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IBM WebSphere Integration Developer Version 7.0
WebSphere test environment
(Optional) IBM Lotus Forms Server V3.5.1 FP1 Installation

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What this exercise is about

The objective of this exercise is to provide step by step instructions for installing IBM WebSphere Integration Developer V7.0, the WebSphere test environment, and update with latest available refresh pack, fixes, and extensions. If you are installing WebSphere Integration Developer V7.0 and WebSphere test environment for the first time, you will update it with the latest available refresh pack at the same time when you install WebSphere Integration Developer V7.0. Instructions are also provided to update WebSphere Integration Developer V7.0 and the WebSphere test environment with the latest available refresh pack using the Update Packages wizard in the IBM Installation Manager. Optionally install and configure IBM Lotus Forms Server V3.5.1 with the WebSphere Process Server test environment.

Exercise requirements

List of software required for the student to complete the exercise:

- IBM Installation Manager V1.3.3
- IBM WebSphere Integration Developer V7.0 (Updated with the latest available refresh pack)
- WebSphere test environment (Updated with the latest available refresh pack)
- (Optional) Lotus Forms Server V3.5.1 Fixpack 1

What you should be able to do

At the end of this exercise you should be able to:

- Install IBM Installation Manager V1.3.3
- Optionally install IBM Lotus Forms Designer V3.5.1 Fixpack 1
- Install IBM WebSphere Integration Developer V7.0 with the required features (Updated with the latest available refresh pack)
- Install WebSphere test environment (Updated with the latest available refresh pack)
    - Create these WebSphere Process Server V7.0 profiles by choice
        - Create stand-alone development WebSphere Process Server profile
        - Create stand-alone development WebSphere Enterprise Service Bus profile
    - Create these WebSphere Business Monitor V7.0 profiles by choice
        - Create stand-alone development WebSphere Business Monitor profile
        - Create stand-alone development WebSphere Monitor on WebSphere Process Server profile
        - Create stand-alone development WebSphere Monitor on WebSphere Enterprise Service Bus profile
- Optionally install Lotus Forms Server V3.5.1 Fixpack 1

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Exercise Instructions

Some instructions in this exercise might be Windows operating-system specific. If you plan on running the exercise on an operating-system other than Windows, you will need to run the appropriate commands, and use appropriate files (.sh or .bat) for your operating system. The directory locations are specified in the exercise instructions using symbolic references, as follows:

Reference Variable	Windows Location	AIX/UNIX Location
<WID_HOME>	C:\IBM\WID7	
Shared Resources Directory	C:\IBM\SDPShared	
Installation Manager Directory	C:\IBM\Installation Manager\eclipse	
<WTE_HOME>	C:\IBM\WID7_WTE\runtimes\bi_v7	
<WTE_PROFILE_HOME>	<WTE_HOME>\profiles\qwps (or qmwps)	
<LFSERVER_HOME>	C:\IBM\LotusForms\Server\3.5	
<WFSERVER_PROFILE_HOME>	<WTE_HOME>\profiles\AppSrv01	

Windows users' note: When directory locations are passed as parameters to a Java program such as EJBdeploy or wsadmin, it is necessary to replace the backslashes with forward slashes to follow the Java convention.

The following are the installation files you need to complete the exercise:

Product	File Name (Windows)
WebSphere Integration Developer V7.0	WID_V7.0_Install_1.zip
	WID_V7.0_Install_2.zip
	WID_V7.0_Install_3.zip
WebSphere test environment	WID_V7.0_Install_4.zip
	WID_V7.0_Install_5.zip
(Optional) Lotus Forms Server V3.5.1 FP 1	CZ28LML.exe

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Introduction:

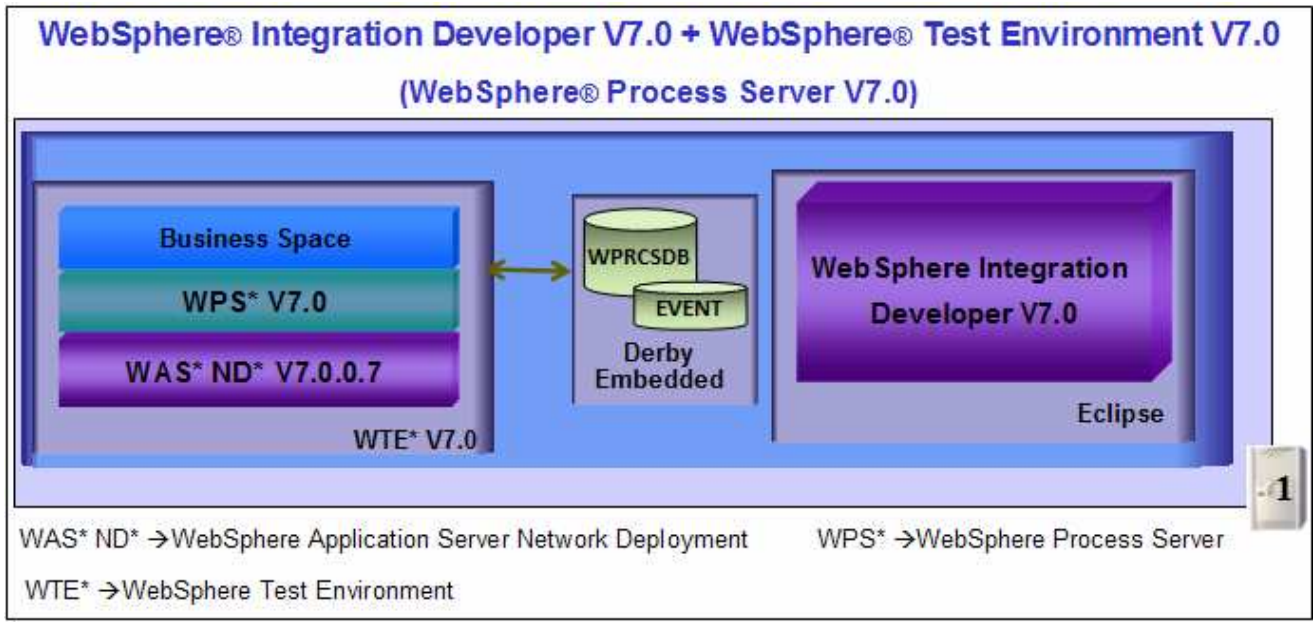
WebSphere Integration Developer is a development environment for end-to-end integration of service oriented applications. It is the Eclipse-based tool for building SOA-based business process management (BPM) and integration solutions across WebSphere Process Server, WebSphere Enterprise Service Bus, WebSphere Adapters and optionally WebSphere Business Monitor.

IBM WebSphere Business Monitor Development Toolkit V7.0 is now part of WebSphere Integration Developer V7.0 installation. You can optionally select to install the Monitor Model Editor when you install WebSphere Integration Developer. The Monitor Model Editor provides wizards, libraries, and a test environment to help you create and test monitor models. WebSphere Business Monitor development toolkit can also be installed in an existing Rational Application Developer or WebSphere Integration Developer environment.

In this exercise, you will use the IBM Installation Manager V1.3.3 to install WebSphere Integration Developer V7.0 by selecting the features necessary for your development environment. If you are installing WebSphere Integration Developer V7.0 for the first time, you will update it with the latest available refresh pack (Version 7.0.0.0.101 at the time of writing this document) at the same time when you install WebSphere Integration Developer V7.0. However, instructions are also provided to update WebSphere Integration Developer V7.0 with the latest version of the refresh pack using the Update Packages wizard in the IBM Installation Manager.

You will eventually install the WebSphere test environment to achieve a stand-alone runtime environment good for development. If you are installing the WebSphere test environment for the first time, you will update it with the latest available refresh pack (Version 7.0.0.0.1 at the time of writing this document) at the same time when you install WebSphere Process Server V7.0 or WebSphere Business Monitor V7.0.

Optionally you will install Lotus Forms Server V3.5.1 Fixpack 1 and manually deploy the Lotus Forms API to the WebSphere Process Server stand-alone profile.



