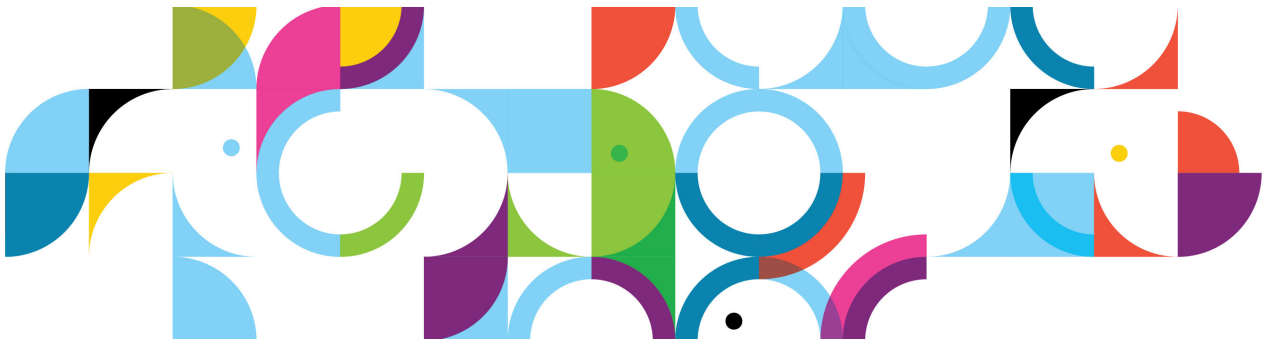




*IBM Connections 4.5
Deployment Scenarios*

Deployment Scenarios

ERC 1.0



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How to install Connections V4.5 on Windows

About the author



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2. Media requirements
3. Environment preparation
4. Middleware installation and configuration steps
5. Database server and Tivoli Directory Integrator
6. Installing IBM Connections 4.5
7. Post-installation configuration
8. Extra suggested configuration steps

Environment description

The test environment that is described in this article is a 2-Node Medium Cluster running on Windows Server 2008 R2 Enterprise 64-bit edition that uses Microsoft SQL Server 2008 R2 database back end and Microsoft Active Directory 2008 LDAP repository.

The Windows Domain is .LITBG02.SWG.USMA.IBM.COM.

Host name	Function	RAM	Disk space
dmgrHTTPsrv	WebSphere DMGR+HTTP	8 GB 2 CPU	60 GB
wasNode1srv	WebSphere Application Server Node1	8 GB 2 CPU	60 GB
wasNode2srv	WebSphere Application Server Node2	8 GB 2 CPU	60 GB
sqlTDIsrv	SQLServer + Tivoli Directory Integrator	8 GB 2 CPU	60 GB

Host name	Function	Branch	# Users
LDAPsrv	LDAP repository	OU=SharedLDAP,OU=Lotus,OU=Software Group,DC=litbg02,DC=swg,DC=usma,DC=ibm,DC=com	300k

Media requirements

Download the following media to begin your deployment:

- IBM Installation Manager 1.5.3
- WebSphere Network Deployment 8.0.0.5 Media
- WebSphere Supplements 8.0.0.5 Media
- IBM Tivoli Directory Integrator 7.1 + FixPack 5
- IBM Connections 4.5

Environment preparation

On Windows, for the computer to have the HTTP server and plug-ins, you must download and install the Microsoft Visual C++ 2008 Redistribution Package. In this case, it is installed to the DMGR computer.

1. Set up an NFS4 Shared Area for the Deployment Manager, Node1, and Node2 with read and write access. For this configuration, it was done on the DMGR, share named ConnectionsShare.

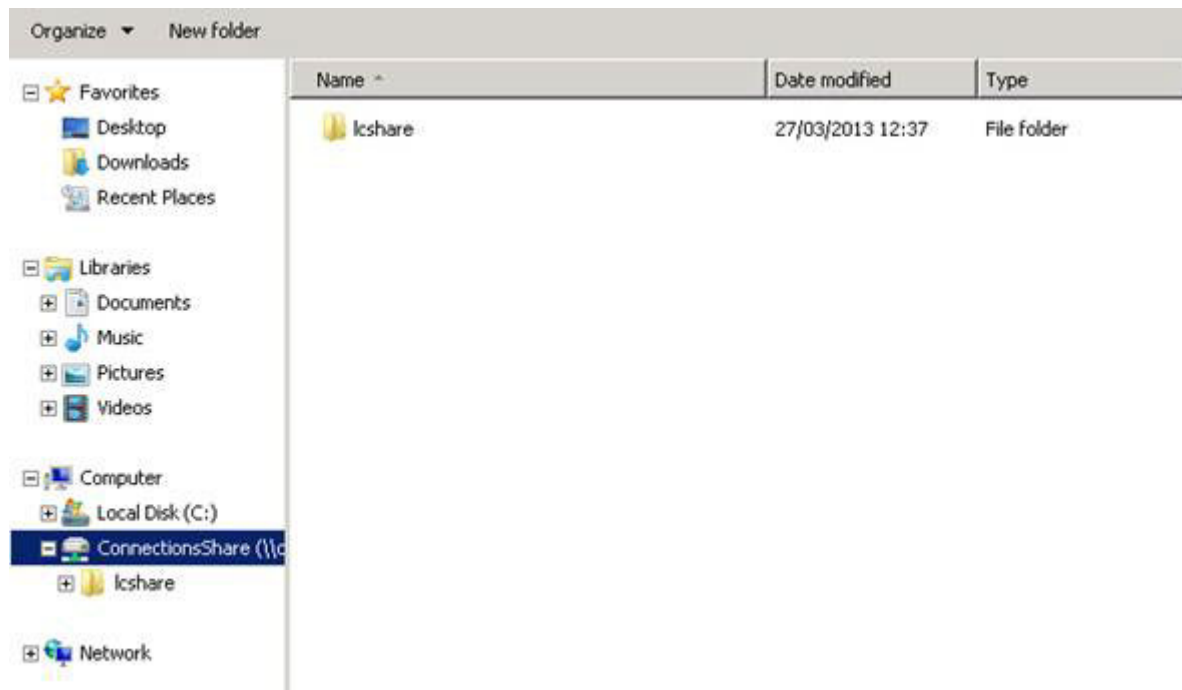


Figure 1. DMGR - ConnectionsShare

- ___ 2. From Node1 and Node2, locate ConnectionsShare and select **Map Network Drive**. Select the same drive letter on each node and check **Reconnect at logon**.

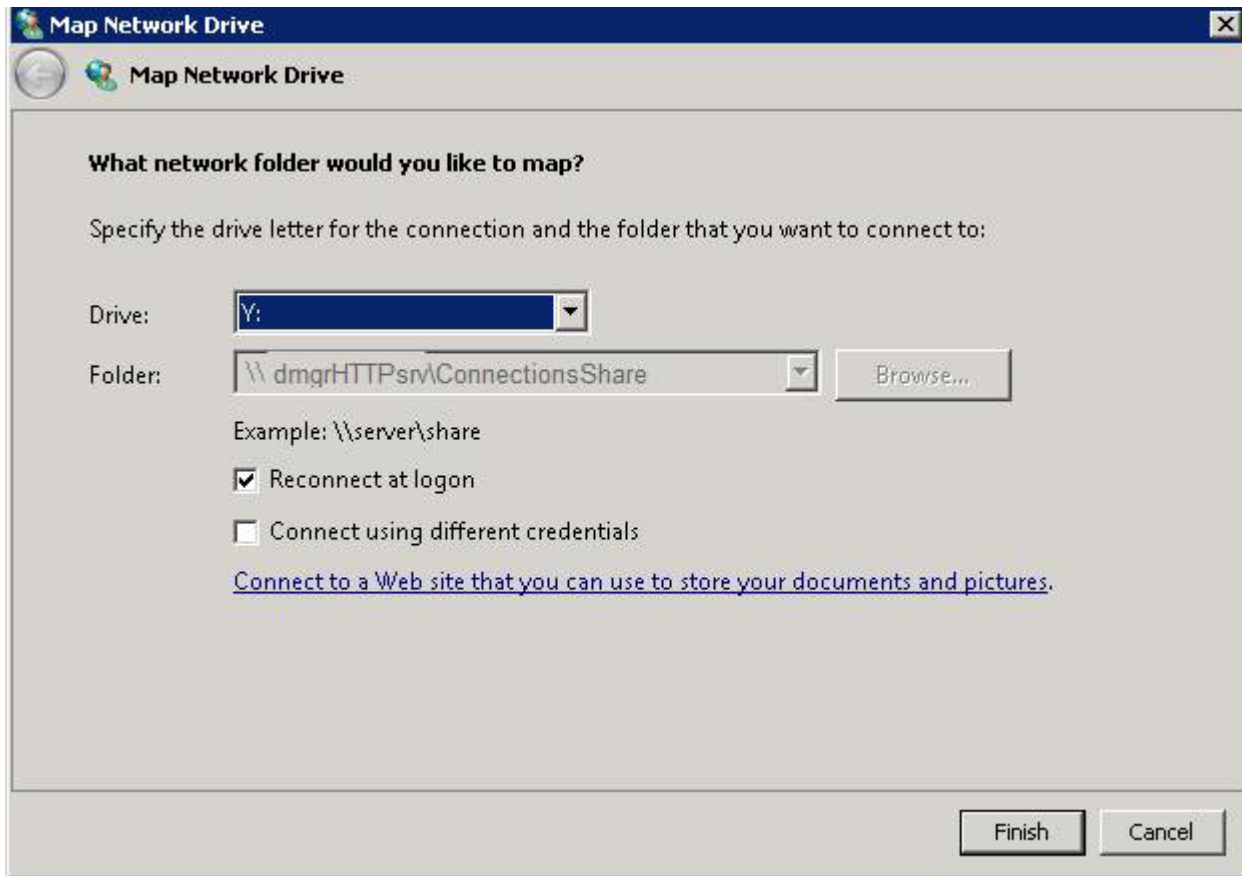


Figure 2. Map Network Drive

- ___ 3. Install the JDBC driver for your corresponding database server on DMGR, Node1, and Node2 computers to connect to the Connections databases when created. This driver should be installed to the same location on each computer.

For SQL Server, download the SQL Server JDBC 2 driver from the Microsoft website and follow the instructions to extract the driver files.

IBM Connections uses the `sqljdbc4.jar` file.

Middleware installation and configuration steps



Note

After completion of each of the installations, select "View Log File" to check for any errors.

- ___ 1. Install IBM Installation Manager 1.5.3.
- ___ 2. WebSphere V8.0 is installed from the Rational Installation Manager, so the latter product must be installed first on the three WebSphere computers: DMGR, Node1, Node2.
- ___ 3. From the DMGR, run `install.exe` to start the installation and display the welcome screen. You then see the following screen:



Figure 3. IBM Installation Manager - Install Packages

- ___ 4. Click **Next** to continue.

5. Accept the license agreement and click **Next**.

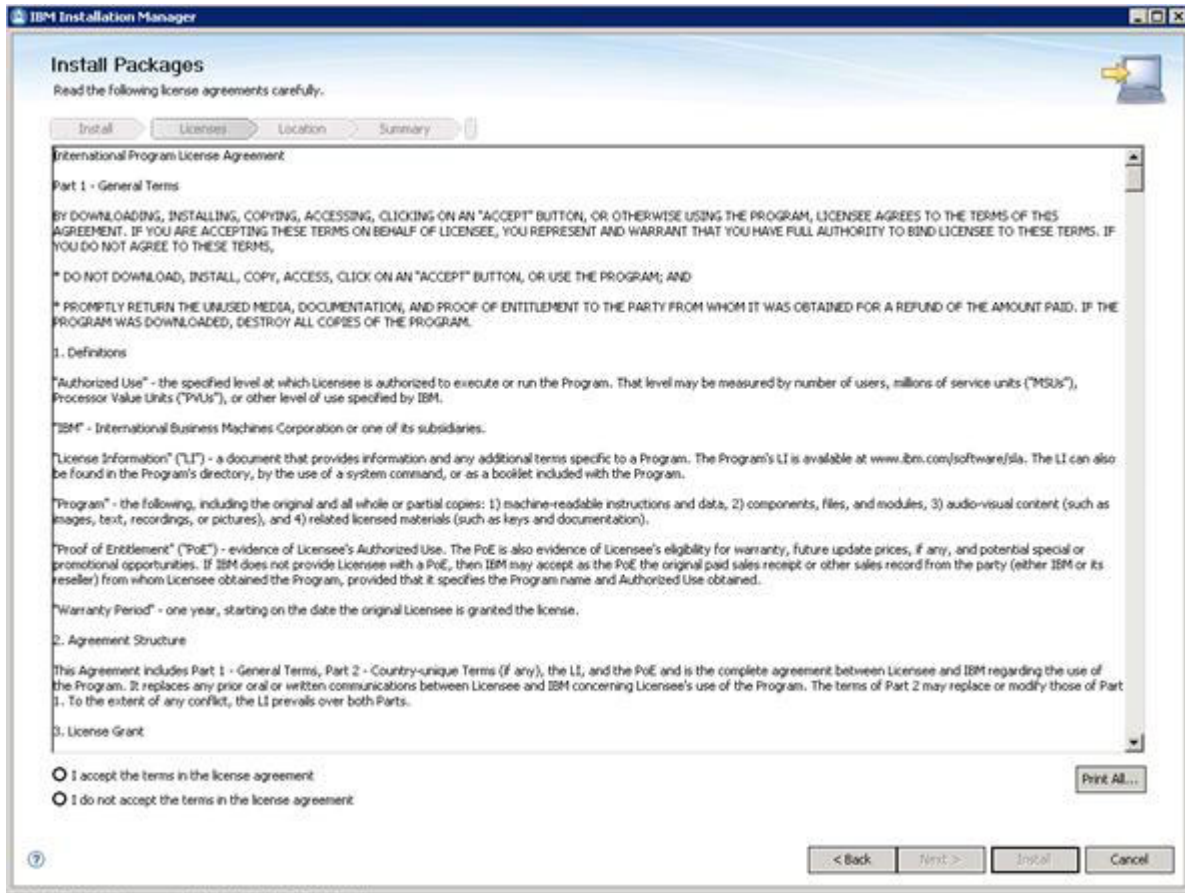


Figure 4. IBM Installation Manager - Install Packages - License agreement

6. You can adjust the installation path if you want. Click **Next** to continue.

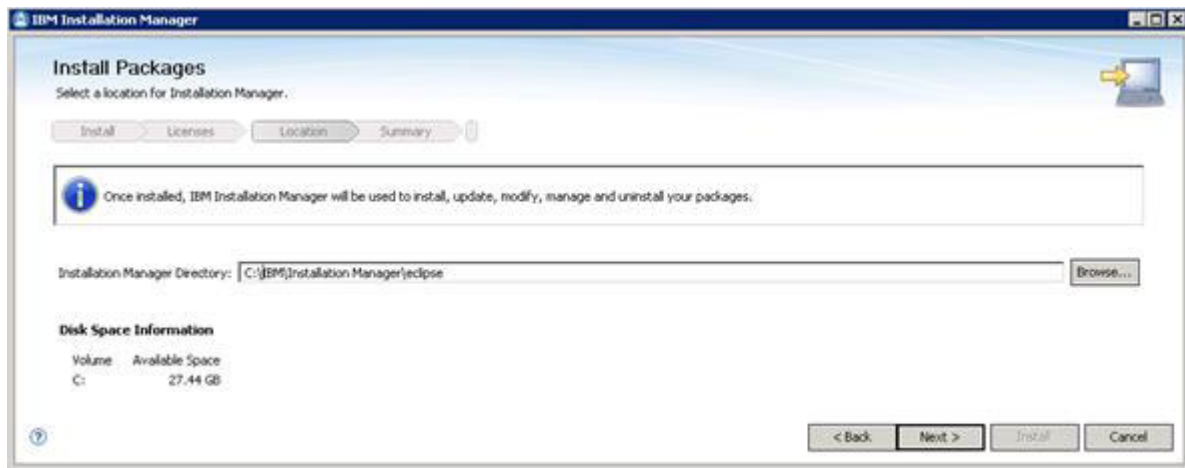


Figure 5. IBM Installation Manager - Install Packages - Select location

- ___ 7. A summary screen is then shown. Click **Install** to complete the installation of the installation manager.

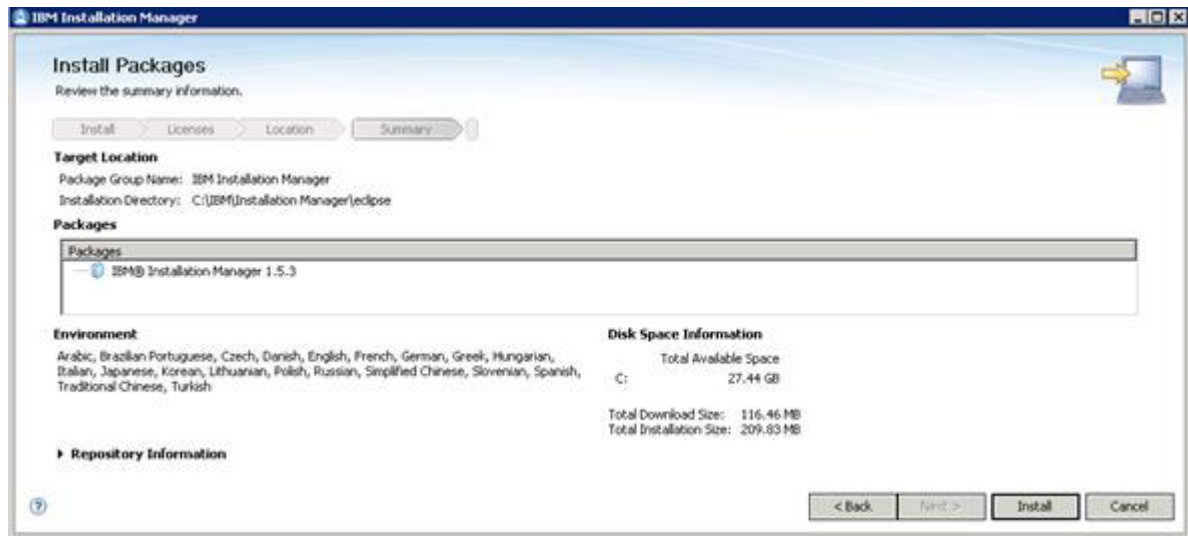


Figure 6. IBM Installation Manager - Install Packages - Summary information

- ___ 8. After some time, the installation completes and you should see the following screen:

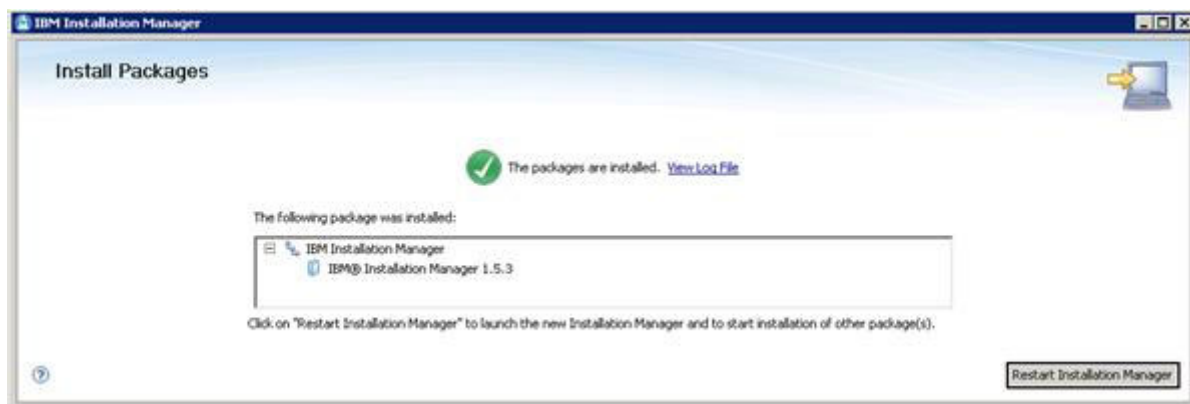


Figure 7. IBM Installation Manager - Install Packages - Installation successful

- ___ 9. IBM Installation Manager is installed. Repeat on Node1 and Node2.

Installing IBM WebSphere Deployment Manager

- ___ 1. Copy the WebSphere Network Deployment installation media and the WebSphere supplements installation media to the DMGR and extract the files.
- ___ 2. Start the IBM Installation Manager and from the main menu open **Files > Preferences**.
- ___ 3. In the Preferences window, select **Repositories**.

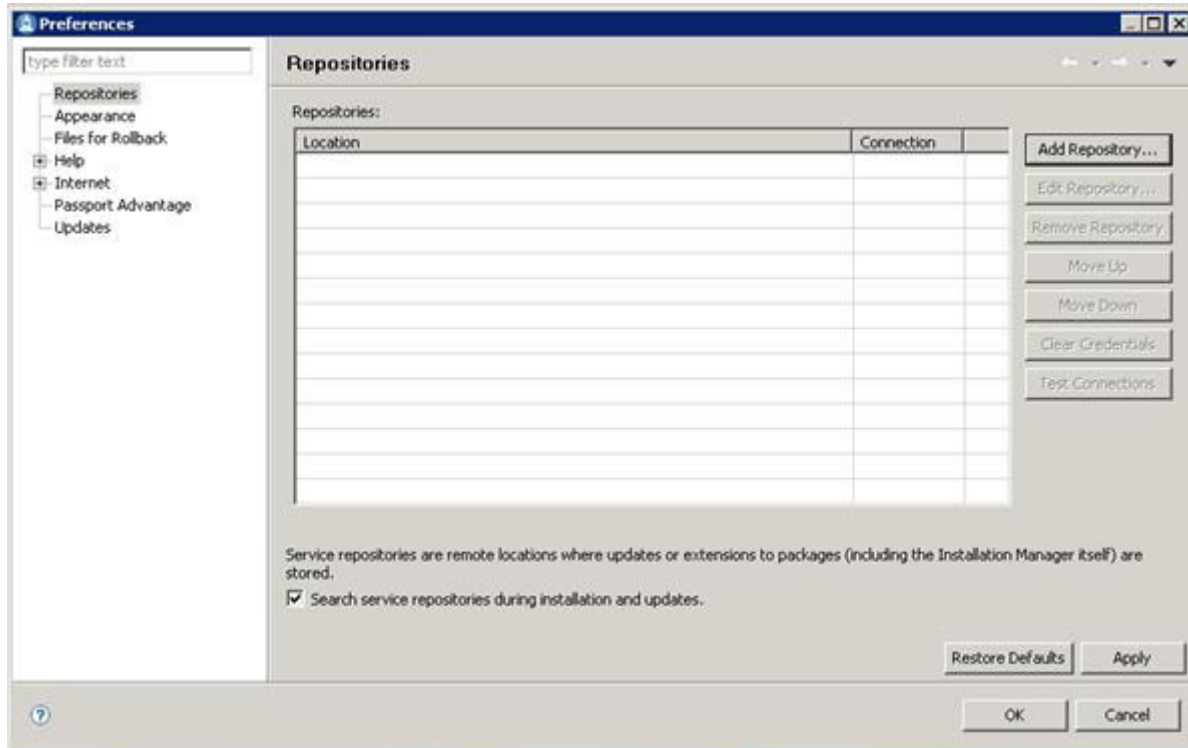


Figure 8. IBM Installation Manager - Repositories

4. Click **Add Repository** and in the Add Repository dialog browse to the `repository.config` file under the location where you extracted the installation media for the WebSphere Application Server Network Deployment and click **OK** to add it.

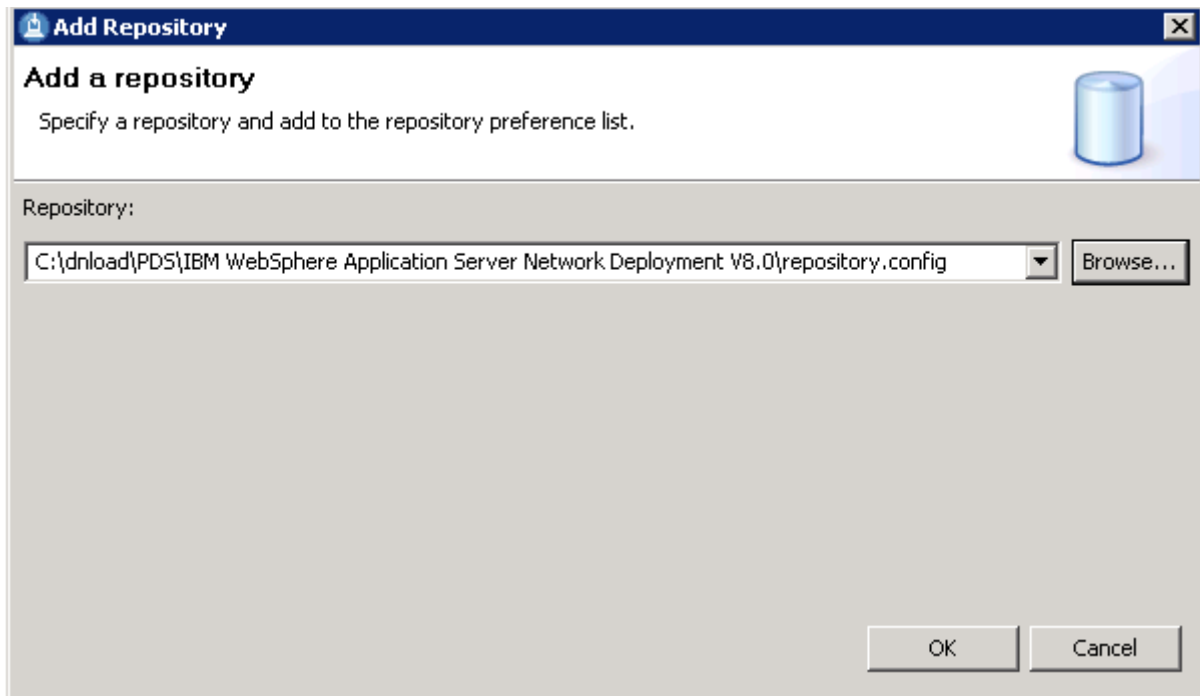


Figure 9. IBM Installation Manager - Add a repository

5. Click **Apply** to save the changes and **OK** to return to the main Installation Manager window.



Figure 10. IBM Installation Manager - Main screen

6. On the main Installation Manager screen, click **Install**.
7. In the Install Packages window, select the IBM WebSphere Application Server Network Deployment package and click **Next** to continue.

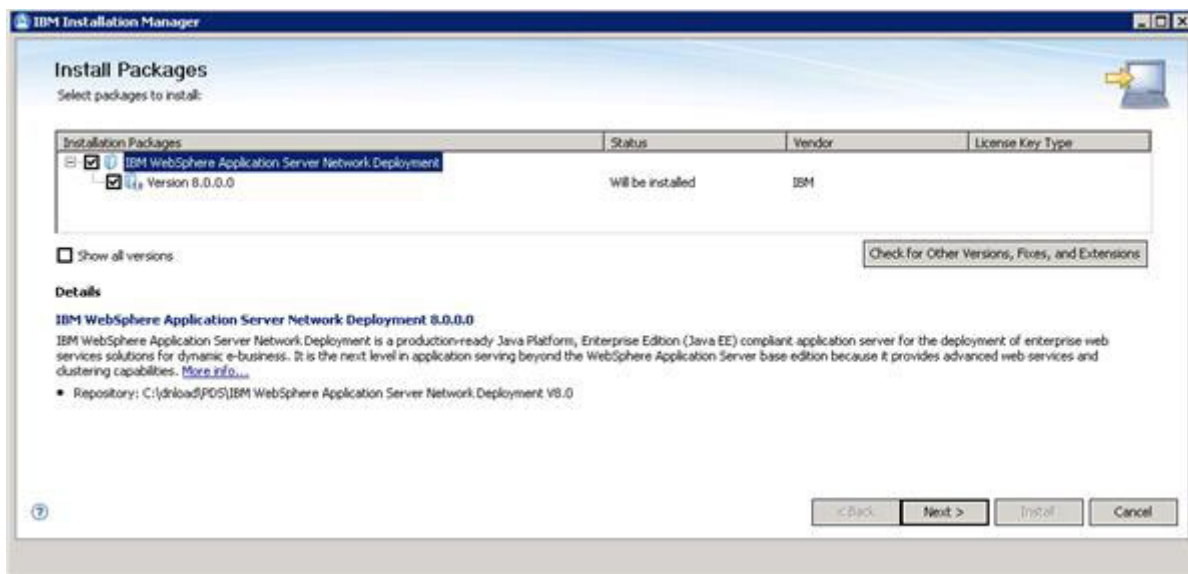


Figure 11. IBM Installation Manager - Install Packages

8. On the Licenses agreement page, review the licenses and select **I accept the terms in the license agreement** if you would like to proceed with the installation and click **Next** to continue.
9. On the Shared Resources Directory page, remove Program Files (x86) from the installation path to install to the IBM\IMShared directory. Click **Next**.

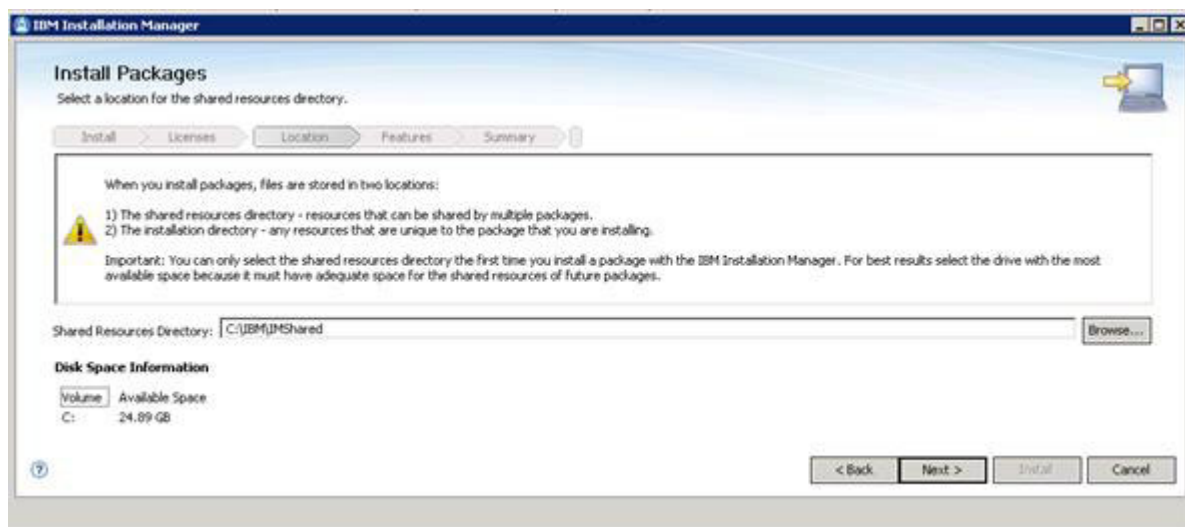


Figure 12. IBM Installation Manager - Install Packages - Select location

10. On the Package Group Name page, remove Program Files (x86) from the installation path to install to the IBM\WebSphere\AppServer directory. Click **Next**.

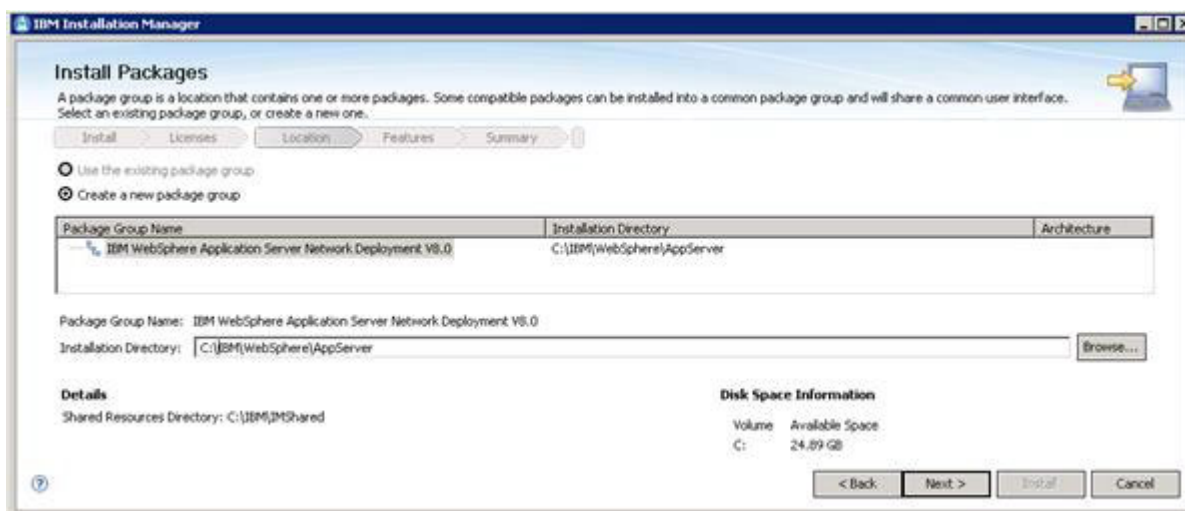


Figure 13. IBM Installation Manager - Install Packages - Package group name

- ___ 11. On the languages selection page, choose your language (the default here is English) and click **Next**.

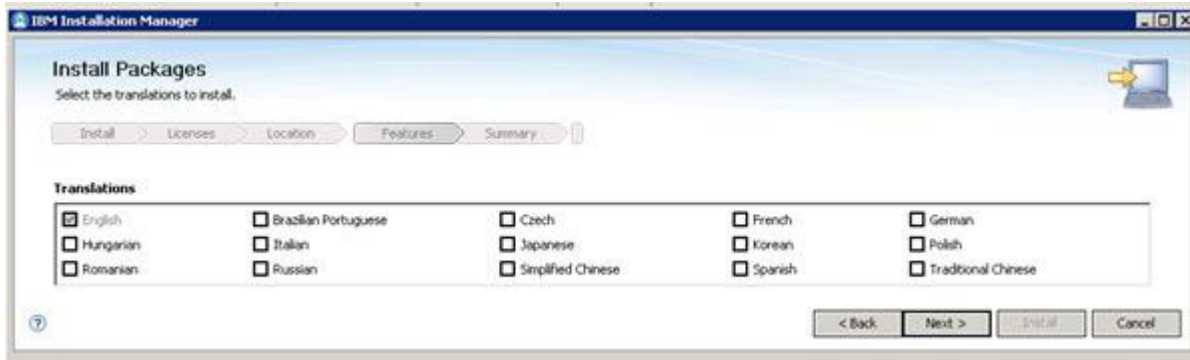


Figure 14. IBM Installation Manager - Install Packages - Translations to install

- ___ 12. On the Install Packages page, everything should be selected for a 64-bit environment except IBM 32-bit SDK for Java, Version 6. Click **Next**.

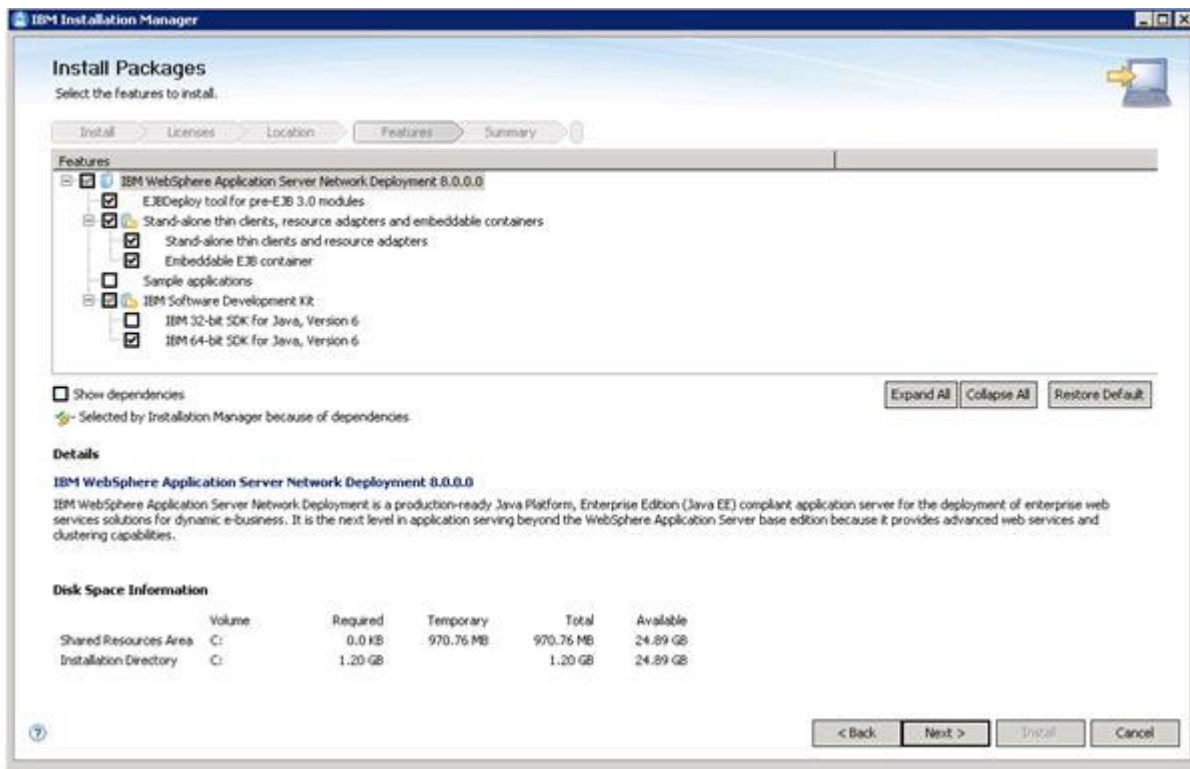


Figure 15. IBM Installation Manager - Install Packages - Features to install

13. On the packages summary, verify your selections and click **Install**.

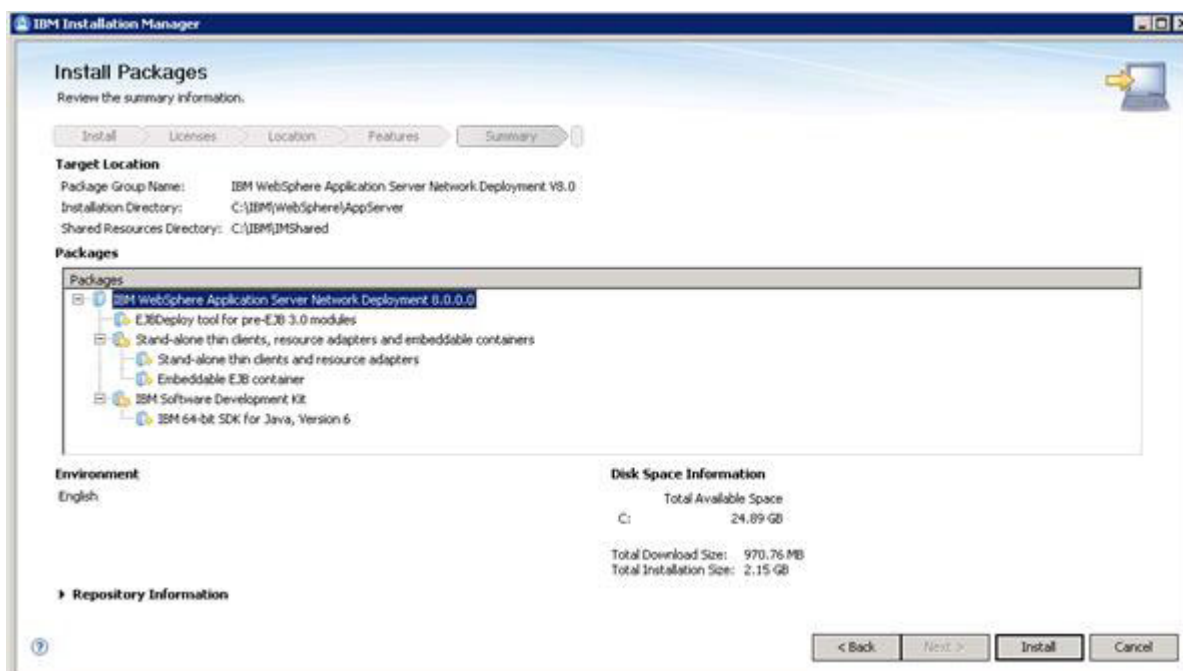


Figure 16. IBM Installation Manager - Install Packages - Summary information

14. On the Installation Summary page, on the “Which program do you want to start?” screen, leave the default option **Profile Management Tool to create a profile** selected and click **Finish**.

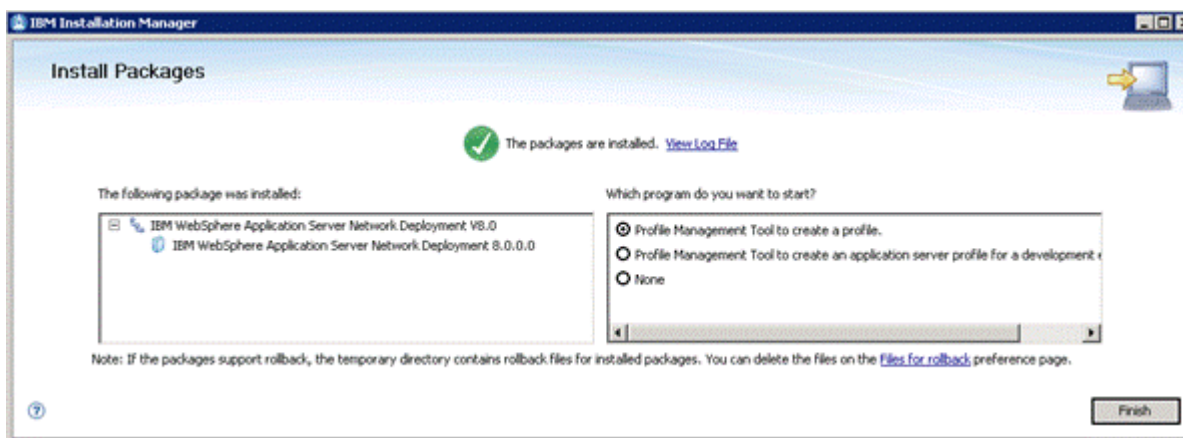


Figure 17. IBM Installation Manager - Install Packages - Installation summary page

The WebSphere Customization Toolbox 8.0 application should now start.

