Server using the IBM HTTP Server administration server on Linux and UNIX operating systems. When selected, the installation grants a user ID write access to the necessary IBM HTTP Server and plug-in configuration files. Optionally, you can complete this step after installation by running the setupadm script.

☑ Setup IBM HTTP Server administration server to administer IBM HTTP Server.

☑ Create a unique user ID and group for IBM HTTP Server administration files.

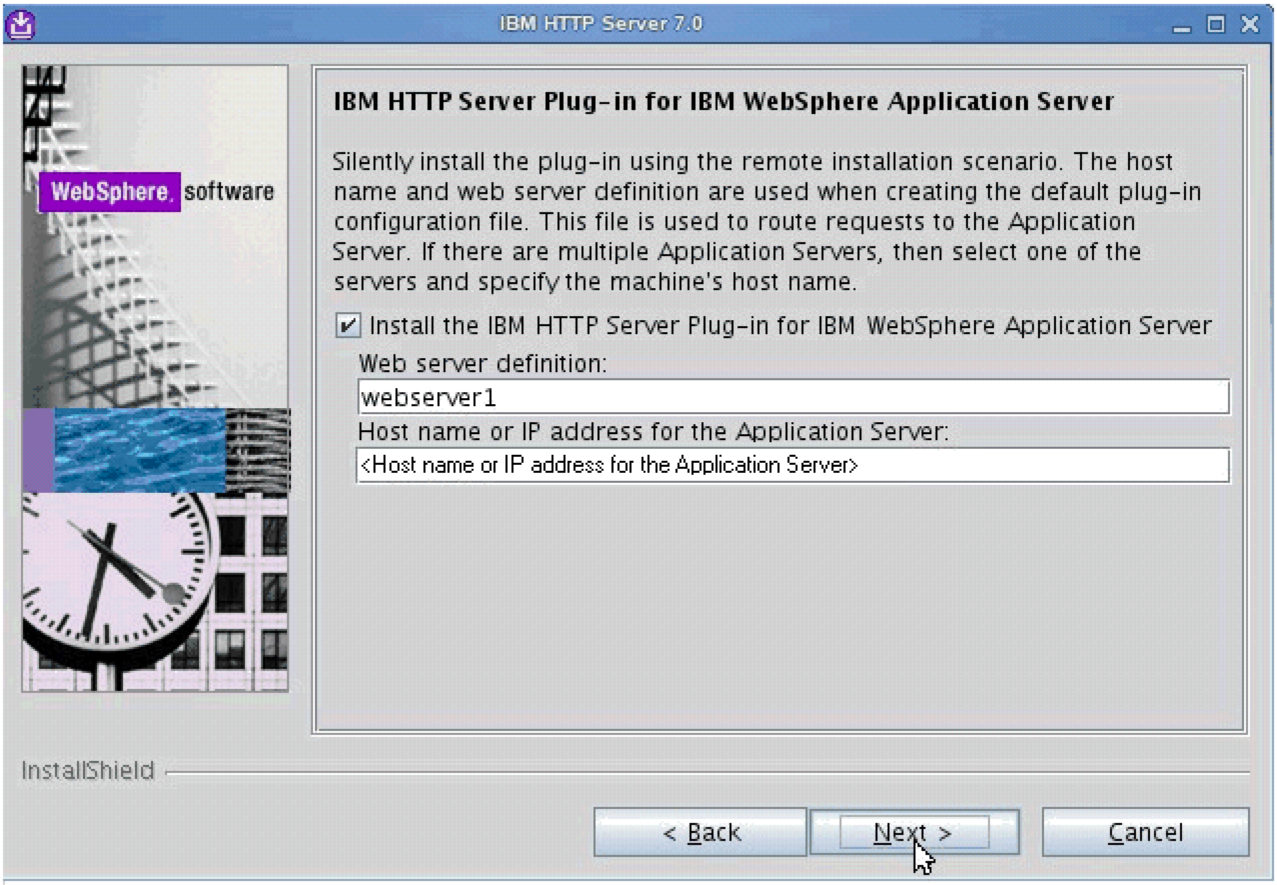
User ID: ihsadmin

The user ID for the administration server cannot be a root user.

Group: ihsadmin

Figure 18. IBM HTTP Server 7.0 installation wizard: Setup HTTP Server Administration server screen

__ 9. Install the IBM HTTP Server plug-in and click **Next.**



IBM HTTP Server Plug-in for IBM WebSphere Application Server

Silently install the plug-in using the remote installation scenario. The host name and web server definition are used when creating the default plug-in configuration file. This file is used to route requests to the Application Server. If there are multiple Application Servers, then select one of the servers and specify the machine's host name.

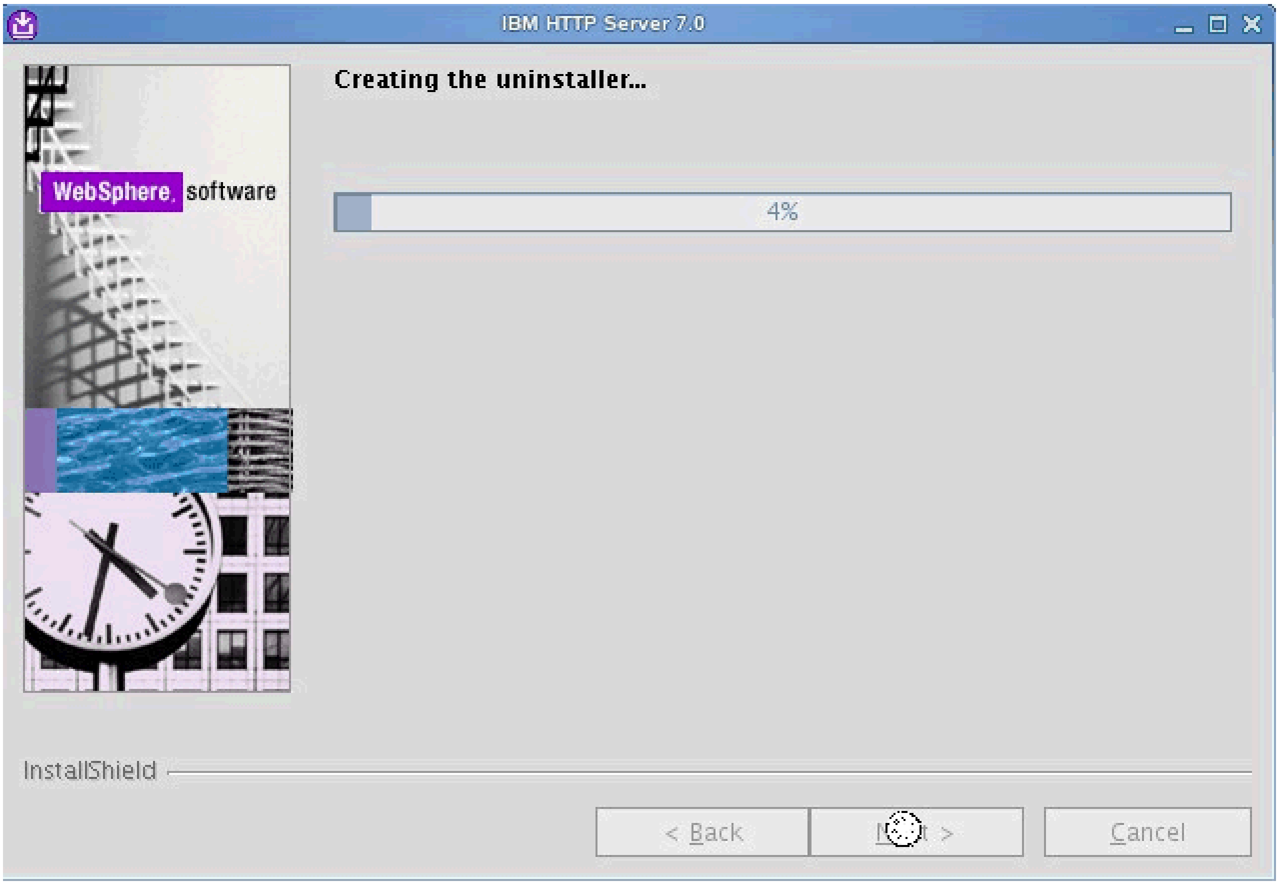
☑ Install the IBM HTTP Server Plug-in for IBM WebSphere Application Server

Web server definition:
webserver1

Host name or IP address for the Application Server:
<Host name or IP address for the Application Server>

Figure 19. IBM HTTP Server 7.0 installation wizard: IBM HTTP Server plug-in for IBM WebSphere Application Server screen

The installation begins.

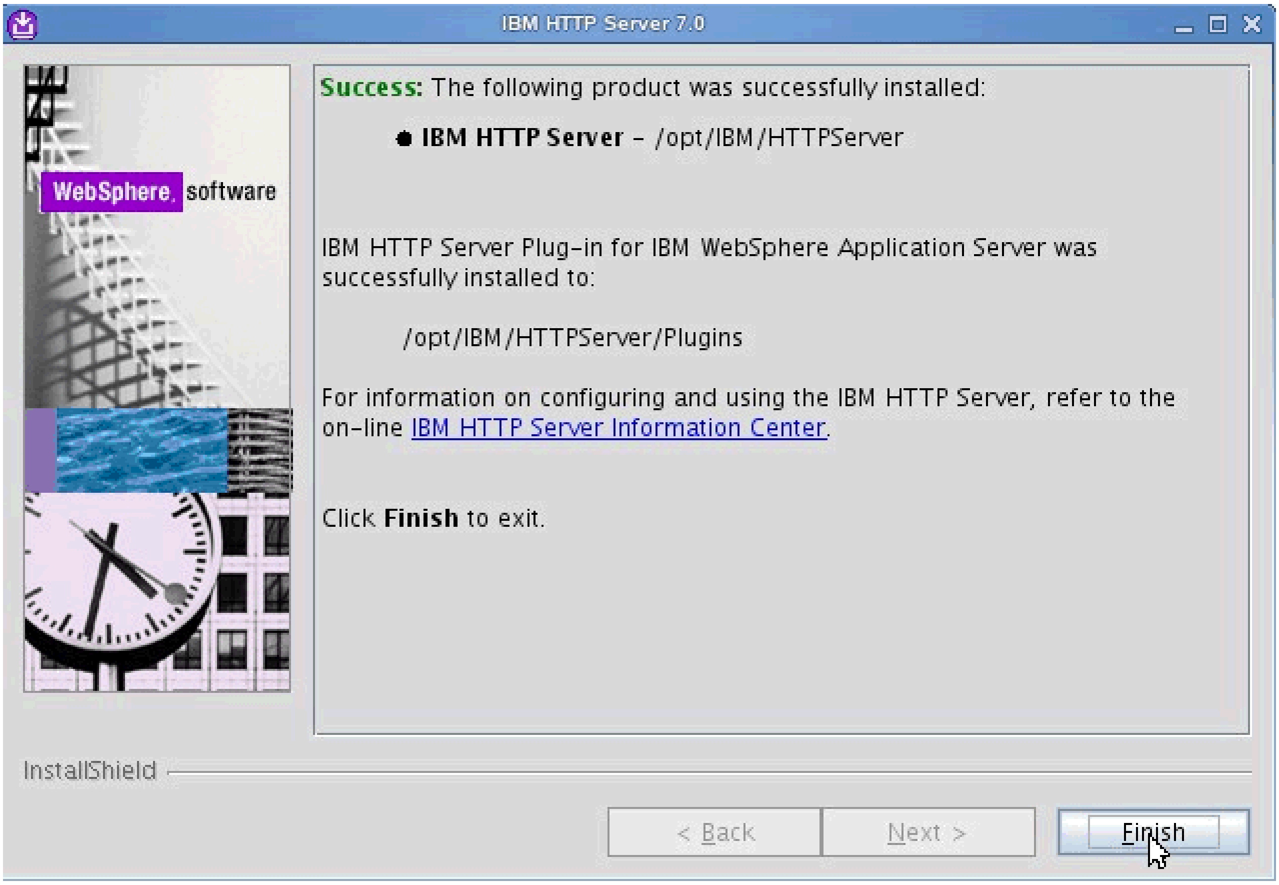


Creating the uninstaller...

4%

Figure 20. IBM HTTP Server 7.0 installation wizard: Installation in progress screen

__ 10. When the product is successfully installed click **Finish**.



Success: The following product was successfully installed:

- **IBM HTTP Server** – /opt/IBM/HTTPServer

IBM HTTP Server Plug-in for IBM WebSphere Application Server was successfully installed to:

/opt/IBM/HTTPServer/Plugins

For information on configuring and using the IBM HTTP Server, refer to the on-line IBM HTTP Server Information Center.

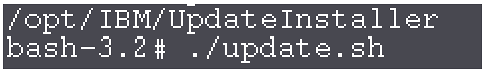
Click **Finish** to exit.

Figure 21. IBM HTTP Server 7.0 installation wizard: Installation completion screen

Install fix pack for IBM HTTP Server

Install Update Installer

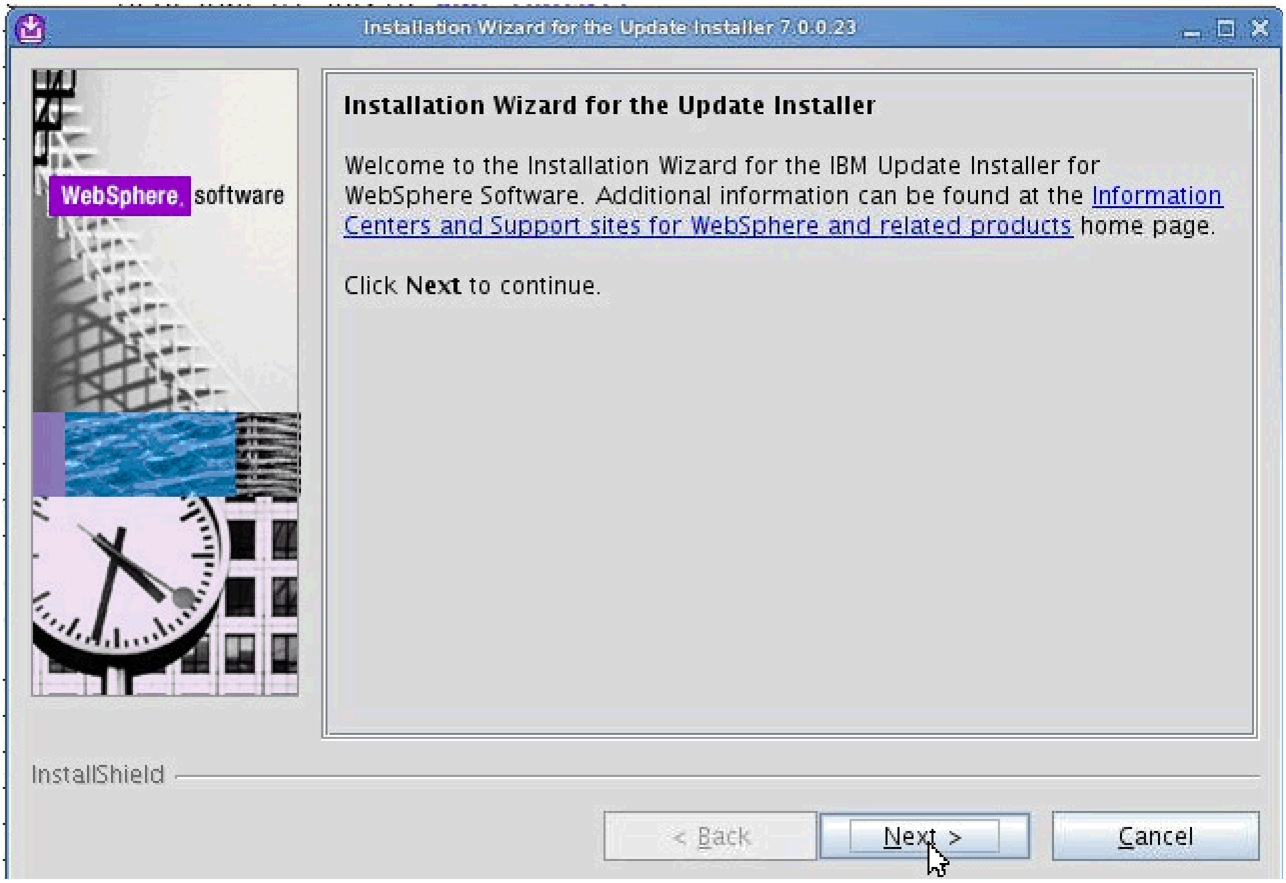
__ 1. Run the command in the following figure to open the Installation Wizard for the Update Installer.



```
/opt/IBM/UpdateInstaller
bash-3.2# ./update.sh
```

Figure 22. Command to open the Installation Wizard for the Update Installer

__ 2. On the welcome screen of the Installation Wizard for the Update Installer, click **Next**.



Installation Wizard for the Update Installer 7.0.0.23

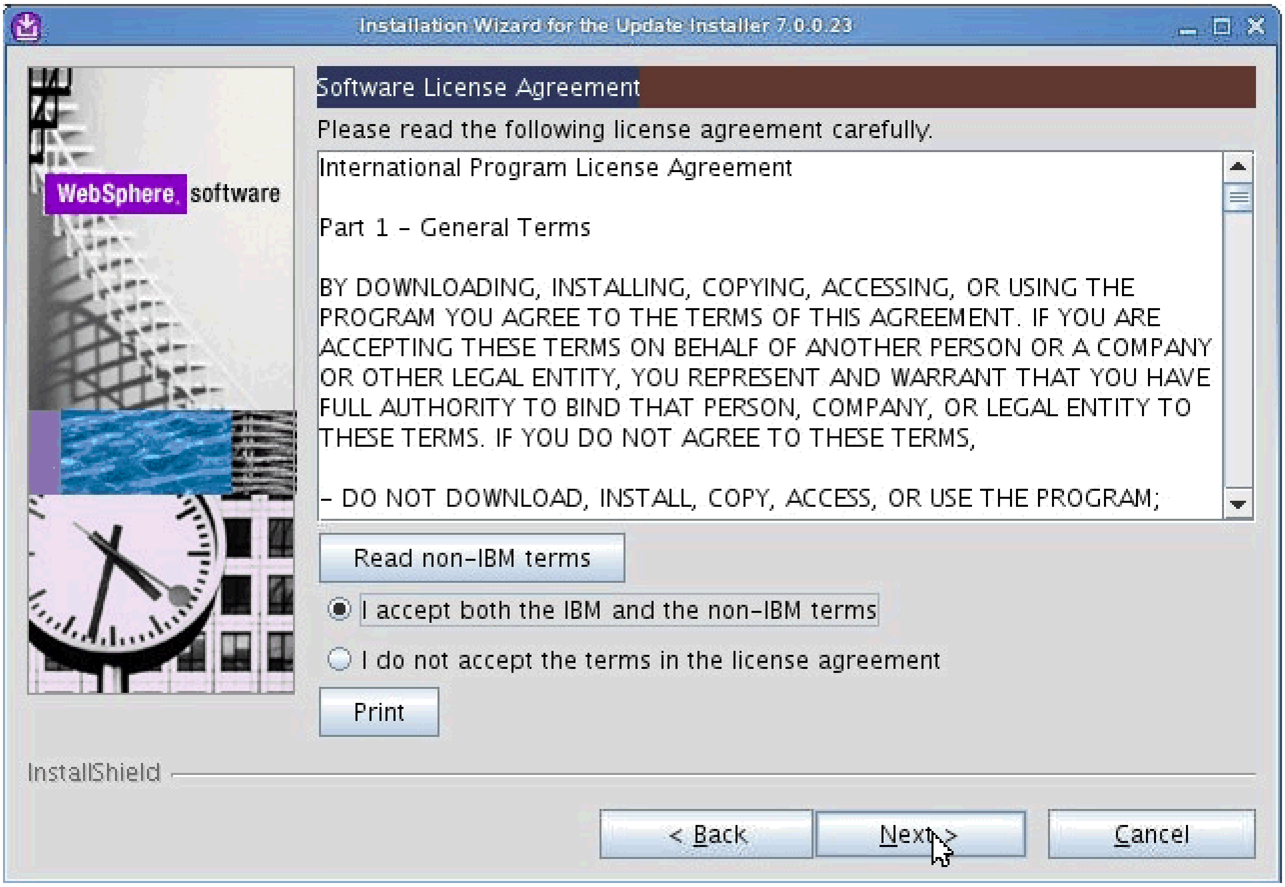
Installation Wizard for the Update Installer

Welcome to the Installation Wizard for the IBM Update Installer for WebSphere Software. Additional information can be found at the Information Centers and Support sites for WebSphere and related products home page.

Click **Next** to continue.

Figure 23. Installation Wizard for the Update Installer: Welcome screen

__ 3. Accept both the IBM and non-IBM terms and click **Next**.



Installation Wizard for the Update Installer 7.0.0.23

Software License Agreement

Please read the following license agreement carefully.

International Program License Agreement

Part 1 - General Terms

BY DOWNLOADING, INSTALLING, COPYING, ACCESSING, OR USING THE PROGRAM YOU AGREE TO THE TERMS OF THIS AGREEMENT. IF YOU ARE ACCEPTING THESE TERMS ON BEHALF OF ANOTHER PERSON OR A COMPANY OR OTHER LEGAL ENTITY, YOU REPRESENT AND WARRANT THAT YOU HAVE FULL AUTHORITY TO BIND THAT PERSON, COMPANY, OR LEGAL ENTITY TO THESE TERMS. IF YOU DO NOT AGREE TO THESE TERMS,

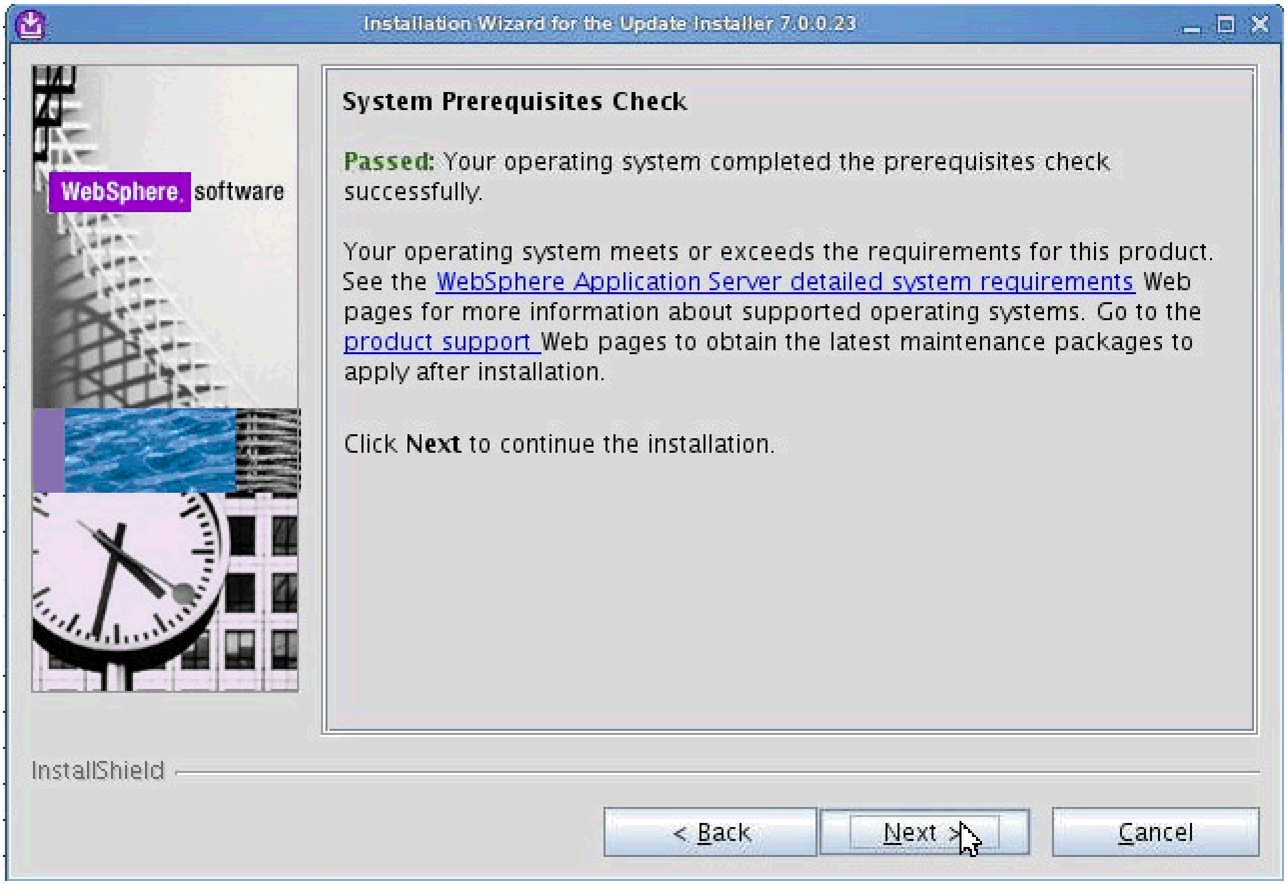
- DO NOT DOWNLOAD, INSTALL, COPY, ACCESS, OR USE THE PROGRAM;

● I accept both the IBM and the non-IBM terms

○ I do not accept the terms in the license agreement

Figure 24. Installation Wizard for the Update Installer: Software License Agreement screen

__ 4. The prerequisites are checked. Click **Next** if passed.



System Prerequisites Check

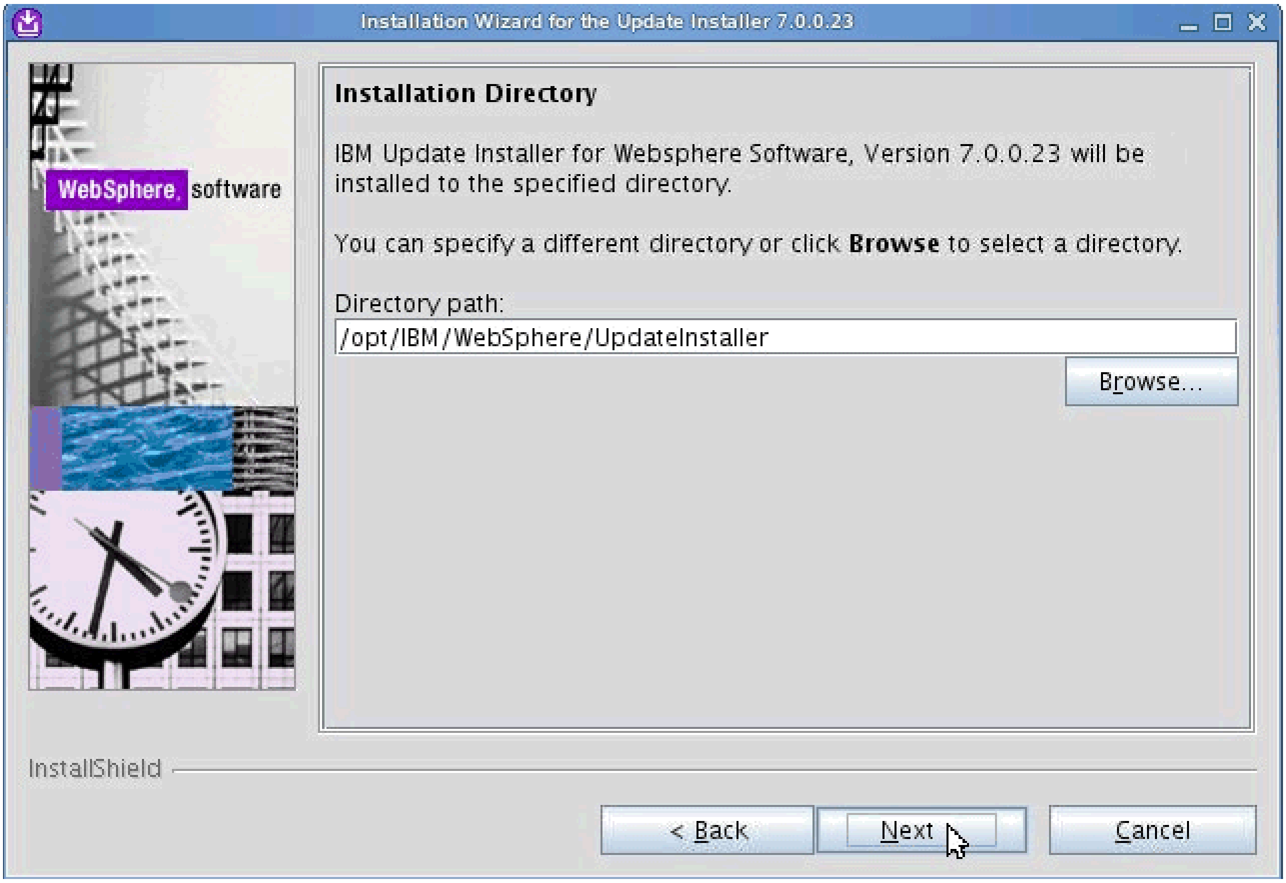
Passed: Your operating system completed the prerequisites check successfully.

Your operating system meets or exceeds the requirements for this product. See the WebSphere Application Server detailed system requirements Web pages for more information about supported operating systems. Go to the product support Web pages to obtain the latest maintenance packages to apply after installation.

Click **Next** to continue the installation.

Figure 25. Installation Wizard for the Update Installer: System Prerequisites Check screen

__ 5. Select the directory to install the product and click **Next**.



Installation Directory

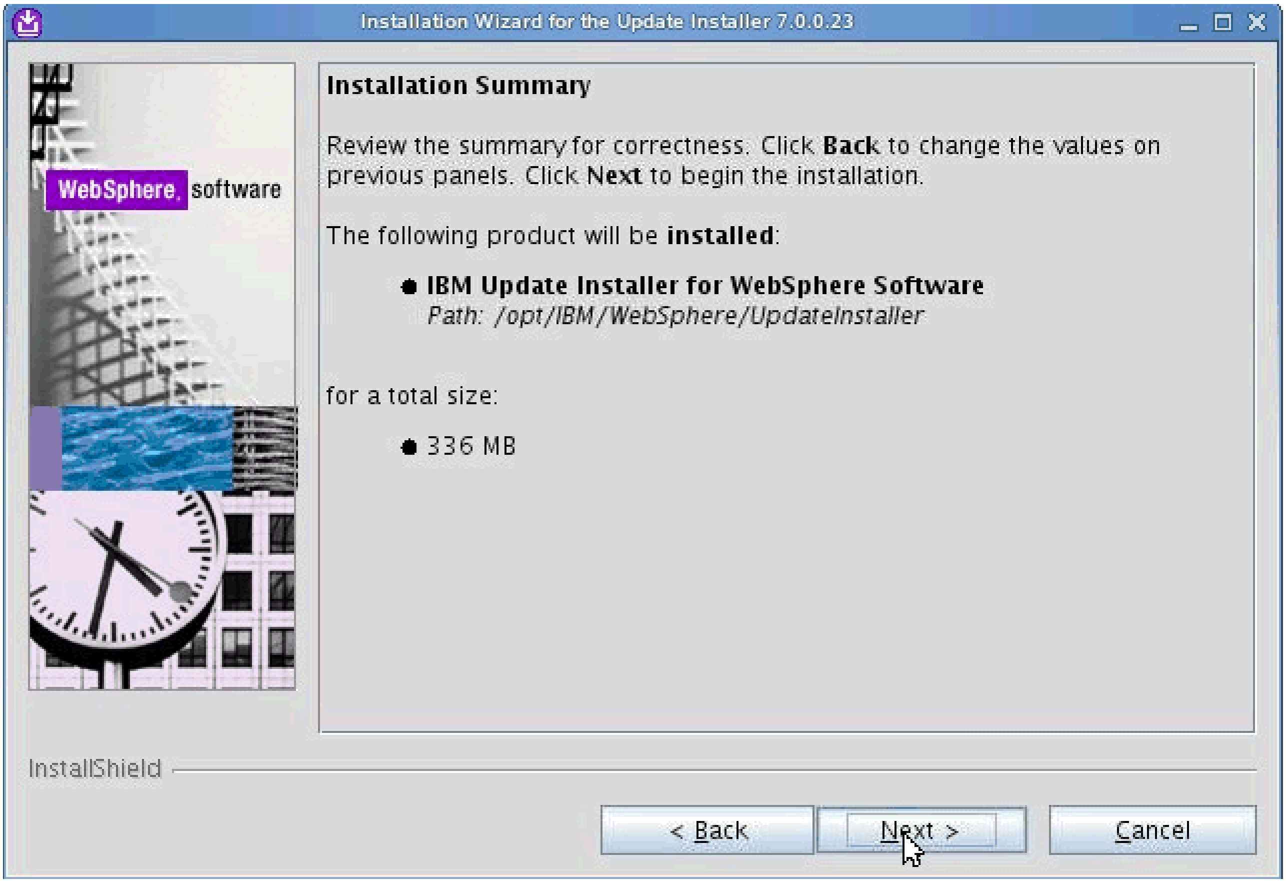
IBM Update Installer for Websphere Software, Version 7.0.0.23 will be installed to the specified directory.

You can specify a different directory or click **Browse** to select a directory.

Directory path:
/opt/IBM/WebSphere/UpdateInstaller

Figure 26. Installation Wizard for the Update Installer: Installation Directory screen

__ 6. Review the installation summary and click **Next.**



Installation Summary

Review the summary for correctness. Click **Back** to change the values on previous panels. Click **Next** to begin the installation.

The following product will be **installed**:

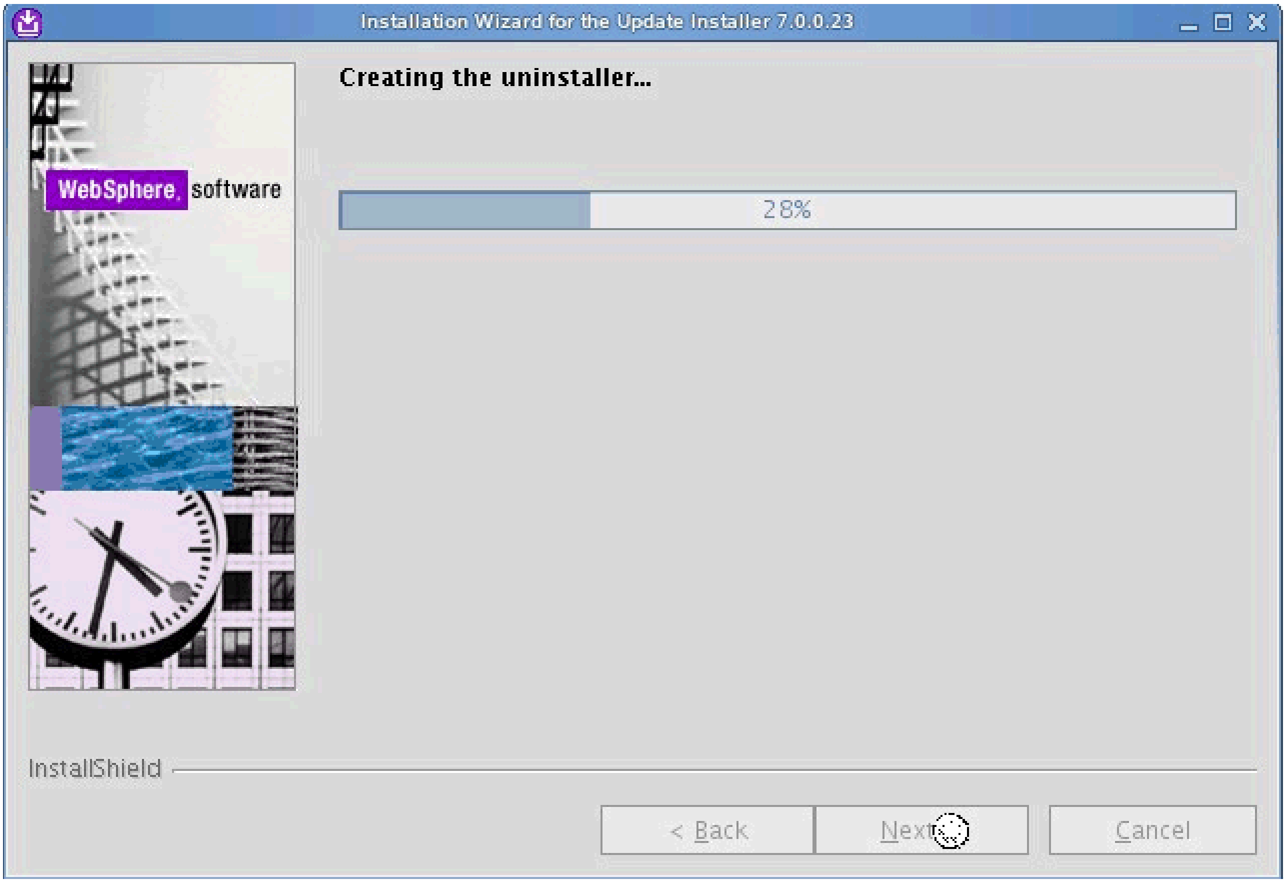
- **IBM Update Installer for WebSphere Software**
  Path: /opt/IBM/WebSphere/UpdateInstaller

for a total size:

- 336 MB

Figure 27. Installation Wizard for the Update Installer: Installation Summary screen

The installation begins.

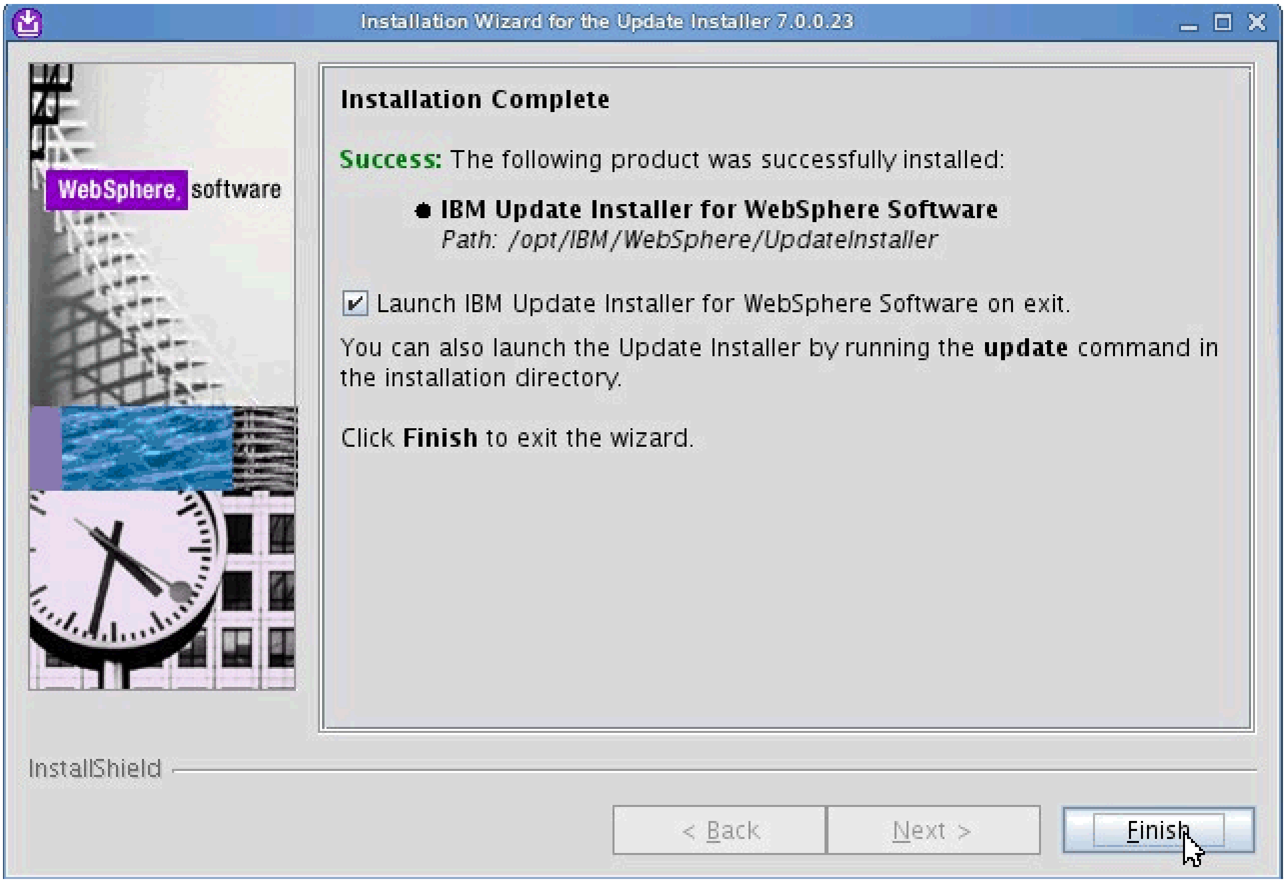


Creating the uninstaller...

28%

Figure 28. Installation Wizard for the Update Installer: Installation in progress screen

__ 7. When the product is successfully installed click **Finish.**



Installation Wizard for the Update Installer 7.0.0.23

Installation Complete

Success: The following product was successfully installed:

- **IBM Update Installer for WebSphere Software**
  Path: /opt/IBM/WebSphere/UpdateInstaller

☑ Launch IBM Update Installer for WebSphere Software on exit.

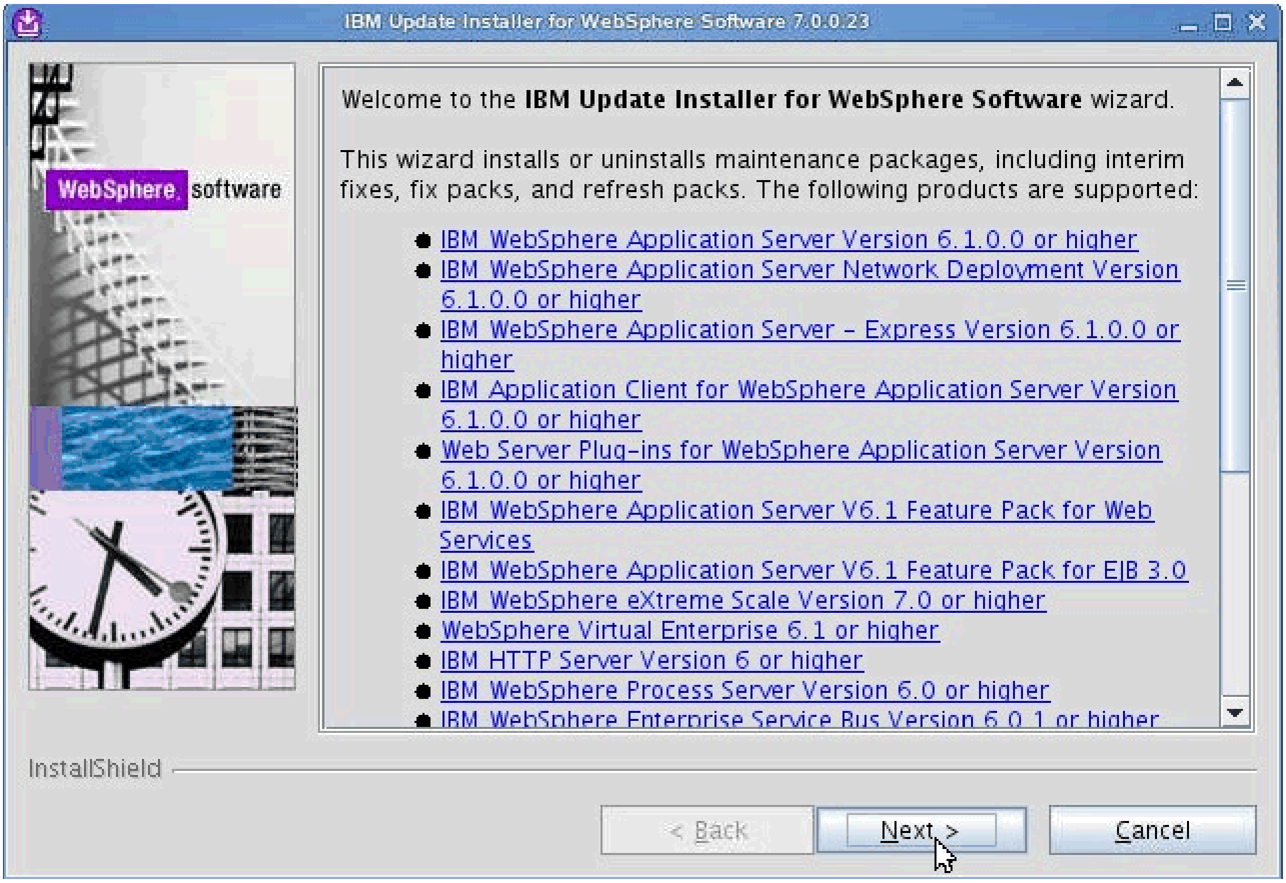
You can also launch the Update Installer by running the **update** command in the installation directory.

Click **Finish** to exit the wizard.

Figure 29. Installation Wizard for the Update Installer: Installation Complete screen

You must also install the IBM Update Installer for WebSphere Software, by following these steps:

__ 1. On the welcome page of the IBM Update Installer for WebSphere Software wizard, click **Next**.



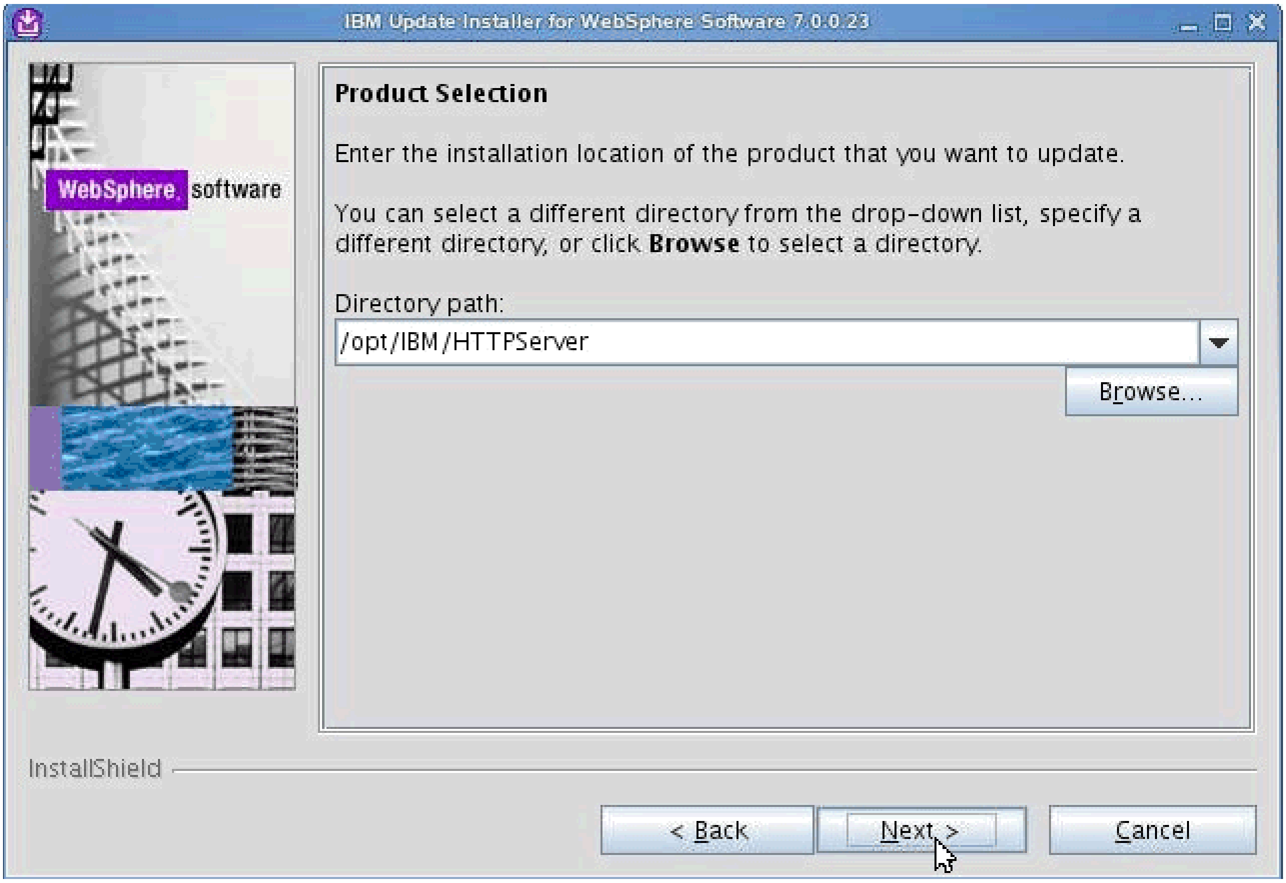
Welcome to the **IBM Update Installer for WebSphere Software** wizard.

This wizard installs or uninstalls maintenance packages, including interim fixes, fix packs, and refresh packs. The following products are supported:

- IBM WebSphere Application Server Version 6.1.0.0 or higher
- IBM WebSphere Application Server Network Deployment Version 6.1.0.0 or higher
- IBM WebSphere Application Server - Express Version 6.1.0.0 or higher
- IBM Application Client for WebSphere Application Server Version 6.1.0.0 or higher
- Web Server Plug-ins for WebSphere Application Server Version 6.1.0.0 or higher
- IBM WebSphere Application Server V6.1 Feature Pack for Web Services
- IBM WebSphere Application Server V6.1 Feature Pack for EJB 3.0
- IBM WebSphere eXtreme Scale Version 7.0 or higher
- WebSphere Virtual Enterprise 6.1 or higher
- IBM HTTP Server Version 6 or higher
- IBM WebSphere Process Server Version 6.0 or higher
- IBM WebSphere Enterprise Service Bus Version 6.0.1 or higher

Figure 30. IBM Update Installer for WebSphere Software wizard: Welcome screen

__ 2. Enter the installation location of the product that you want to update and click **Next.**



Product Selection

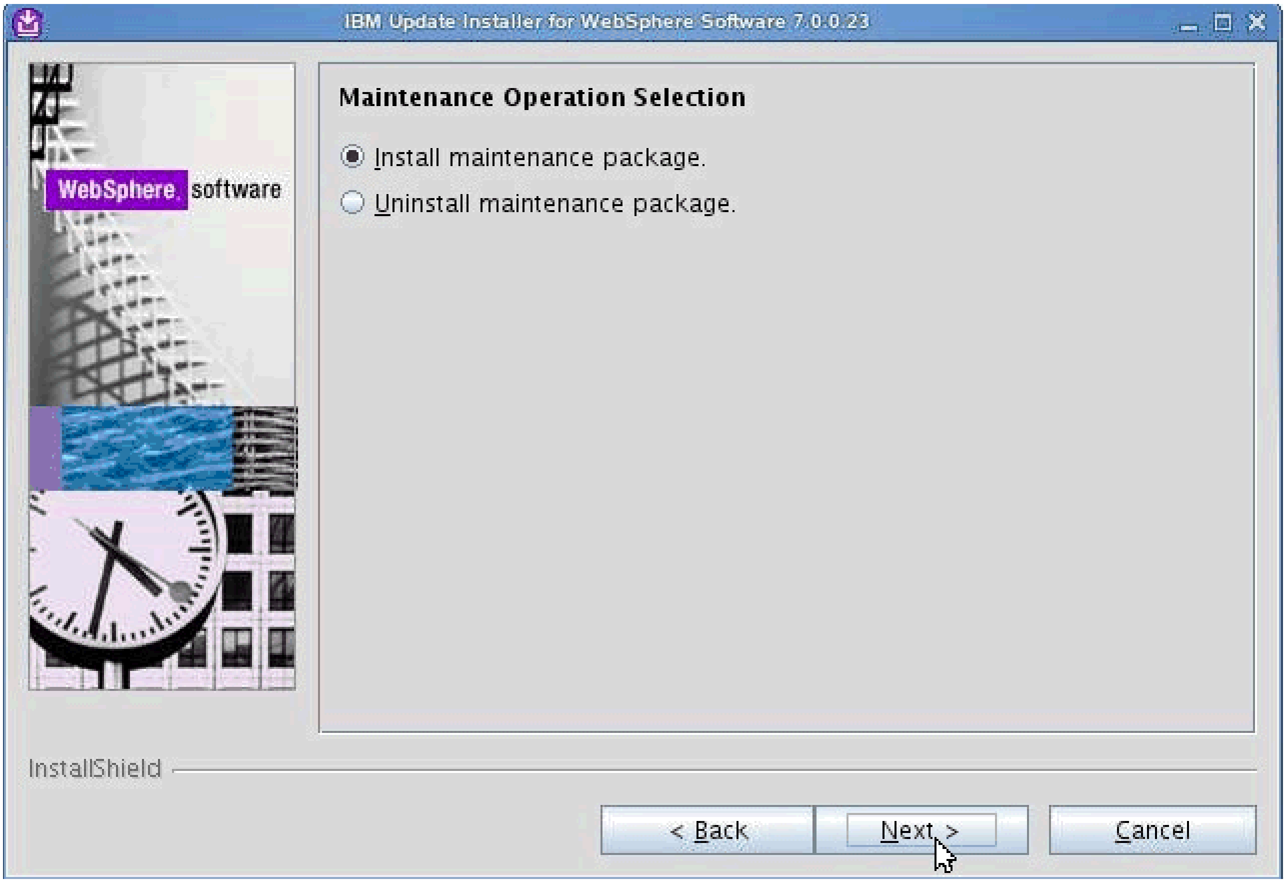
Enter the installation location of the product that you want to update.

You can select a different directory from the drop-down list, specify a different directory, or click **Browse** to select a directory.

Directory path: /opt/IBM/HTTPServer

Figure 31. IBM Update Installer for WebSphere Software wizard: Product Selection screen

__ 3. Select Install maintenance package and click **Next**.



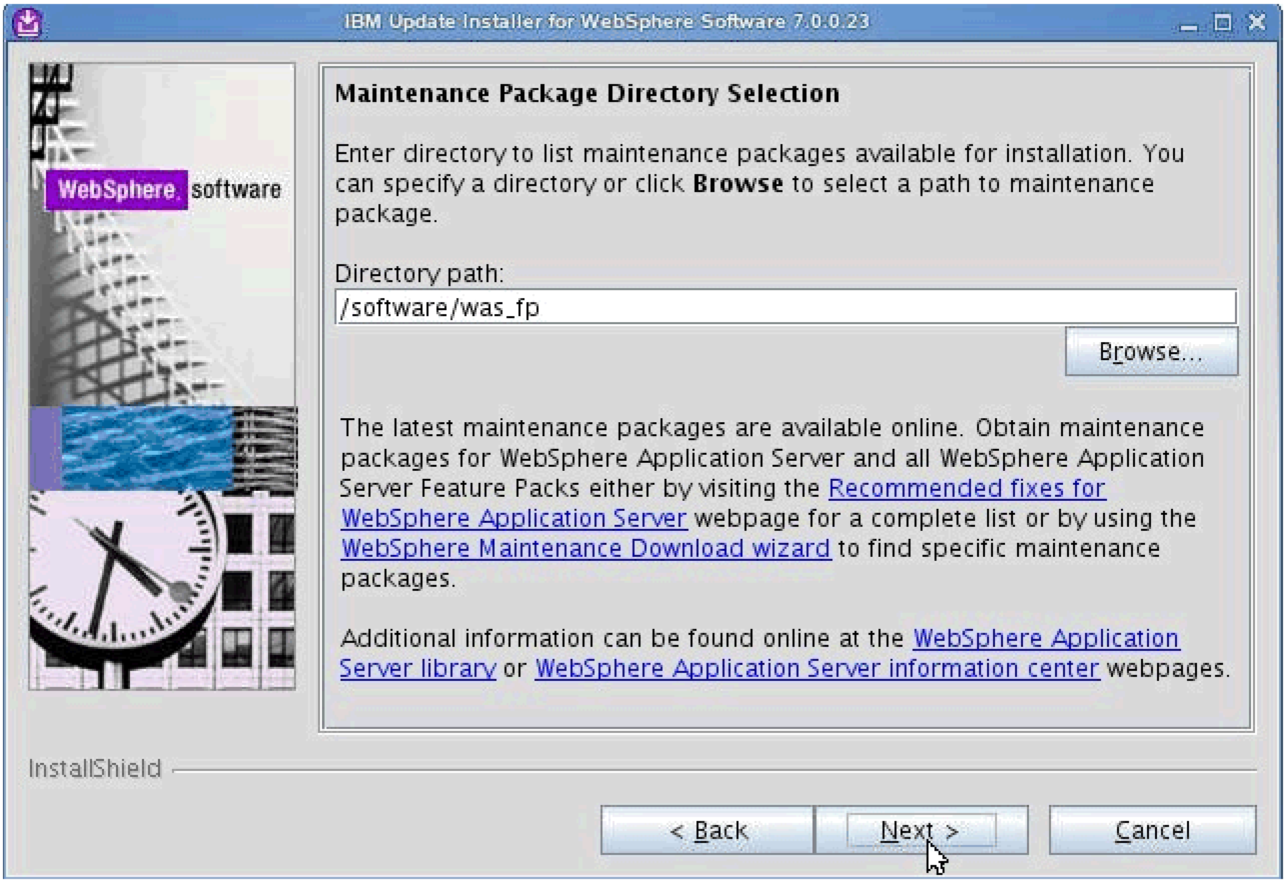
Maintenance Operation Selection

● Install maintenance package.

○ Uninstall maintenance package.

Figure 32. IBM Update Installer for WebSphere Software wizard: Maintenance Operation Selection screen

__ 4. Select the directory to install the maintenance package and click **Next.**



IBM Update Installer for WebSphere Software 7.0.0.23

Maintenance Package Directory Selection

Enter directory to list maintenance packages available for installation. You can specify a directory or click **Browse** to select a path to maintenance package.