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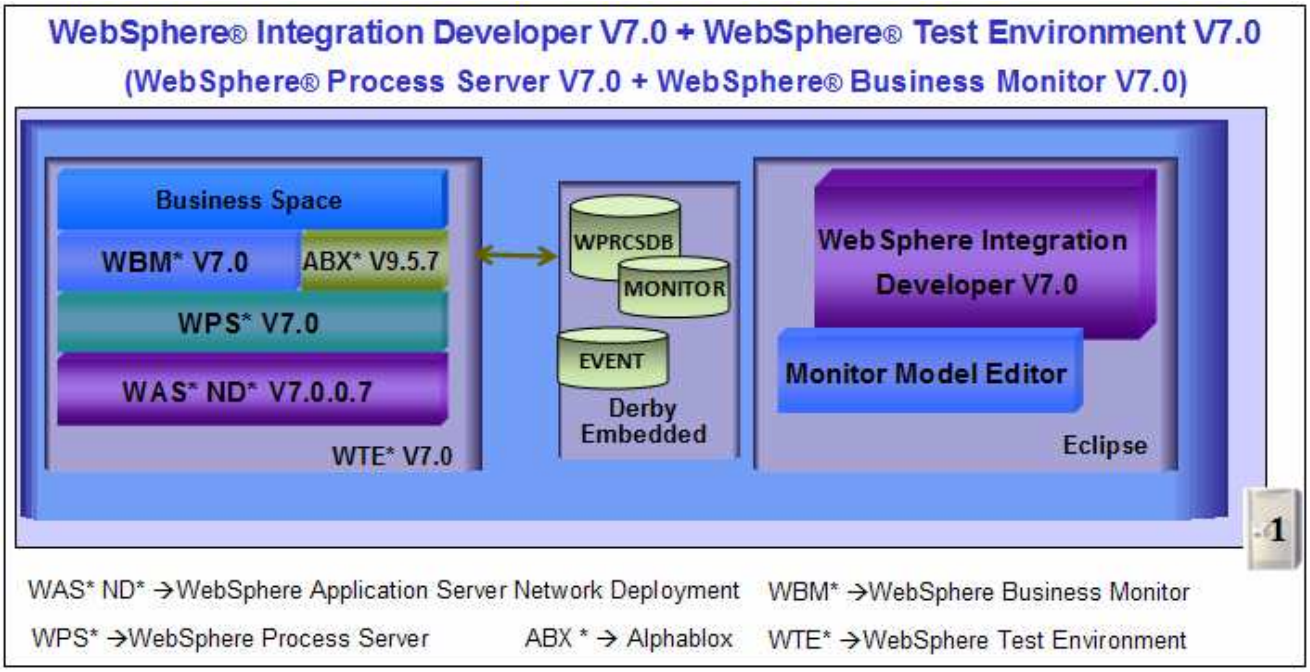

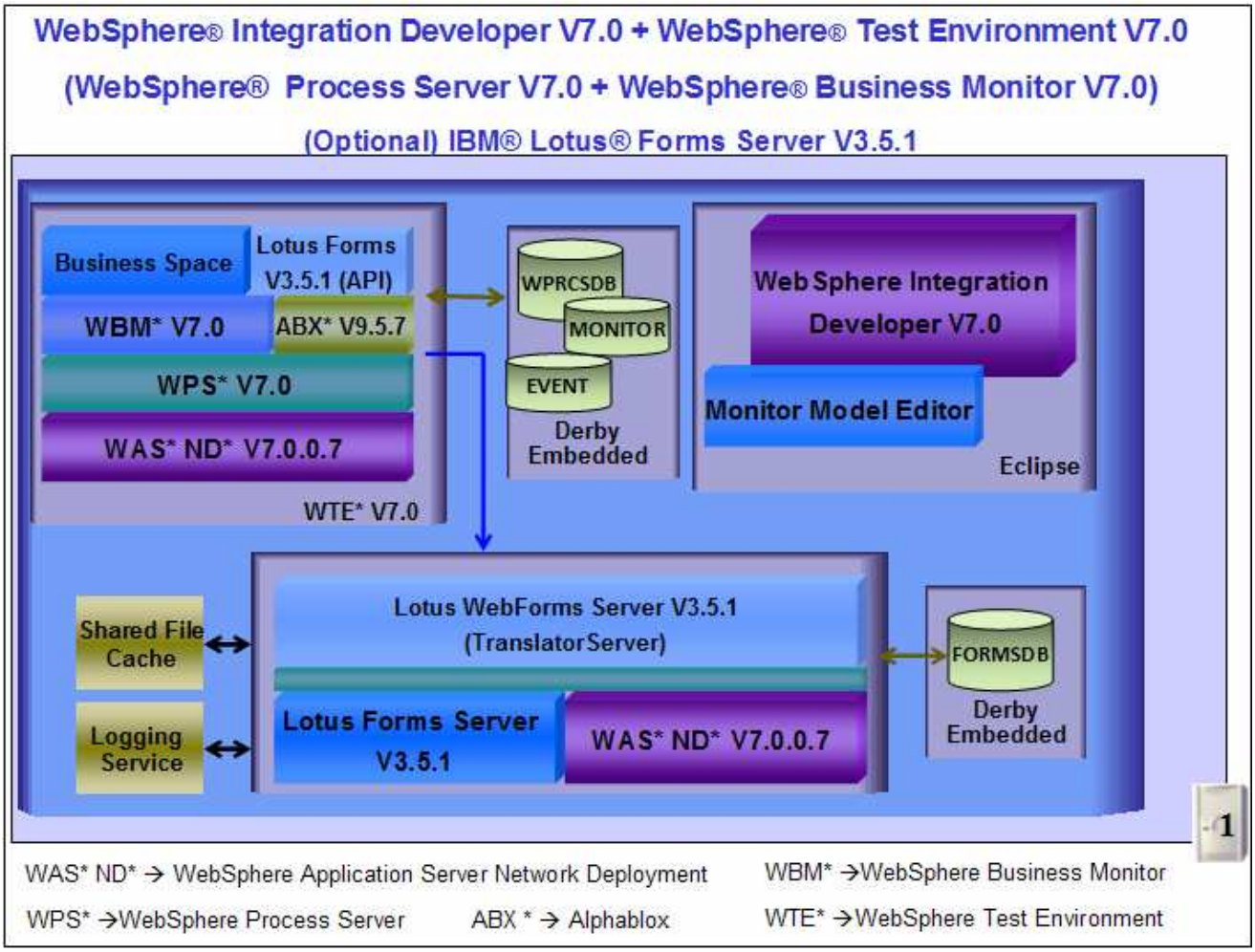

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Part 1: Preparing for the Installation Image

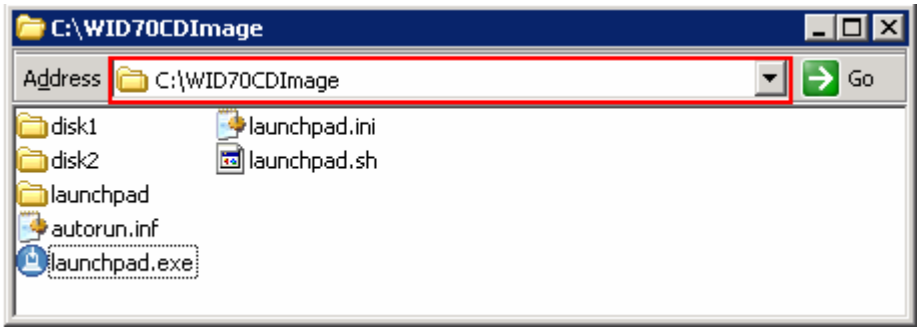
In this part of the exercise, the WebSphere Integration Developer and WebSphere test environment DVD images are obtained and extracted -- creating the correct on-disk structure for the installation image.