15. In the Profiles section of the WebSphere Customization Toolbox, click **Create**, and on the Environment Selection page pick **Management**. Then, click **Next**.

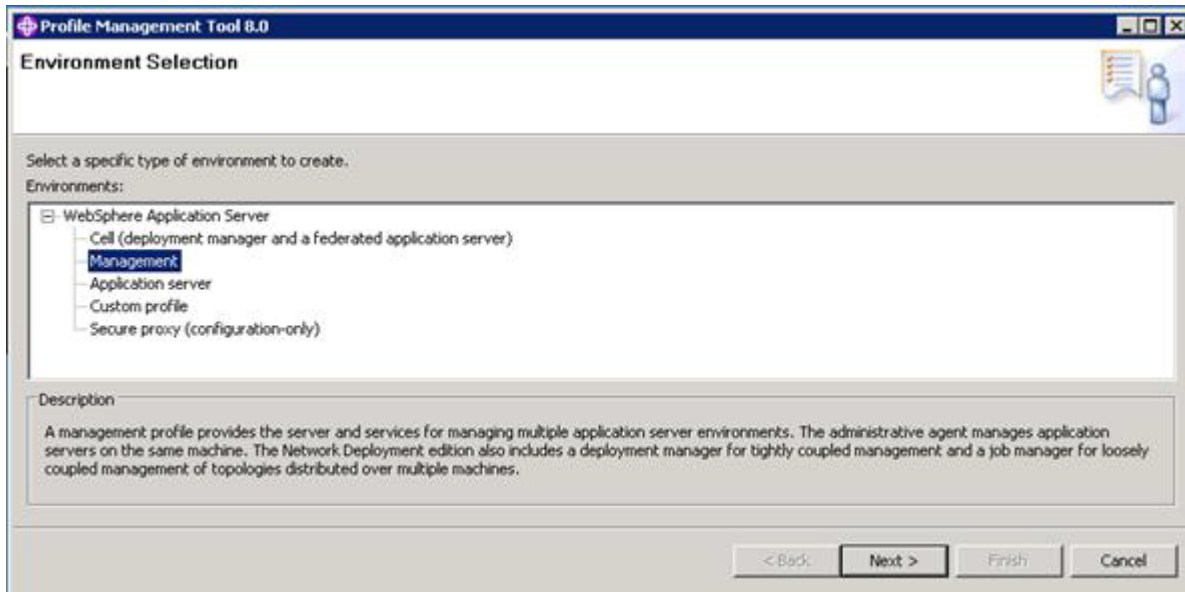


Figure 18. Profile Management Tool 8.0 - Environment Selection

16. For the Server Type Selection, choose **Deployment Manager** and click **Next**.

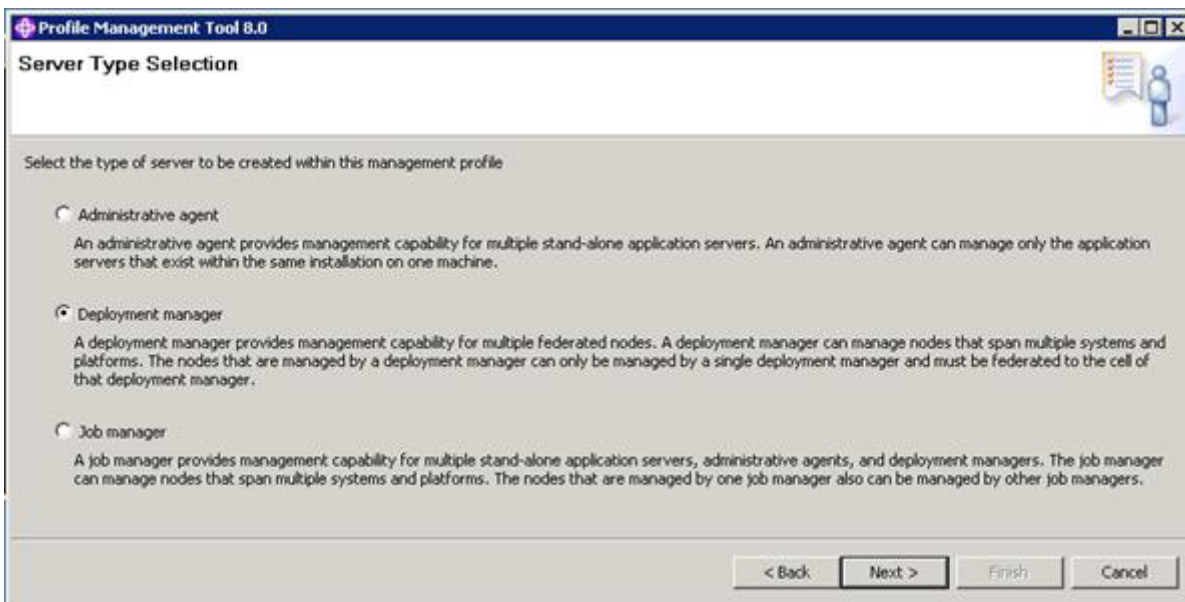


Figure 19. Profile Management Tool 8.0 - Server Type Selection

17. Select **Typical Profile Creation** and click **Next**.

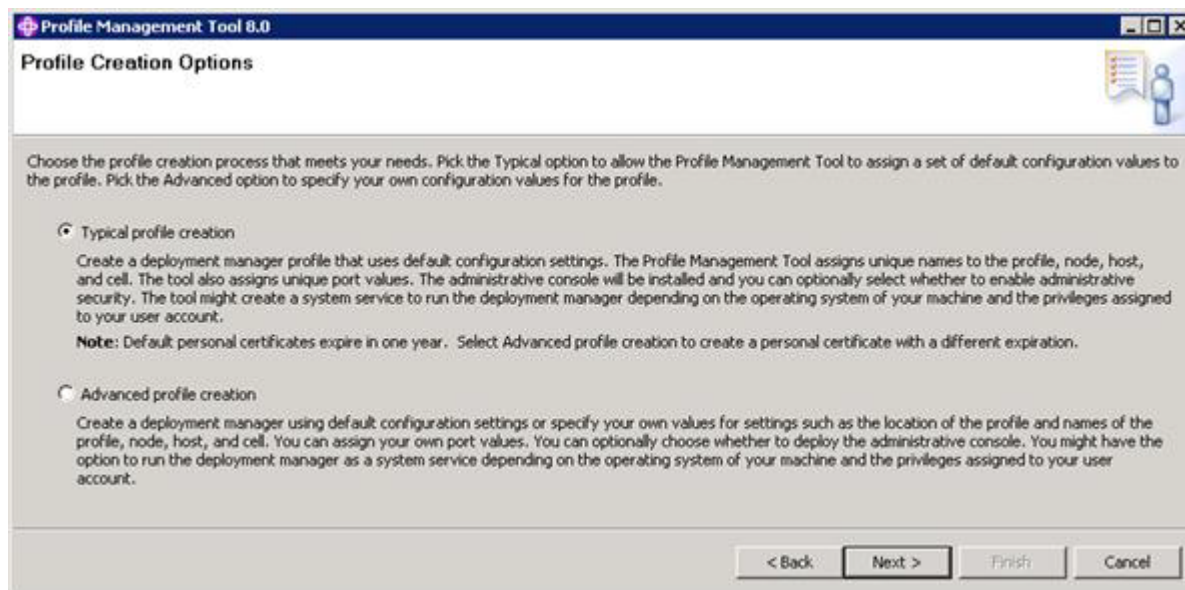


Figure 20. Profile Management Tool 8.0 - Profile Creation Options

18. Enable **Administrative Security** and enter credentials. For example, use `wasadmin` for both user name and password. Click **Next**.

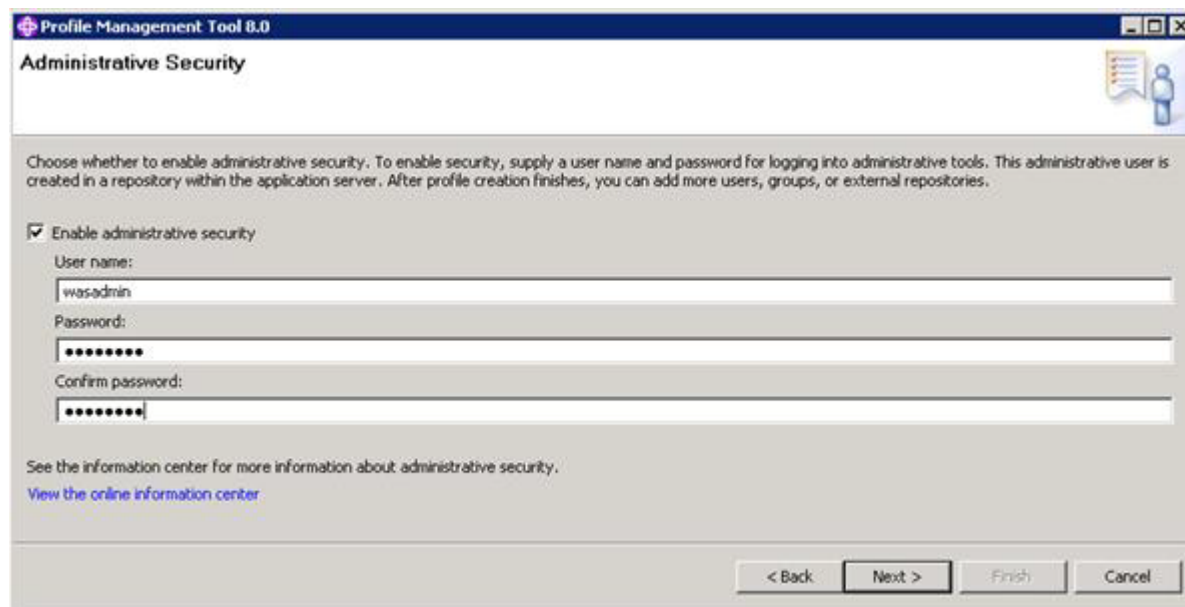


Figure 21. Profile Management Tool 8.0 - Administrative Security

- ___ 19. On the Profile Creation Summary page, review the information and click **Create** to complete the profile creation.

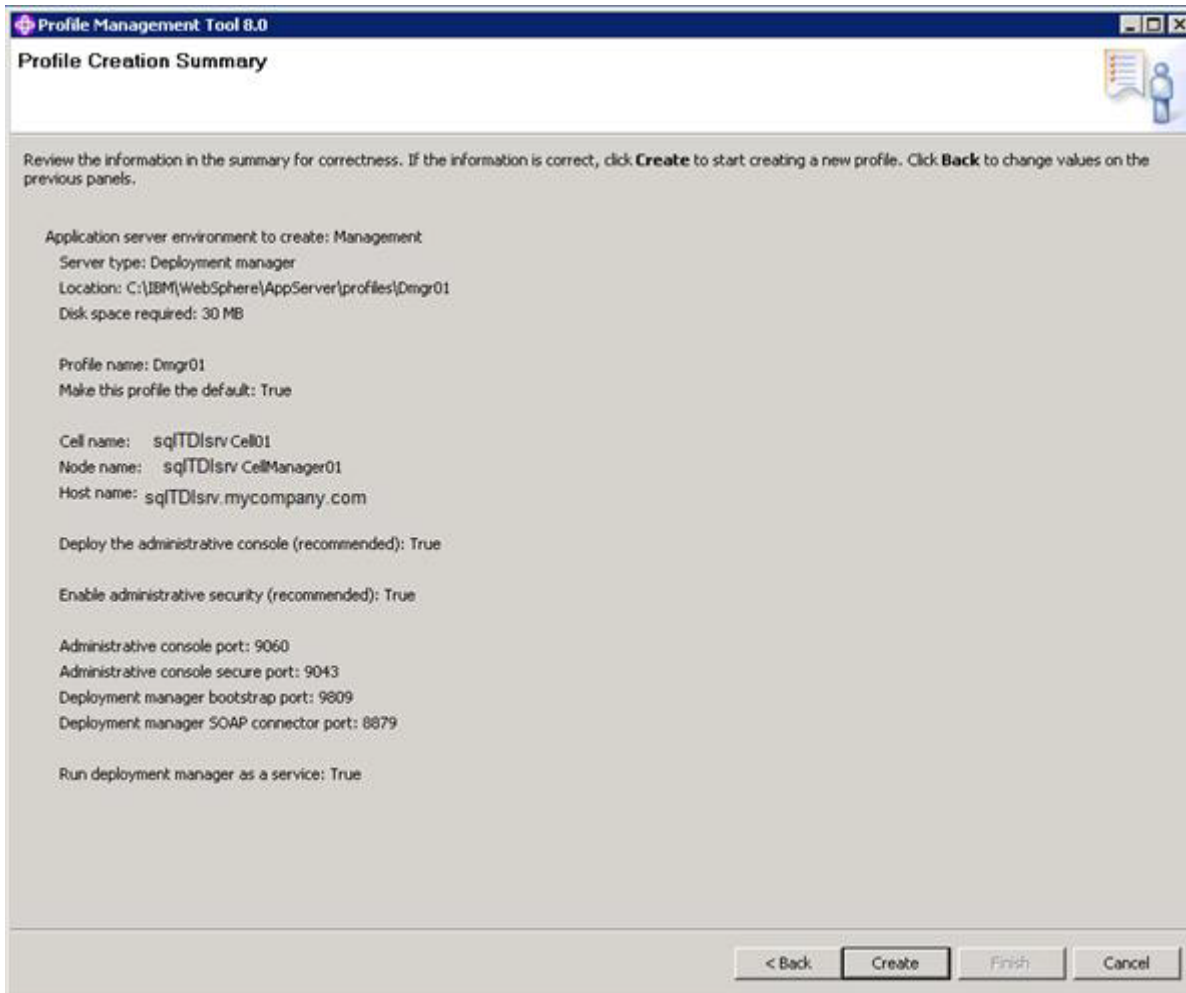


Figure 22. Profile Management Tool 8.0 - Profile Creation Summary

- ___ 20. The Profile Management Tool wizard starts the process of creating the profiles and reports when it completes. When done, select **Launch the First steps console** and click **Finish**.

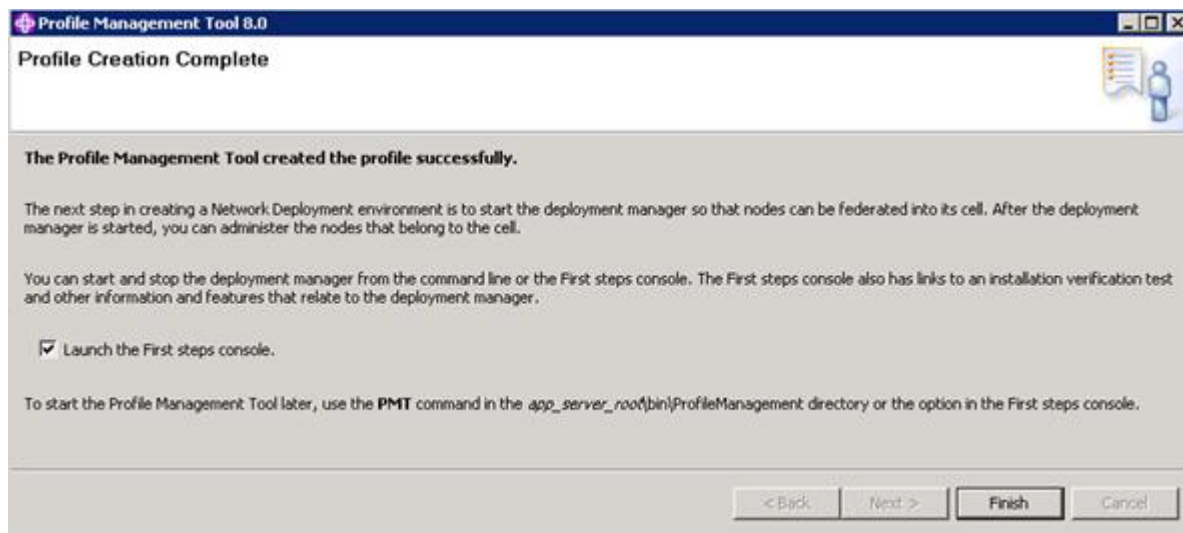


Figure 23. Profile Management Tool 8.0 - Profile Creation Complete

- ___ 21. From the First steps screen, choose **Installation Verification** and review the output. Your Deployment Manager starts and you can now log in to the console by using the `wasadmin` user created earlier.

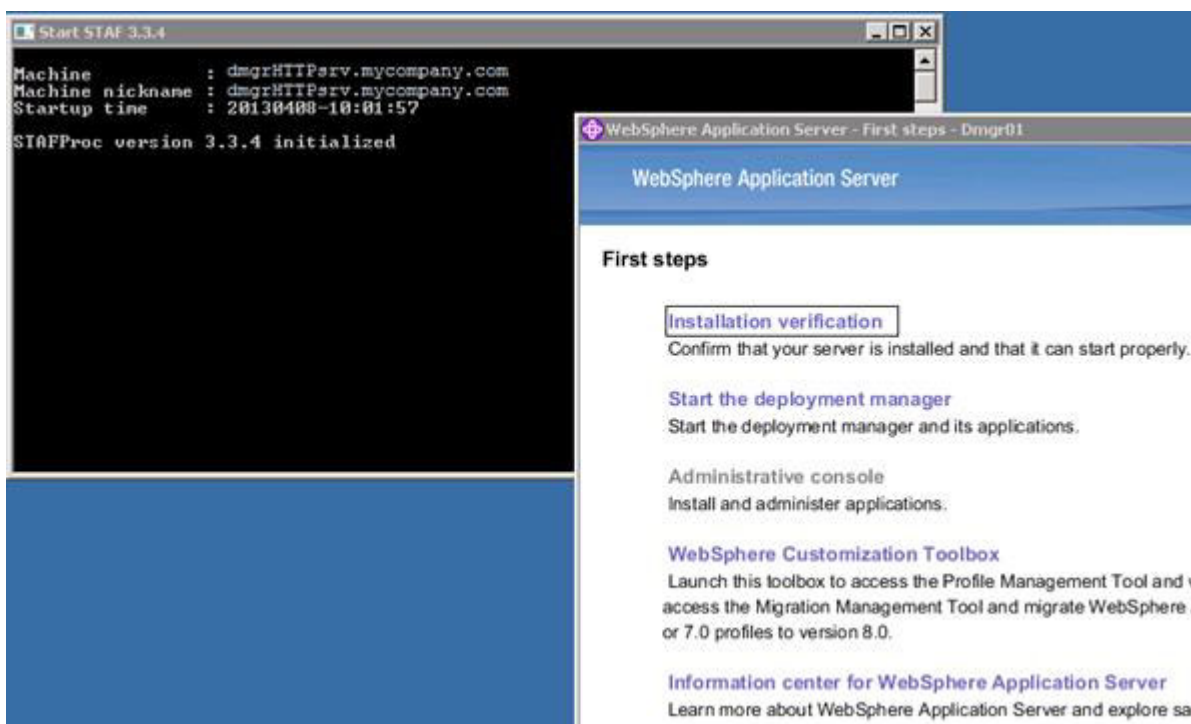


Figure 24. Profile Management Tool 8.0 - First steps screen

Congratulations! Your Deployment Manager is now set up. Now go to your application server nodes.

Installing IBM WebSphere Application Server

- ___ 1. Copy the WebSphere Application installation media to Node1 and extract the files.
- ___ 2. Repeat the steps 2 - 6 from Section "Installing IBM WebSphere Deployment Manager".
- ___ 3. In the Install Packages window, select the **IBM WebSphere Application Server** package and click **Next** to continue.

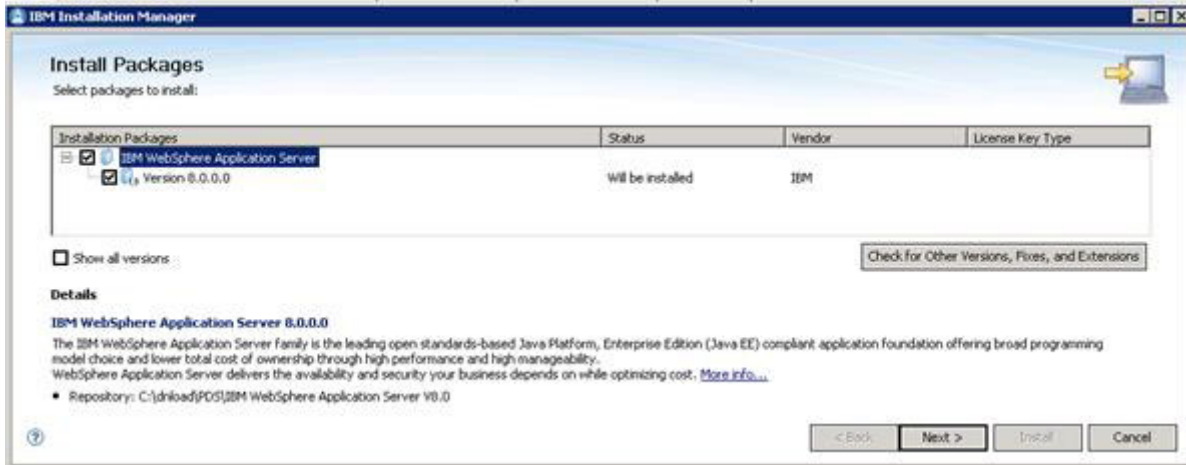


Figure 25. IBM Installation Manager - Select packages to install

- ___ 4. Repeat steps 8 - 11 from Section "Installing IBM WebSphere Deployment Manager".

5. On the Install Packages page, everything should be selected for a 64-bit environment except IBM 32-bit SDK for Java, Version 6 and Sample Applications. Click **Next**.

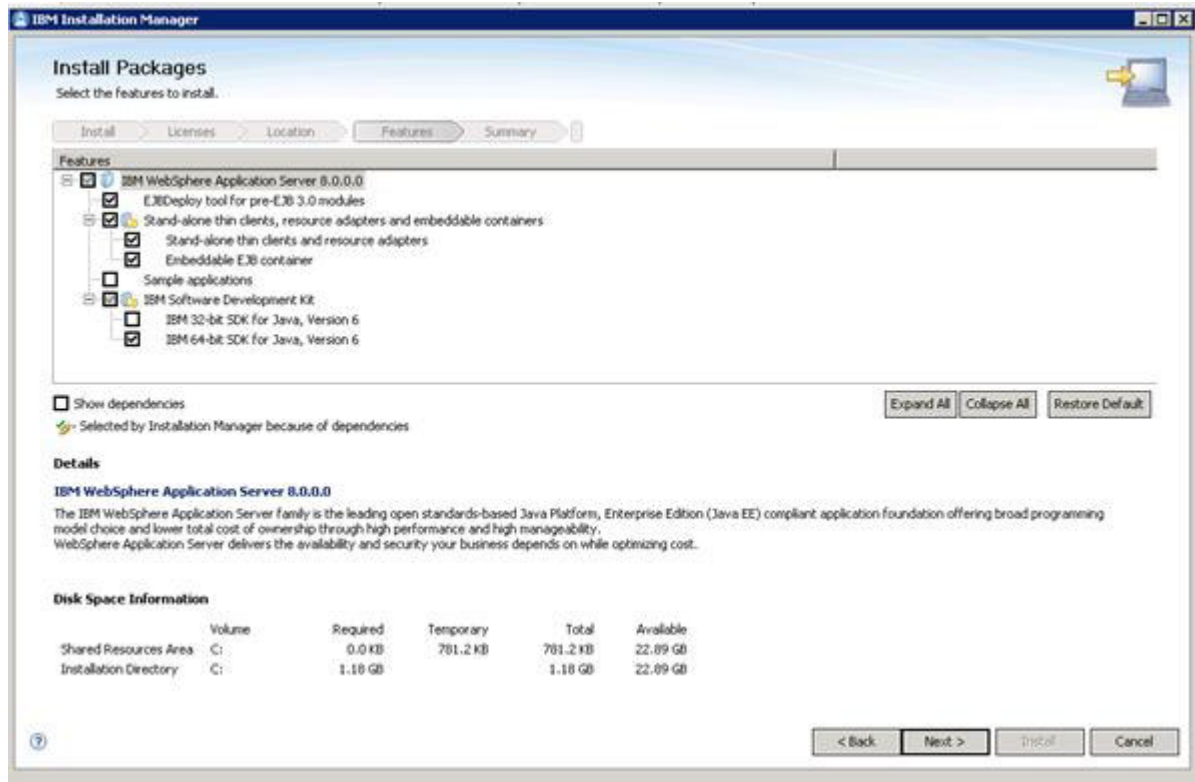


Figure 26. IBM Installation Manager - Select the features to install

6. Click **Install** and monitor progress.

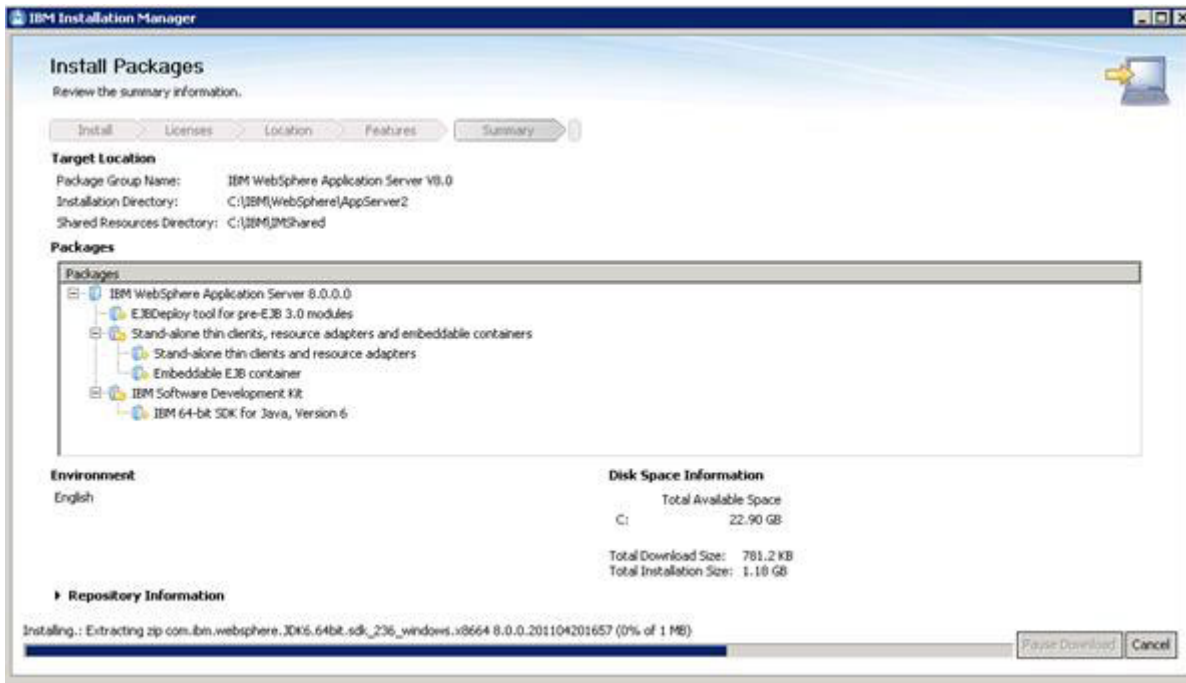


Figure 27. IBM Installation Manager - Review the summary information

7. When it completes, you are asked to create an Application Server Profile. Select **Profile Management Tool to create a profile** and then **Finish**.

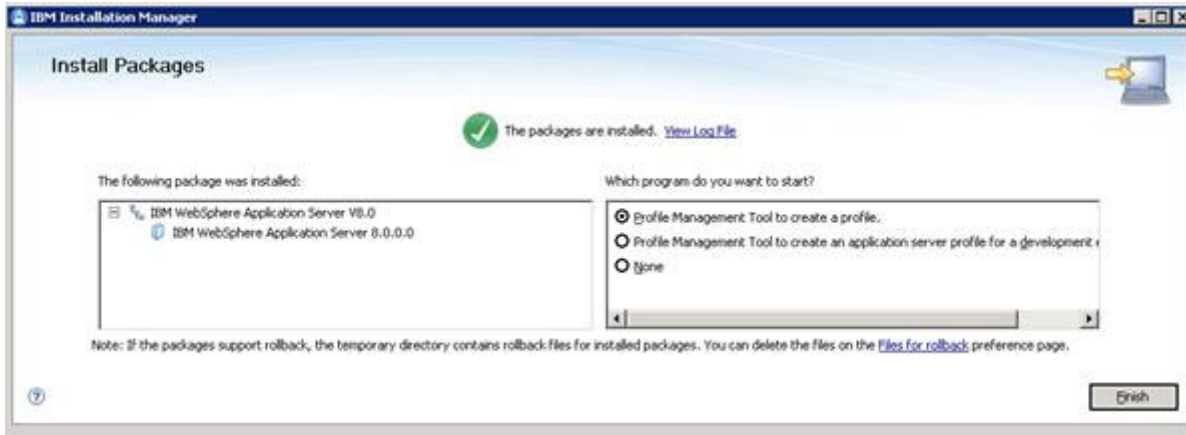


Figure 28. IBM Installation Manager - Start creating an application server profile

- ___ 8. In the Profiles section of the WebSphere Customization Toolbox, click **Create**, and in the Environment Selection page, pick **Application server**. Then, click **Next**.

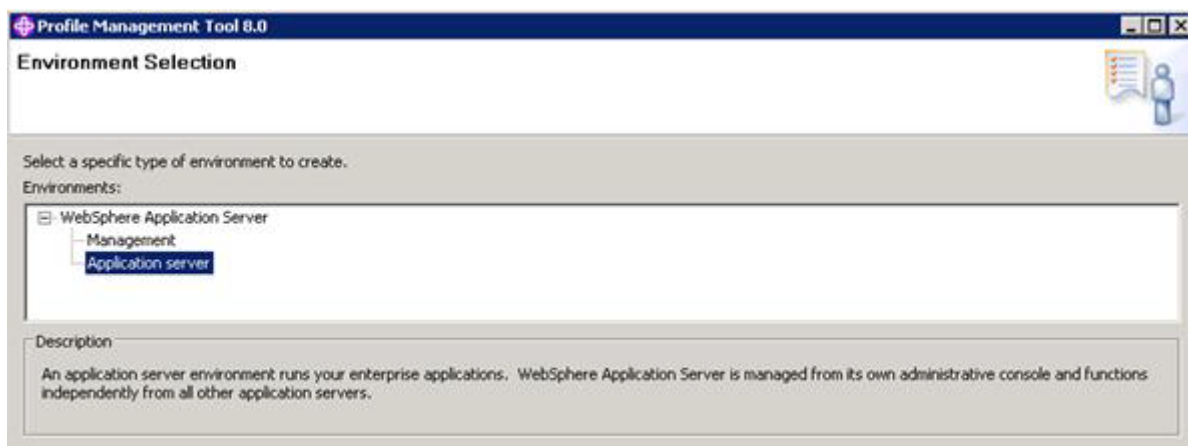


Figure 29. IBM Installation Manager - Environment Selection

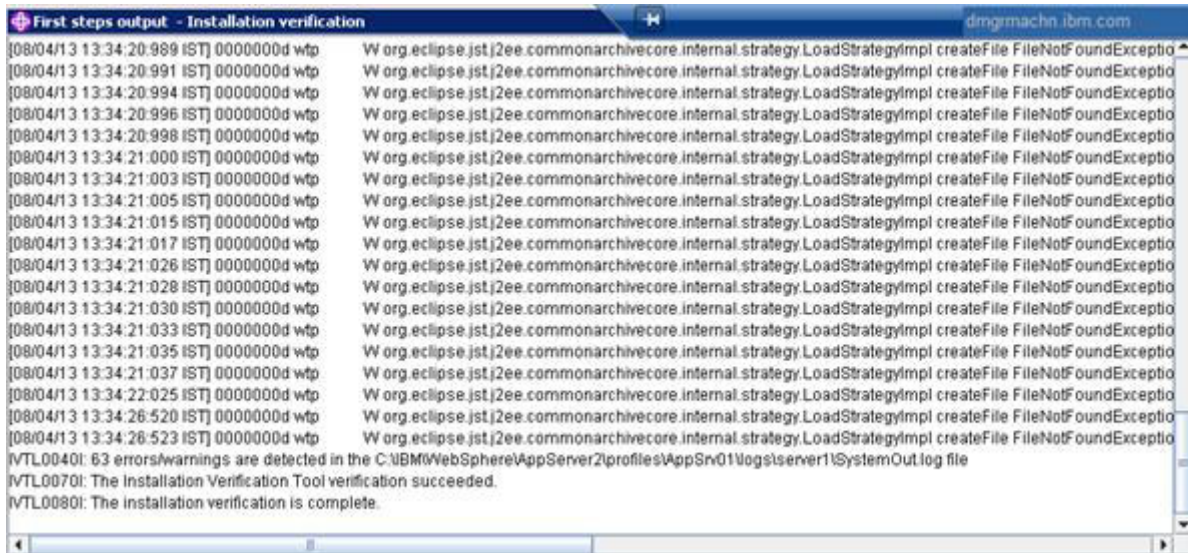
- ___ 9. On this screen, select **Typical profile creation**.



Figure 30. IBM Installation Manager - Profile Creation Options

- ___ 10. Repeat steps 18 - 21 from Section "Installing IBM WebSphere Deployment Manager" to enable security and complete the profile for the Application Server and verify the installation.

You should see the following result:



```
First steps output - Installation verification
[08/04/13 13:34:20.989 IST] 0000000d wtp      W org.eclipse.jst.j2ee.commonarchivcore.internal.strategy.LoadStrategyImpl createFile FileNotFoundExceptio
[08/04/13 13:34:20.991 IST] 0000000d wtp      W org.eclipse.jst.j2ee.commonarchivcore.internal.strategy.LoadStrategyImpl createFile FileNotFoundExceptio
[08/04/13 13:34:20.994 IST] 0000000d wtp      W org.eclipse.jst.j2ee.commonarchivcore.internal.strategy.LoadStrategyImpl createFile FileNotFoundExceptio
[08/04/13 13:34:20.996 IST] 0000000d wtp      W org.eclipse.jst.j2ee.commonarchivcore.internal.strategy.LoadStrategyImpl createFile FileNotFoundExceptio
[08/04/13 13:34:20.998 IST] 0000000d wtp      W org.eclipse.jst.j2ee.commonarchivcore.internal.strategy.LoadStrategyImpl createFile FileNotFoundExceptio
[08/04/13 13:34:21.000 IST] 0000000d wtp      W org.eclipse.jst.j2ee.commonarchivcore.internal.strategy.LoadStrategyImpl createFile FileNotFoundExceptio
[08/04/13 13:34:21.003 IST] 0000000d wtp      W org.eclipse.jst.j2ee.commonarchivcore.internal.strategy.LoadStrategyImpl createFile FileNotFoundExceptio
[08/04/13 13:34:21.005 IST] 0000000d wtp      W org.eclipse.jst.j2ee.commonarchivcore.internal.strategy.LoadStrategyImpl createFile FileNotFoundExceptio
[08/04/13 13:34:21.015 IST] 0000000d wtp      W org.eclipse.jst.j2ee.commonarchivcore.internal.strategy.LoadStrategyImpl createFile FileNotFoundExceptio
[08/04/13 13:34:21.017 IST] 0000000d wtp      W org.eclipse.jst.j2ee.commonarchivcore.internal.strategy.LoadStrategyImpl createFile FileNotFoundExceptio
[08/04/13 13:34:21.026 IST] 0000000d wtp      W org.eclipse.jst.j2ee.commonarchivcore.internal.strategy.LoadStrategyImpl createFile FileNotFoundExceptio
[08/04/13 13:34:21.028 IST] 0000000d wtp      W org.eclipse.jst.j2ee.commonarchivcore.internal.strategy.LoadStrategyImpl createFile FileNotFoundExceptio
[08/04/13 13:34:21.030 IST] 0000000d wtp      W org.eclipse.jst.j2ee.commonarchivcore.internal.strategy.LoadStrategyImpl createFile FileNotFoundExceptio
[08/04/13 13:34:21.033 IST] 0000000d wtp      W org.eclipse.jst.j2ee.commonarchivcore.internal.strategy.LoadStrategyImpl createFile FileNotFoundExceptio
[08/04/13 13:34:21.035 IST] 0000000d wtp      W org.eclipse.jst.j2ee.commonarchivcore.internal.strategy.LoadStrategyImpl createFile FileNotFoundExceptio
[08/04/13 13:34:21.037 IST] 0000000d wtp      W org.eclipse.jst.j2ee.commonarchivcore.internal.strategy.LoadStrategyImpl createFile FileNotFoundExceptio
[08/04/13 13:34:22.025 IST] 0000000d wtp      W org.eclipse.jst.j2ee.commonarchivcore.internal.strategy.LoadStrategyImpl createFile FileNotFoundExceptio
[08/04/13 13:34:26.520 IST] 0000000d wtp      W org.eclipse.jst.j2ee.commonarchivcore.internal.strategy.LoadStrategyImpl createFile FileNotFoundExceptio
[08/04/13 13:34:26.523 IST] 0000000d wtp      W org.eclipse.jst.j2ee.commonarchivcore.internal.strategy.LoadStrategyImpl createFile FileNotFoundExceptio
IVTL0070I: The Installation Verification Tool verification succeeded.
IVTL0080I: The installation verification is complete.
```

Figure 31. First steps output - Installation verification

Congratulations! Your Node1 Application Server is now complete. You must now repeat all steps in this section to install the Application Server on Node2.

Federate Application Server into Deployment Manager

- ___ 1. First, ensure that the clocks are in sync between all three cluster computers, that is, Deployment Manager, Node1, and Node2.
- ___ 2. Your Deployment Manager should be started and your Application Servers on Node1 and Node2 should be stopped.
- ___ 3. Then, from Node1 open a command prompt at C:\IBM\WebSphere\Appserver\bin and run the following command:

```
addnode.bat dmgrHTTPsrv.mycompany.com 8879 -user wasadmin -password wasadmin
-localusername wasadmin -localpassword wasadmin
```

Node1 should be successfully federated as shown in the following figure:

```
Administrator: Command Prompt
min
ADMU0116I: Tool information is being logged in file
C:\IBM\WebSphere\AppServer2\profiles\AppSrv01\logs\addNode.log
ADMU0128I: Starting tool with the AppSrv01 profile
CWPKI0308I: Adding signer alias "CN=wasNode1srv.mycompany.com" to local
keystore "ClientDefaultTrustStore" with the following SHA digest:
D1:46:AD:67:70:DF:7F:FB:B5:69:0D:03:EB:59:AD:46:5D:DB:8E:81
CWPKI0309I: All signers from remote keystore already exist in local keystore.
ADMU0001I: Begin federation of node dubxpcvm233Node01 with Deployment Manager
at
wasNode1srv.mycompany.com:8879.
ADMU0009I: Successfully connected to Deployment Manager Server:
wasNode1srv.mycompany.com:8879
ADMU0505I: Servers found in configuration:
ADMU0506I: Server name: server1
ADMU2010I: Stopping all server processes for node wasNode1srvNode01
ADMU7702I: Because server1 is registered to run as a Windows Service, the
request to stop this server will be completed by stopping the
associated Windows Service.
ADMU0024I: Deleting the old backup directory.
ADMU0015I: Backing up the original cell repository.
ADMU0012I: Creating Node Agent configuration for node: wasNode1srvNode01
ADMU0014I: Adding node wasNode1srvNode01 configuration to cell:
wasNode1srvCell01
ADMU0016I: Synchronizing configuration between node and cell.
ADMU0018I: Launching Node Agent process for node: wasNode1srvNode01
ADMU0020I: Reading configuration for Node Agent process: nodeagent
ADMU0022I: Node Agent launched. Waiting for initialization status.
ADMU0030I: Node Agent initialization completed successfully. Process id is:
4928
ADMU0505I: Servers found in configuration:
ADMU0506I: Server name: nodeagent
ADMU0506I: Server name: server1
ADMU7703I: The Windows Service wasNode1srvNode01 associated with server1 is now
being deregistered.
ADMU0300I: The node wasNode1srvNode01 was successfully added to the
wasNode1srvCell01 cell.
ADMU0306I: Note:
ADMU0302I: Any cell-level documents from the standalone wasNode1srvCell01
configuration have not been migrated to the new cell.
ADMU0307I: You might want to:
ADMU0303I: Update the configuration on the wasNode1srvCell01 Deployment Manager
with values from the old cell-level documents.
ADMU0306I: Note:
ADMU0304I: Because -includeapps was not specified, applications installed on
the standalone node were not installed on the new cell.
ADMU0307I: You might want to:
ADMU0305I: Install applications onto the dmgrmachnCell01 cell using wsadmin
$AdminApp or the Administrative Console.
ADMU0003I: Node wasNode1srvNode01 has been successfully federated.
```

Figure 32. Administrator: Command Prompt

- ___ 4. Log on to your WebSphere Application Server admin console as `wasadmin`. Go to **Servers > Server Types > WebSphere Application Servers** and you should see a server for Node1 listed.