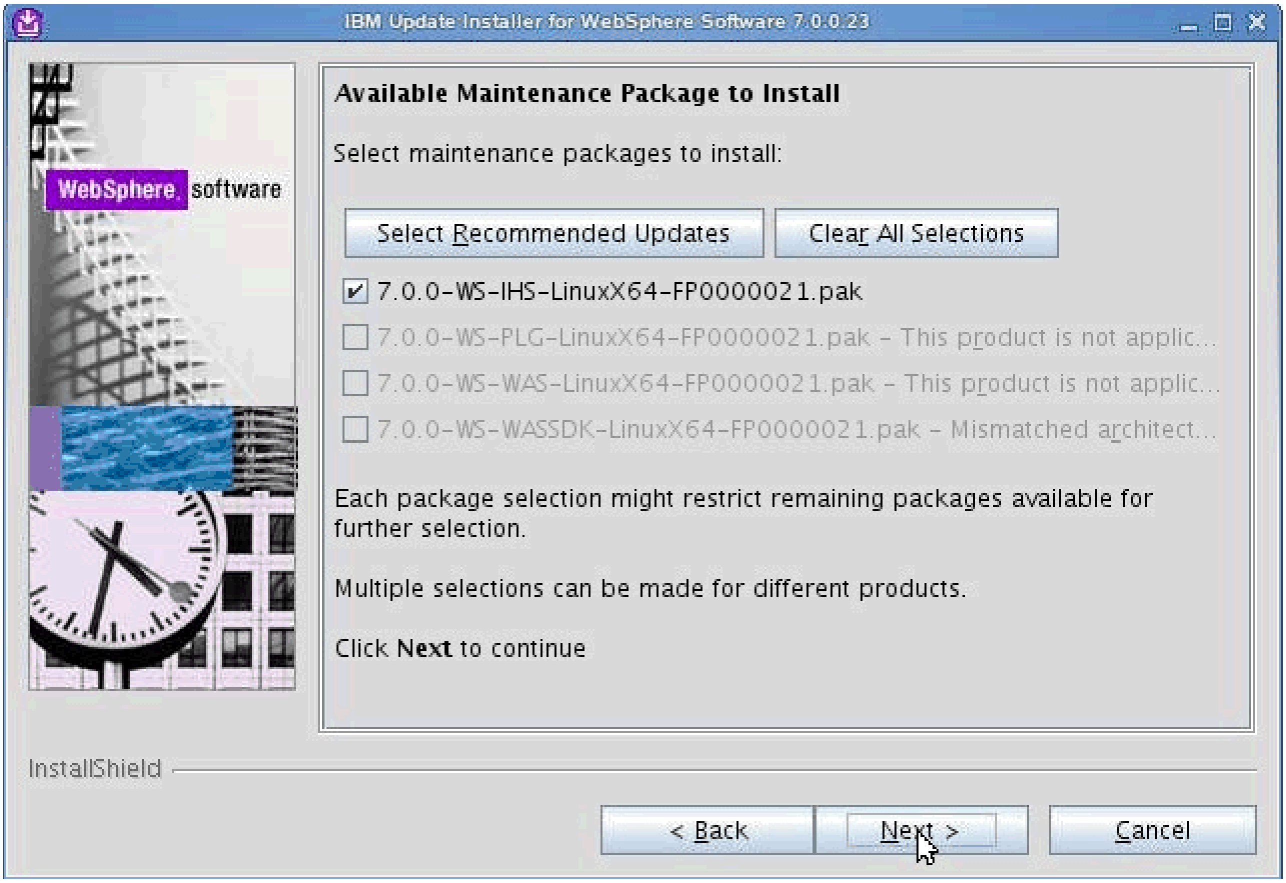
Directory path:
/software/was_fp

The latest maintenance packages are available online. Obtain maintenance packages for WebSphere Application Server and all WebSphere Application Server Feature Packs either by visiting the Recommended fixes for WebSphere Application Server webpage for a complete list or by using the WebSphere Maintenance Download wizard to find specific maintenance packages.

Additional information can be found online at the WebSphere Application Server library or WebSphere Application Server information center webpages.

Figure 33. IBM Update Installer for WebSphere Software wizard: Maintenance Package Directory screen

__ 5. Select the maintenance packages that you want to install and click **Next**.


IBM Update Installer for WebSphere Software 7.0.0.23
WebSphere. software
InstallShield
< Back
Next >
Cancel

Available Maintenance Package to Install

Select maintenance packages to install:

Select Recommended Updates
Clear All Selections

☑ 7.0.0-WS-IHS-LinuxX64-FP0000021.pak

☐ 7.0.0-WS-PLG-LinuxX64-FP0000021.pak - This product is not applic...

☐ 7.0.0-WS-WAS-LinuxX64-FP0000021.pak - This product is not applic...

☐ 7.0.0-WS-WASSDK-LinuxX64-FP0000021.pak - Mismatched architect...

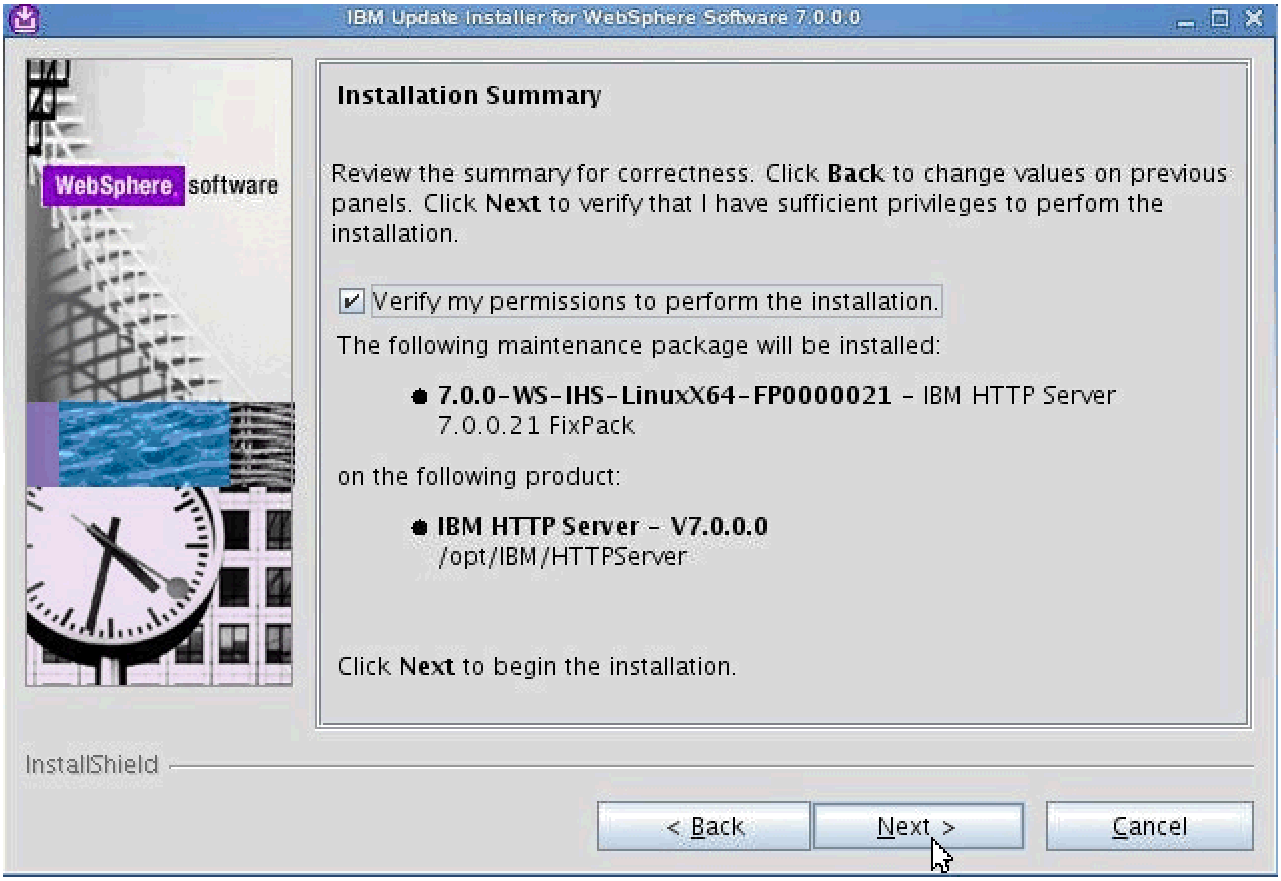
Each package selection might restrict remaining packages available for further selection.

Multiple selections can be made for different products.

Click **Next** to continue

Figure 34. IBM Update Installer for WebSphere Software wizard: Available Maintenance Package to Install screen

__ 6. Review the installation summary and click **Next.**



Installation Summary

Review the summary for correctness. Click **Back** to change values on previous panels. Click **Next** to verify that I have sufficient privileges to perfom the installation.

☑ Verify my permissions to perform the installation.

The following maintenance package will be installed:

- **7.0.0-WS-IHS-LinuxX64-FP0000021** - IBM HTTP Server 7.0.0.21 FixPack

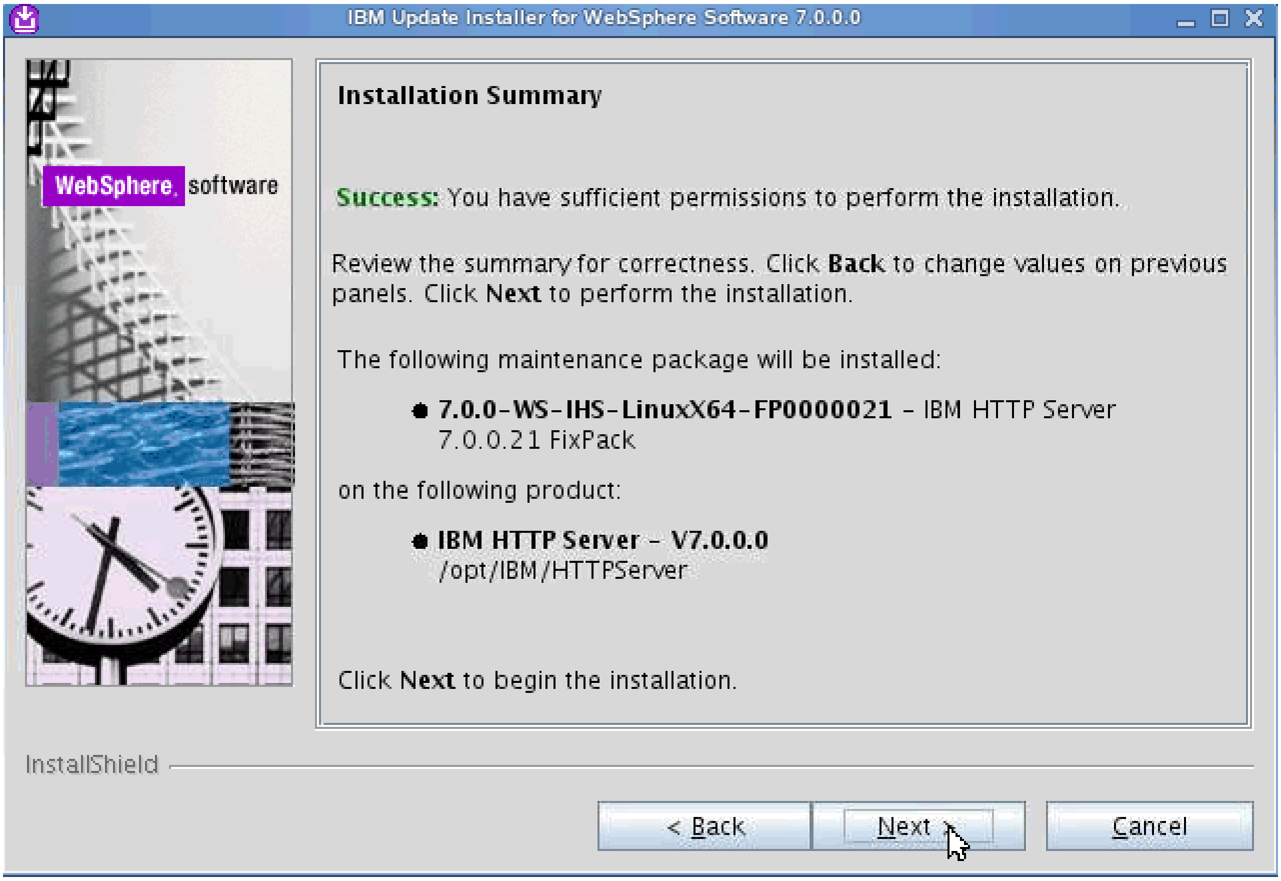
on the following product:

- **IBM HTTP Server - V7.0.0.0** /opt/IBM/HTTPServer

Click **Next** to begin the installation.

Figure 35. IBM Update Installer for WebSphere Software wizard: Installation Summary screen (1 of 2)

__ 7. On the Installation Summary screen, you are informed that you have enough permissions for the installation. Click **Next**.



IBM Update Installer for WebSphere Software 7.0.0.0

Installation Summary

Success: You have sufficient permissions to perform the installation.

Review the summary for correctness. Click **Back** to change values on previous panels. Click **Next** to perform the installation.

The following maintenance package will be installed:

- **7.0.0-WS-IHS-LinuxX64-FP0000021** - IBM HTTP Server 7.0.0.21 FixPack

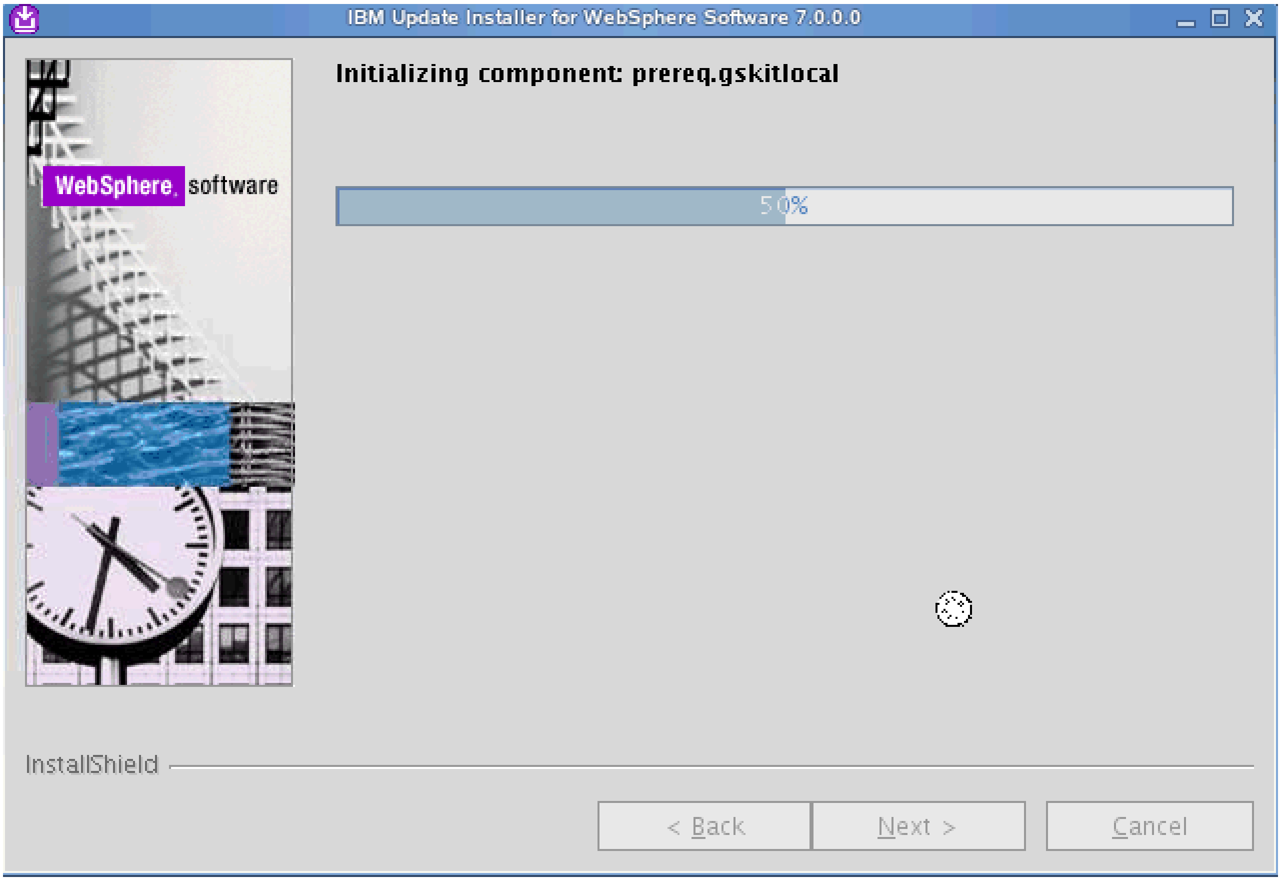
on the following product:

- **IBM HTTP Server - V7.0.0.0** /opt/IBM/HTTPServer

Click **Next** to begin the installation.

Figure 36. IBM Update Installer for WebSphere Software wizard: Installation Summary screen (2 of 2)

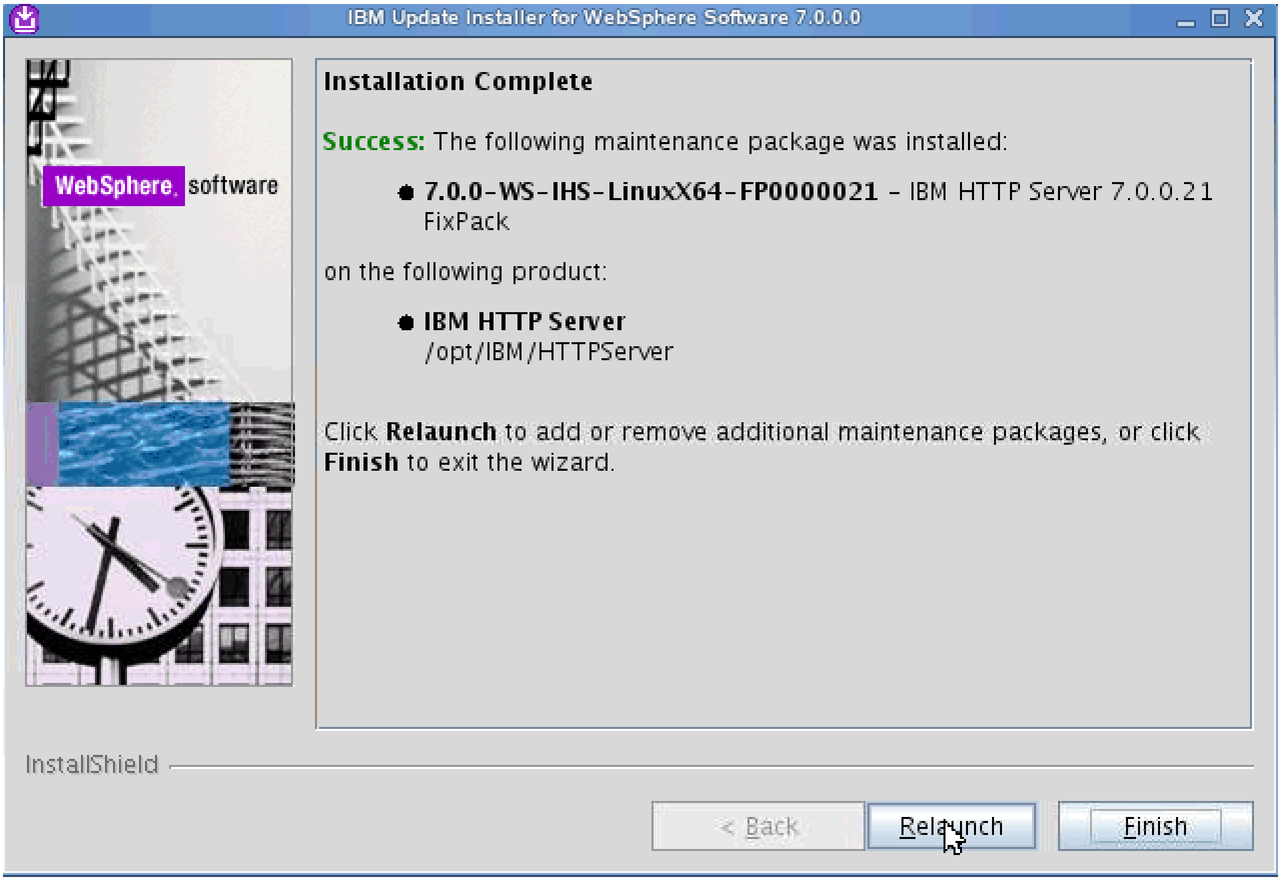
The installation components initialize.



Initializing component: prereq.gskitlocal

Figure 37. IBM Update Installer for WebSphere Software wizard: Installation in progress screen

__ 8. The installation completes. Click **Relaunch** to add or remove extra maintenance packages.



Installation Complete

Success: The following maintenance package was installed:

- **7.0.0-WS-IHS-LinuxX64-FP0000021** - IBM HTTP Server 7.0.0.21 FixPack

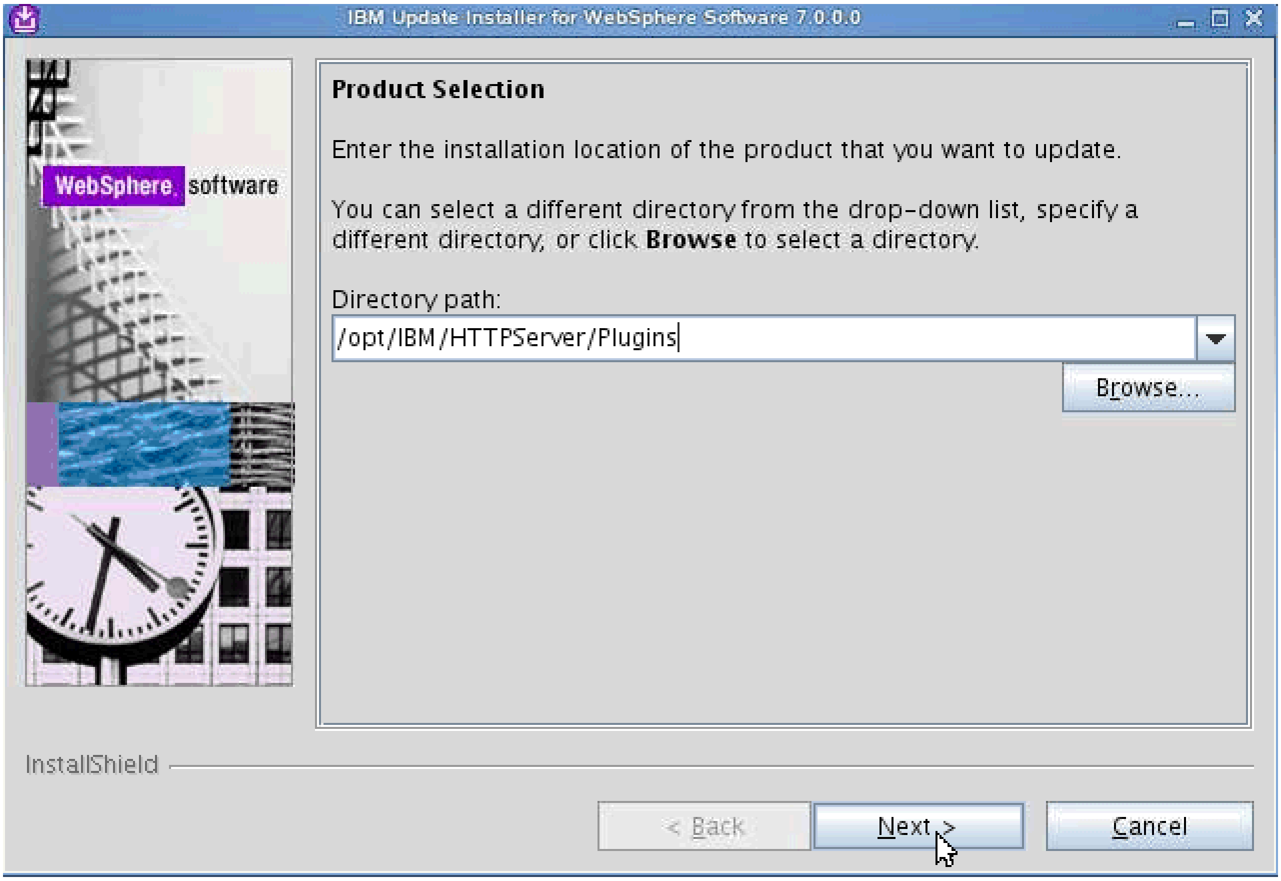
on the following product:

- **IBM HTTP Server**
  /opt/IBM/HTTPServer

Click **Relaunch** to add or remove additional maintenance packages, or click **Finish** to exit the wizard.

Figure 38. IBM Update Installer for WebSphere Software wizard: Installation Complete screen

__ 9. Apply 70021 fix pack. On the Product Selection screen, click **Next**.



IBM Update Installer for WebSphere Software 7.0.0.0

Product Selection

Enter the installation location of the product that you want to update.

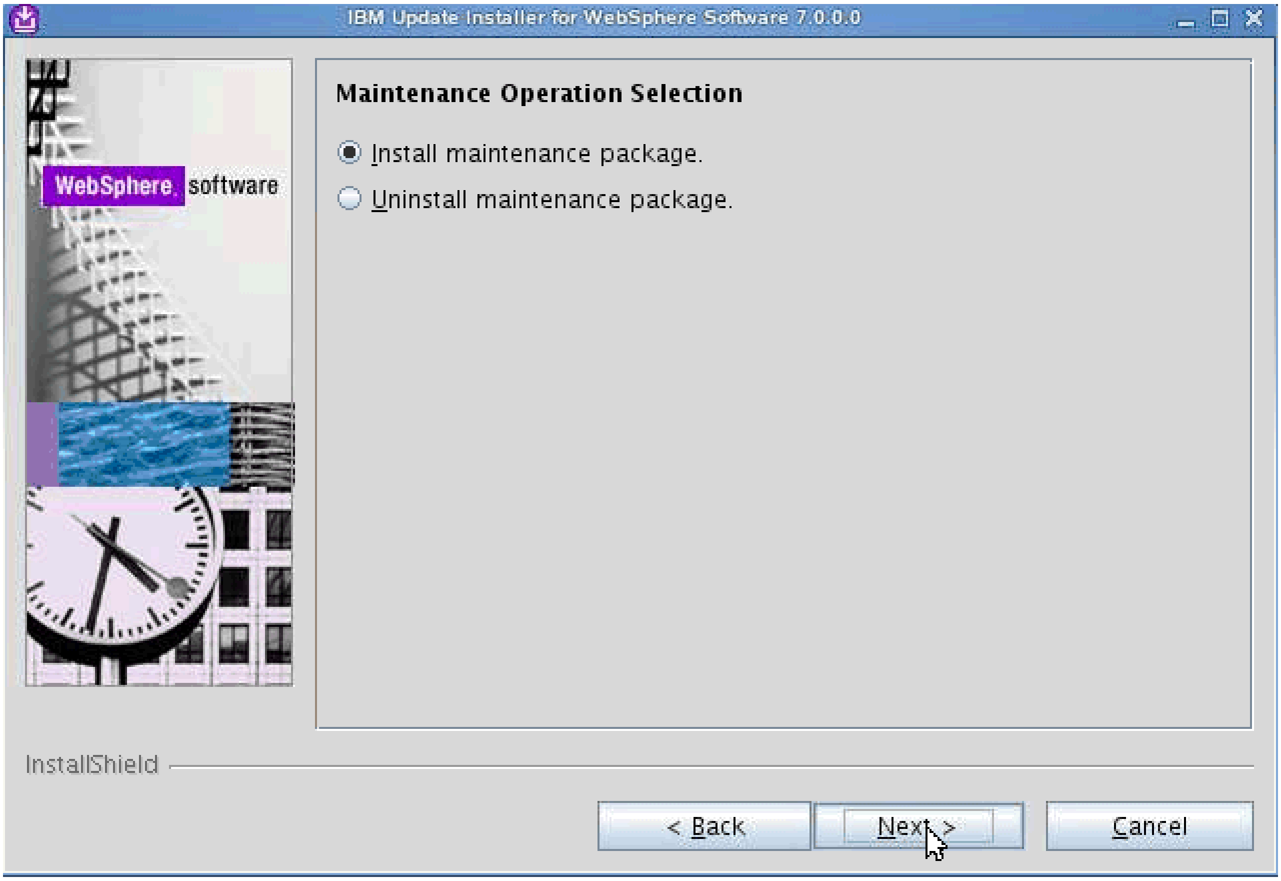
You can select a different directory from the drop-down list, specify a different directory, or click **Browse** to select a directory.

Directory path:

/opt/IBM/HTTPServer/Plugins

Figure 39. IBM Update Installer for WebSphere Software wizard: Product Selection screen

___ 10. Select Install maintenance package and click **Next.**



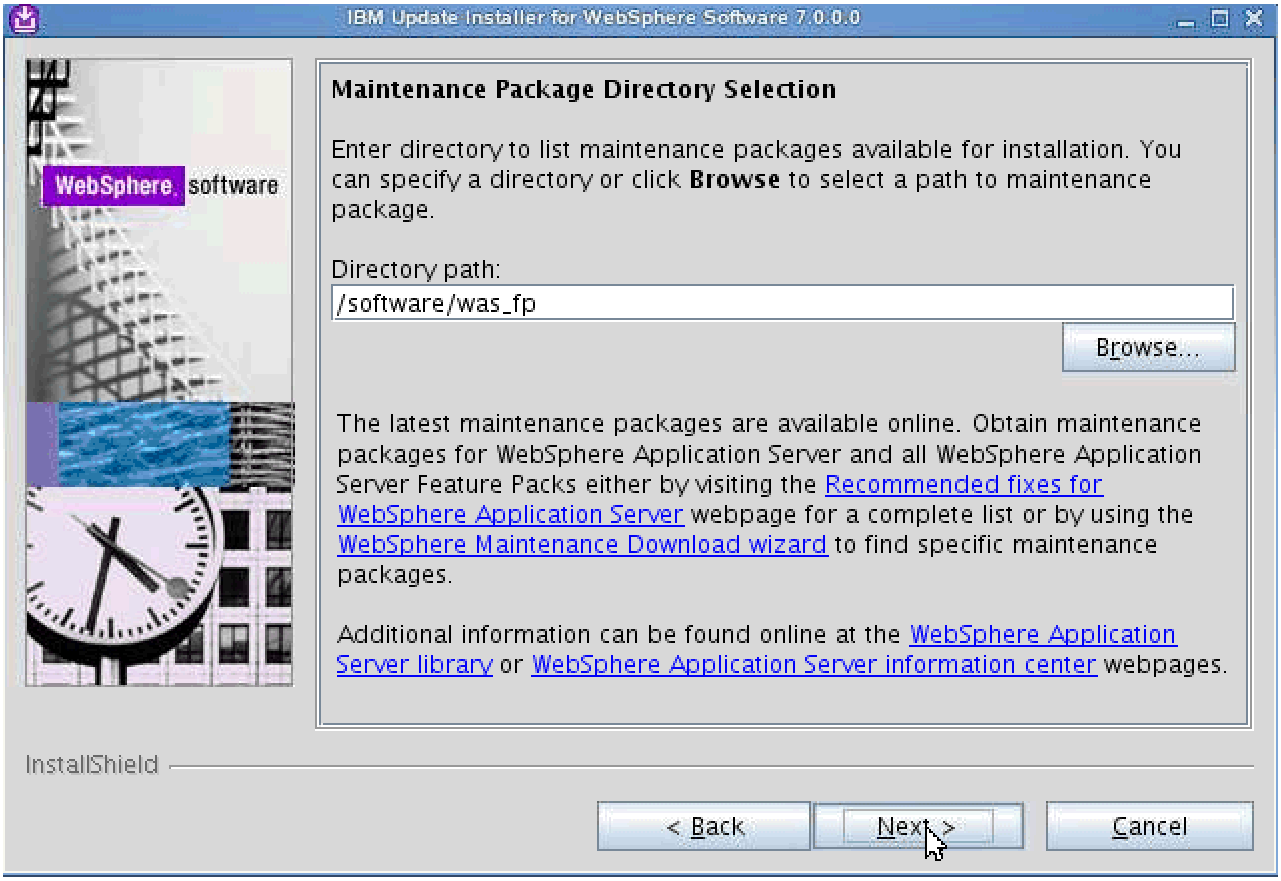
Maintenance Operation Selection

● Install maintenance package.

○ Uninstall maintenance package.

Figure 40. IBM Update Installer for WebSphere Software wizard: Maintenance Operation Selection screen

__ 11. Select the directory to install the maintenance package and click **Next**.



Maintenance Package Directory Selection

Enter directory to list maintenance packages available for installation. You can specify a directory or click **Browse** to select a path to maintenance package.

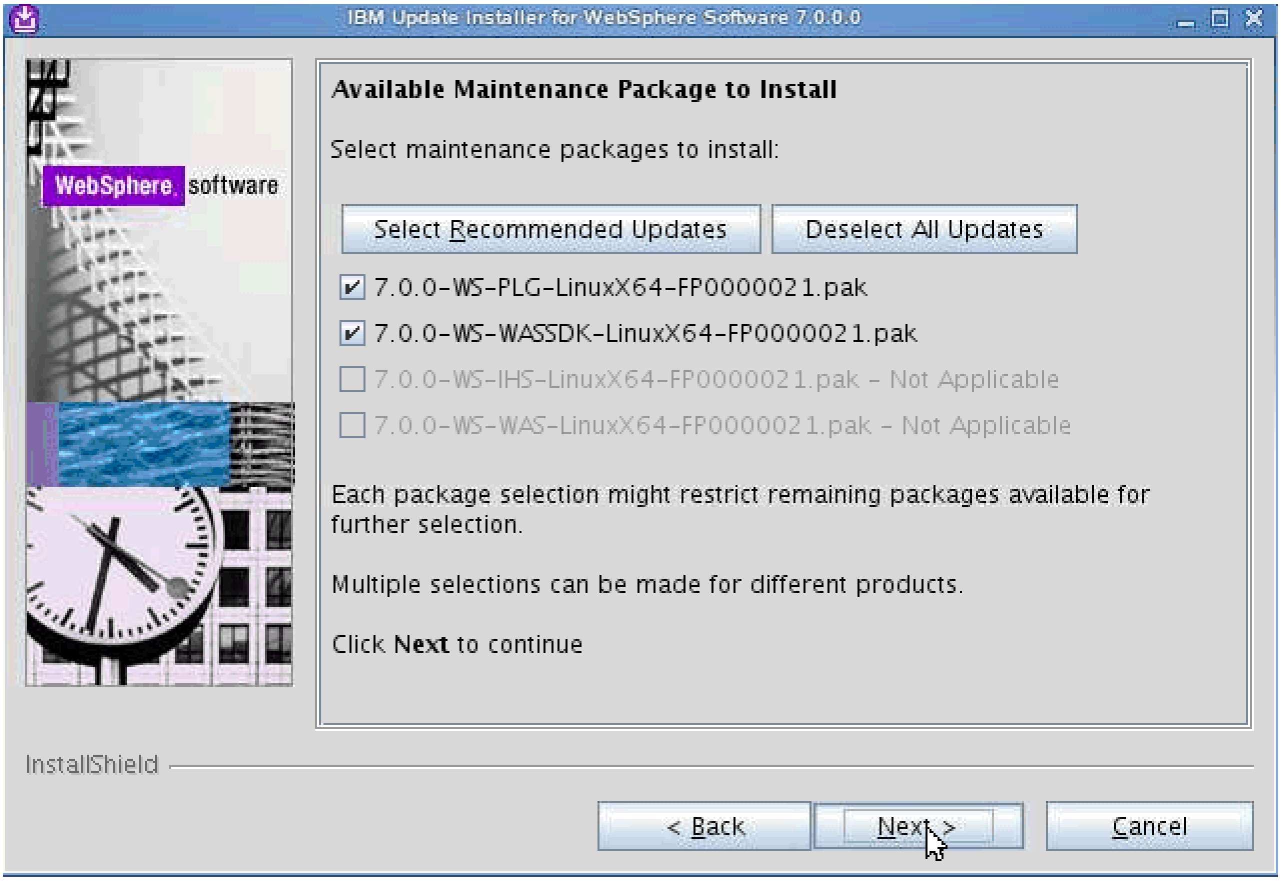
Directory path:
/software/was_fp

The latest maintenance packages are available online. Obtain maintenance packages for WebSphere Application Server and all WebSphere Application Server Feature Packs either by visiting the Recommended fixes for WebSphere Application Server webpage for a complete list or by using the WebSphere Maintenance Download wizard to find specific maintenance packages.

Additional information can be found online at the WebSphere Application Server library or WebSphere Application Server information center webpages.

Figure 41. IBM Update Installer for WebSphere Software wizard: Maintenance Package Directory screen

__ 12. Select the maintenance packages that you want to install and click **Next**.



IBM Update Installer for WebSphere Software 7.0.0.0

Available Maintenance Package to Install

Select maintenance packages to install:

Select Recommended Updates
Deselect All Updates

☑ 7.0.0-WS-PLG-LinuxX64-FP0000021.pak

☑ 7.0.0-WS-WASSDK-LinuxX64-FP0000021.pak

□ 7.0.0-WS-IHS-LinuxX64-FP0000021.pak - Not Applicable

□ 7.0.0-WS-WAS-LinuxX64-FP0000021.pak - Not Applicable

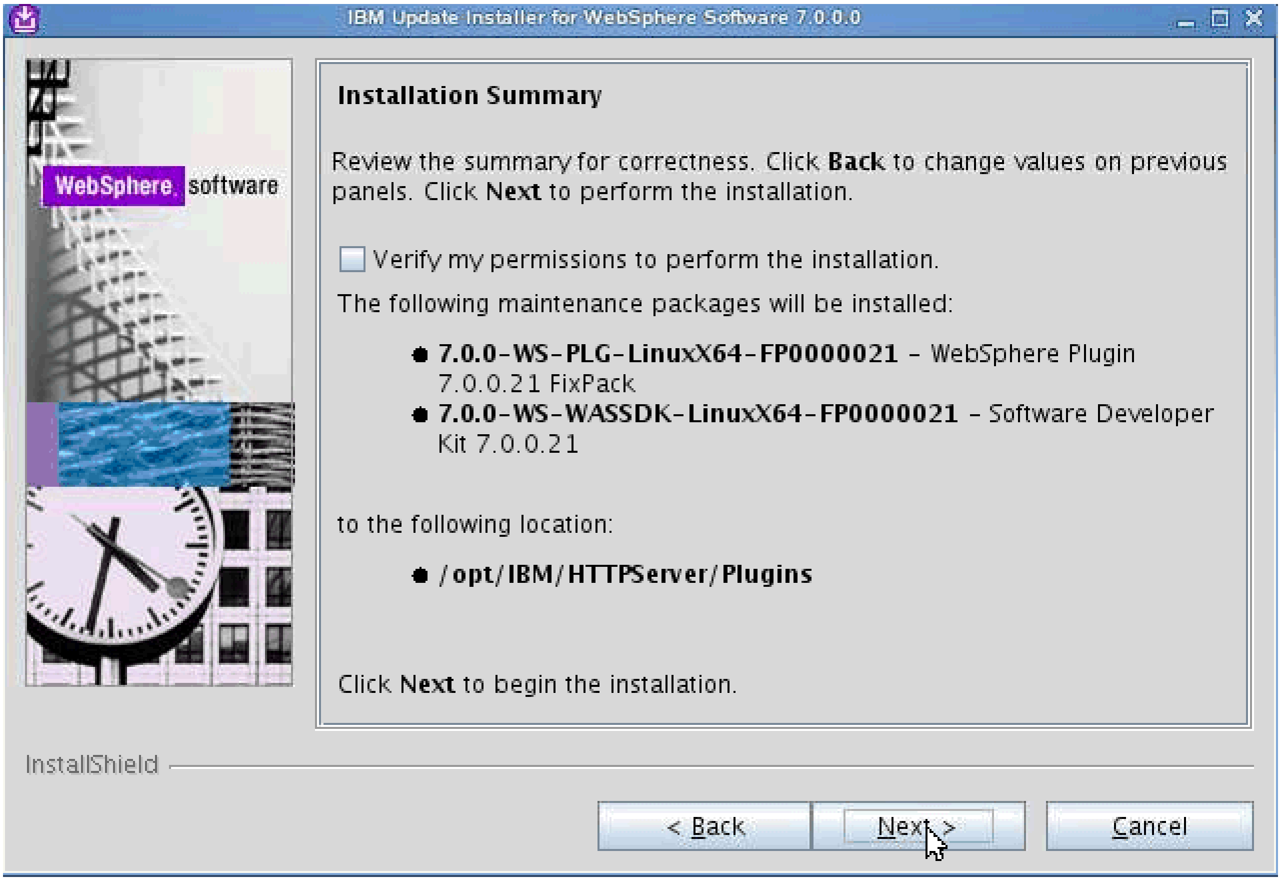
Each package selection might restrict remaining packages available for further selection.

Multiple selections can be made for different products.

Click **Next** to continue

Figure 42. IBM Update Installer for WebSphere Software wizard: Available Maintenance Package to Install screen

___ 13. Review the installation summary and click **Next.**



Installation Summary

Review the summary for correctness. Click **Back** to change values on previous panels. Click **Next** to perform the installation.

□ Verify my permissions to perform the installation.

The following maintenance packages will be installed:

- **7.0.0-WS-PLG-LinuxX64-FP0000021** - WebSphere Plugin 7.0.0.21 FixPack
- **7.0.0-WS-WASSDK-LinuxX64-FP0000021** - Software Developer Kit 7.0.0.21

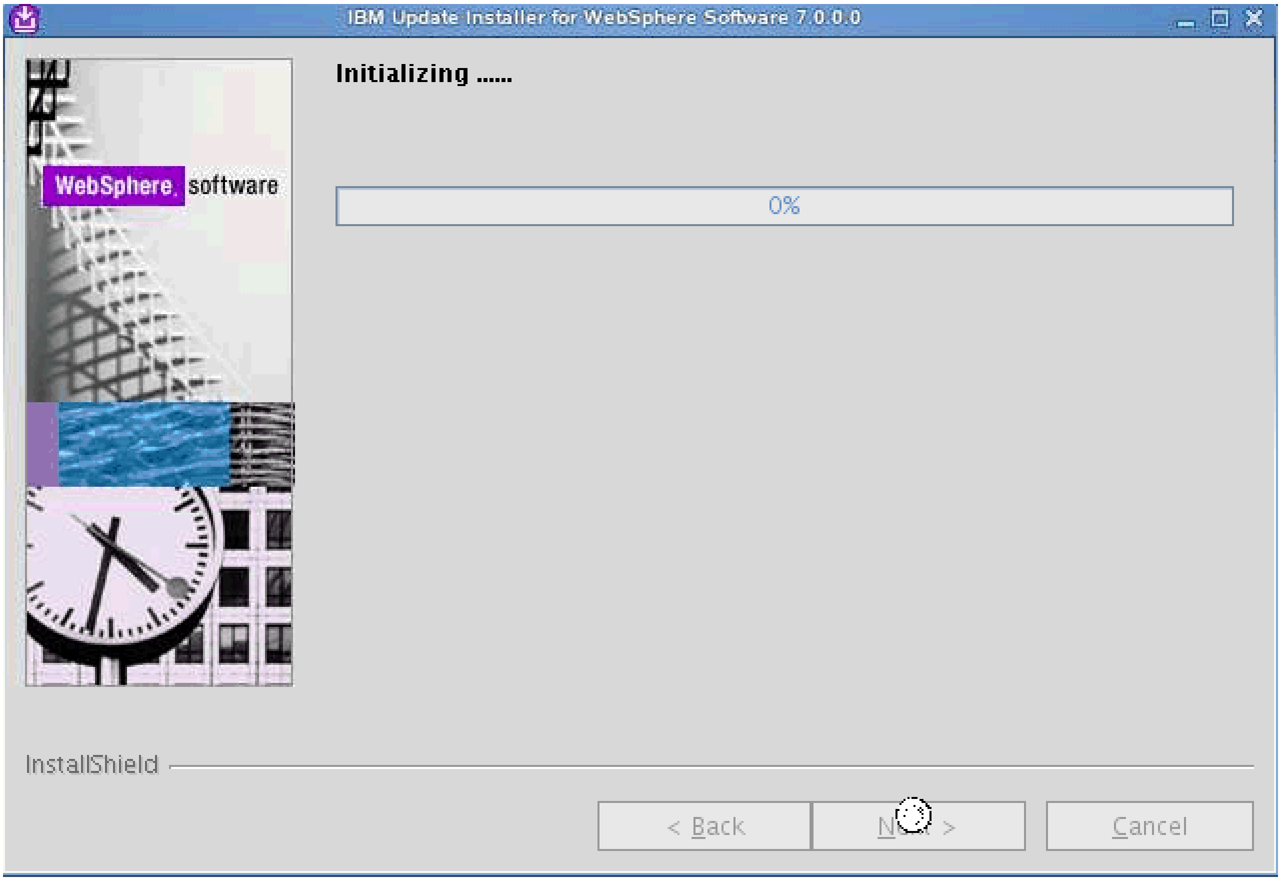
to the following location:

- **/opt/IBM/HTTPServer/Plugins**

Click **Next** to begin the installation.

Figure 43. IBM Update Installer for WebSphere Software wizard: Installation Summary screen

The installation begins.

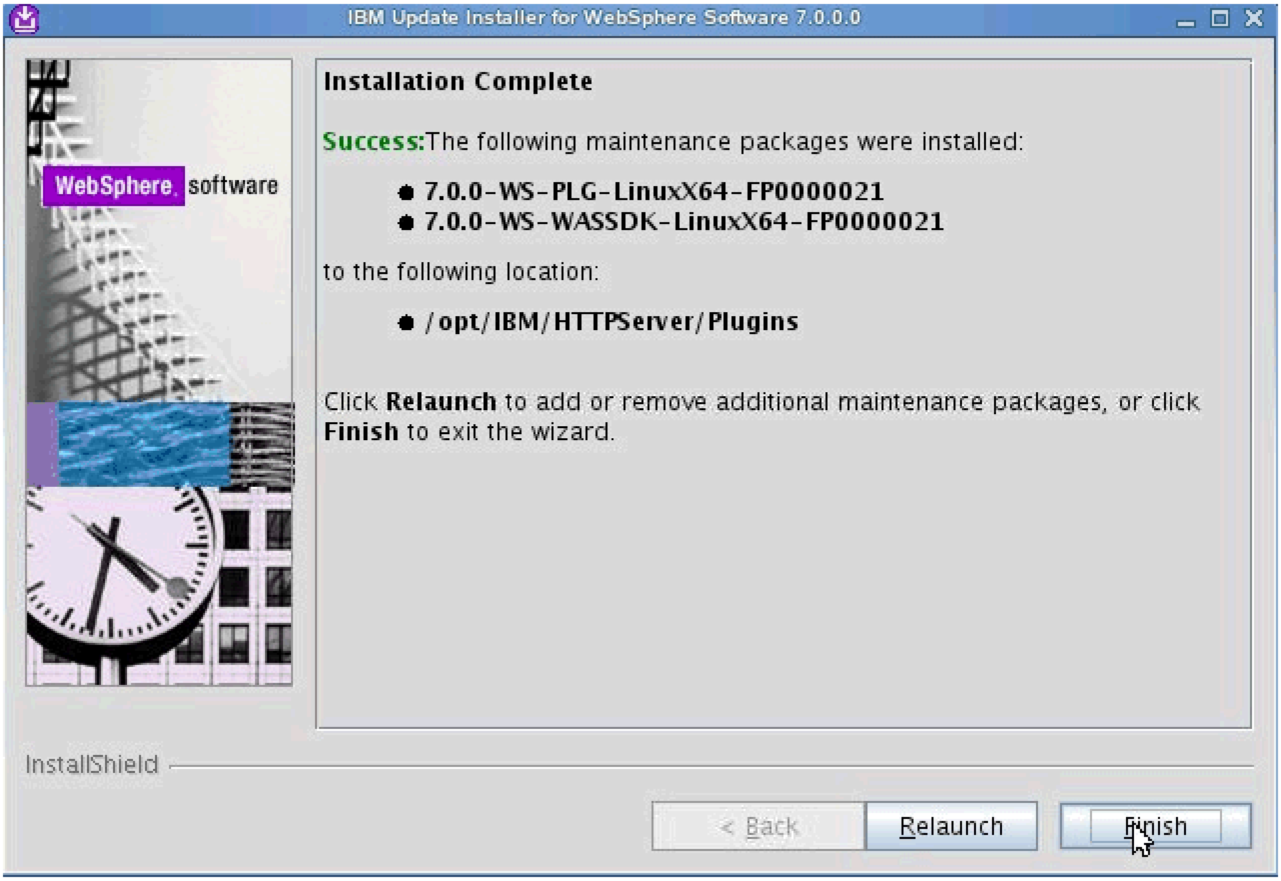


Initializing ......

0%

Figure 44. IBM Update Installer for WebSphere Software wizard: Installation in progress screen

__ 14. The installation completes. Click **Finish**.



Installation Complete

Success: The following maintenance packages were installed:

- **7.0.0-WS-PLG-LinuxX64-FP0000021**
- **7.0.0-WS-WASSDK-LinuxX64-FP0000021**

to the following location:

- **/opt/IBM/HTTPServer/Plugins**

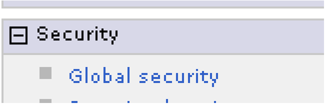
Click **Relaunch** to add or remove additional maintenance packages, or click **Finish** to exit the wizard.

Figure 45. IBM Update Installer for WebSphere Software wizard: Installation Complete screen

Configure WebSphere Application Server security

Configure the federated repository

___ 1. Go to Security > Global security.

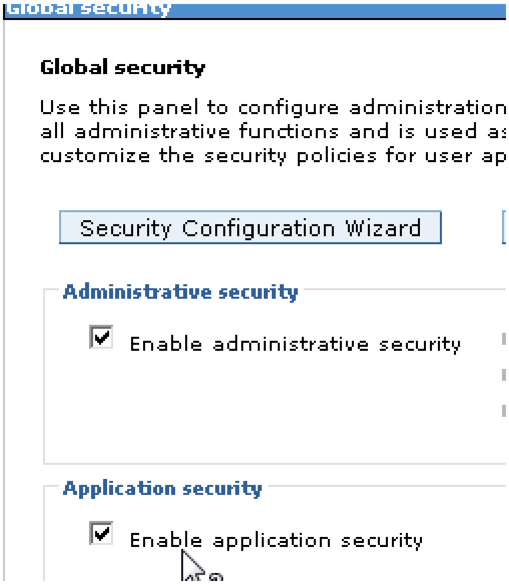


⊟ Security

Global security

Figure 46. Global security

___ 2. Select **Enable application security.**



Global security

Global security

Use this panel to configure administration
all administrative functions and is used a:
customize the security policies for user ap

Administrative security

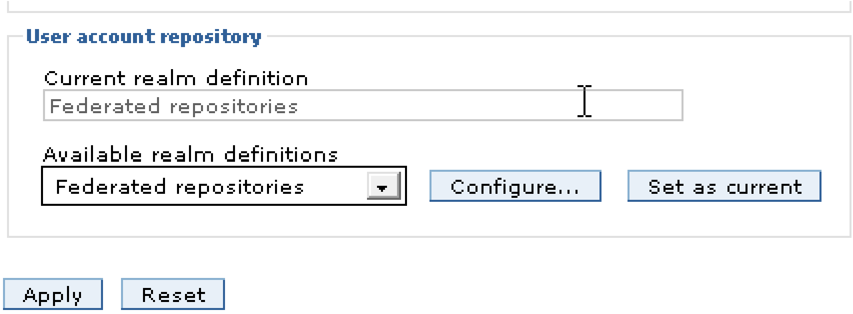
☑ Enable administrative security

Application security

☑ Enable application security

Figure 47. Application security enablement

___ 3. Click **Configure...**



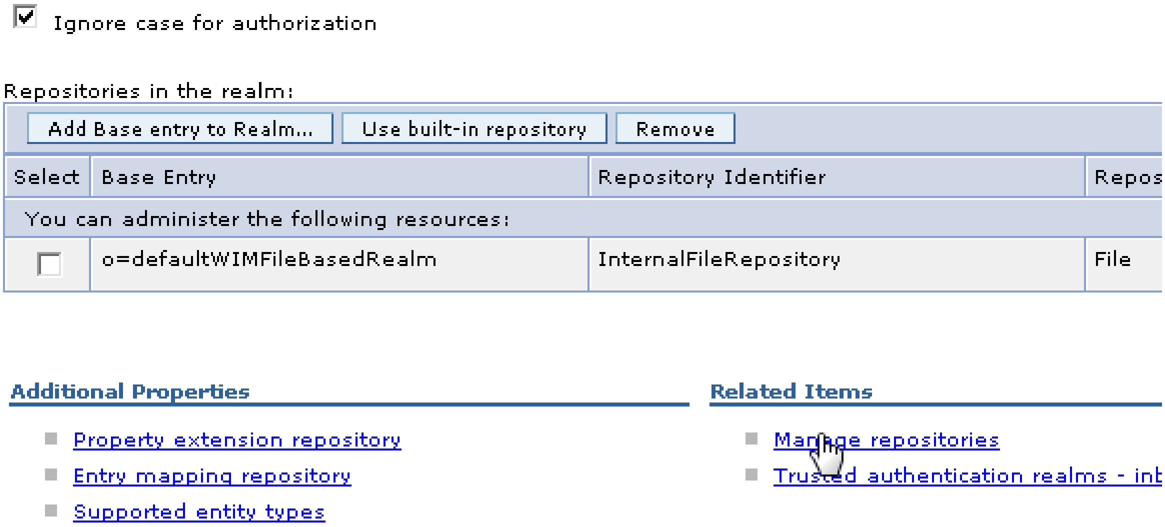
User account repository

Current realm definition
Federated repositories

Available realm definitions
Federated repositories

Figure 48. User account repository

__ 4. In the Related Items section, click **Manage repositories**.



☑ Ignore case for authorization

Repositories in the realm:

Select	Base Entry	Repository Identifier	Repos
You can administer the following resources:			
□	o=defaultWIMFileBasedRealm	InternalFileRepository	File

Additional Properties

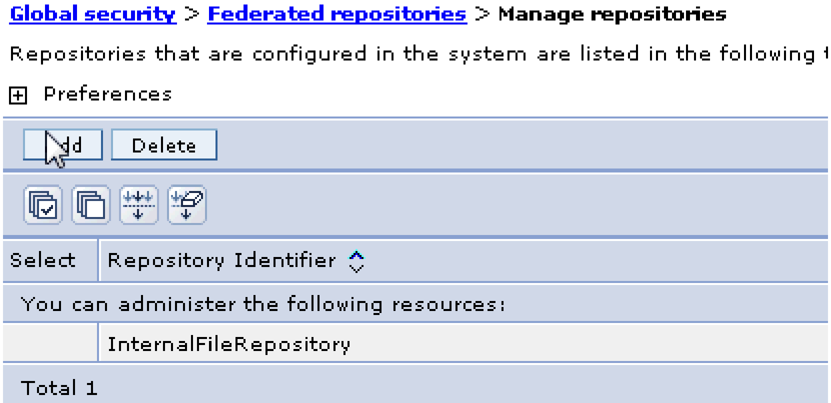
- Property extension repository
- Entry mapping repository
- Supported entity types

Related Items

- Manage repositories
- Trusted authentication realms - inb

Figure 49. Related items > Manage repositories

__ 5. Click **Add**.



Global security > Federated repositories > **Manage repositories**

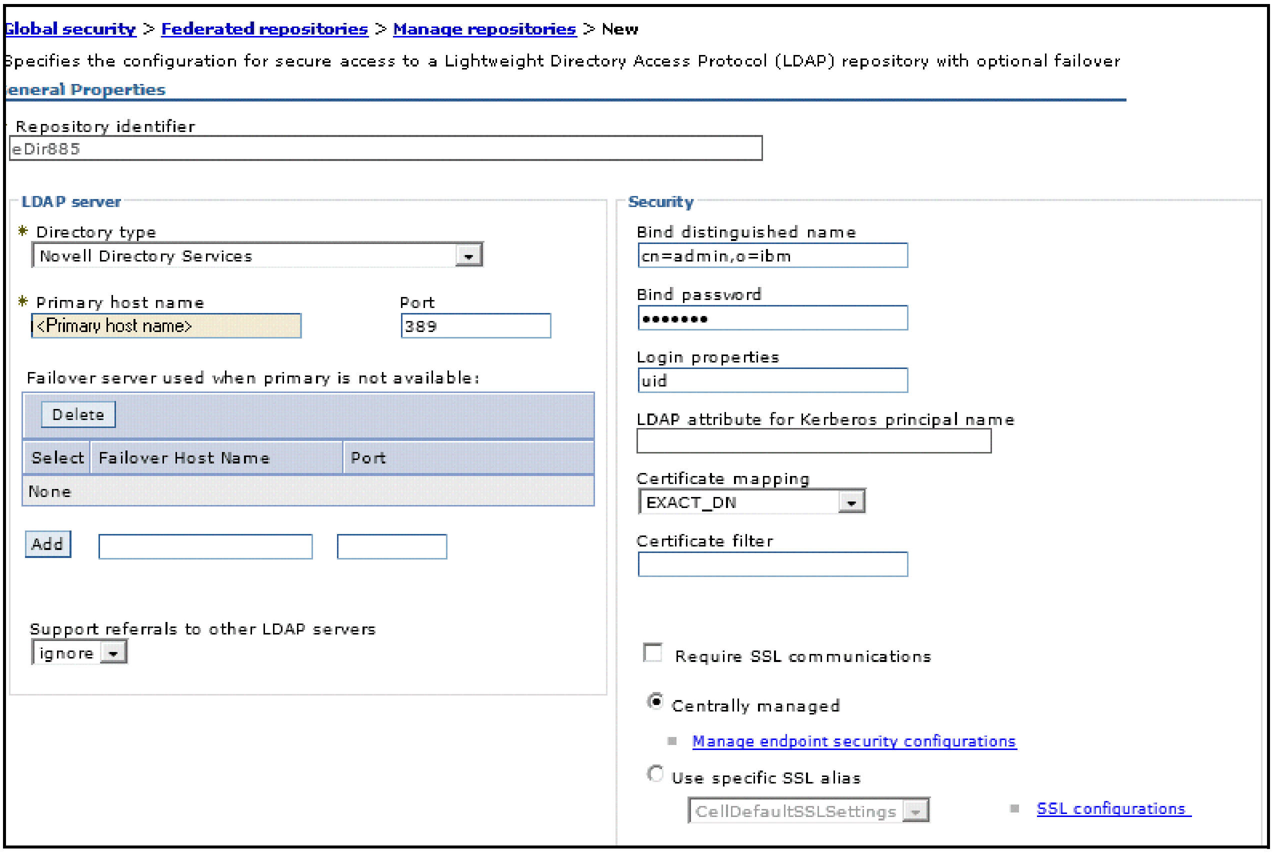
Repositories that are configured in the system are listed in the following t

⊞ Preferences

Select	Repository Identifier
You can administer the following resources:	
	InternalFileRepository
Total 1	

Figure 50. Global security > Federated repositories > Manage repositories

__ 6. In the General Properties window, enter a repository identifier, the directory type, a primary host name, and port, and click **Add**.