____ 1. The following are the installation files needed to install the WebSphere Integration Developer V7.0

Product	File Name (Windows)
WebSphere Integration Developer V7.0	WID_V7.0_Install_1.zip
	WID_V7.0_Install_2.zip
	WID_V7.0_Install_3.zip

____ 2. Obtain the WebSphere Integration Developer DVD image and extract in such a way to create the correct on-disk structure for the installation image

__ a. Extract the WebSphere Integration Developer V7.0 installation archives to a directory (for example **C:\WID70CDimage)**. Using file archiver software, right-click each files and select **Extract here** from the pop-up menu. Click **Yes to All** to overwrite the contents when prompted. Confirm that the directories and files are extracted correctly; it should appear similar to the picture below:



____ 3. The following are the installation files needed to install the WebSphere test environment:

Product	File Name
WebSphere test environment	WID_V7.0_Install_4.zip
	WID_V7.0_Install_5.zip

____ 4. Obtain the WebSphere test environment DVD image and extract in such a way to create the correct on-disk structure for the installation image

__ a. Extract the WebSphere test environment installation archives to a directory (for example **C:\WTE70CDImage**). Using file archiver software, right-click each files and select **Extract here** from the pop-up menu. Click **Yes to All** to overwrite the contents when prompted. You should see a directory named; **WTE_Disk** created with the extracted contents. Confirm that the directories and files are extracted correctly; it should appear similar to the picture below:

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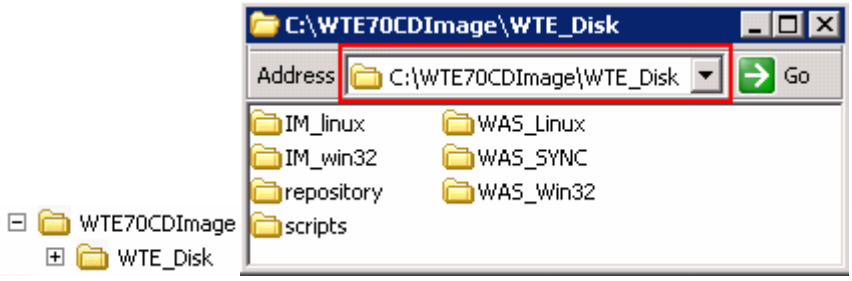
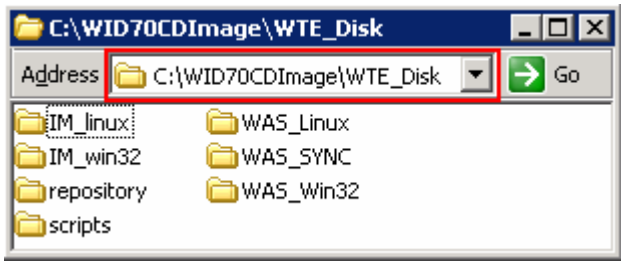


____ 5. Now, from the **`C:\WTE70CDImage`** directory where you extracted the WebSphere test environment archives, copy the **`WTE_Disk`** directory and paste it to the **`C:\WID70CDImage`** directory. Confirm that the new WebSphere Integration Developer installation image is as shown in the pictures below:



Note: For the WebSphere Integration Developer Common Launchpad to recognize the WebSphere test environment installation image, it must be named as **`WTE_Disk`** and placed in the peer level to the WebSphere Integration Developer launchpad executable file (**`launchpad.exe`**) as shown below:

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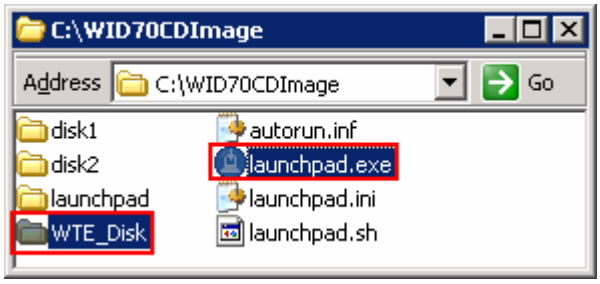
Part 2: Install WebSphere Integration Developer Version 7.0

This part of the exercise provides step-by-step instructions for installing the WebSphere Integration Developer V7.0 using IBM Installation Manager V1.3.3 launched from the launchpad program. You will optionally select the Monitor Model Editor for installation. If you are installing WebSphere Integration Developer V7.0 for the first time on this machine, you will update it with the latest available refresh pack (Version 7.0.0.0.101 at the time of writing this document) at the same time when you install WebSphere Integration Developer V7.0. However, instructions are also provided to update WebSphere Integration Developer V7.0 with the latest version of the refresh pack using the Update Packages wizard in the IBM Installation Manager.

Complete the instructions below to install WebSphere Integration Developer V7.0:

____ 1. Navigate to the directory where the correct on-disk structure for the installation image was created



____ 2. Double-click **`launchpad.exe`** to launch the Common Launchpad

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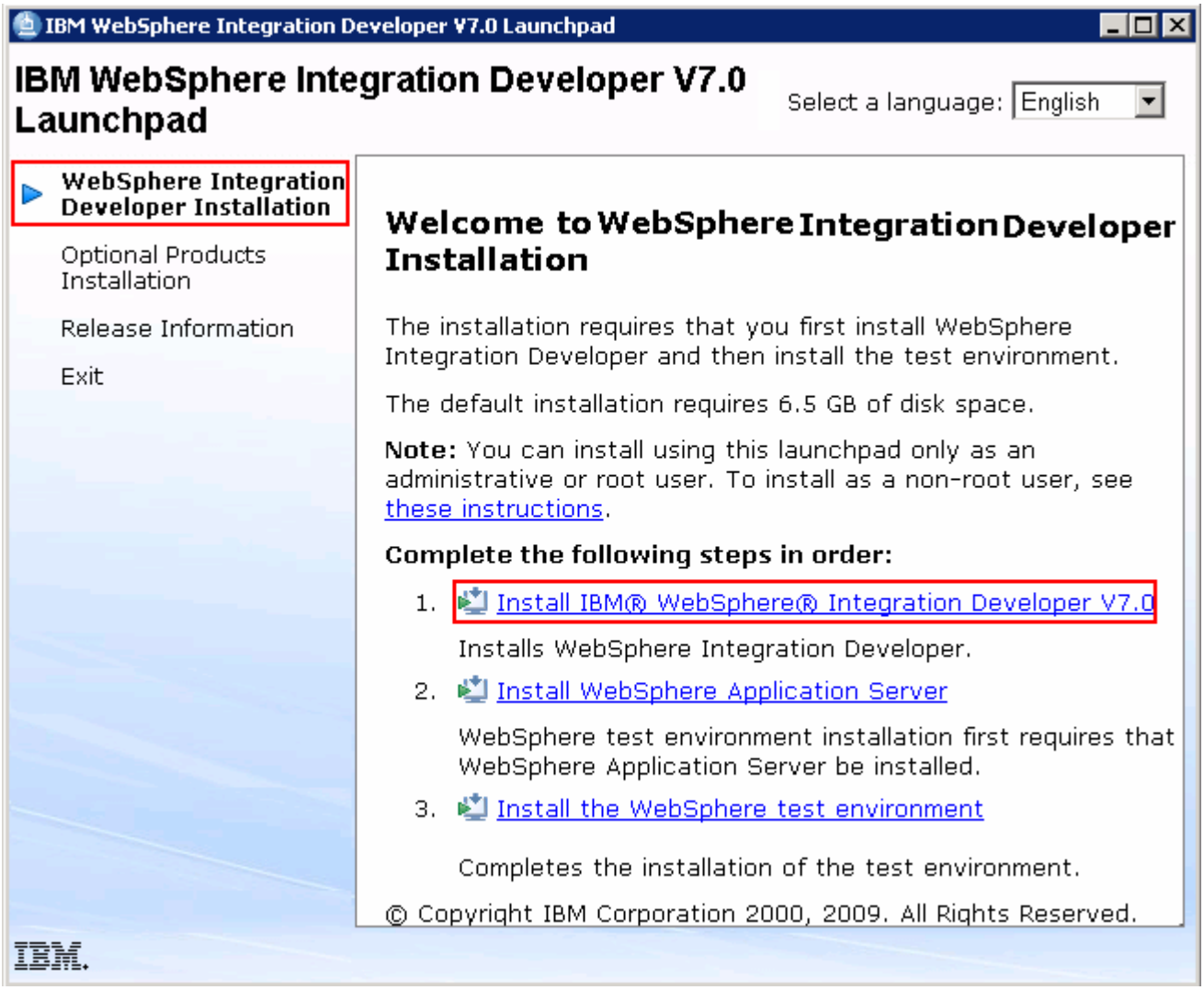

____ 3. Click the **`WebSphere Integration Developer Installation`** link to the left navigation pane and then click the **`Install IBM WebSphere Integration Developer V7.0`** to launch the Installation Manager