Figure 33. WebSphere Application Servers Administration Console - WebSphere Application Servers

- ___ 5. Now repeat the same steps in this section to federate Node2.

Setting up the IBM HTTP Server and web server plug-ins for WebSphere and the WebSphere Customization Toolbox

- ___ 1. Copy and extract the media to the Deployment Manager computer. Then, start the IBM Installation Manager.
- ___ 2. From the main menu, select **File > Preferences**, and in the Repositories pane, click **Add Repository**.

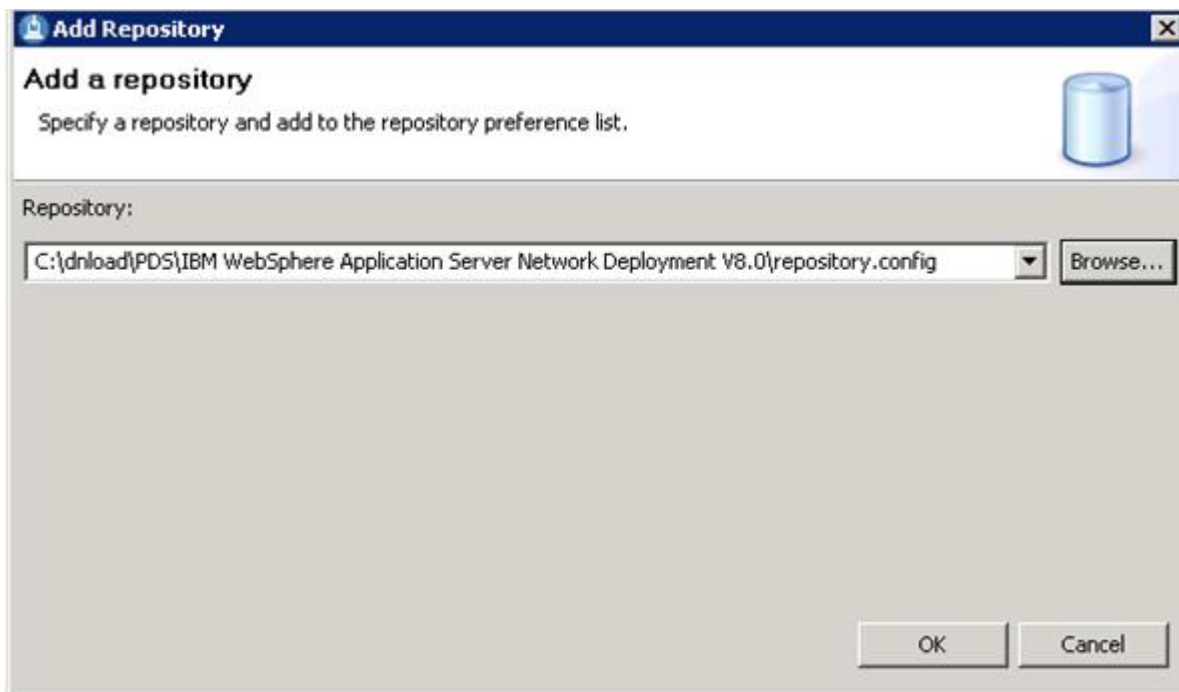


Figure 34. IBM Installation Manager - Add a repository

- ___ 3. Browse to the location where you extracted the WebSphere supplements installation media, select the `repository.config` file, and then click **OK**.

- ___ 4. Click **Apply** to save the changes and **OK** to return to the main Installation Manager screen.

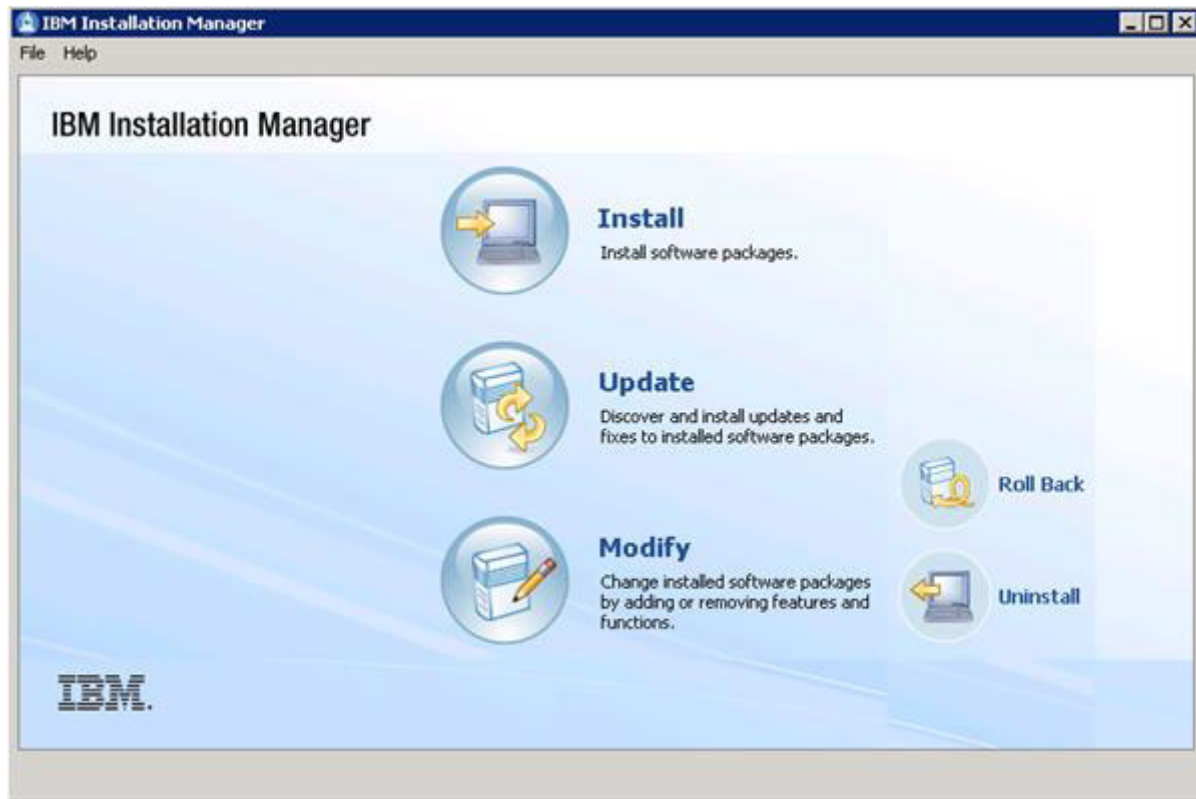


Figure 35. IBM Installation Manager - Main screen

- ___ 5. In the main Installation Manager window, click **Install**.

6. In the Install Packages window, select the IBM HTTP Server for WebSphere Application Server, the Web Server plug-ins for IBM WebSphere Application Server, and the WebSphere Customization Toolbox packages. Then, click **Next** to continue.

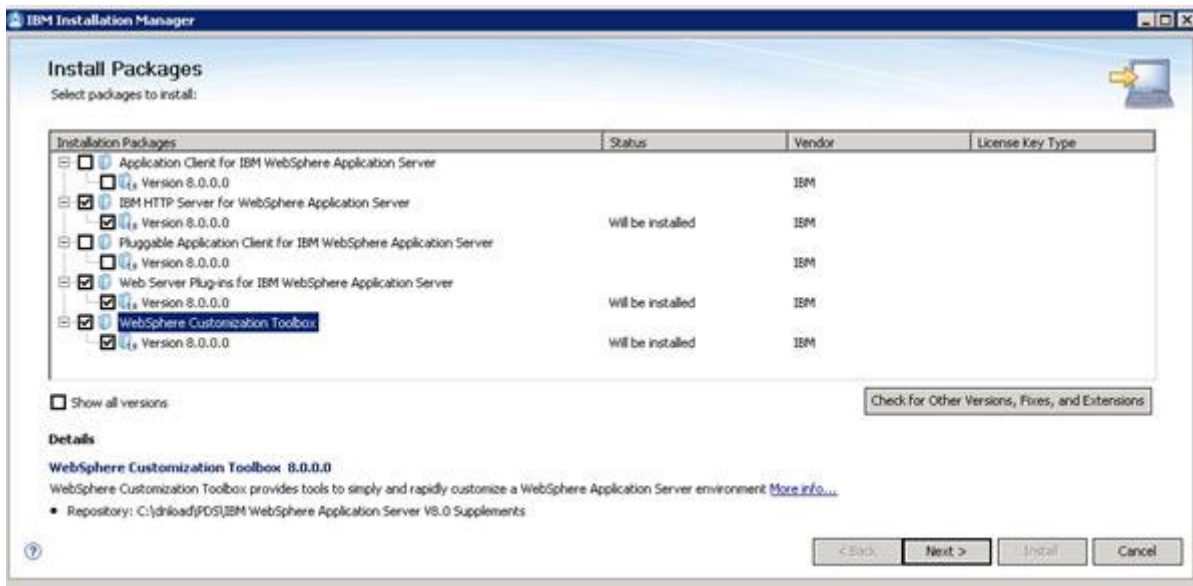


Figure 36. IBM Installation Manager - Select Packages to install

7. On the Software License agreement page, review the License Agreements and select “I accept the terms in the license agreements”. When you are ready, click **Next** to continue.

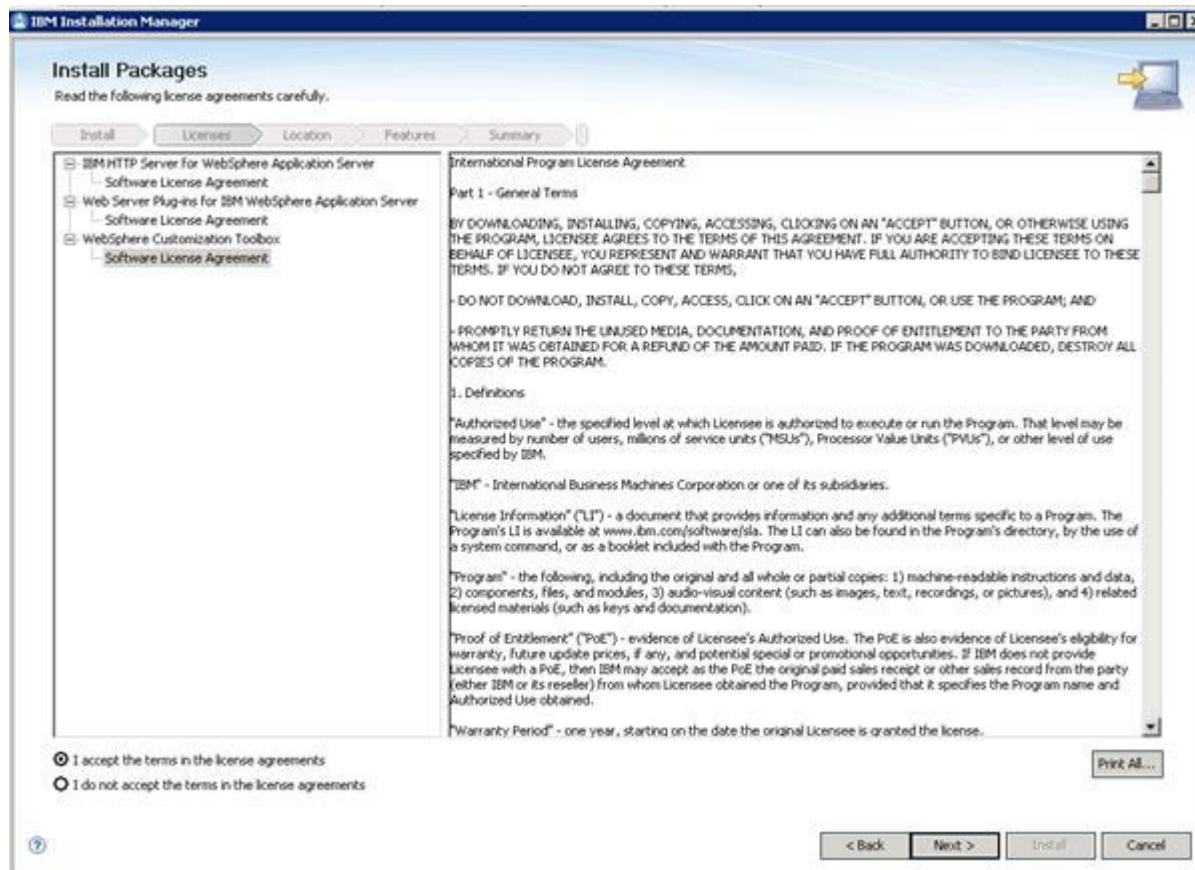


Figure 37. IBM Installation Manager - License agreements

8. On the Install Packages page, review the group entries and verify the installation paths for each of the three installation packages. Then, click **Next** to continue.

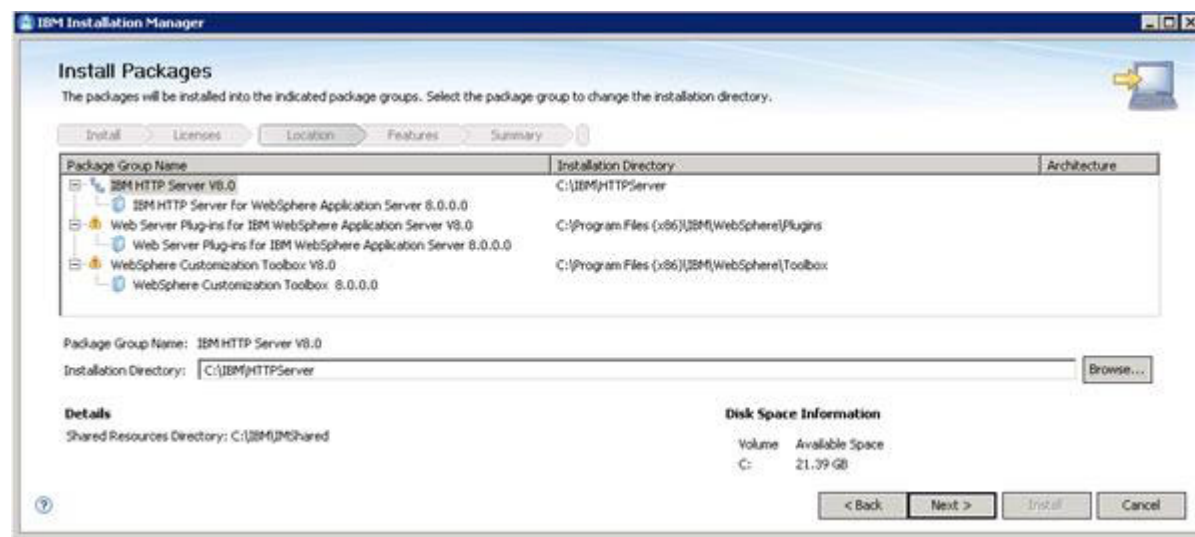


Figure 38. IBM Installation Manager - Installation paths

9. Next, verify the components that you want to install and click **Next** to continue.

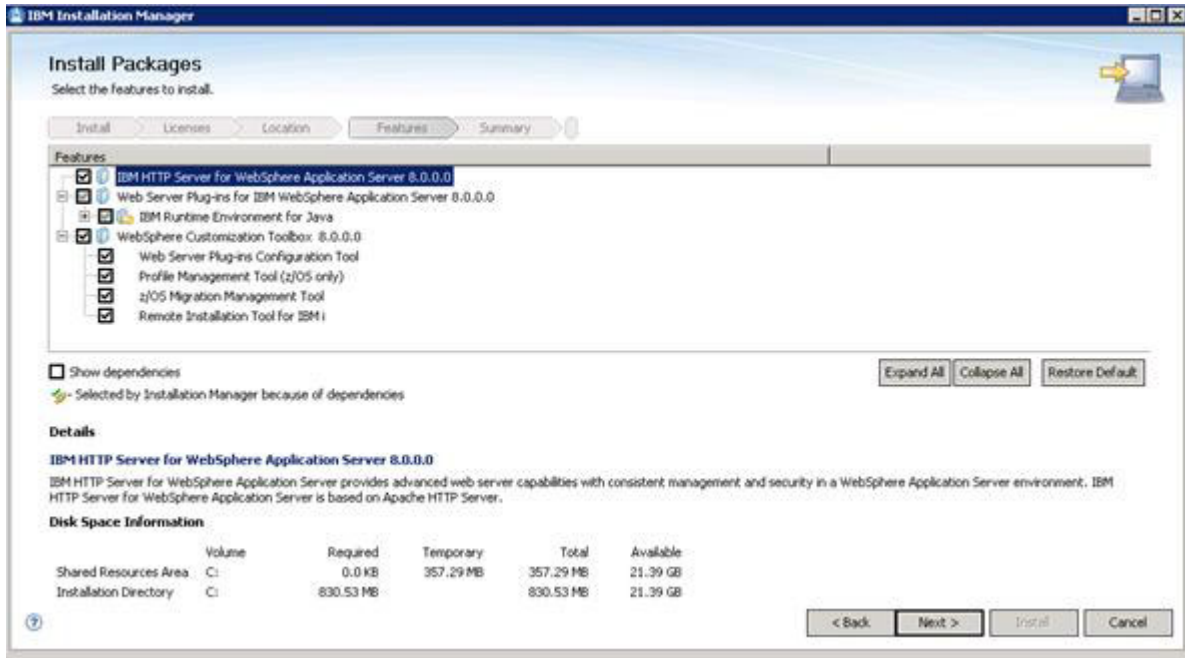


Figure 39. IBM Installation Manager - Select features to install

10. In the Web Server Configuration, use the default value of 80 unless the HTTP server must be run on a different port. Optionally, select **Run IBM HTTP Server as a Windows Service** and keep the default Startup type as **Automatic**.

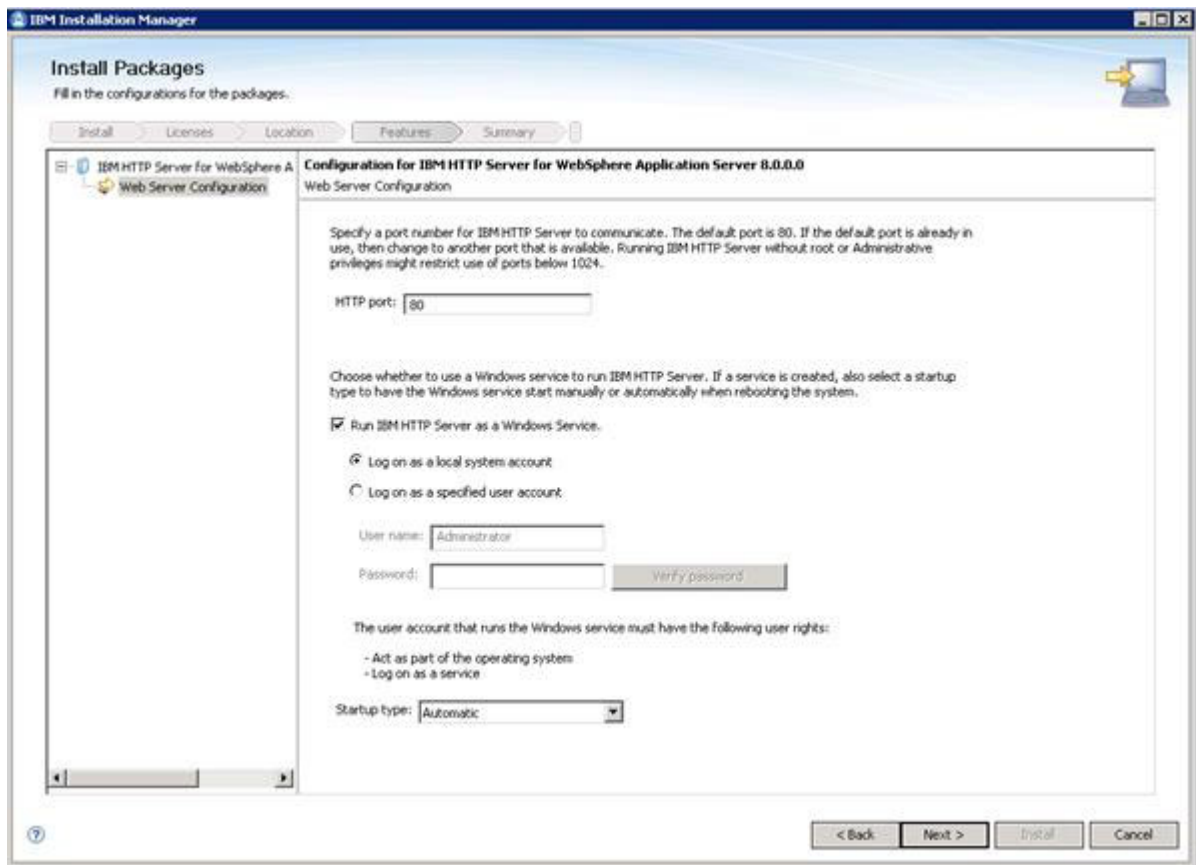


Figure 40. IBM Installation Manager - Complete the configurations for the packages

- ___ 11. On the Packages Summary page, verify the list of packages to install and click **Install**.

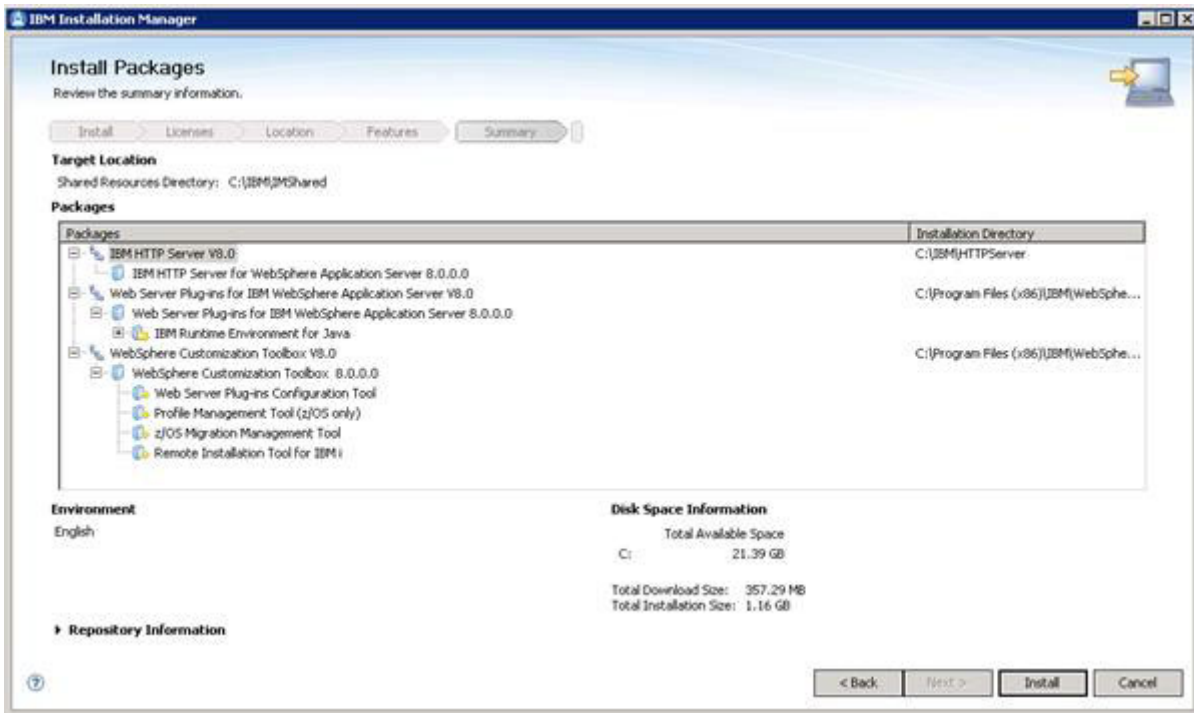


Figure 41. IBM Installation Manager - Summary information

- ___ 12. The wizard installs the packages and displays the Installation Summary page. Make sure that all packages installed correctly. In the "Which program do you want to start?" section, make sure that the **WebSphere Customization Toolbox** option is selected and click **Finish** to exit the wizard.

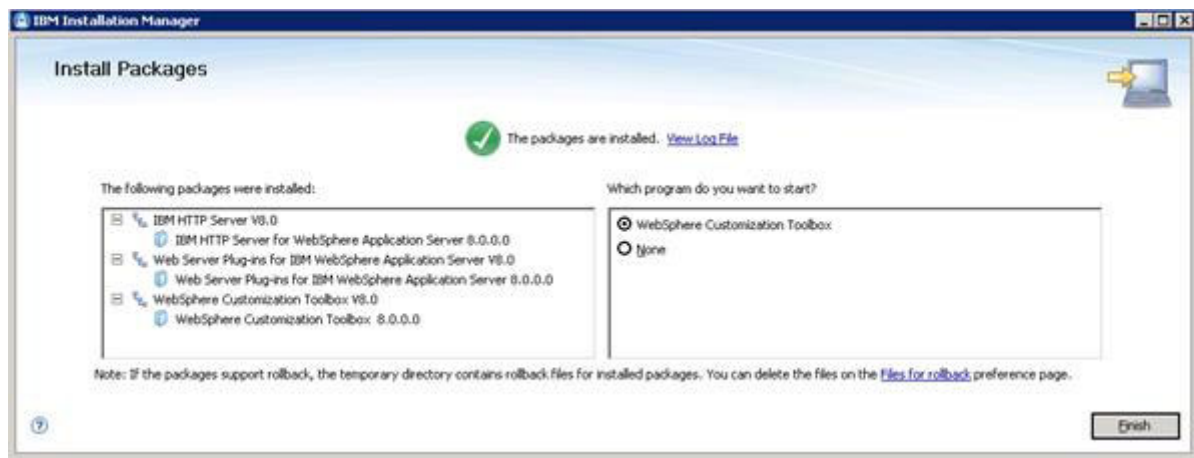


Figure 42. IBM Installation Manager - Installation successfully completed

- ___ 13. The WebSphere Customization Toolbox should now start. Select **Web Server Plug-ins Configuration Tool** and click **Launch Selected Tool**.

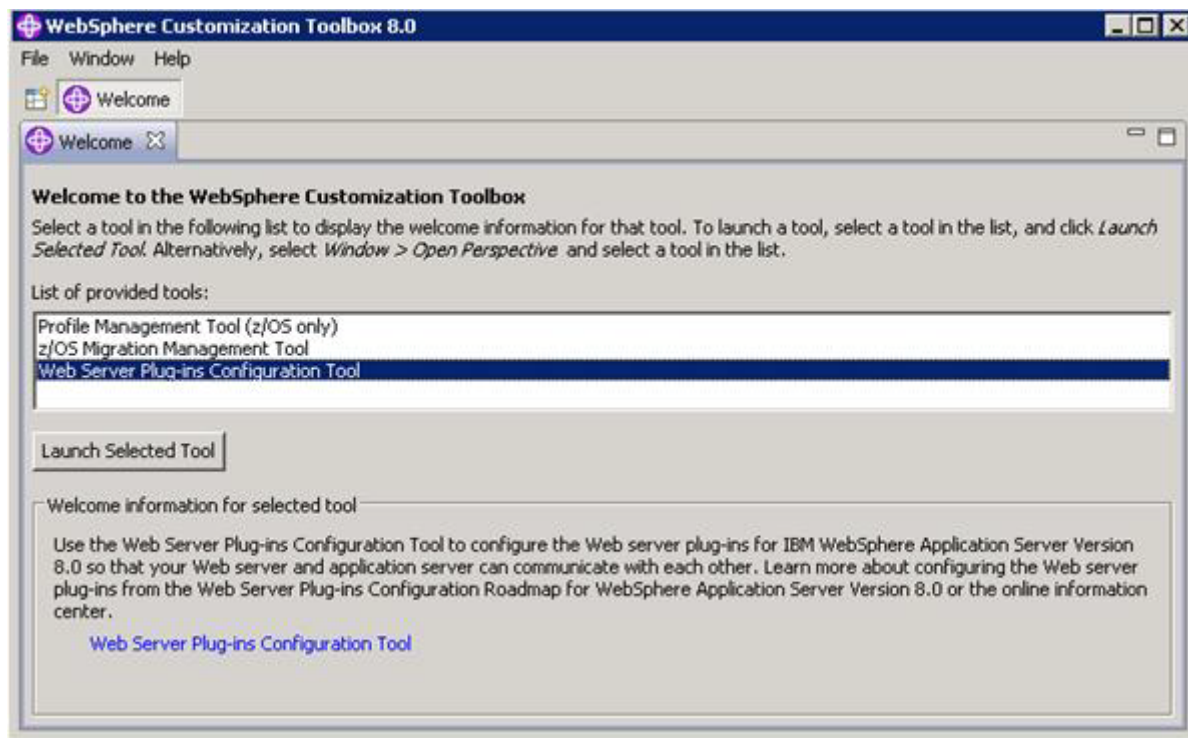


Figure 43. WebSphere Customization Toolbox 8.0

- ___ 14. On the next screen, click **Add** and enter the name and location for the web server plug-ins.



Note

In this case, it is named `dubxpcvm956` as it is being installed on the Deployment Manager computer.

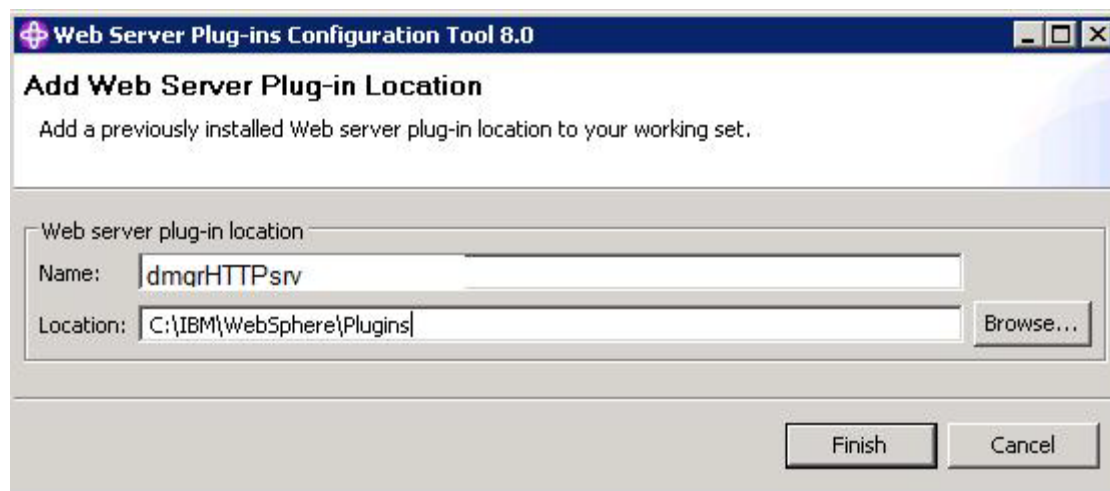


Figure 44. WebSphere Customization Toolbox 8.0 - Add Web Server Plug-in Location

15. Click **Finish** and in the resulting screen click **Create...** for Web Server Plug-in Configurations.

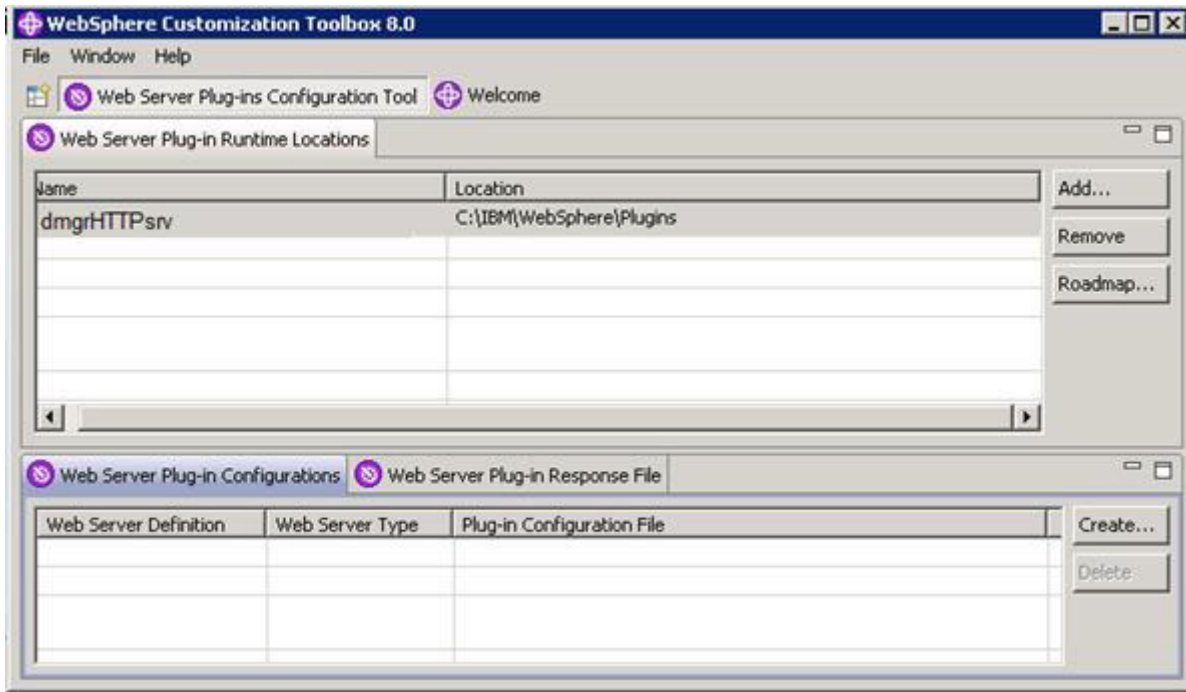


Figure 45. WebSphere Customization Toolbox 8.0 - Web Server Plug-ins Configuration Tool

16. On the Web Server Selection page, select **IBM HTTP Server V8** and click **Next** to continue.

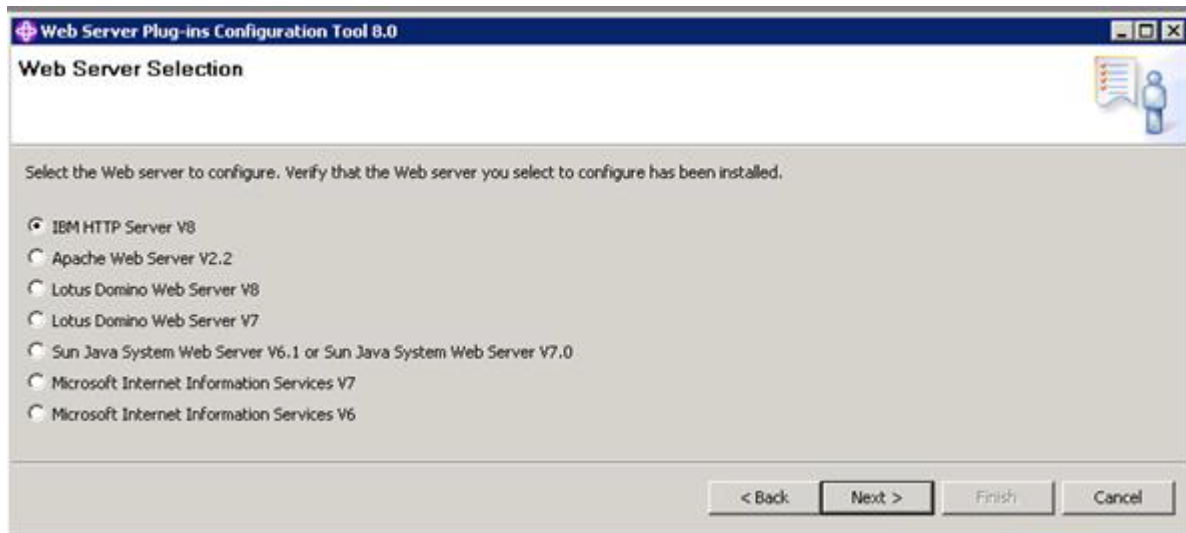


Figure 46. WebSphere Customization Toolbox 8.0 - Web Server Selection

- ___ 17. On the Web Server Configuration File Selection page, verify that the path to the `httpd.conf` file is correct and that the port is the same as set previously and click **Next**.

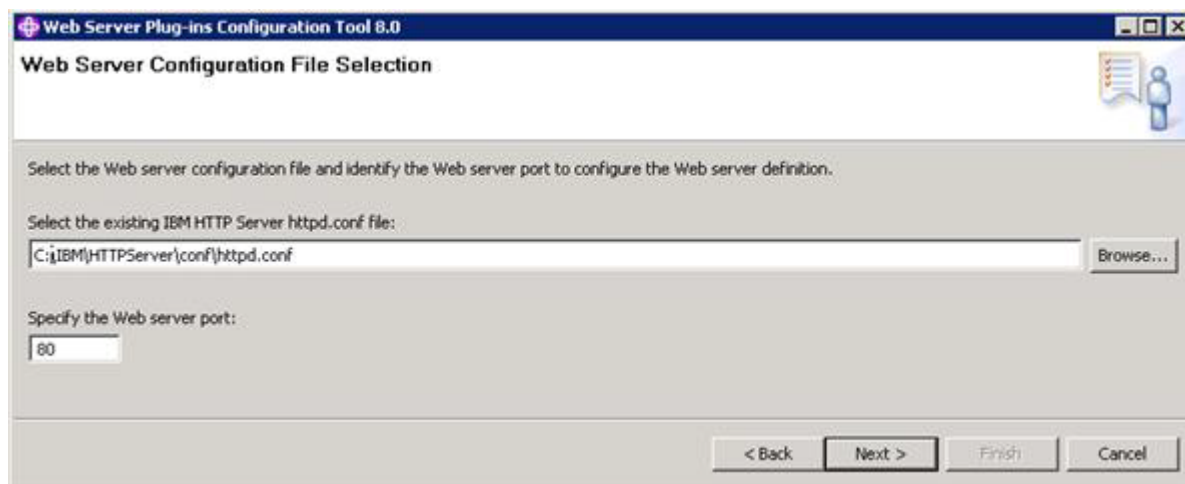


Figure 47. WebSphere Customization Toolbox 8.0 - Web Server Configuration File Selection

- ___ 18. On the Setup IBM HTTP Server Administration Server page, leave "Setup IBM HTTP Server Administration Server" enabled. In this case, the default HTTP Administration Port of 8008 is kept. Then, create a user ID and set the password. Click **Next**.

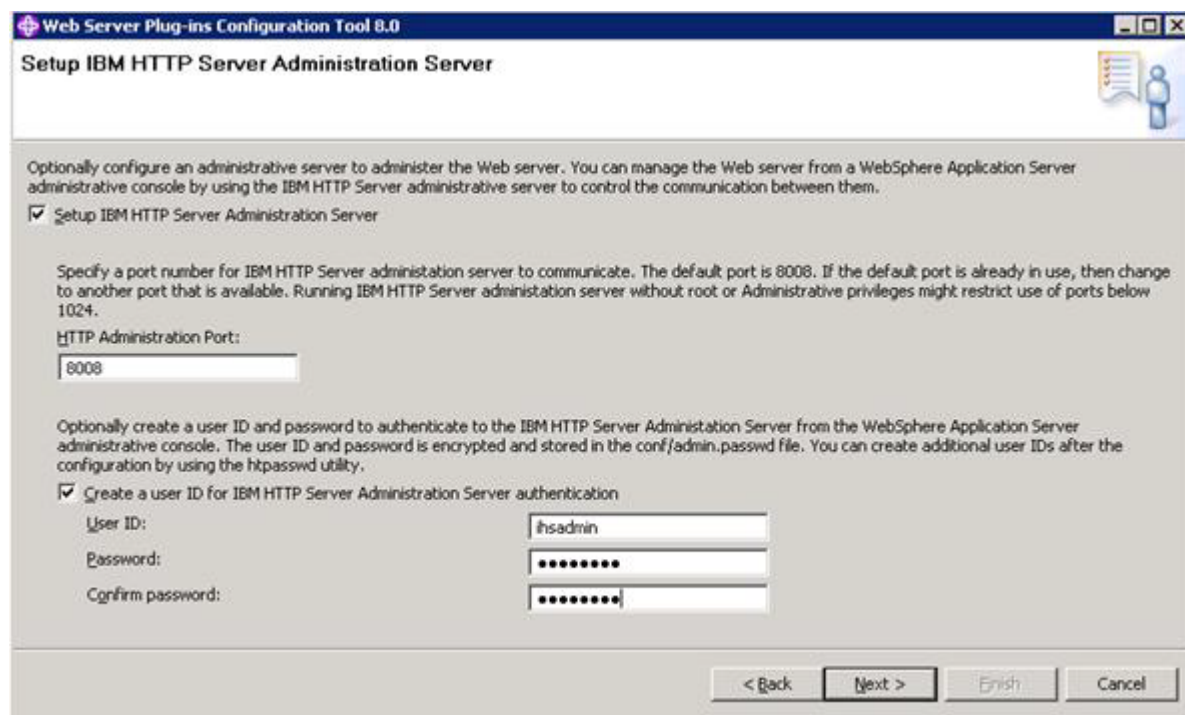


Figure 48. WebSphere Customization Toolbox 8.0 - Setup IBM HTTP Server Administration Server

- ___ 19. On the second Setup IBM HTTP Server Administration page, leave the defaults to Run IBM HTTP Server Administration Server as a Window Service and Automatic startup.