Global security > Federated repositories > Manage repositories > New

Specifies the configuration for secure access to a Lightweight Directory Access Protocol (LDAP) repository with optional failover

General Properties

Repository identifier: eDir885

LDAP server

* Directory type: Novell Directory Services

* Primary host name: <Primary host name>

Port: 389

Failover server used when primary is not available:

Select	Failover Host Name	Port
None		

Support referrals to other LDAP servers: ignore

Security

Bind distinguished name: cn=admin,o=ibm

Bind password: •••••••

Login properties: uid

LDAP attribute for Kerberos principal name:

Certificate mapping: EXACT_DN

Certificate filter:

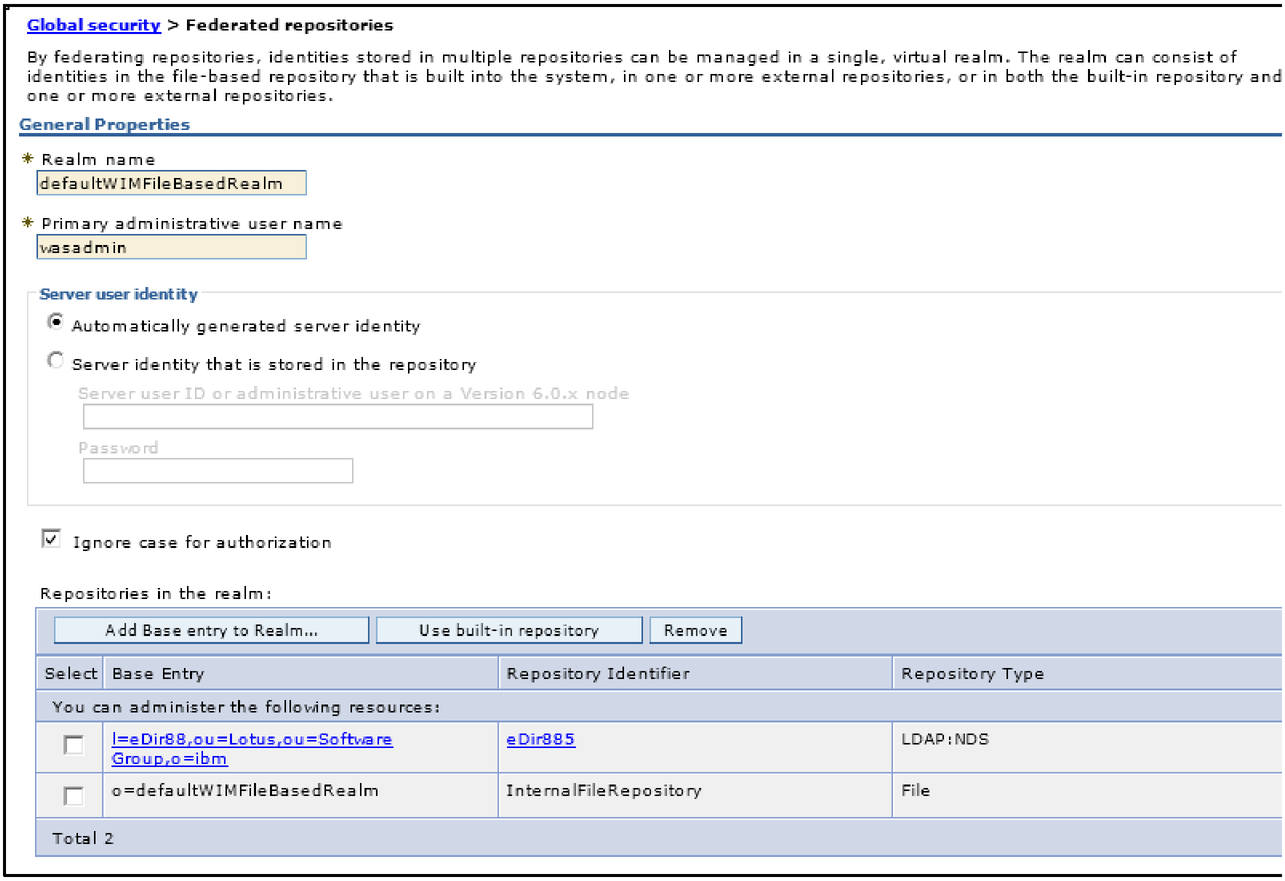
□ Require SSL communications

● Centrally managed

○ Use specific SSL alias: CellDefaultSSLSettings

Figure 51. General properties window

__ 7. Next, click **Add Base entry to Realm...**



Global security > **Federated repositories**

By federating repositories, identities stored in multiple repositories can be managed in a single, virtual realm. The realm can consist of identities in the file-based repository that is built into the system, in one or more external repositories, or in both the built-in repository and one or more external repositories.

General Properties

* Realm name
defaultWIMFileBasedRealm

* Primary administrative user name
wasadmin

Server user identity

● Automatically generated server identity

○ Server identity that is stored in the repository

Server user ID or administrative user on a Version 6.0.x node

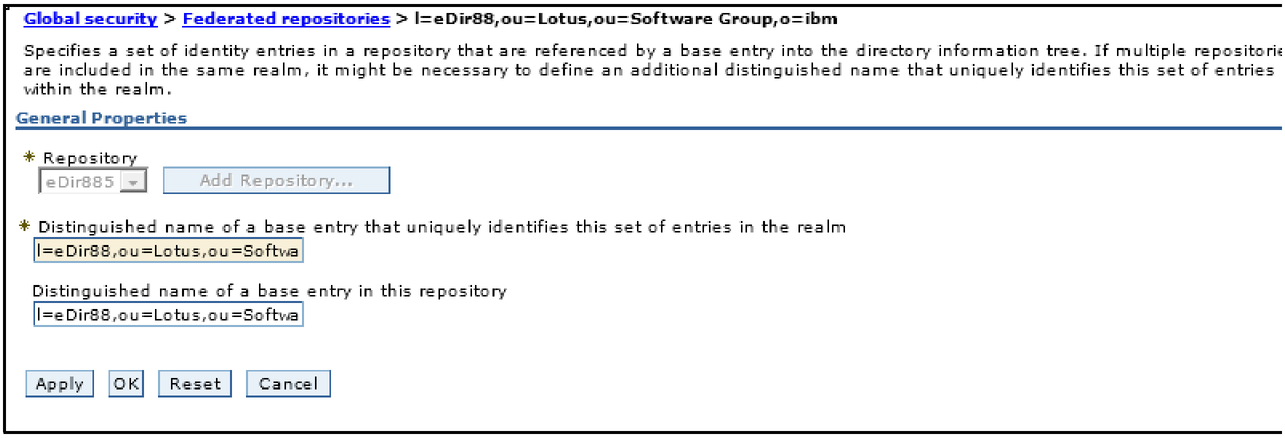
Password

☑ Ignore case for authorization

Repositories in the realm:

Select	Base Entry	Repository Identifier	Repository Type
You can administer the following resources:			
□	l=eDir88,ou=Lotus,ou=Software Group,o=ibm	eDir885	LDAP:NDS
□	o=defaultWIMFileBasedRealm	InternalFileRepository	File
Total 2			

Figure 52. Adding base entry to the realm (1 of 2)



Global security > Federated repositories > **l=eDir88,ou=Lotus,ou=Software Group,o=ibm**

Specifies a set of identity entries in a repository that are referenced by a base entry into the directory information tree. If multiple repositorie are included in the same realm, it might be necessary to define an additional distinguished name that uniquely identifies this set of entries within the realm.

General Properties

* Repository
eDir885

* Distinguished name of a base entry that uniquely identifies this set of entries in the realm
l=eDir88,ou=Lotus,ou=Softwa

Distinguished name of a base entry in this repository
l=eDir88,ou=Lotus,ou=Softwa

Figure 53. Adding base entry to the realm (2 of 2)

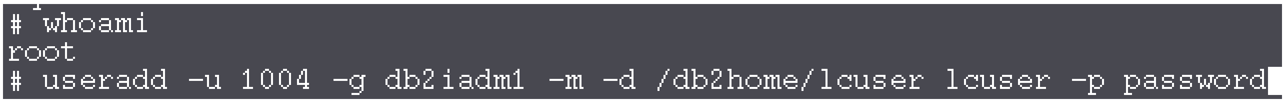
__ 8. Restart all Deployment Manager and Nodes

DBWizard

Assume that DB2 and Tivoli Directory Integrator are already installed.

Preparing lcuser and Wizard

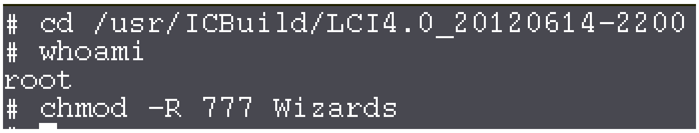
__ 1. Log in to the DB2 server as the root user and type the following command to create a user.



```
# whoami
root
# useradd -u 1004 -g db2iadm1 -m -d /db2home/lcuser lcuser -p password
```

Figure 54. Command to create a user in DB2 server

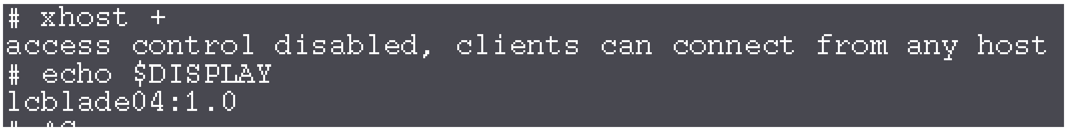
__ 2. Extract the Wizard package and change Wizards directory permission to DB2 administration.



```
# cd /usr/ICBuild/LCI4.0_20120614-2200
# whoami
root
# chmod -R 777 Wizards
```

Figure 55. Extracting wizard package and changing wizard directory permission

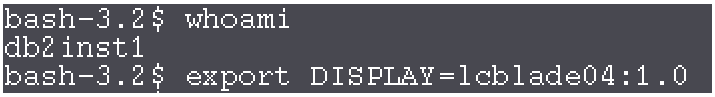
__ 3. Check DISPLAY value.



```
# xhost +
access control disabled, clients can connect from any host
# echo $DISPLAY
lcblade04:1.0
```

Figure 56. Checking display value

__ 4. Switch to DB2 administration user, db2inst1, and export DISPLAY.



```
bash-3.2$ whoami
db2inst1
bash-3.2$ export DISPLAY=lcblade04:1.0
```

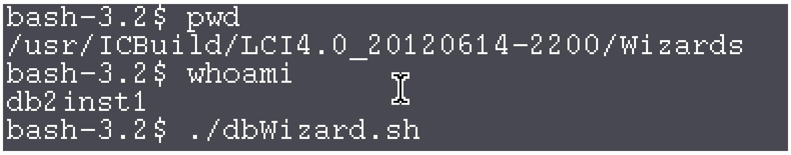
Figure 57. Switching to DB2 administration user and exporting display

Create LC database

Information

For this step, the DB2 user is an administrative user.

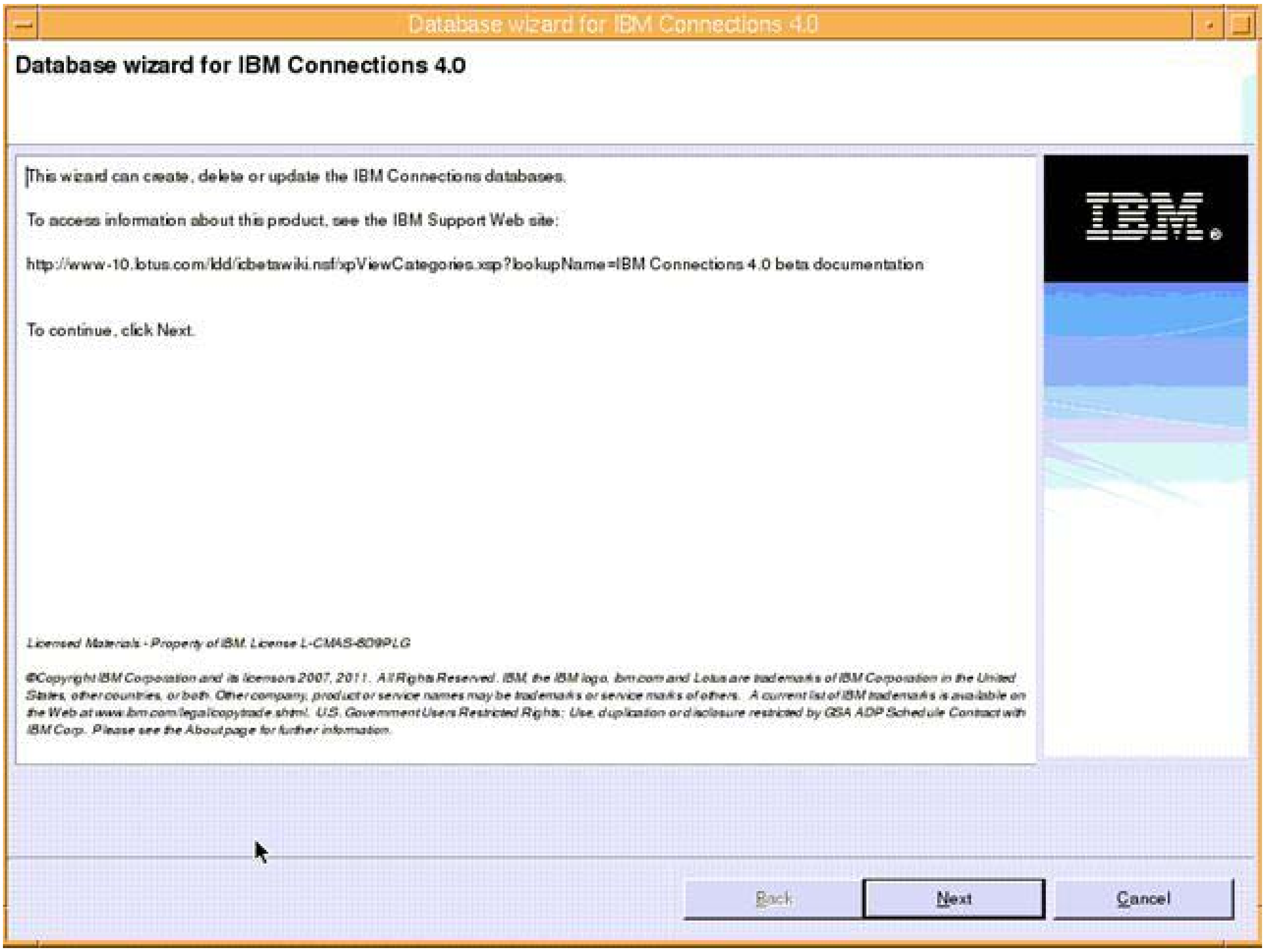
__ 1. Run `./dbWizard.sh` in the extracted Wizard folder.



```
bash-3.2$ pwd
/usr/ICBuild/LCI4.0_20120614-2200/Wizards
bash-3.2$ whoami
db2inst1
bash-3.2$ ./dbWizard.sh
```

Figure 58. Running .dbWizard.sh

__ 2. The database wizard for IBM Connections 4.0 opens. Click **Next**.



Database wizard for IBM Connections 4.0

This wizard can create, delete or update the IBM Connections databases.

To access information about this product, see the IBM Support Web site:

http://www-10.lotus.com/ldd/lcbetawiki.nsf/xpViewCategories.xsp?lookupName=IBM Connections 4.0 beta documentation

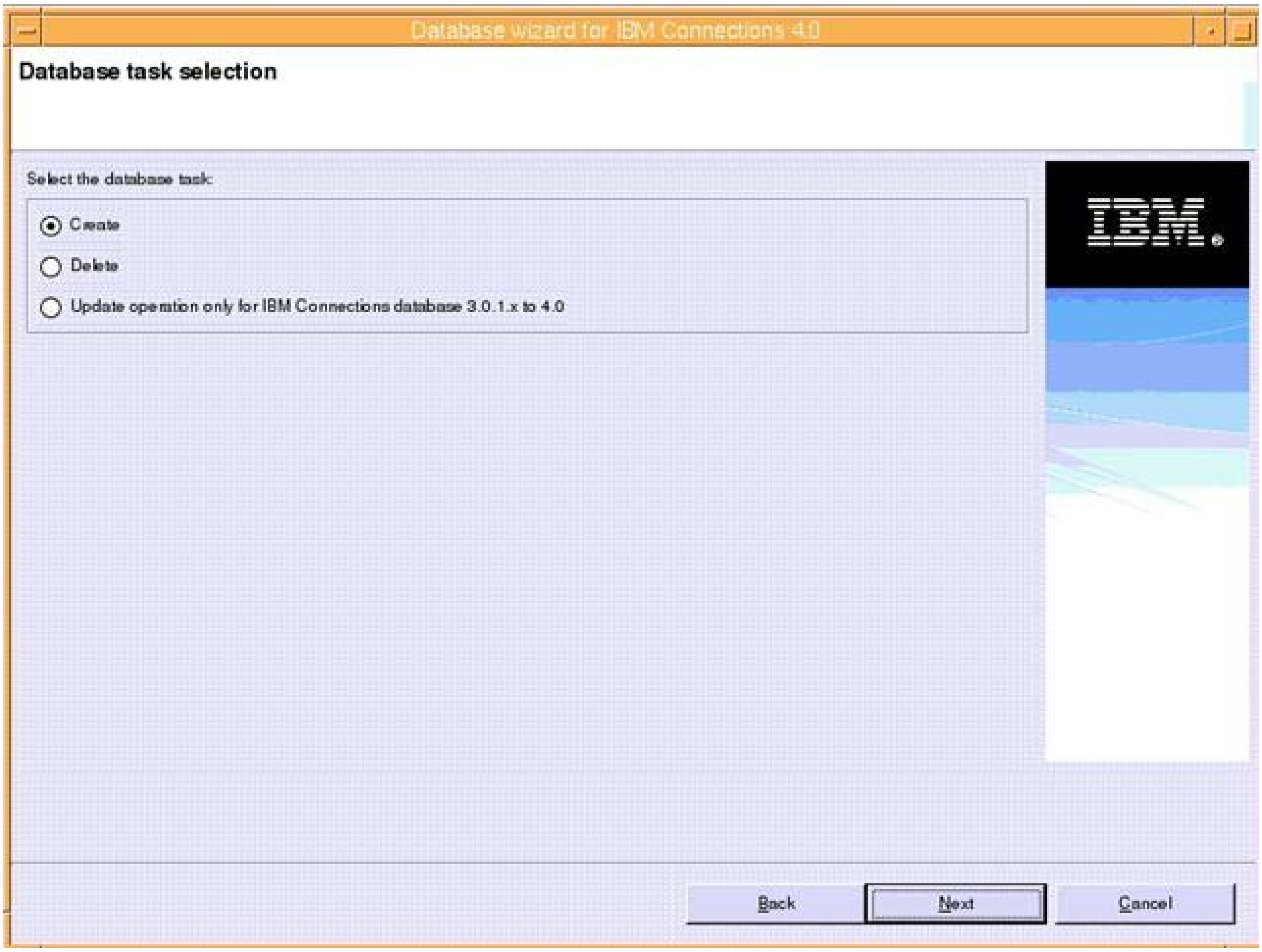
To continue, click Next.

Licensed Materials - Property of IBM. License L-CMAS-8D9PLG

©Copyright IBM Corporation and its licensors 2007, 2011. All Rights Reserved. IBM, the IBM logo, ibm.com and Lotus are trademarks of IBM Corporation in the United States, other countries, or both. Other company, product or service names may be trademarks or service marks of others. A current list of IBM trademarks is available on the Web at www.ibm.com/legal/copytrade.shtml. U.S. Government Users Restricted Rights: Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp. Please see the About page for further information.

Figure 59. Database wizard for IBM Connections 4.0: Welcome screen

___ 3. In the database task selection screen, select **Create** and click **Next.**



Database task selection

Select the database task:

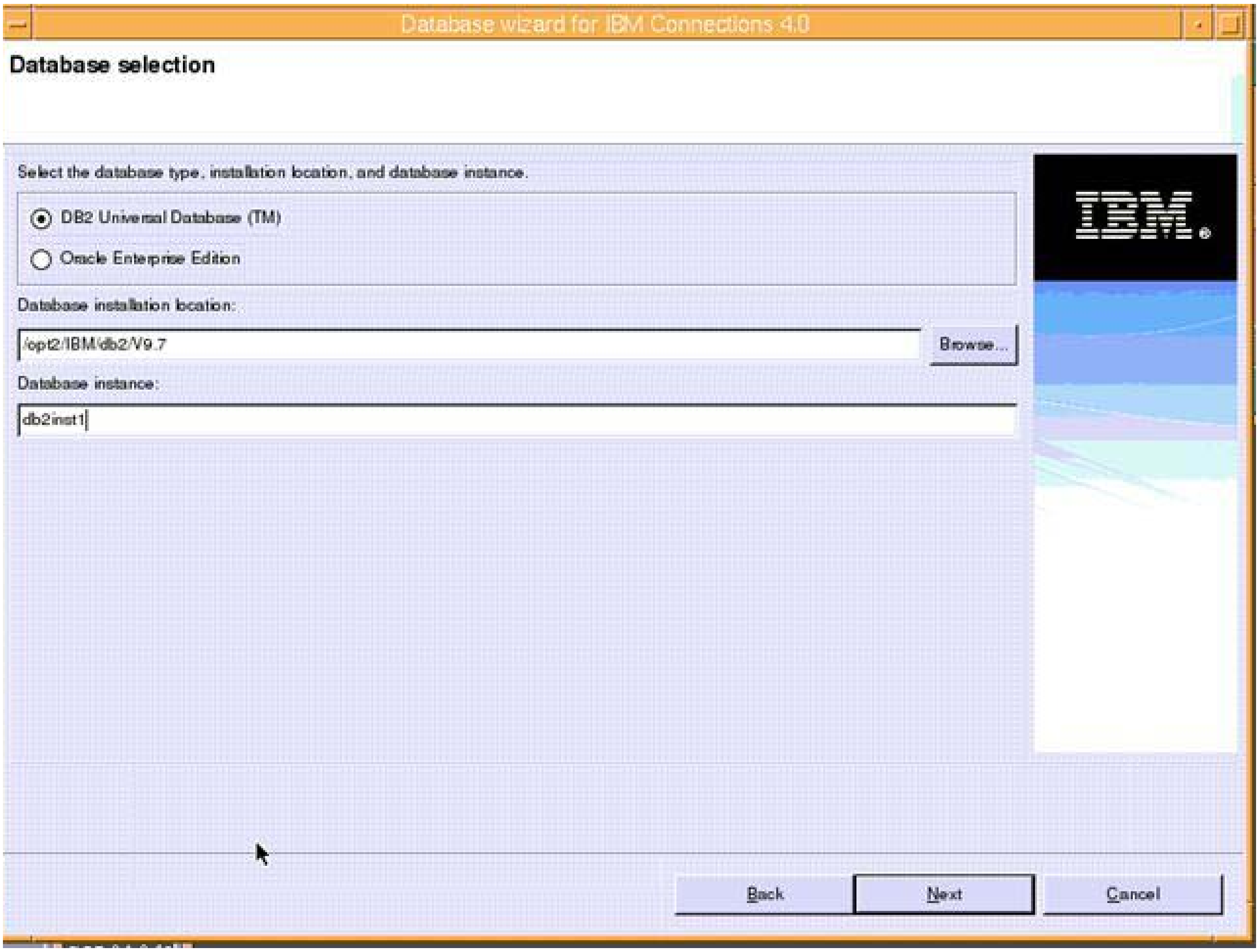
● Create

○ Delete

○ Update operation only for IBM Connections database 3.0.1.x to 4.0

Figure 60. Database wizard for Lotus Connections 4.0: Database task selection screen

__ 4. In the database selection screen, select **DB2 Universal Database (TM)** and click **Next**.



Database selection

Select the database type, installation location, and database instance.

● DB2 Universal Database (TM)

○ Oracle Enterprise Edition

Database installation location:

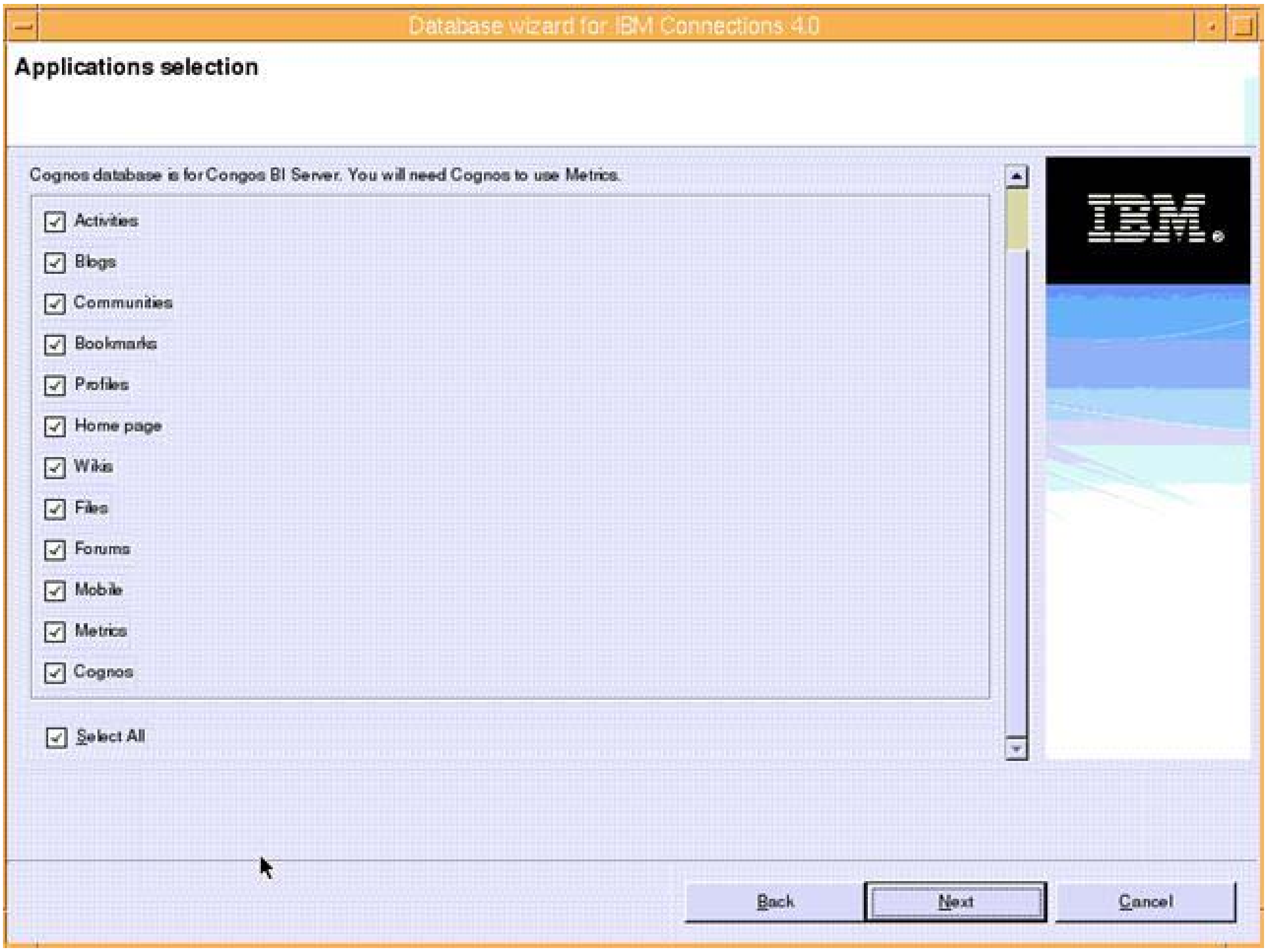
/opt2/IBM/db2/V9.7

Database instance:

db2inst1

Figure 61. Database wizard for Lotus Connections 4.0: Database selection screen

__ 5. In the Applications selection screen, select all options available and click **Next**.



Applications selection

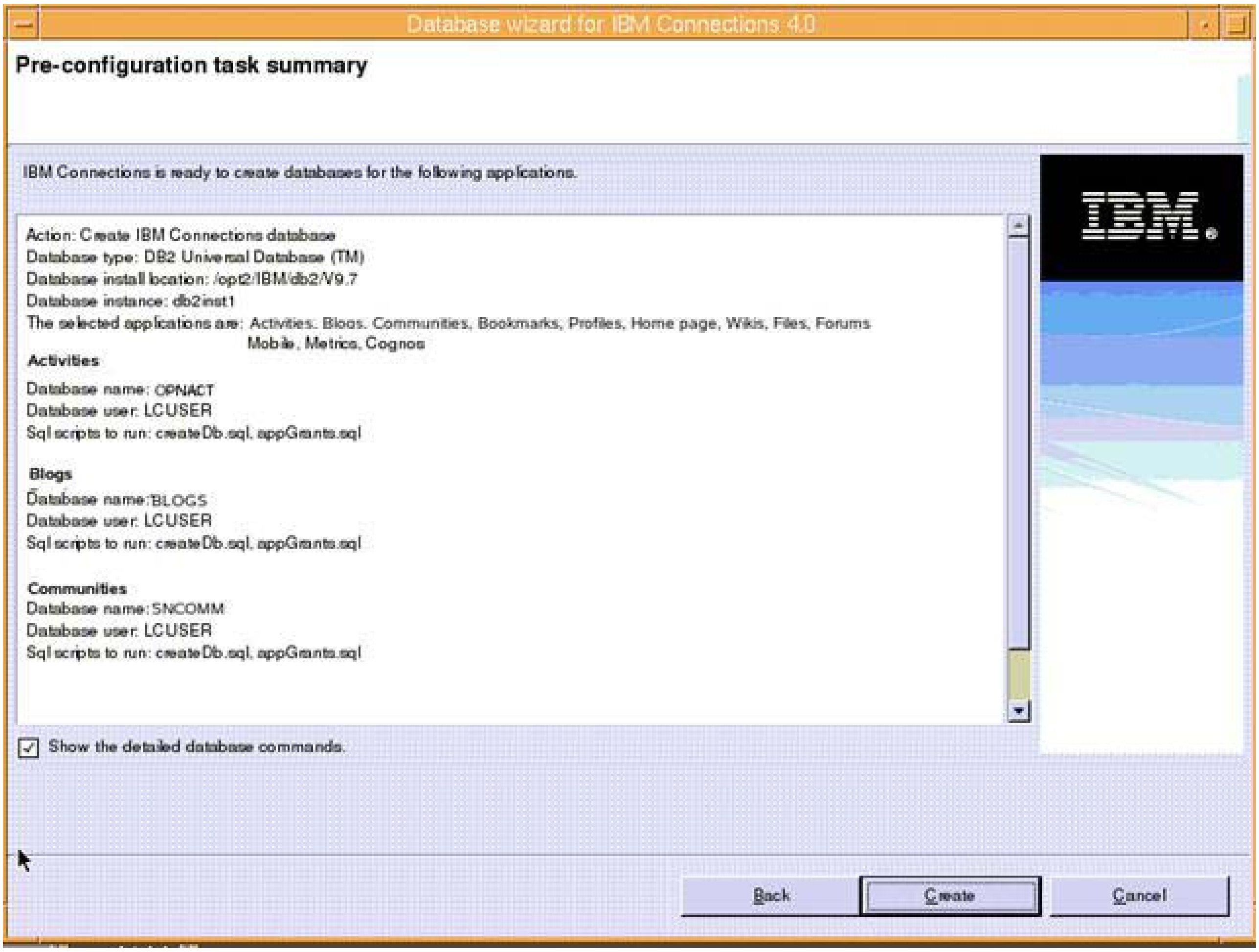
Cognos database is for Congos BI Server. You will need Cognos to use Metrics.

☑ Activities
☑ Blogs
☑ Communities
☑ Bookmarks
☑ Profiles
☑ Home page
☑ Wikis
☑ Files
☑ Forums
☑ Mobile
☑ Metrics
☑ Cognos

☑ Select All

Figure 62. Database wizard for Lotus Connections 4.0: Applications selection screen

__ 6. Check the pre-configuration task summary and click **Create**.



Pre-configuration task summary

IBM Connections is ready to create databases for the following applications.

Action: Create IBM Connections database
Database type: DB2 Universal Database (TM)
Database install location: /opt2/IBM/db2/V9.7
Database instance: db2inst1
The selected applications are: Activities. Bloos. Communities, Bookmarks, Profiles, Home page, Wikis, Files, Forums
Mobile, Metrics, Cognos

Activities
Database name: OPNACT
Database user: LCUSER
Sql scripts to run: createDb.sql, appGrants.sql

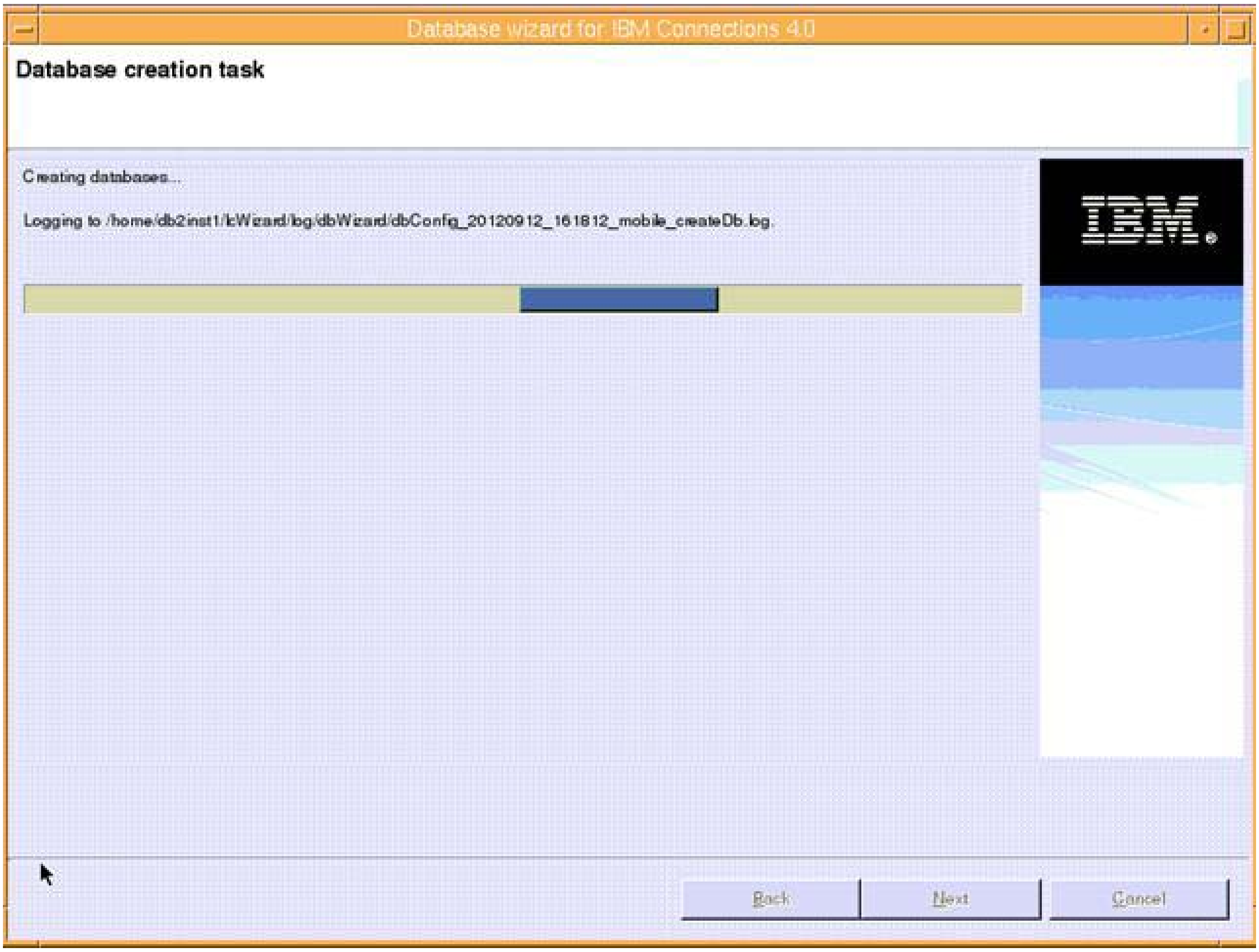
Blogs
Database name:BLOGS
Database user: LCUSER
Sql scripts to run: createDb.sql, appGrants.sql

Communities
Database name:SNCOMM
Database user: LCUSER
Sql scripts to run: createDb.sql, appGrants.sql

☑ Show the detailed database commands.

Figure 63. Database wizard for Lotus Connections 4.0: Pre-configuration task summary screen

Creation of the database starts.



Database creation task

Creating databases...

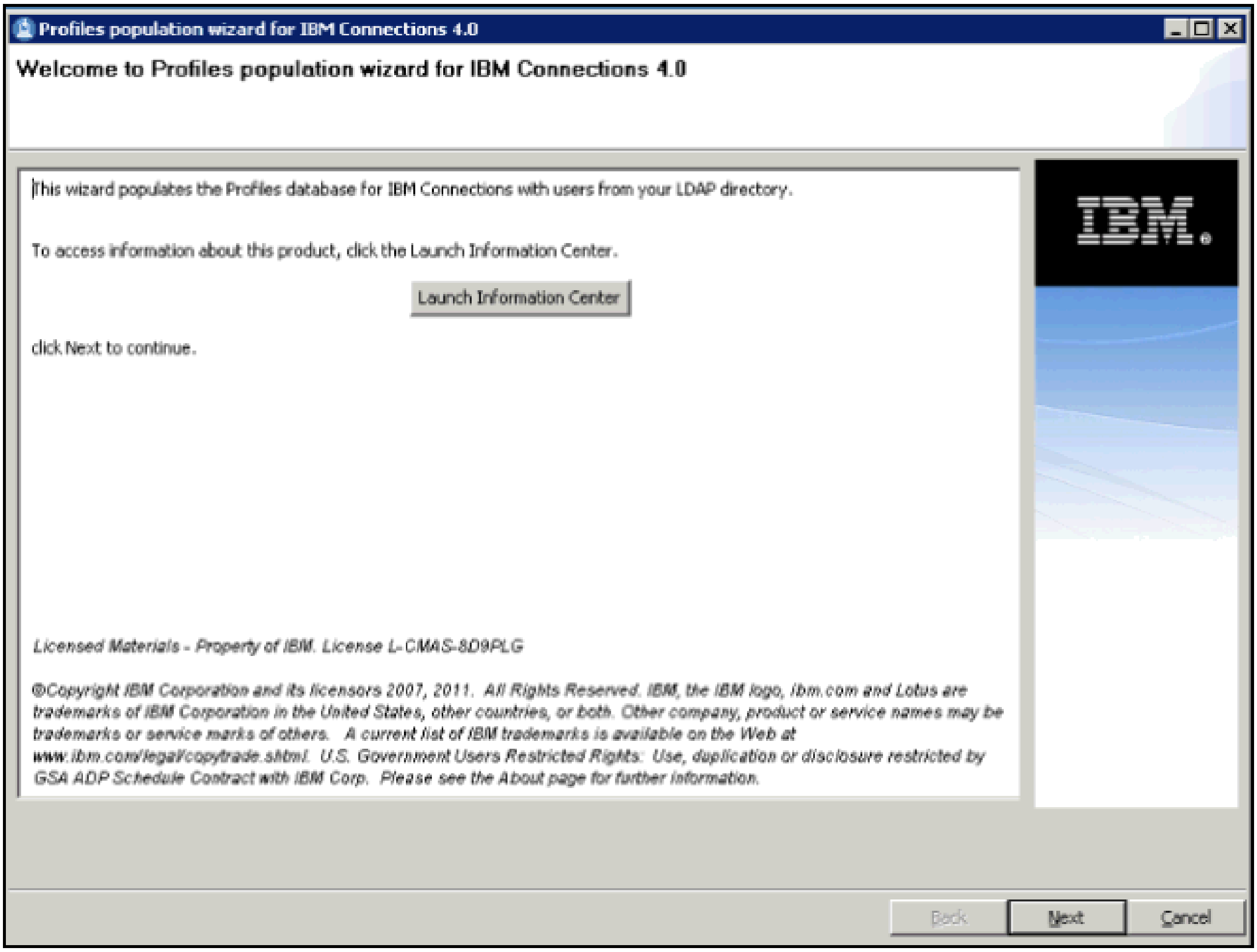
Logging to /home/db2inst1/lcWizard/log/dbWizard/dbConfig_20120912_161812_mobile_createDb.log.

Figure 64. Database wizard for Lotus Connections 4.0: Database creation in progress

__ 7. After completed, review the result. Then, click **Finish**.

Populating the Profiles database by using Population Wizard

__ 1. In the welcome screen of the population wizard, click **Next**.



Profiles population wizard for IBM Connections 4.0

Welcome to Profiles population wizard for IBM Connections 4.0

This wizard populates the Profiles database for IBM Connections with users from your LDAP directory.

To access information about this product, click the Launch Information Center.

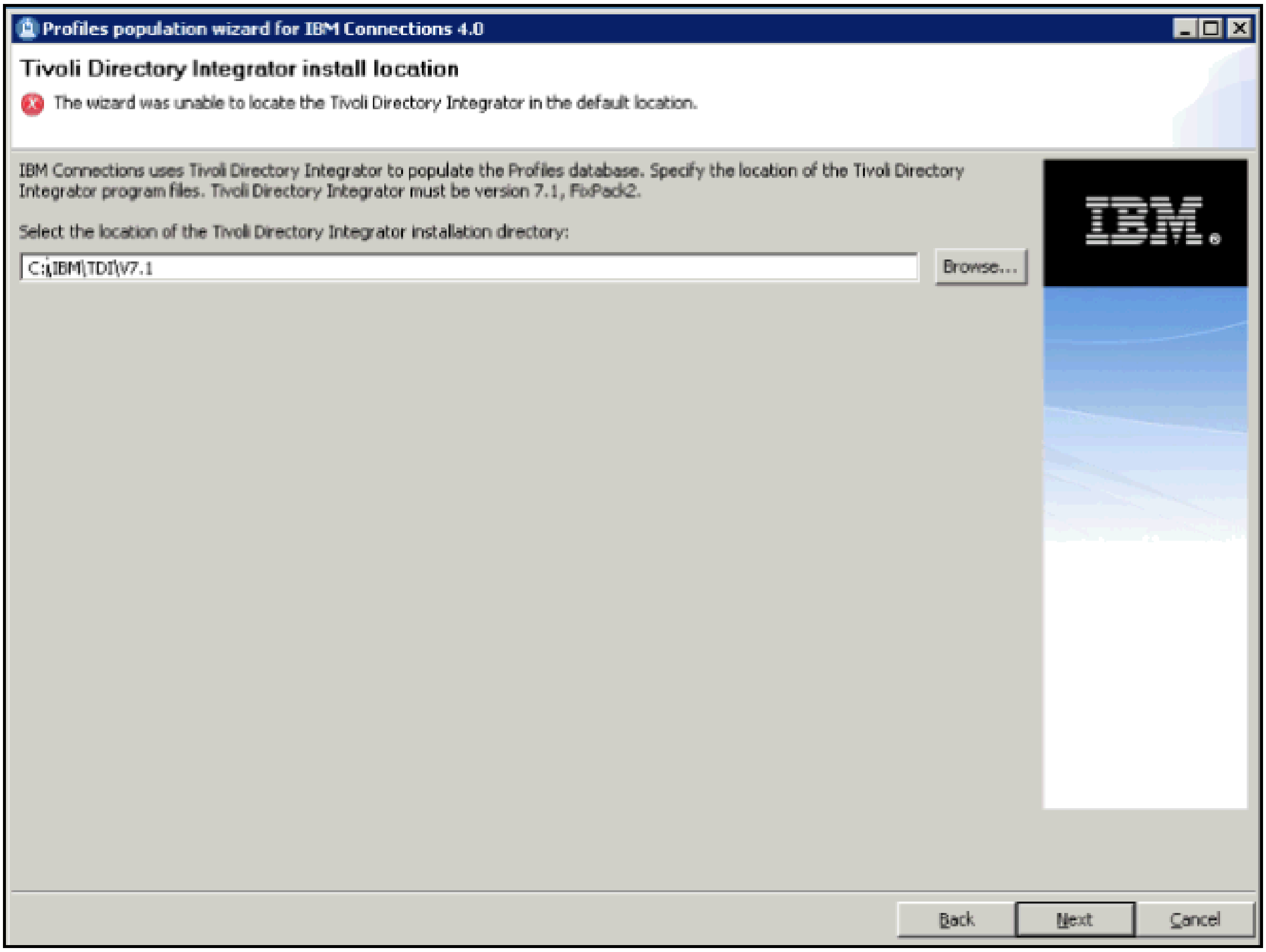
click Next to continue.

Licensed Materials - Property of IBM. License L-CMAS-8D9PLG

©Copyright IBM Corporation and its licensors 2007, 2011. All Rights Reserved. IBM, the IBM logo, ibm.com and Lotus are trademarks of IBM Corporation in the United States, other countries, or both. Other company, product or service names may be trademarks or service marks of others. A current list of IBM trademarks is available on the Web at www.ibm.com/legal/copytrade.shtml. U.S. Government Users Restricted Rights: Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp. Please see the About page for further information.

Figure 65. Profiles population wizard for IBM Connections 4.0: Welcome screen

__ 2. Select the location to install the Tivoli Integrator and click **Next**.



Profiles population wizard for IBM Connections 4.0

Tivoli Directory Integrator install location

The wizard was unable to locate the Tivoli Directory Integrator in the default location.

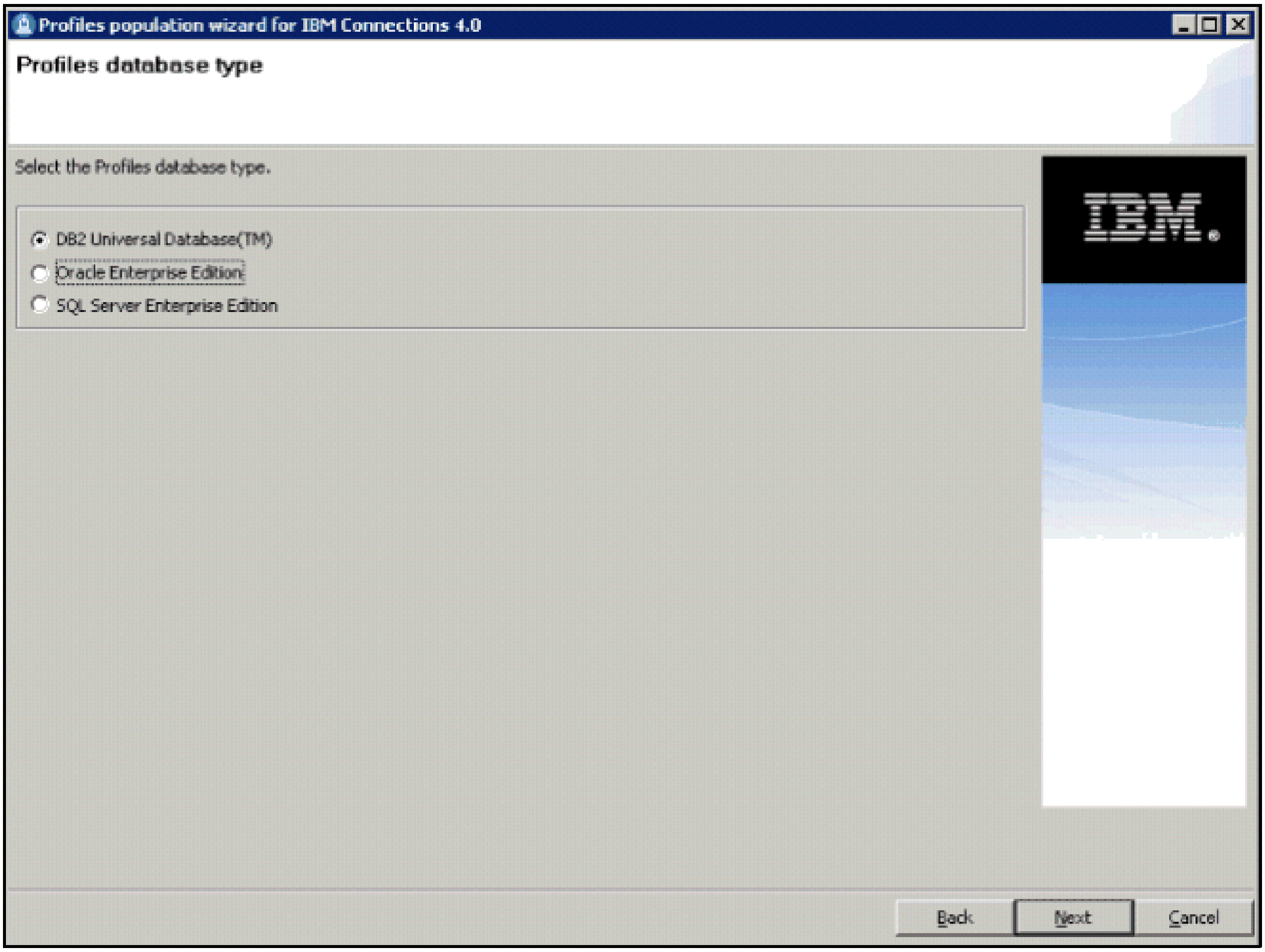
IBM Connections uses Tivoli Directory Integrator to populate the Profiles database. Specify the location of the Tivoli Directory Integrator program files. Tivoli Directory Integrator must be version 7.1, FixPack2.

Select the location of the Tivoli Directory Integrator installation directory:

C:\IBM\TDI\V7.1

Figure 66. Profiles population wizard for IBM Connections 4.0: Tivoli Directory Integrator installation location screen

__ 3. Select **DB2 Universal Database(TM)** as the database type and click **Next**.



Profiles population wizard for IBM Connections 4.0

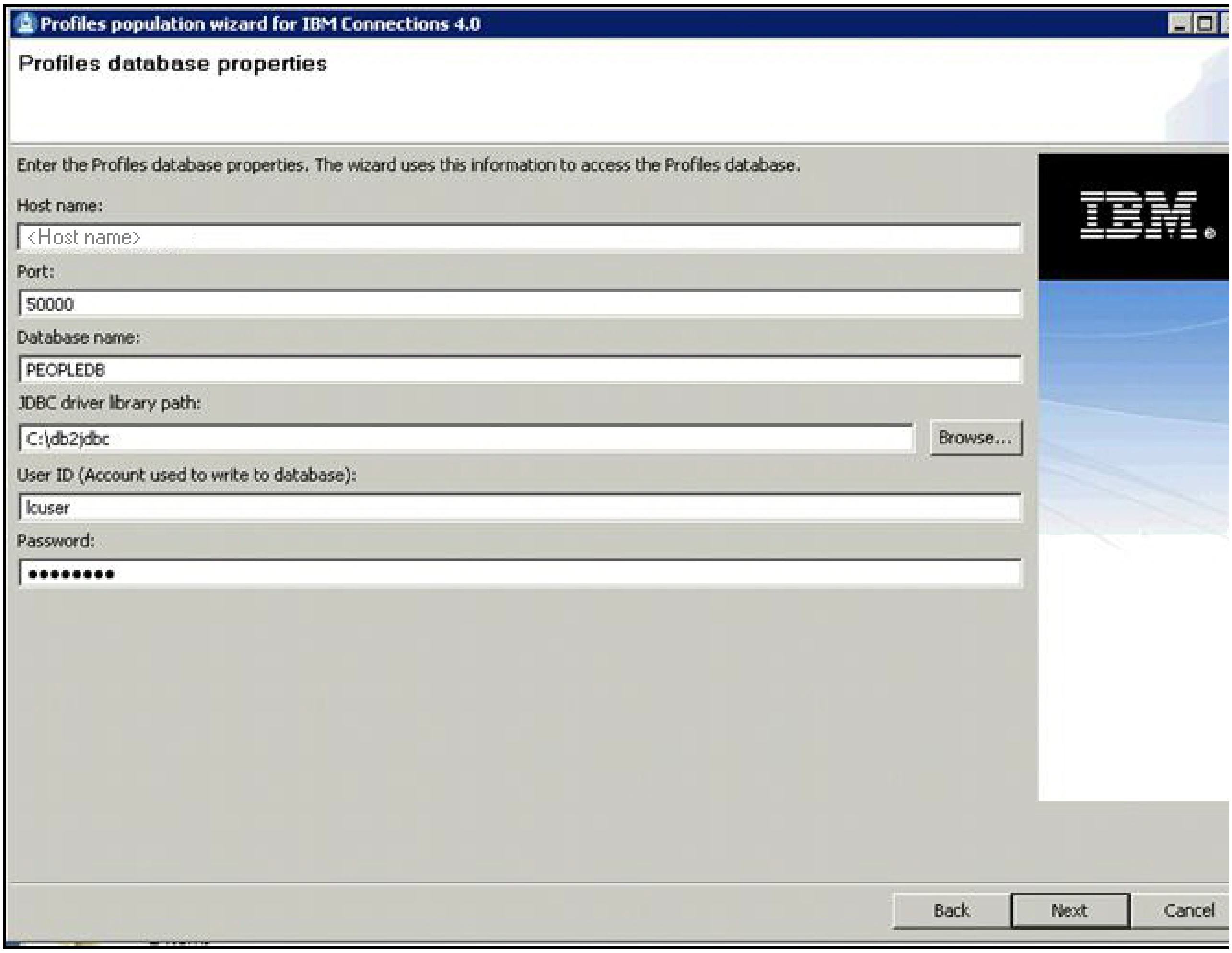
Profiles database type

Select the Profiles database type.

● DB2 Universal Database(TM)
○ Oracle Enterprise Edition
○ SQL Server Enterprise Edition

Figure 67. Profiles population wizard for IBM Connections 4.0: Profiles database type screen

__ 4. Enter the database properties and click **Next**.



Profiles population wizard for IBM Connections 4.0

Profiles database properties

Enter the Profiles database properties. The wizard uses this information to access the Profiles database.

Host name: <Host name>

Port: 50000

Database name: PEOPLEDB

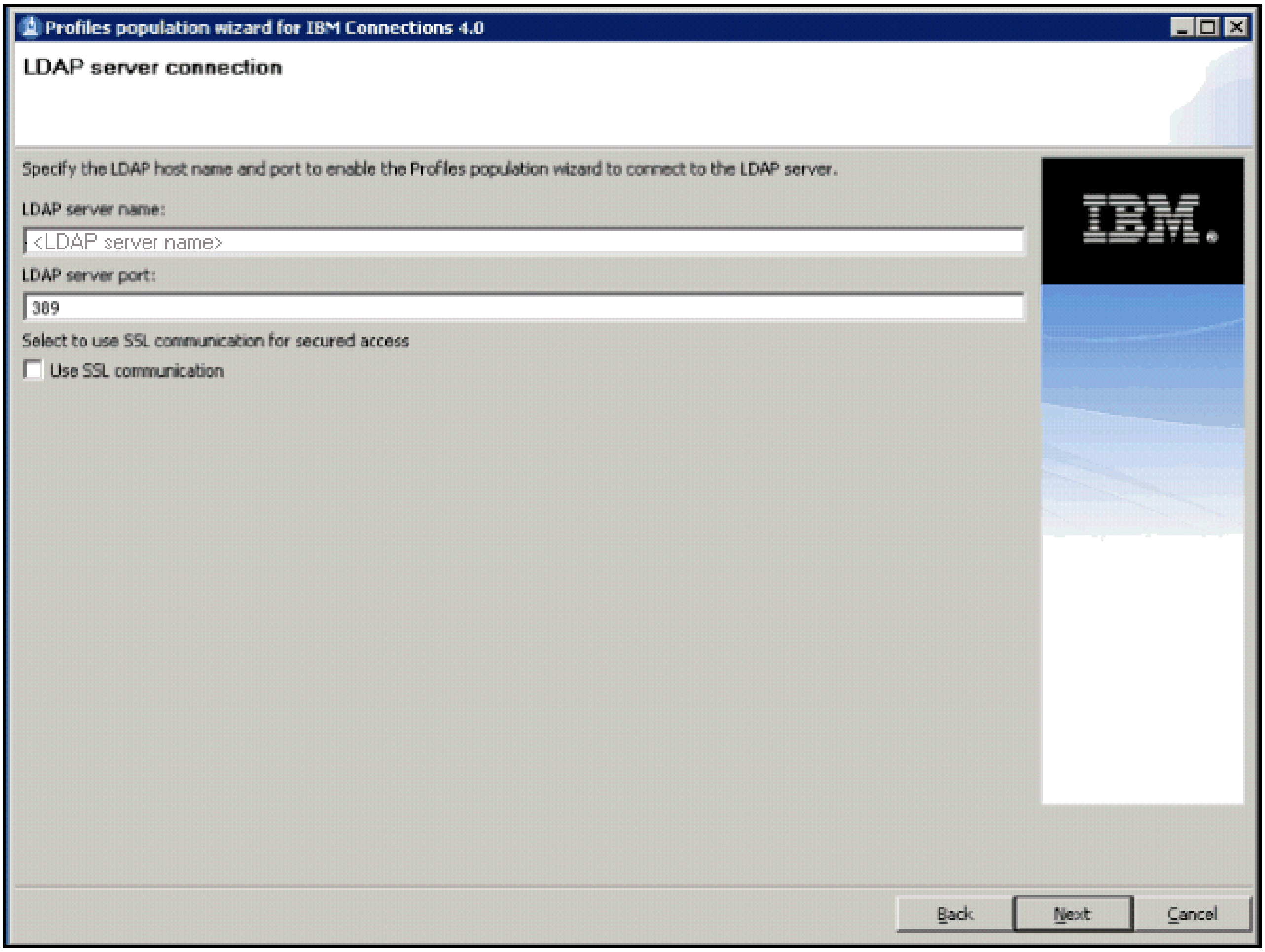
JDBC driver library path: C:\db2jdbc

User ID (Account used to write to database): lcuser

Password: •••••••••

Figure 68. Profiles population wizard for IBM Connections 4.0: Profiles database properties screen

__ 5. Specify the LDAP host name and server port and click **Next**.



LDAP server connection

Specify the LDAP host name and port to enable the Profiles population wizard to connect to the LDAP server.