____ 4. The IBM Installation Manager V1.3.3 is launched. You should see a list of the packages shown below:

__ a. **`IBM Installation Manager → Version 1.3.3`**

__ b. **`IBM WebSphere Integration Developer → Version 7.0.0.0`**

__ c. **`IBM Lotus Forms Designer → Version 3.5.1 Fixpack 1`**

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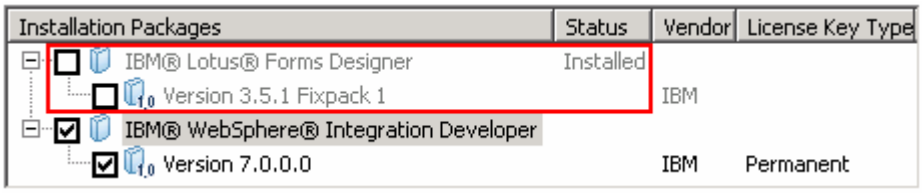
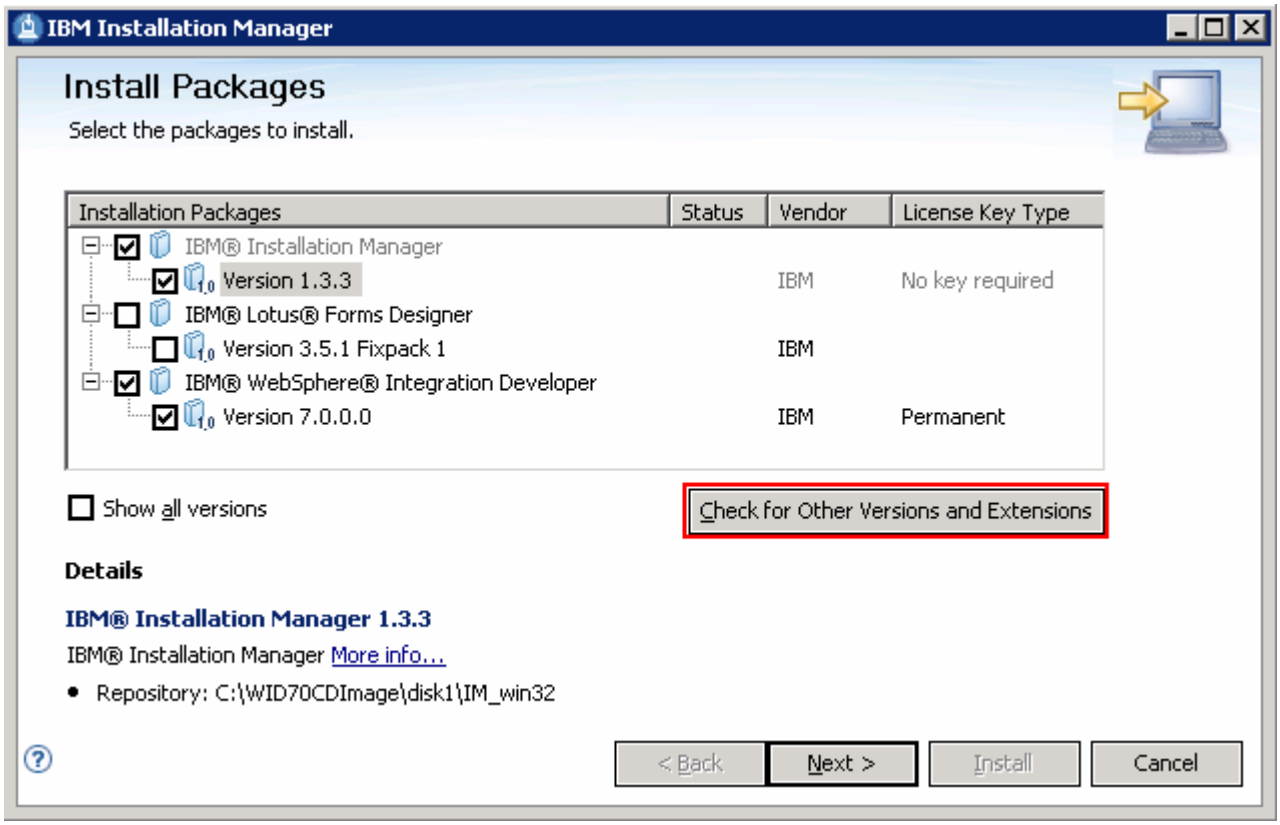
Note: You will not see **`IBM Installation Manager (Version 1.3.3)`** listed for installation in the panel, if it was already installed on this machine. Also the **`IBM Lotus Forms Designer (Version 3.5.1 Fixpack 1)`** entry is not available and displays the status as installed if it is already installed on this machine.





Note 1: If the Installation Manager Version 1.3.3 is already installed on this machine, it is launched automatically and you are not prompted for an installation.

Note 2: If you do **not** want to update with the latest refresh pack, do not click the **`Check for Other Versions and Extensions`** button. Select the required packages and click **`Next`**.

____ 5. Click **`Check for Other Versions and Extensions`** button to search for the available refresh packs, fixes and extensions. This action gives you an opportunity to update the packages with the latest refresh packs, fixes and extensions at the same time when you install WebSphere Integration Developer V7.0

Note: At the time of writing this document, the latest refresh pack version is 7.0.0.101. Ensure your machine is connected to the network accessible to the WebSphere Integration Developer live repository Web site.

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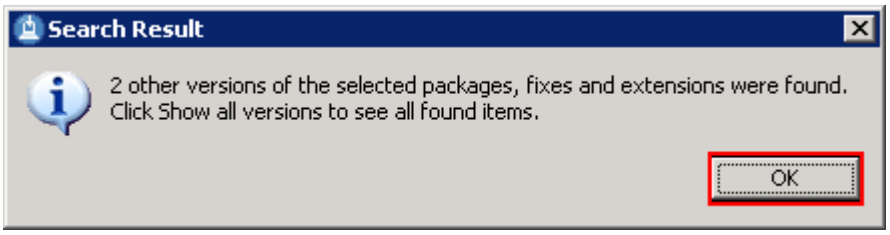
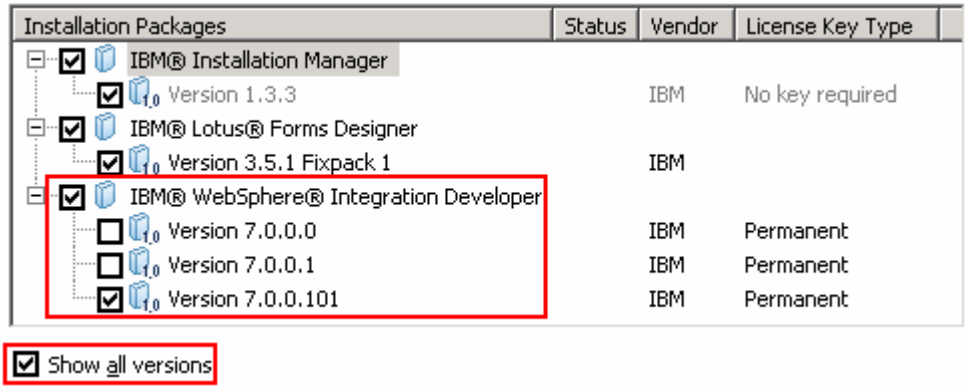
____ 6. Once the search is complete, you should see an information dialog similar to the one shown in the picture below, displaying the number of other versions found



____ 7. Click **OK**. You should see the Install Packages panel updated with the latest available packages, for example WebSphere Integration Developer Version 7.0.0.101

Note: The Installation Manager only lists the latest versions of the packages available at the time of search. If you want to install an older version, select the **Show all versions** check box. You should see all the available versions as shown below:



In this exercise, you will install WebSphere Integration Developer V7.0.0.101.