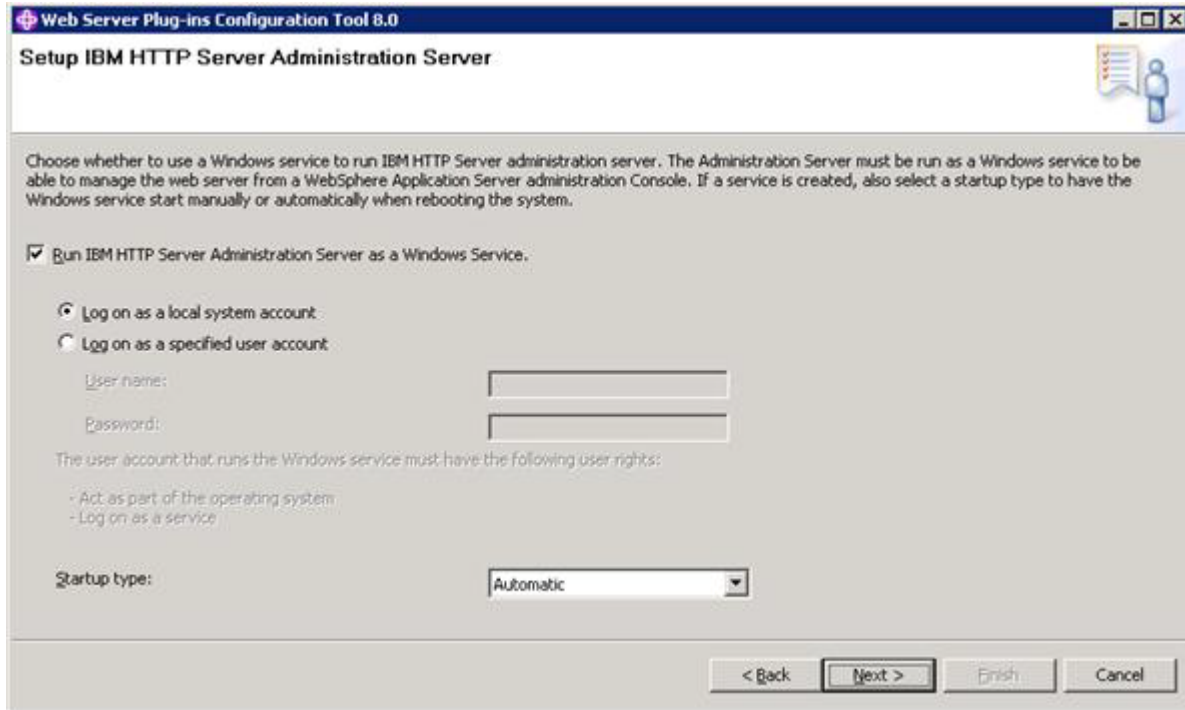


Figure 49. WebSphere Customization Toolbox 8.0 - Setup IBM HTTP Server Administration Server

- ___ 20. In Web Server Definition Name, specify a name for the Web server or use the default value, and click **Next** to continue.

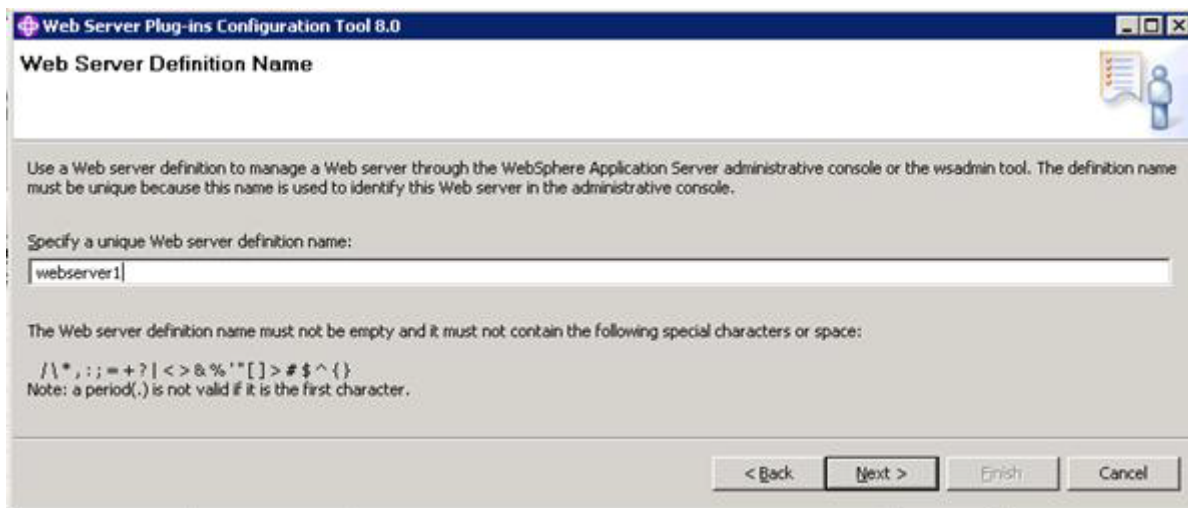


Figure 50. WebSphere Customization Toolbox 8.0 - Web Server Definition Name

- ___ 21. On the Configuration Scenario Selection page, select **Remote** and enter the fully qualified domain name of the Deployment Manager. Then, click **Next** to continue.

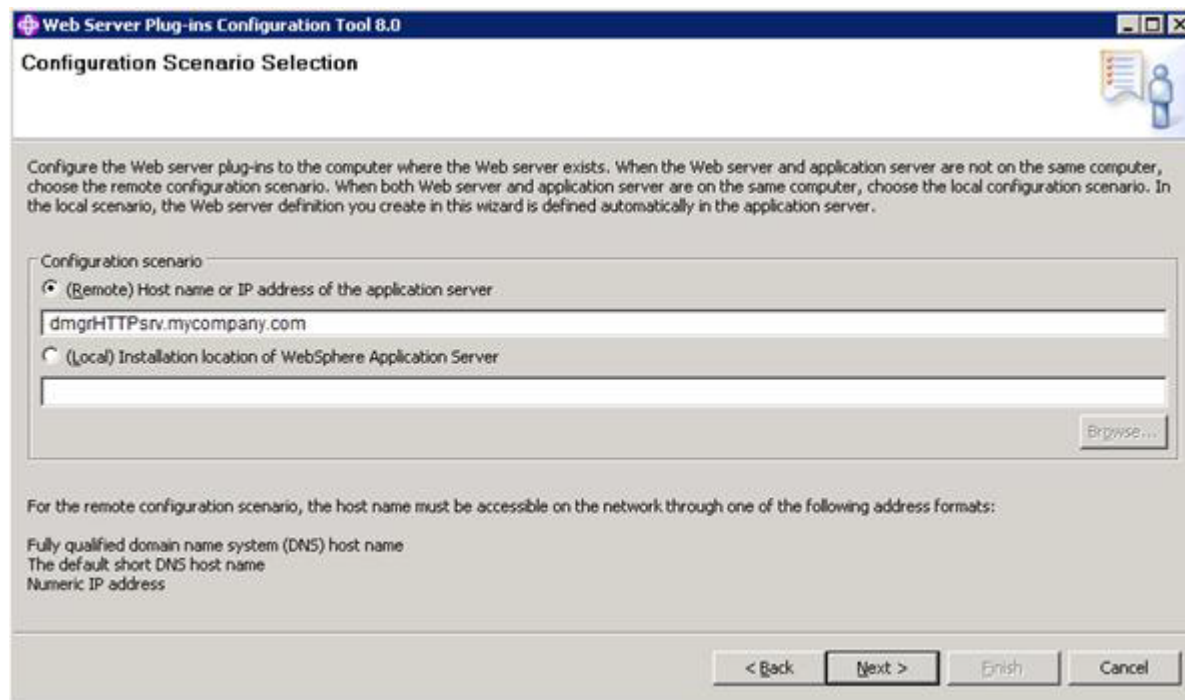


Figure 51. WebSphere Customization Toolbox 8.0 - Configuration Scenario Selection

- ___ 22. On the Plug-in Configuration Summary page, review the information and click **Configure** to continue.

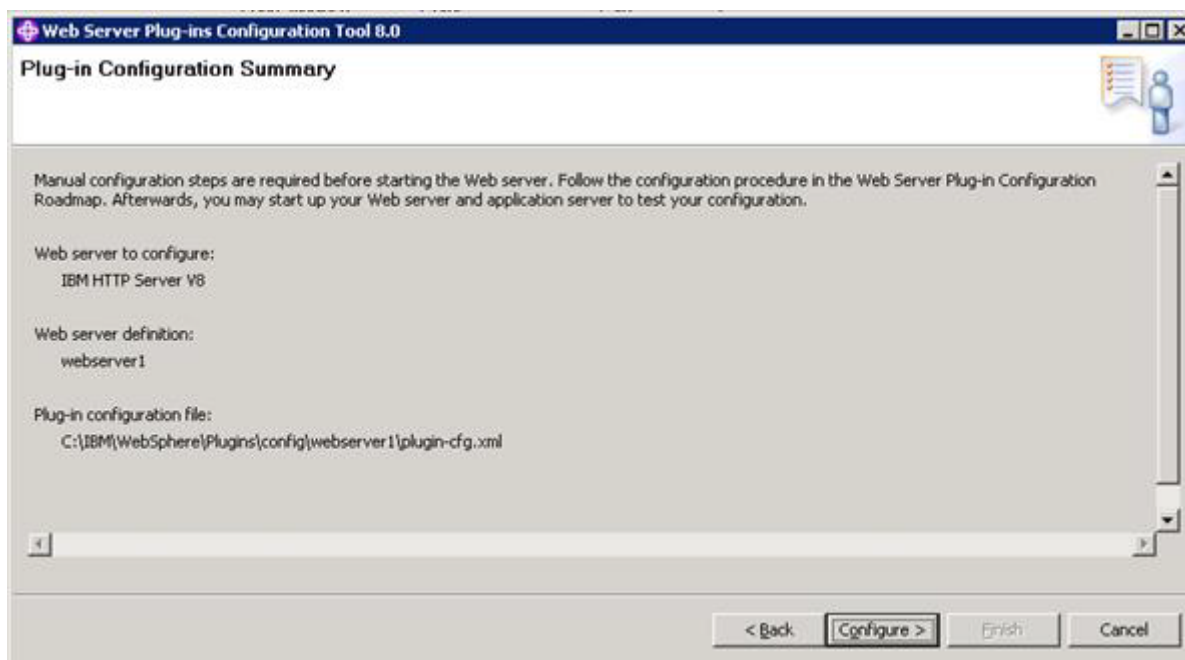


Figure 52. WebSphere Customization Toolbox 8.0 - Plug-in Configuration Summary

- ___ 23. On the Plug-in Configuration Result page, clear **Launch the plug-in configuration roadmap** and click **Finish** to continue.

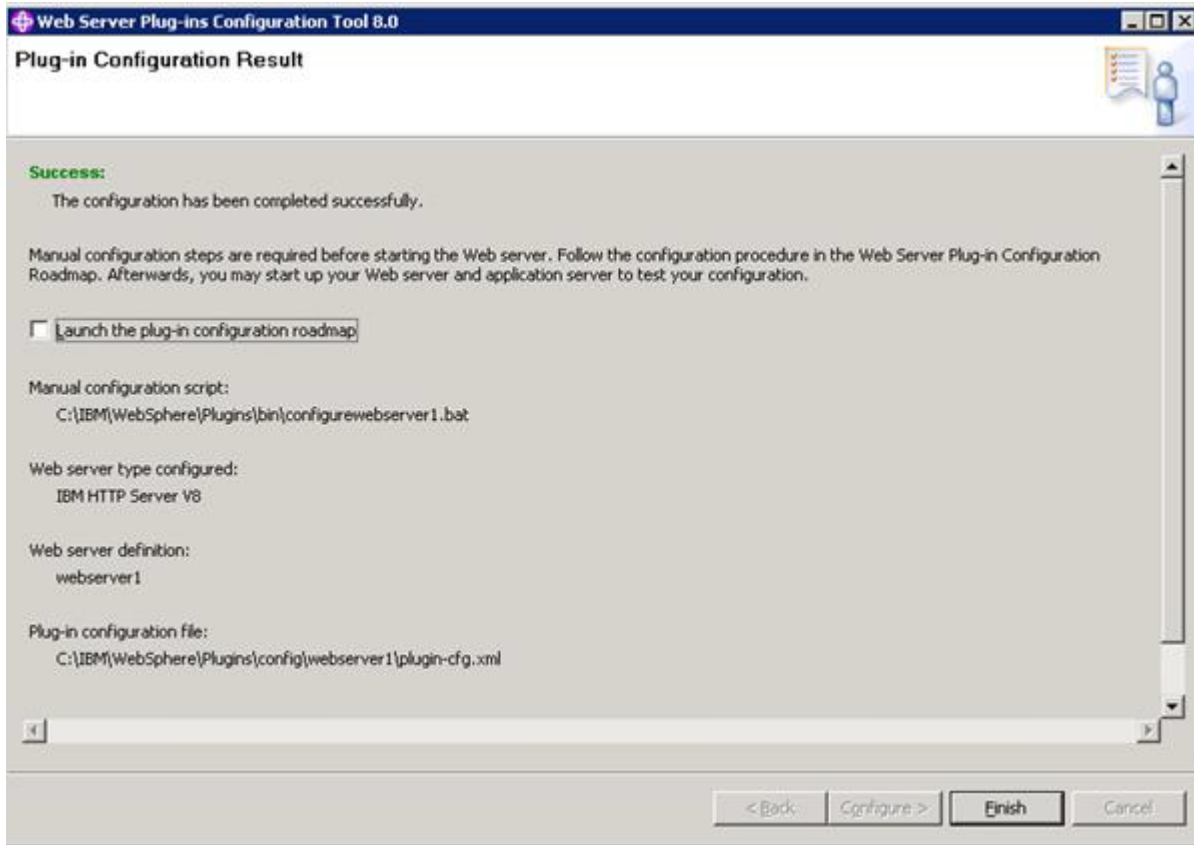


Figure 53. WebSphere Customization Toolbox 8.0 - Plug-in Configuration Result

- ___ 24. You can now close the WebSphere Customization Toolbox.

Update your Deployment Manager, Application Servers, IBM HTTP Server v8.0, plug-ins, and WebSphere Customization Toolbox to WebSphere Application Server 8.0.0.5

- ___ 1. Because WebSphere Application Server 8.0 is using the Installation Manager, updating to the latest fix pack it is easy. However, make sure that *all* servers are stopped before you install the fix packs.
- ___ 2. Start the Installation Manager and select the **Update** link.
- ___ 3. Then, check **Update all**. Only the applications that are installed on your system are updated, so you must repeat the process on DMGR, Node1, and Node2.
- ___ 4. Enter credentials to the IBM Download Location when prompted.
- ___ 5. Accept the License Agreements and click **Update** to apply the 8.0.0.5 update to each application.
- ___ 6. On your Deployment Manager *only*, you must also apply WebSphere interim fixes PM62615 and PM71430 in the same manner.

Configuring the HTTP server for SSL

Connections supports login over SSL only, so you must configure the HTTP server to accept SSL connections.

Creating a self-signed SSL certificate



Note

If you are going to use a certificate signed by a certificate authority for your deployment then, it is not necessary to generate a self-signed SSL certificate.

To accept a certificate authority signed certificate, see [Receiving a signed certificate from a certificate authority](#) at

http://pic.dhe.ibm.com/infocenter/wasinfo/v8r0/index.jsp?topic=/com.ibm.websphere.ihs.doc/info/ihs/ihs/welc_ikeymangui.html.

1. To generate a self-signed certificate, start the iKeyman "Start Key Management Utility" from the HTTP server.

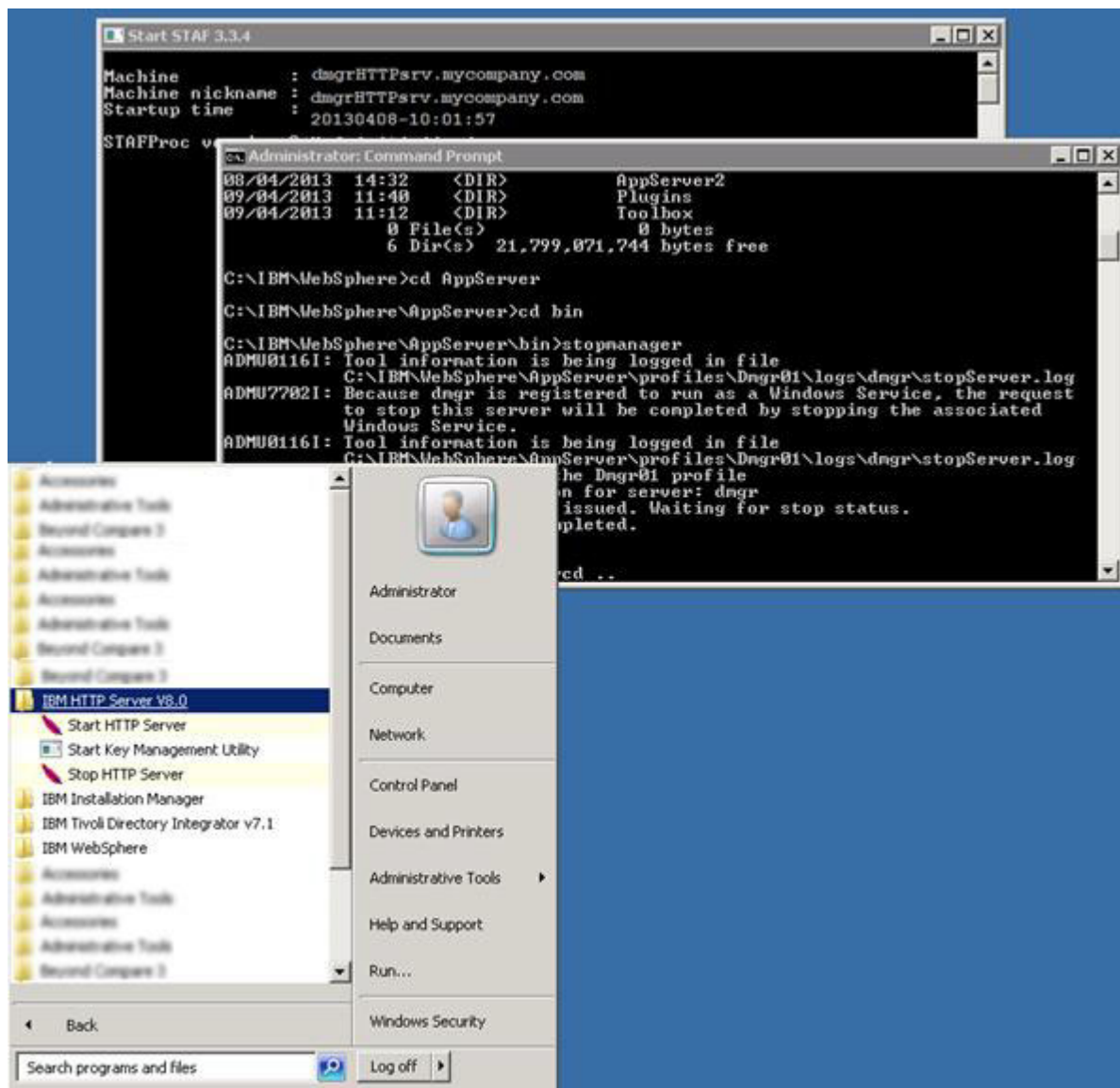


Figure 54. Starting the iKeyman Start Key Management Utility

2. From the main menu, select **Key Database File > New**, provide a name for the key database file, and set the path to where you want to store this file.

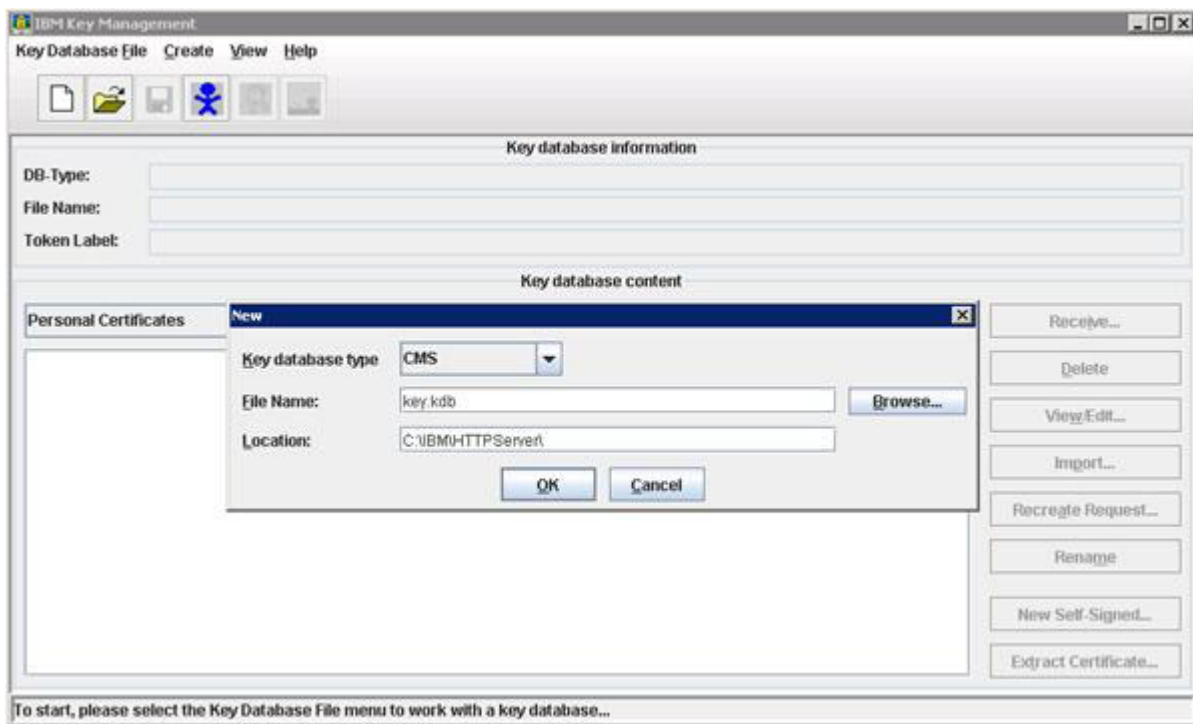


Figure 55. IBM Key Management - Key Database File - New

3. When you click **OK**, you are asked to enter a password to protect the file. Enter a password, and select **Stash password to a file**. Then, click **OK**.

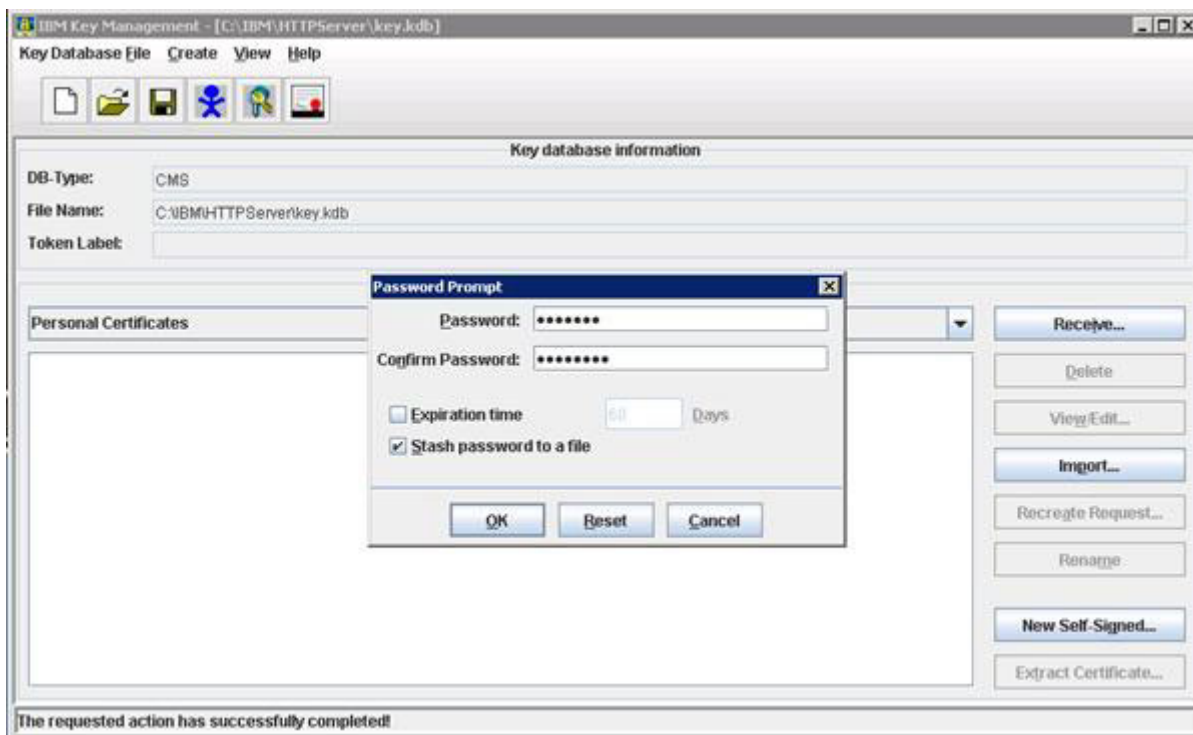


Figure 56. IBM Key Management - Password Prompt

4. The tool returns to the main panel of the Key Management utility with the new file opened. Click **New Self-Signed** and enter the required information into the Create New Self-Signed Certificate window and click **OK**.

The screenshot shows a dialog box titled "Create New Self-Signed Certificate". It contains the following fields and values:

Field	Value
Key Label	SelfSignedCertificate
Version	X509 V3
Key Size	1024
Signature Algorithm	SHA1WithRSA
Common Name (optional)	dmgrHTTPsrv.mycompany.com
Organization (optional)	
Organizational Unit (optional)	
Locality (optional)	
State/Province (optional)	
Zipcode (optional)	
Country or region (optional)	
Validity Period	365 Days
Subject Alternative Names	
Email Address (optional)	
IP Address (optional)	
DNS Name (optional)	

Buttons: OK, Reset, Cancel

Figure 57. IBM Key Management - Create New Self-Signed Certificate

- 5. The tool returns to the main panel of the Key Management utility with the new self-signed certificate shown under the Key database content panel. Exit the Key Management Utility and proceed to configuring the HTTP server to use this certificate.

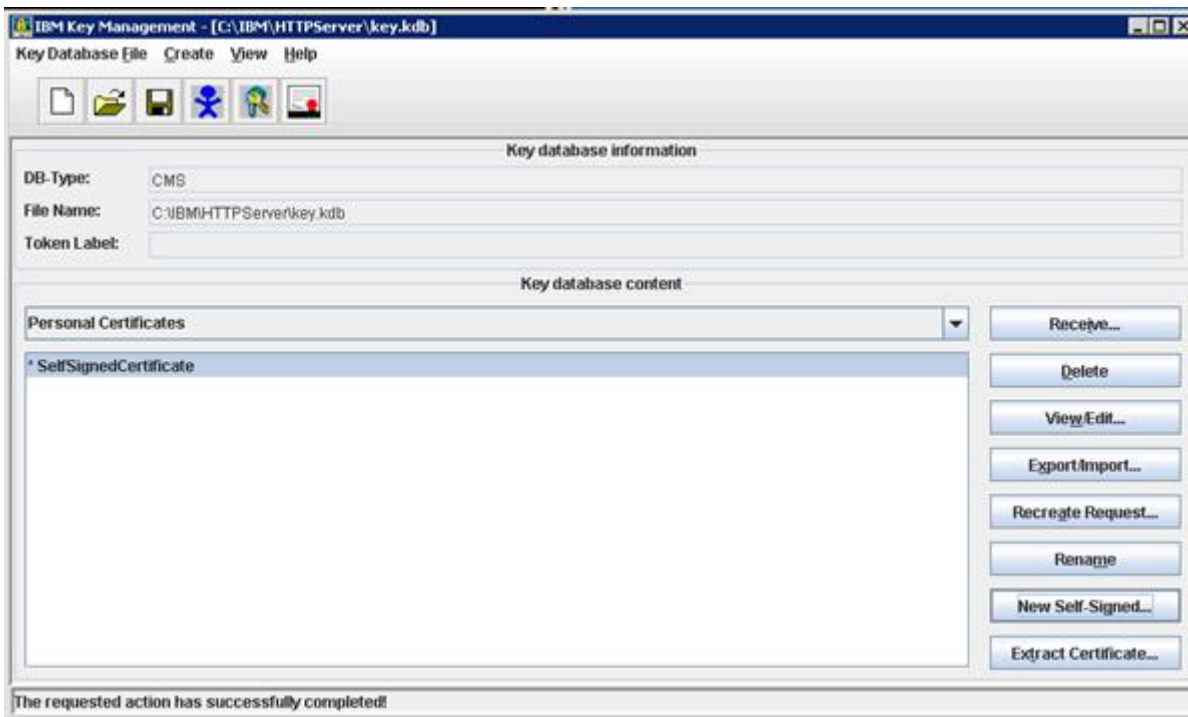


Figure 58. IBM Key Management

Adding the self-signed certificate to the HTTP server

- ___ 1. Open the `httpd.conf` file under the `C:\IBM\WebSphere\HTTPServer\conf` directory.
- ___ 2. Enter an SSL virtual host stanza before the `LoadModule was_ap22_module` and `WebSpherePluginConfig` sections:

```

LoadModule ibm_ssl_module modules/mod_ibm_ssl.so
<IfModule mod_ibm_ssl.c>
  Listen 0.0.0.0:443
  ServerName dmgrHTTPsrv.ibm.com
  <VirtualHost *:443>
    SSLEnable

    AllowEncodedSlashes On

  </VirtualHost>
</IfModule>
SSLDisable

Keyfile "c:\IBM\WebSphere\Plugins\config\dmgrHTTPsrv\dmgrHTTPsrv.kdb"
SSLStashFile "c:\IBM\WebSphere\Plugins\config\dmgrHTTPsrv\dmgrHTTPsrv.sth"

```

- ___ 3. Save the file and restart the server. The server should now allow SSL connections.
- ___ 4. Open the server URL to test.

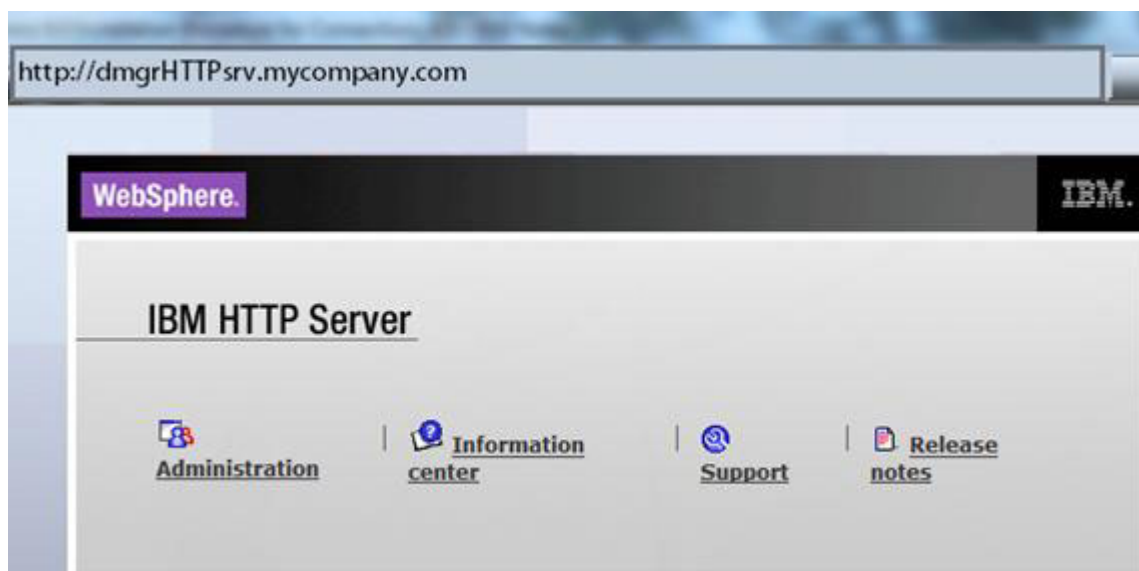


Figure 59. Server URL

Enable security on your Deployment Manager

The final step to complete the WebSphere Base Configuration is to add the LDAP repository.

1. Log on to your admin console as your WebSphere Administration User defined earlier at the URL:

`http://<yourWebSphereDMGR>.<yourorganization.com>:9043/ibm/console/logon.jsp`

2. Ensure that Enable administrative security and Enable application security are selected. Also, ensure that the user account is set to federated repositories.

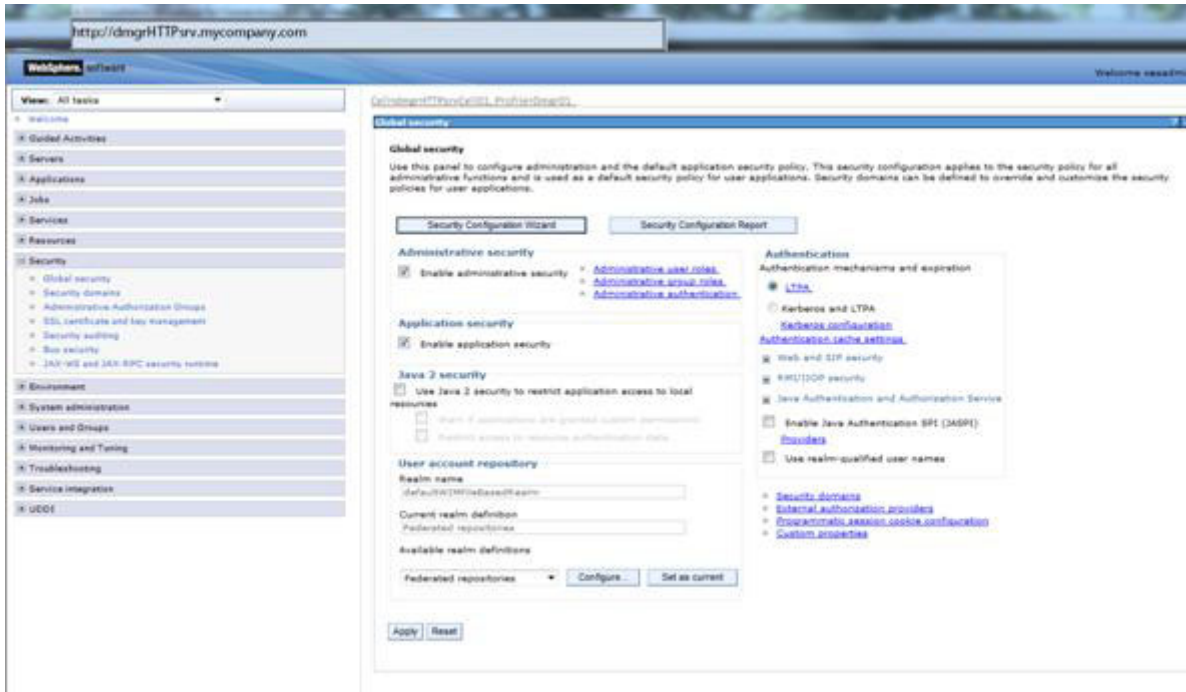


Figure 60. Deployment Manager - Global security

- ___ 3. Select **Security > Web and SIP security > General Settings**. Ensure that **Use available authentication data** is ticked. Click **Apply** and **Save**.

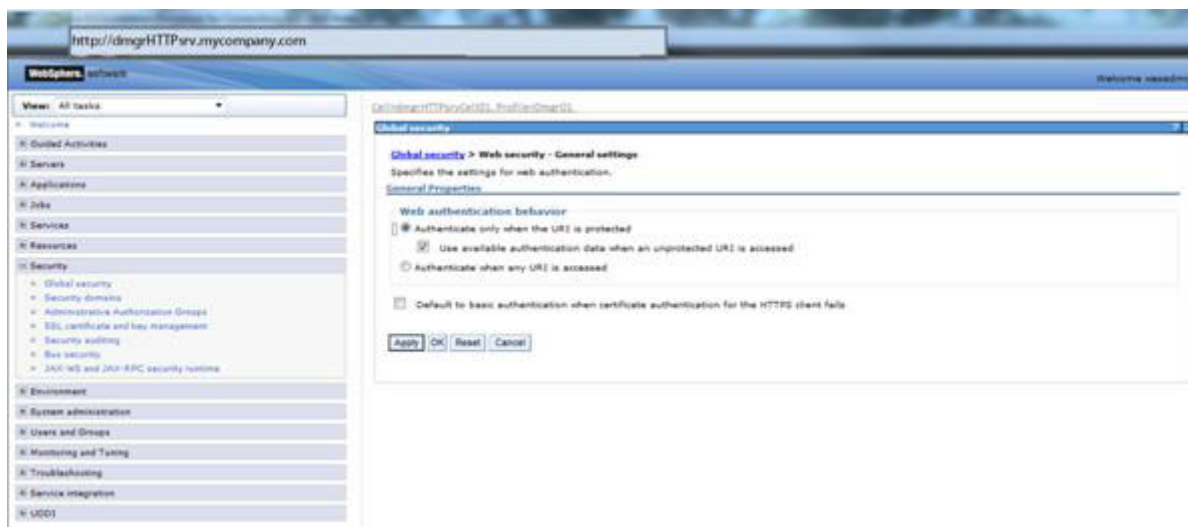


Figure 61. Deployment Manager - Global security - Web and SIP security - General Settings

- ___ 4. Next, select **Security > Global security > Web and SIP security > Single sign-on (SSO)**. Ensure that the Interoperability Mode is selected and enter the domain name. Also, enter the LTPA cookie names as `LtpaToken` and `LtpaToken2` and **Apply** and **Save**.

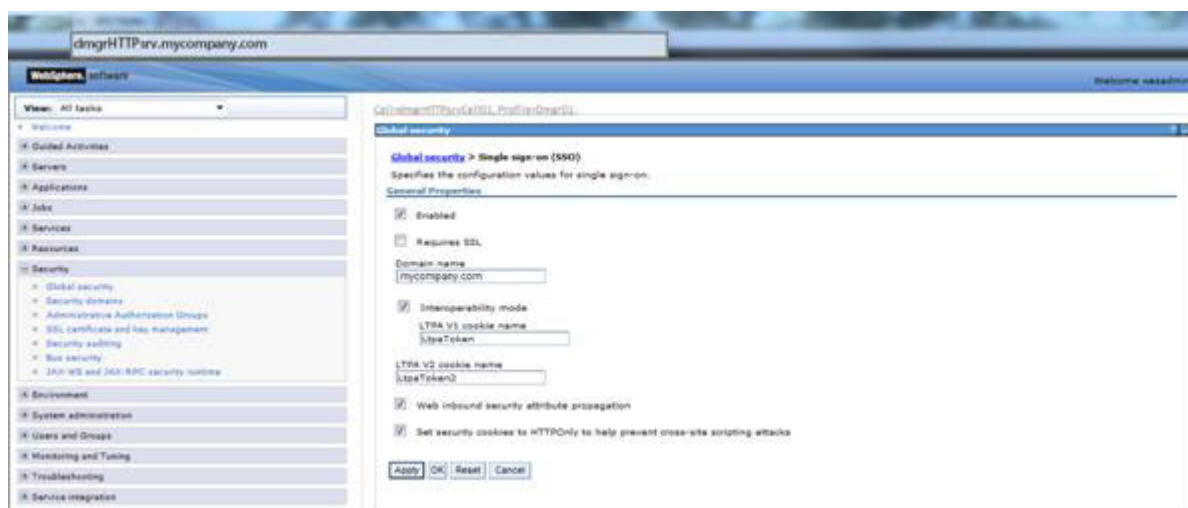


Figure 62. Deployment Manager - Global security - Web and SIP security - General Settings - Single sign-on (SSO)

- ___ 5. You must now federate the LDAP repository. Select **Security > Global Security** and click **Configure**.

6. Select **Add Base Entry to Realm**.

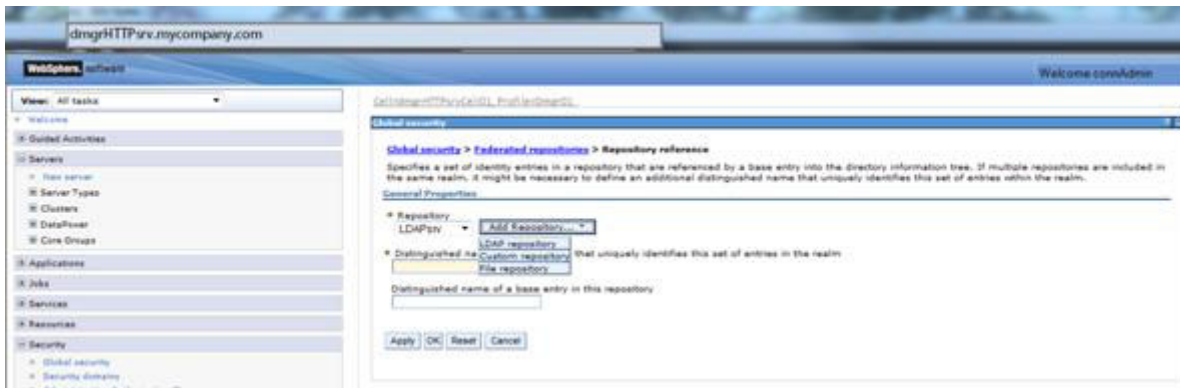


Figure 63. Deployment Manager - Security - Global Security - Adding base entry to realm

7. Then, select **Add Repository** followed by LDAP repository. Enter an identifier, host name, bind distinguished name, and bind password for your LDAP repository. Then, click **OK**.