LDAP server name: <LDAP server name>

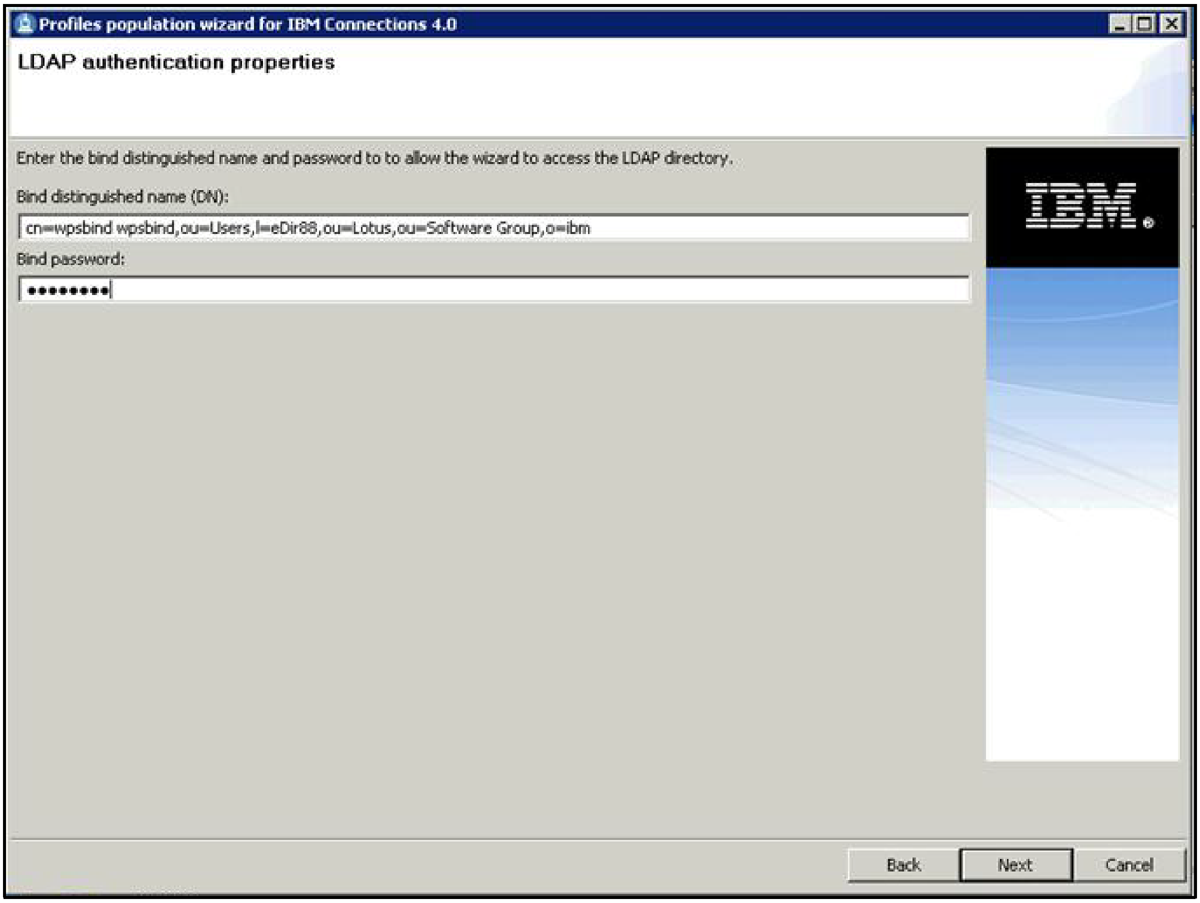
LDAP server port: 389

Select to use SSL communication for secured access

□ Use SSL communication

Figure 69. Profiles population wizard for IBM Connections 4.0: LDAP server connections screen

__ 6. Enter the bind distinguished name and password and click **Next**.



Profiles population wizard for IBM Connections 4.0

LDAP authentication properties

Enter the bind distinguished name and password to to allow the wizard to access the LDAP directory.

Bind distinguished name (DN):

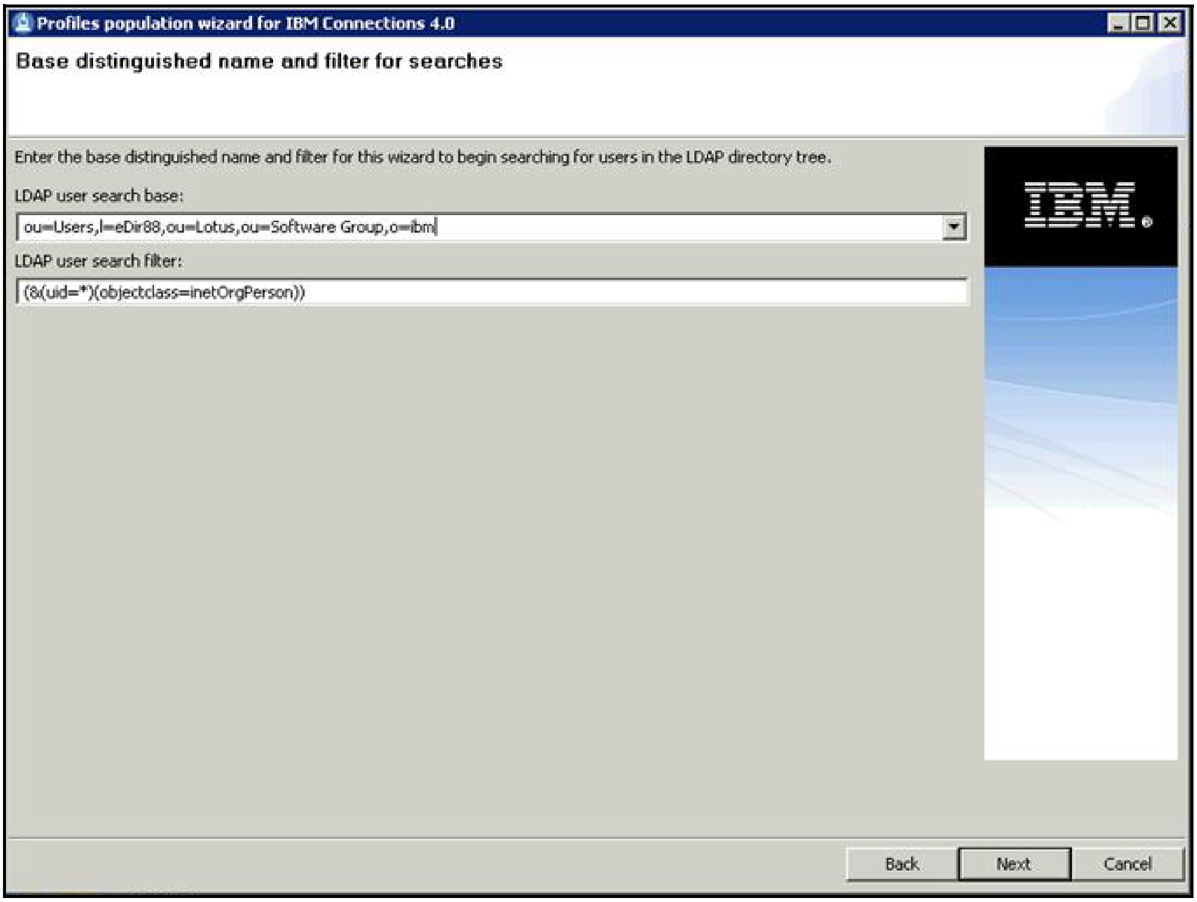
cn=wpsbind wpsbind,ou=Users,l=eDir88,ou=Lotus,ou=Software Group,o=ibm

Bind password:

●●●●●●●●●

Figure 70. Profiles population wizard for IBM Connections 4.0: LDAP authentication properties screen

__ 7. Enter the distinguished name and filter for LDAP user search and click **Next**.



Profiles population wizard for IBM Connections 4.0

Base distinguished name and filter for searches

Enter the base distinguished name and filter for this wizard to begin searching for users in the LDAP directory tree.

LDAP user search base:

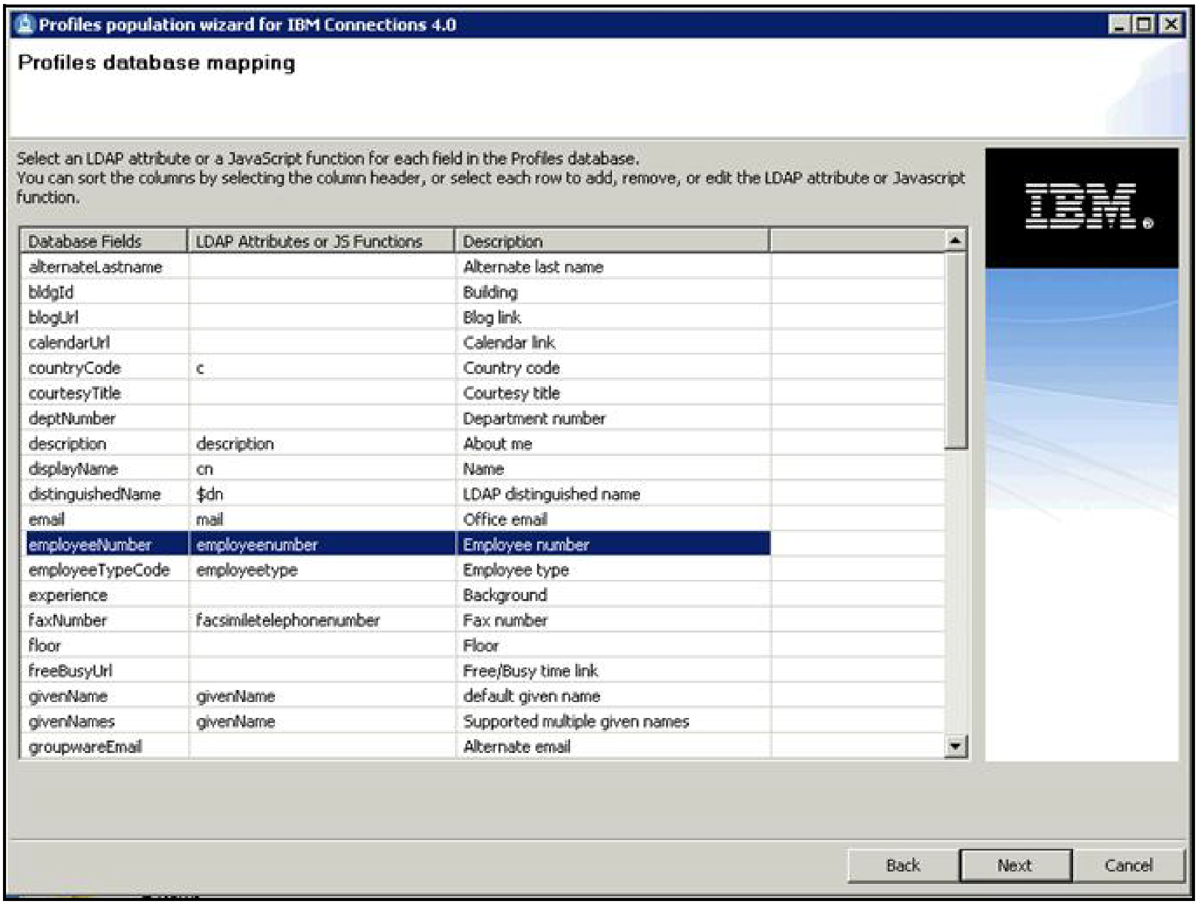
ou=Users,l=eDir88,ou=Lotus,ou=Software Group,o=ibm

LDAP user search filter:

(&(uid=*)(objectclass=inetOrgPerson))

Figure 71. Profiles population wizard for IBM Connections 4.0: Base distinguished name and filter for searches screen

__ 8. Select and LDAP attribute and click **Next**.



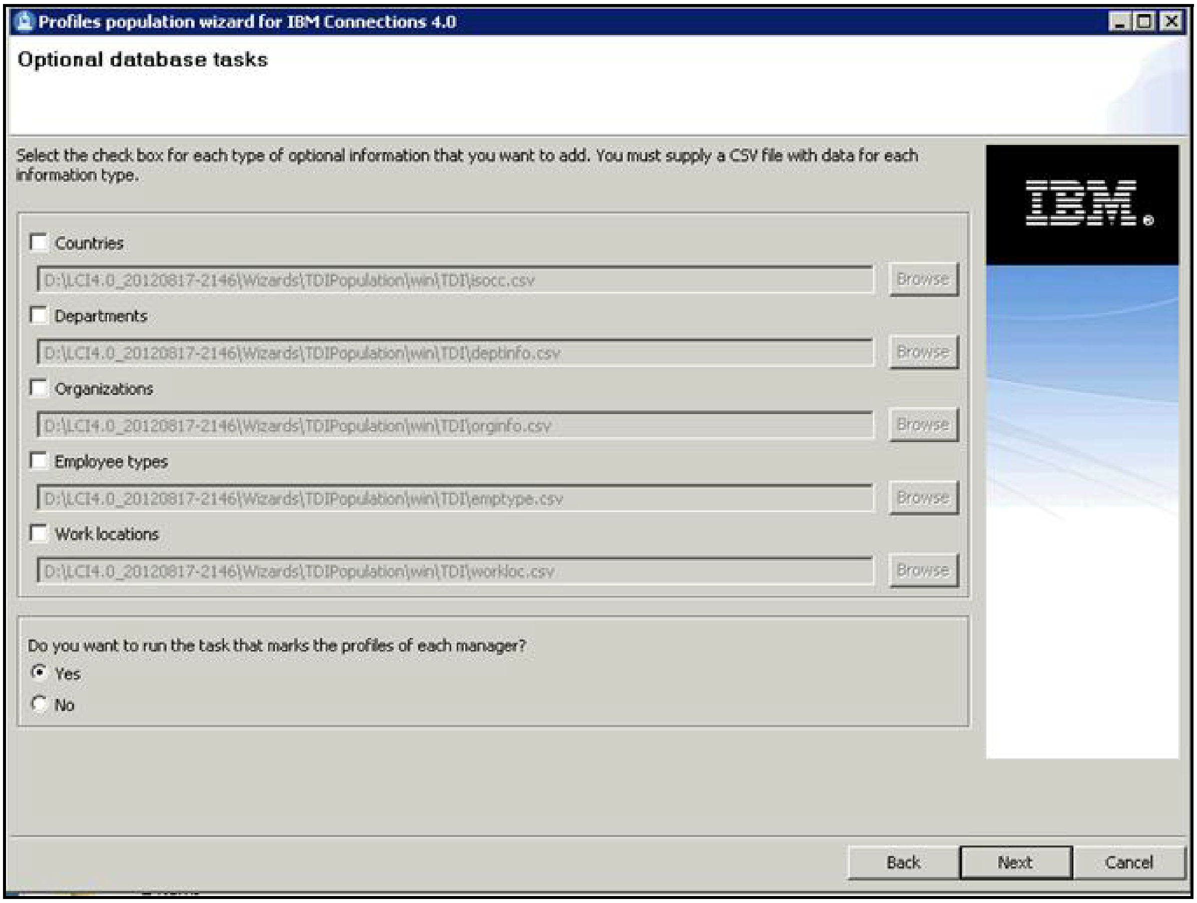
Profiles database mapping

Select an LDAP attribute or a JavaScript function for each field in the Profiles database.
You can sort the columns by selecting the column header, or select each row to add, remove, or edit the LDAP attribute or Javascript function.

Database Fields	LDAP Attributes or JS Functions	Description	
alternateLastname		Alternate last name	
bldgId		Building	
blogUrl		Blog link	
calendarUrl		Calendar link	
countryCode	c	Country code	
courtesyTitle		Courtesy title	
deptNumber		Department number	
description	description	About me	
displayName	cn	Name	
distinguishedName	$dn	LDAP distinguished name	
email	mail	Office email	
employeeNumber	employeenumber	Employee number	
employeeTypeCode	employeetype	Employee type	
experience		Background	
faxNumber	facsimiletelephonenumber	Fax number	
floor		Floor	
freeBusyUrl		Free/Busy time link	
givenName	givenName	default given name	
givenNames	givenName	Supported multiple given names	
groupwareEmail		Alternate email	

Figure 72. Profiles population wizard for IBM Connections 4.0: Profiles database mapping screen

__ 9. Select the check box for each type of optional information that you want to add and click **Next**.



Profiles population wizard for IBM Connections 4.0

Optional database tasks

Select the check box for each type of optional information that you want to add. You must supply a CSV file with data for each information type.

□ Countries

D:\LCI4.0_20120817-2146\Wizards\TDIPopulation\win\TDI\isocc.csv

□ Departments

D:\LCI4.0_20120817-2146\Wizards\TDIPopulation\win\TDI\deptinfo.csv

□ Organizations

D:\LCI4.0_20120817-2146\Wizards\TDIPopulation\win\TDI\orginfo.csv

□ Employee types

D:\LCI4.0_20120817-2146\Wizards\TDIPopulation\win\TDI\emptype.csv

□ Work locations

D:\LCI4.0_20120817-2146\Wizards\TDIPopulation\win\TDI\workloc.csv

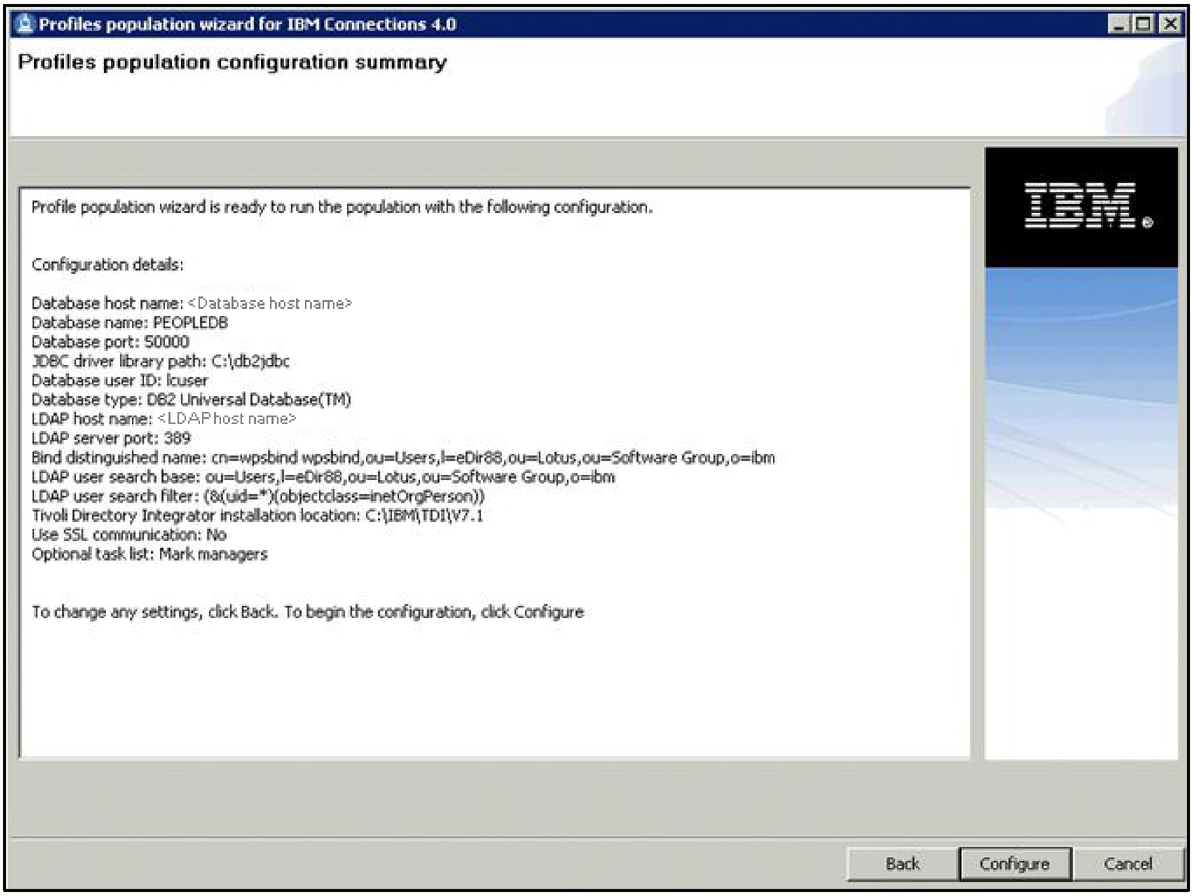
Do you want to run the task that marks the profiles of each manager?

● Yes

○ No

Figure 73. Profiles population wizard for IBM Connections 4.0: Optional database tasks screen

__ 10. Check the population configuration summary and click **Configure**.



Profiles population wizard for IBM Connections 4.0
Profiles population configuration summary
IBM

Profile population wizard is ready to run the population with the following configuration.

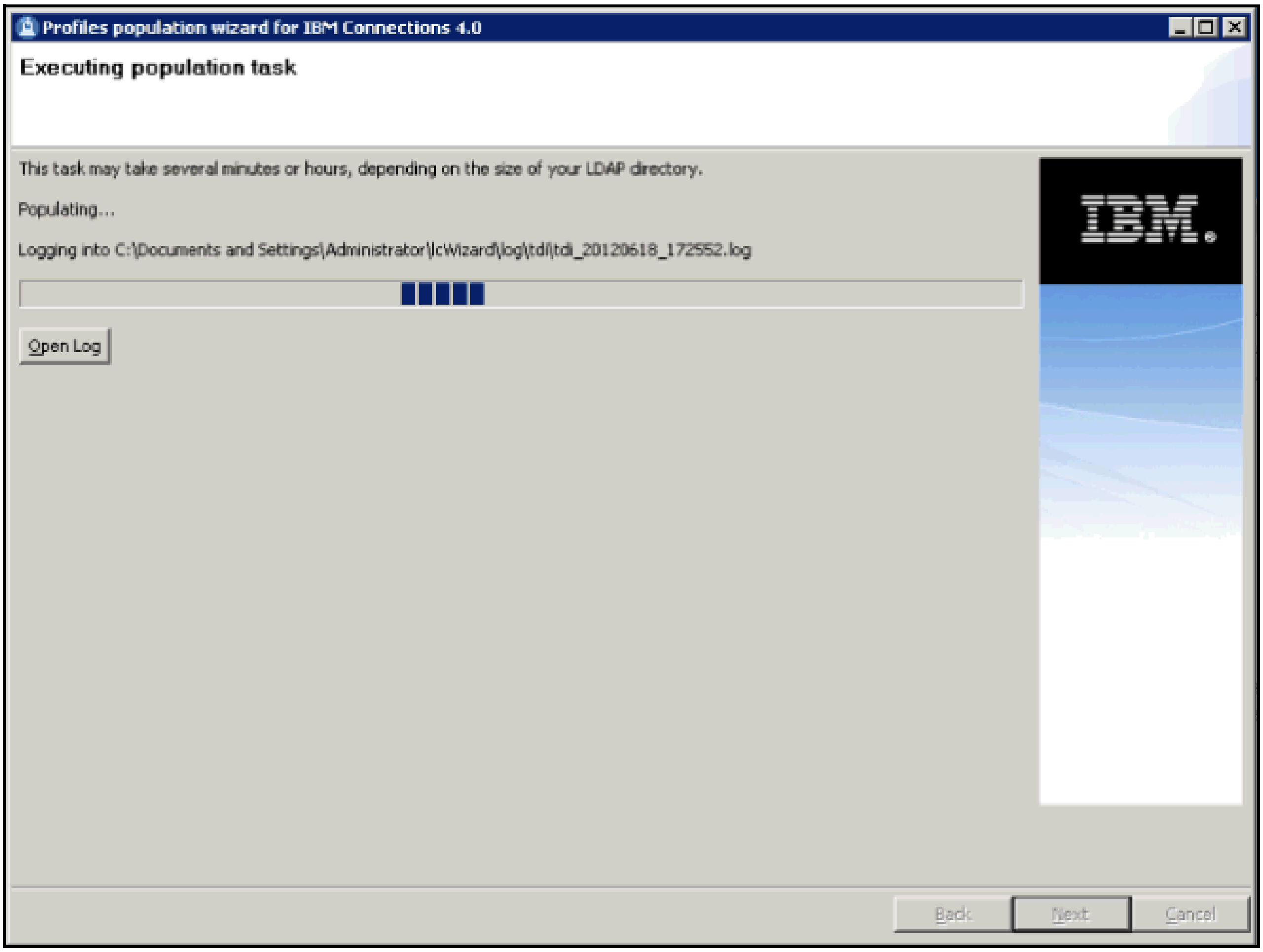
Configuration details:

```
Database host name: <Database host name>
Database name: PEOPLEDB
Database port: 50000
JDBC driver library path: C:\db2jdbc
Database user ID: lcuser
Database type: DB2 Universal Database(TM)
LDAP host name: <LDAP host name>
LDAP server port: 389
Bind distinguished name: cn=wpsbind wpsbind,ou=Users,l=eDir88,ou=Lotus,ou=Software Group,o=ibm
LDAP user search base: ou=Users,l=eDir88,ou=Lotus,ou=Software Group,o=ibm
LDAP user search filter: (&(uid=*)(objectclass=inetOrgPerson))
Tivoli Directory Integrator installation location: C:\IBM\TDI\V7.1
Use SSL communication: No
Optional task list: Mark managers
```

To change any settings, click Back. To begin the configuration, click Configure

Figure 74. Profiles population wizard for IBM Connections 4.0: Profiles population configuration summary screen

__ 11. The population task begins.



Profiles population wizard for IBM Connections 4.0

Executing population task

This task may take several minutes or hours, depending on the size of your LDAP directory.

Populating...

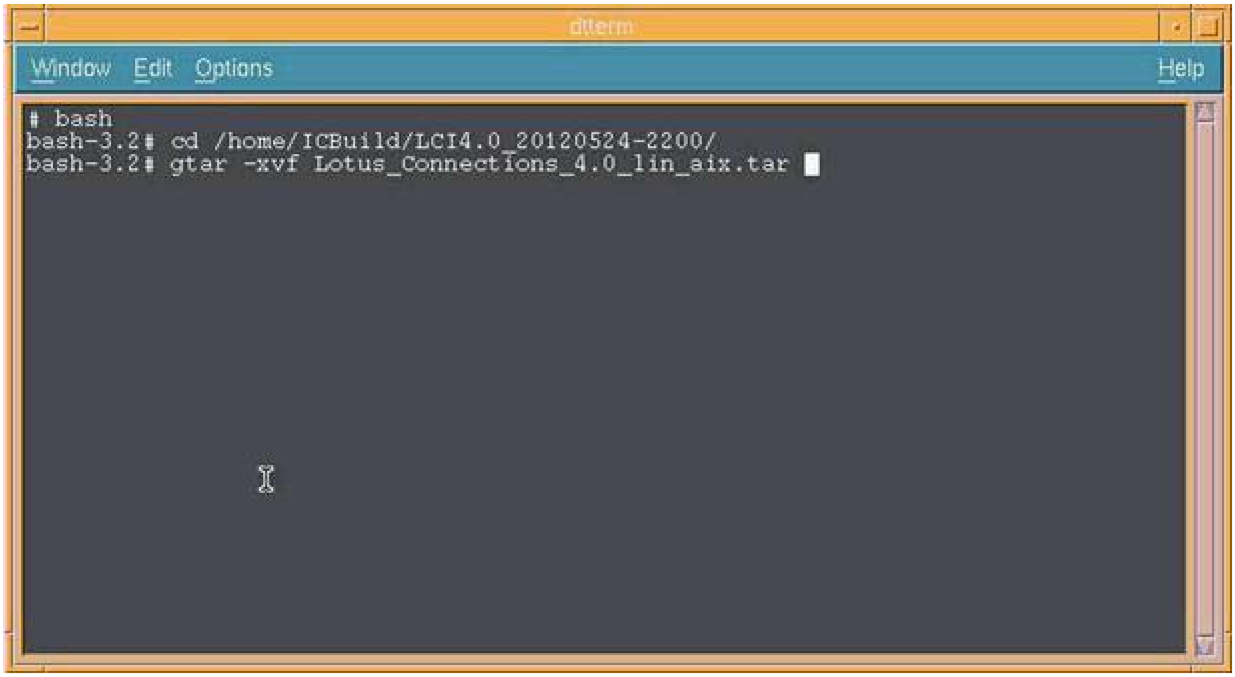
Logging into C:\Documents and Settings\Administrator\lcWizard\log\tdi\tdi_20120618_172552.log

Figure 75. Profiles population wizard for IBM Connections 4.0: Population task in progress

Install Connections

Assume that WebSphere Network deployment is already installed.

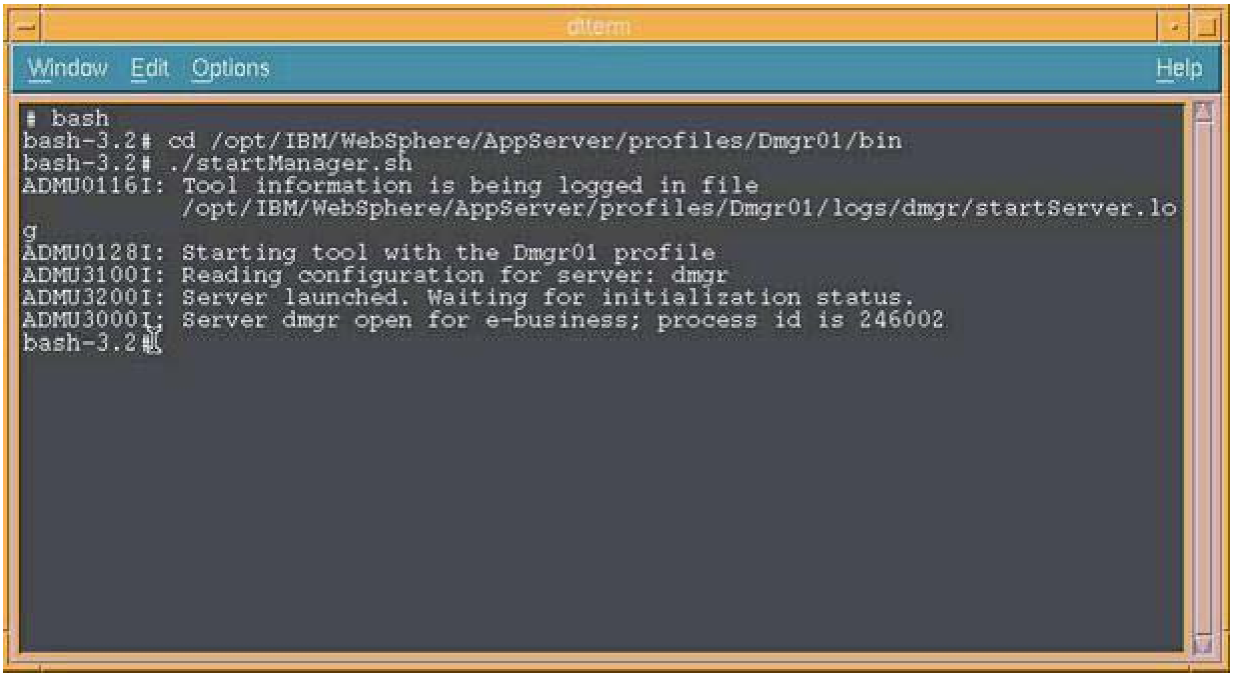
__ 1. Extract the Installation files.



```
# bash
bash-3.2# cd /home/ICBuild/LCI4.0_20120524-2200/
bash-3.2# gtar -xvf Lotus_Connections_4.0_lin_aix.tar
```

Figure 76. Install Connections

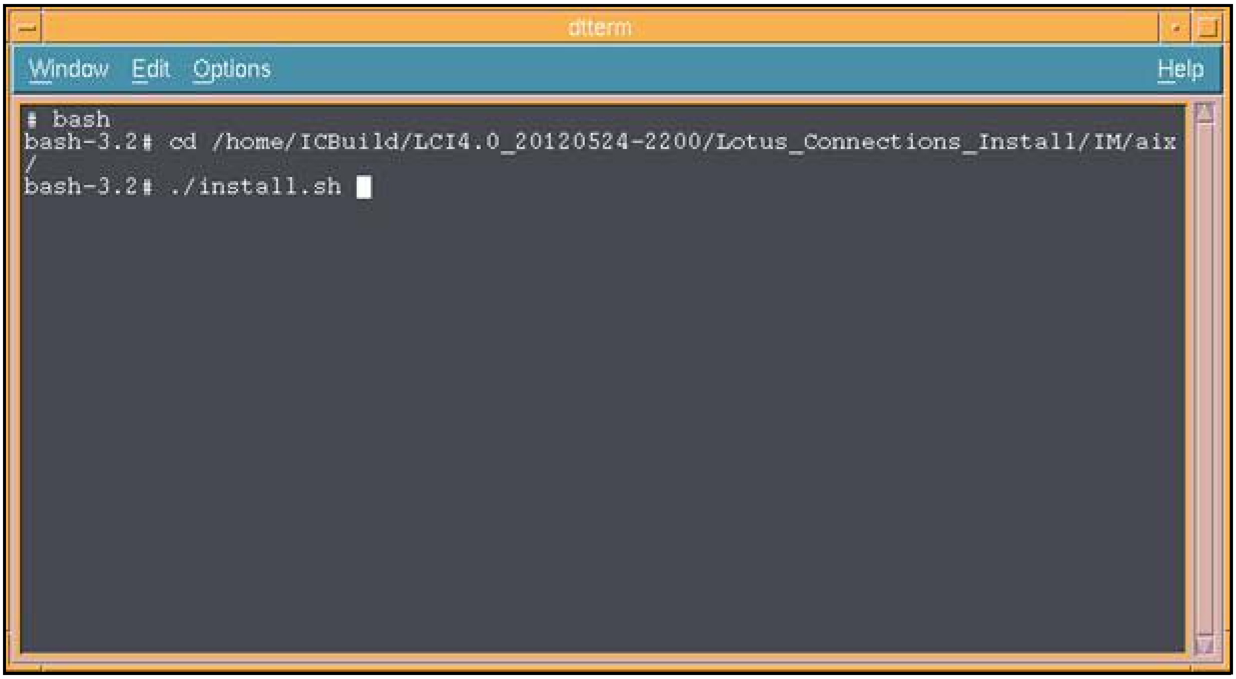
__ 2. Start WebSphere Application Server Network Deployment Manager.



```
# bash
bash-3.2# cd /opt/IBM/WebSphere/AppServer/profiles/Dmgr01/bin
bash-3.2# ./startManager.sh
ADMU0116I: Tool information is being logged in file
           /opt/IBM/WebSphere/AppServer/profiles/Dmgr01/logs/dmgr/startServer.lo
g
ADMU0128I: Starting tool with the Dmgr01 profile
ADMU3100I: Reading configuration for server: dmgr
ADMU3200I: Server launched. Waiting for initialization status.
ADMU3000I: Server dmgr open for e-business; process id is 246002
bash-3.2#
```

Figure 77. Starting WebSphere Application Server Network Deployment Manager

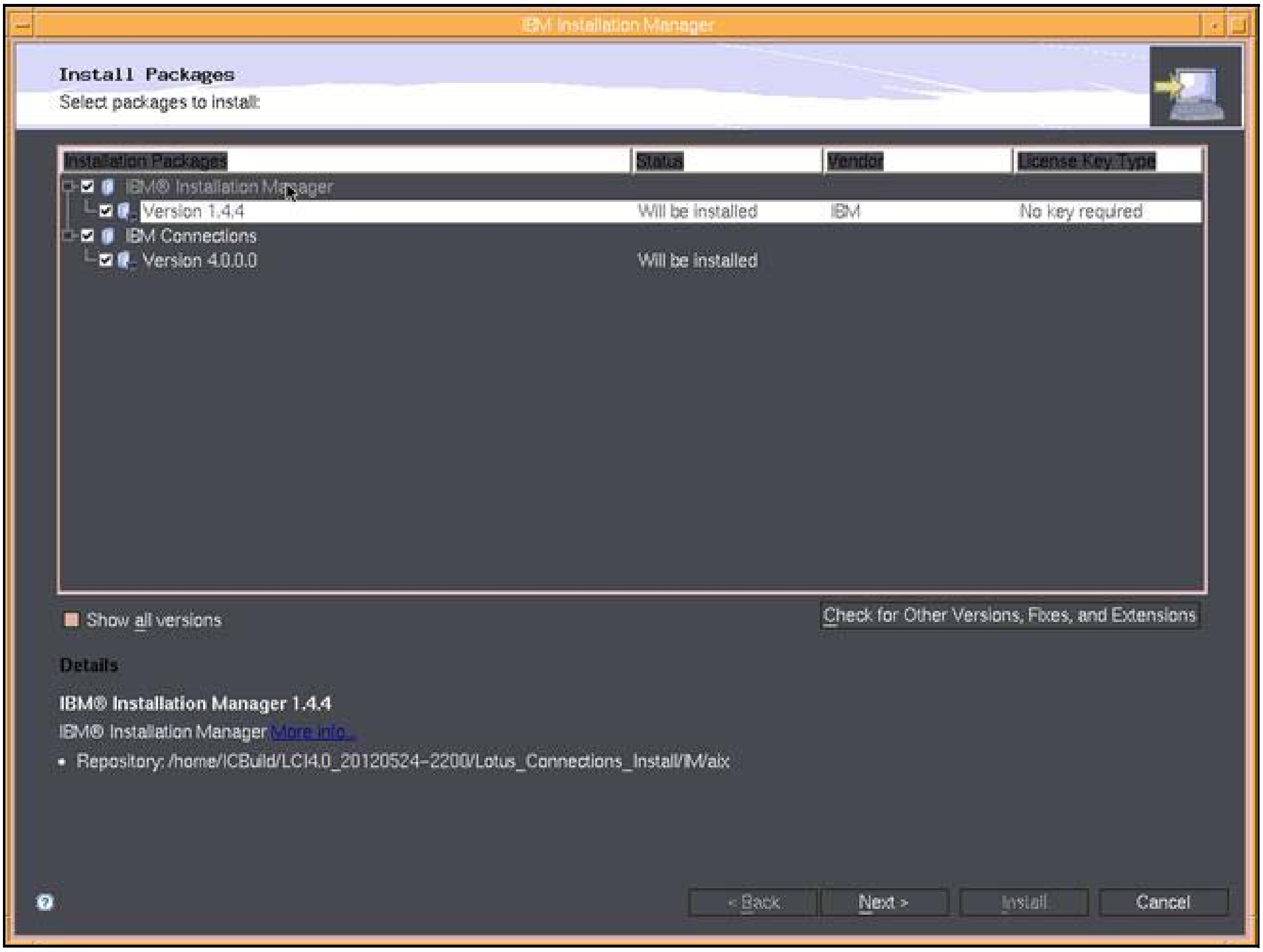
__ 3. Start IBM Installation Manager.



```
# bash
bash-3.2# cd /home/ICBuild/LCI4.0_20120524-2200/Lotus_Connections_Install/IM/aix
/
bash-3.2# ./install.sh
```

Figure 78. Starting IBM Installation Manager

___ 4. In the Select packages to install window, select the packages that you want to install and click **Next** to continue.



IBM Installation Manager

Install Packages

Select packages to install:

Installation Packages	Status	Vendor	License Key Type
☑ IBM® Installation Manager			
☑ Version 1.4.4	Will be installed	IBM	No key required
☑ IBM Connections			
☑ Version 4.0.0.0	Will be installed		

□ Show all versions

Details

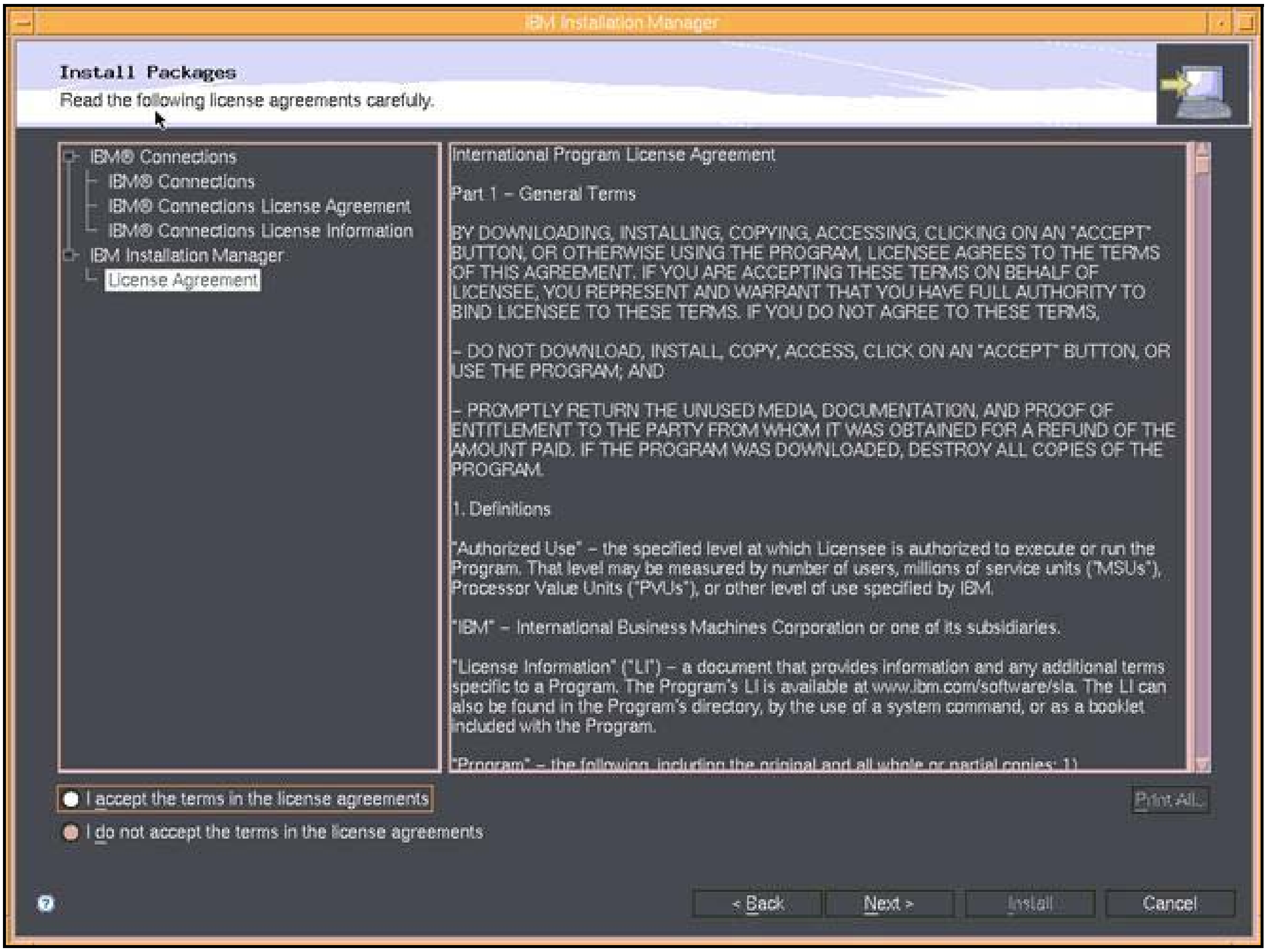
IBM® Installation Manager 1.4.4

IBM® Installation Manager More info...

- Repository: /home/ICBuild/LCI4.0_20120524-2200/Lotus_Connections_Install/IM/aix

Figure 79. Extracting the installation files

__ 5. Review and accept the license agreement by clicking **I accept the terms in the license agreements**. Click **Next**.



Install Packages

Read the following license agreements carefully.

International Program License Agreement

Part 1 - General Terms

BY DOWNLOADING, INSTALLING, COPYING, ACCESSING, CLICKING ON AN "ACCEPT" BUTTON, OR OTHERWISE USING THE PROGRAM, LICENSEE AGREES TO THE TERMS OF THIS AGREEMENT. IF YOU ARE ACCEPTING THESE TERMS ON BEHALF OF LICENSEE, YOU REPRESENT AND WARRANT THAT YOU HAVE FULL AUTHORITY TO BIND LICENSEE TO THESE TERMS. IF YOU DO NOT AGREE TO THESE TERMS,

- DO NOT DOWNLOAD, INSTALL, COPY, ACCESS, CLICK ON AN "ACCEPT" BUTTON, OR USE THE PROGRAM; AND

- PROMPTLY RETURN THE UNUSED MEDIA, DOCUMENTATION, AND PROOF OF ENTITLEMENT TO THE PARTY FROM WHOM IT WAS OBTAINED FOR A REFUND OF THE AMOUNT PAID. IF THE PROGRAM WAS DOWNLOADED, DESTROY ALL COPIES OF THE PROGRAM.

1. Definitions

"Authorized Use" - the specified level at which Licensee is authorized to execute or run the Program. That level may be measured by number of users, millions of service units ("MSUs"), Processor Value Units ("PVUs"), or other level of use specified by IBM.

"IBM" - International Business Machines Corporation or one of its subsidiaries.

"License Information" ("LI") - a document that provides information and any additional terms specific to a Program. The Program's LI is available at www.ibm.com/software/sla. The LI can also be found in the Program's directory, by the use of a system command, or as a booklet included with the Program.

"Program" - the following, including the original and all whole or partial copies: 1)

● I accept the terms in the license agreements

○ I do not accept the terms in the license agreements

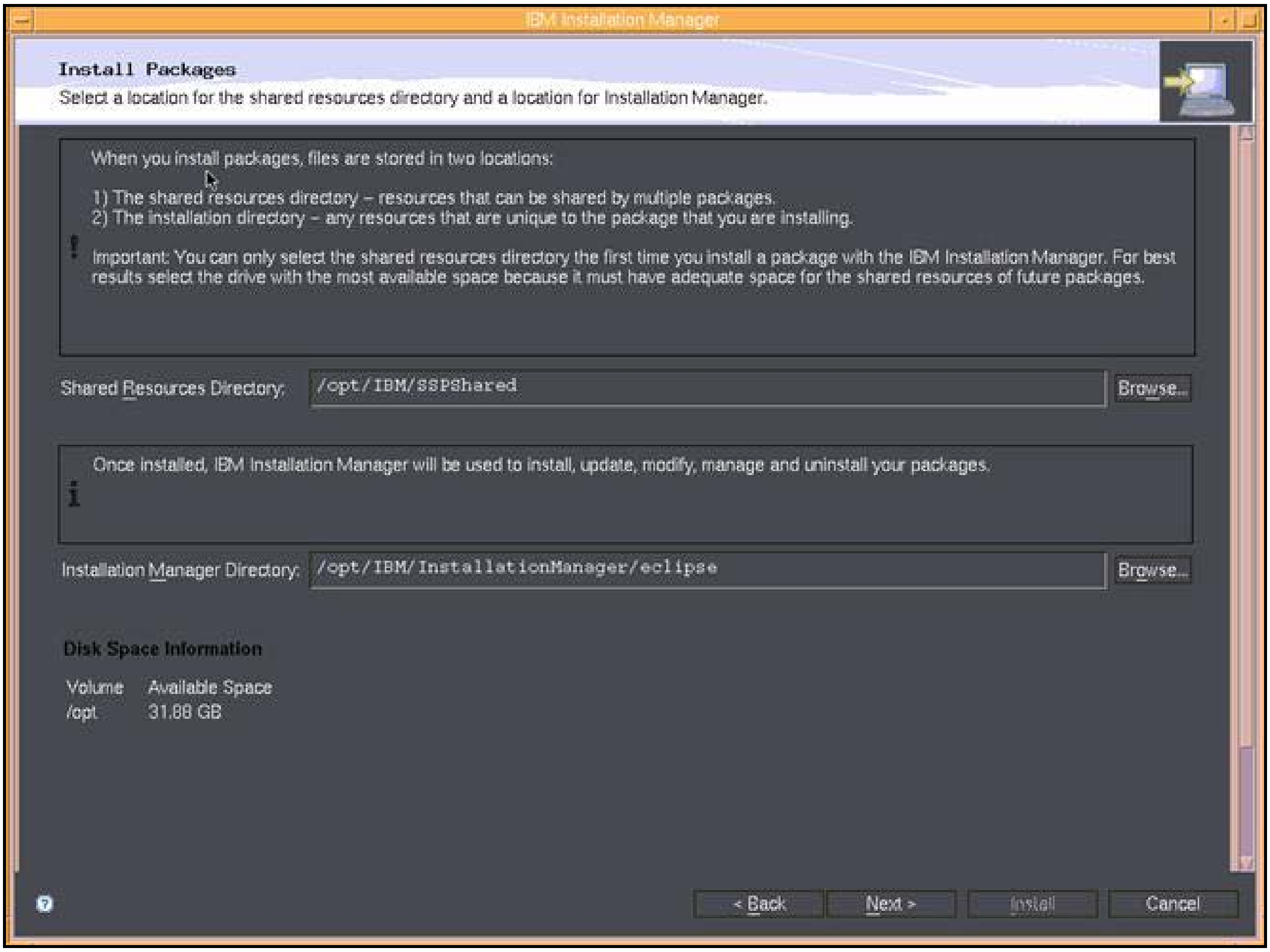
Figure 80. Accepting the terms in the license agreements

__ 6. Specify the location of shared directories for IBM Installation Manager.

__ a. Specify the location of the Shared Resources Directory.

__ b. Specify the location of the Installation Manager Directory. This option appears only if IBM Installation Manager is not previously installed.

__ c. Click **Next**.



Install Packages

Select a location for the shared resources directory and a location for Installation Manager.

When you install packages, files are stored in two locations:

1) The shared resources directory – resources that can be shared by multiple packages.
2) The installation directory – any resources that are unique to the package that you are installing.

Important: You can only select the shared resources directory the first time you install a package with the IBM Installation Manager. For best results select the drive with the most available space because it must have adequate space for the shared resources of future packages.

Shared Resources Directory: /opt/IBM/SSPShared

Once installed, IBM Installation Manager will be used to install, update, modify, manage and uninstall your packages.

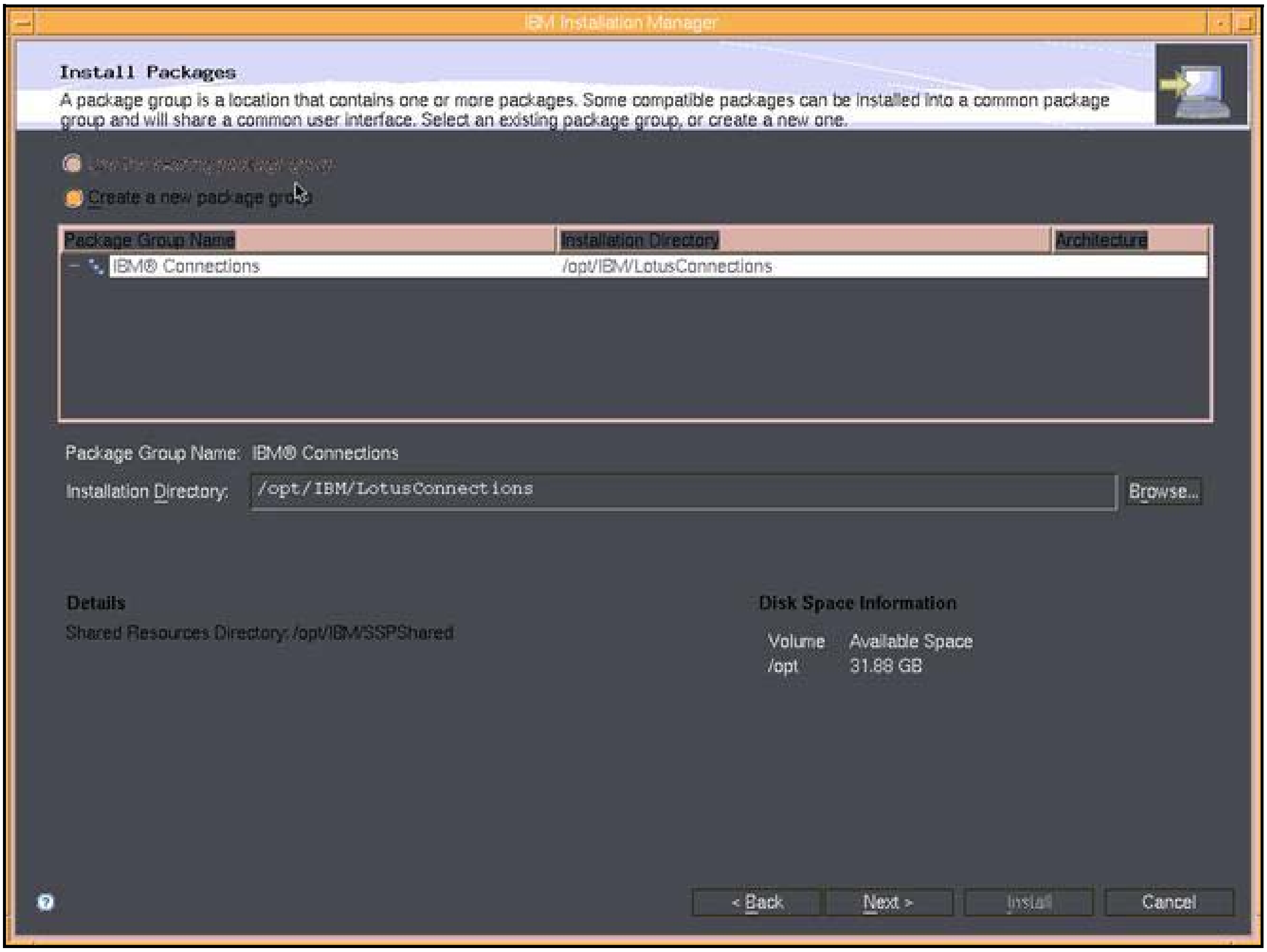
Installation Manager Directory: /opt/IBM/InstallationManager/eclipse

Disk Space Information

Volume	Available Space
/opt	31.88 GB

Figure 81. Specifying the location of shared directories for IBM Installation Manager

__ 7. Specify the location of the installation directory for IBM Connections.



Install Packages

A package group is a location that contains one or more packages. Some compatible packages can be installed into a common package group and will share a common user interface. Select an existing package group, or create a new one.

○ Use the existing package group

● Create a new package group

Package Group Name	Installation Directory	Architecture
IBM® Connections	/opt/IBM/LotusConnections	

Package Group Name: IBM® Connections

Installation Directory: /opt/IBM/LotusConnections

Details

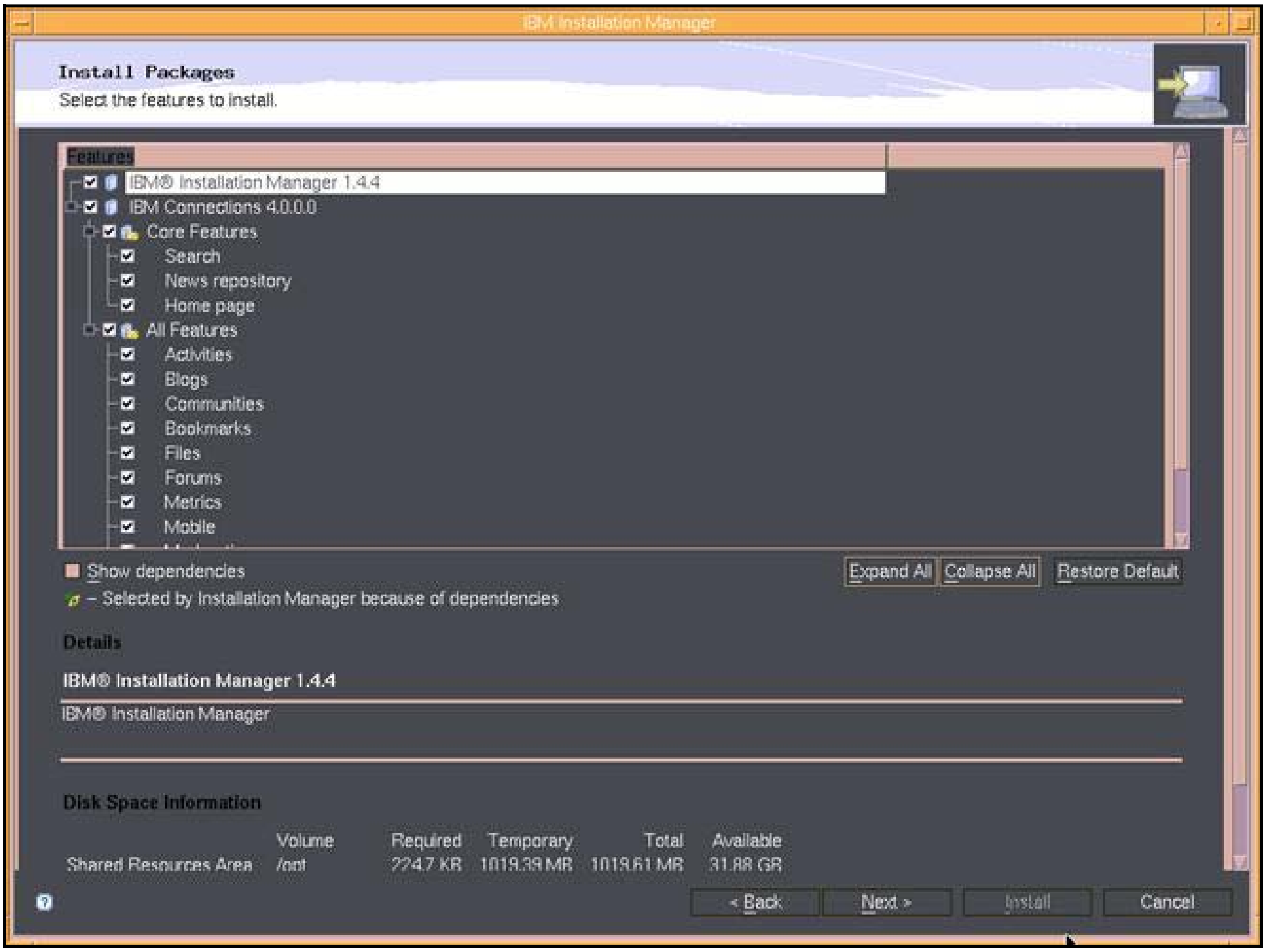
Shared Resources Directory: /opt/IBM/SSPShared

Disk Space Information

Volume	Available Space
/opt	31.88 GB

Figure 82. Specifying the location of the installation directory for IBM Connections

__ 8. Confirm the applications that you want to install:



IBM Installation Manager

Install Packages

Select the features to install.