____ 8. In the select packages panel, select the packages with the appropriate versions you like to install

__ a. Select **IBM Installation Manager → Version 1.3.3**

__ b. Select **IBM WebSphere Integration Developer → Version 7.0.0.101**

__ c. Optionally select **IBM Lotus Forms Designer → Version 3.5.1 Fixpack 1**

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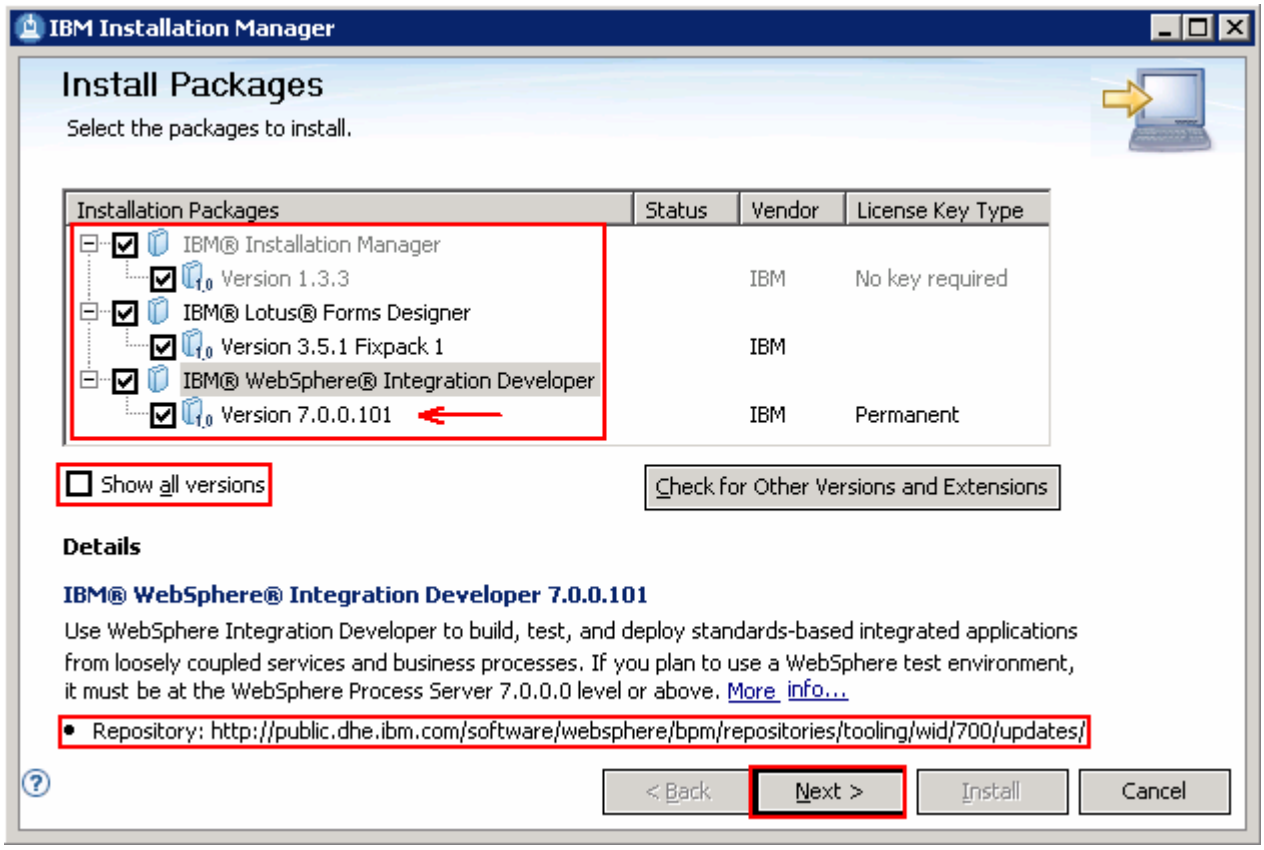

____ 9. Click **`Next`**

____ 10. In the next panel, read the license agreements. If you agree to the terms, select the radio button for **`I accept the terms in the license agreements`** and Click **`Next`**

____ 11. In the next **Install Packages** panel, read the instructions over the panel and follow the them accordingly:

__ a. Click the **`Browse`** button or type for the **`Shared Resources Directory`** field, to set the shared resources directory location to **`C:\IBM\SDPShared`**

__ b. Click the **`Browse`** button or type for the **`Installation Manager Directory`** field to set the Installation Manager installation location to **`C:\IBM\Installation Manager\eclipse`**

Note: You will not see this panel, if WebSphere Business Modeler Advanced V7.0 or any package was installed using the Installation Manager and a shared resources directory was created on this machine. Remember that only one instance of the shared resource directory is created as it can be shared by multiple packages.

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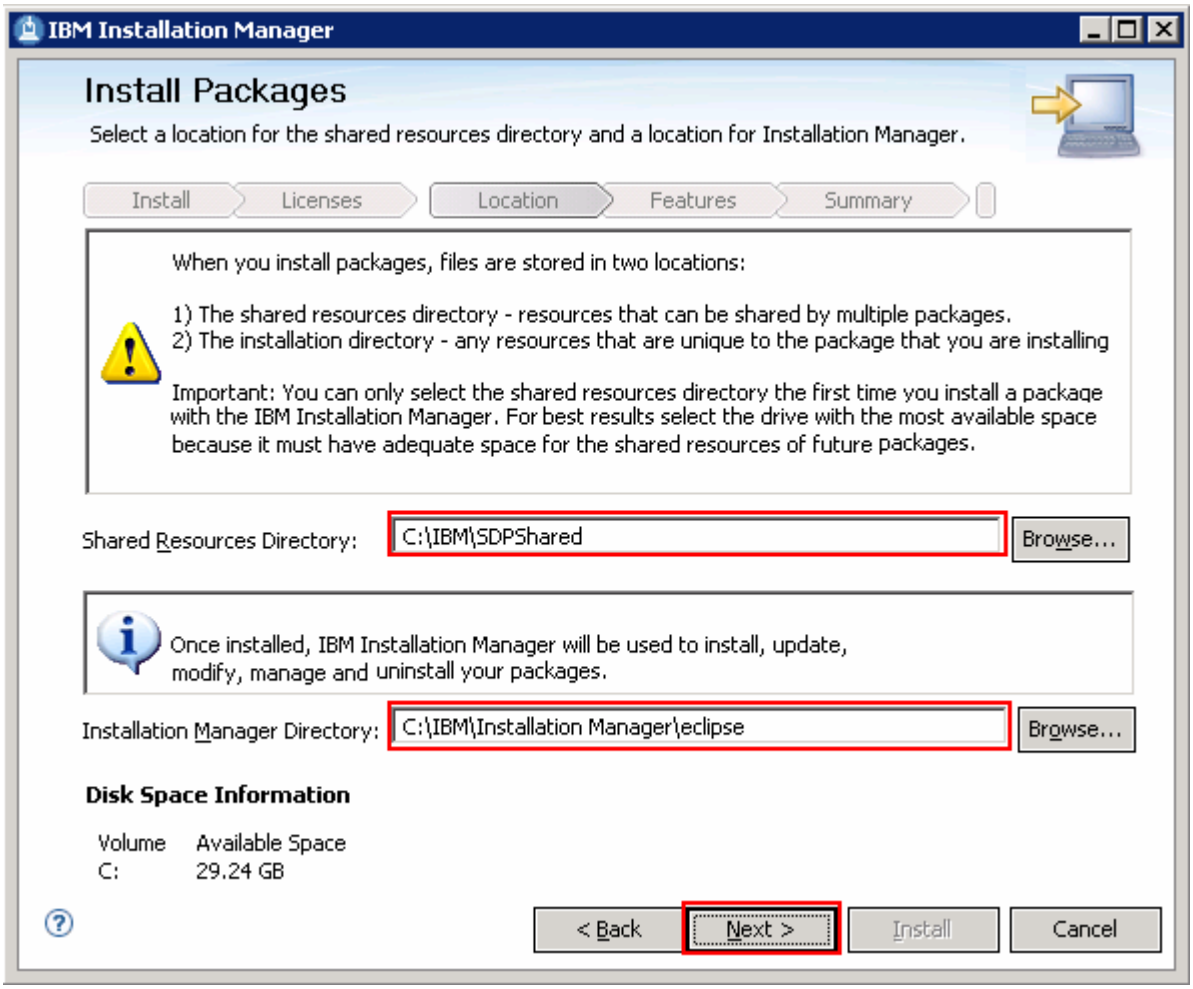

Note: The Installation Manager Directory field is not available if it was already installed. Remember that only one instance of an Installation Manager can be installed on a machine.