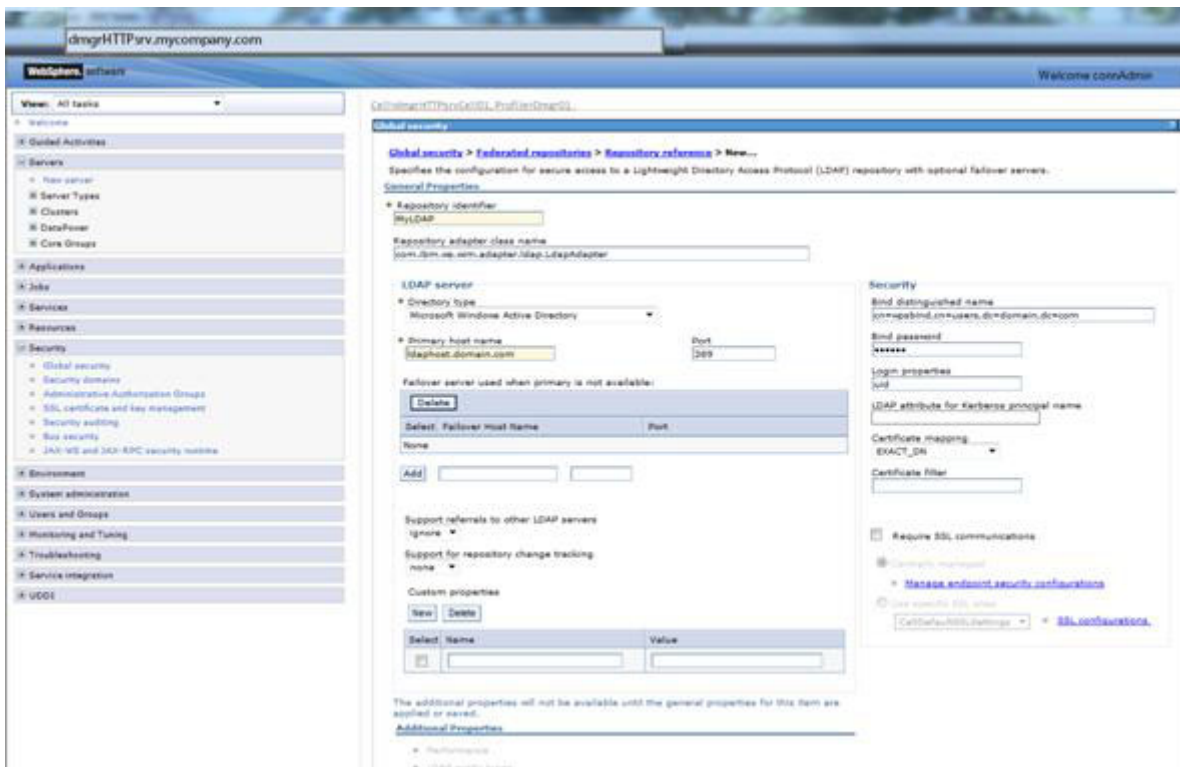


Figure 64. Deployment Manager - Security - Global Security - Adding repository

8. You are then asked to enter the base entry. When done, click **Apply** and **Save**.

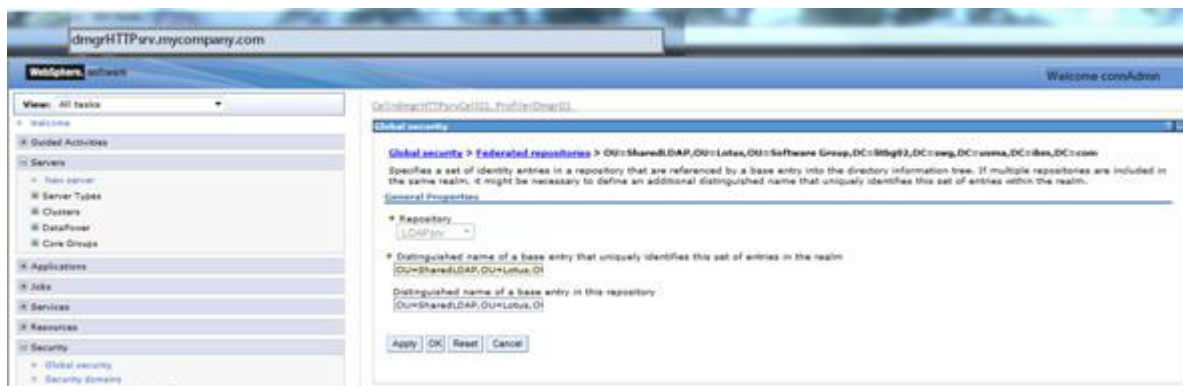


Figure 65. Deployment Manager - Security - Global Security - Adding repository and the base entry

9. Restart your Deployment Manager and Node agents.
10. Then, to check that security is enabled correctly, log in to your admin console again. Select **Users and Groups > Administrative User Roles**. Select **Add**, select the Administrator role, search for the user to use as your Connections Administrator, and add that user to the Mapped to Role.

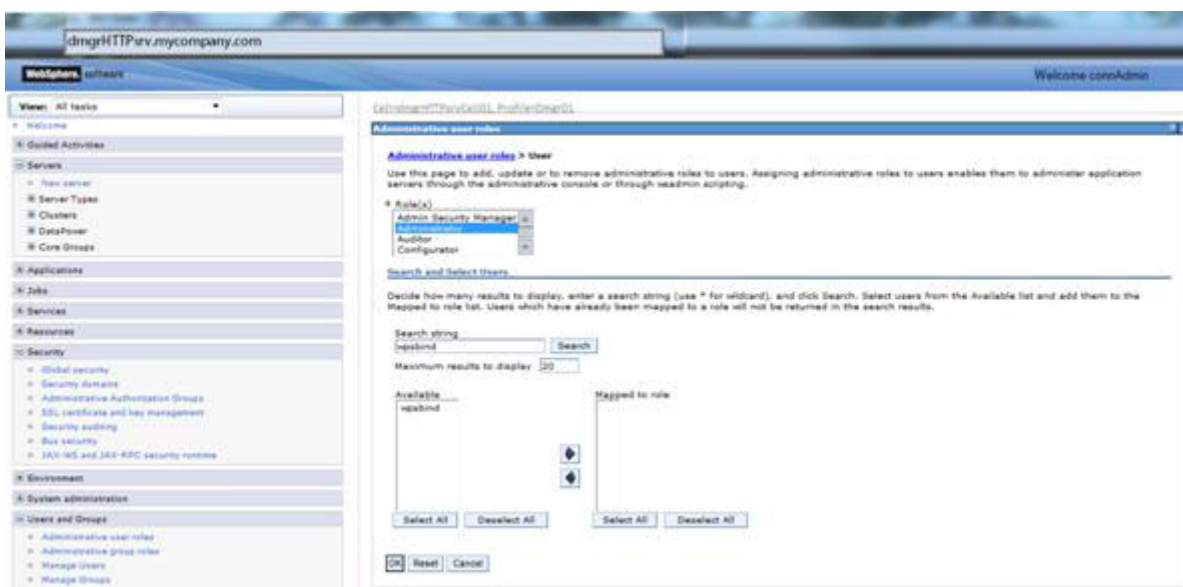


Figure 66. Deployment Manager - Administrative user roles

11. Select **OK**. Log out and log back in again as the user you chose, to ensure that it is working.



Important

You can run this test by using any user from the LDAP repository. It must be the user that is specified during the Connections installation and not the default WebSphere Administration User that is defined during the Deployment Manager installation.



Note

Recommendation

Back up your WebSphere Base Configuration, that is, Deployment Manager, Node1, and Node2 computers before you proceed with the Connections installation.

You now move to your database server.

Database server and Tivoli Directory Integrator

Create Connections databases on Microsoft SQL Server

1. It is assumed that Microsoft SQL Server is already installed and running on a separate computer. To enable database connectivity from Connections, start the **SQL Server Configuration Manager** and expand **SQL Server Network Configuration**. Select **Protocols for ICINST1**. Right-click **Named Pipes** and select **Enable**.

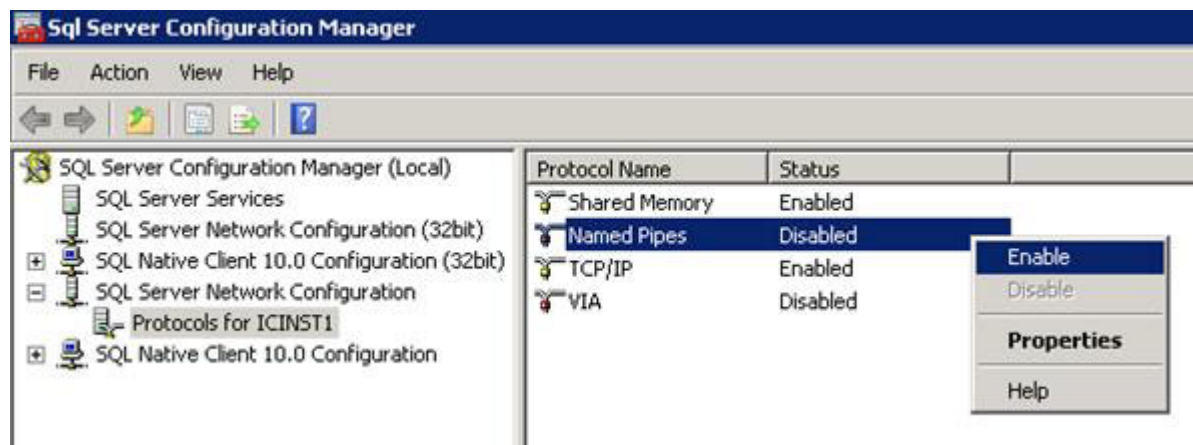


Figure 67. SQL Server Configuration Manager

2. The default port for SQL server is 1433. If your server is configured for dynamic ports, you must note it for the Connections installation. From the same location, select **TCP/IP** and right click to select **Properties**. Click **IP Addresses** from the resulting window and scroll to the bottom. Note the TCP Dynamic Ports value, in this case 65053.

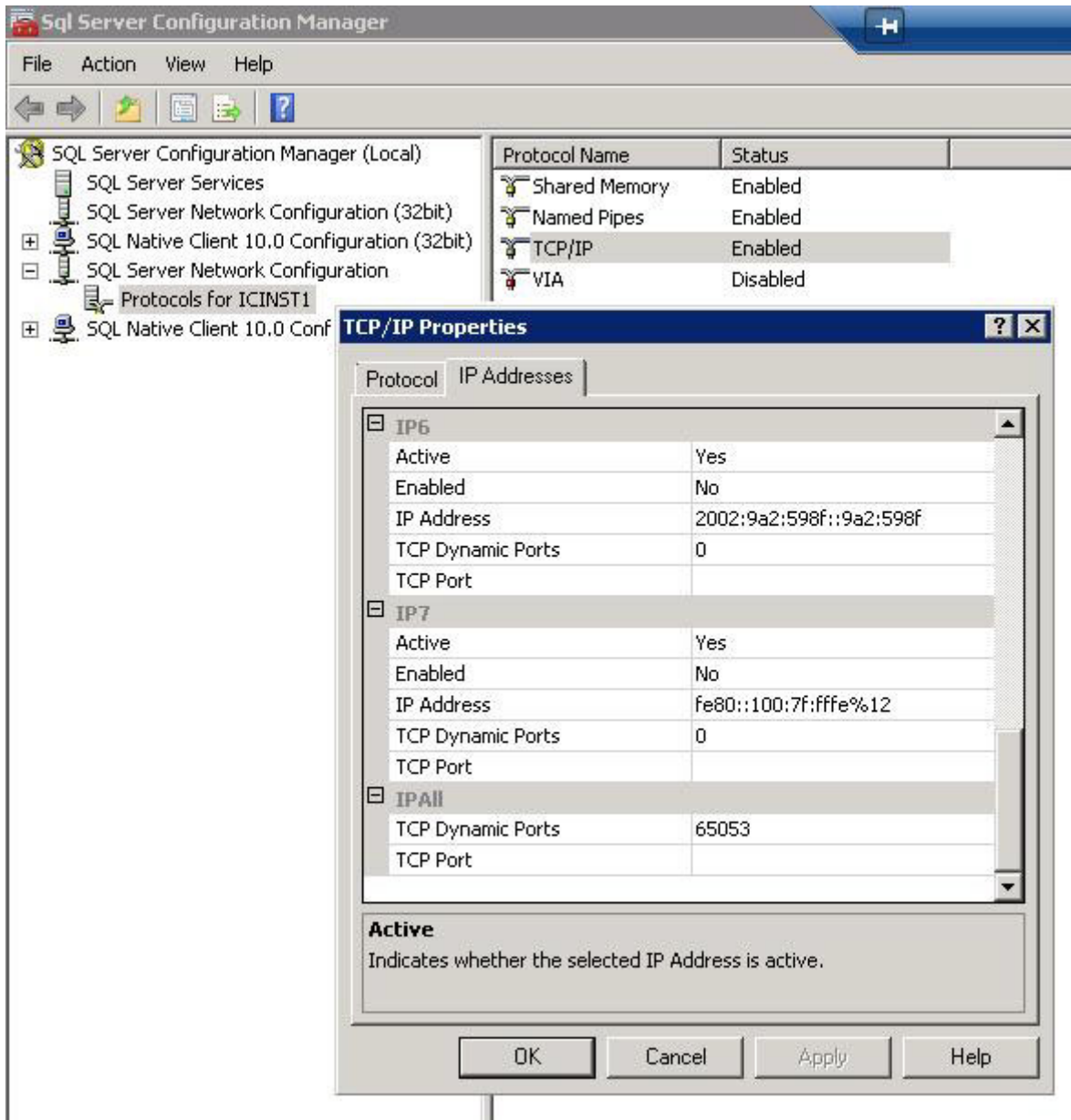


Figure 68. SQL Server Configuration Manager - TCP/IP Properties

- ___ 3. Now extract the IBM Connections 4.5 installation media and locate the Wizards folder. Start dbWizard.bat, which starts the database wizard.

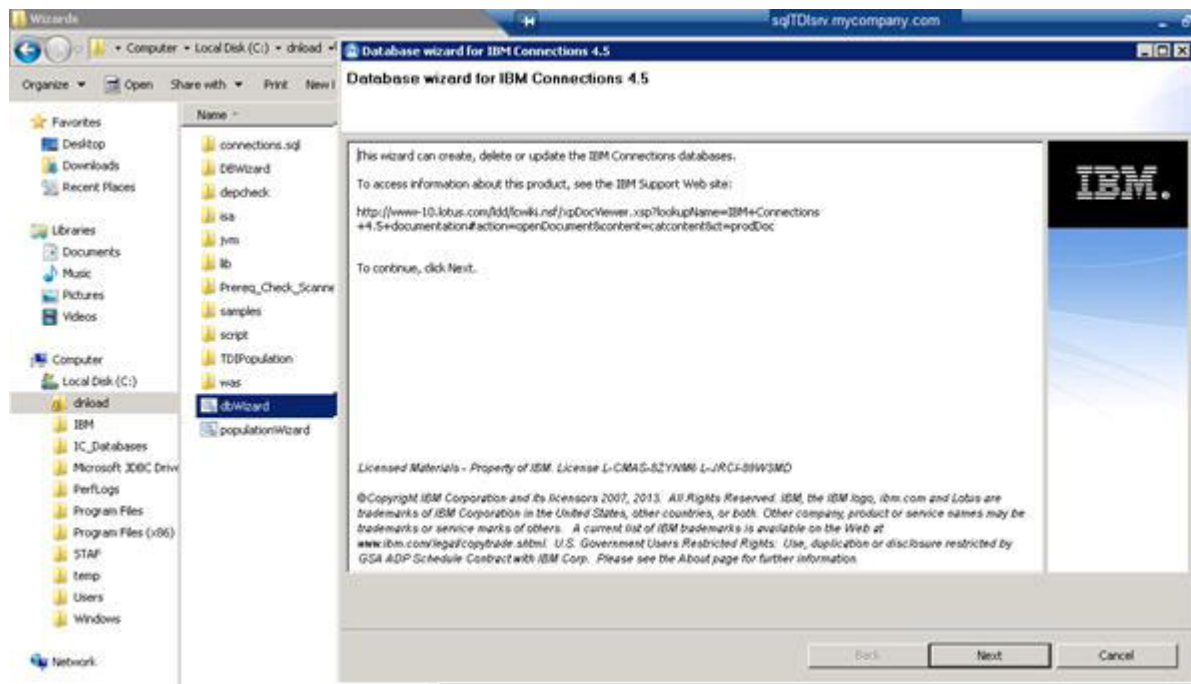


Figure 69. Database wizard for IBM Connections 4.5

- ___ 4. On the Database task selection screen, choose **Create** and click **Next**.

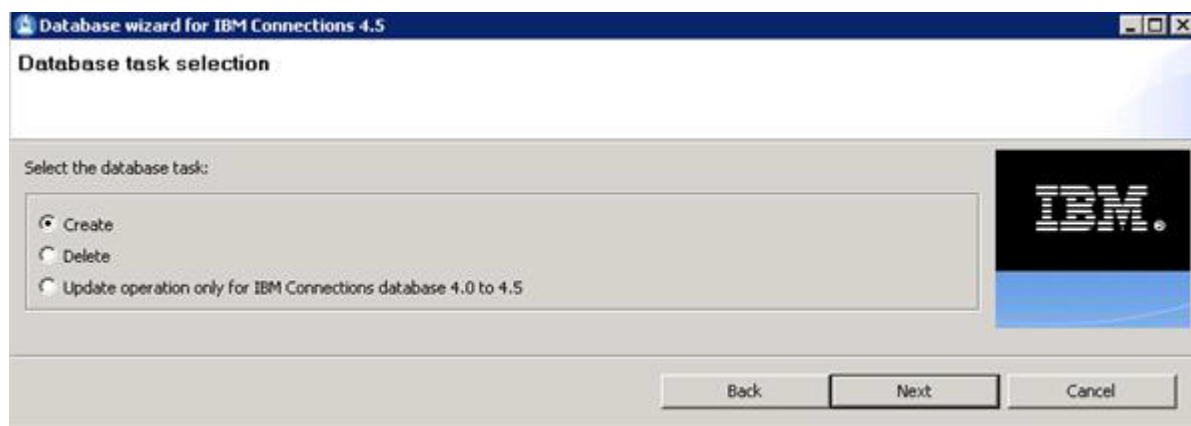


Figure 70. Database wizard for IBM Connections 4.5 - Database task selection

5. On the Database selection screen, choose **SQL Server Enterprise Edition** and enter the details for the installation location and database instance.

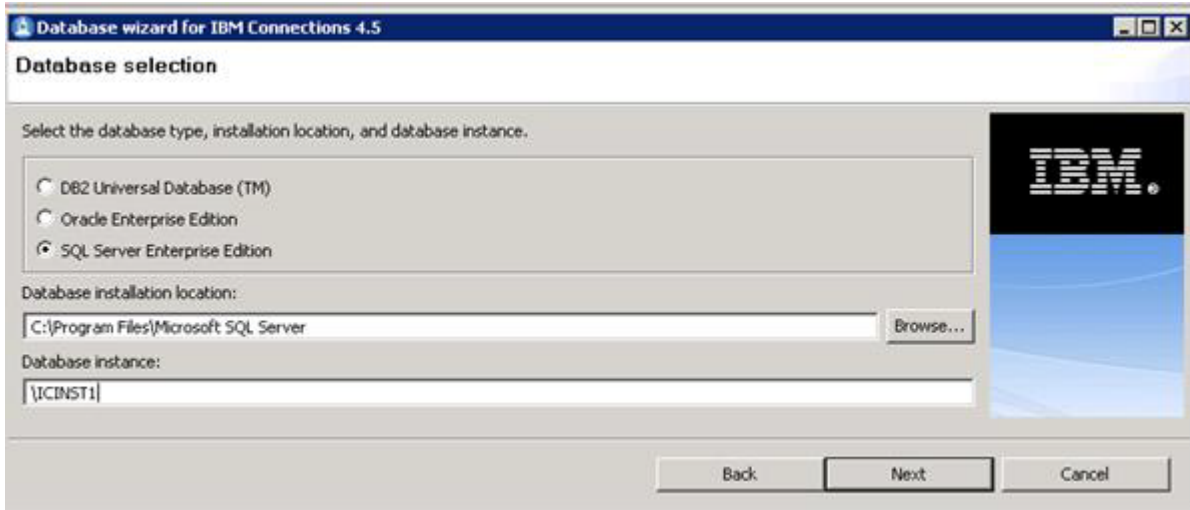


Figure 71. Database wizard for IBM Connections 4.5 - Database selection

6. On the Application selection screen, choose **Select All** and click **Next**.

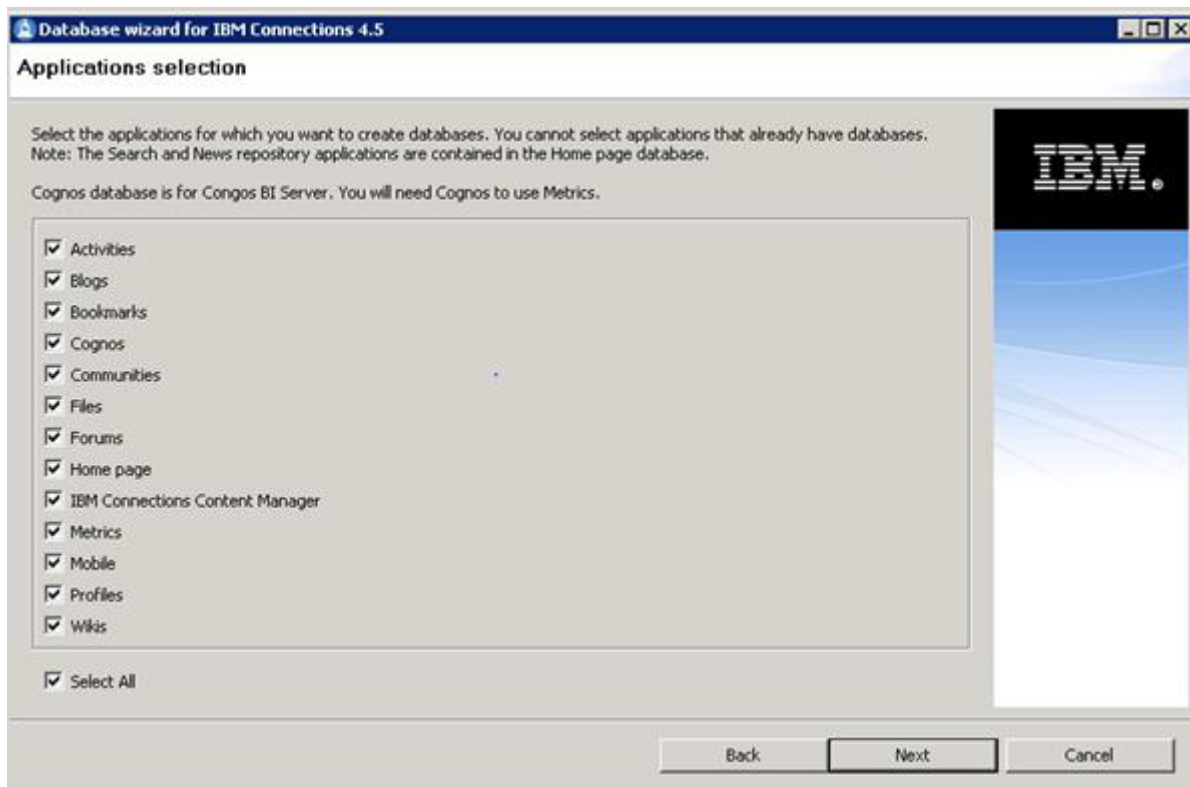


Figure 72. Database wizard for IBM Connections 4.5 - Applications selection

7. Select **Create** from the summary screen followed by **Execute**.

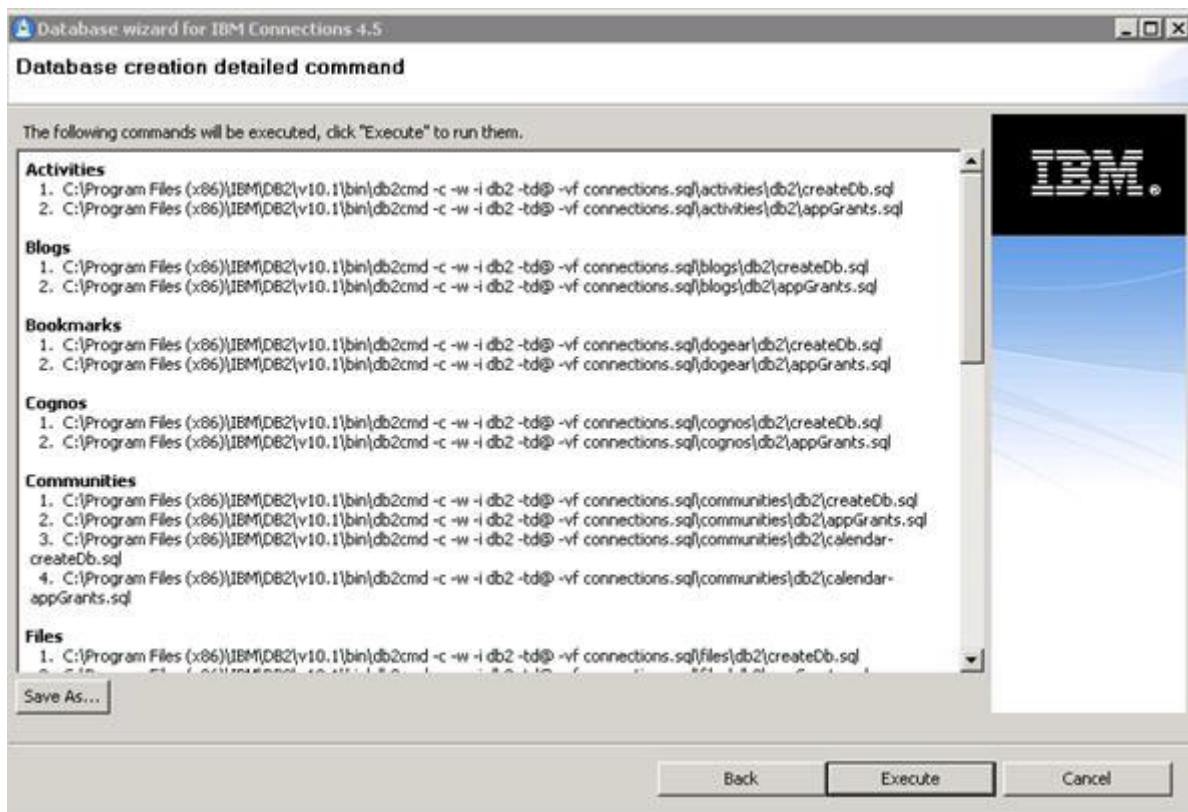


Figure 73. Database wizard for IBM Connections 4.5 - Database creation detailed command

8. Review the Post configuration task summary, click **Finish**, and then check logs for any errors.

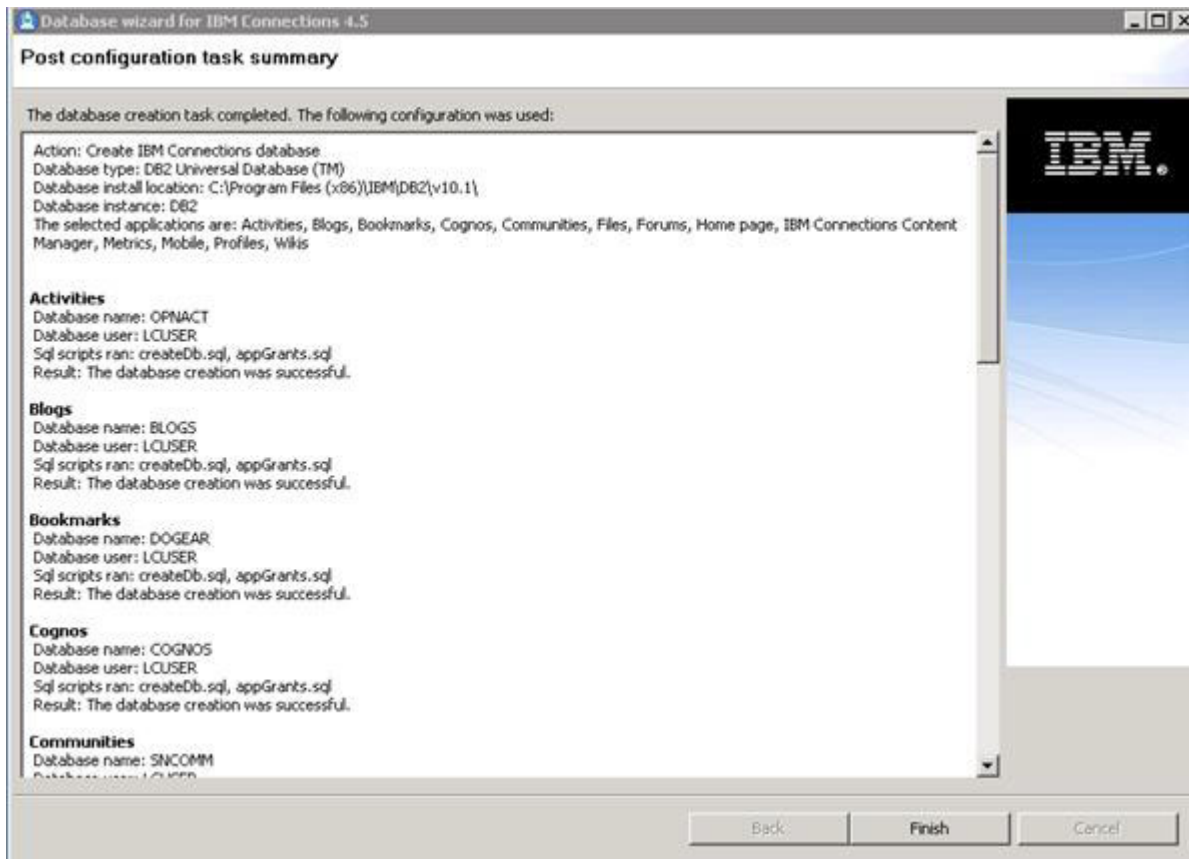


Figure 74. Database wizard for IBM Connections 4.5 - Post configuration task summary

You should now see all of the databases in the SQL Server Management Studio.

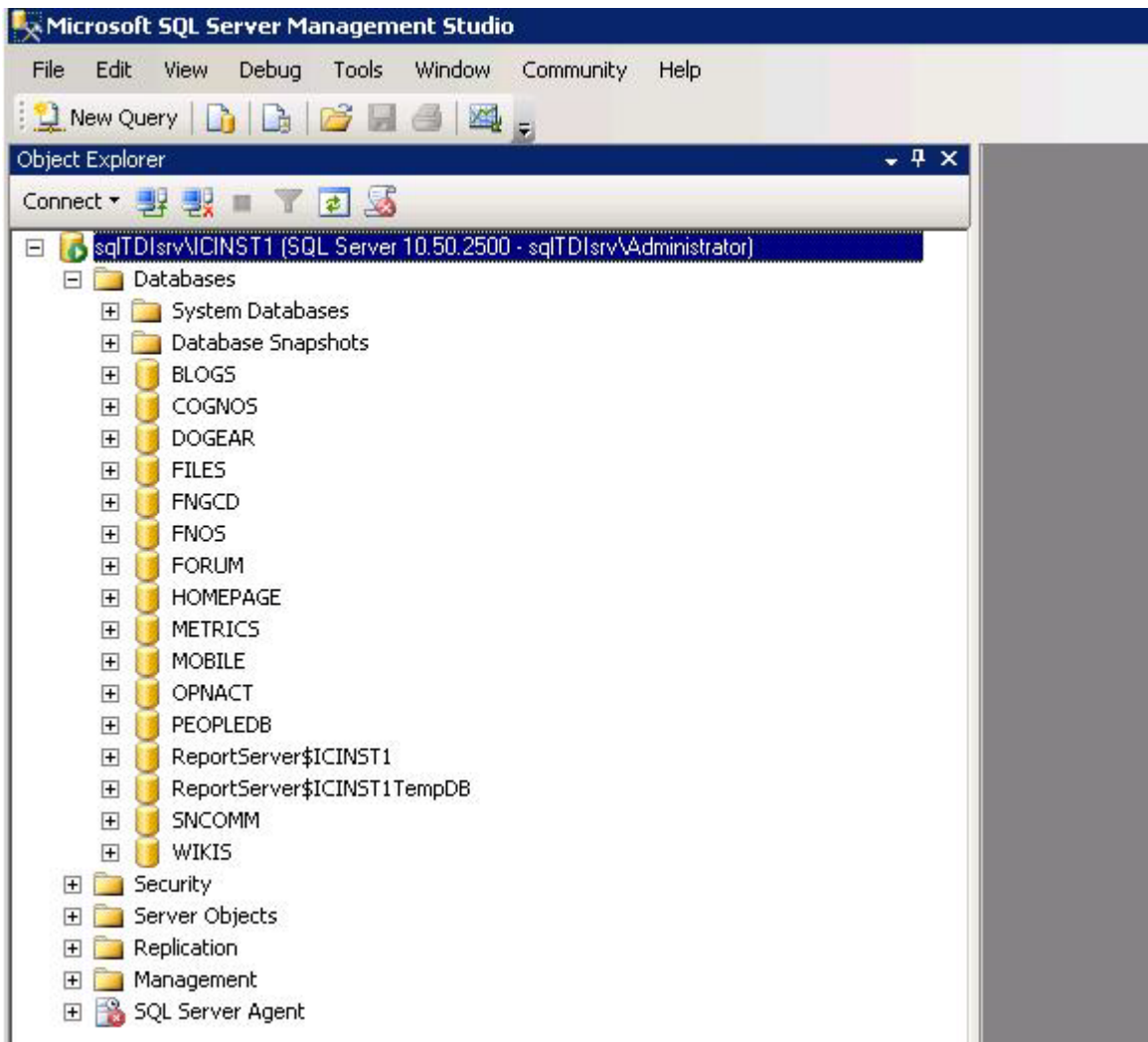


Figure 75. Microsoft SQL Server Management Studio

IBM Tivoli Directory Integrator 7.1 installation

The installation of Tivoli Directory Integrator is needed so that the Connections Profiles database can be populated with LDAP information.



Note

Recommendation

Install it on the same computer as your database server.

1. Extract the installation media and run the launchpad application. The welcome screen opens.

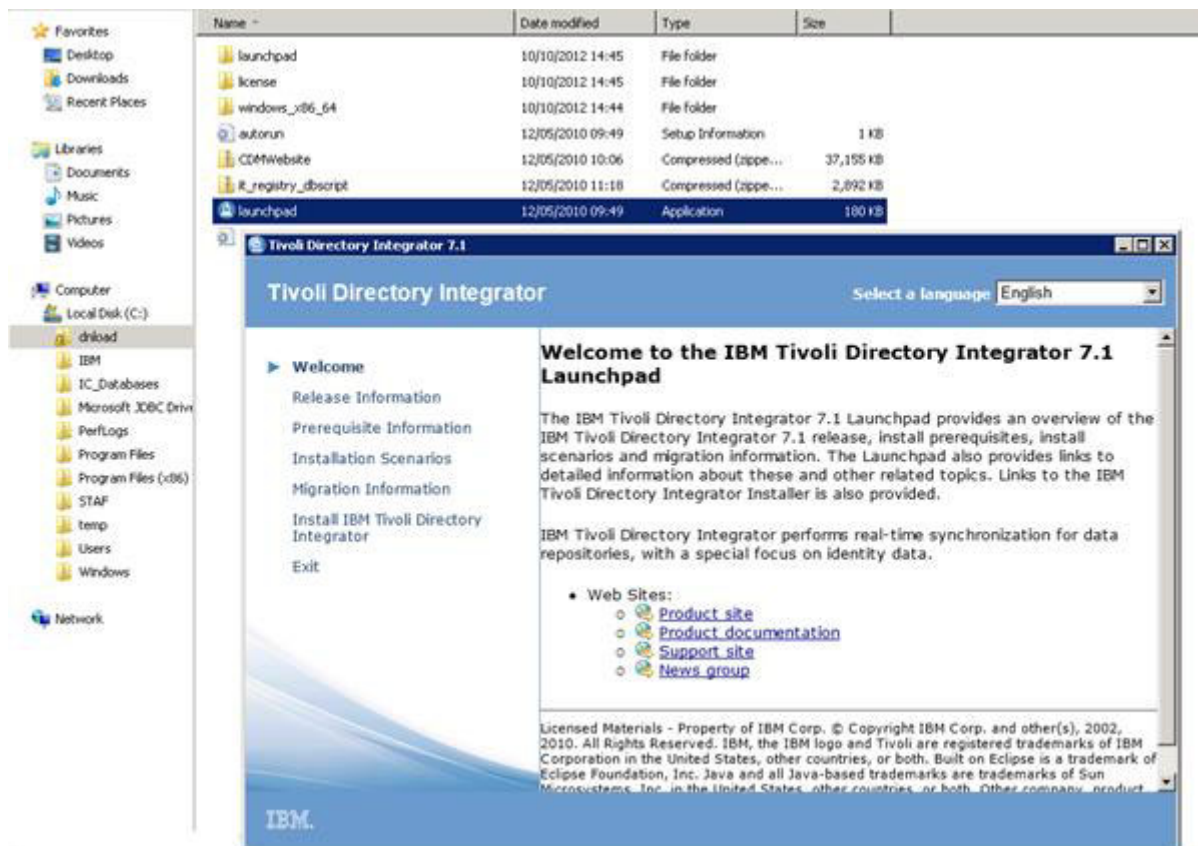


Figure 76. Tivoli Directory Integrator 7.1 - Welcome screen

2. Select **Install IBM Tivoli Directory Integration** from the left navigator followed by “Launch the product installation: Tivoli Directory Integrator 7.1 Installer”.



Figure 77. Tivoli Directory Integrator 7.1 - IBM Tivoli Directory Integrator 7.1 Installation

3. Select your language and click **OK**. On the Introduction screen, click **Next** to continue.

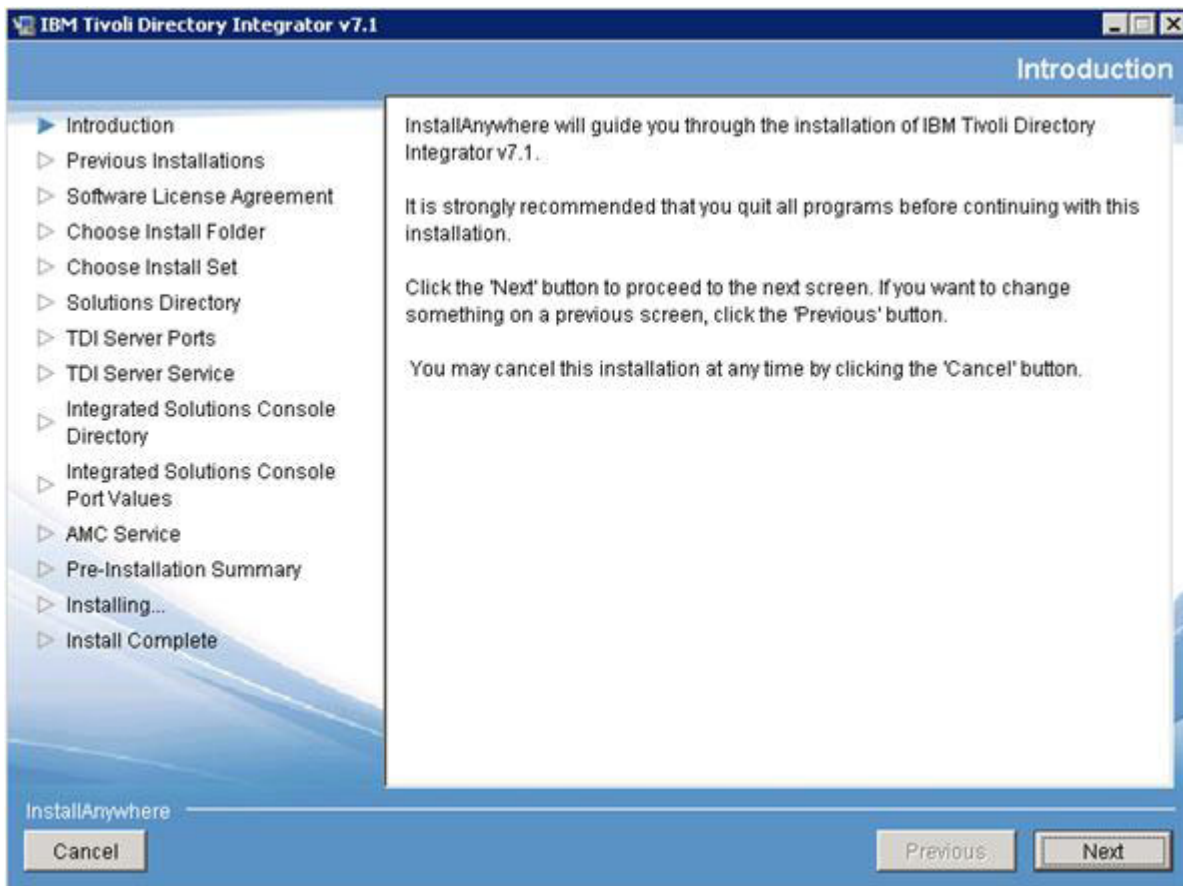


Figure 78. Tivoli Directory Integrator 7.1 - Introduction

4. Accept the license agreement and click **Next** to get to the installation location. Enter the installation path and click **Next**.