Features

- ☑ IBM® Installation Manager 1.4.4
- ☑ IBM Connections 4.0.0.0
  - ☑ Core Features
    - ☑ Search
    - ☑ News repository
    - ☑ Home page
  - ☑ All Features
    - ☑ Activities
    - ☑ Blogs
    - ☑ Communities
    - ☑ Bookmarks
    - ☑ Files
    - ☑ Forums
    - ☑ Metrics
    - ☑ Mobile

□ Show dependencies

– Selected by Installation Manager because of dependencies

Details

IBM® Installation Manager 1.4.4

IBM® Installation Manager

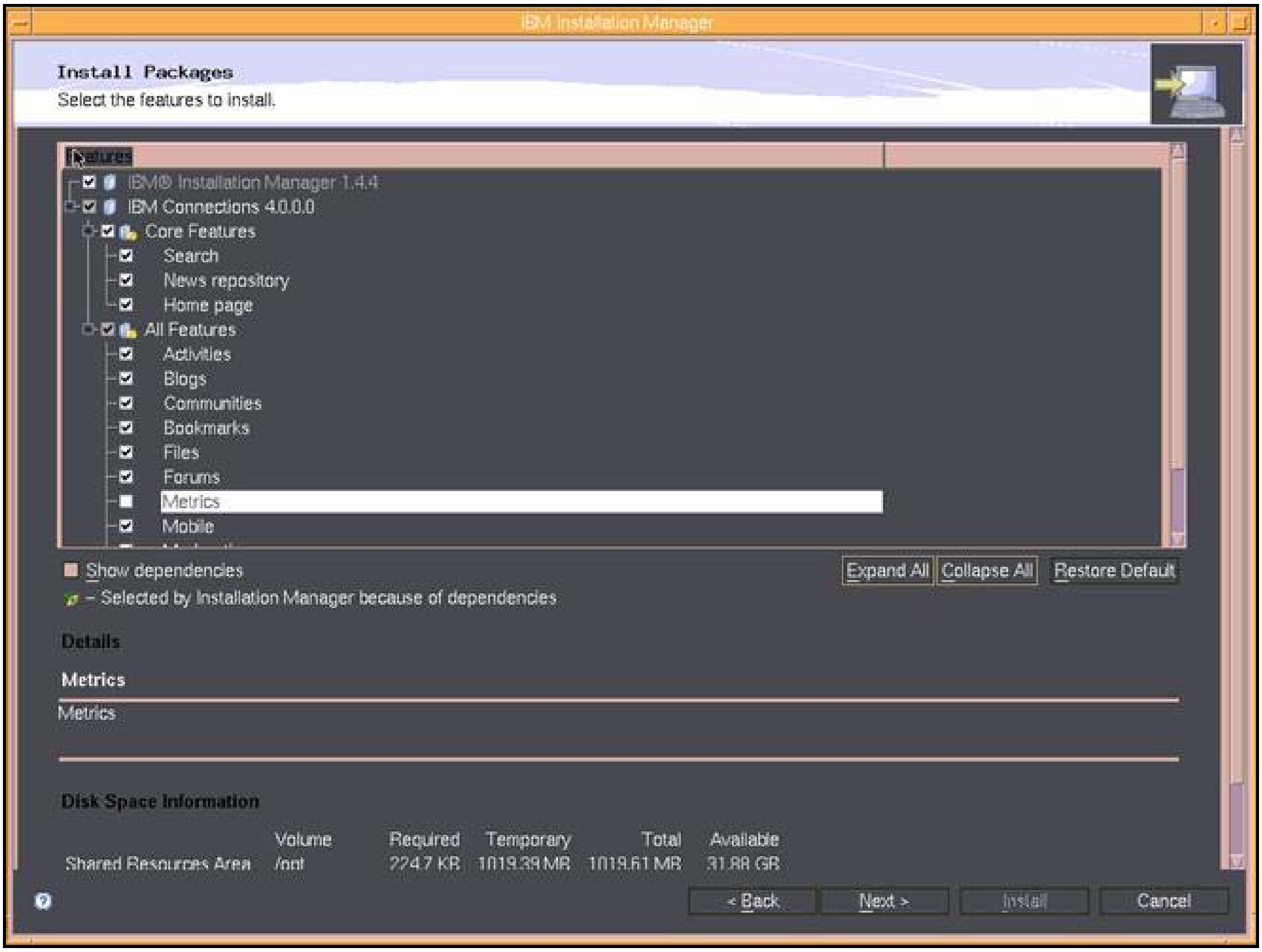
Disk Space Information

	Volume	Required	Temporary	Total	Available
Shared Resources Area	/opt	224.7 KB	1019.39 MB	1019.61 MB	31.88 GB

Figure 83. Selecting the features to install

__ a. Clear **Metrics.**

__ b. Click **Next**.



Install Packages

Select the features to install.

Features

- ☑ IBM® Installation Manager 1.4.4
- ☑ IBM Connections 4.0.0.0
  - ☑ Core Features
    - ☑ Search
    - ☑ News repository
    - ☑ Home page
  - ☑ All Features
    - ☑ Activities
    - ☑ Blogs
    - ☑ Communities
    - ☑ Bookmarks
    - ☑ Files
    - ☑ Forums
    - □ Metrics
    - ☑ Mobile

□ Show dependencies

– Selected by Installation Manager because of dependencies

Details

Metrics

Metrics

Disk Space Information

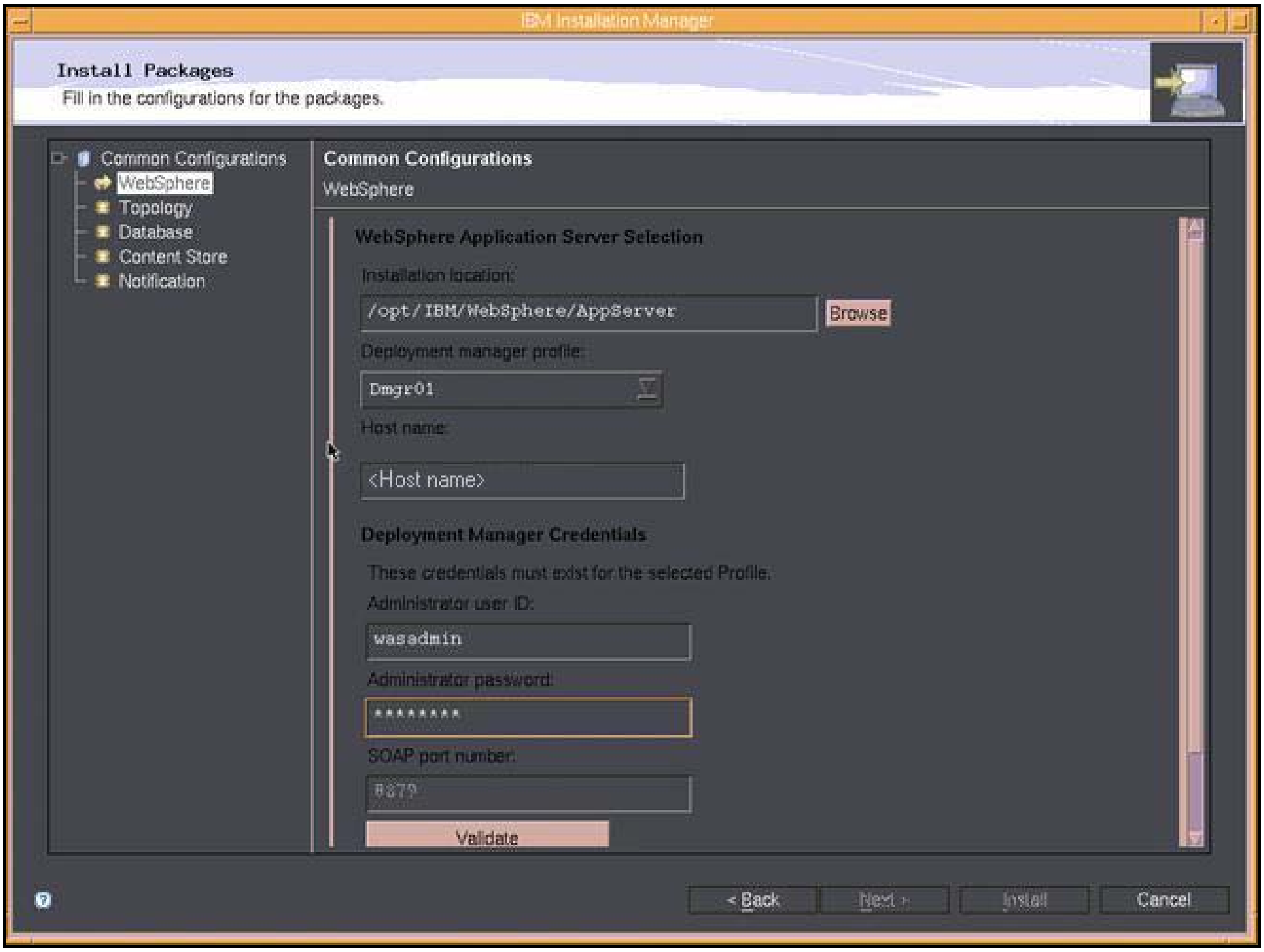
	Volume	Required	Temporary	Total	Available
Shared Resources Area	/opt	224.7 KB	1019.39 MB	1019.61 MB	31.88 GB

Figure 84. Selecting the features to install: clearing Metrics

__ 9. Enter the details of your WebSphere Application Server environment:

__ a. Select the WebSphere Application Server installation location that contains the Deployment Manager.

__ b. Enter the properties of the WebSphere Application Server Deployment Manager.



IBM Installation Manager

Install Packages

Fill in the configurations for the packages.

Common Configurations

WebSphere

WebSphere Application Server Selection

Installation location: /opt/IBM/WebSphere/AppServer

Deployment manager profile: Dmgr01

Host name: <Host name>

Deployment Manager Credentials

These credentials must exist for the selected Profile.

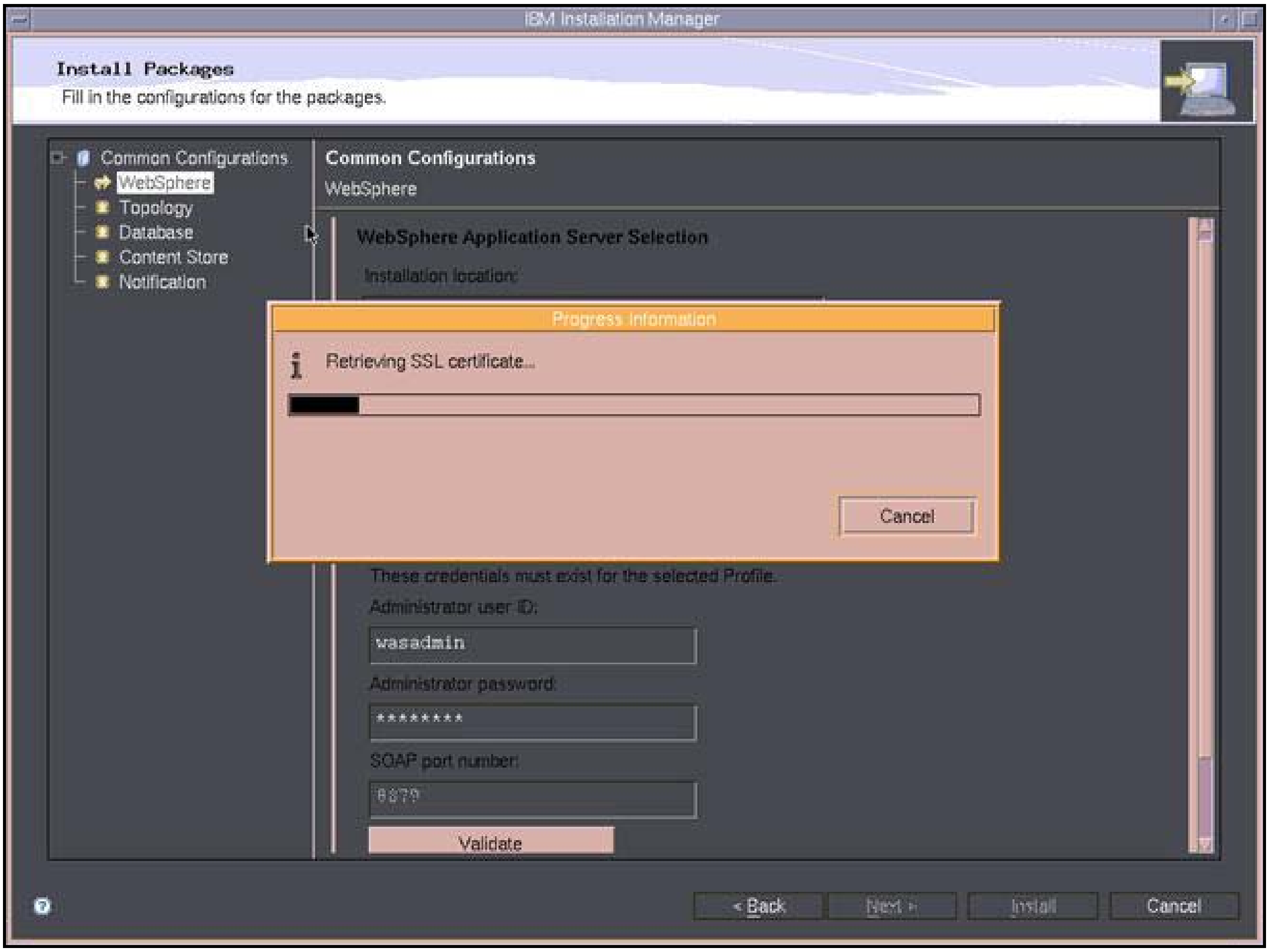
Administrator user ID: wasadmin

Administrator password: ********

SOAP port number: 8879

Figure 85. Entering the details of the WebSphere Application Server environment

__ c. Click **Validate** to verify the Deployment Manager information that you entered and that application security is enabled on WebSphere Application Server.



Retrieving SSL certificate...

These credentials must exist for the selected Profile.

Administrator user ID: wasadmin

Administrator password: ********

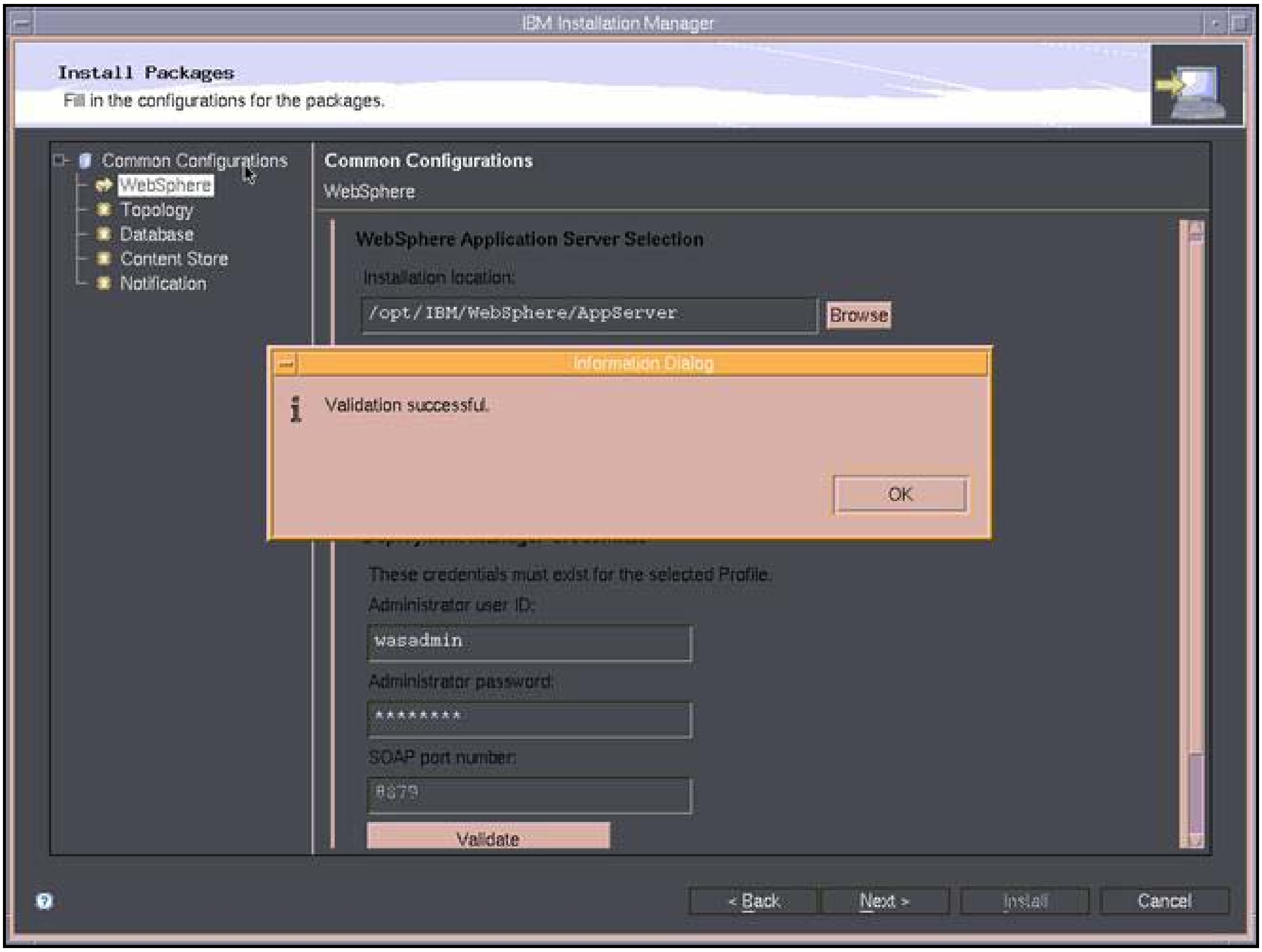
SOAP port number: 8879

Figure 86. Verifying the Deployment Manager information

Note

If the verification fails, IBM Installation Manager displays an error message.

__ d. When the verification test is successful, click **Next.**



Install Packages

Fill in the configurations for the packages.

Common Configurations

WebSphere

WebSphere Application Server Selection

Installation location:

/opt/IBM/WebSphere/AppServer

Validation successful.

These credentials must exist for the selected Profile.

Administrator user ID:

wasadmin

Administrator password:

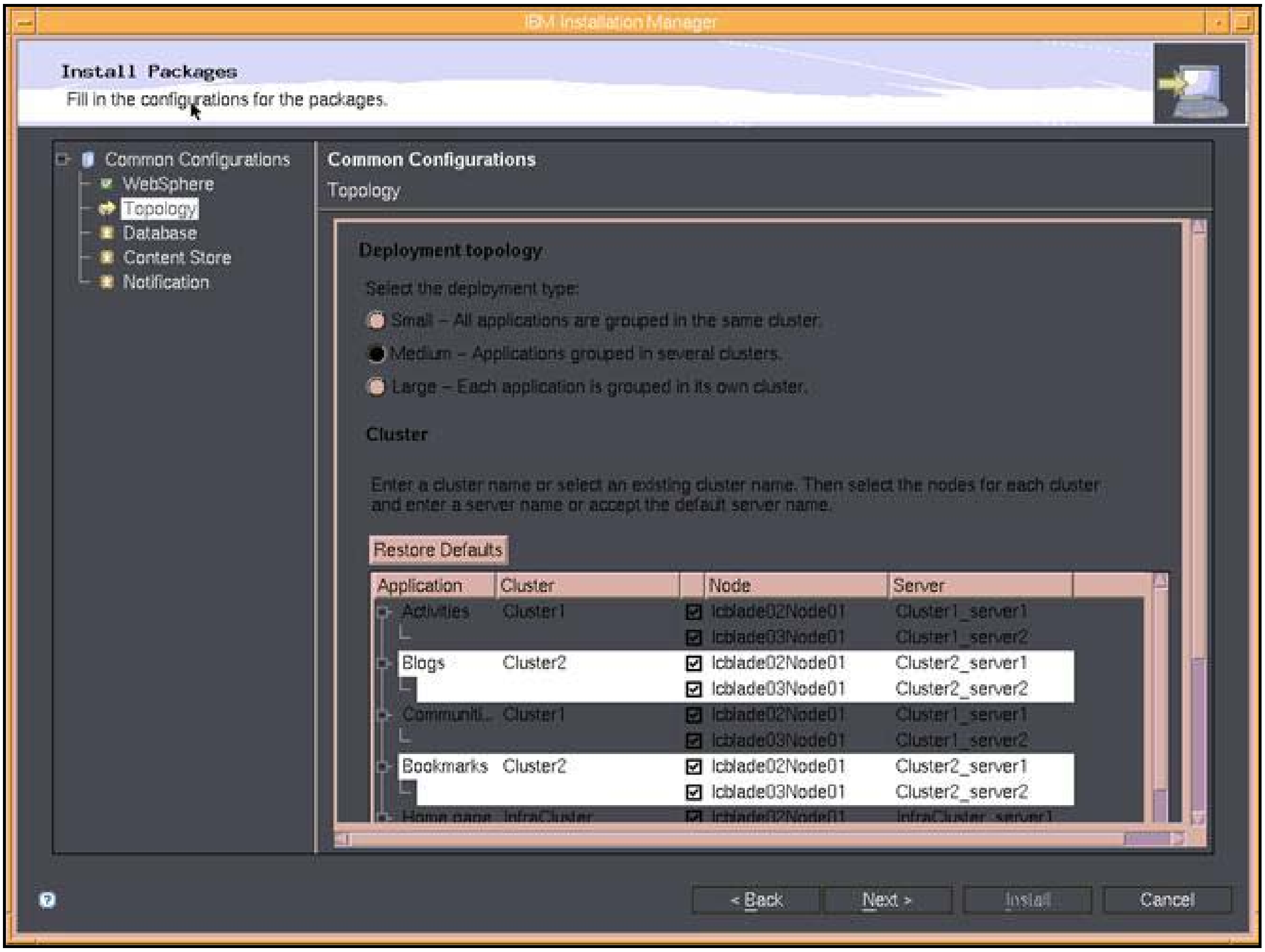
****

SOAP port number:

8879

Figure 87. Validation successful message

__ 10. Configure your topology and click **Next**.



Install Packages

Fill in the configurations for the packages.

Common Configurations

Topology

Deployment topology

Select the deployment type:

○ Small – All applications are grouped in the same cluster.

● Medium – Applications grouped in several clusters.

○ Large – Each application is grouped in its own cluster.

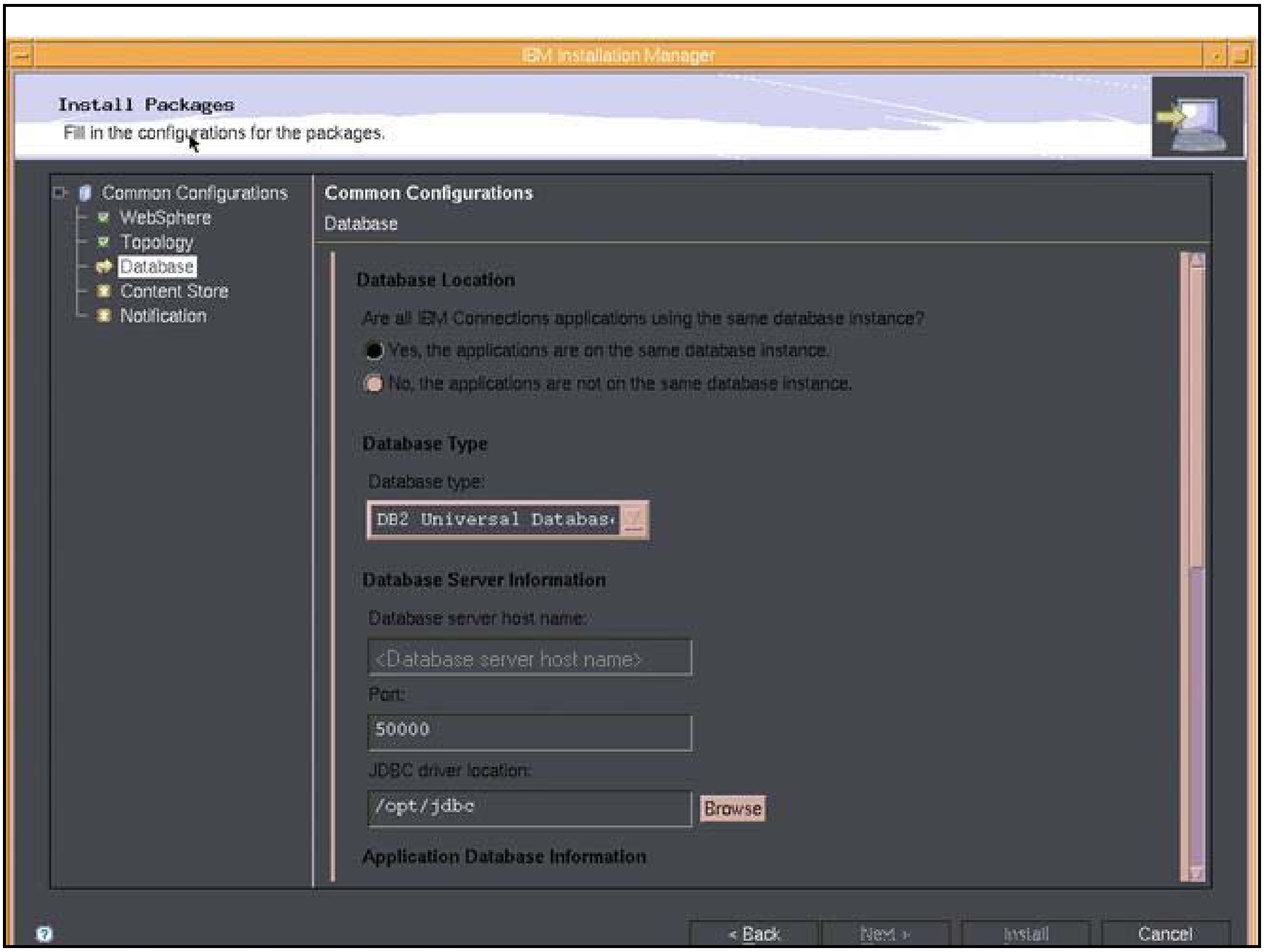
Cluster

Enter a cluster name or select an existing cluster name. Then select the nodes for each cluster and enter a server name or accept the default server name.

Application	Cluster	Node	Server
Activities	Cluster1	☑ lcblade02Node01	Cluster1_server1
		☑ lcblade03Node01	Cluster1_server2
Blogs	Cluster2	☑ lcblade02Node01	Cluster2_server1
		☑ lcblade03Node01	Cluster2_server2
Communiti...	Cluster1	☑ lcblade02Node01	Cluster1_server1
		☑ lcblade03Node01	Cluster1_server2
Bookmarks	Cluster2	☑ lcblade02Node01	Cluster2_server1
		☑ lcblade03Node01	Cluster2_server2
Home page	InfraCluster	☑ lcblade02Node01	InfraCluster_server1

Figure 88. Configuring topology

___ 11. Enter the database information.



Install Packages

Fill in the configurations for the packages.

Common Configurations

Database

Database Location

Are all IBM Connections applications using the same database instance?

● Yes, the applications are on the same database instance.

○ No, the applications are not on the same database instance.

Database Type

Database type: DB2 Universal Databas

Database Server Information

Database server host name: <Database server host name>

Port: 50000

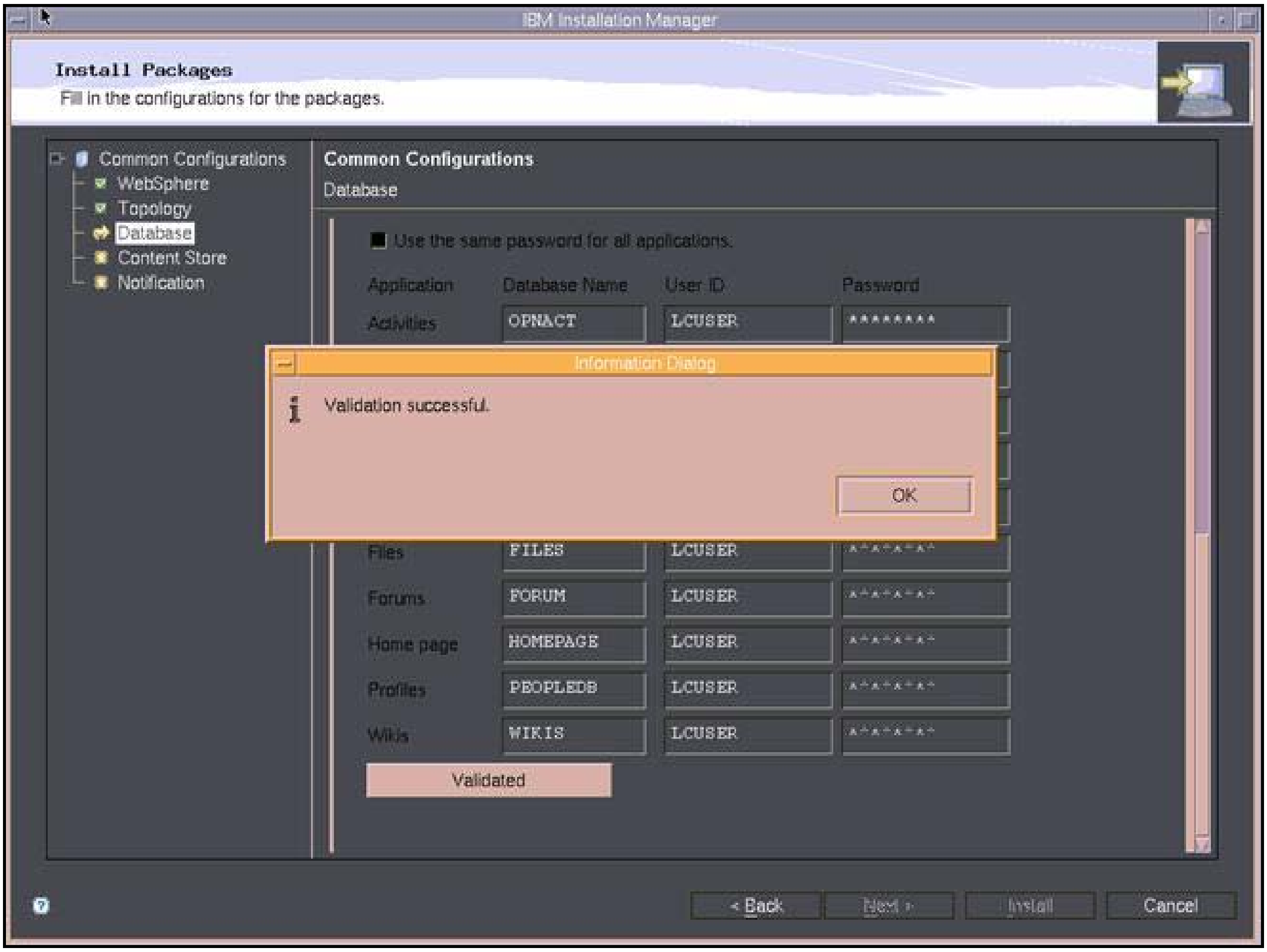
JDBC driver location: /opt/jdbc

Application Database Information

Figure 89. Entering the database information

__ a. Click **Validate.**

__ b. Click **OK** to close the validation message.



Install Packages

Fill in the configurations for the packages.

Common Configurations

Database

■ Use the same password for all applications.

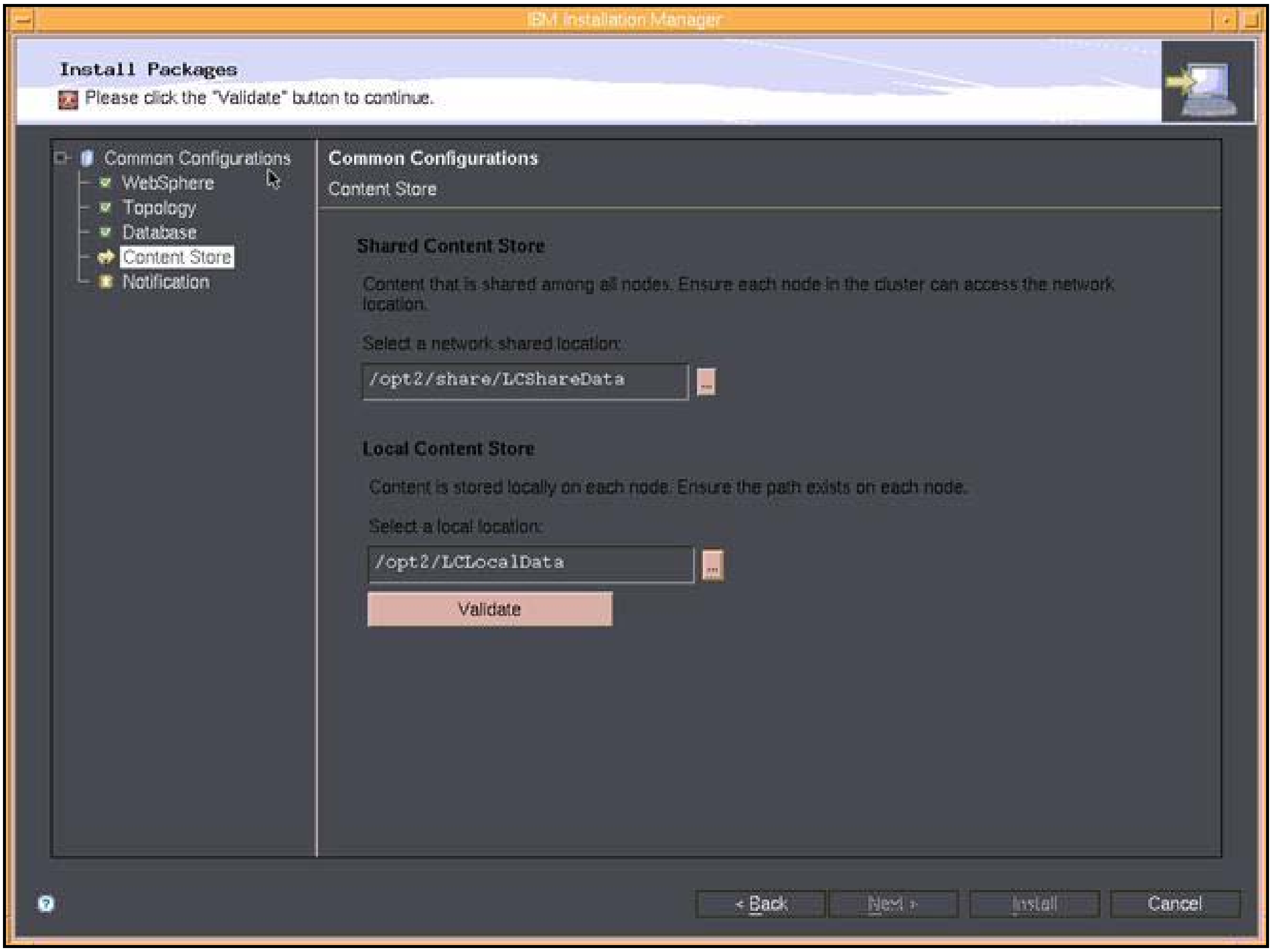
Application	Database Name	User ID	Password
Activities	OPNACT	LCUSER	********
Files	FILES	LCUSER	********
Forums	FORUM	LCUSER	********
Home page	HOMEPAGE	LCUSER	********
Profiles	PEOPLEDB	LCUSER	********
Wikis	WIKIS	LCUSER	********

Information Dialog

Validation successful.

Figure 90. Validation successful message

__ 12. Specify the locations of the content stores.



IBM Installation Manager

Install Packages

Please click the "Validate" button to continue.

Common Configurations

Content Store

Shared Content Store

Content that is shared among all nodes. Ensure each node in the cluster can access the network location.

Select a network shared location:

/opt2/share/LCShareData

Local Content Store

Content is stored locally on each node. Ensure the path exists on each node.

Select a local location:

/opt2/LCLocalData

Figure 91. Specifying the locations of the content stores

__ a. Click **Validate.**

__ b. Click **OK** to close the validation message.

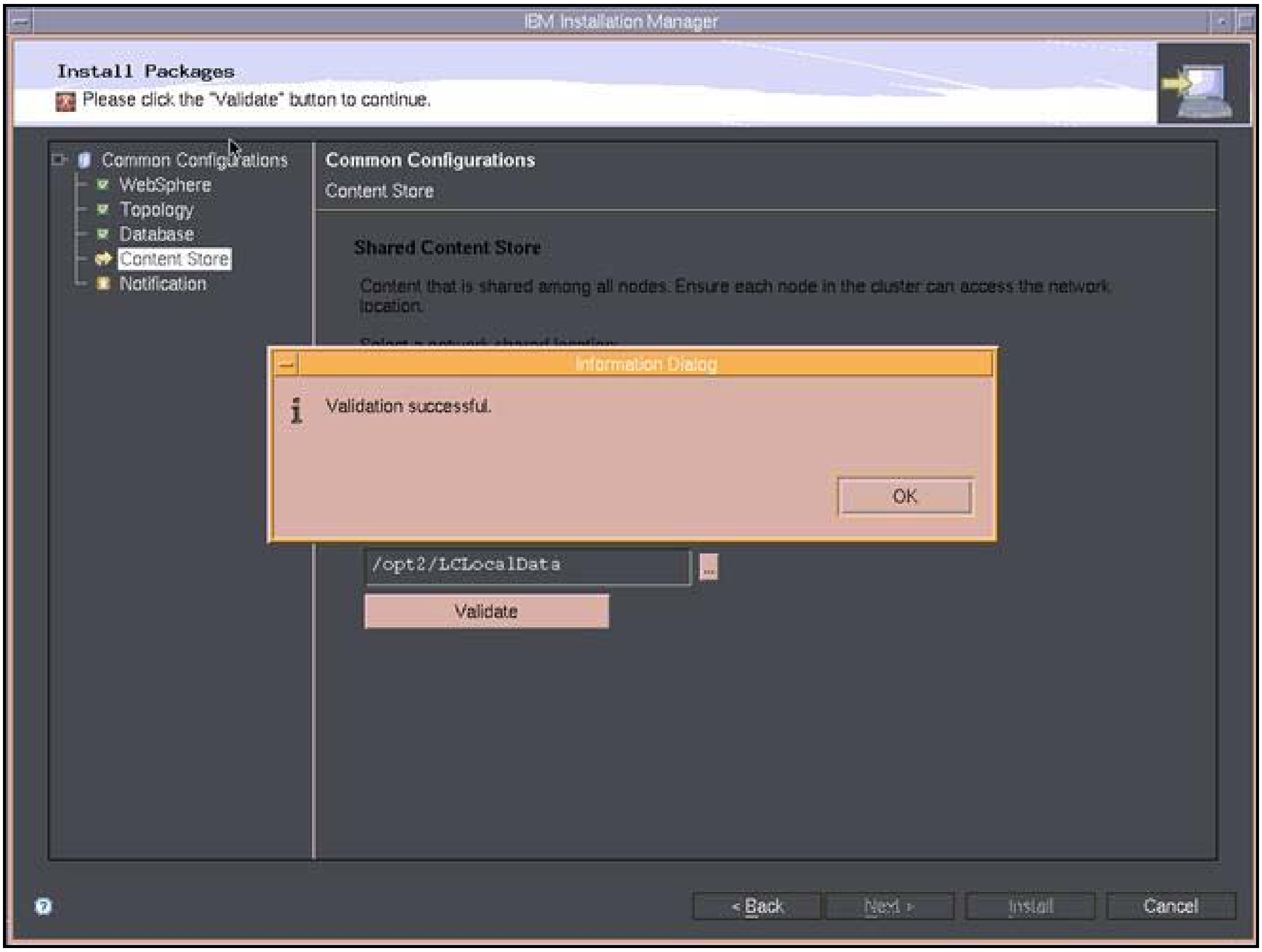
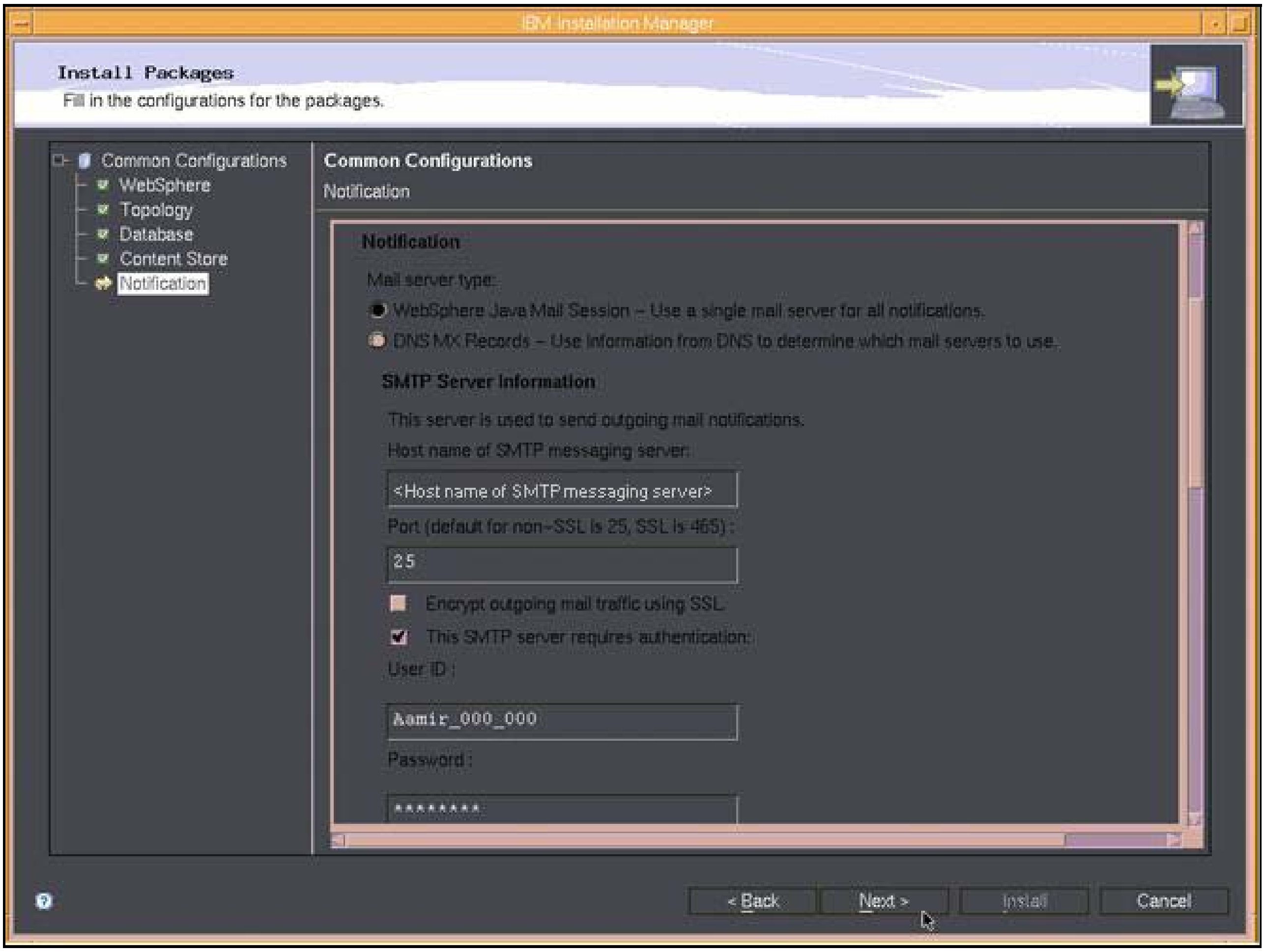


Figure 92. Validation successful message

__ 13. Select a Notification solution and click **Next.**



Fill in the configurations for the packages.

Common Configurations

Notification

Notification

Mail server type:

● WebSphere Java Mail Session – Use a single mail server for all notifications.

○ DNS MX Records – Use information from DNS to determine which mail servers to use.

SMTP Server Information

This server is used to send outgoing mail notifications.

Host name of SMTP messaging server:

<Host name of SMTP messaging server>

Port (default for non-SSL is 25, SSL is 465) :

25

□ Encrypt outgoing mail traffic using SSL.

☑ This SMTP server requires authentication:

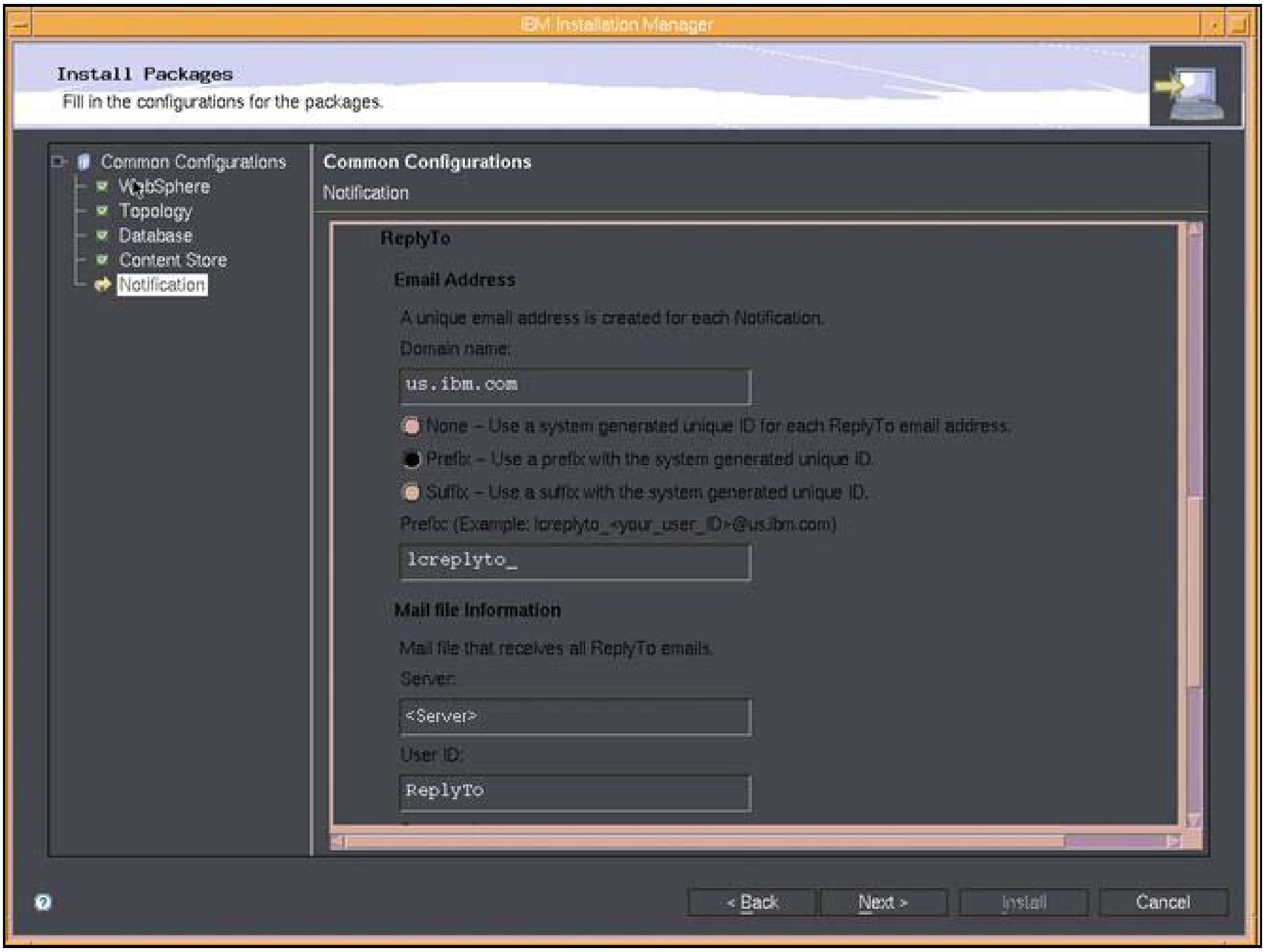
User ID :

Aamir_000_000

Password :

****

Figure 93. Selecting a notification solution (1 of 2)



Install Packages

Fill in the configurations for the packages.

Common Configurations

Notification

ReplyTo

Email Address

A unique email address is created for each Notification.

Domain name:

us.ibm.com

○ None – Use a system generated unique ID for each ReplyTo email address.

● Prefix – Use a prefix with the system generated unique ID.

○ Suffix – Use a suffix with the system generated unique ID.

Prefix: (Example: lcreplyto_<your_user_ID>@us.ibm.com)

lcreplyto_

Mail file Information

Mail file that receives all ReplyTo emails.

Server:

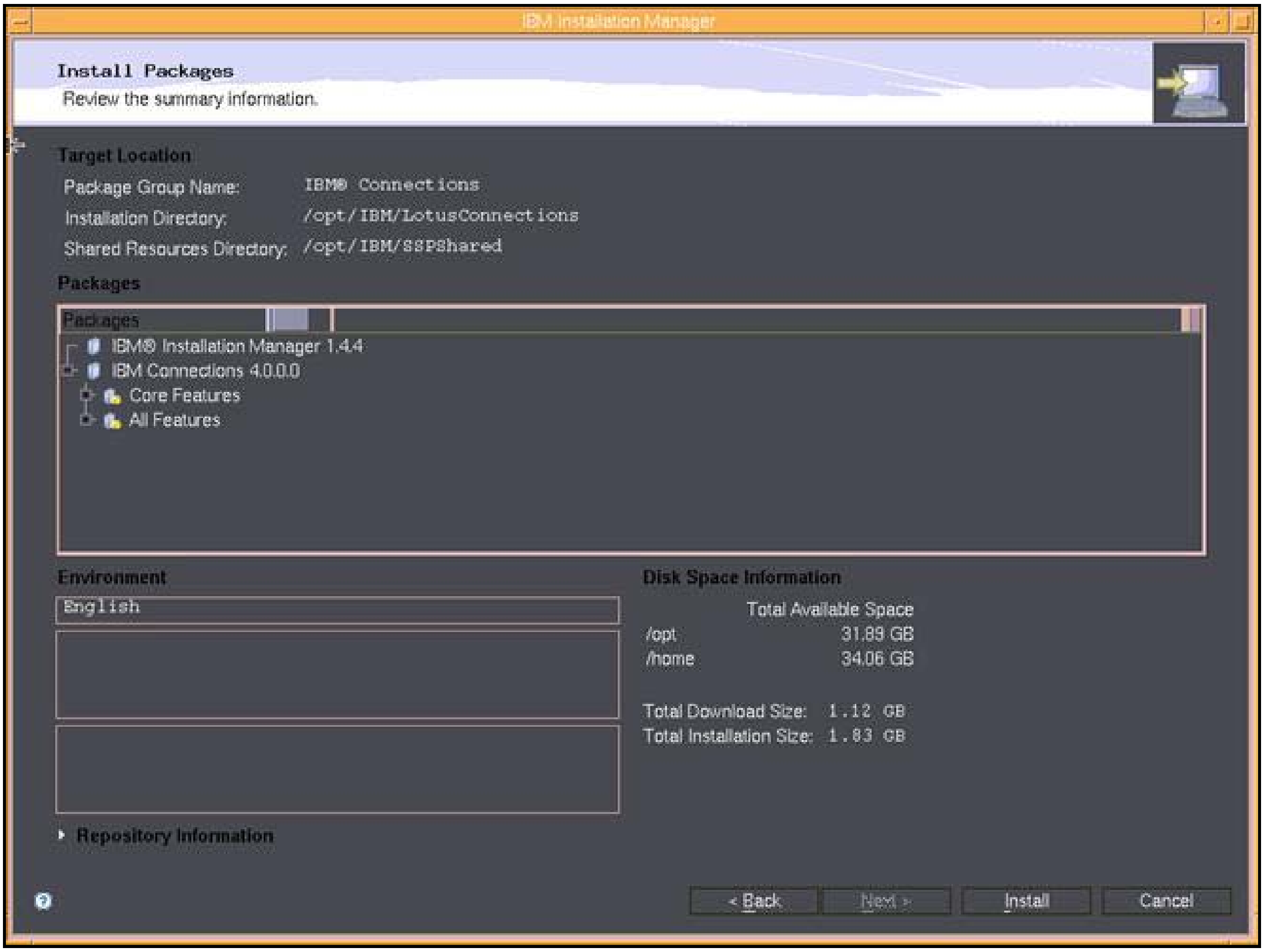
<Server>

User ID:

ReplyTo

Figure 94. Selecting a notification solution (2 of 2)

__ 14. Review the information that you entered. To revise your selections, click **Back**. To finalize the installation, click **Next**.



Install Packages

Review the summary information.

Target Location

Package Group Name: IBM® Connections

Installation Directory: /opt/IBM/LotusConnections

Shared Resources Directory: /opt/IBM/SSPShared

Packages

Packages
- IBM® Installation Manager 1.4.4
- IBM Connections 4.0.0.0
  - Core Features
  - All Features

Environment

English

Disk Space Information

	Total Available Space
/opt	31.89 GB
/home	34.06 GB

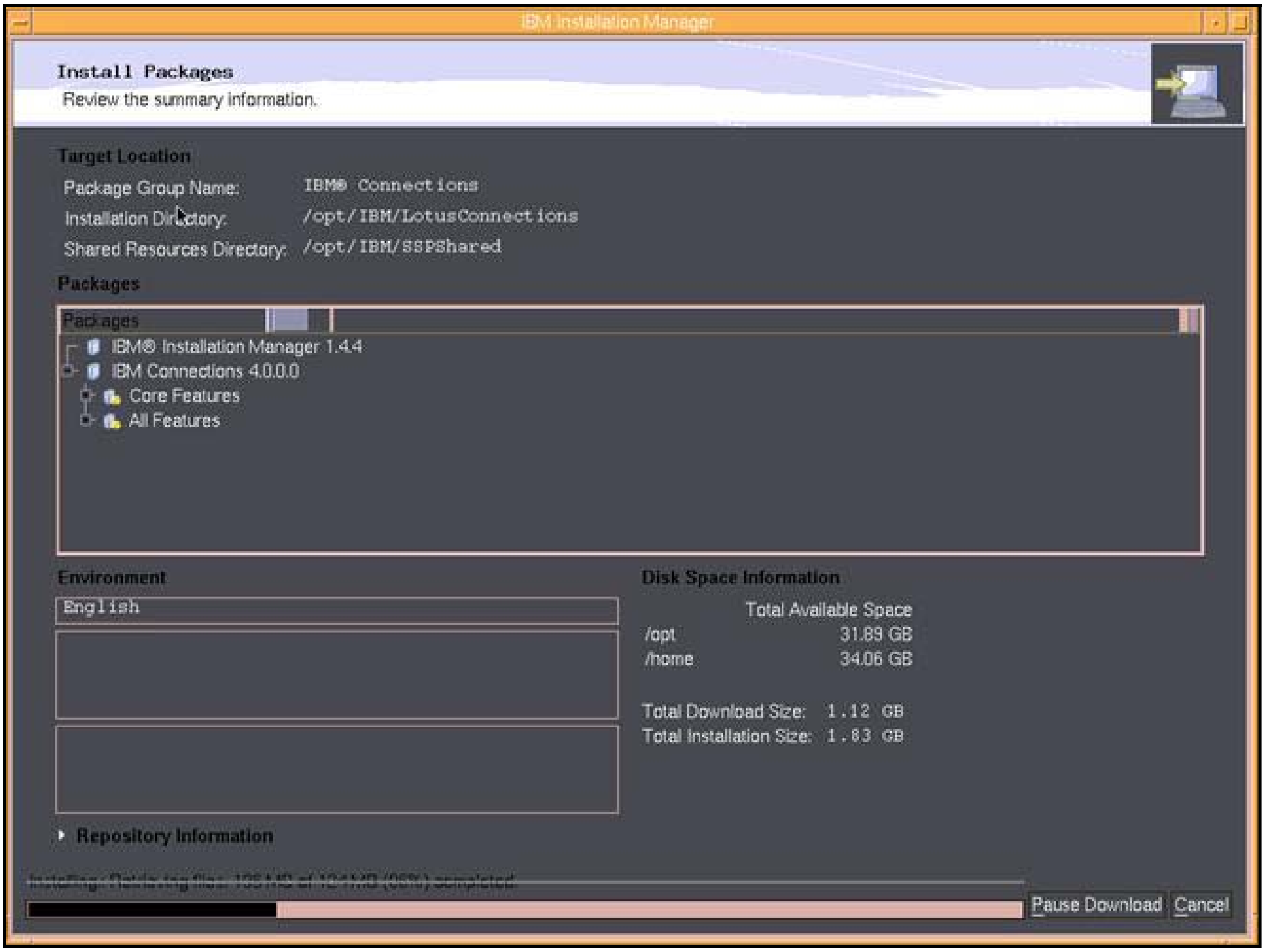
Total Download Size: 1.12 GB

Total Installation Size: 1.83 GB

Repository Information

Figure 95. Summary information

__ 15. To start the installation, click **Install**.



Install Packages

Review the summary information.