____ 12. Click **`Next`**

____ 13. In the next panel, ensure the radio button for **`Create a new package group`** is selected and click the **`Browse`** button or type to set the **`Installation Directory`** for the WebSphere Integration Developer package group to **`C:\IBM\WID7`**

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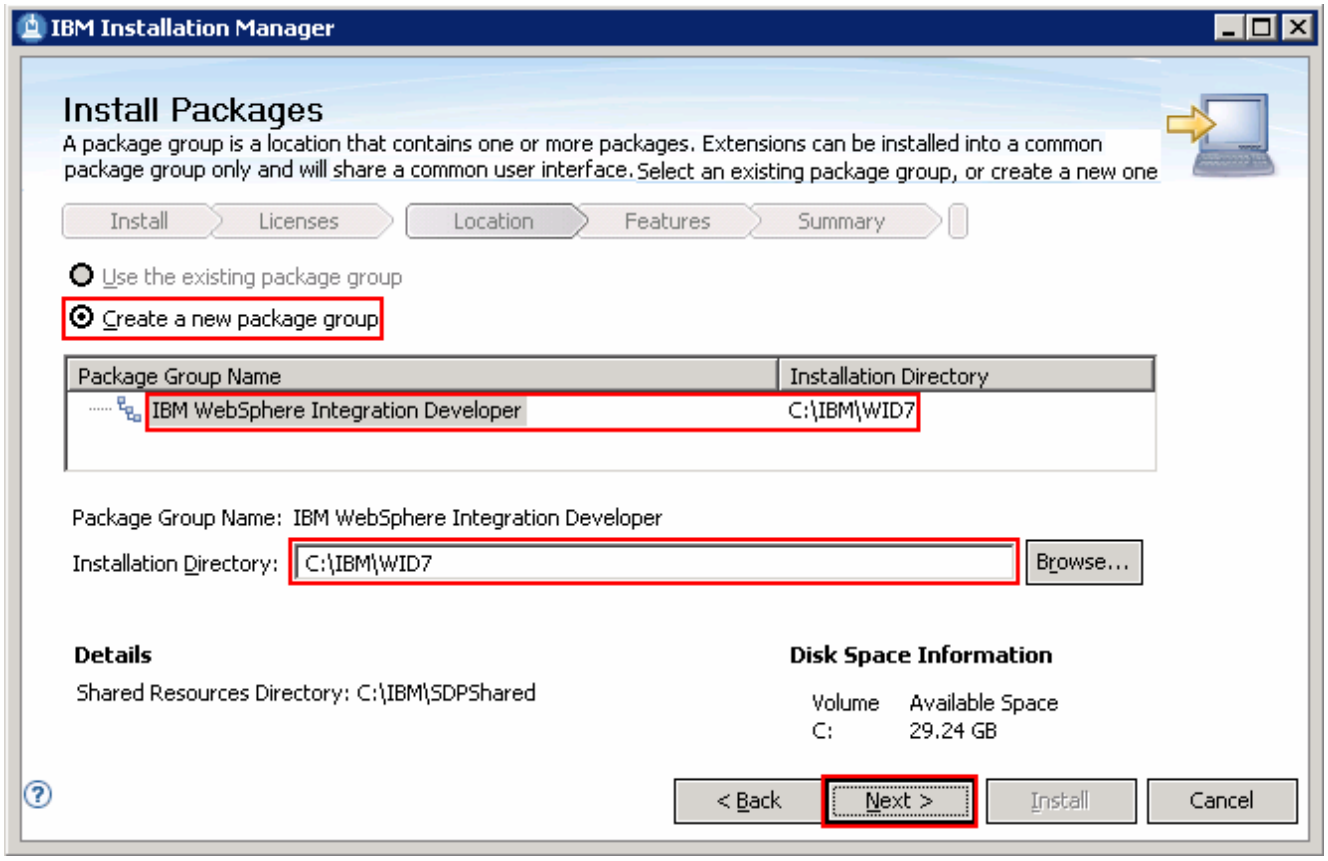

____ 14. Click **`Next`**

____ 15. In the next panel, select the check box for the required language. English is a mandatory selection and hence the option is already selected and not available

____ 16. Click **`Next`**

____ 17. In the next feature selection panel, click the **`Expand All`** button to see all the options and select the check boxes for:

- (Mandatory) **`IBM Installation Manager 1.3.3`**

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- (Optionally select) **IBM `Lotus Forms Designer 3.5.1 Fixpack 1` → `Lotus Forms Designer`**
- **`IBM WebSphere Integration Developer 7.0.0.101`**

  → (Optionally select) **E-mail, Flat File, FTP and JDBC IBM WebSphere Adapters**

  → (Optionally select) **Additional IBM WebSphere Adapters**

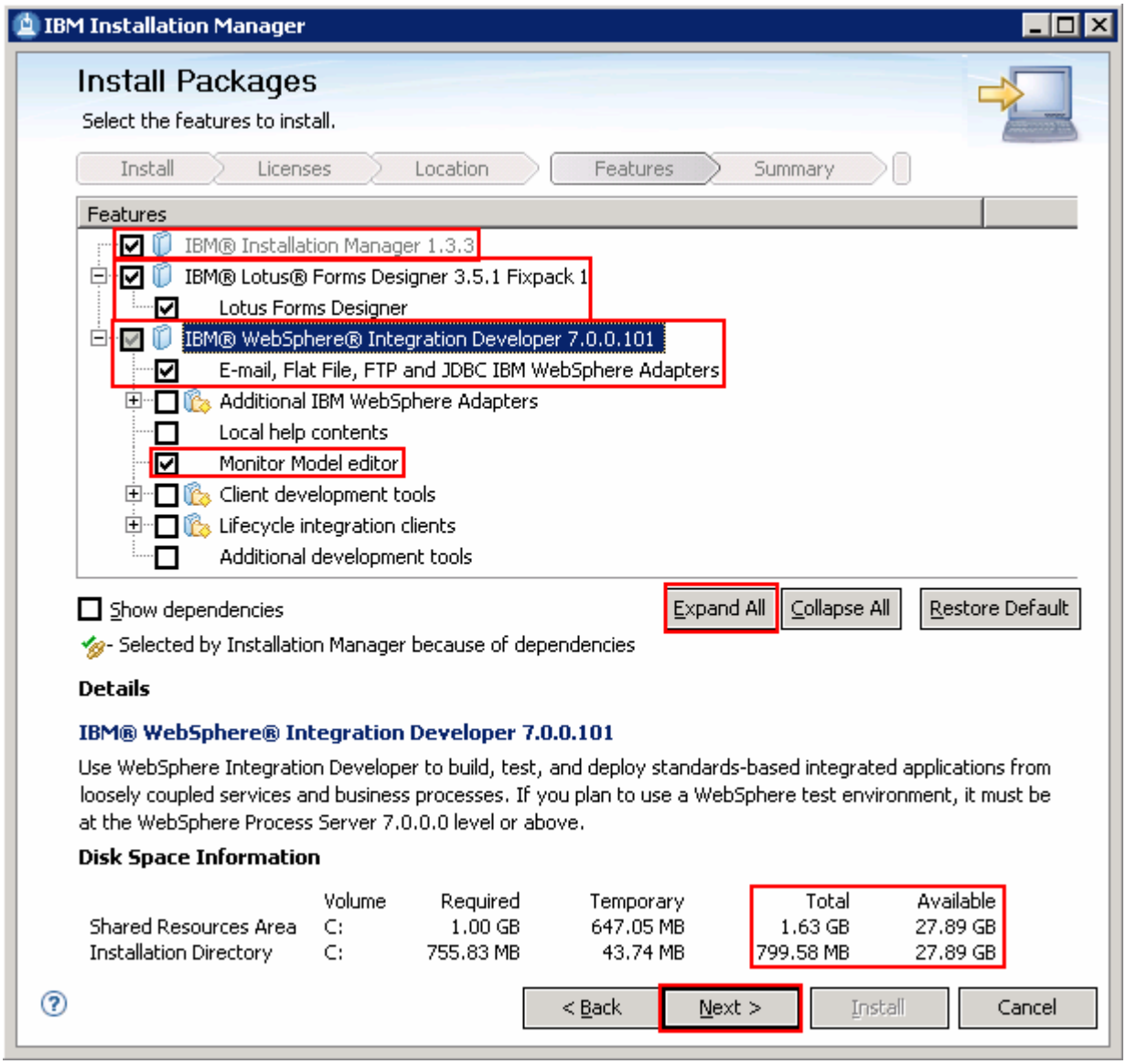
  → (Optionally select) **Local help contents**