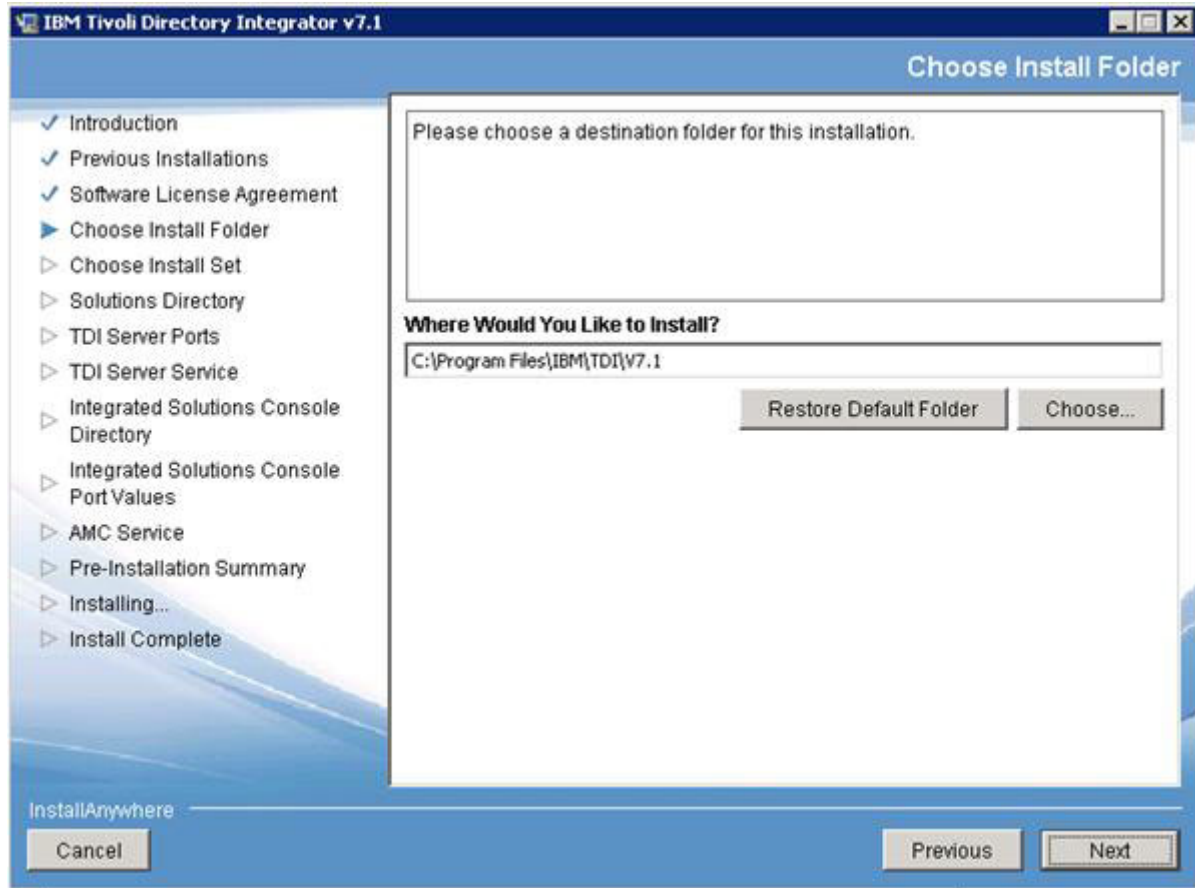


Figure 79. Tivoli Directory Integrator 7.1 - Choose Install Folder

5. Select **Typical install** and at the next screen select the **Do not specify - use current working directory at startup time** option for the Solutions Directory.

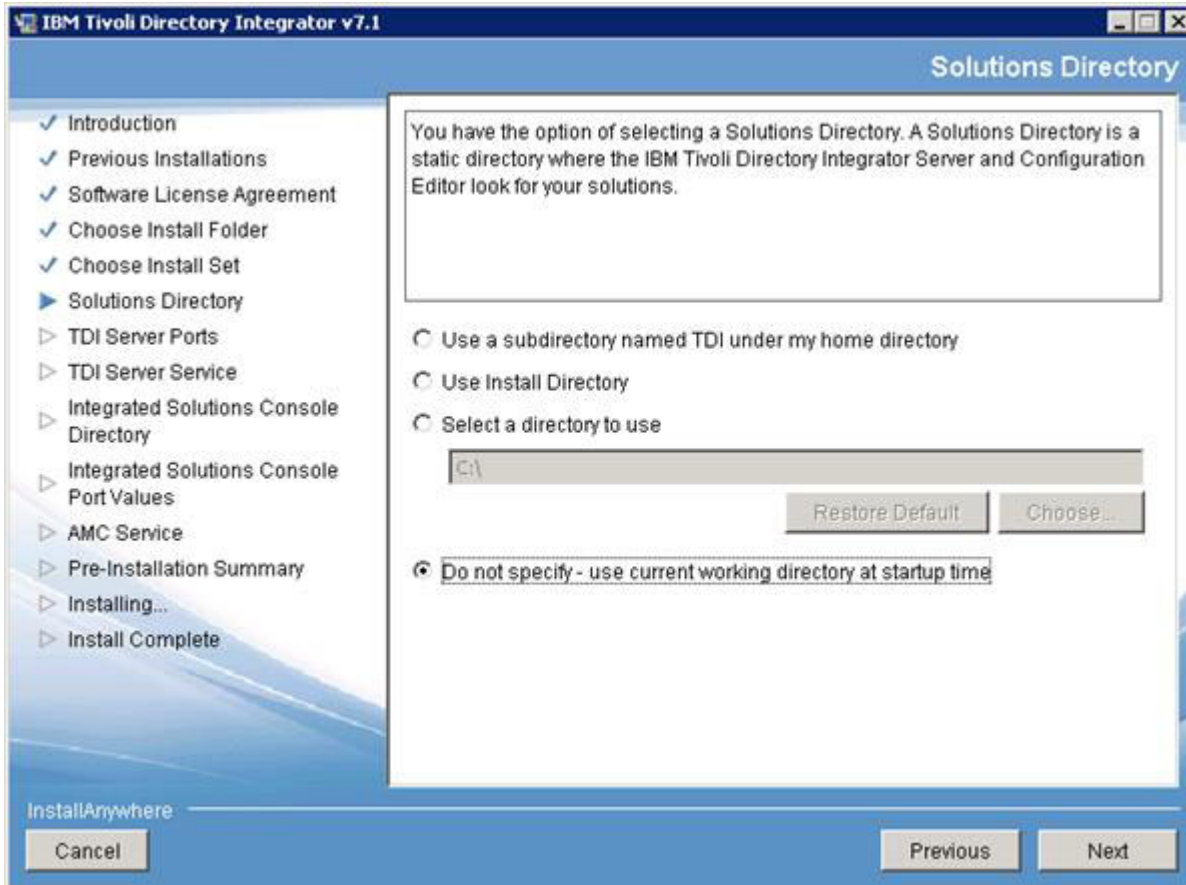


Figure 80. Tivoli Directory Integrator 7.1 - Solutions Directory

- ___ 6. Use the default ports and click **Next** to continue.

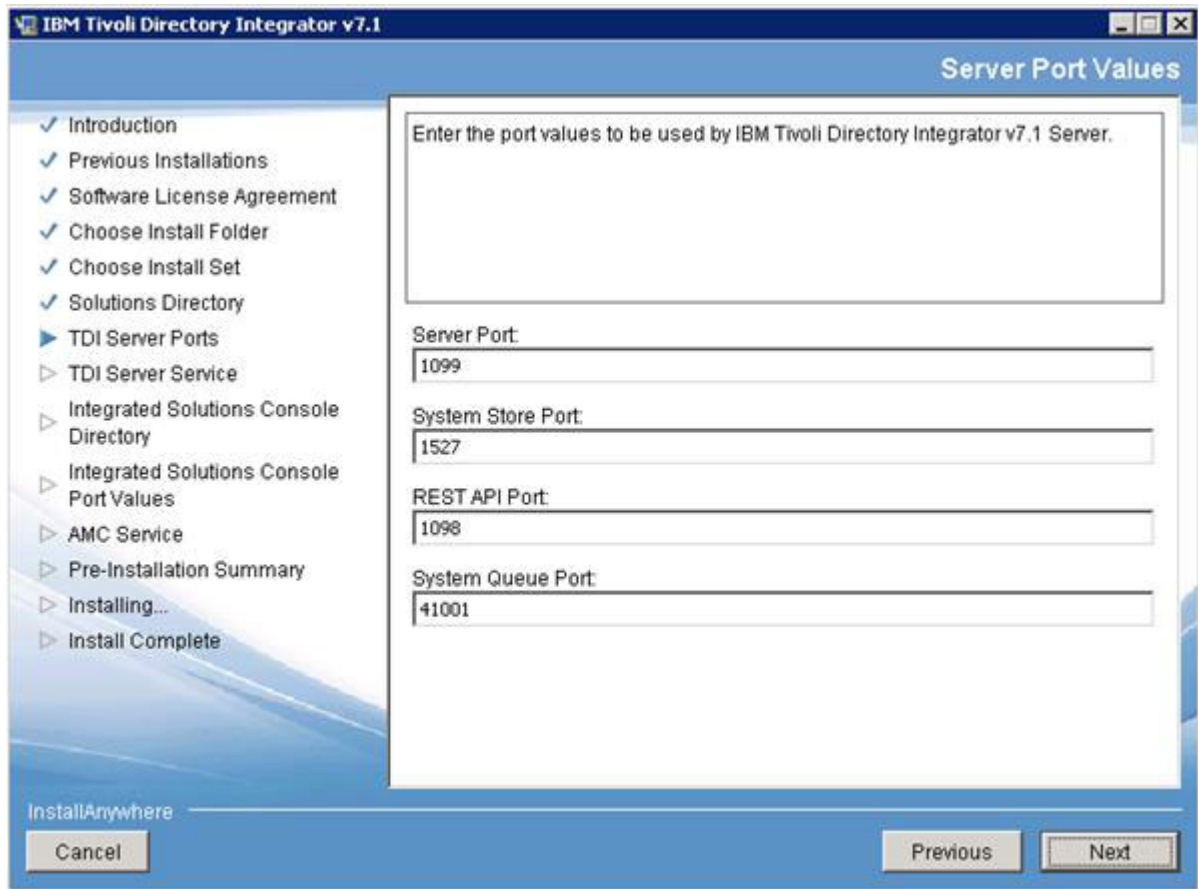


Figure 81. Tivoli Directory Integrator 7.1 - Server Port Values

7. Do not register the system as a service. Click **Next**.

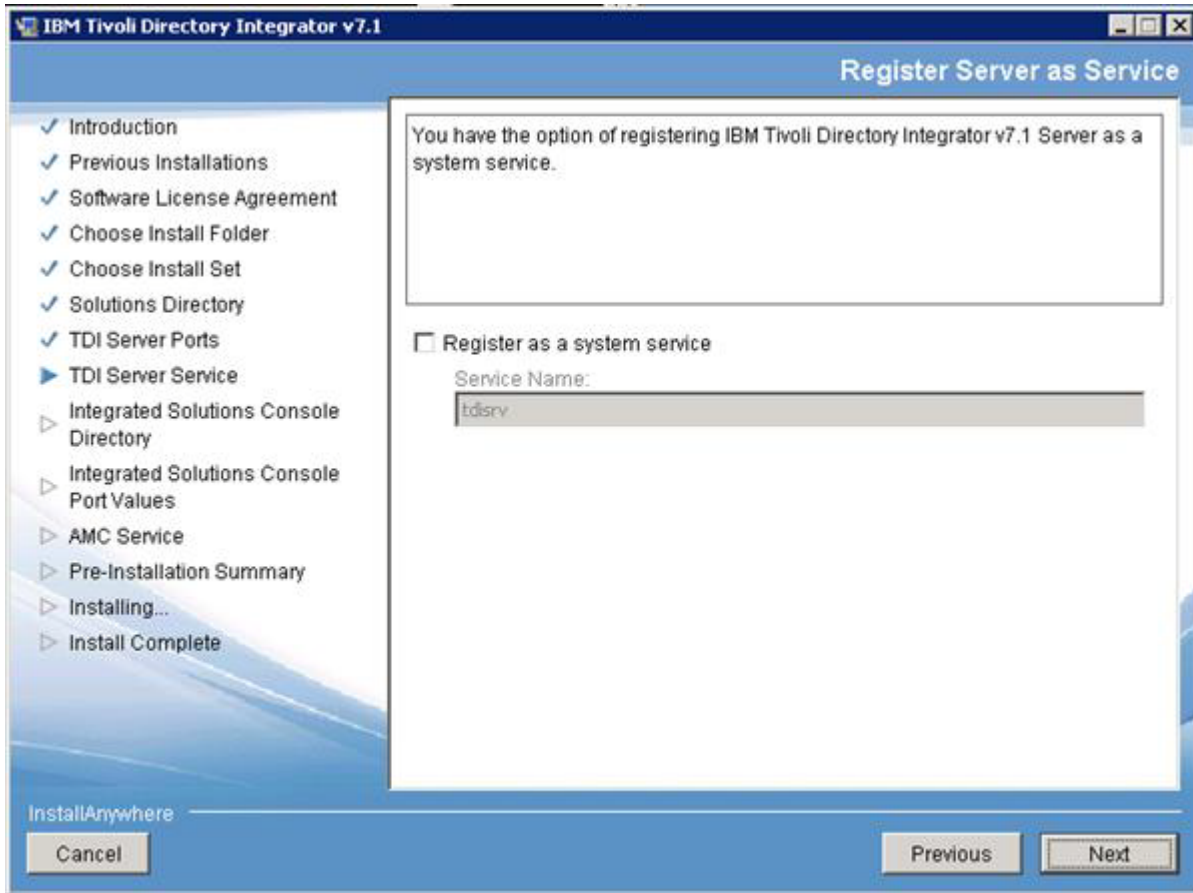


Figure 82. Tivoli Directory Integrator 7.1 - Register Server as Service

8. Accept the default ports for Integrated Solutions Console Port Values and click **Next**.

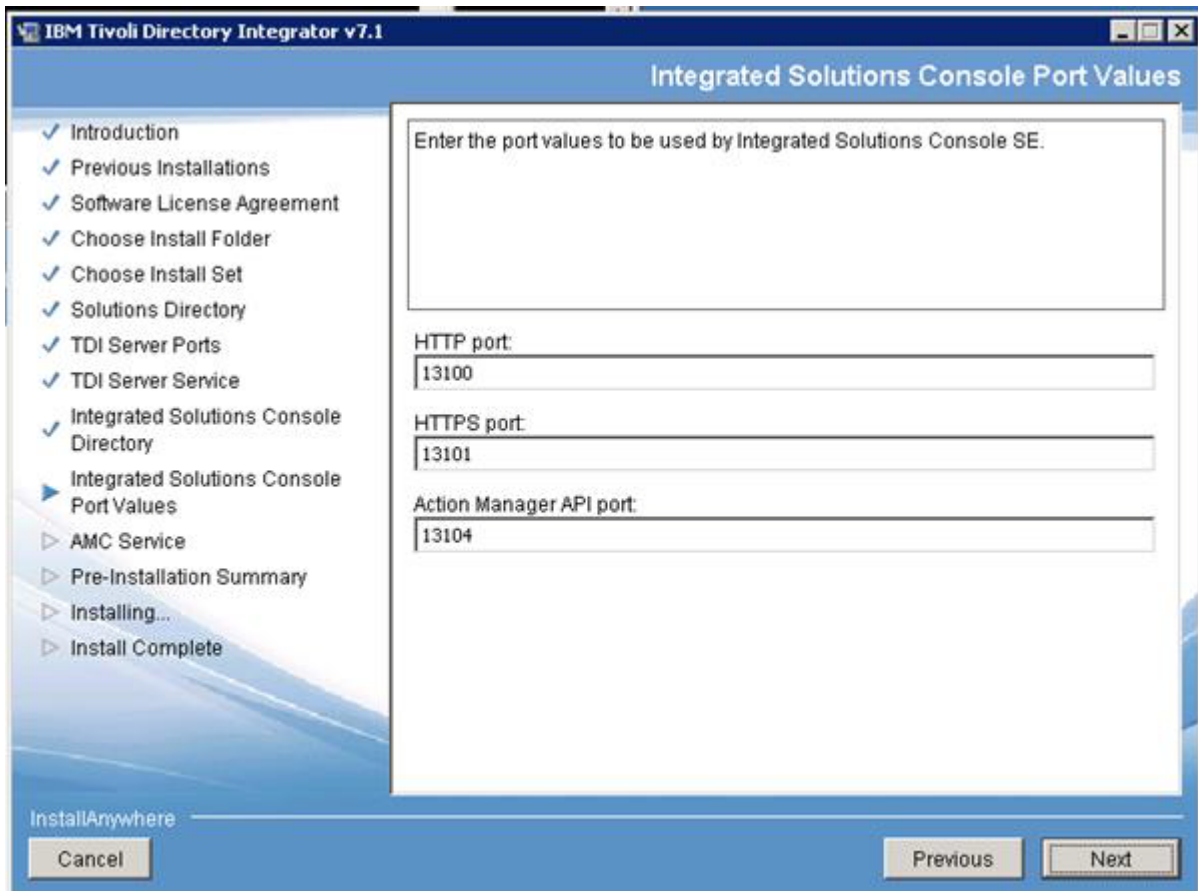


Figure 83. Tivoli Directory Integrator 7.1 - Integrated Solutions Console Port Values

9. Do not register the Administration and Monitoring Console as a service. Click **Next**.

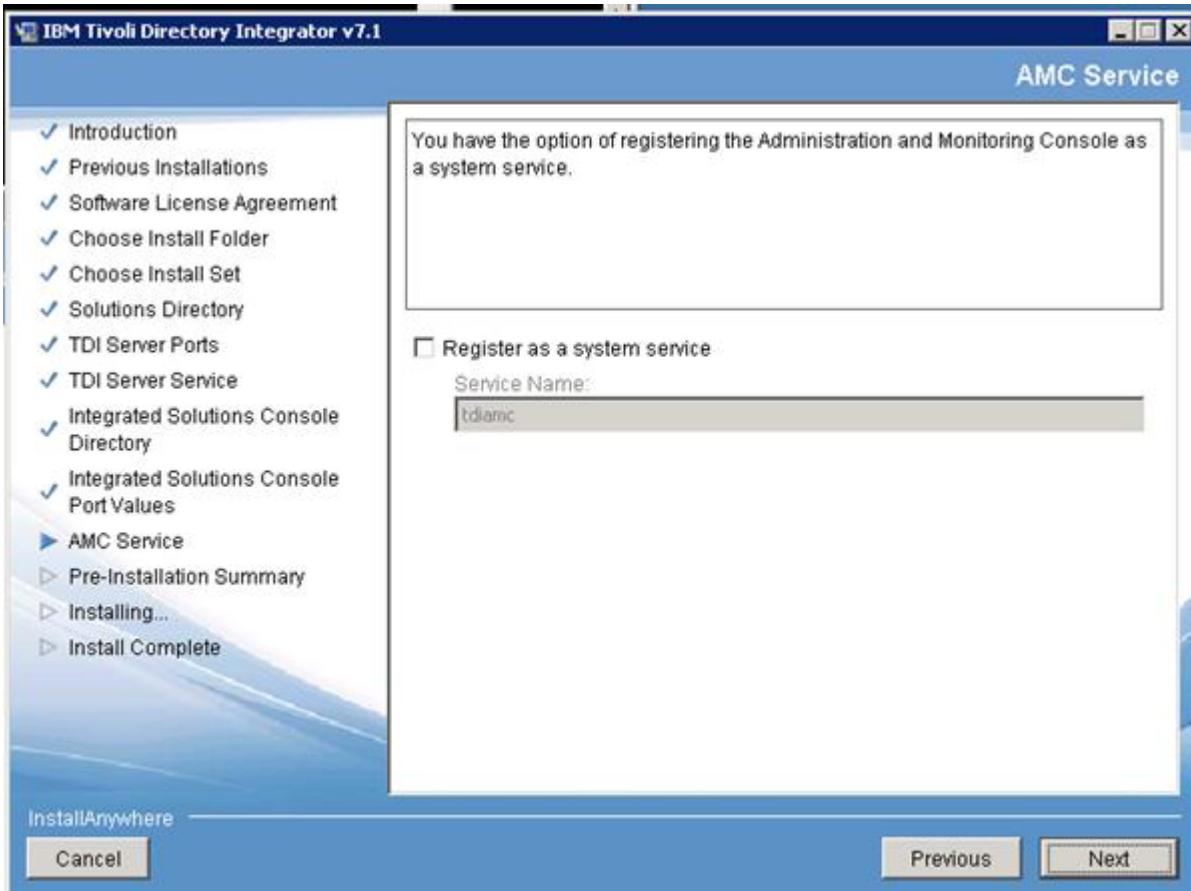


Figure 84. Tivoli Directory Integrator 7.1 - AMC Service

10. Review the summary and then click **Install**.

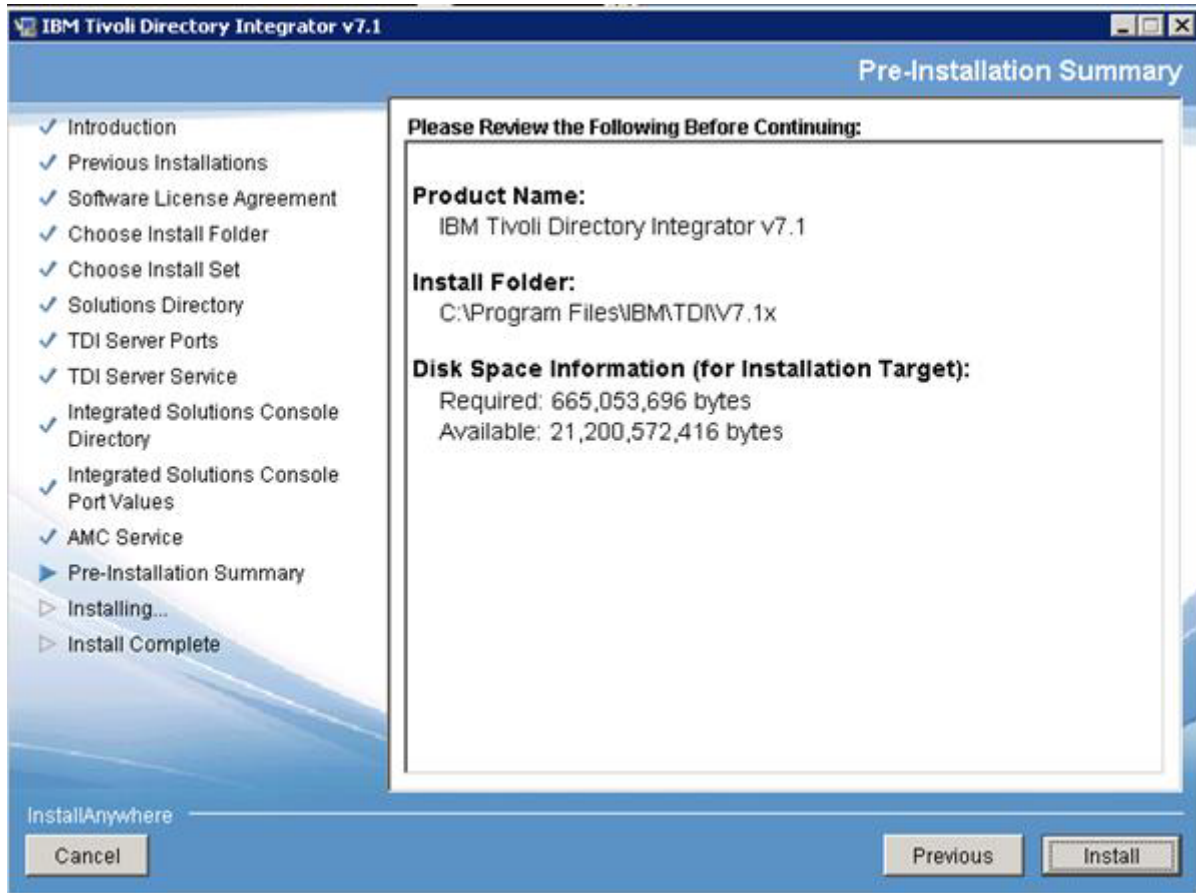


Figure 85. Tivoli Directory Integrator 7.1 - Pre-Installation Summary

- ___ 11. When the installation finishes, clear **Start the Configuration Editor** and close the installer.

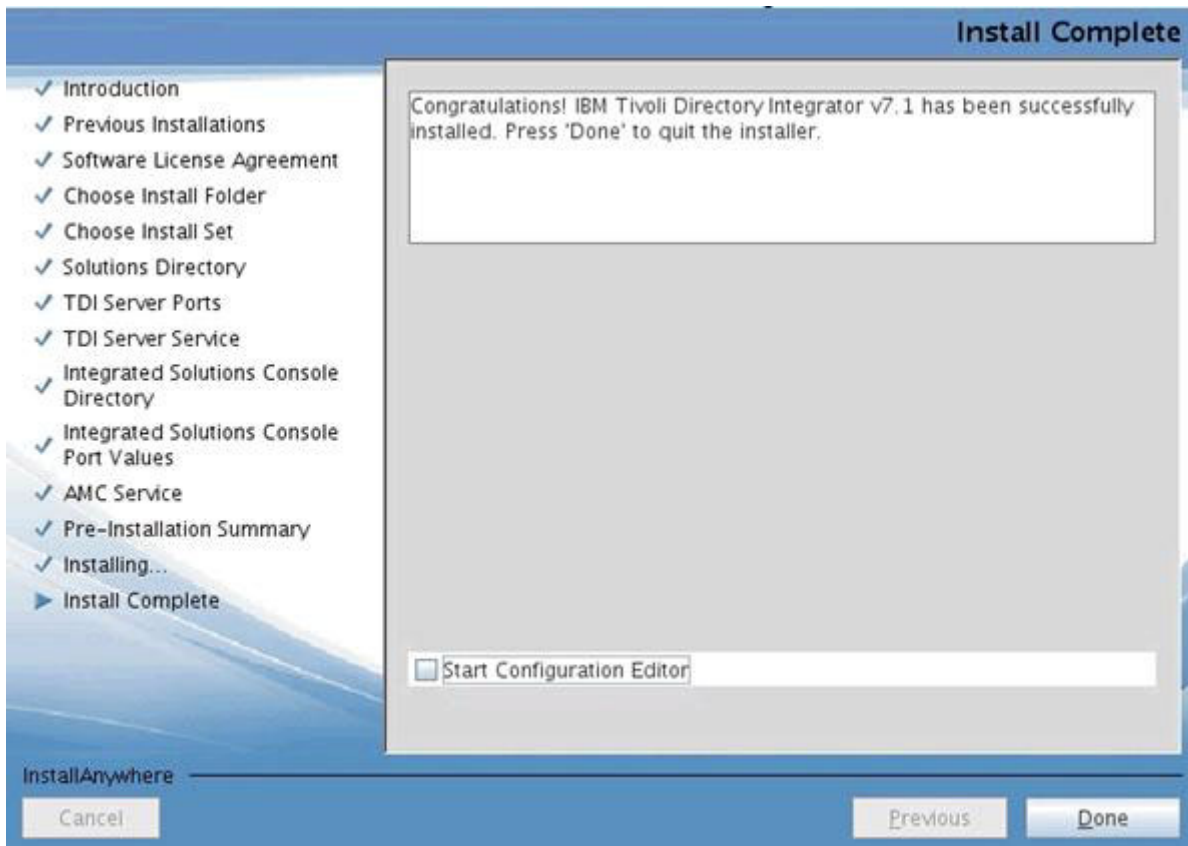


Figure 86. Tivoli Directory Integrator 7.1 - Installation complete

- ___ 12. Install Fixpack 5.
- ___ a. Ensure Tivoli Directory Integrator is not running.
 - ___ b. Copy and extract the file `7.1.0-TIV-TDI-FP0005.zip` to your file system and use `C:\Program Files\IBM\TDI\7.1\bin\applyUpdates.bat` to install the fix pack.
 - ___ c. Run the following command:

```
TDI_install_dir/bin/applyUpdates.bat -update TDI-7.1-FP0005.zip [-clean [-silent]]
```

Populating the Profiles database with LDAP user information



Note

This section can be completed before or after installing Connections 4.5. However, the Profiles database must be created by using the database wizard from the Connections 4.5 installation media as in Step 4 on page 51 from Create Connections Databases on Microsoft SQL Server.



Important

For large LDAPs for example, 300,000 users, it is necessary to increase the JVM size of the Tivoli Directory Integrator process that populates into the profiles database.

See instructions at Configuring Tivoli Directory Integrator,

http://www-10.lotus.com/ldd/lcwiki.nsf/xpDocViewer.xsp?lookupName=IBM+Connections+4.5+Documentation#action=openDocument&res_title=Configuring_Tivoli_Directory_Integrator_ic45&content=pdcontent.

Complete all steps in this document including "Make the database libraries available to Tivoli Directory Integrator".

1. From the Connections Install Media\Wizards folder, launch populationWizard.bat and click **Next** at the Welcome Screen.

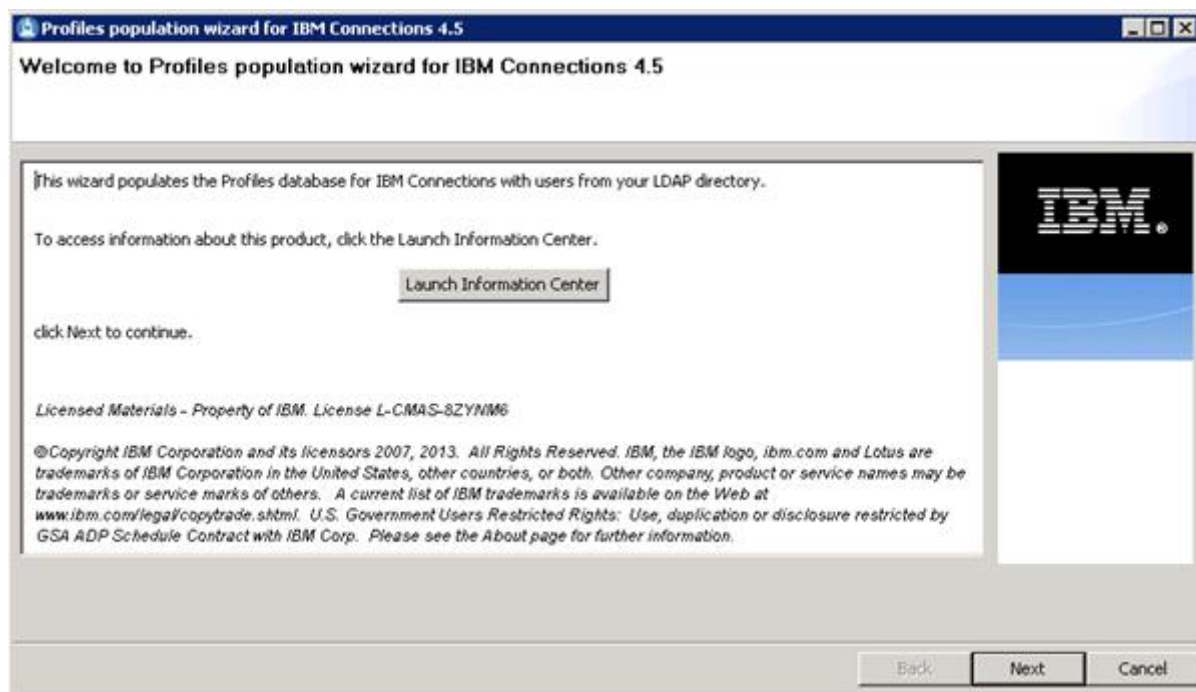


Figure 87. Profiles population wizard for IBM Connections 4.5 - Welcome screen

2. Locate the Tivoli Directory Integrator installation location and click **Next**.

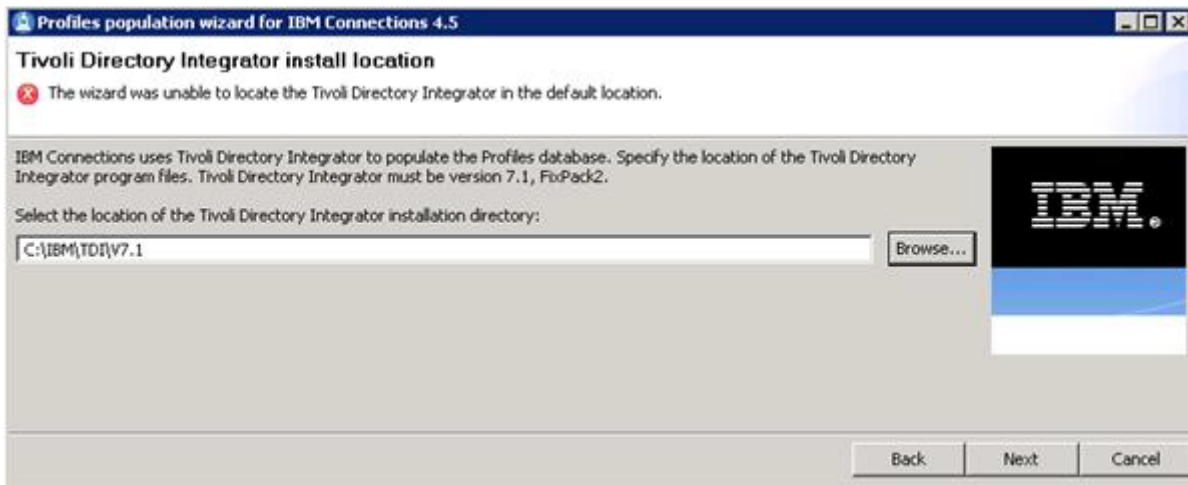


Figure 88. Profiles population wizard for IBM Connections 4.5 - Tivoli Directory Integrator install location

3. Select the database type at the next screen, in this case **SQL Server Enterprise Edition**, and click **Next**.



Figure 89. Profiles population wizard for IBM Connections 4.5 - Profiles database type

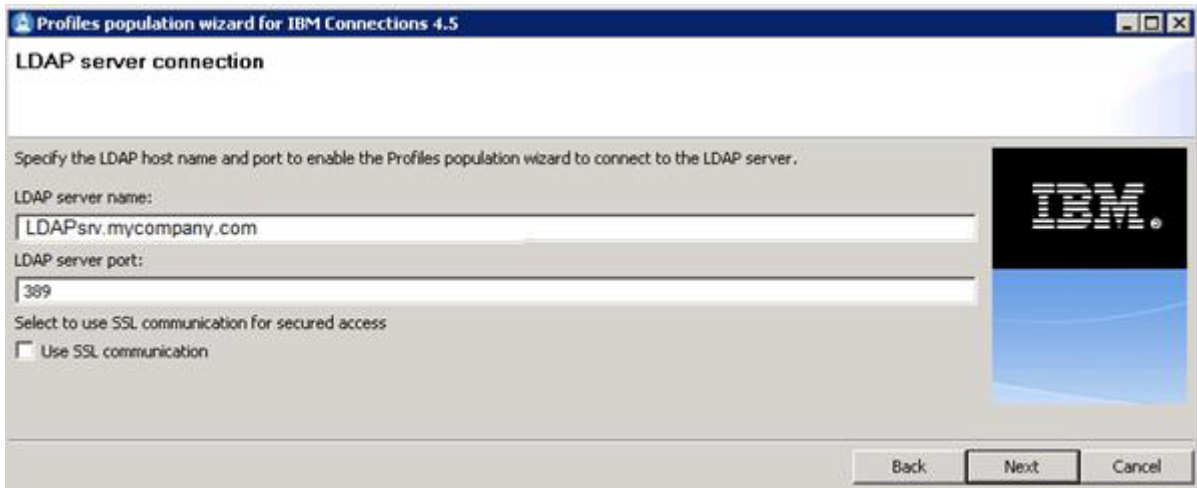
4. Next, enter the database information for the `PEOPLEDB` that you created earlier and click **Next**.



The screenshot shows the 'Profiles database properties' window of the 'Profiles population wizard for IBM Connections 4.5'. The window title is 'Profiles population wizard for IBM Connections 4.5'. The main heading is 'Profiles database properties'. Below the heading, there is a text box with the instruction: 'Enter the Profiles database properties. The wizard uses this information to access the Profiles database.' The form contains several input fields: 'Host name:' with the value 'sqlTDSrv.mycompany.com'; 'Port:' with the value '1433'; 'Database name:' with the value 'PEOPLEDB'; 'JDBC driver library path:' with the value 'C:\Microsoft JDBC Driver 4.0 for SQL Server\sqljdbc_4.0\enu' and a 'Browse...' button; 'User ID (Account used to write to database):' with the value 'PROFUSER'; and 'Password:' with a masked field of dots. On the right side, there is an IBM logo and a blue gradient background. At the bottom right, there are three buttons: 'Back', 'Next', and 'Cancel'.

Figure 90. Profiles population wizard for IBM Connections 4.5 - Profiles database properties

5. On the LDAP server connection information, enter host name and port information and click **Next**.



The screenshot shows the 'LDAP server connection' window of the 'Profiles population wizard for IBM Connections 4.5'. The window title is 'Profiles population wizard for IBM Connections 4.5'. The main heading is 'LDAP server connection'. Below the heading, there is a text box with the instruction: 'Specify the LDAP host name and port to enable the Profiles population wizard to connect to the LDAP server.' The form contains several input fields: 'LDAP server name:' with the value 'LDAPsvr.mycompany.com'; 'LDAP server port:' with the value '389'; and a checkbox labeled 'Use SSL communication' which is currently unchecked. On the right side, there is an IBM logo and a blue gradient background. At the bottom right, there are three buttons: 'Back', 'Next', and 'Cancel'.

Figure 91. Profiles population wizard for IBM Connections 4.5 - LDAP server connection

- 6. Next, enter the bind distinguished name and password to authenticate with the LDAP and click **Next**.

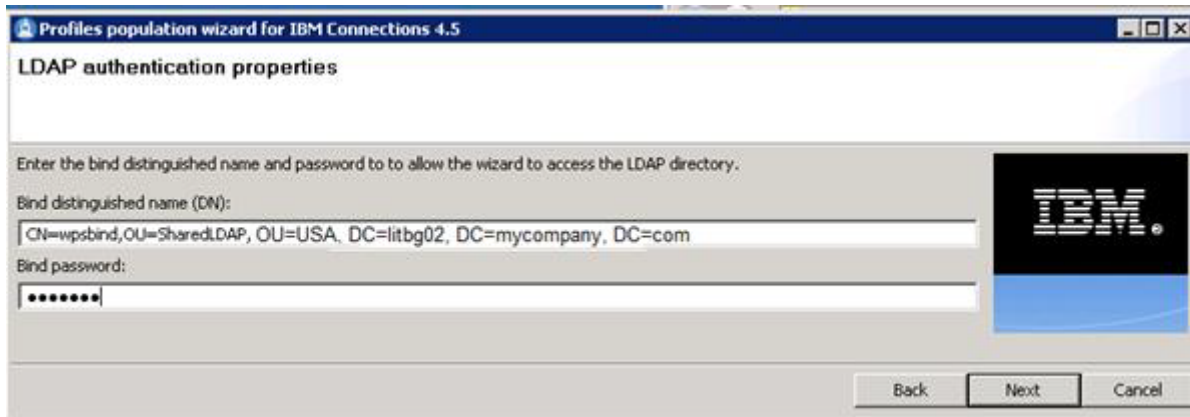


Figure 92. Profiles population wizard for IBM Connections 4.5 - LDAP authentication properties

- 7. On the next screen, you must enter the Based distinguished name and string for searches and click **Next**.