Target Location

Package Group Name: IBM® Connections

Installation Directory: /opt/IBM/LotusConnections

Shared Resources Directory: /opt/IBM/SSPShared

Packages

Environment

English

Disk Space Information

	Total Available Space
/opt	31.89 GB
/home	34.06 GB

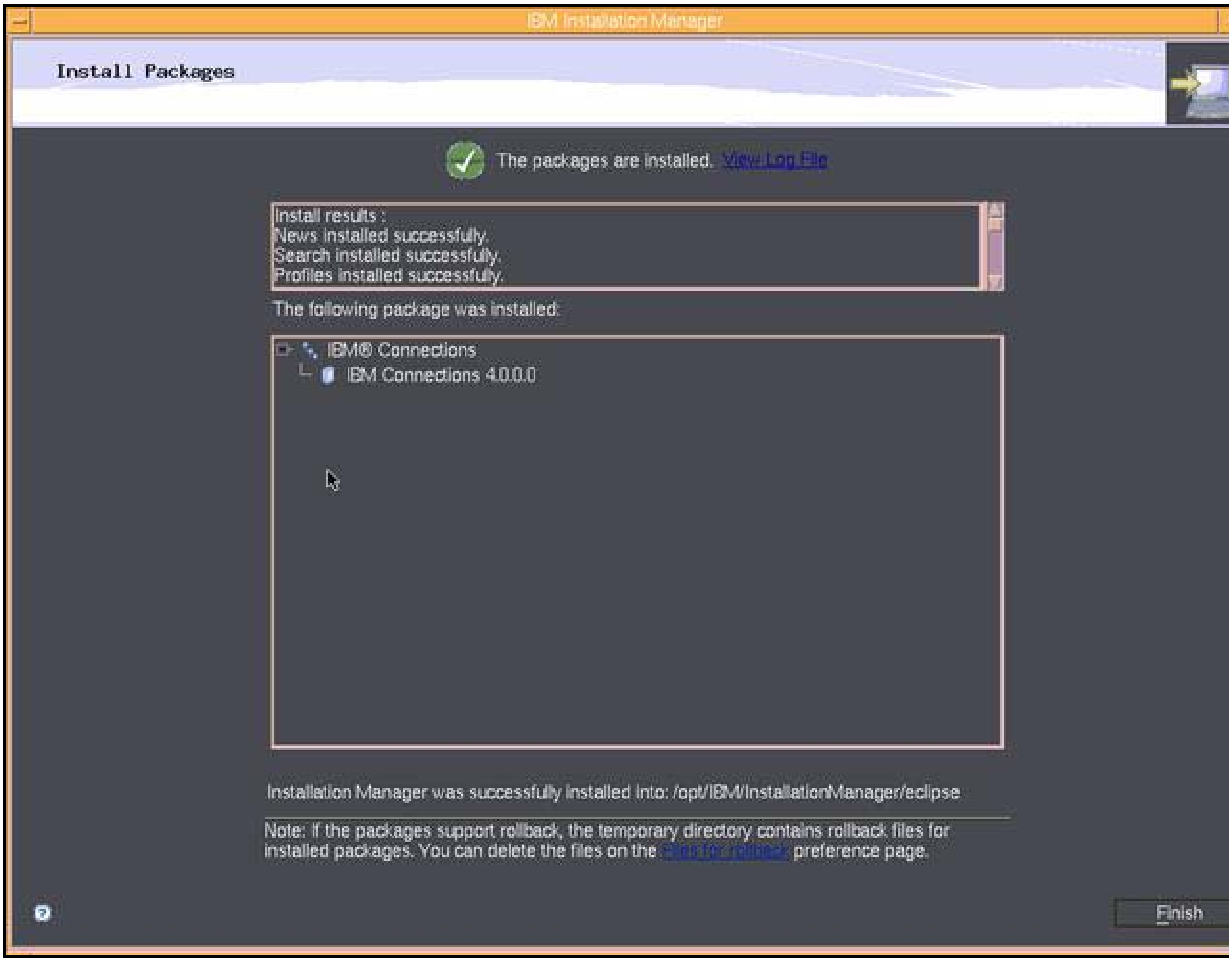
Total Download Size: 1.12 GB

Total Installation Size: 1.83 GB

Installing: Retrieving files: 105 MB of 124 MB (85%) completed

Figure 96. Installation in progress

__ 16. Review the result of the installation. Click **Finish** to exit the installation wizard.



The packages are installed. View Log File

Install results :
News installed successfully.
Search installed successfully.
Profiles installed successfully.

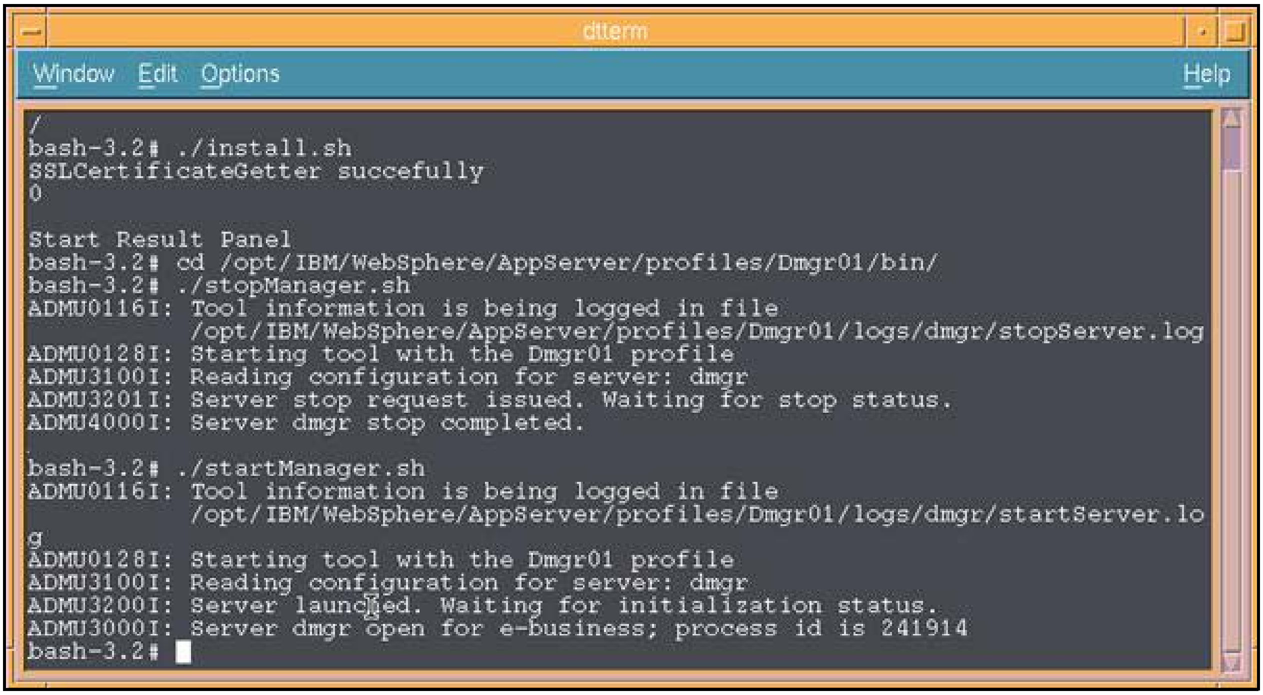
The following package was installed:

Installation Manager was successfully installed into: /opt/IBM/InstallationManager/eclipse

Note: If the packages support rollback, the temporary directory contains rollback files for installed packages. You can delete the files on the Files for rollback preference page.

Figure 97. Installation completion

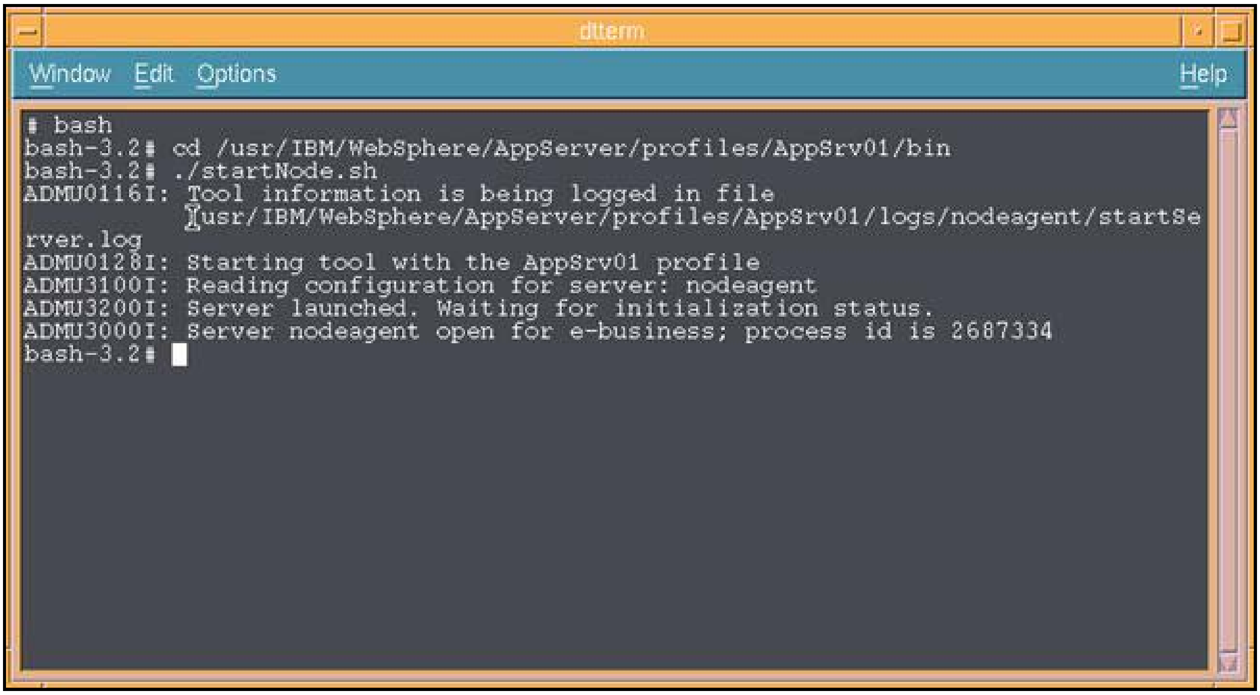
__ 17. Restart the Deployment Manager.



```
/
bash-3.2# ./install.sh
SSLCertificateGetter succefully
0

Start Result Panel
bash-3.2# cd /opt/IBM/WebSphere/AppServer/profiles/Dmgr01/bin/
bash-3.2# ./stopManager.sh
ADMU0116I: Tool information is being logged in file
           /opt/IBM/WebSphere/AppServer/profiles/Dmgr01/logs/dmgr/stopServer.log
ADMU0128I: Starting tool with the Dmgr01 profile
ADMU3100I: Reading configuration for server: dmgr
ADMU3201I: Server stop request issued. Waiting for stop status.
ADMU4000I: Server dmgr stop completed.

bash-3.2# ./startManager.sh
ADMU0116I: Tool information is being logged in file
           /opt/IBM/WebSphere/AppServer/profiles/Dmgr01/logs/dmgr/startServer.lo
g
ADMU0128I: Starting tool with the Dmgr01 profile
ADMU3100I: Reading configuration for server: dmgr
ADMU3200I: Server launched. Waiting for initialization status.
ADMU3000I: Server dmgr open for e-business; process id is 241914
bash-3.2# 
```

Figure 98. Restarting the Deployment Manager

__ 18. Start all the federated nodes and enter the startNode command.



```
# bash
bash-3.2# cd /usr/IBM/WebSphere/AppServer/profiles/AppSrv01/bin
bash-3.2# ./startNode.sh
ADMU0116I: Tool information is being logged in file
           /usr/IBM/WebSphere/AppServer/profiles/AppSrv01/logs/nodeagent/startSe
rver.log
ADMU0128I: Starting tool with the AppSrv01 profile
ADMU3100I: Reading configuration for server: nodeagent
ADMU3200I: Server launched. Waiting for initialization status.
ADMU3000I: Server nodeagent open for e-business; process id is 2687334
bash-3.2# 
```

Figure 99. Starting all the federated nodes

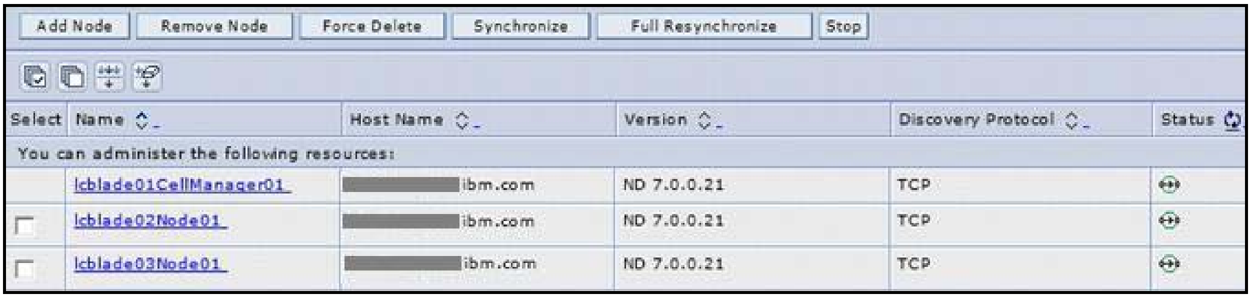
__ 19. Log in to the Integrated Solutions Console on the Deployment Manager for a full synchronization of all nodes.

3. Post-installation

Configuring IBM HTTP Server with SSL

Defining IBM HTTP Server

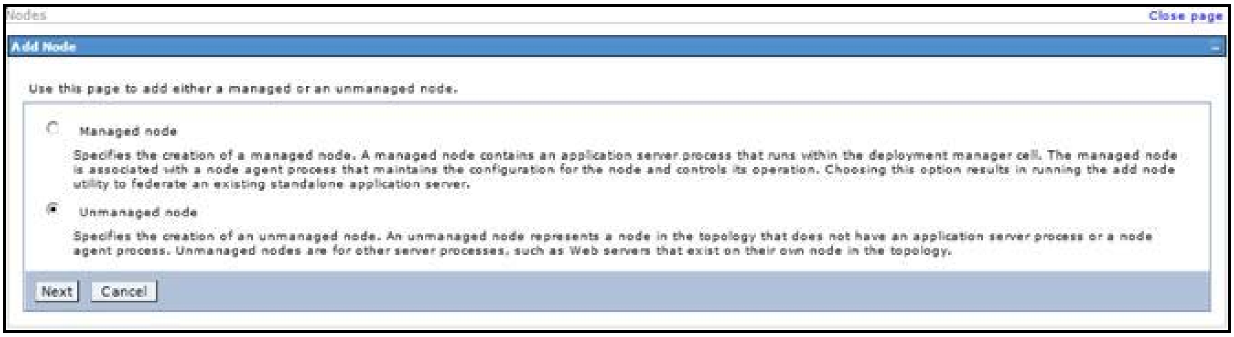
__ 1. Log in to the WebSphere Application Server Integrated Solutions Console on the Deployment Manager and select **System administration > Nodes**. Click **Add Node**.



Select	Name	Host Name	Version	Discovery Protocol	Status
You can administer the following resources:					
	lcblade01CellManager01	[redacted]ibm.com	ND 7.0.0.21	TCP	⊕
□	lcblade02Node01	[redacted]ibm.com	ND 7.0.0.21	TCP	⊕
□	lcblade03Node01	[redacted]ibm.com	ND 7.0.0.21	TCP	⊕

Figure 100. Adding a node from the system administration

__ 2. Choose **Unmanaged node**.



Use this page to add either a managed or an unmanaged node.

○ Managed node

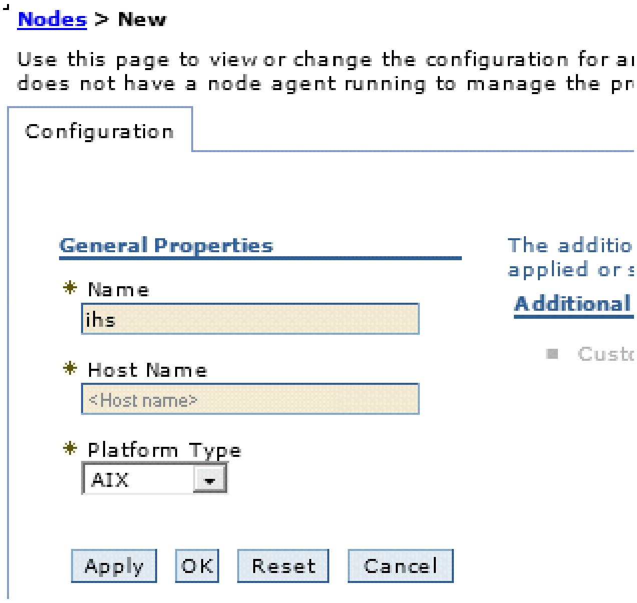
Specifies the creation of a managed node. A managed node contains an application server process that runs within the deployment manager cell. The managed node is associated with a node agent process that maintains the configuration for the node and controls its operation. Choosing this option results in running the add node utility to federate an existing standalone application server.

● Unmanaged node

Specifies the creation of an unmanaged node. An unmanaged node represents a node in the topology that does not have an application server process or a node agent process. Unmanaged nodes are for other server processes, such as Web servers that exist on their own node in the topology.

Figure 101. Selecting node type

___ 3. Input node name and host name.



Nodes > New

Use this page to view or change the configuration for a
does not have a node agent running to manage the pr

Configuration

General Properties

* Name
ihs

* Host Name
<Host name>

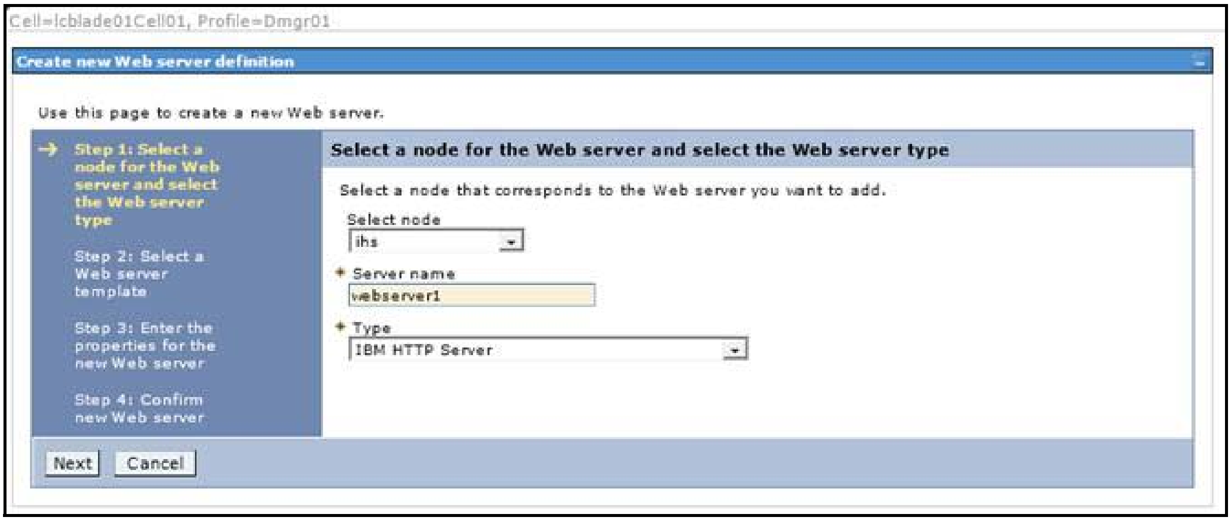
* Platform Type
AIX

Figure 102. Inputting node name and host name

___ 4. Click **OK** and then **Save**.

___ 5. Select **Servers > Server Types > Web servers** and click **New**.

___ 6. Select the node that you just created and input server name as **webserver1**.



Cell=lcblade01Cell01, Profile=Dmgr01

Create new Web server definition

Use this page to create a new Web server.

→ Step 1: Select a node for the Web server and select the Web server type

Step 2: Select a Web server template

Step 3: Enter the properties for the new Web server

Step 4: Confirm new Web server

Select a node for the Web server and select the Web server type

Select a node that corresponds to the Web server you want to add.

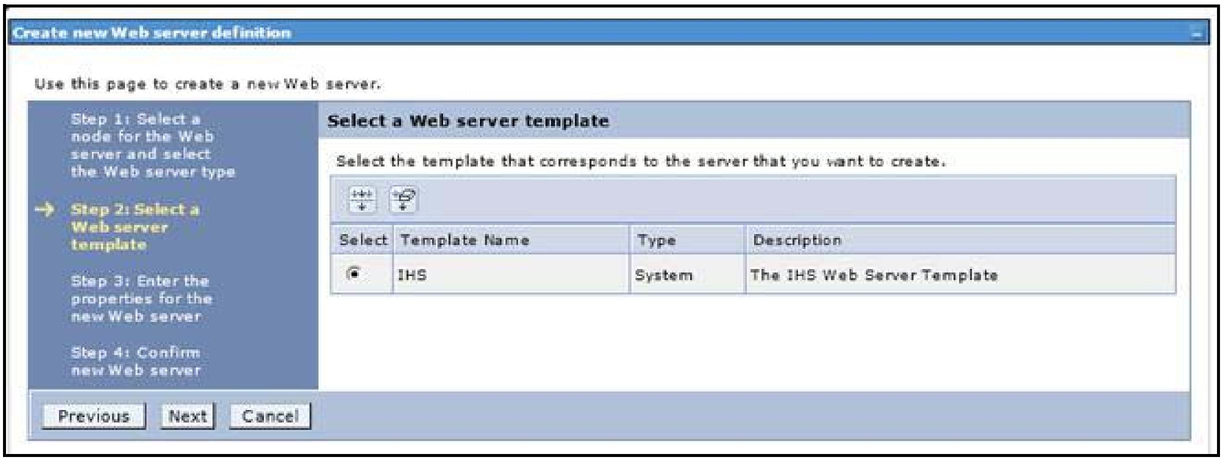
Select node
ihs

* Server name
webserver1

* Type
IBM HTTP Server

Figure 103. Inputting server name

__ 7. Click **Next** and then **Next**.



Create new Web server definition

Use this page to create a new Web server.

Step 1: Select a node for the Web server and select the Web server type

→ Step 2: Select a Web server template

Step 3: Enter the properties for the new Web server

Step 4: Confirm new Web server

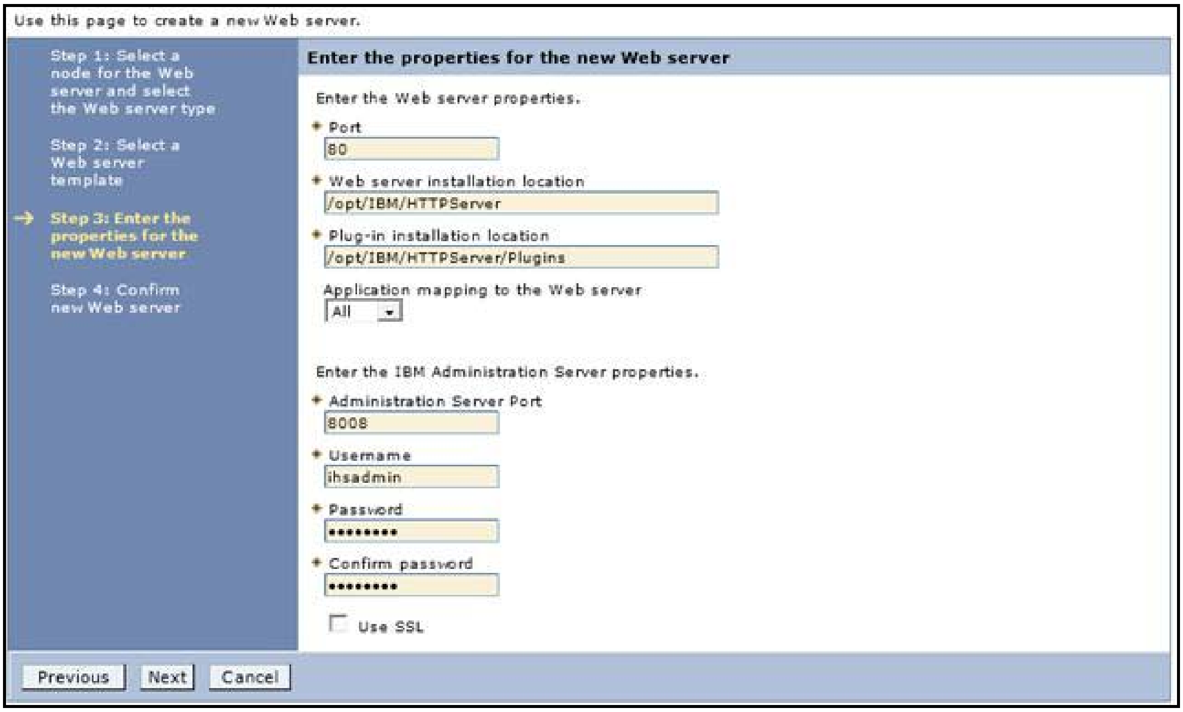
Select a Web server template

Select the template that corresponds to the server that you want to create.

Select	Template Name	Type	Description
●	IHS	System	The IHS Web Server Template

Figure 104. Selecting a web server template

__ 8. Modify the HTTP server installation path and input username/password for IBM HTTP Server administration.



Use this page to create a new Web server.

Step 1: Select a node for the Web server and select the Web server type

Step 2: Select a Web server template

→ Step 3: Enter the properties for the new Web server

Step 4: Confirm new Web server

Enter the properties for the new Web server

Enter the Web server properties.

* Port: 80
* Web server installation location: /opt/IBM/HTTPServer
* Plug-in installation location: /opt/IBM/HTTPServer/Plugins

Application mapping to the Web server: All

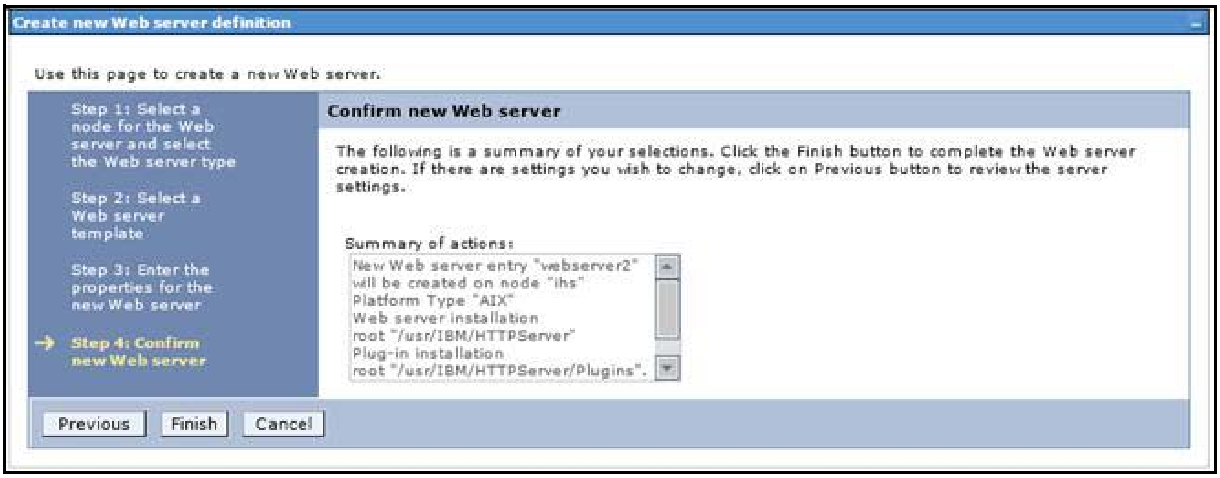
Enter the IBM Administration Server properties.

* Administration Server Port: 8008
* Username: ihsadmin
* Password: ********
* Confirm password: ********

□ Use SSL

Figure 105. Entering the properties for the new web server

___ 9. Click **Next** and then **Finish**.



Create new Web server definition
Step 1: Select a node for the Web server and select the Web server type
Step 2: Select a Web server template
Step 3: Enter the properties for the new Web server
→ Step 4: Confirm new Web server
Previous
Finish
Cancel

Use this page to create a new Web server.

Confirm new Web server

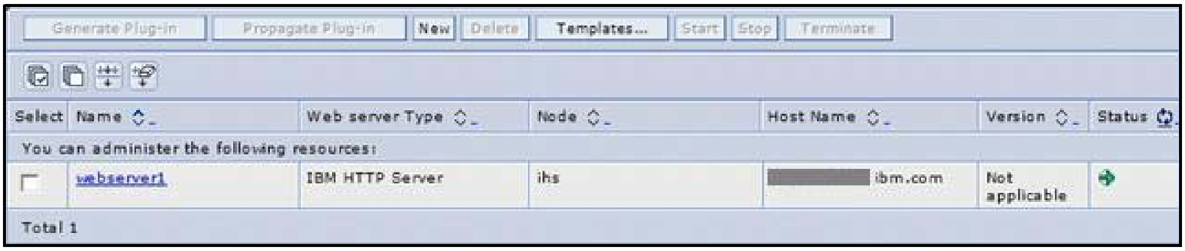
The following is a summary of your selections. Click the Finish button to complete the Web server creation. If there are settings you wish to change, click on Previous button to review the server settings.

Summary of actions:

New Web server entry "webserver2" will be created on node "ihs" Platform Type "AIX" Web server installation root "/usr/IBM/HTTPServer" Plug-in installation root "/usr/IBM/HTTPServer/Plugins".

Figure 106. Confirming new web server

___ 10. Click **Save**.

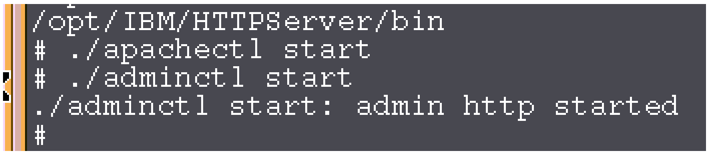


Select	Name	Web server Type	Node	Host Name	Version	Status
You can administer the following resources:						
□	webserver1	IBM HTTP Server	ihs	[redacted] ibm.com	Not applicable	➜
Total 1						

Figure 107. Saving the new web server

___ 11. Synchronize all the nodes.

___ 12. Start IBM HTTP Server and IBM HTTP Server administration.

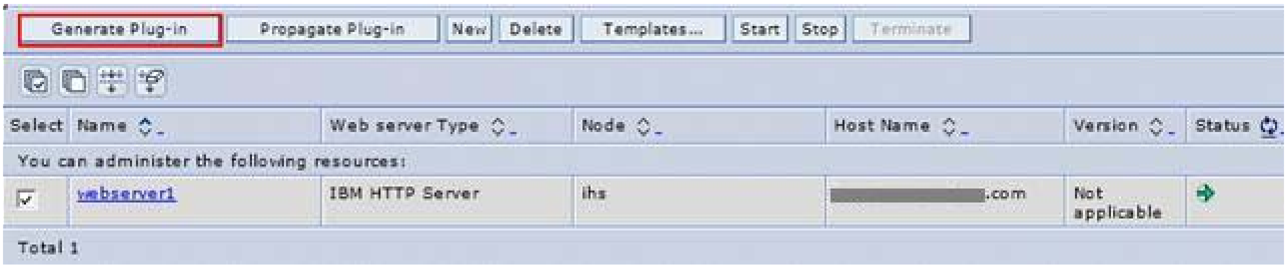


```
/opt/IBM/HTTPServer/bin
# ./apachectl start
# ./adminctl start
./adminctl start: admin http started
#
```

Figure 108. Starting IBM HTTP Server and IBM HTTP Server administration

___ 13. Select **Servers** > **Server Types** > **Web servers**.

___ 14. Select the check box for webserver1. Click **Generate Plug-in**.



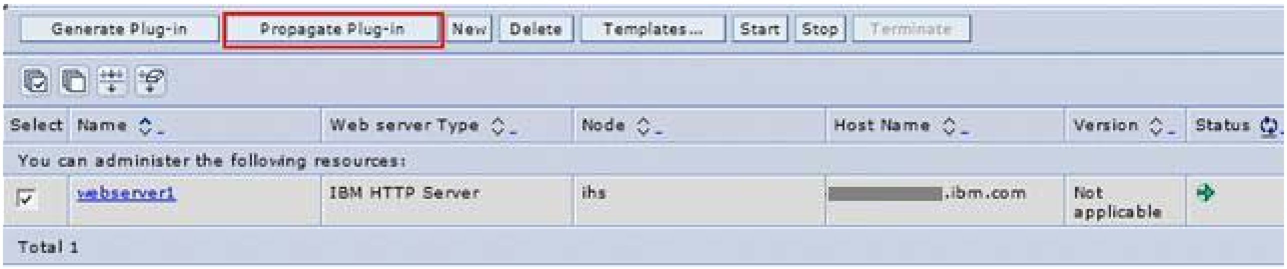
You can administer the following resources:

Select	Name	Web server Type	Node	Host Name	Version	Status
☑	webserver1	IBM HTTP Server	ihs	[redacted].com	Not applicable	➔

Total 1

Figure 109. Generating a plug-in for the new web server

___ 15. Select the check box for your webserver1. **Click Propagate Plug-in**.



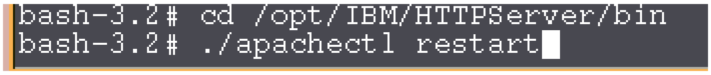
You can administer the following resources:

Select	Name	Web server Type	Node	Host Name	Version	Status
☑	webserver1	IBM HTTP Server	ihs	[redacted].ibm.com	Not applicable	➔

Total 1

Figure 110. Propagating the plug-in for the new web server

___ 16. Restart IBM HTTP Server.

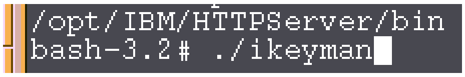


```
bash-3.2# cd /opt/IBM/HTTPServer/bin
bash-3.2# ./apachectl restart
```

Figure 111. Restarting IBM HTTP Server

Configuring IBM HTTP Server for SSL

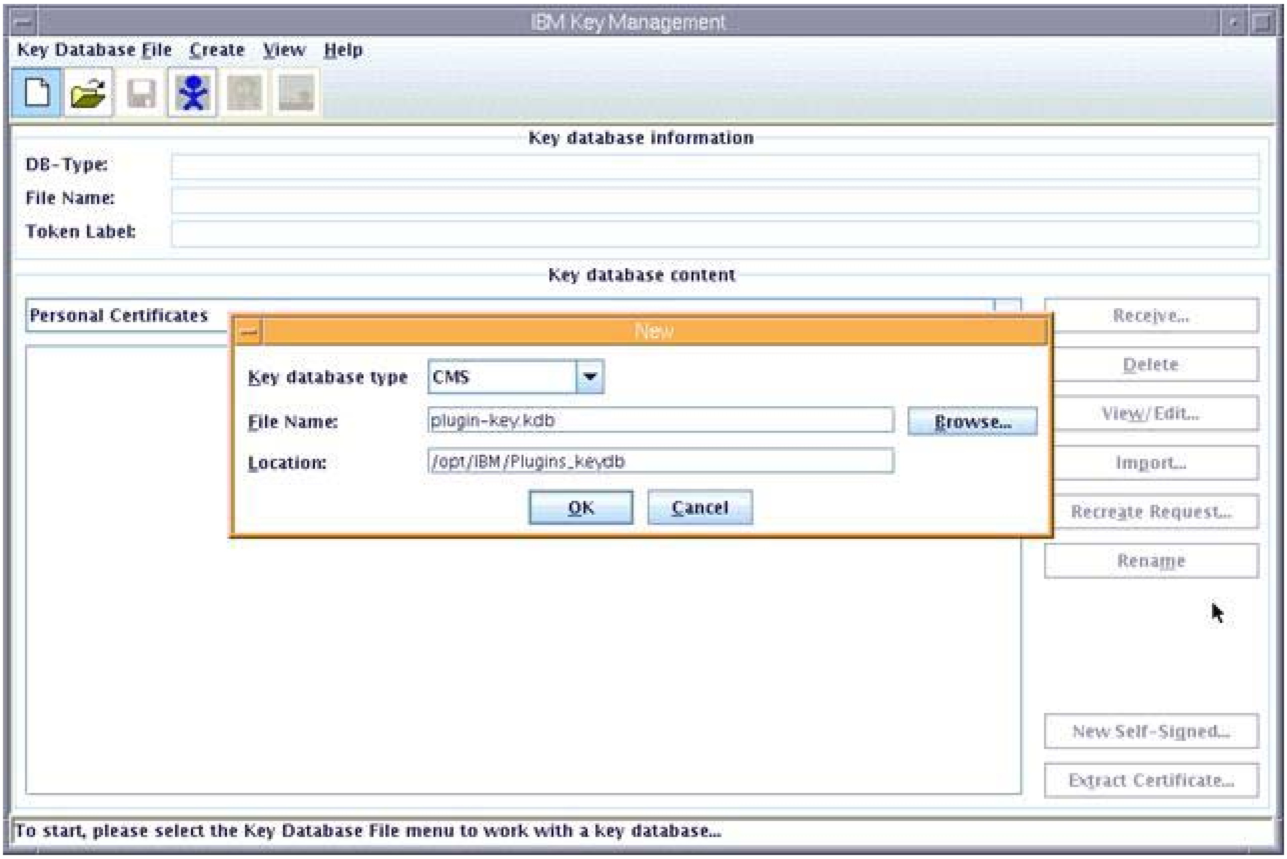
__ 1. Start iKeyman on IBM HTTP Server computer.



```
/opt/IBM/HTTPServer/bin
bash-3.2# ./ikeyman
```

Figure 112. Starting the iKeyman on IBM HTTP Server computer

__ 2. Create a key file. Click **New**. Select **CMS** for the Key database type. Enter a name and location for the new key file. Click **OK**.



IBM Key Management

Key database information

DB-Type:

File Name:

Token Label:

Key database content

Personal Certificates

New

Key database type: CMS

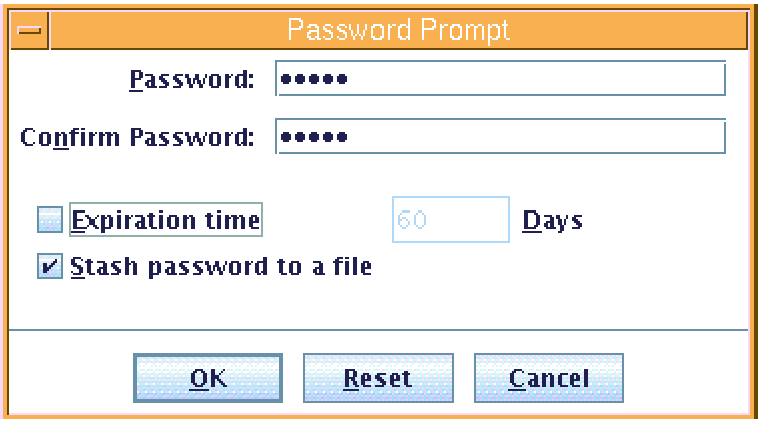
File Name: plugin-key.kdb

Location: /opt/IBM/Plugins_keydb

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

Figure 113. Creating a key file

__ 3. Enter your password in the Password Prompt dialog box, and confirm the password. The password is WebAS. Select **Stash the password to a file** and then click **OK**.



Password: •••••

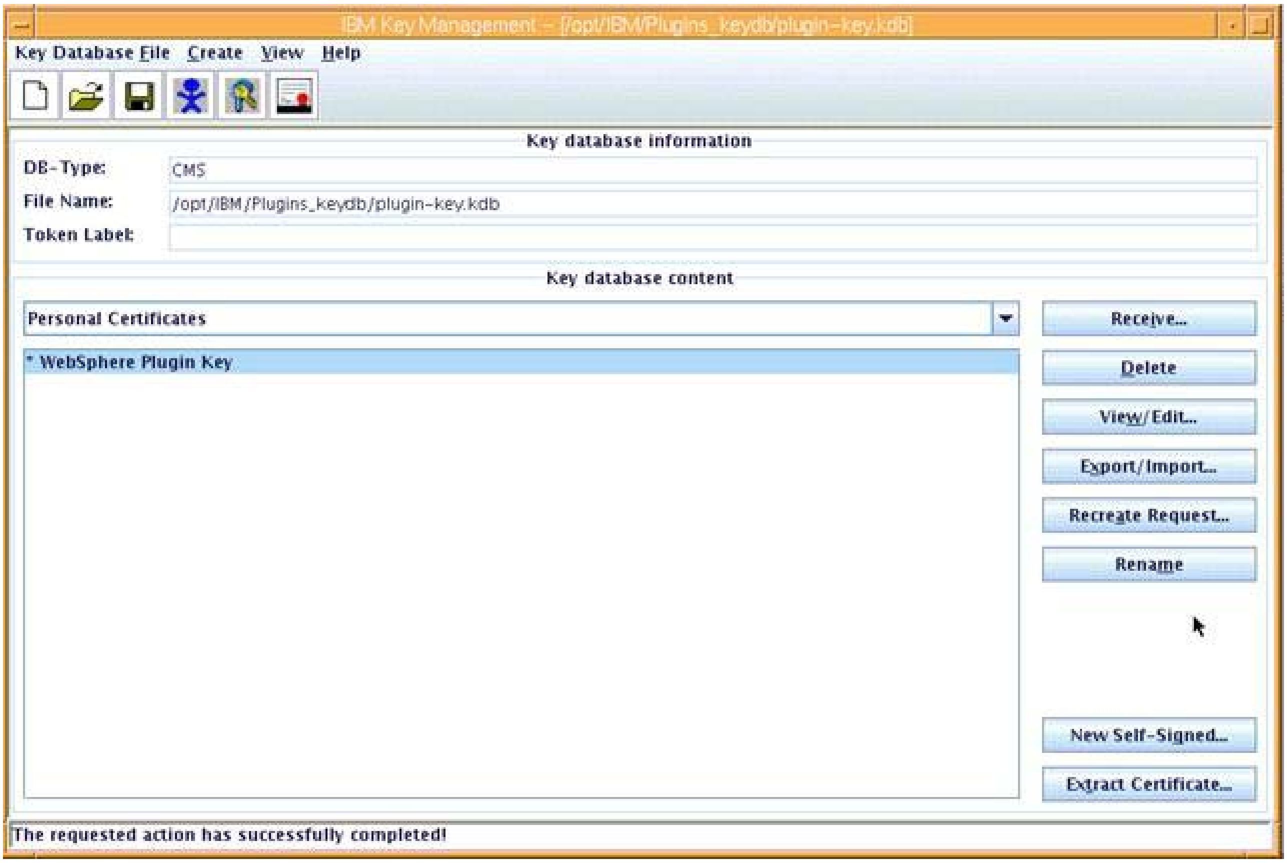
Confirm Password: •••••

□ Expiration time 60 Days

☑ Stash password to a file

Figure 114. Password Prompt

__ 4. The new key database should display in the iKeyman utility with default signer certificates. Click **New Self-Signed...**



DB-Type: CMS

File Name: /opt/IBM/Plugins_keydb/plugin-key.kdb

Token Label:

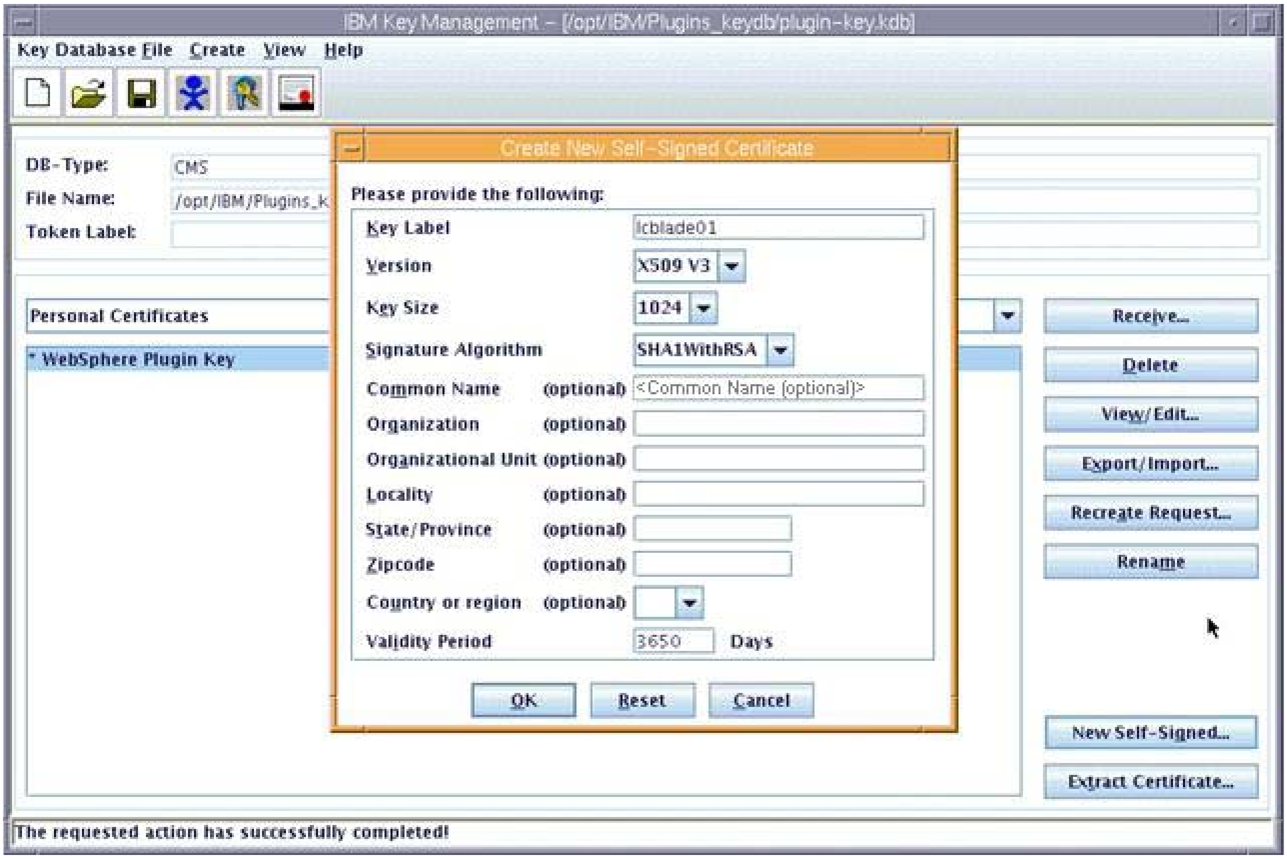
Personal Certificates

* WebSphere Plugin Key

The requested action has successfully completed!

Figure 115. Key database

__ 5. Input a label name and set the validity period to be as long as you want but no longer than 9999 days. Click **OK**.



IBM Key Management – [/opt/IBM/Plugins_keydb/plugin-key.kdb]

DB-Type: CMS
File Name: /opt/IBM/Plugins_k
Token Label:

Personal Certificates
* WebSphere Plugin Key

Create New Self-Signed Certificate

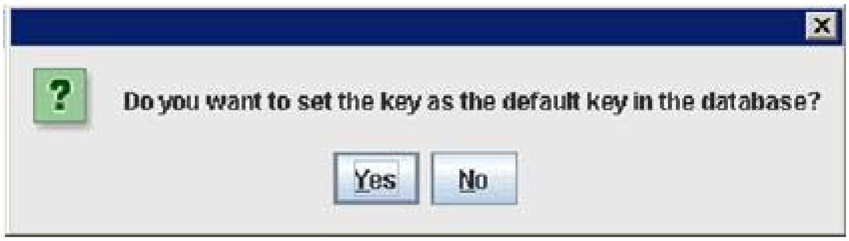
Please provide the following:

Key Label: lcblade01
Version: X509 V3
Key Size: 1024
Signature Algorithm: SHA1WithRSA
Common Name (optional): <Common Name (optional)>
Organization (optional):
Organizational Unit (optional):
Locality (optional):
State/Province (optional):
Zipcode (optional):
Country or region (optional):
Validity Period: 3650 Days

The requested action has successfully completed!

Figure 116. Creating New Self-Signed Certificate

__ 6. You can set this key to be default key by clicking **Yes**.



Do you want to set the key as the default key in the database?

Figure 117. Setting the key as the default key

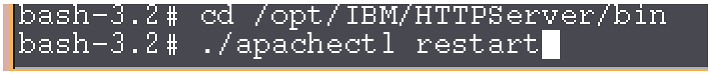
__ 7. Close iKeyman.

__ 8. Find the file httpd.conf under /opt/IBM/HTTPServer/conf, open it with your favorite text editor and at the end of the file, add the following lines:

```
LoadModule rewrite_module modules/mod_rewrite.so
LoadModule ibm_ssl_module modules/mod_ibm_ssl.so
<IfModule mod_ibm_ssl.c>
Listen 0.0.0.0:443
```

```
<VirtualHost *:443>
ServerName lcblade01.cn.ibm.com
#DocumentRoot /opt/IBM/HTTPServer/htdocs
SSLEnable
</VirtualHost>
</IfModule>
SSLDisable
Keyfile /opt/IBM/Plugins_keydb/plugin-key.kdb
SSLStashFile /opt/IBM/Plugins_keydb/plugin-key.sth
```

___ 9. Restart HTTP server.



```
bash-3.2# cd /opt/IBM/HTTPServer/bin
bash-3.2# ./apachectl restart
```

Figure 118. Restarting HTTP server

___ 10. Verify you can access `https://<your IHS host>` and get IBM HTTP Server page successfully.

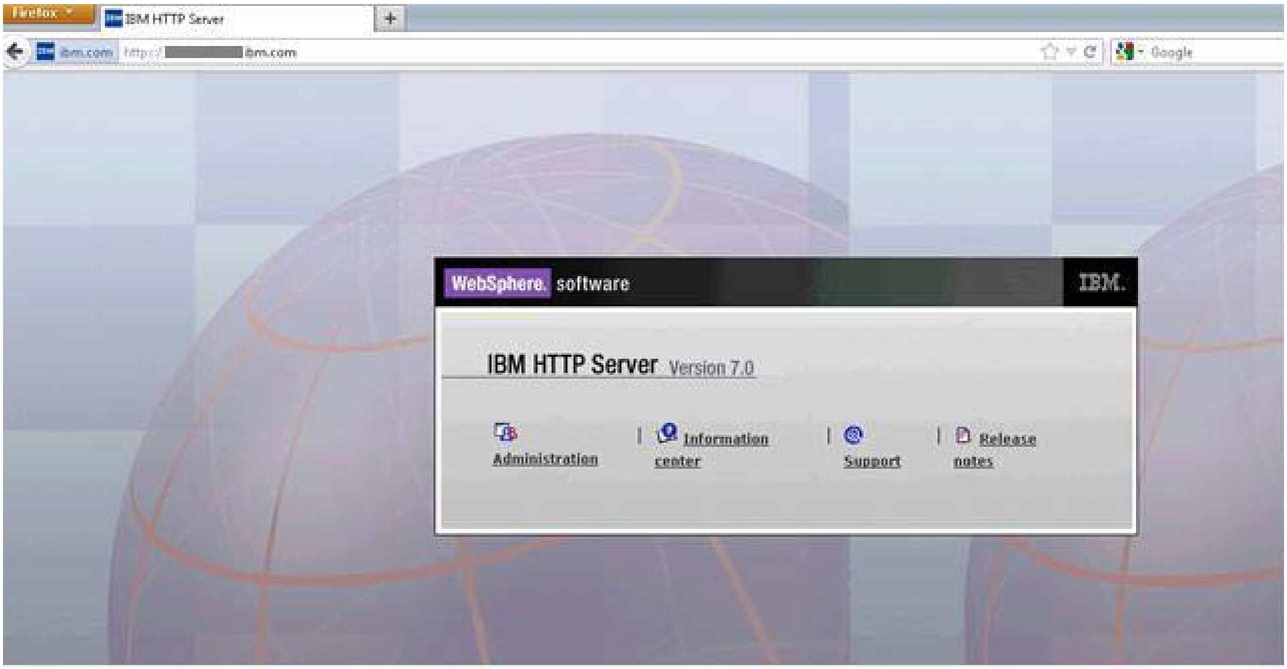
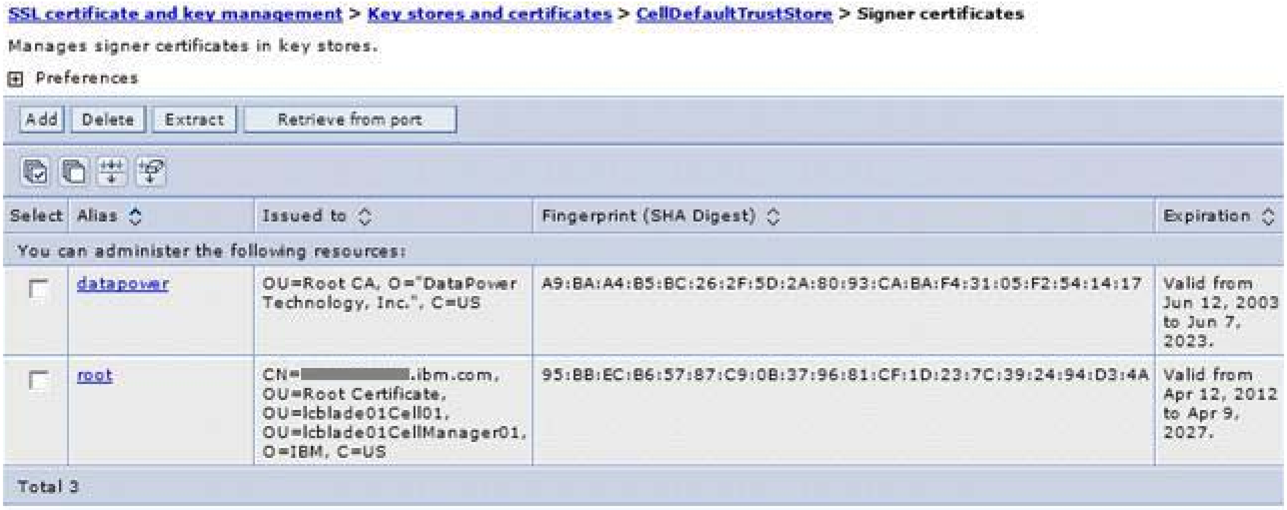


Figure 119. https://<your IHS host>

Adding certificates to the WebSphere truststore

__ 1. Go to **Security > SSL certificate and key management > Key stores and certificates > CellDefaultTrustStore > Signer certificates**. Click **Retrieve from port**.



SSL certificate and key management > Key stores and certificates > CellDefaultTrustStore > Signer certificates

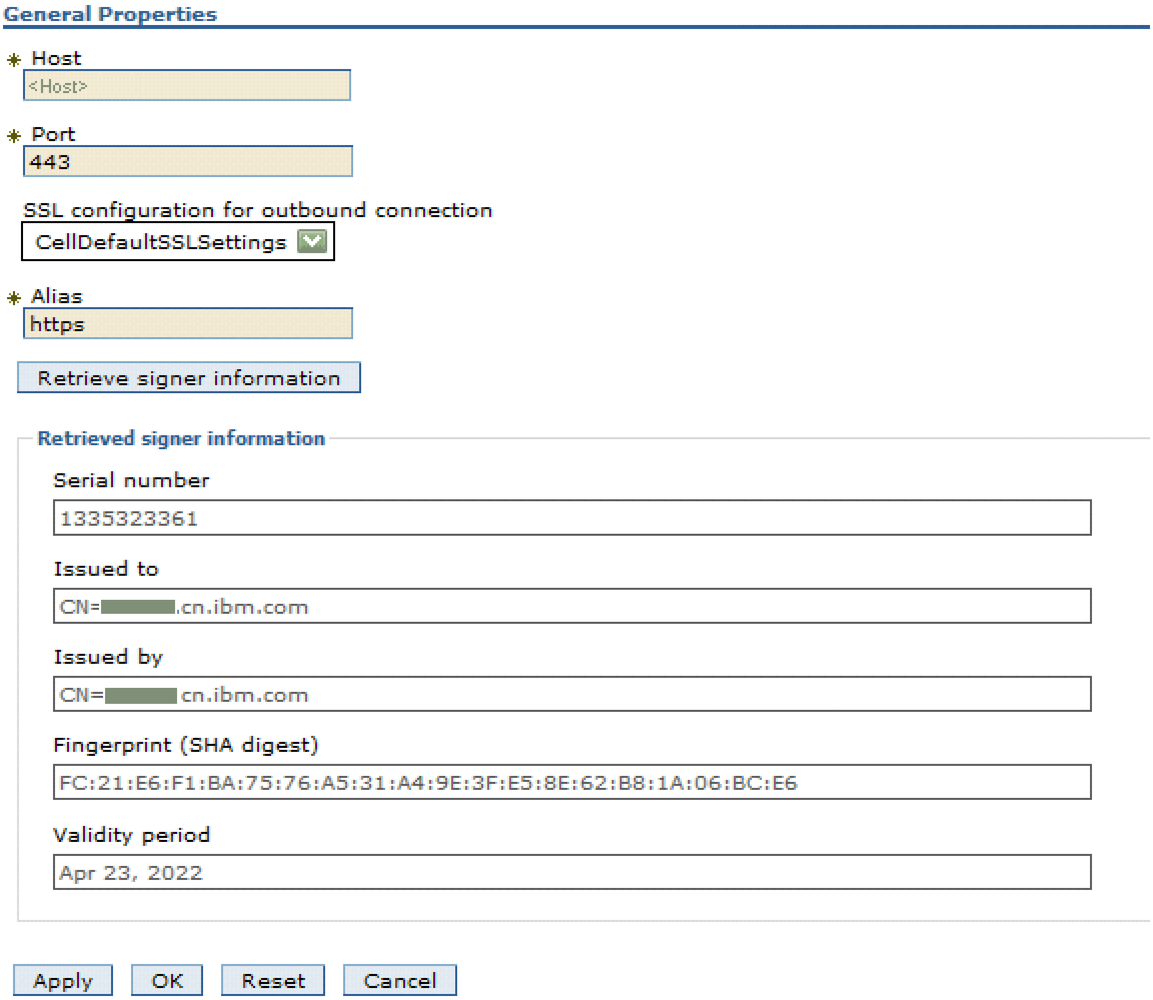
Manages signer certificates in key stores.