  → (Optionally select) **Monitor Model editor**

  → (Optionally select) **Client development tools**

  → (Optionally select) **Lifecycle integration clients**

  → (Optionally select) **Additional development tools**



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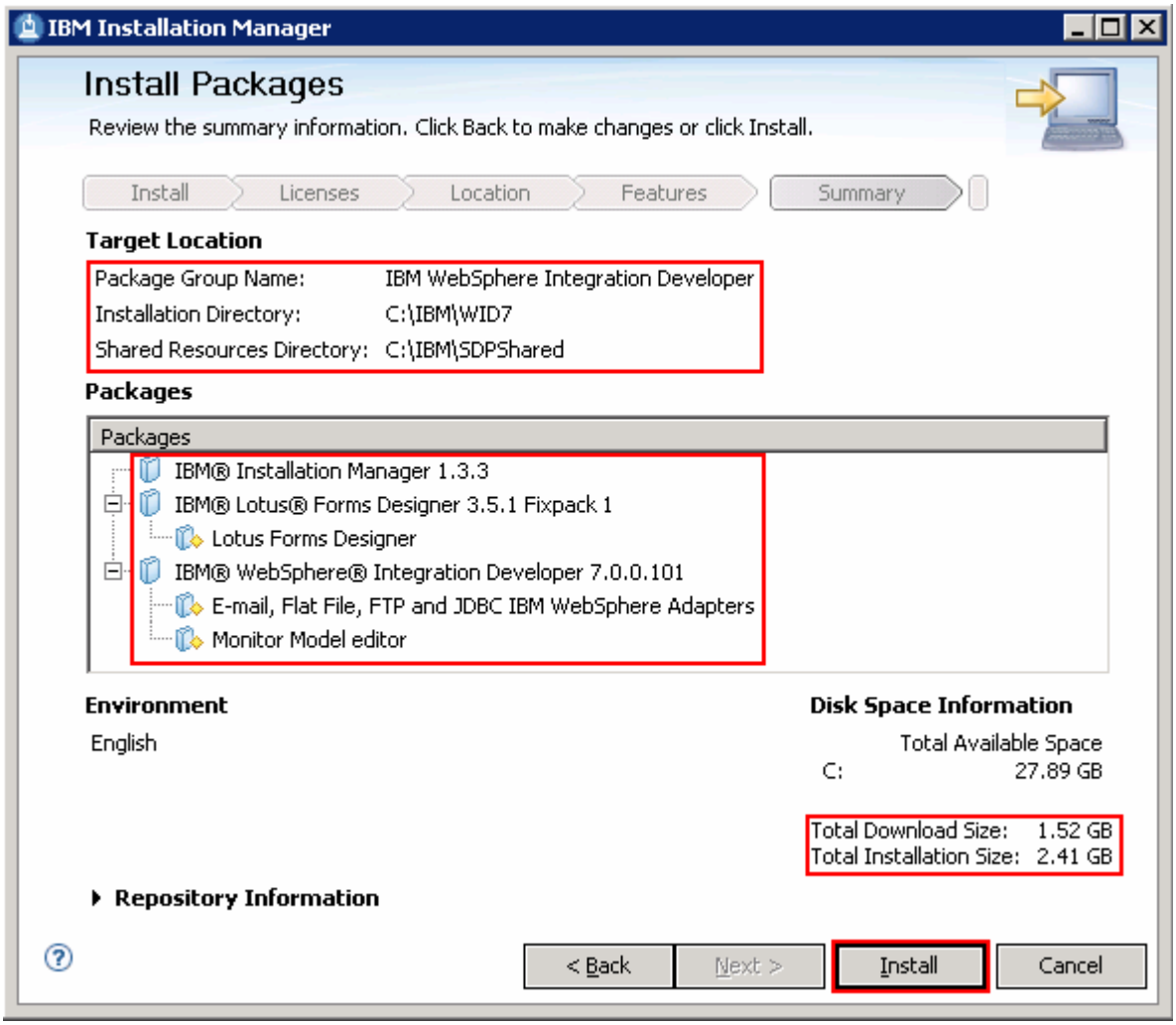
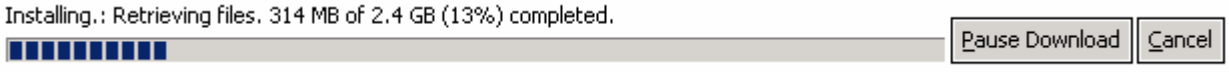
Note: Ensure you have enough space to complete the WebSphere Integration Developer installation successfully.

____ 18. Click **`Next`**

____ 19. Verify the WebSphere Integration Developer installation summary in the next panel



____ 20. Click **`Install`** to continue with the installation. The installation progresses



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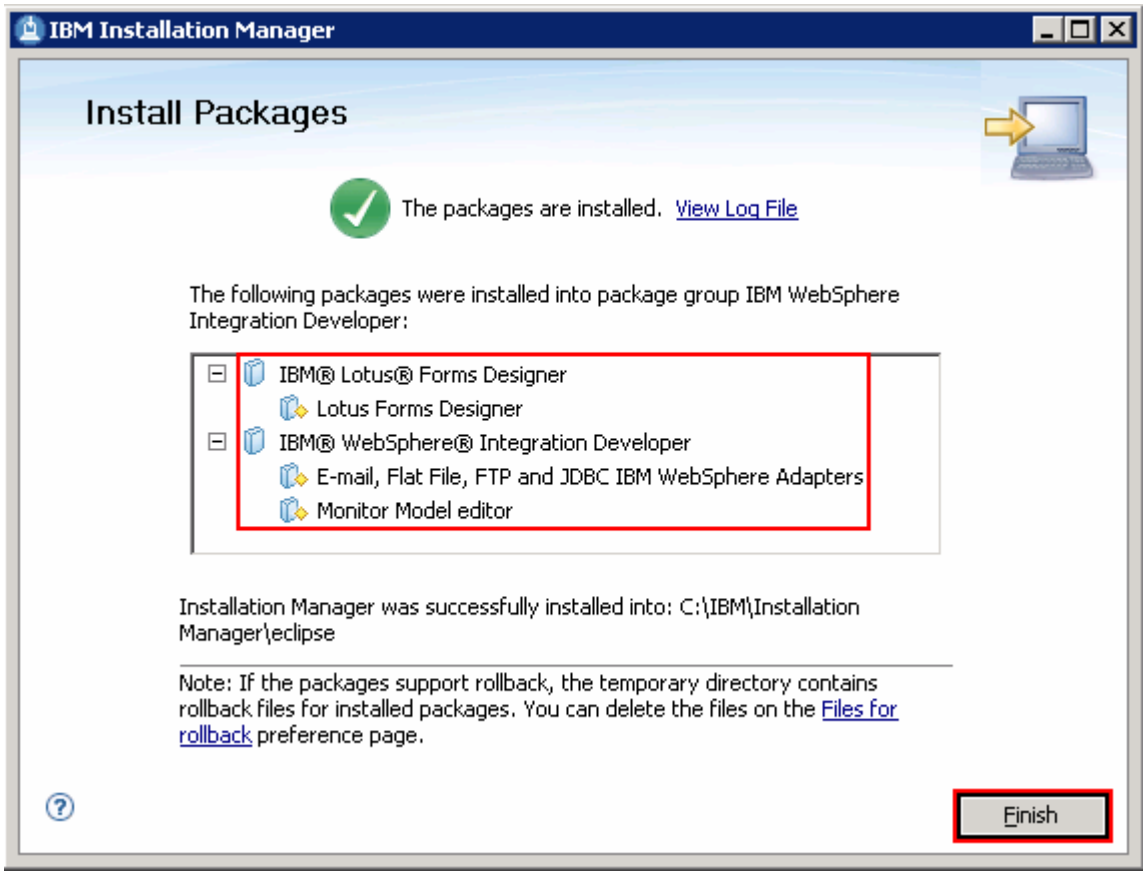

____ 21. Click **`Finish`** when the installation is complete

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Part 3: Install the WebSphere test environment

In this part of the exercise, you will create a WebSphere test environment by choice. Using the WebSphere Integration Developer V7.0 common launchpad, you will install WebSphere Application Server V7.0.0.7, WebSphere Process Server V7.0 and WebSphere Business Monitor V7.0 binaries. You will also create WebSphere Process Server, WebSphere Enterprise Service Bus or WebSphere Business Monitor stand-alone profiles with process server and enterprise service bus capabilities using the stand-alone profile development template by choice.