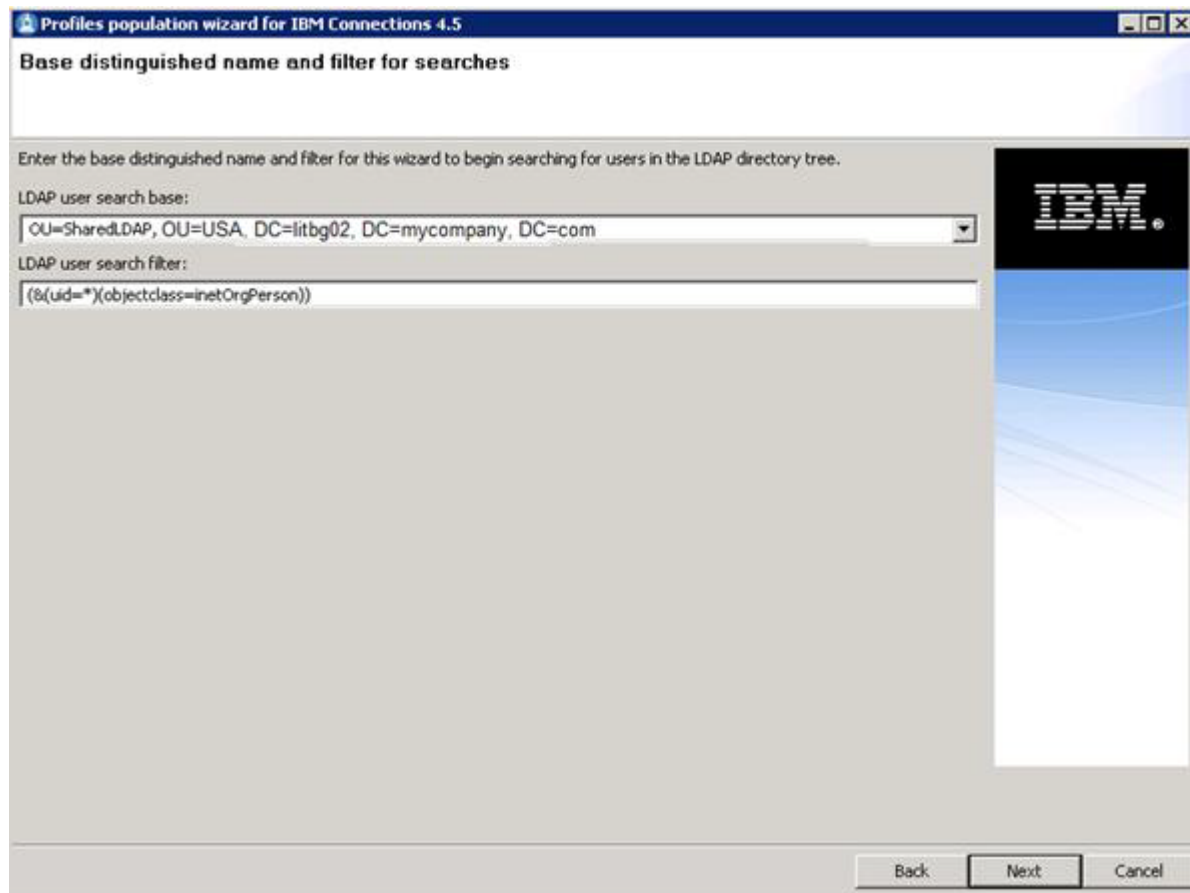


Figure 93. Profiles population wizard for IBM Connections 4.5 - Base distinguished name and filter for searches

8. Review the Profiles database mapping on the next screen. You might not need to make any changes. Click **Next**.

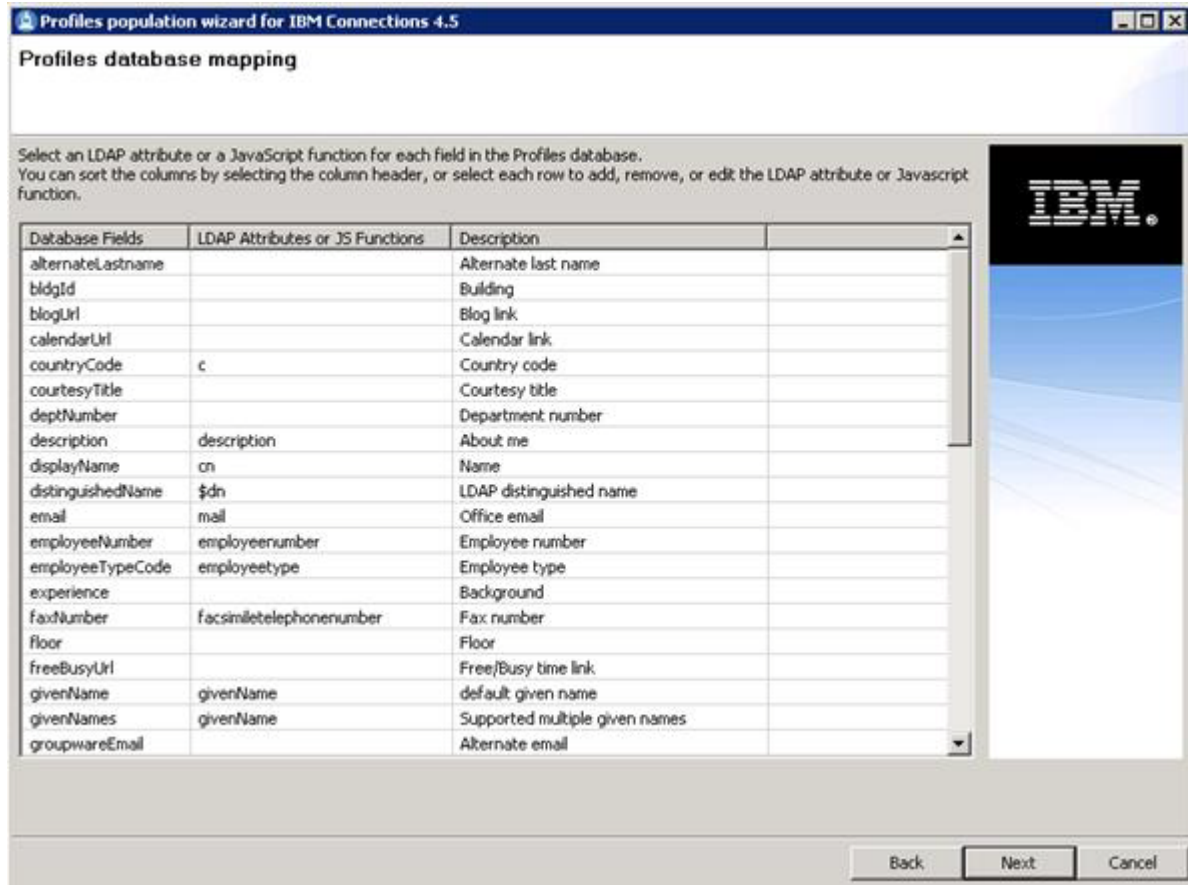


Figure 94. Profiles population wizard for IBM Connections 4.5 - Profiles database mapping

9. Accept the defaults on the Optional database tasks screen and click **Next**.

Profiles population wizard for IBM Connections 4.5

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.

<input type="checkbox"/> Countries	C:\download\LCI4.5\Wizards\TD\Population\win\TD\jsocc.csv	Browse
<input type="checkbox"/> Departments	C:\download\LCI4.5\Wizards\TD\Population\win\TD\deptinfo.csv	Browse
<input type="checkbox"/> Organizations	C:\download\LCI4.5\Wizards\TD\Population\win\TD\orginfo.csv	Browse
<input type="checkbox"/> Employee types	C:\download\LCI4.5\Wizards\TD\Population\win\TD\emptype.csv	Browse
<input type="checkbox"/> Work locations	C:\download\LCI4.5\Wizards\TD\Population\win\TD\workloc.csv	Browse

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

Yes
 No

Back Next Cancel

Figure 95. Profiles population wizard for IBM Connections 4.5 - Optional database tasks

10. Review the summary screen and then click **Configure**.

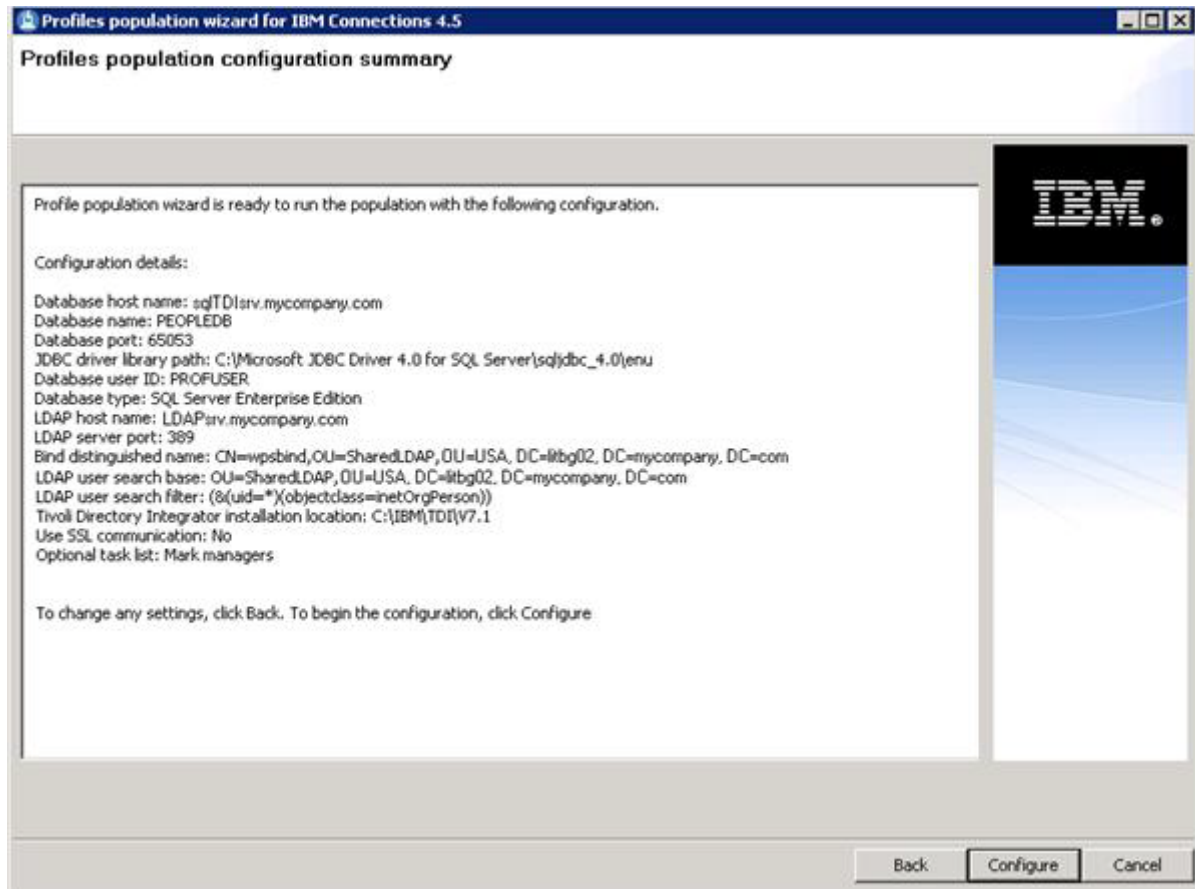


Figure 96. Profiles population wizard for IBM Connections 4.5 - Profiles population configuration summary

11. This configuration can take a number of hours to complete depending on the size of your LDAP. In some cases, it might fail and you must follow a manual workaround to complete the population. The problem is that Tivoli Directory Integrator runs out of memory, and even by increasing it to 10 GB it still runs out depending on the size of the LDAP branch. What you must do is:
- a. Edit `profiles_tdi.properties` and ensure `source_ldap_page_size=1000` to capture all required users.
 - b. Run `collect_dns.bat` from within `/Wizards/TDIPopulation/win/TDI` on your wizards for Connections. It creates a file that is called `collect_dns`, which contains all the users to be populated into PeopleDB. You must put this file on a Linux computer and split it into 20,000 chunks (`split -l 20000 collect_dns collect-split`).
 - c. It creates a bunch of files called `collect-splita`, `collect-splitab`, `collect-splitac`, `collect-splitad`, `collect-splitae`, `collect-splitaf`.

- ___ d. Copy these files back to your Wizards folder under /Wizards/TDIPopulation/win/TDI and then create a batch file, for example, `Mypopulation.bat` with the following code in it:

```
for %%? in (collect-splitaa collect-splitab collect-splitac  
collect-splitad collect-splitae collect-splitaf) do (  
copy%%? collect.dns  
populate_from_dn_file.bat  
delcollect.dns
```

- ___ e. Then, run `Mypopulation.bat` to populate the remainder of your LDAP branch. Any duplicates that the wizard already populated are skipped.

You now move back to your Deployment Manager.

4. Then, select **Install**, which should open the Select packages to install window with Connections 4.5 listed. Select this package and click **Next**.

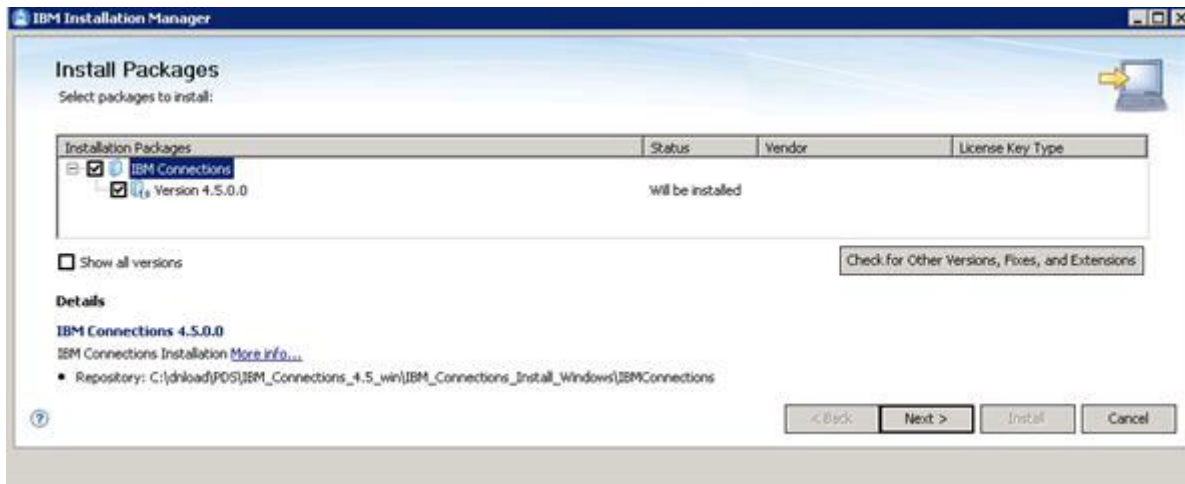


Figure 98. IBM Installation Manager - Install Packages

5. Accept the license agreement and click **Next**.

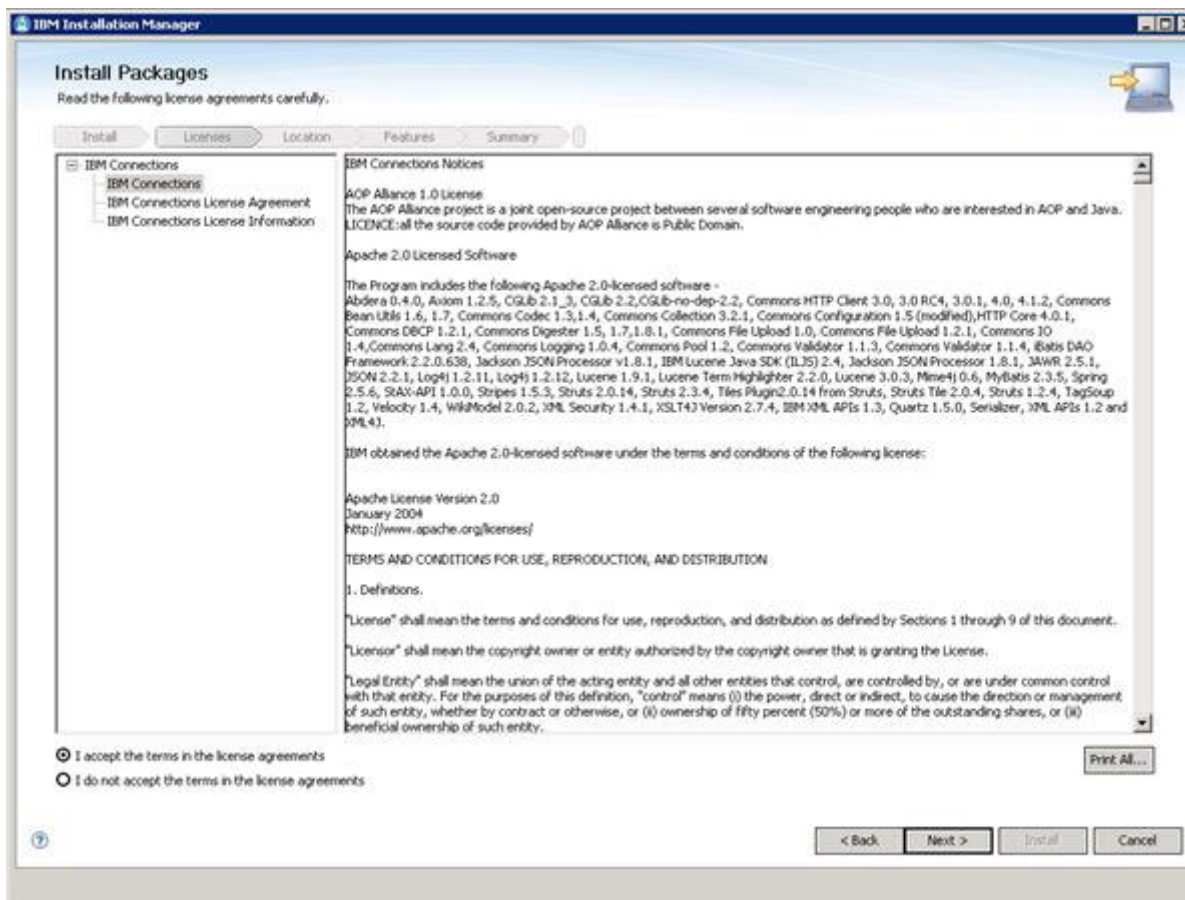


Figure 99. IBM Installation Manager - Install Packages - License agreement

6. Select the installation directory for Connections and click **Next**.

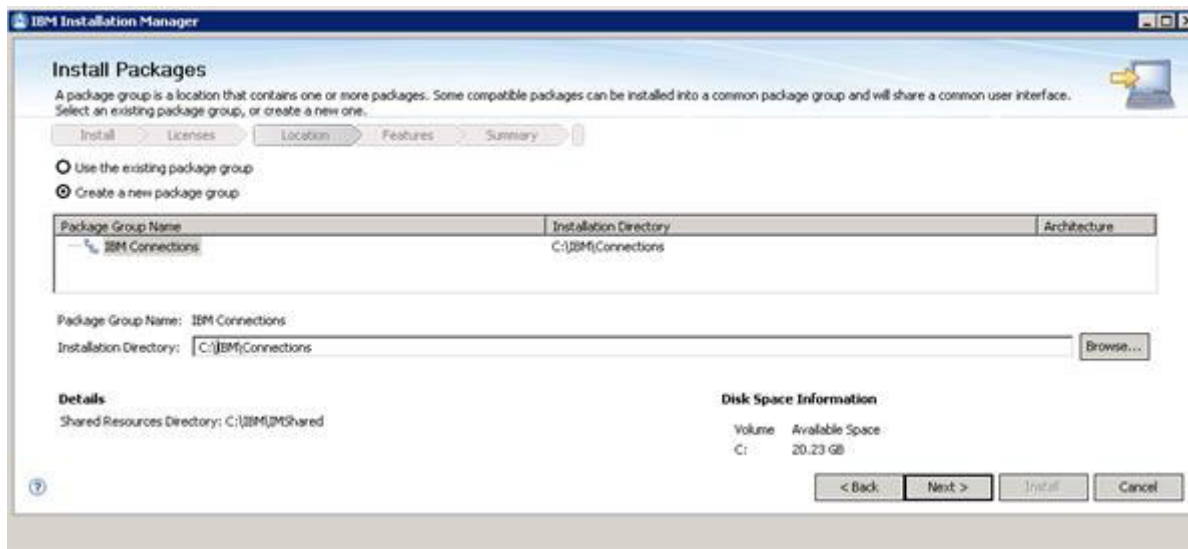


Figure 100. IBM Installation Manager - Install Packages - Installation directory

7. Next, choose the packages to install. For this configuration, you can choose to clear **Metrics** and **IBM Connections Content Manager**. All other applications are installed. Click **Next**.

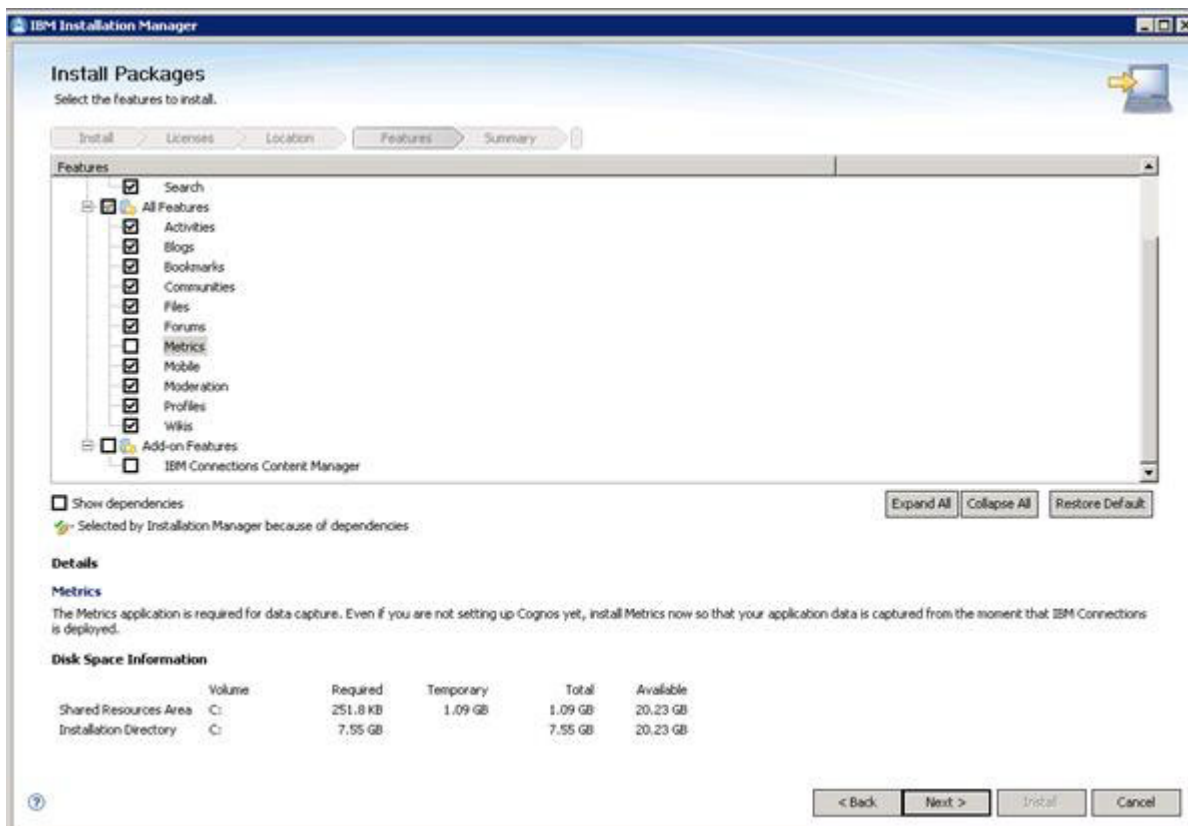


Figure 101. IBM Installation Manager - Install Packages - Features to install

8. Enter your WebSphere Deployment Manager Details and credentials. The credentials that are used here should be your Connections Administrator and not `wasadmin`. Click **Validate** and **Next** after the validation is successful.

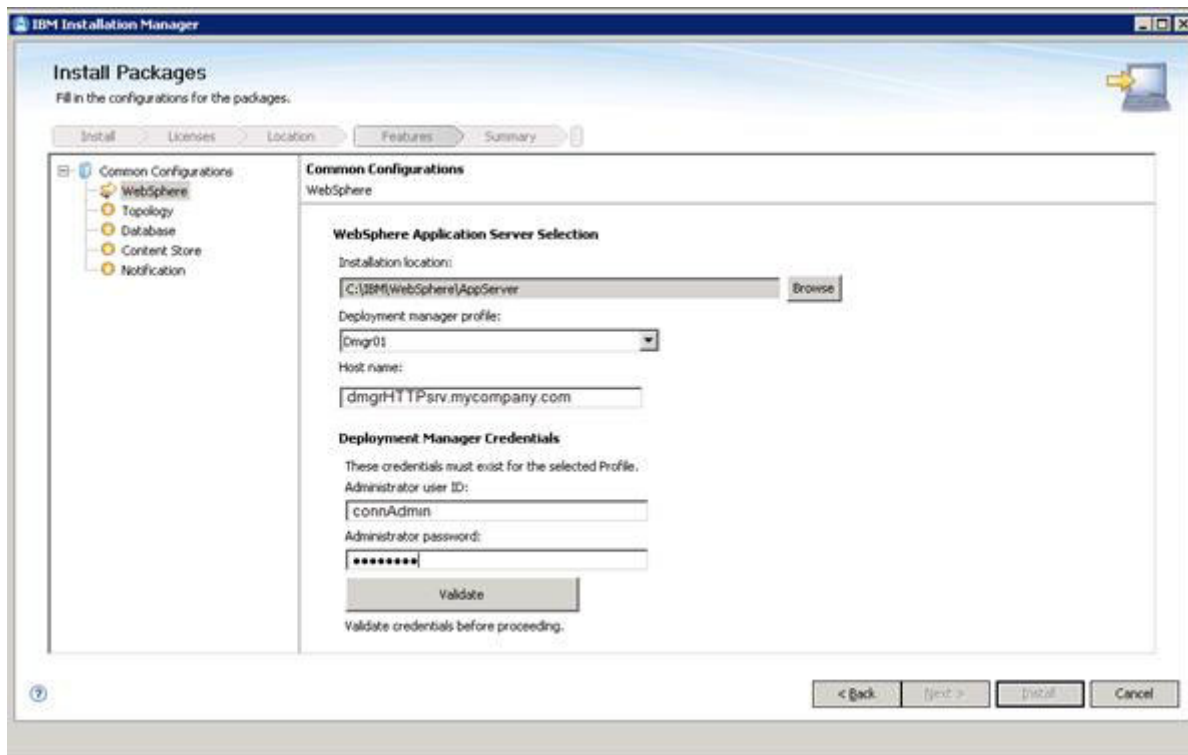


Figure 102. IBM Installation Manager - Install Packages - Configurations for the packages

9. Select **Medium** for the deployment type and select all check box for each application. Then, click **Next**.

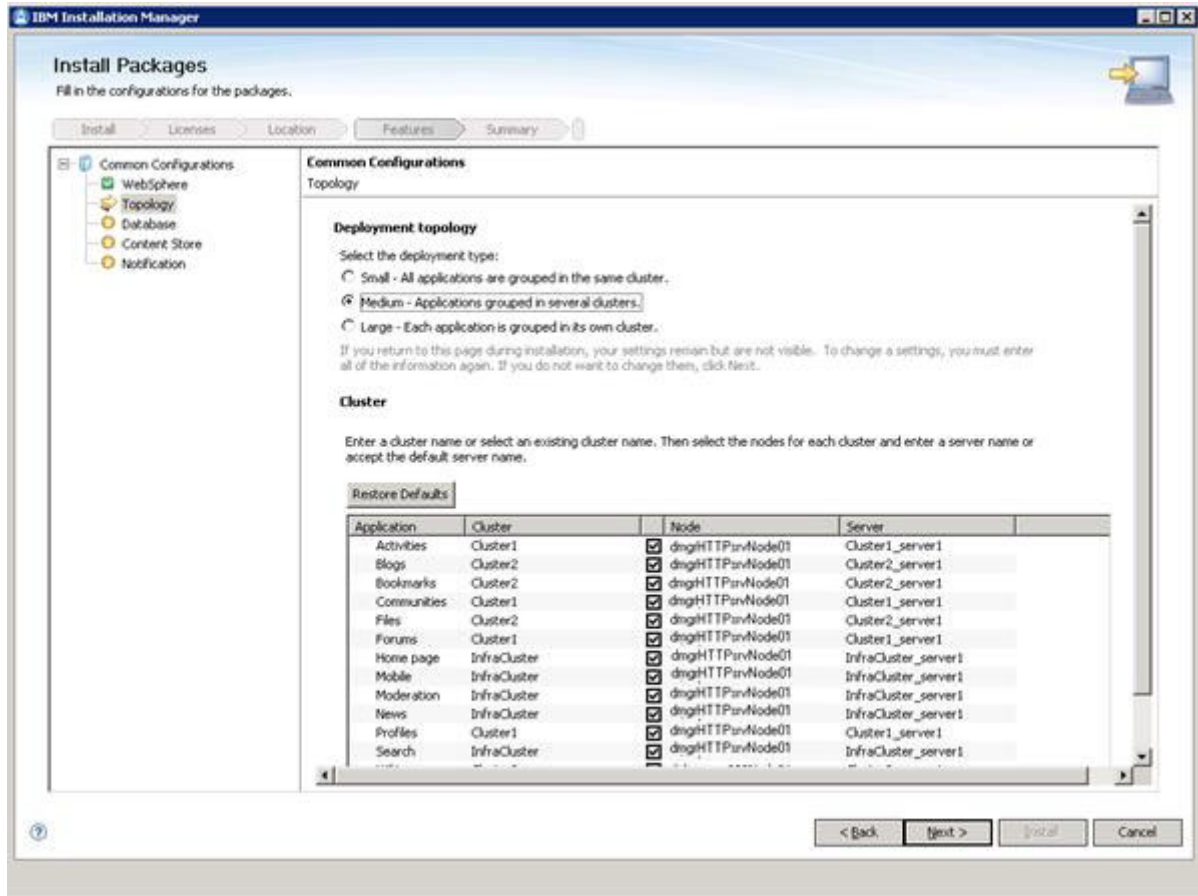


Figure 103. IBM Installation Manager - Install Packages - Configurations for the packages

- ___ 10. Enter the database information and ensure you can connect when you click **Validate**. Then, click **Next** when the screen displays that it is successfully validated.

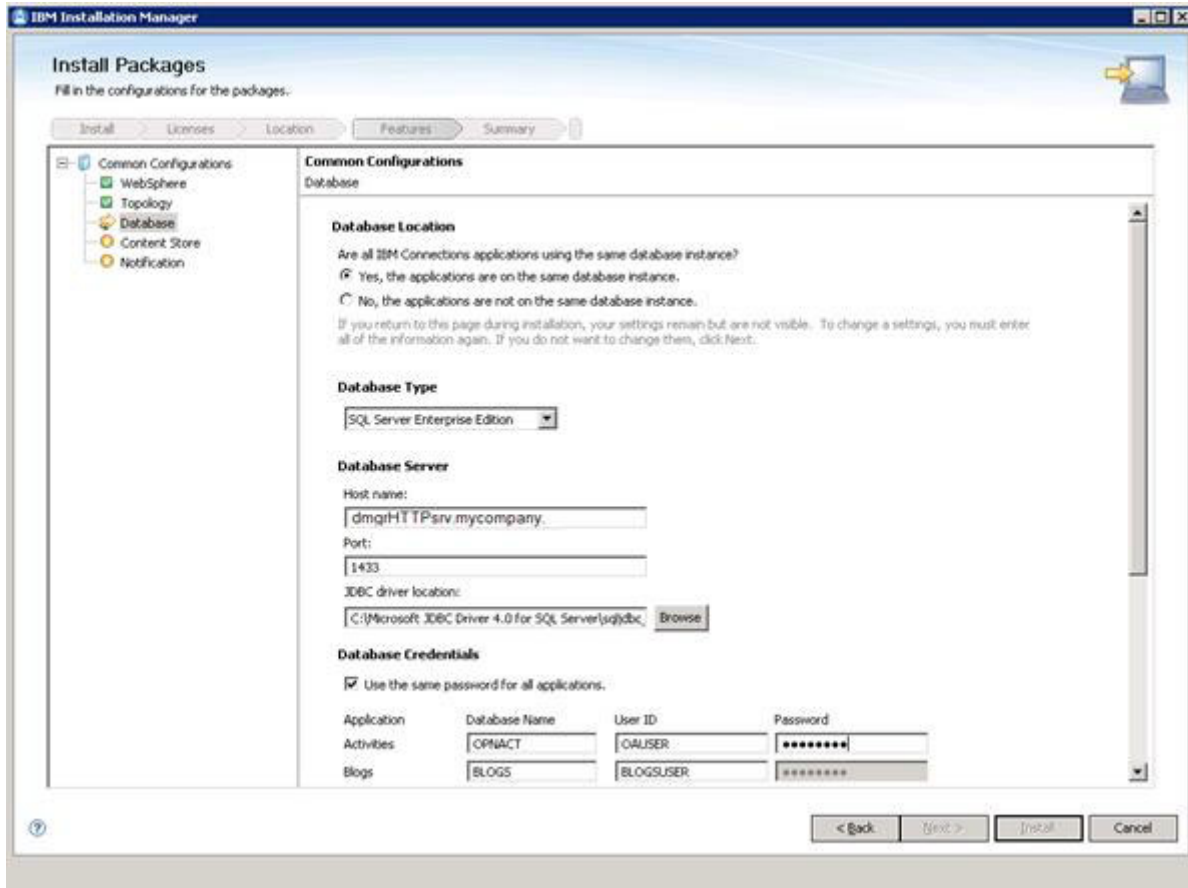


Figure 104. IBM Installation Manager - Install Packages - Common configurations - Database location

11. You must now enter the details for your Connections Share. For Windows, specify the file location by using the Universal Naming Convention (UNC) format. For example: `\\server_name\share_name`. Ensure to test read/write access to this share from both Nodes. You must also specify the local content store. It should be in the same location on both nodes. When it is validated click **Next**.

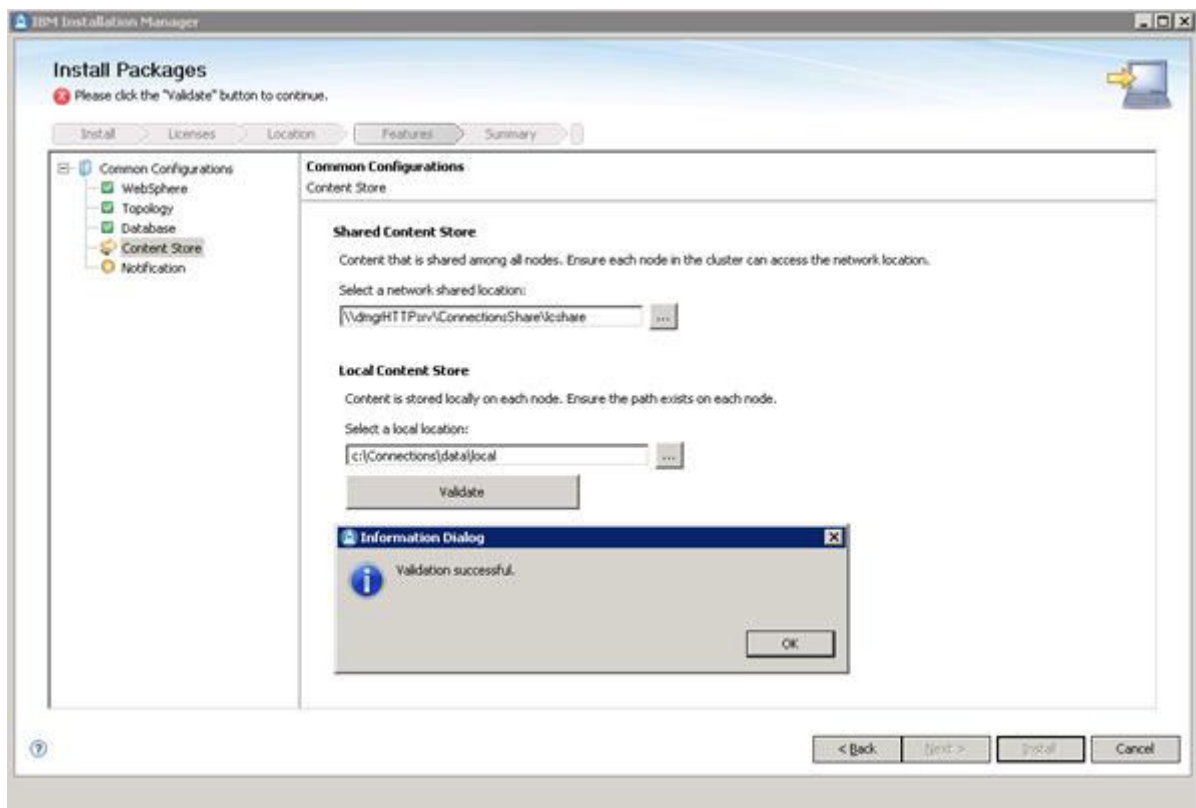


Figure 105. IBM Installation Manager - Install Packages - Common configurations - Shared Content Store

__ 12. You can select **None** for notifications.



Information

See the information center for how to configure notifications, which can be done after installation: Configuring Notifications,

http://www-10.lotus.com/ldd/lcwiki.nsf/xpDocViewer.xsp?lookupName=IBM+Connections+4.5+Documentation#action=openDocument&res_title=Configuring_notifications_ic45&content=pdcontent.



Figure 106. IBM Installation Manager - Install Packages - Common configurations - Notification

13. Review the summary information and then click **Install**.

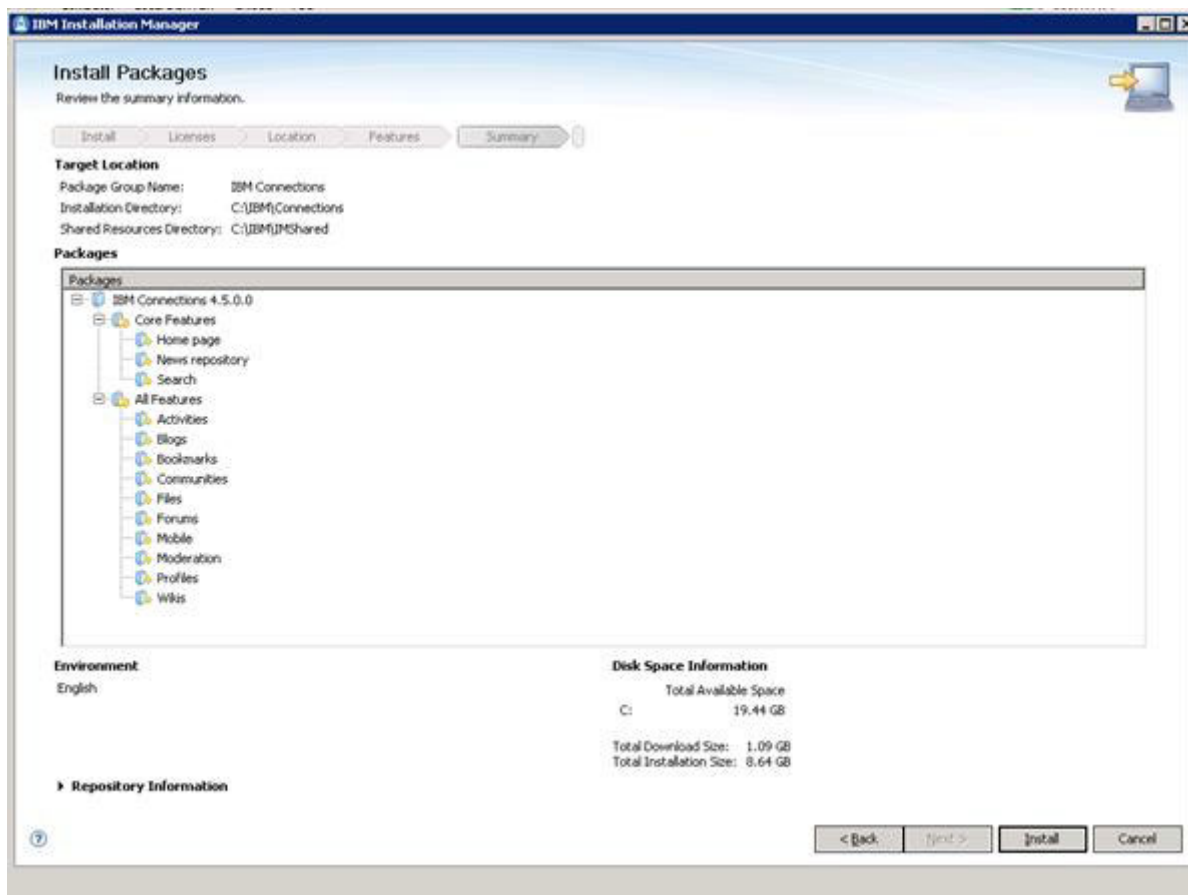


Figure 107. IBM Installation Manager - Install Packages - Summary information

14. After it completes, check the logs for any errors.
15. You should now stop your Node Agents and Deployment Manager. Then, start the Deployment Manager followed by your Node Agents. Check the Node agent logs for activity, similar to the following results:

```
[1/3/13 12:58:24:824 GMT] 00000018 FileRepository A ADMR0015I: User defaultWINFileBasedRealm/server:wasNodeLsrVCell01_wasNodeLsrVNode01_nodeagent created document
bin_lc_admin/dogearAdmin.py.
[1/3/13 12:58:24:849 GMT] 00000018 FileRepository A ADMR0015I: User defaultWINFileBasedRealm/server:wasNodeLsrVCell01_wasNodeLsrVNode01_nodeagent created document
bin_lc_admin/activitiesSetup.py.
[1/3/13 12:58:24:869 GMT] 00000018 FileRepository A ADMR0015I: User defaultWINFileBasedRealm/server:wasNodeLsrVCell01_wasNodeLsrVNode01_nodeagent created document
bin_lc_admin/mobileAdmin.py.
[1/3/13 12:58:24:891 GMT] 00000018 FileRepository A ADMR0015I: User defaultWINFileBasedRealm/server:wasNodeLsrVCell01_wasNodeLsrVNode01_nodeagent created document
bin_lc_admin/wikisAdmin.py.
[1/3/13 12:58:24:916 GMT] 00000018 FileRepository A ADMR0015I: User defaultWINFileBasedRealm/server:wasNodeLsrVCell01_wasNodeLsrVNode01_nodeagent created document
bin_lc_admin/communitiesAdmin.py.
[1/3/13 12:58:24:942 GMT] 00000018 FileRepository A ADMR0015I: User defaultWINFileBasedRealm/server:wasNodeLsrVCell01_wasNodeLsrVNode01_nodeagent created document
bin_lc_admin/searchAdmin.py.
[1/3/13 12:58:24:961 GMT] 00000018 FileRepository A ADMR0015I: User defaultWINFileBasedRealm/server:wasNodeLsrVCell01_wasNodeLsrVNode01_nodeagent created document
bin_lc_admin/activitiesSetup.properties.
[1/3/13 12:58:24:979 GMT] 00000018 FileRepository A ADMR0015I: User defaultWINFileBasedRealm/server:wasNodeLsrVCell01_wasNodeLsrVNode01_nodeagent created document
bin_lc_admin/newsCatcher.py.
[1/3/13 12:58:25:002 GMT] 00000018 FileRepository A ADMR0015I: User defaultWINFileBasedRealm/server:wasNodeLsrVCell01_wasNodeLsrVNode01_nodeagent created document
bin_lc_admin/activitiesAdmin.py.
[1/3/13 12:58:25:021 GMT] 00000018 FileRepository A ADMR0015I: User defaultWINFileBasedRealm/server:wasNodeLsrVCell01_wasNodeLsrVNode01_nodeagent created document
bin_lc_admin/homepageAdmin.py.
[1/3/13 12:58:25:049 GMT] 00000018 FileRepository A ADMR0015I: User defaultWINFileBasedRealm/server:wasNodeLsrVCell01_wasNodeLsrVNode01_nodeagent created document
bin_lc_admin/blogsAdmin.py.
[1/3/13 12:58:25:065 GMT] 00000018 FileRepository A ADMR0015I: User defaultWINFileBasedRealm/server:wasNodeLsrVCell01_wasNodeLsrVNode01_nodeagent created document
bin_lc_admin/forumsAdmin.py.
[1/3/13 12:58:25:088 GMT] 00000018 FileRepository A ADMR0015I: User defaultWINFileBasedRealm/server:wasNodeLsrVCell01_wasNodeLsrVNode01_nodeagent created document
bin_lc_admin/filesAdmin.py.
[1/3/13 12:58:25:153 GMT] 00000018 NodeSyncTask A ADMR0003I: The configuration synchronization completed successfully.
```

Figure 108. Node agent activity

- ___ 16. Leave it for about 30 minutes and then start your Connections Servers. To do it, log in to WebSphere admin console and go to **Server Types > WebSphere Application Servers**. Select each Connections cluster and click **Start**.