⊞ Preferences

Select	Alias	Issued to	Fingerprint (SHA Digest)	Expiration
You can administer the following resources:				
□	datapower	OU=Root CA, O="DataPower Technology, Inc.", C=US	A9:BA:A4:B5:BC:26:2F:5D:2A:80:93:CA:BA:F4:31:05:F2:54:14:17	Valid from Jun 12, 2003 to Jun 7, 2023.
□	root	CN=[redacted].ibm.com, OU=Root Certificate, OU=lcblade01Cell01, OU=lcblade01CellManager01, O=IBM, C=US	95:BB:EC:B6:57:87:C9:0B:37:96:81:CF:1D:23:7C:39:24:94:D3:4A	Valid from Apr 12, 2012 to Apr 9, 2027.
Total 3				

Figure 120. Signer certificates

___ 2. Input host name and port number.



General Properties

* Host
<Host>

* Port
443

SSL configuration for outbound connection
CellDefaultSSLSettings

* Alias
https

Retrieved signer information

Serial number
1335323361

Issued to
CN=[redacted].cn.ibm.com

Issued by
CN=[redacted]cn.ibm.com

Fingerprint (SHA digest)
FC:21:E6:F1:BA:75:76:A5:31:A4:9E:3F:E5:8E:62:B8:1A:06:BC:E6

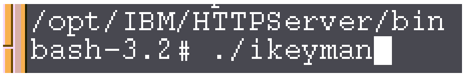
Validity period
Apr 23, 2022

Figure 121. Inputting host name and port number

___ 3. Click **OK** and then **Save**.

Import WebSphere Application Server root certificate to HTTP server.

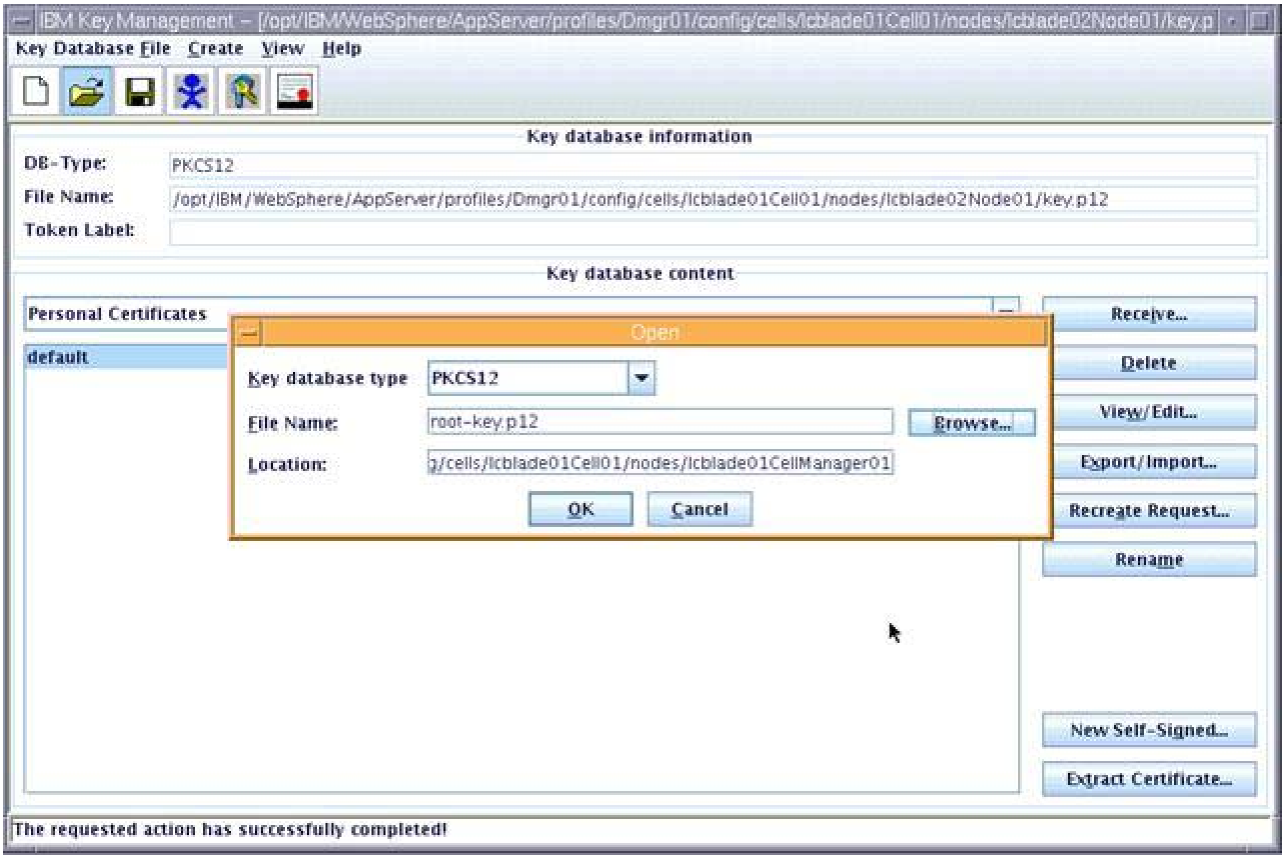
__ 1. Start iKeyman on IBM HTTP Server computer.



```
/opt/IBM/HTTPServer/bin
bash-3.2# ./ikeyman
```

Figure 122. Starting iKeyman on IBM HTTP Server comouter

__ 2. Export Deployment Manager root certificate. Open `root-key.p12` under `/opt/IBM/Websphere/Appserver/profiles/Dmgr01/config/cells/cell_name/nodes/DMmanager_name/`. Key database type is PKCS12. Click **OK**.



IBM Key Management – [/opt/IBM/WebSphere/AppServer/profiles/Dmgr01/config/cells/lcblade01Cell01/nodes/lcblade02Node01/key.p

Key database information

DB-Type: PKCS12

File Name: /opt/IBM/WebSphere/AppServer/profiles/Dmgr01/config/cells/lcblade01Cell01/nodes/lcblade02Node01/key.p12

Token Label:

Key database content

Personal Certificates

default

Open

Key database type: PKCS12

File Name: root-key.p12

Location: g/cells/lcblade01Cell01/nodes/lcblade01CellManager01

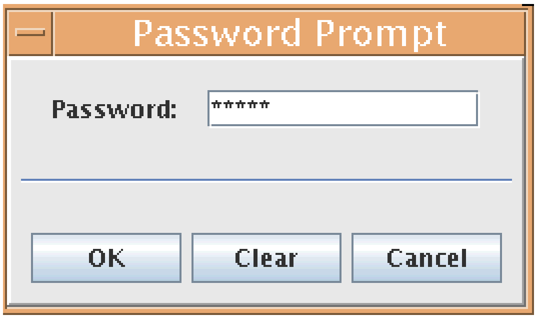
The requested action has successfully completed!

Figure 123. Export Deployment Manager root certificate

__ 3. Introduce the password when prompted.

Note

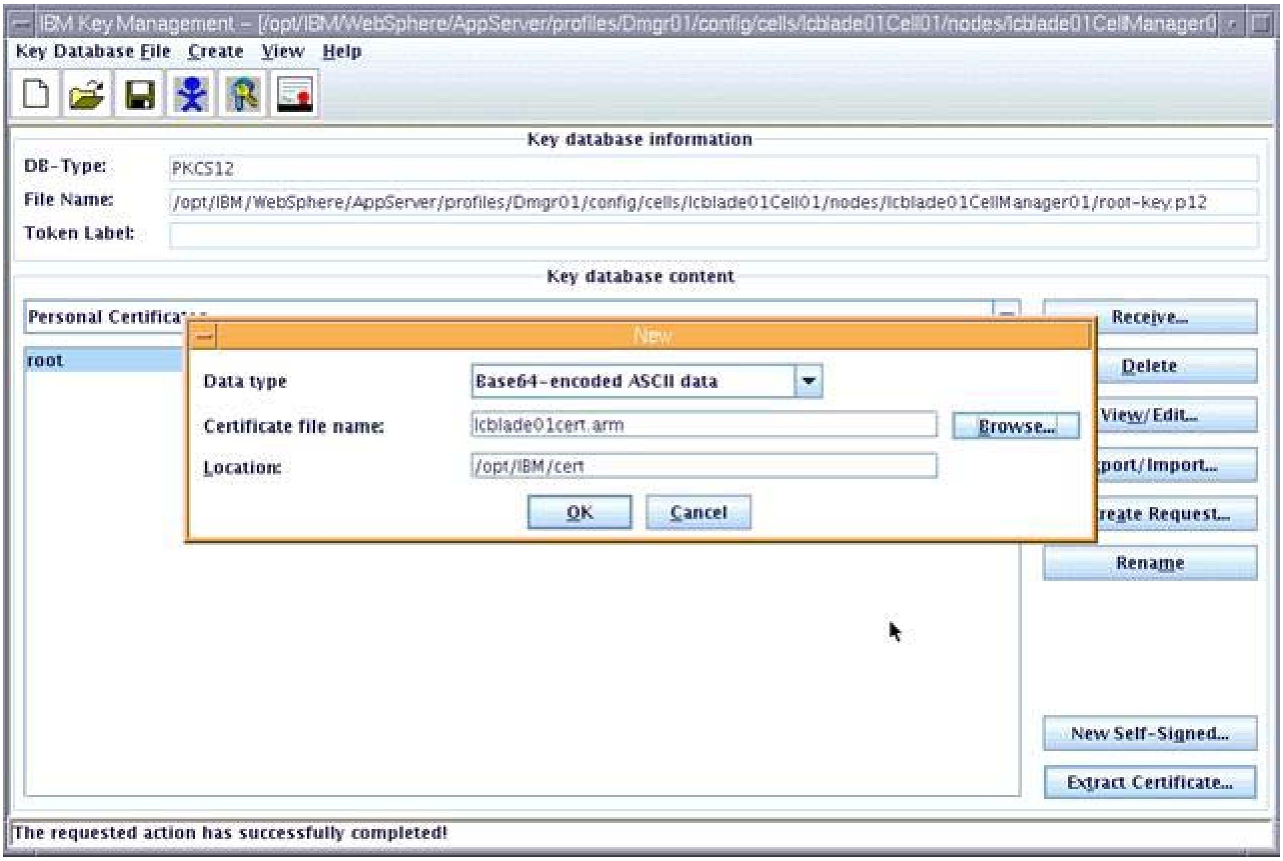
The password is `WebAS`.



Password: ******

Figure 124. Password prompt

__ 4. Click **Extract Certificate.** Enter a name and location for the new certification file. Click **OK.**



DB-Type: PKCS12

File Name: /opt/IBM/WebSphere/AppServer/profiles/Dmgr01/config/cells/lcblade01Cell01/nodes/lcblade01CellManager01/root-key.p12

Token Label:

Personal Certifica...

root

Data type: Base64-encoded ASCII data

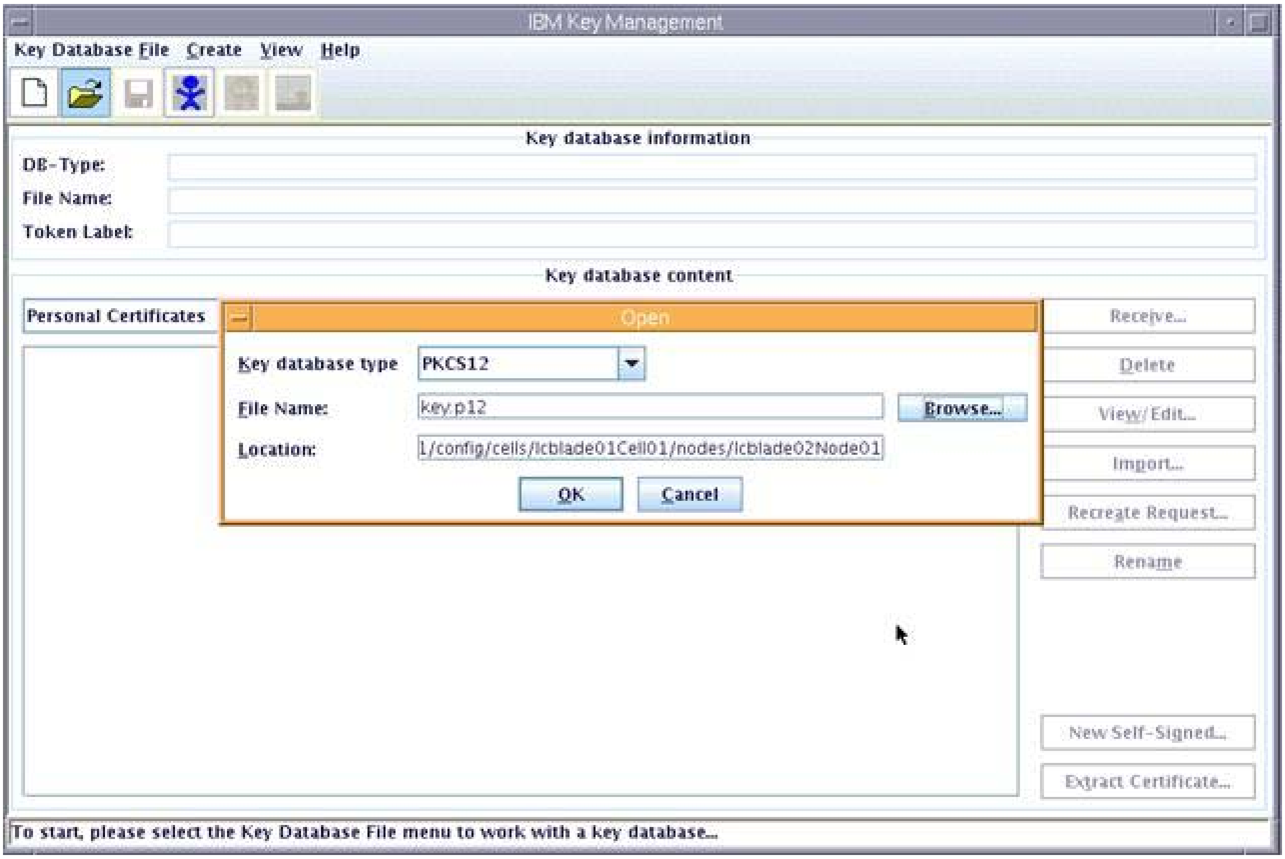
Certificate file name: lcblade01cert.arm

Location: /opt/IBM/cert

The requested action has successfully completed!

Figure 125. Extracting certificate

__ 5. Export Node1 certificate. Open `key.p12` under `/opt/IBM/Websphere/Appserver/profiles/Dmgr01/config/cells/cell_name/nodes/node1_name/`. Key database type is PKCS12. Click **OK**.



DB-Type:

File Name:

Token Label:

Key database type: PKCS12

File Name: key.p12

Location: l/config/cells/lcblade01Cell01/nodes/lcblade02Node01

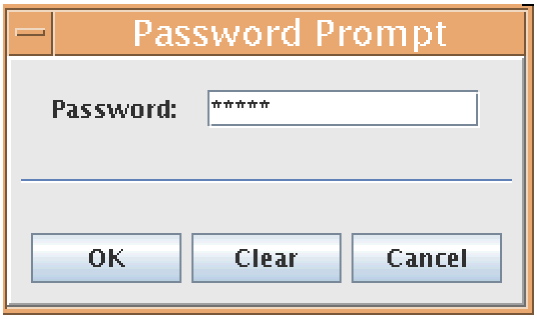
To start, please select the Key Database File menu to work with a key database...

Figure 126. Exporting Node1 certificate

__ 6. Introduce the password when prompted.

Note

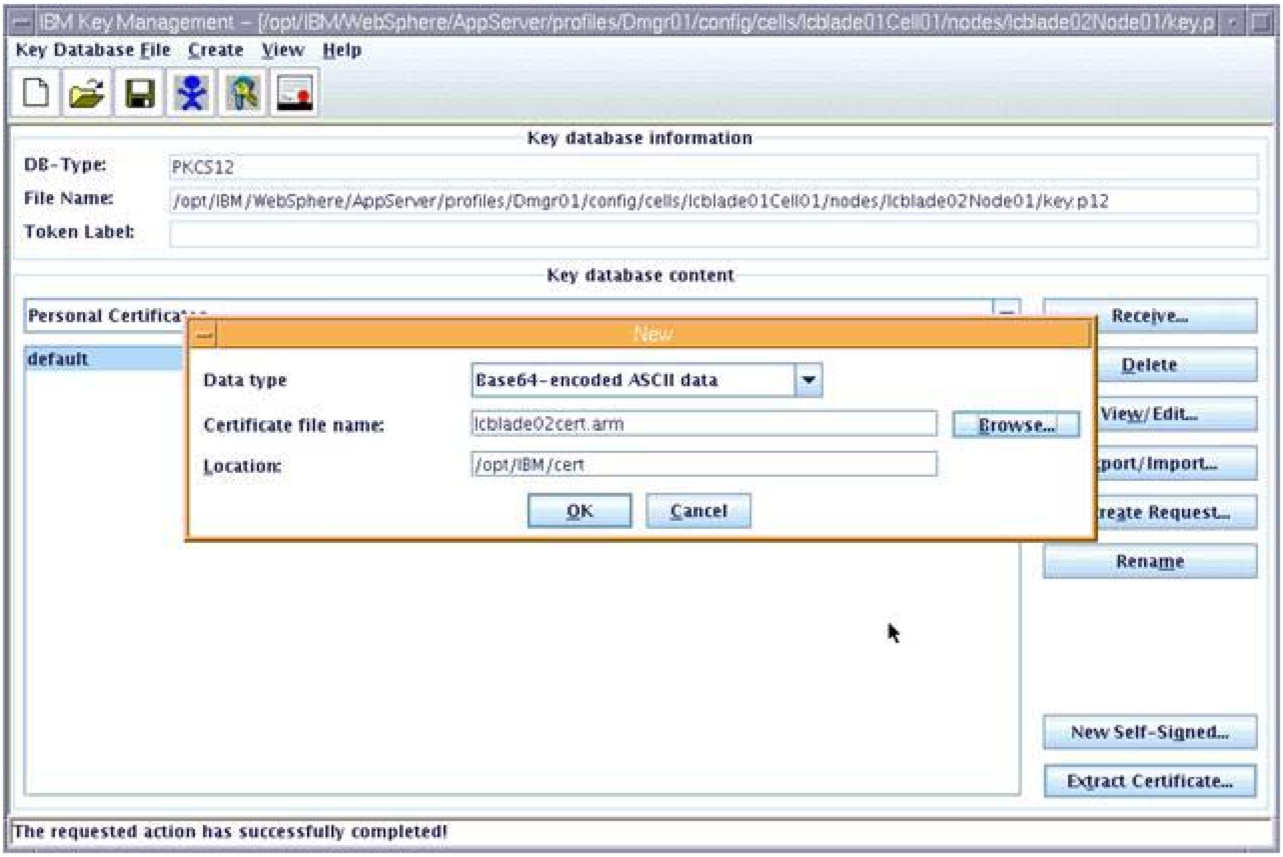
The password is WebAS.



Password: ******

Figure 127. Password Prompt

__ 7. Click **Extract Certificate.** Enter a name and location for the new certification file. Click **OK**.



IBM Key Management – [/opt/IBM/WebSphere/AppServer/profiles/Dmgr01/config/cells/lcblade01Cell01/nodes/lcblade02Node01/key.p

Key database information

DB-Type: PKCS12

File Name: /opt/IBM/WebSphere/AppServer/profiles/Dmgr01/config/cells/lcblade01Cell01/nodes/lcblade02Node01/key.p12

Token Label:

Key database content

Personal Certifica...

default

New

Data type: Base64-encoded ASCII data

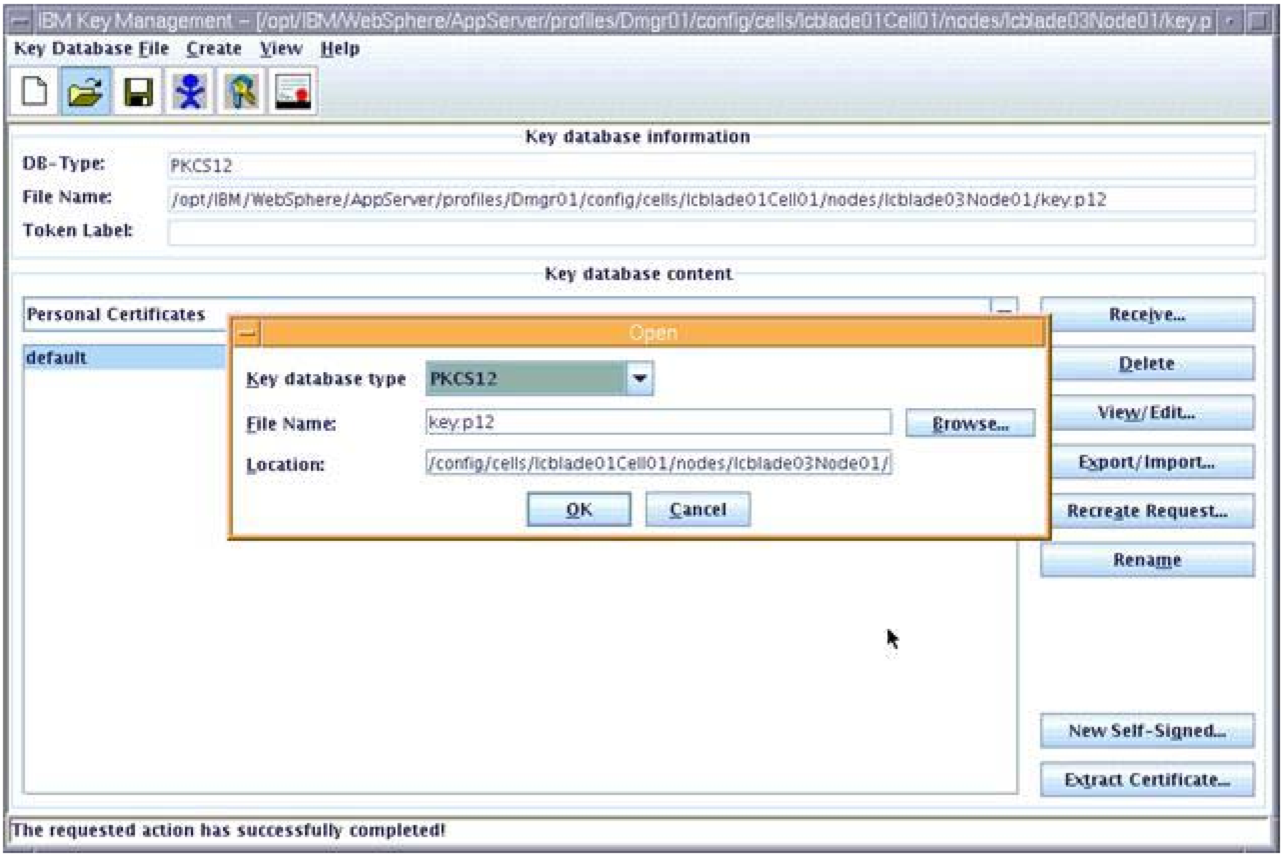
Certificate file name: lcblade02cert.arm

Location: /opt/IBM/cert

The requested action has successfully completed!

Figure 128. Extracting certificate

__ 8. Export Node2 certificate. Open `key.p12` under `/opt/IBM/Websphere/Appserver/profiles/Dmgr01/config/cells/cell_name/nodes/node2_name/`. Key database type is PKCS12.



IBM Key Management - [/opt/IBM/WebSphere/AppServer/profiles/Dmgr01/config/cells/lcblade01Cell01/nodes/lcblade03Node01/key.p

Key database information

DB-Type: PKCS12

File Name: /opt/IBM/WebSphere/AppServer/profiles/Dmgr01/config/cells/lcblade01Cell01/nodes/lcblade03Node01/key.p12

Token Label:

Key database content

Personal Certificates

default

Open

Key database type: PKCS12

File Name: key.p12

Location: /config/cells/lcblade01Cell01/nodes/lcblade03Node01/

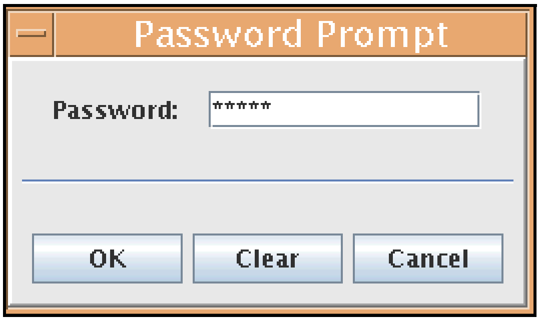
The requested action has successfully completed!

Figure 129. Exporting Node2 certificate

__ 9. Introduce the password when prompted.

Note

The password is `WebAS`.

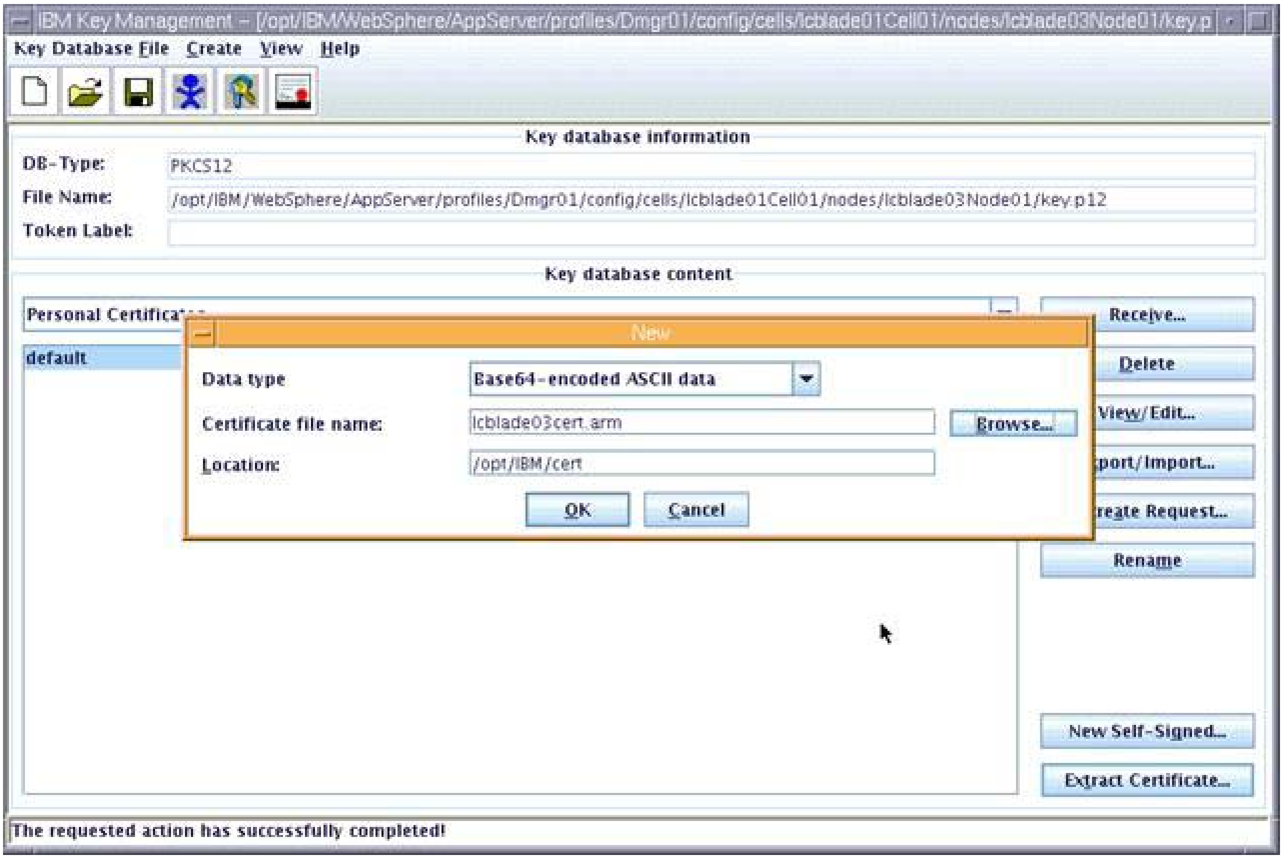


Password Prompt

Password: ******

Figure 130. Password Prompt

__ 10. Click **Extract Certificate.** Enter a name and location for the new certification file. Click **OK**.



IBM Key Management – [/opt/IBM/WebSphere/AppServer/profiles/Dmgr01/config/cells/lcblade01Cell01/nodes/lcblade03Node01/key.p

Key database information

DB-Type: PKCS12

File Name: /opt/IBM/WebSphere/AppServer/profiles/Dmgr01/config/cells/lcblade01Cell01/nodes/lcblade03Node01/key.p12

Token Label:

Key database content

Personal Certificates

default

New

Data type: Base64-encoded ASCII data

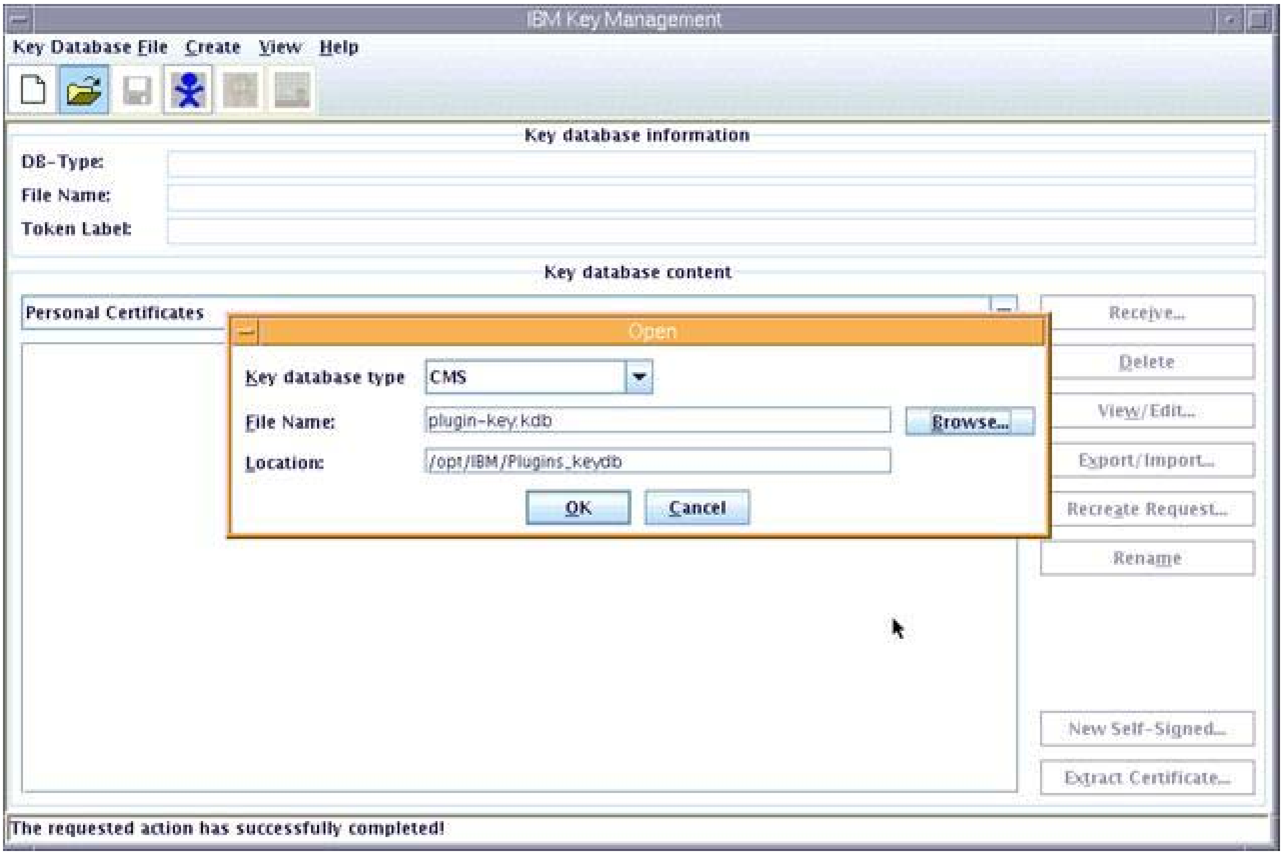
Certificate file name: lcblade03cert.arm

Location: /opt/IBM/cert

The requested action has successfully completed!

Figure 131. Extracting certificate

__ 11. Add WebSphere Application Server certificates to IBM HTTP Server Plug-in kdb. Open `plugin-key.kdb` under /opt/IBM/Plugins_keydb/. Click **OK**.



Key database type: CMS

File Name: plugin-key.kdb

Location: /opt/IBM/Plugins_keydb

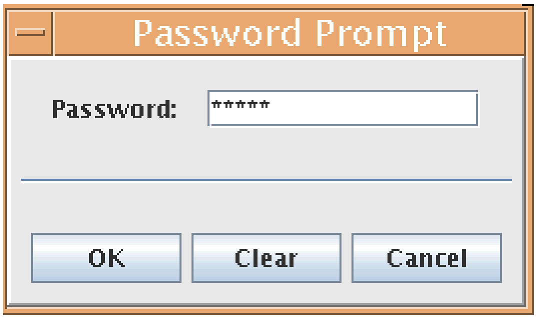
The requested action has successfully completed!

Figure 132. Adding WebSphere Application Server certificates to IBM HTTP Server Plug-in kdb

__ 12. Introduce the password when prompted.

Note

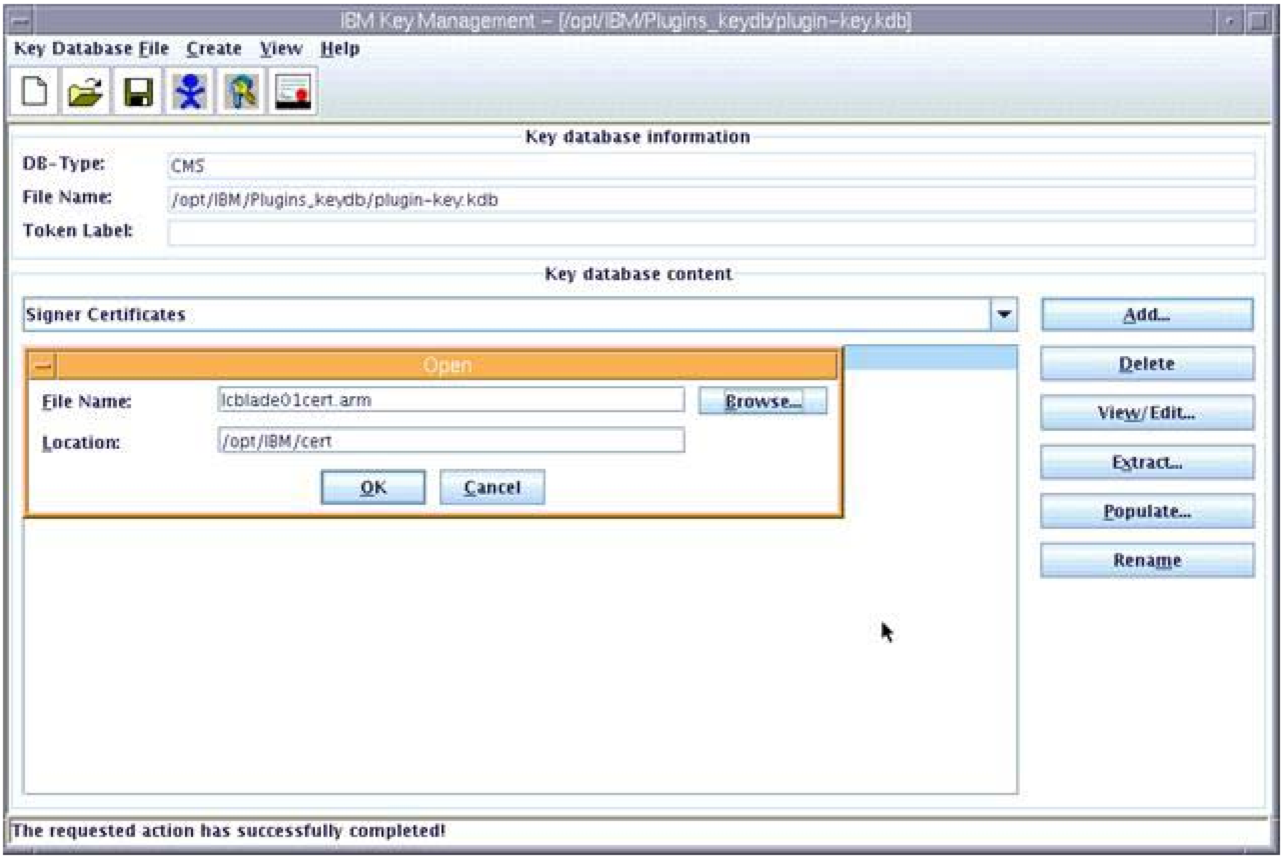
The password is `WebAS`.



Password: ******

Figure 133. Password Prompt

___ 13. Select **Signer Certificates**. Click **Add**. Open the Deployment Manager certificate. Click **OK**.



IBM Key Management – [/opt/IBM/Plugins_keydb/plugin-key.kdb]

Key database information

DB-Type: CMS

File Name: /opt/IBM/Plugins_keydb/plugin-key.kdb

Token Label:

Key database content

Signer Certificates

Open

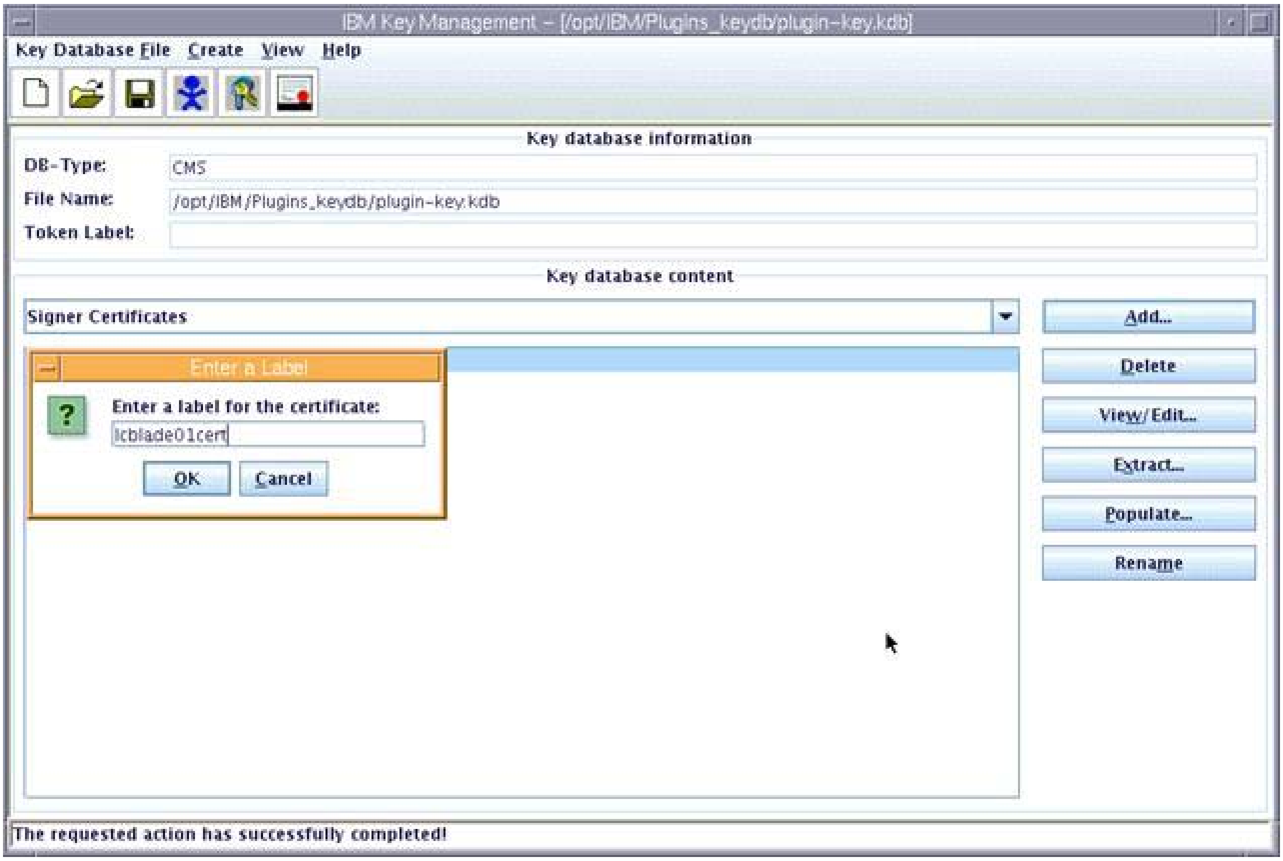
File Name: lcblade01cert.arm

Location: /opt/IBM/cert

The requested action has successfully completed!

Figure 134. Signer certificates

__ 14. Enter a label and click **OK**.



DB-Type: CMS

File Name: /opt/IBM/Plugins_keydb/plugin-key.kdb

Token Label:

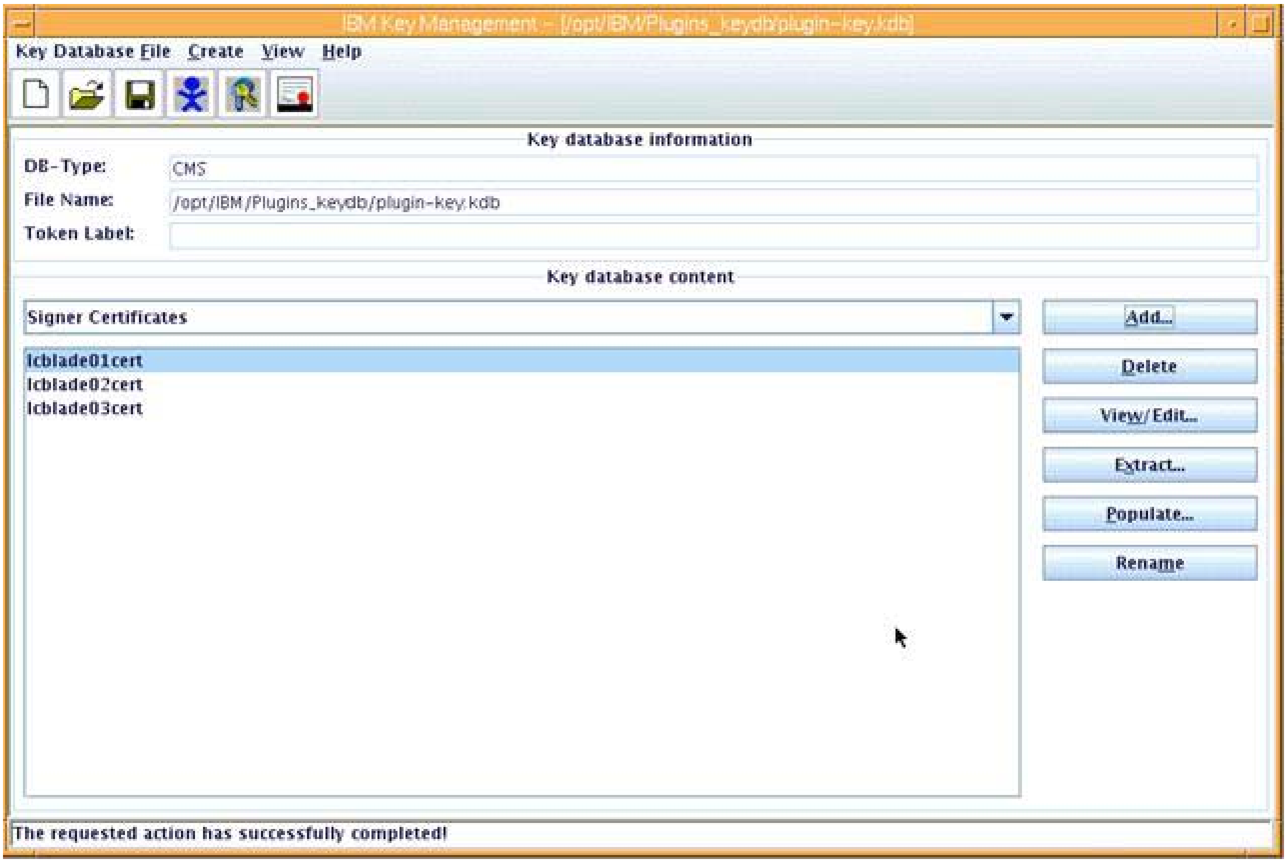
Signer Certificates

Enter a label for the certificate: lcblade01cert

The requested action has successfully completed!

Figure 135. Entering a label for the certificate

__ 15. Add two nodes certificate by the same step. Then, the Signer Certificates list is as shown in the following figure.



DB-Type: CMS

File Name: /opt/IBM/Plugins_keydb/plugin-key.kdb

Token Label:

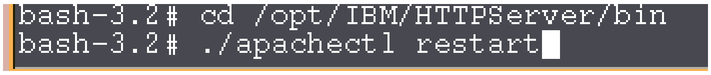
Signer Certificates

- lcblade01cert
- lcblade02cert
- lcblade03cert

The requested action has successfully completed!

Figure 136. Adding two nodes certificate

__ 16. Restart IBM HTTP Server.



```
bash-3.2# cd /opt/IBM/HTTPServer/bin
bash-3.2# ./apachectl restart
```

Figure 137. Restarting IBM HTTP Server

Updating web addresses in IBM HTTP Server

__ 1. Open LotusConnections-config.xml under /opt/IBM/WebSphere/AppServer/profiles/Dmgr01/config/cells/lcblade01Cell01/LotusConnections-config with your favorite text editor.

__ 2. Find each URL with a port number postfixed. Replace such URL with any port, for example:

```
<sloc:serviceReference acf_config_file="acf-config-nf.xml" bootstrapHost=""
bootstrapPort="" clusterName="LCCluster" enabled="true"
person_card_service_name_js_eval="generalrs.label_personcard_activitieslink"
person_card_service_url_pattern="/service/html/mainpage#dashboard%2Cmyactivities%2C
userid%3D{userid}%2Cname%3D{displayName}" serviceName="activities"
ssl_enabled="true">

   <sloc:href>

      <sloc:hrefPathPrefix>/activities</sloc:hrefPathPrefix>

      <sloc:static href="http://serverhost.ibm.com"
      ssl_href="https://serverhost.ibm.com"/>

      <sloc:interService href="https://serverhost.ibm.com"/>

    </sloc:href>

 </sloc:serviceReference>
```

__ 3. After the modification, make sure you cannot find any URL with port number for any Connections application in LotusConnections-config.xml file. The exception is for Other third-party URLs which are covered in a later section.

Creating initial server index

Configure Search variable

__ 1. Add "/opt2/shared/LCShareData/search/stellent/dcs/oiexport" to your PATH variable in .profile for the root user.

__ 2. Either add export LIBPATH=$LIBPATH:/opt2/shared/LCShareData/search/stellent/dcs/oiexport to /opt/IBM/WebSphere/AppServer/bin/setupCmdLine.sh and run ../setupCmdLine.sh before you start the nodes or add export LIBPATH=/opt2/shared/LCShareData/search/stellent/dcs/oiexport and add the line to the PATH in .profile.

Creating initial server index

Note

From Connections 4.0, administrator does not need additional actions to create initial server index. After you make sure that the search directory in shared folder is equally accessible to each server computer, and you have enough space in local folder, the search index building task starts automatically each 15 minutes. The initial index is completed on one node and is copied automatically to any other node to finish the whole initial index building task.

__ 1. To verify initial index, go to each local folder and find INDEX.READY file under /opt2/LCLocalData/search/index.

Configuring ReplyTo feature

Note

Assume that Domino mail server is installed successfully.

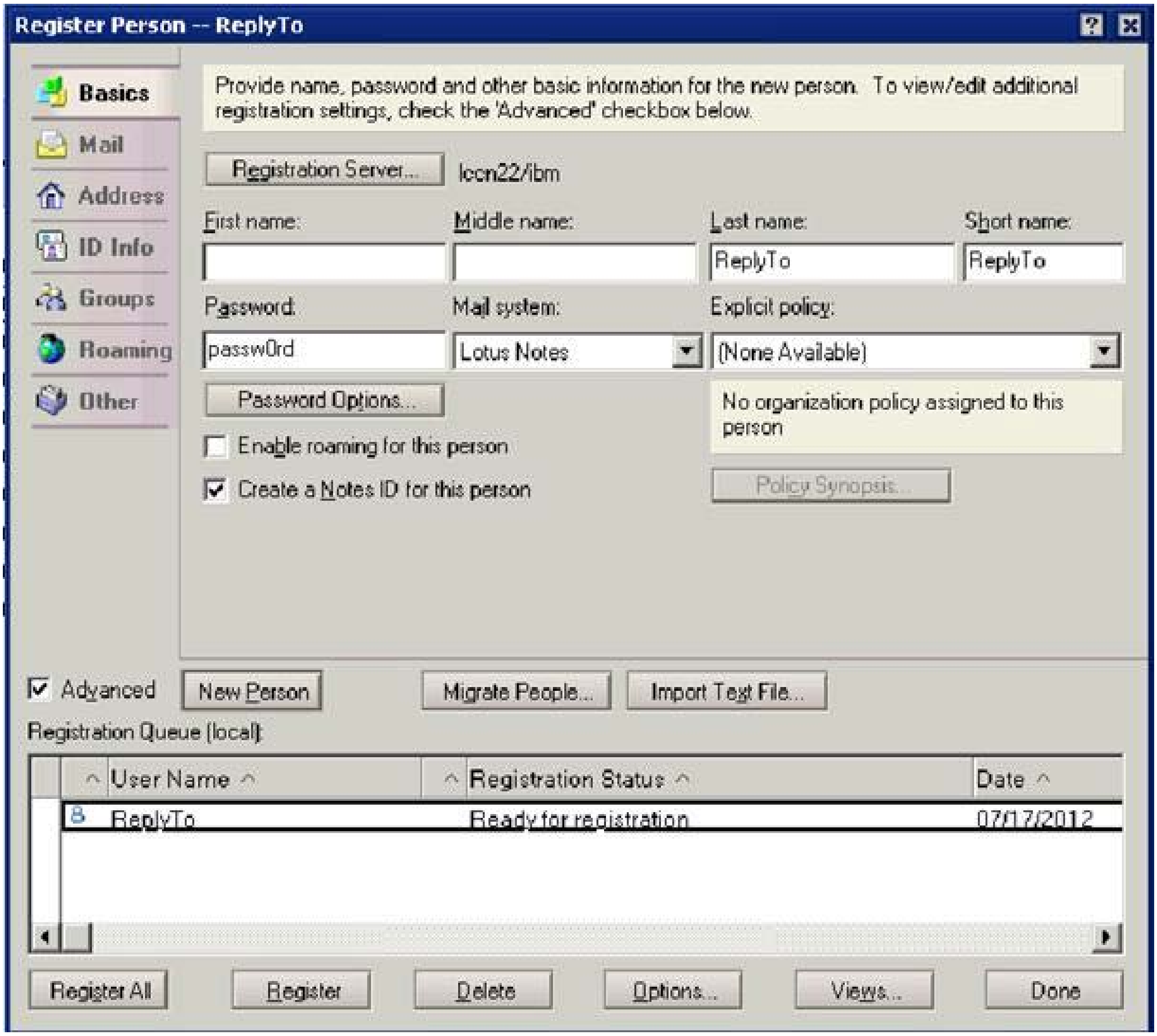
Create a ReplyTo user on Domino mail server

__ 1. Open Domino administration, connect to Domino mail server you plan to use.

__ 2. On People & Group view, click the **People** tab on the right panel.

__ 3. Click **Register**, input the certifier password for Domino server.

__ 4. Check advanced box and input information as in the following figure:



Register Person -- ReplyTo

Provide name, password and other basic information for the new person. To view/edit additional registration settings, check the 'Advanced' checkbox below.

Registration Server... lccn22/ibm

First name:
Middle name:
Last name: ReplyTo
Short name: ReplyTo

Password: passw0rd
Mail system: Lotus Notes
Explicit policy: (None Available)

No organization policy assigned to this person

☐ Enable roaming for this person

☑ Create a Notes ID for this person

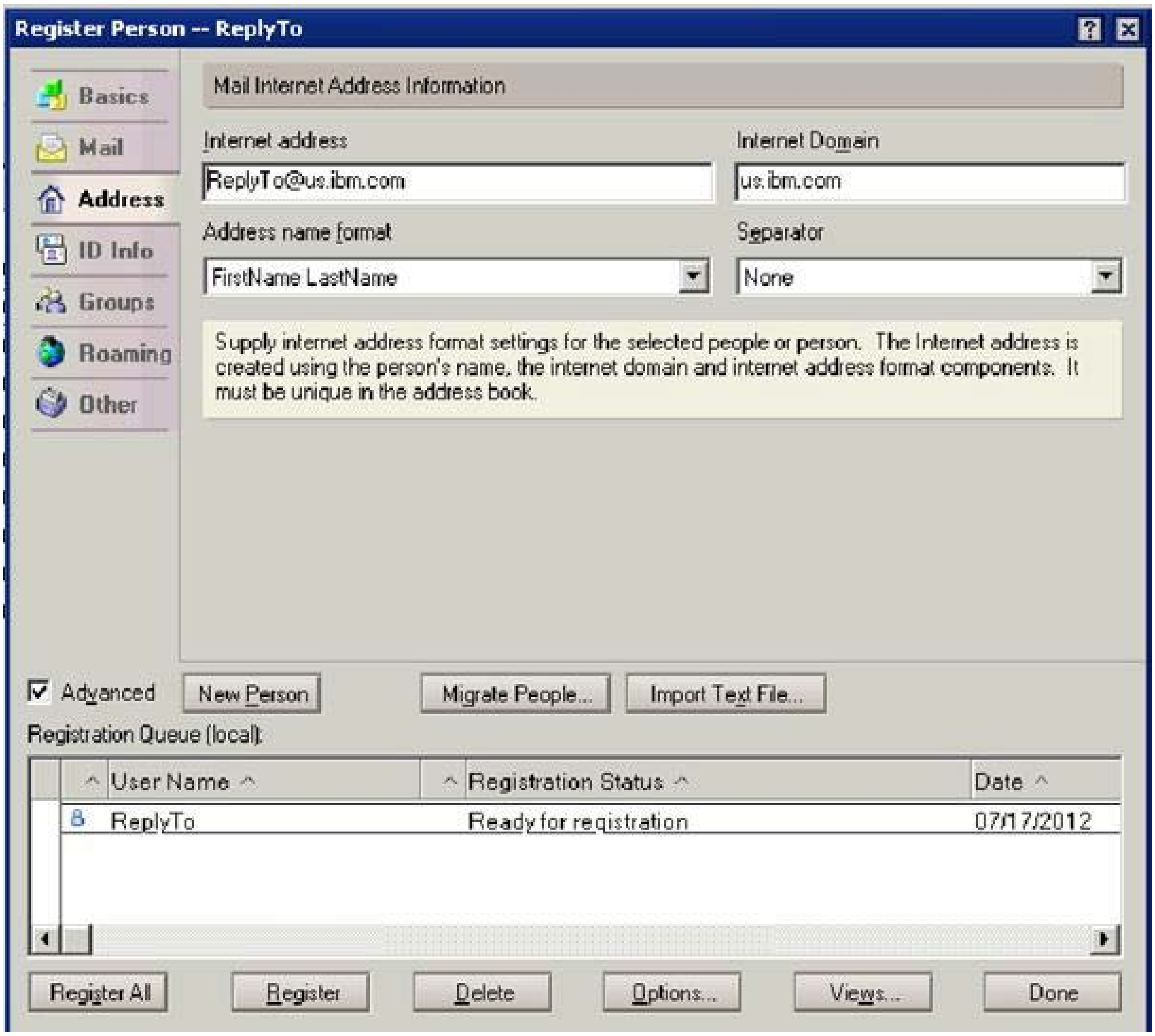
☑ Advanced

Registration Queue (local):

User Name	Registration Status	Date
ReplyTo	Ready for registration	07/17/2012

Figure 138. Register Person: ReplyTo

__ 5. The mail domain value can be set to the real domain you use.



Register Person -- ReplyTo

Mail Internet Address Information

Internet address: ReplyTo@us.ibm.com

Internet Domain: us.ibm.com

Address name format: FirstName LastName

Separator: None

Supply internet address format settings for the selected people or person. The Internet address is created using the person's name, the internet domain and internet address format components. It must be unique in the address book.

☑ Advanced

Registration Queue (local):

User Name	Registration Status	Date
ReplyTo	Ready for registration	07/17/2012

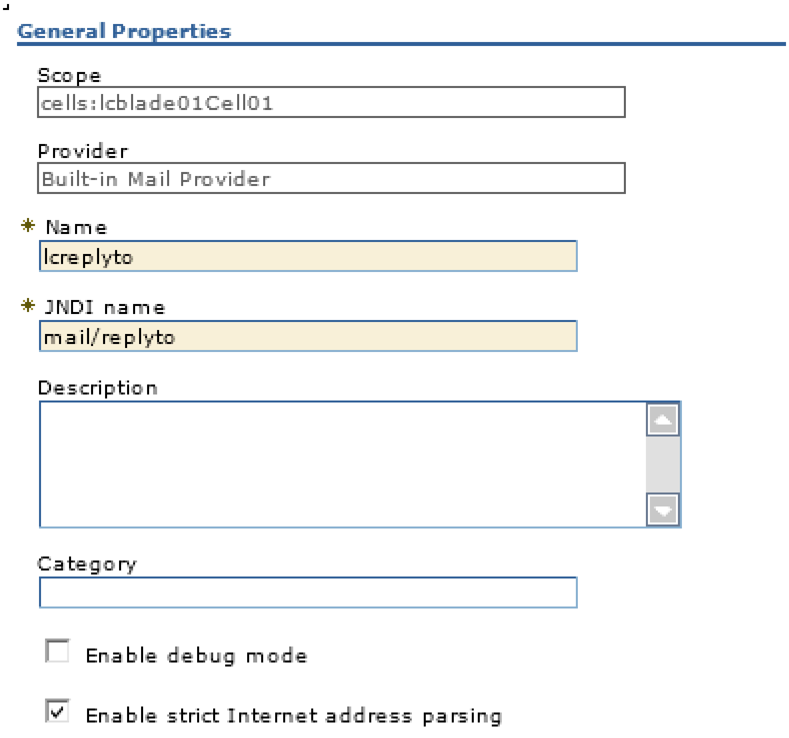
Figure 139. Register Person: ReplyTo: Mail domain value

__ 6. Click **Register** to complete the registration.

Configuring WebSphere Application Server for email notification replies

__ 1. Open WebSphere Application Server console and go to **Resources > Mail > Mail Sessions**.

If you enabled mail-in during Connections installation, you see a mail session that is named lcreplyto. If not, select the cell scope and create a mail session as in the following figure:



General Properties

Scope: cells:lcblade01Cell01

Provider: Built-in Mail Provider

* Name: lcreplyto

* JNDI name: mail/replyto

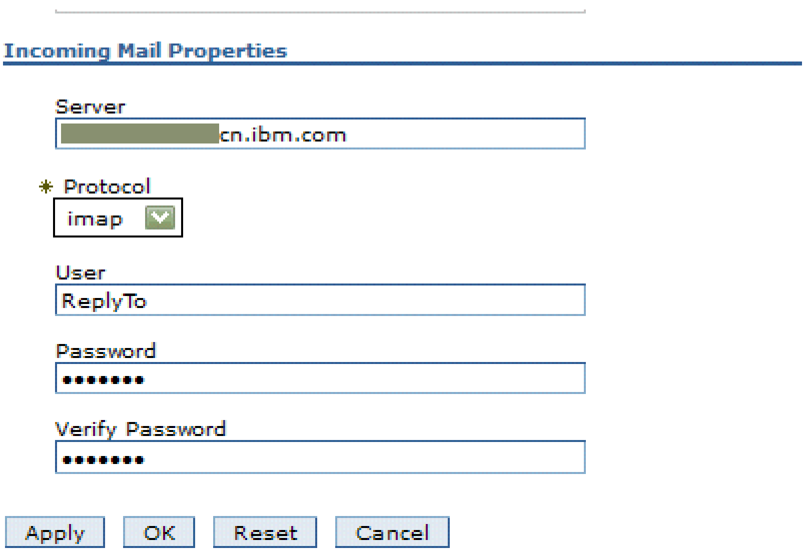
Description:

Category:

☐ Enable debug mode

☑ Enable strict Internet address parsing

Figure 140. Resources > Mail > Mail Sessions: General Properties



Incoming Mail Properties

Server: [redacted]cn.ibm.com

* Protocol: imap

User: ReplyTo

Password: ●●●●●●●

Verify Password: ●●●●●●●

Figure 141. Incoming Mail Properties

__ 2. Click **OK** and **Save**.

Configuring Domino for email notification replies

__ 1. Open Domino administration and click the **Configuration** tab.

__ 2. Expand Messaging in the navigator, and then click **Configuration**.

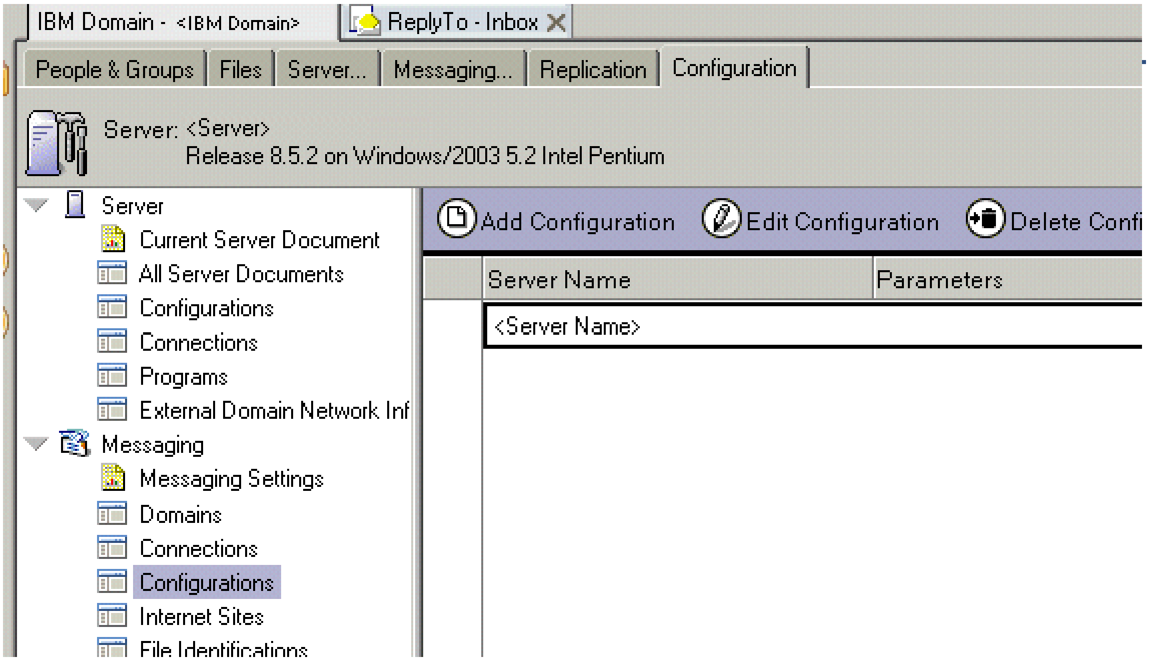


Figure 142. Domino administration: Configuration: Messaging navigator

__ 3. Select the messaging server and click **Edit Configuration**.

__ 4. Click the **Router/SMTP** tab, and then the **Restrictions** and **Controls** tab, and then the **Rules** tab.

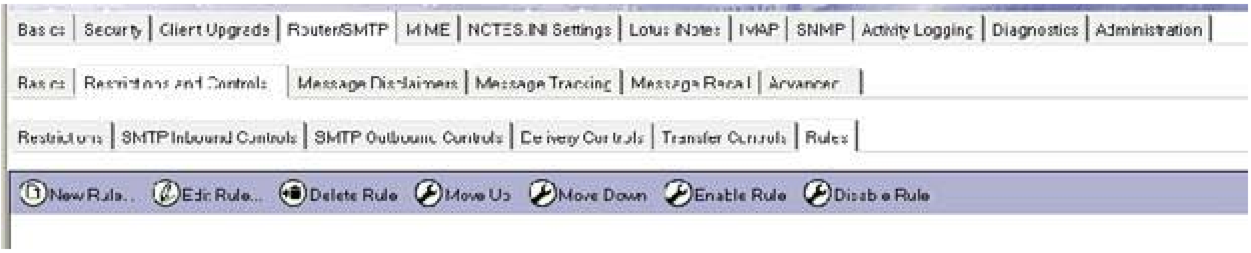
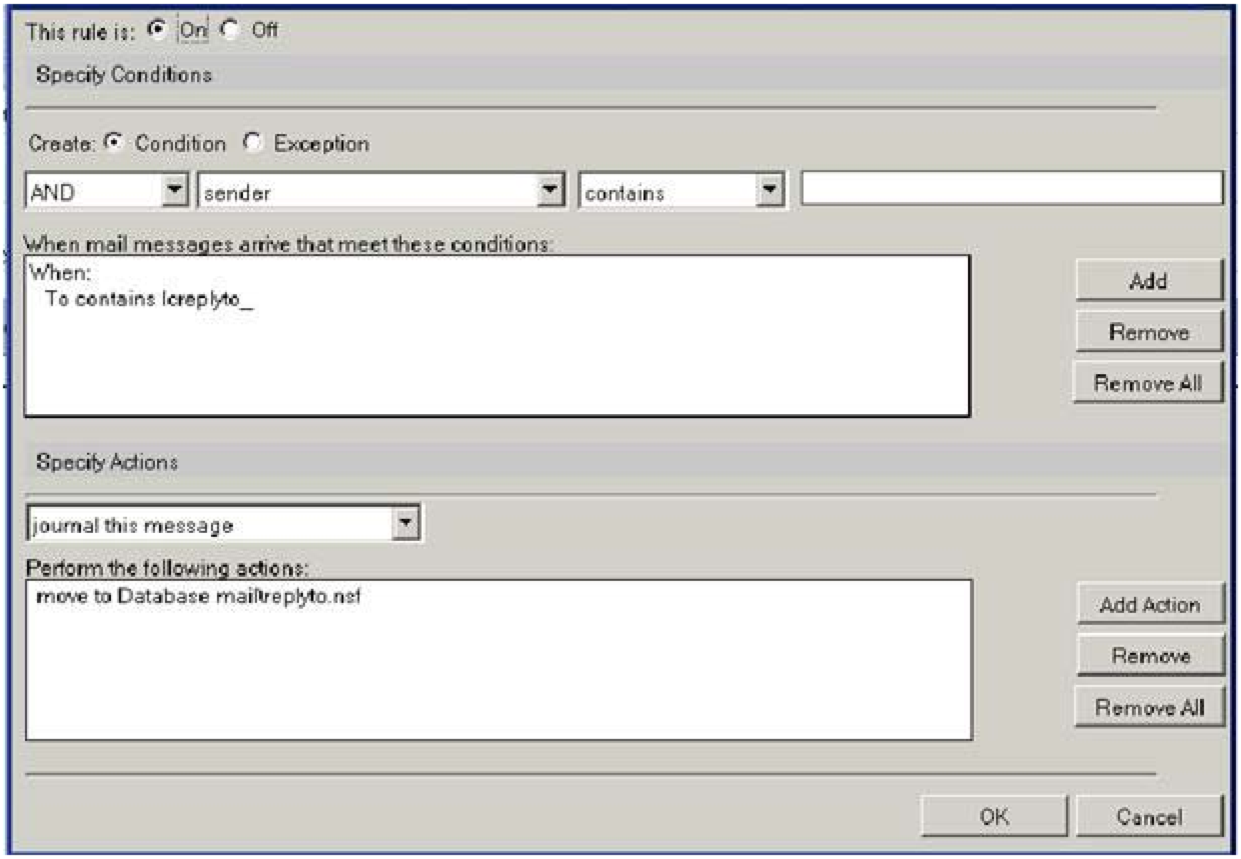


Figure 143. Editing configuration

__ 5. Click **New Rule** and create a rule that moves emails that contain `lcreplyto_` in the **To** field to the mailbox, for example:



This rule is: ● On ○ Off

Specify Conditions

Create: ● Condition ○ Exception

AND | sender | contains

When mail messages arrive that meet these conditions:

When:
To contains lcreplyto_

Specify Actions

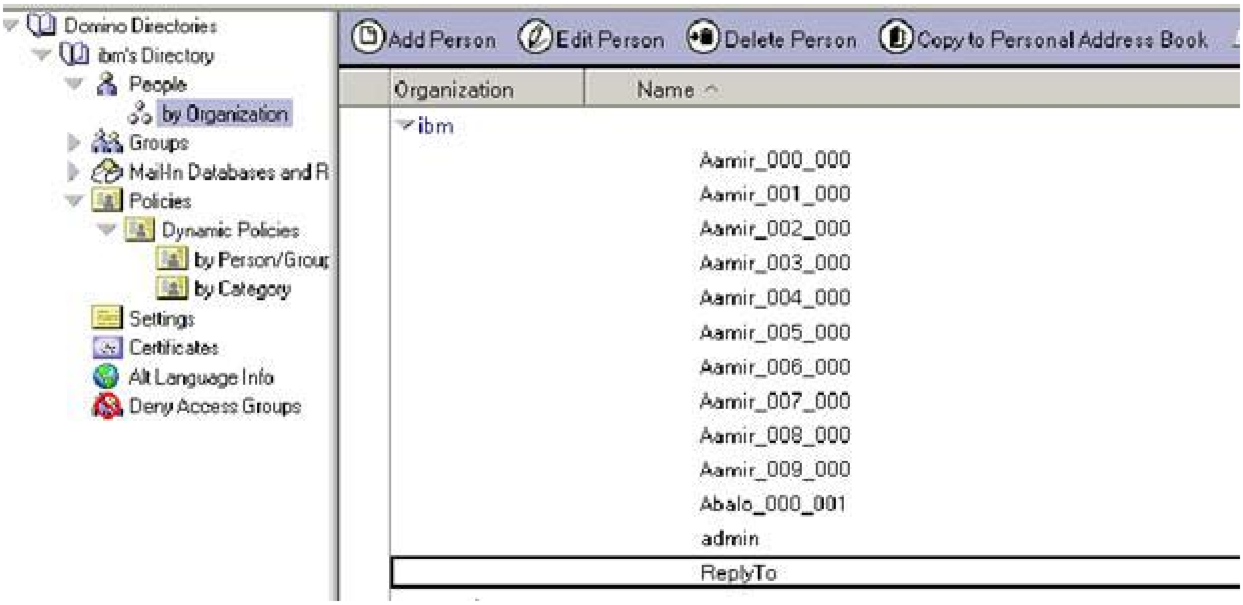
journal this message

Perform the following actions:

move to Database mailreplyto.nsf

Figure 144. Creating a rule

__ 6. Go back to **People & Groups** tab, expand **PeoplebyOrganization.** Edit the account of the user that is used to direct reply mail.



Organization	Name ^
ibm	
	Aamir_000_000
	Aamir_001_000
	Aamir_002_000
	Aamir_003_000
	Aamir_004_000
	Aamir_005_000
	Aamir_006_000
	Aamir_007_000
	Aamir_008_000
	Aamir_009_000
	Abalo_000_001
	admin
	ReplyTo

Figure 145. Editing the account of the user

__ 7. Click **Open Mail File.** Select the **View > Agents** menu item.

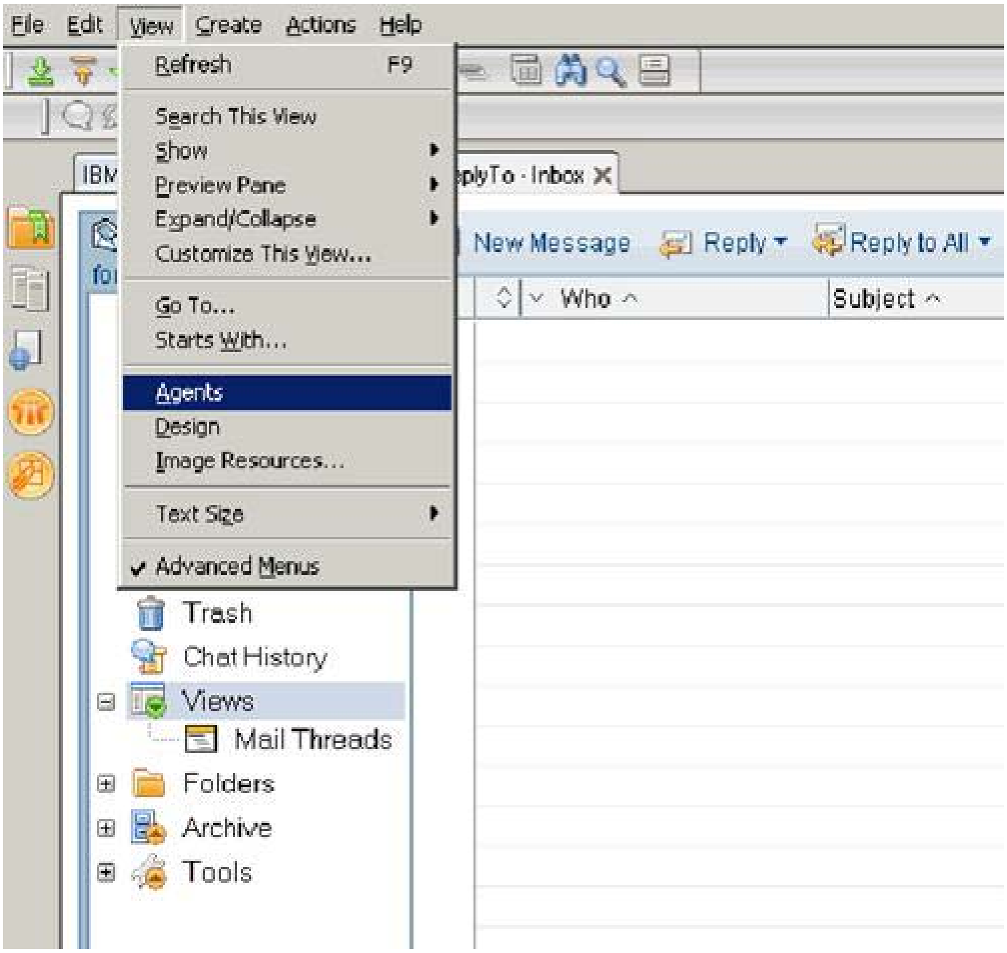
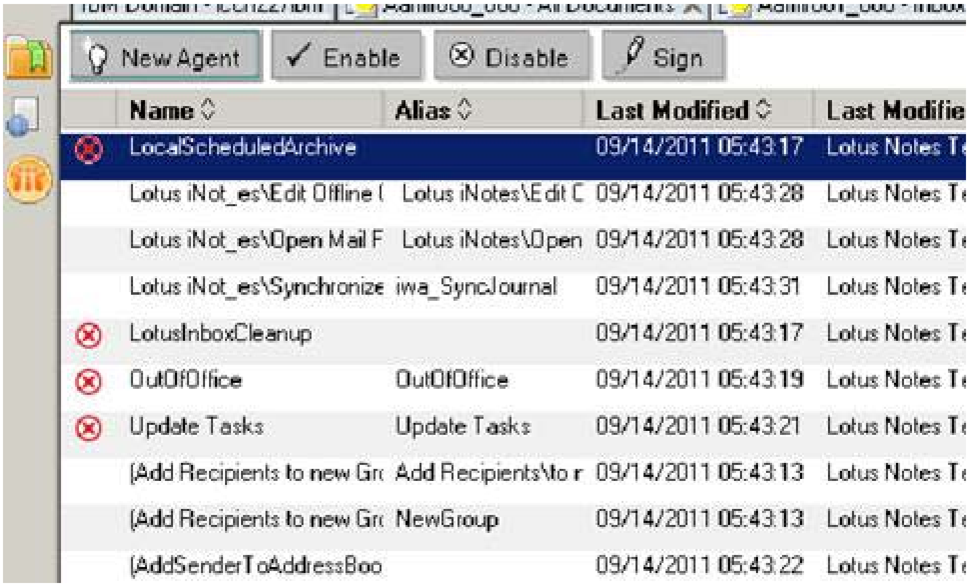


Figure 146. Selecting the View > Agents

___ 8. Click **New Agent**.

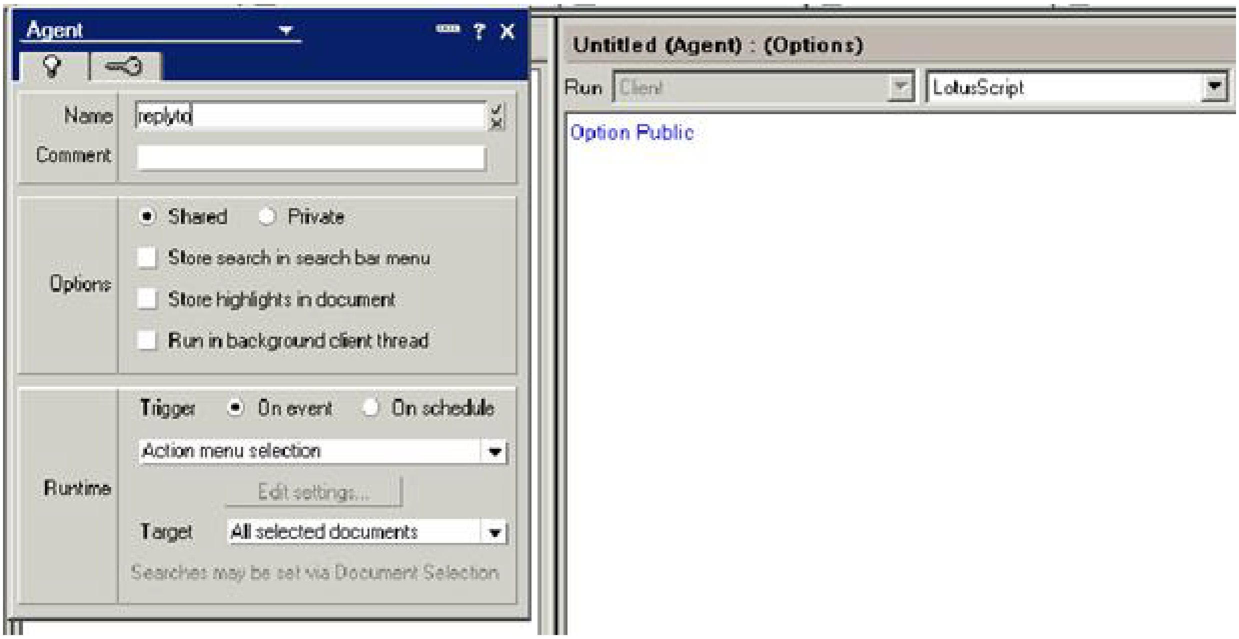


	Name	Alias	Last Modified	Last Modifie
⊗	LocalScheduledArchive		09/14/2011 05:43:17	Lotus Notes T
	Lotus iNot_es\Edit Offline (	Lotus iNotes\Edit C	09/14/2011 05:43:28	Lotus Notes T
	Lotus iNot_es\Open Mail F	Lotus iNotes\Open	09/14/2011 05:43:28	Lotus Notes T
	Lotus iNot_es\Synchronize	iwa_SyncJournal	09/14/2011 05:43:31	Lotus Notes T
⊗	LotusInboxCleanup		09/14/2011 05:43:17	Lotus Notes T
⊗	OutOfOffice	OutOfOffice	09/14/2011 05:43:19	Lotus Notes T
⊗	Update Tasks	Update Tasks	09/14/2011 05:43:21	Lotus Notes T
	(Add Recipients to new Gr	Add Recipients\to r	09/14/2011 05:43:13	Lotus Notes T
	(Add Recipients to new Gr	NewGroup	09/14/2011 05:43:13	Lotus Notes T
	(AddSenderToAddressBoo		09/14/2011 05:43:22	Lotus Notes T

Figure 147. Select the View > Agents: New Agent

___ 9. Add the following LotusScript to the agent:

```
Sub Initialize
    Dim session As New NotesSession
    Dim db As NotesDatabase
    Dim view As NotesView
    Dim doc As NotesDocument

    Set db = session.CurrentDatabase
    Set view = db.getView("$Sent")

    Set doc = view.GetFirstDocument()
    While Not(doc Is Nothing)
        Call doc.PutInFolder("$inbox")
        Set doc = view.GetNextDocument(doc)
    Wend
End Sub
```



Name: replyto

Comment:

Options: ● Shared ○ Private

□ Store search in search bar menu

□ Store highlights in document

□ Run in background client thread

Runtime: Trigger ● On event ○ On schedule

Action menu selection

Edit settings...

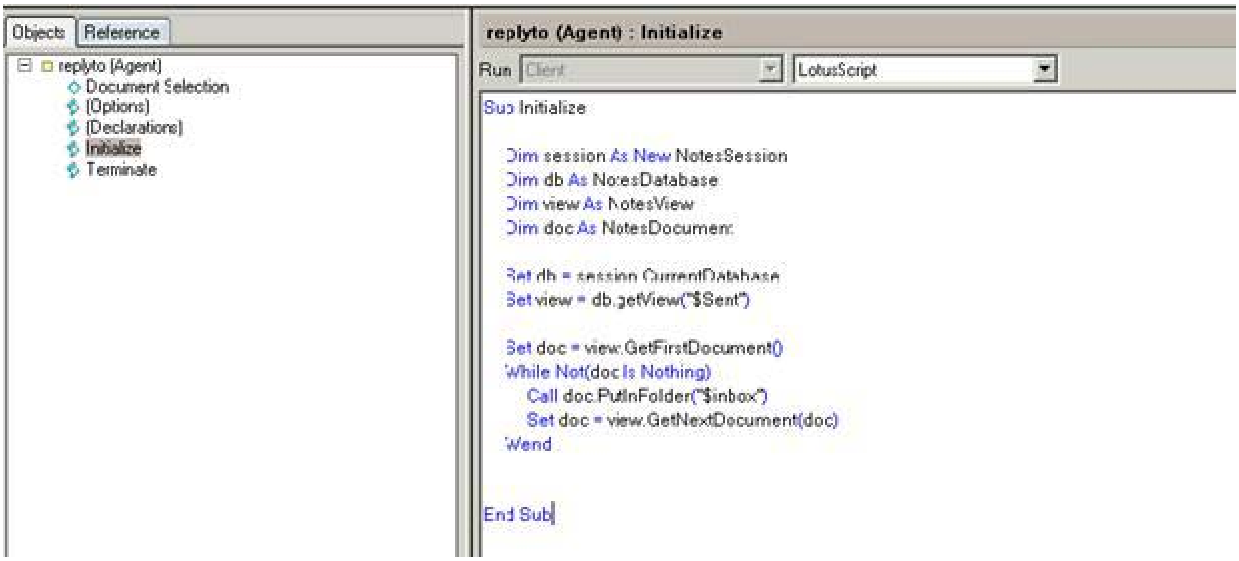
Target: All selected documents

Searches may be set via Document Selection

Run: Client | LotusScript

```
Option Public
```

Figure 148. Adding the LotusScript

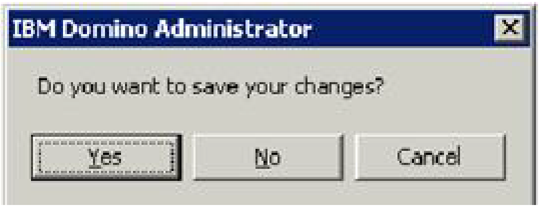


Run: Client | LotusScript

```
Sub Initialize

  Dim session As New NotesSession
  Dim db As NotesDatabase
  Dim view As NotesView
  Dim doc As NotesDocument

  Set db = session.CurrentDatabase
  Set view = db.getView("$Sent")

  Set doc = view.GetFirstDocument()
  While Not(doc Is Nothing)
     Call doc.PutInFolder("$inbox")
     Set doc = view.GetNextDocument(doc)
  Wend


End Sub
```

Figure 149. Ending Subinitialize

__ 10. Click **Yes** to save your changes.



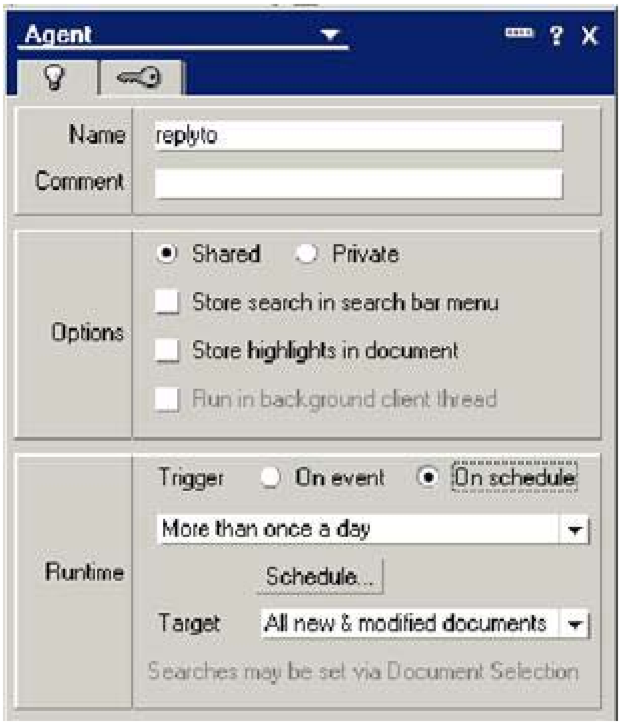
IBM Domino Administrator

Do you want to save your changes?

Figure 150. Saving changes to the agent

__ 11. Open the agent again to set properties:

- __ a. In the Options section, select **Shared**.
- __ b. In the Runtime section, select **On schedule**, and then select **More than once a day**.
- __ c. In the Target field, select **All new & modified documents**.
- __ d. Set a schedule, for example have it run every 5 minutes, all day.



Agent

Name: replyto

Comment:

Options: ● Shared ○ Private

□ Store search in search bar menu

□ Store highlights in document

□ Run in background client thread

Runtime: Trigger ○ On event ● On schedule

More than once a day

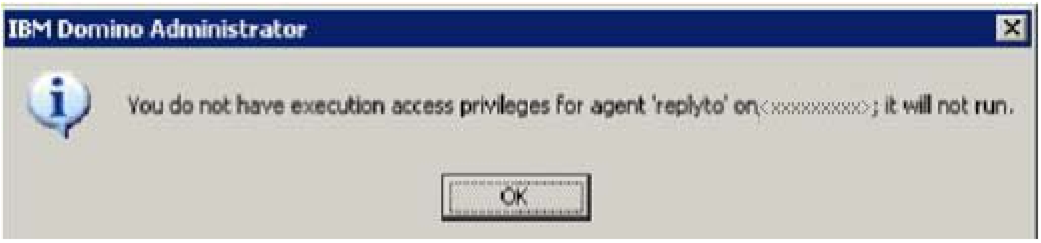
Schedule...

Target: All new & modified documents

Searches may be set via Document Selection

Figure 151. Setting the properties of the agent

__ 12. If you encounter the warning below, you must ensure that you have adequate permissions to run the agent:



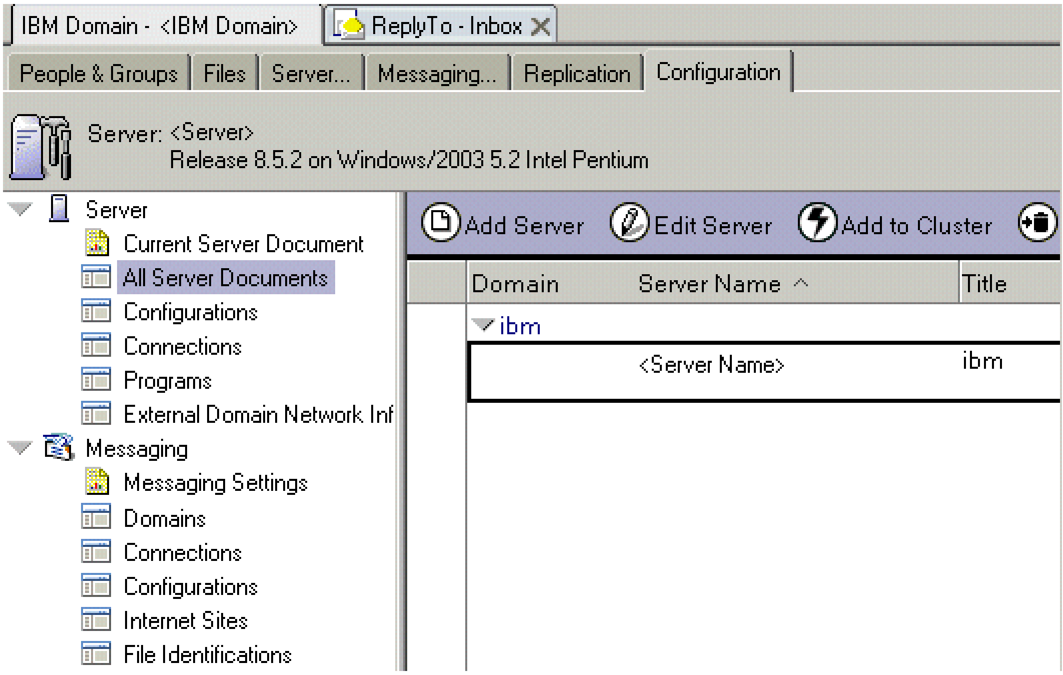
IBM Domino Administrator

You do not have execution access privileges for agent 'replyto' on<xxxxxxxxxx>; it will not run.

OK

Figure 152. Warning message

__ 13. To fix it, open the server configuration from **Configuration > Server > All server documents** and edit it.

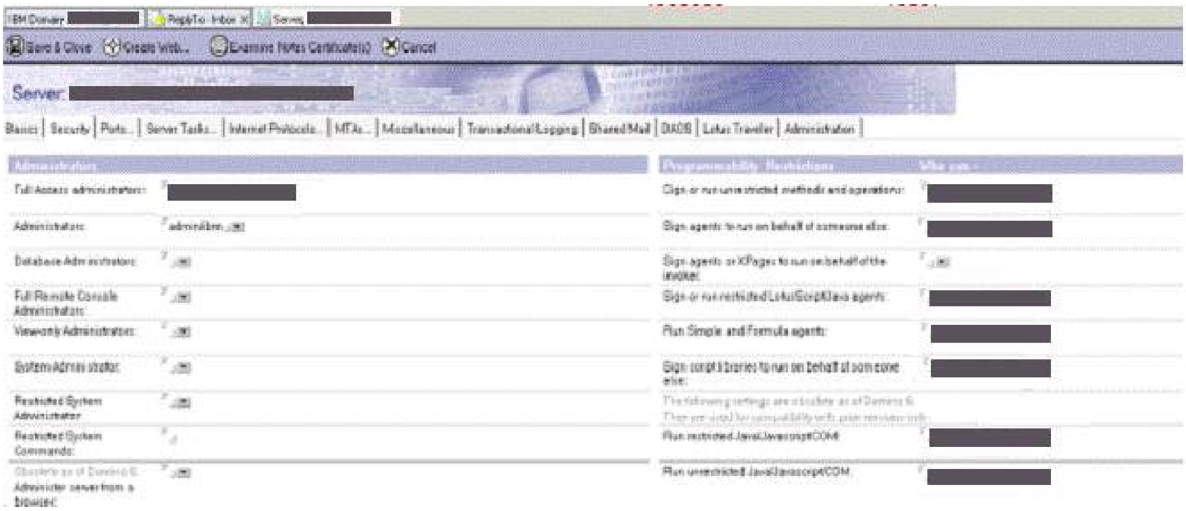


Server: <Server>
Release 8.5.2 on Windows/2003 5.2 Intel Pentium

Domain	Server Name ^	Title
ibm		
	<Server Name>	ibm

Figure 153. Fixing the privileges and permissiones.

__ 14. On security tab, add administrator authorization for administration and mailserver/ibm as in the following figure:



Server: [redacted]

Full Access administrators:	[redacted]
Administrators:	admin/ibm
Database Administrators:	
Full Remote Console Administrators:	
View-only Administrators:	
System Administrator:	
Restricted System Administrator:	
Restricted System Commands:	
Obsolete as of Domino 6: Administer server from a browser:	

Sign or run unrestricted methods and operations:	[redacted]
Sign agents to run on behalf of someone else:	[redacted]
Sign agents or XPages to run on behalf of the invoker:	
Sign or run restricted LotusScript/Java agents:	[redacted]
Run Simple and Formula agents:	[redacted]
Sign script libraries to run on behalf of someone else:	[redacted]
The following settings are obsolete as of Domino 6. They are used for compatibility with older releases only.	
Run restricted Java/Javascript/COM:	[redacted]
Run unrestricted Java/Javascript/COM:	[redacted]

Figure 154. Adding administrator authorization for administration and mailserver/ibm

__ 15. **Save** and **Close**.

Enabling notification replies

__ 1. Open news-config.xml under /opt/IBM/WebSphere/AppServer/profiles/profile_name/config/cells/cell_name/LotusConnections-config/ with you favorite text editor.

__ 2. Set mail-in section as follows:

```
<mailin enabled="true">

<replyto enabled="true">
 <!-- A special ReplyTo address is added to notifications where
 the user can reply to the notification to respond/comment.
 The domain may be a dedicated domain for connections bound
 mails. Or it could be existing domain, in which case a prefix
 of suffix should be provided also. -->
 <replytoAddressFormat>
 <domain>us.ibm.com</domain>
 <!-- A prefix OR suffix (not both) may also be provided.
 This is necessary if an existing domain (with other
 email addresses) is being used.
 There is a 28 character limit for the affix. -->
 <!--
 <affix type="suffix">_lcreplyto</affix>
 <affix type="prefix">lcreplyto_</affix>
 -->
 <affix type="prefix">lcreplyto_</affix>
 </replytoAddressFormat>
 </replyto>
 </mailin>
```

__ 3. Save it.

__ 4. Sync to nodes and restart servers.

Configuring a reverse caching proxy

Note

Assume that WebSphere edge proxy is installed successfully.

__ 1. Open the `ibmproxy.conf` configuration file on Proxy server from `C:\Program Files\IBM\edge\cp\etc\en_US\` in a text editor. Make the following edits to the file:

__ a. In the SendRevProxyName Directive section, add or enable the following rule:

```
SendRevProxyName yes
```

__ b. In the PureProxy Directive section, add or enable the following rule:

```
PureProxy off
```

__ c. In the SSL Directives section, add or enable the following rules:

```
SSLEnable On

SSLCaching On
```

__ d. In the Keyring Directive section, add or enable the following rules:

```
KeyRing C:\ProxyKey\proxykey.kdb

KeyRingStash C:\ProxyKey\proxykey.sth
```

__ e. In the URL Rewriting rules section, add the following reverse pass rules:

```
ReversePass http://httpserver/* http://proxyserver/*

ReversePass https://httpserver/* https://proxyserver/*
```

__ f. Also, in the Mapping Rules section, add the following proxy rules:

```
Proxy /* http://<httpserver>/* :80

Proxy /* https://<httpserver>/* :443
```

__ g. Set the CacheTimeMargin rule to zero seconds.

```
CacheTimeMargin 0 seconds
```

__ h. Prevent the validation of a cache object from sending multiple requests for the same resource to the back-end server by setting the KeepExpired rule to on.

```
KeepExpired On
```

__ i. In the Method Directives section, add the following methods:

```
Enable CONNECT

Enable PUT

Enable DELETE
```

__ j. Add the following rule to the CacheQueries Directives section:

```
CacheQueries PUBLIC
```

__ k. Configure the proxy to allow large file uploads by editing and uncommenting the LimitRequestBody directive:

```
LimitRequestBody 10 M
```

__ l. Save and close the `ibmproxy.conf` file.

__ 2. Update the dynamicHosts attribute in the `LotusConnections-config.xml` file on Deployment Manager server `/opt/IBM/WebSphere/AppServer/profiles/profile_name/config/cells/cell_name/LotusConnections-config.xml`.

```
<dynamicHosts enabled="true">
   <host href="http://proxy.example.com"
    ssl_href="https://proxy.example.com"/>
</dynamicHosts>
```

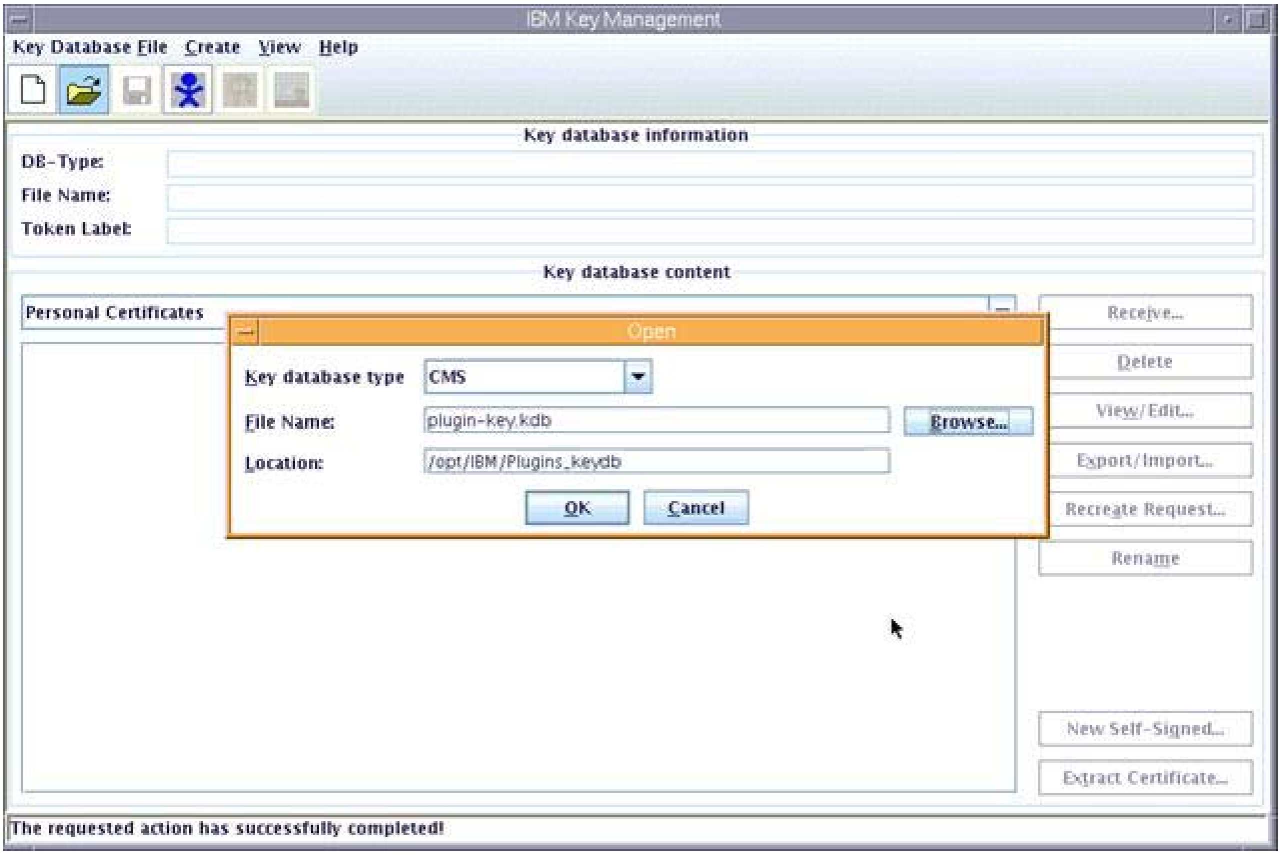
__ 3. Using iKeyman, extract certificates from IBM Connections and add them to the proxy server key database.

__ a. Start iKeyman on the IBM HTTP Server computer:

```
/opt/IBM/HTTPServer/bin
bash-3.2# ./ikeyman
```

Figure 155. Starting iKeyman

__ b. Open `plugin-key.kdb` under `/opt/IBM/Plugins_keydb/`.



Key database type: CMS

File Name: plugin-key.kdb

Location: /opt/IBM/Plugins_keydb

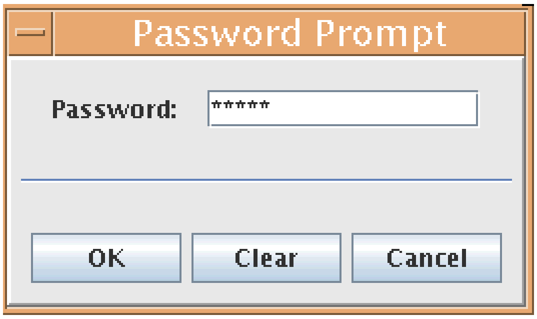
The requested action has successfully completed!

Figure 156. IBM Key Management

__ 4. Introduce the password when prompted.

Note

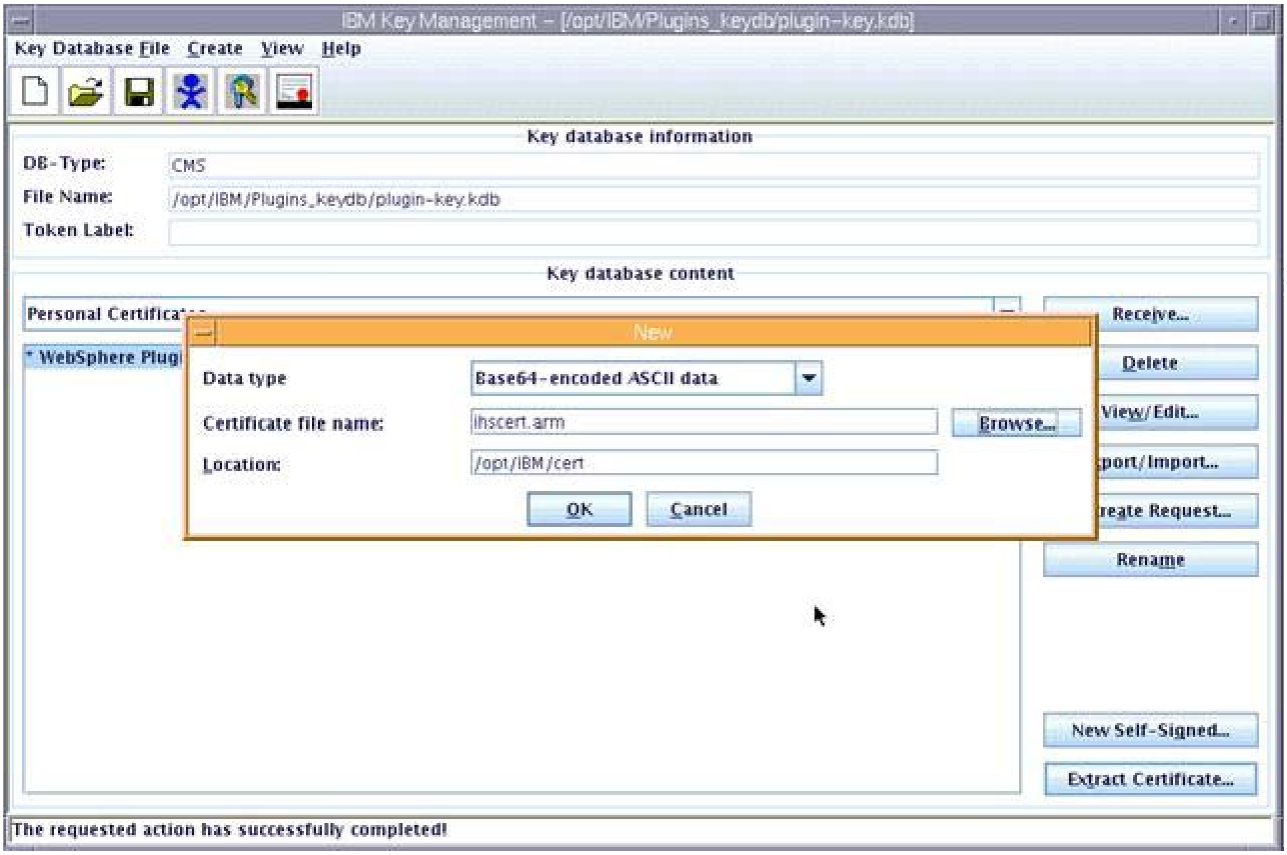
The password is `WebAS`.



Password: ******

Figure 157. Password Prompt

__ 5. Click **Extract Certificate.** Enter a name and location for the new certification file. Click **OK**.



DB-Type: CMS

File Name: /opt/IBM/Plugins_keydb/plugin-key.kdb

Token Label:

Data type: Base64-encoded ASCII data

Certificate file name: ihscert.arm

Location: /opt/IBM/cert

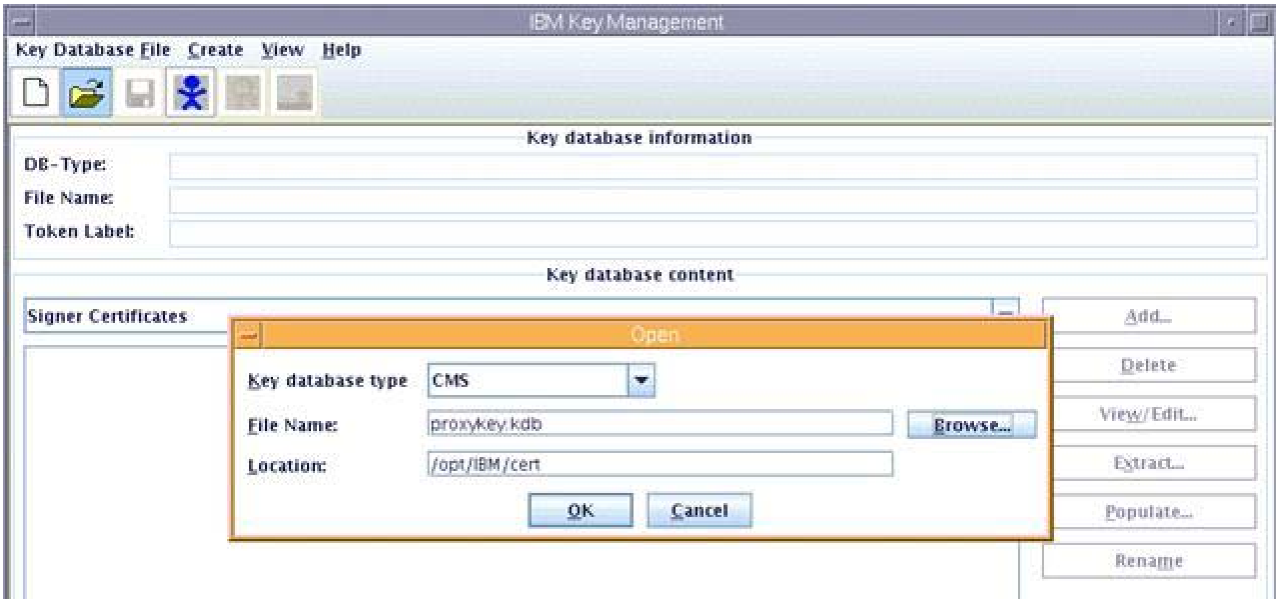
The requested action has successfully completed!

Figure 158. Extracting certificate

__ 6. Add the certificate `ihscert.arm` that you extracted from IBM Connections.

__ 7. Copy the Proxy kdb file from Proxy computer `C:\ProxyKey\proxykey.kdb` to IBM HTTP Server server.

__ 8. Open the Proxy kdb file `proxykey.kdb` by using the iKeyman.



DB-Type:
File Name:
Token Label:

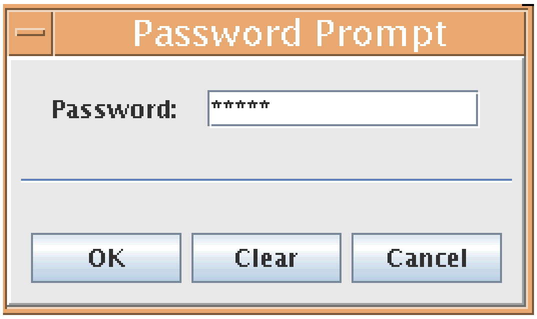
Key database type: CMS
File Name: proxykey.kdb
Location: /opt/IBM/cert

Figure 159. Opening kdb file with IBM Key Management

__ 9. Introduce the password when prompted.

Note

The password is `WebAS`.



Password: ******

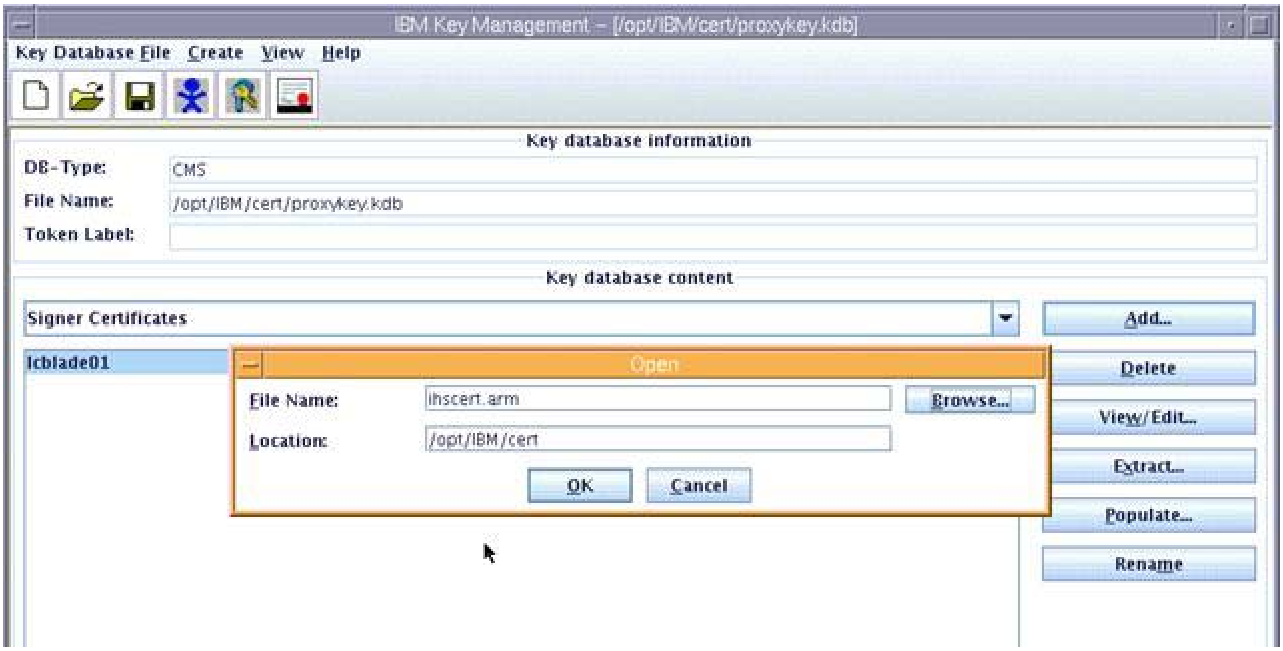
Figure 160. Password Prompt

__ 10. Select **Signer Certificates**.

__ 11. Click **Add**.

__ 12. Open the IBM HTTP Server certificate.

___ 13. Click **OK**.



Key database information

DB-Type: CMS

File Name: /opt/IBM/cert/proxykey.kdb

Token Label:

Key database content

Signer Certificates

lcblade01

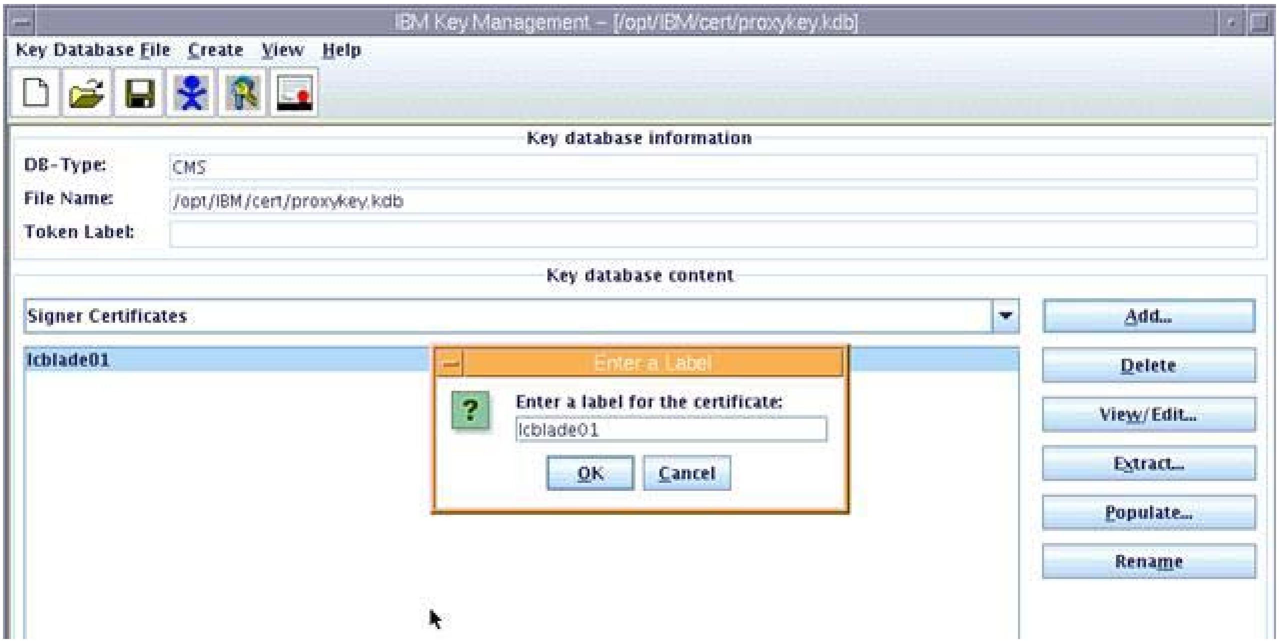
Open

File Name: ihscert.arm

Location: /opt/IBM/cert

Figure 161. Opening the certificate with the IBM Key Management

___ 14. Enter a label.



Key database information

DB-Type: CMS

File Name: /opt/IBM/cert/proxykey.kdb

Token Label:

Key database content

Signer Certificates

lcblade01

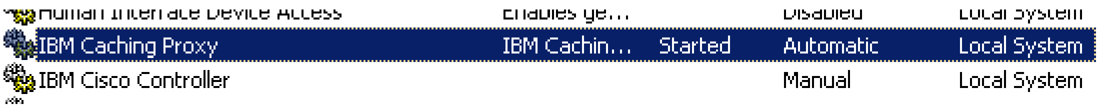
Enter a Label

Enter a label for the certificate: lcblade01

Figure 162. Entering a label for the certificate

___ 15. Copy the Proxy kdb file from IBM HTTP Server server back to the Proxy computer `C:\ProxyKey\proxykey.kdb`.

Restart the Proxy Edge server in Windows service



Human Interface Device Access	Enables ge...		Disabled	Local System
IBM Caching Proxy	IBM Cachin...	Started	Automatic	Local System
IBM Cisco Controller			Manual	Local System

Figure 163. Restarting the Proxy Edge server

After finishing all post installation steps, you will be able to use Connections 4.0 freely with HTTPS enabled.

IBM®