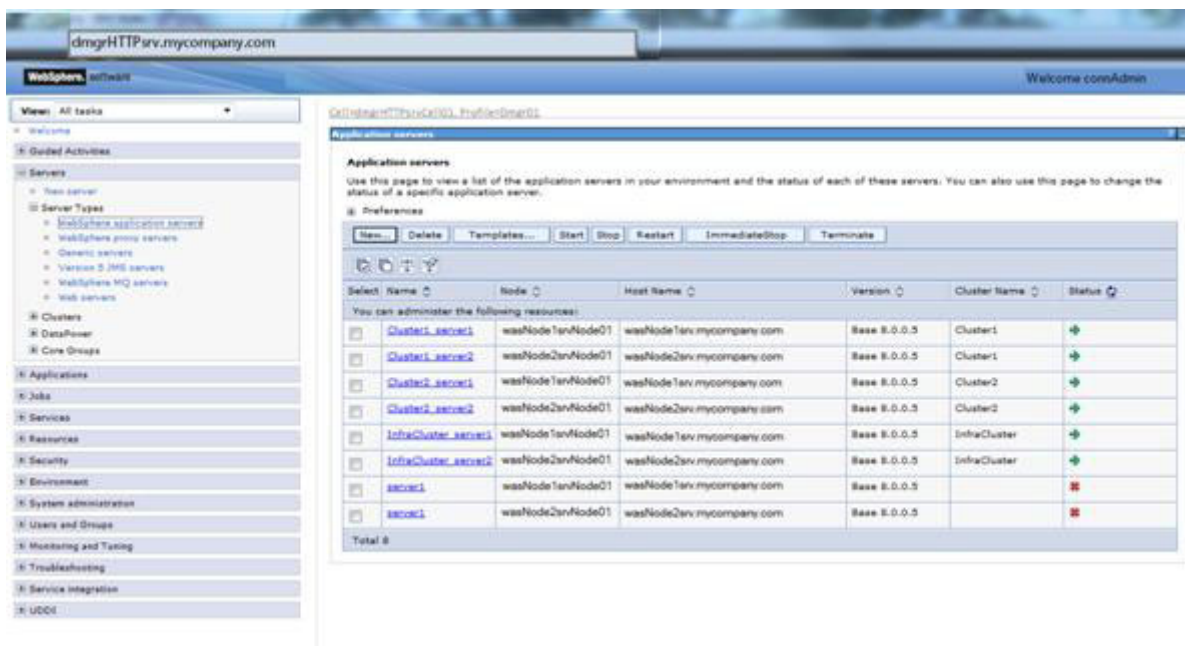


Figure 109. Connections Servers - Application servers

- ___ 17. When it is started, check all logs to ensure that no errors occurred and that startup completed successfully. Logs are found in
 c:\IBM\WebSphere\Appserver\profiles\AppSrv01\logs on each node.

IBM Connections is now installed but there are some additional post-installation tasks that are required before you can log on.

Post-installation configuration

Adding the IBM HTTP server as an unmanaged Node on the Deployment Manager

1. Log in to the Deployment Manager console by using the WebSphere Application Server Administrator credentials and go to **System administration > Nodes**. Then, click the **Add Node**. Select **Unmanaged node** from the list and click **Next** to continue.

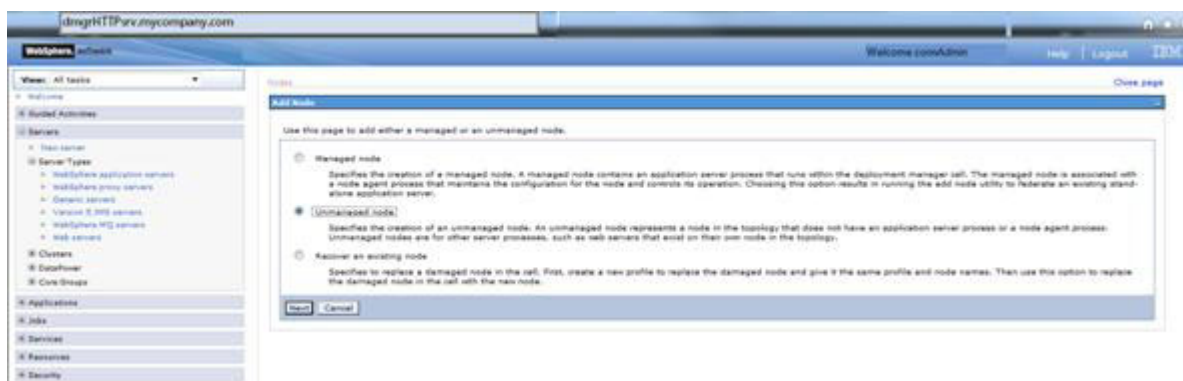


Figure 110. Deployment Manager console - Add node

2. On the Node configuration screen, enter the name, the host name, and platform type of the HTTP server, and click **Apply** then **Save**.

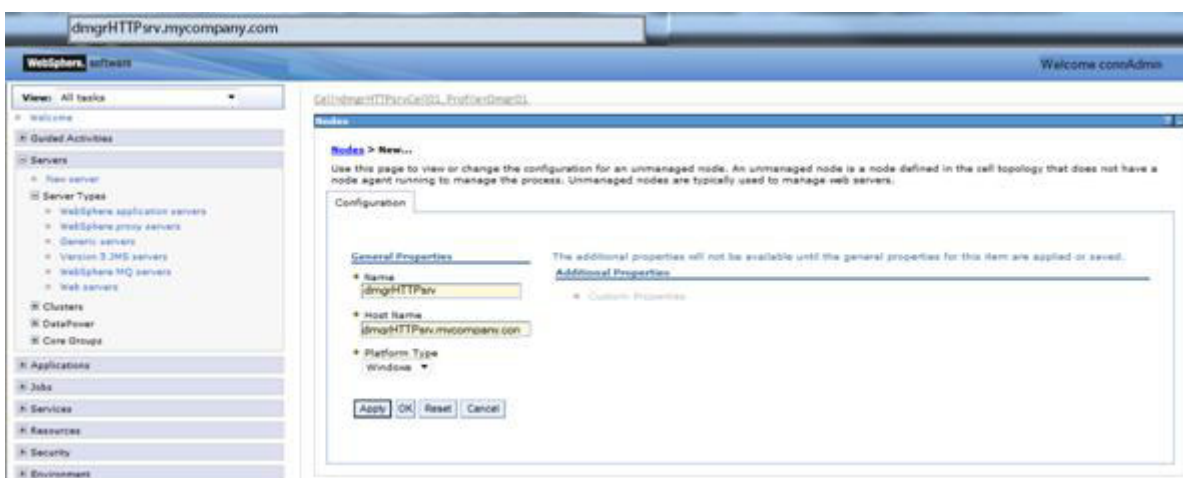


Figure 111. Deployment Manager console - Nodes - New

3. Next, go to **Servers > Server Types > Web servers** and select **New**. Select the web server node that is created previously, enter a Server name, and for type, select IBM HTTP Server. Click **Next** to continue.



Figure 112. Deployment Manager console - Create new web server definition

4. On the web server template selection page, keep the default IHS option and click **Next**.

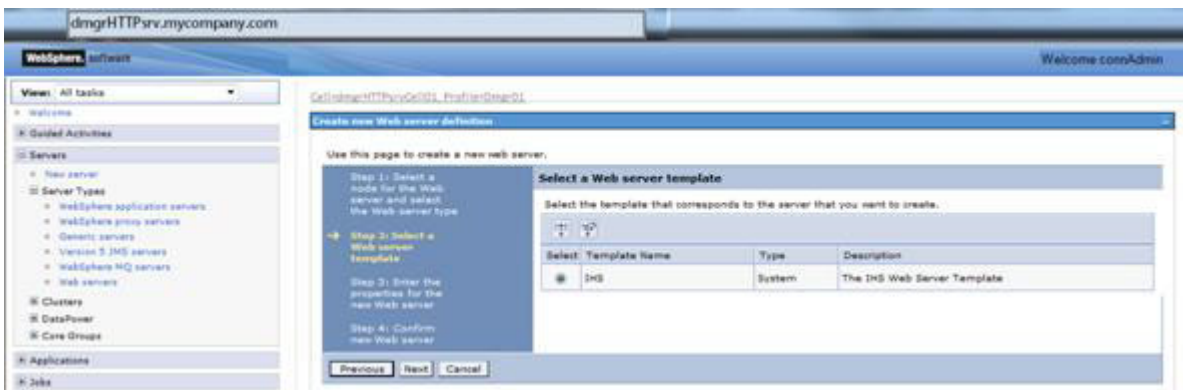


Figure 113. Deployment Manager console - Create new web server definition - Select a web server template

5. On the web server properties page, enter the correct properties for the HTTPServer including location and credentials and click **Next**.

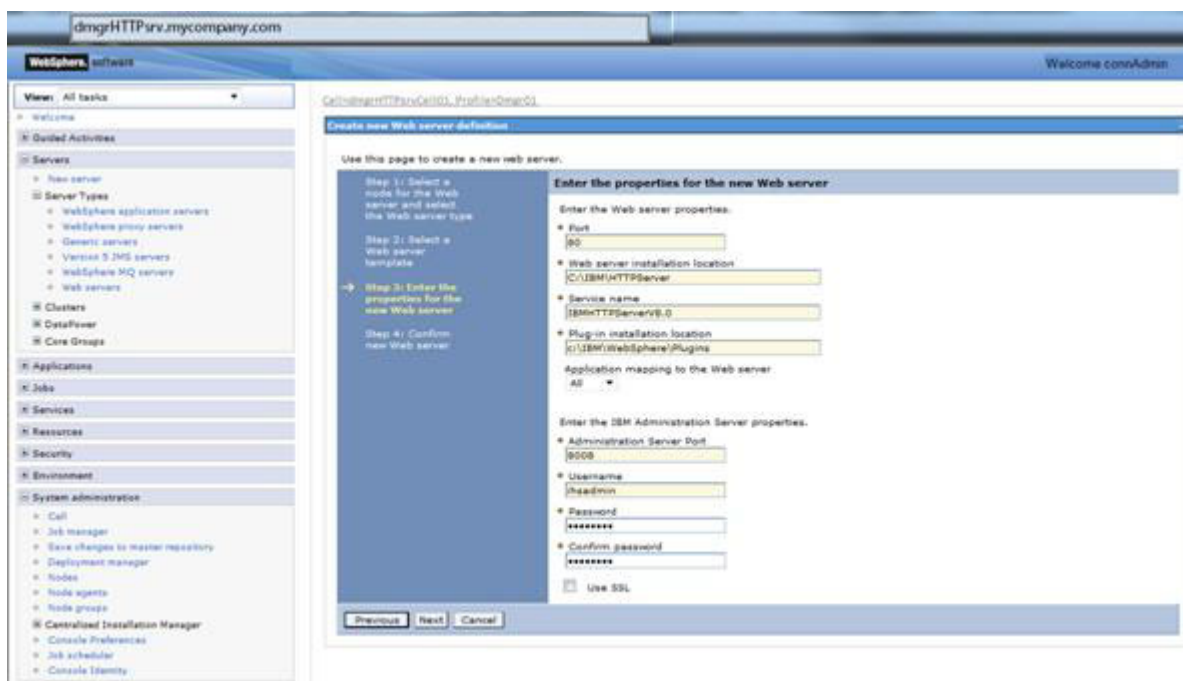


Figure 114. Deployment Manager console - Create new web server definition - Enter the properties for the new web server

6. On the Summary of actions page, review the information, click **Finish**, and then **Save** to complete the web server definition. You should now see the HTTP server that is listed under Web servers.

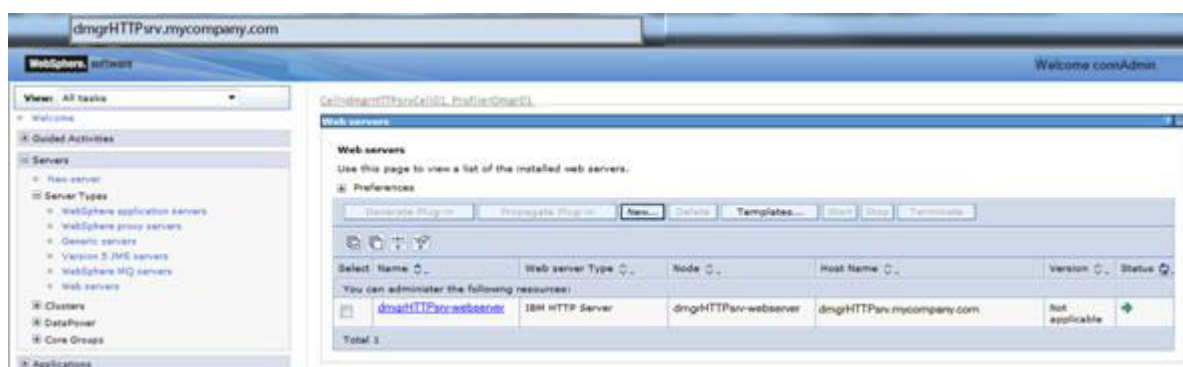


Figure 115. Deployment Manager console - Web servers

7. Now synch the nodes and then return to **Servers > Web servers** to Generate Plug-in and then Propagate Plug-in.

8. Next, click the web server to open it and select **Plug-in properties**.

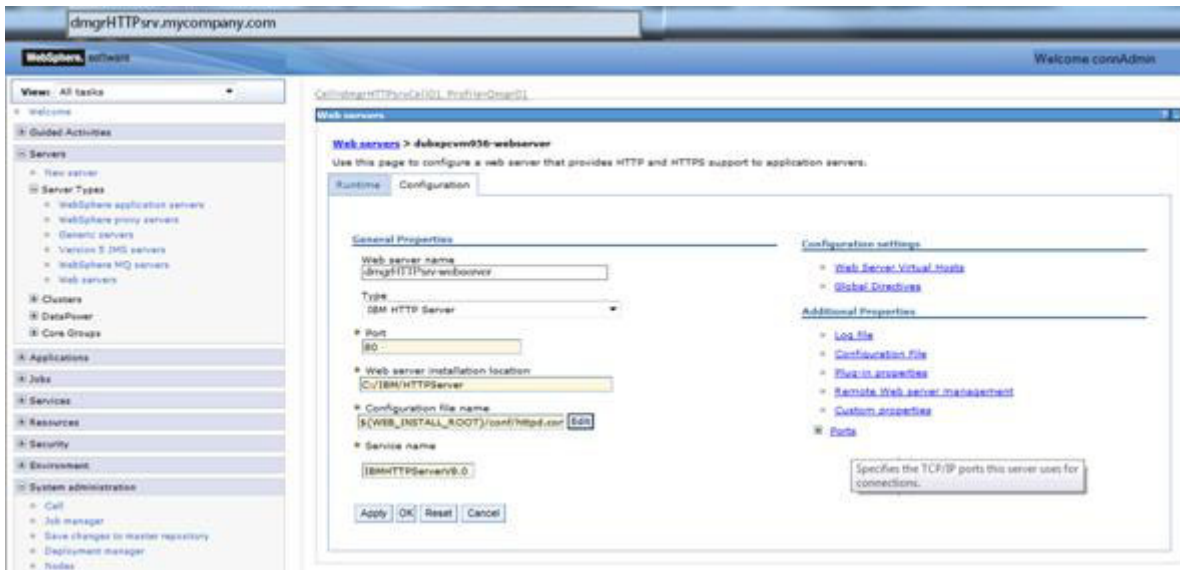


Figure 116. Deployment Manager console - Web servers

9. From the repository copy of web server plug-in files section, click **Copy to Web server key store directory**. You should see the following result:

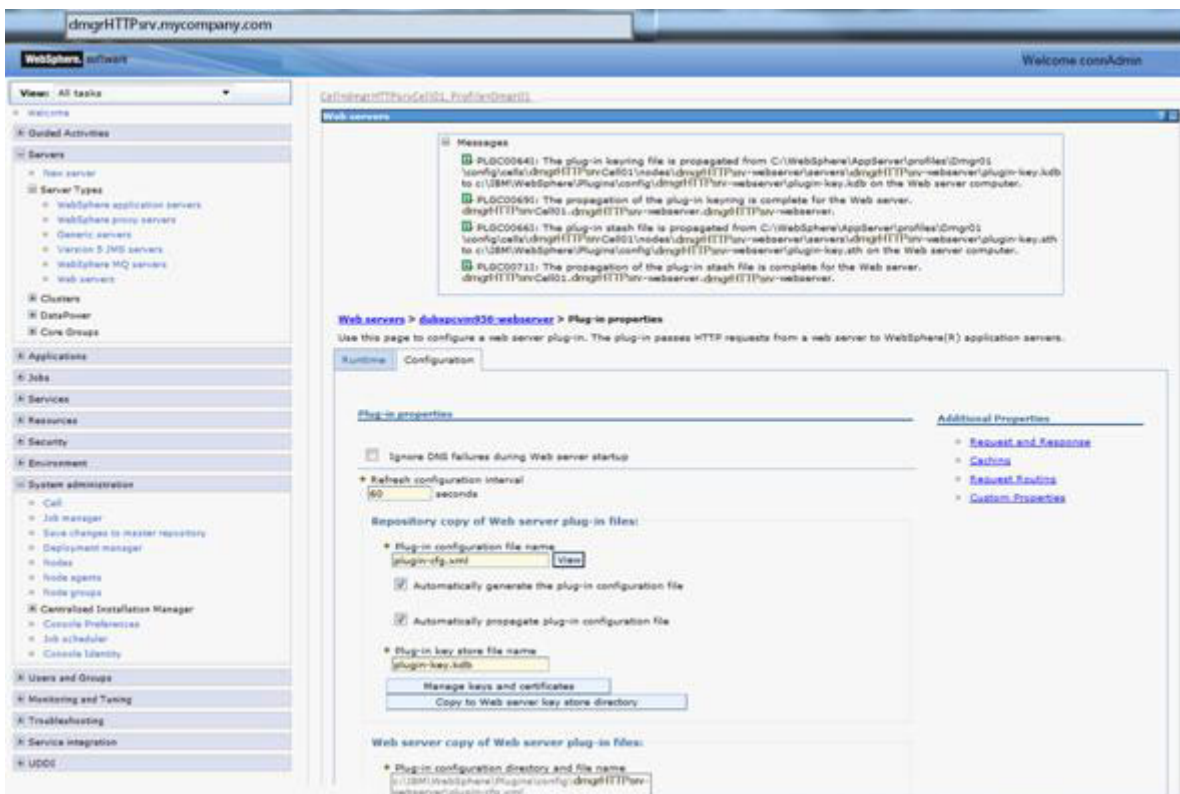


Figure 117. Deployment Manager console - Web servers - Plug-in properties

Adding certificates to the WebSphere truststore

1. From the WebSphere Admin console, go to **Security > SSL Certificate and Key Management**.

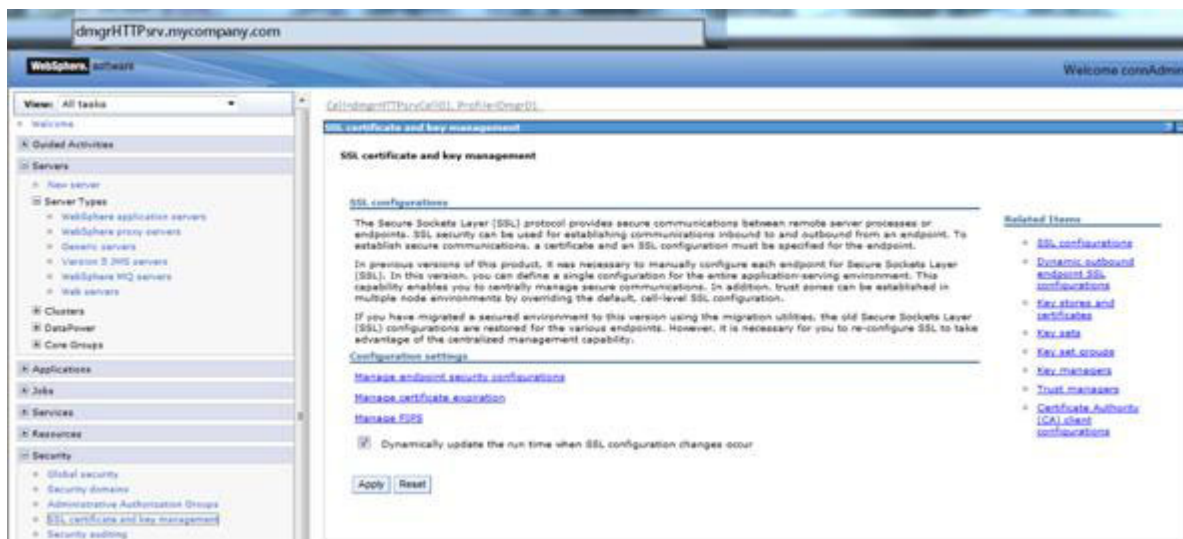


Figure 118. WebSphere Admin console - SSL certificate and key management

2. Next, select **Key stores and certificates** and choose **CellDefaultTrustStore**.

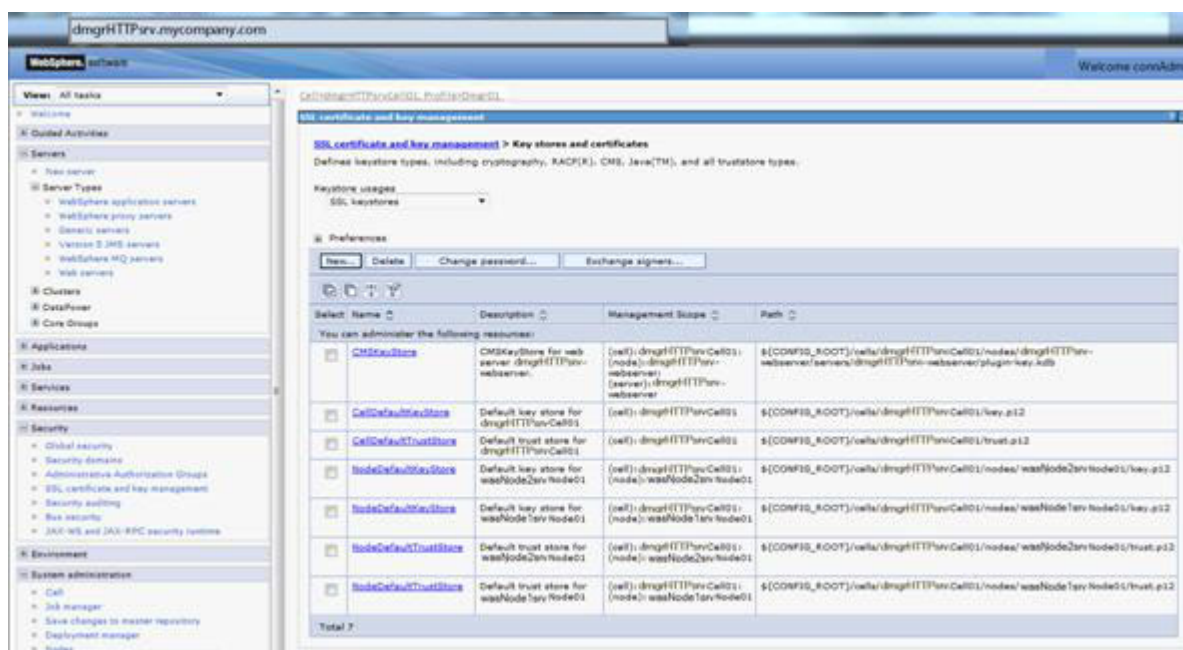


Figure 119. WebSphere Admin console - SSL certificate and key management - Key stores and certificates

___ 3. Select **Signer Certificates** and click **Retrieve from port**.

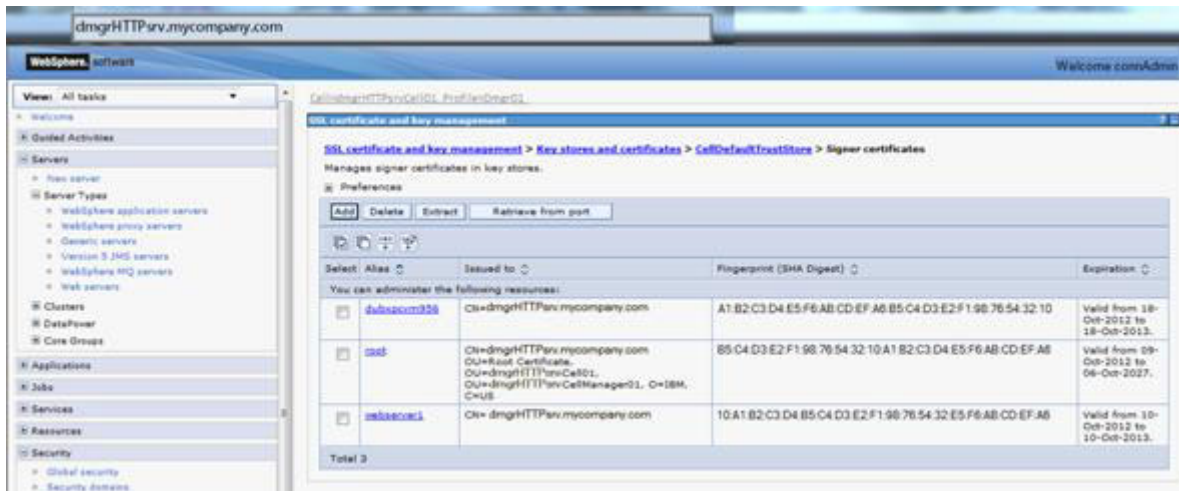


Figure 120. WebSphere Admin console - Signer certificates

___ 4. Enter the host name, port, and alias details and then click **Retrieve signer information**. Click **Apply** and **Save**.

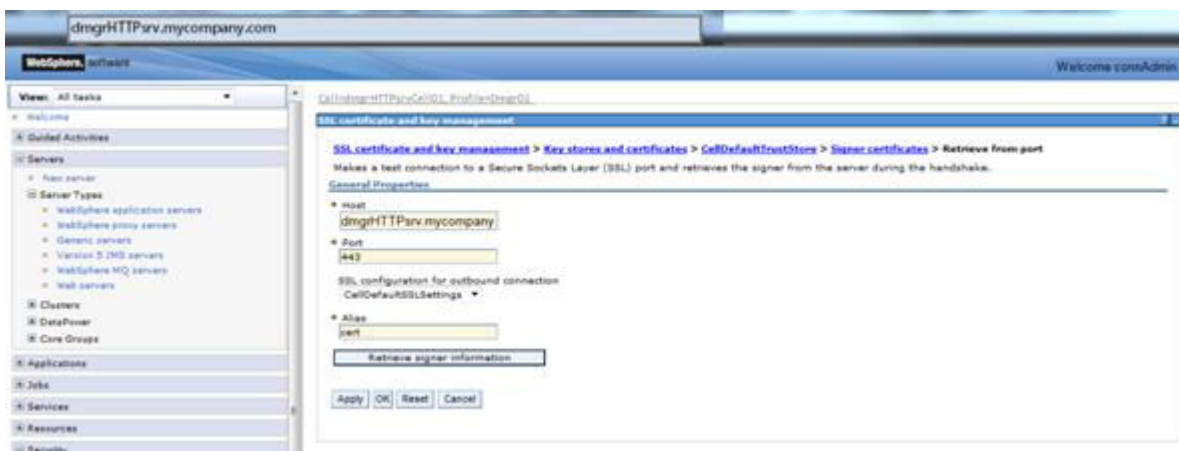


Figure 121. WebSphere Admin console - SSL certificates and key management

You should now restart your HTTPserver, DMGR, and Nodes.

Updating web addresses that Lotus Connections uses to access content

As you are using a remote HTTP server, you must update the web addresses for all Connections applications in the `LotusConnections-config.xml` file. You can do it by using the `wsadmin` client, but in this case it is done by editing it from the file system and then restarting the configuration.

- ___ 1. First, back up
 - c:\IBM\WebSphere\AppServer\profiles\Dmgr01\config\cells\dmgrCell01\Lotus-Connections-Config\LotusConnections-config.xml. Then, open the file for editing.
- ___ 2. Update all `href` and `ssl-href` values to reflect the host name of the HTTP Server and remove all port numbers.

Example before editing:

```
<slc:serviceReference bootstrapHost="connections.example.com" bootstrapPort="2811" clusterName="LotusConnections"
  <slc:href>
    <slc:hrefPathPrefix>/activities</slc:hrefPathPrefix>
    <slc:static href="http://connections.example.com:9081" ssl_href="https://connections.example.com:9444"/>
    <slc:interService href="https://connections.example.com:9444"/>
  </slc:href>
</slc:serviceReference>
```

Figure 122. Editing the LotusConnections-config.xml (before)

Example after editing:

```
<slc:serviceReference bootstrapHost="connections.example.com" bootstrapPort="2811" clusterName="LotusConnections"
  <slc:href>
    <slc:hrefPathPrefix>/activities</slc:hrefPathPrefix>
    <slc:static href="http://connections.example.com" ssl_href="https://connections.example.com"/>
    <slc:interService href="https://connections.example.com"/>
  </slc:href>
</slc:serviceReference>
```

Figure 123. Editing the LotusConnections-config.xml (after)

- ___ 3. Save your changes and then sync your nodes again. You should also regenerate and propagate your HTTP plug-in from `Servers\Server types\web servers`.

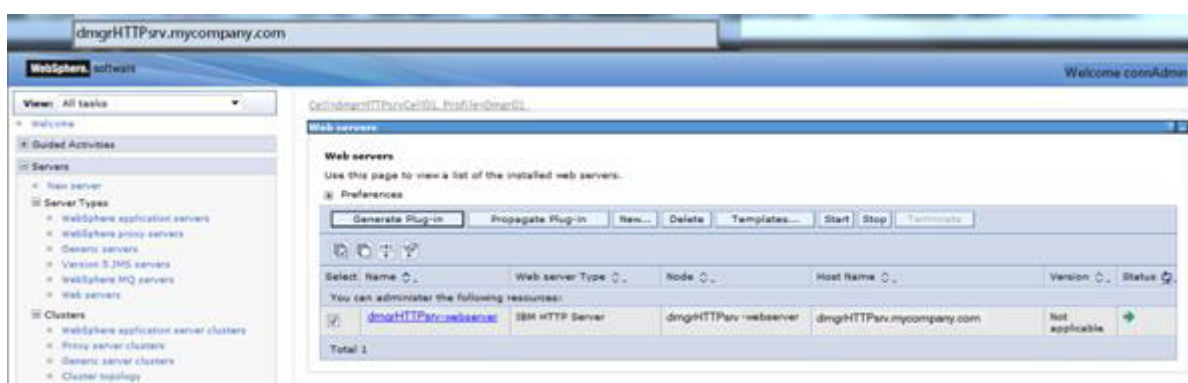


Figure 124. Web servers



Note

Before you use Connections, you must configure home page administration. See Configuring the home page administrator,

http://www-10.lotus.com/ldd/lcwiki.nsf/xpDocViewer.xsp?lookupName=IBM+Connections+4.0+documentation#action=openDocument&res_title=Configuring_the_Home_page_administrator_ic40&content=pdcontent.

4. Restart your config and you should now be able to log in to Connections from your home page. Log in with a user from your LDAP repository and you come to "Getting Started with IBM Connections" on the home page.

Congratulations! You can now start working with IBM Connections 4.5.

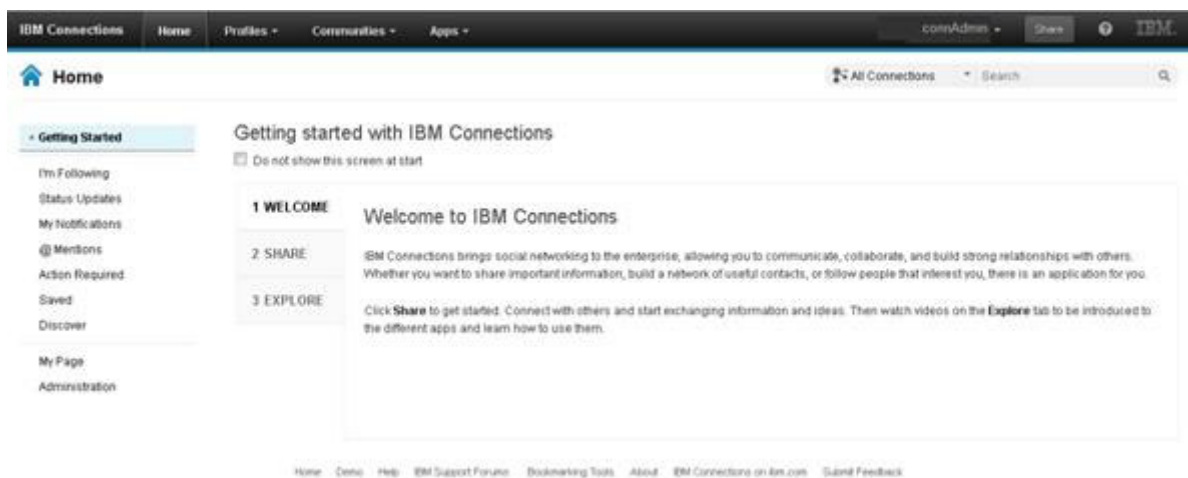


Figure 125. Getting started with IBM Connections

Extra suggested configuration steps

Setting path variables for search

During Connections installation, the `stellent` folder is added to the Shared Content Store `\\ConnectionsShare\search\stellent` and the `FILE_CONTENT_CONVERSION` variable is set to point to this folder. In a multi-node cluster, run it on the nodes themselves and not the shared area.

- ___ 1. Copy the `stellent` folder from `\\ConnectionsShare\search\stellent` to the local drive, for example, `C:\connections\stellent` on each node. Make sure to grant read/write privileges to the folder.
- ___ 2. From the WebSphere administration console, go to **Environment > WebSphere Variables**. Locate `FILE_CONTENT_CONVERSION` and update the value to reference `exporter.exe`, that is, `C:\connections\stellent\dcs\oiexport\exporter.exe`.

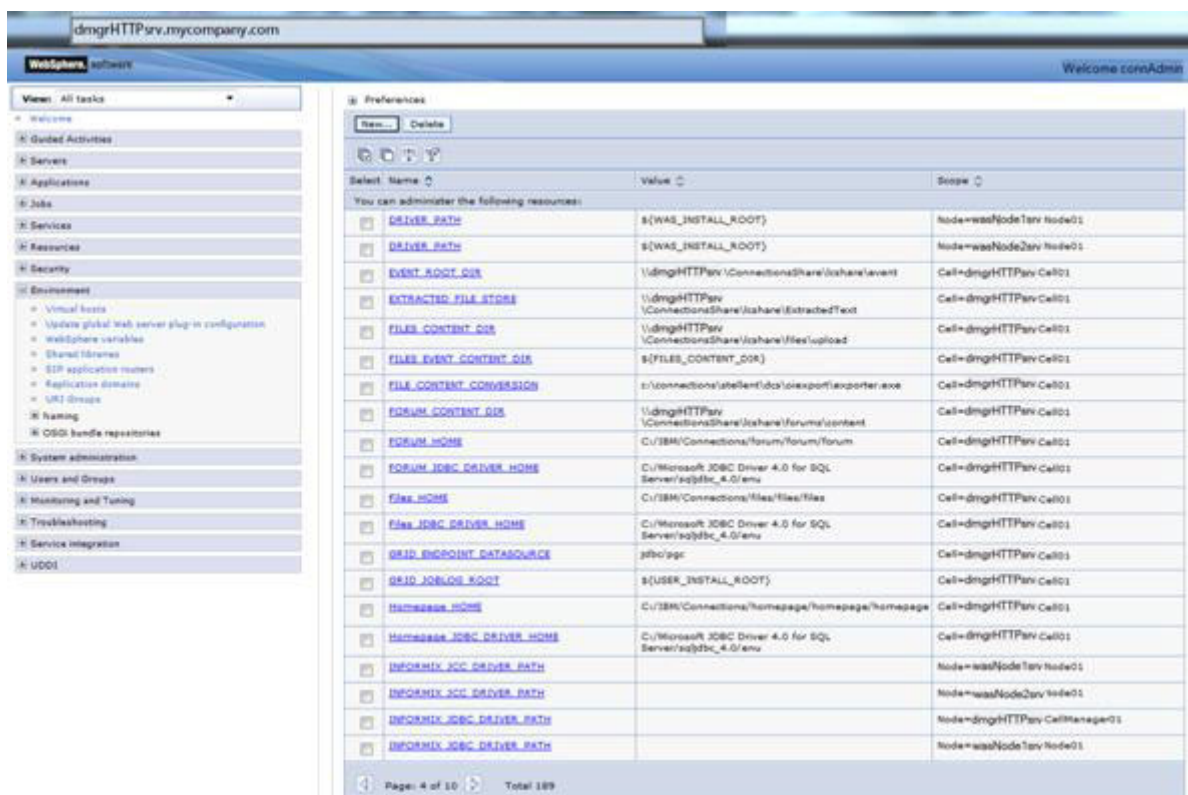


Figure 126. WebSphere admin console - Environment - WebSphere Variables



Note

This change requires a restart.

Enabling fast downloads for files and wikis



Note

This step is optional but was configured on this test environment.



Important

Back up `httpd.conf`, `files-config.xml` and `wikis-config.xml` before making any changes!

1. From your Deployment Manager, go to `C:\IBM\Connections\plugins\ihs\mod_ibm_local_redirect\win_ia32-ap22` and copy `mod_ibm_local_redirect.so` to `C:\IBM\HTTPServer\modules`.
2. Now edit your `httpd.conf` file under `C:\IBM\HTTPServer\conf\httpd.conf` and add the following lines:

```
LoadModule ibm_local_redirect_module modules/mod_ibm_local_redirect.so
LoadModule env_module modules/mod_env.so
```



Note

This content should exist in your file.

- ___ 3. Also add the following sections, updating paths as per your Shared Content location:

```
Alias /downloadfiles "//dmgrHTTPsrv/ConnectionsShare/lcshare/files/upload/"
Alias /downloadwikis "//dmgrHTTPsrv/ConnectionsShare/lcshare/wikis/upload/"
```

```
<Directory "//dmgrHTTPsrv/ConnectionsShare/lcshare/files/upload/">
Order Deny,Allow
Deny from all
Allow from env=REDIRECT_FILES_CONTENT
```

```
</Directory>
<Directory "//dmgrHTTPsrv/ConnectionsShare/lcshare/wikis/upload/">
Order Deny,Allow
Deny from all
Allow from env=REDIRECT_WIKIS_CONTENT
</Directory>
```

```
<Location /files>
IBMLocalRedirect On
IBMLocalRedirectKeepHeadersX-LConn-Auth,Cache-Control,Content-Type,Content-D
isposition,Last-Modified,ETag,Content-Language,Set-Cookie
SetEnv FILES_CONTENT true
</Location>
```

```
<Location /wikis>
IBMLocalRedirect On
IBMLocalRedirectKeepHeadErsX-LConn-Auth,Cache-Control,Content-Type,Content-D
isposition,Last-Modified,ETag,Content-Language,Set-Cookie
SetEnv WIKIS_CONTENT true
```

```
</Location>
```

- ___ 4. Save this file and restart your HttpServer.
- ___ 5. Next you need to edit the files-config.xml and wikis-config.xml files from your LotusConnections-configfolder on the deployment manager to enable, in this case C:\IBM\WebSphere\Appserver\profiles\Dmgr01\config\cells\dmgrcell01\LotusConnections-config:

```
<download>
<modIBMLocalRedirect enabled="true"
hrefPathPrefix="/downloadfiles" />
<stats>
<download>
<modIBMLocalRedirect enabled="true"
hrefPathPrefix="/downloadwikis" />
<stats>
```

- ___ 6. Save the changes and synch to your nodes. You will need to restart Connections for this change to take affect.