Complete the instructions below to create the WebSphere test environment:

____ 1. Navigate to the directory where the correct WebSphere Integration Developer on-disk installation image was created:

____ 2. Double-click **`launchpad.exe`** to launch the WebSphere Integration Developer common launchpad:

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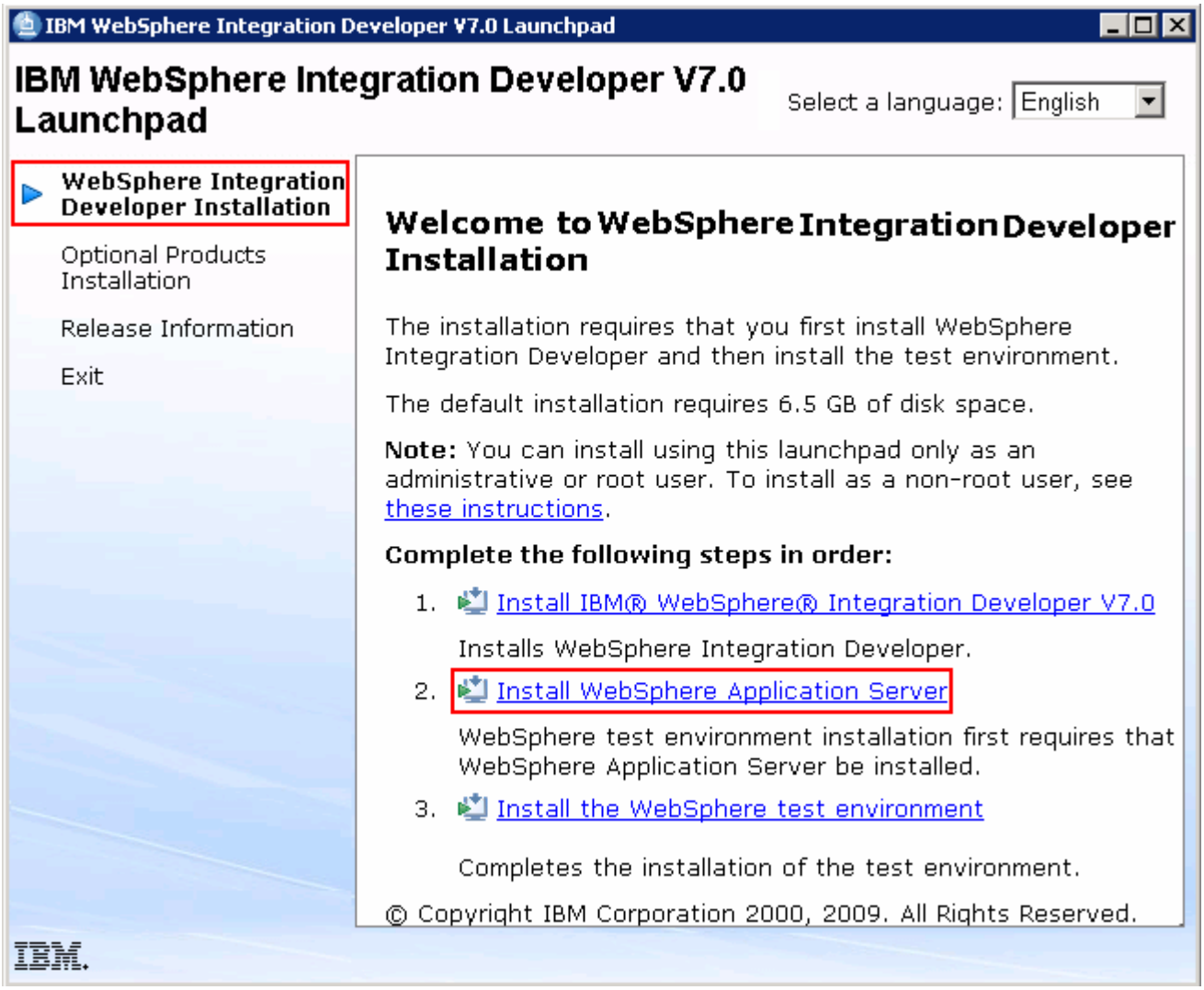
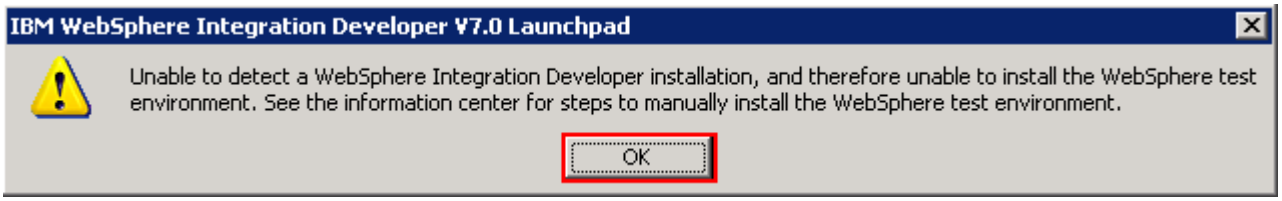


____ 3. In the WebSphere Integration Developer Common Launchpad, click the **`WebSphere Integration Developer Installation`** link to the left and click the **`Install WebSphere Application Server`** link. This action silently installs WebSphere Application Server V7.0.0.7 and then imports the WebSphere Application Server repository to the Installation Manager.

Note 1: Do not click the **`Install WebSphere Application Server`** link until the WebSphere Integration Developer installation is complete. If so, you will see a warning pop-up shown below:



____ 4. A warning dialog pops up, requesting to close the IBM Installation Manager if it is already installed and running at this time. Close the Installation Manager if it is already installed and running

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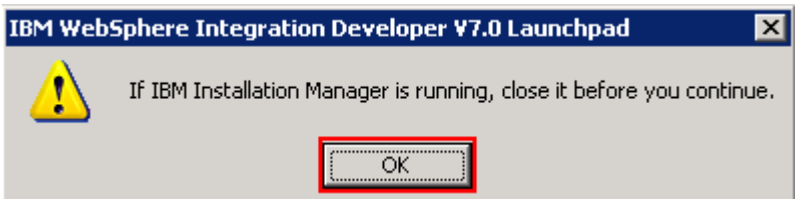
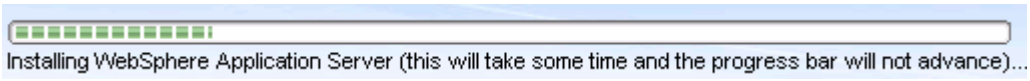


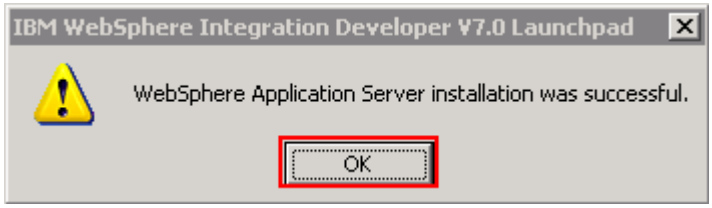
____ 5. Click **OK**

Note : The WebSphere Application Server installation directory is created at the peer level to the WebSphere Integration Developer installation directory and the directory is named as **<WID_HOME_DIR>_WTE** (for example, **WID7_WTE**)

Example:



____ 6. Once the WebSphere Application Server installation is complete, you should see a warning pop-up stating that the WebSphere Application Server installation was successful



____ 7. Click **OK**

Note: Navigate to the WebSphere Application Server installation home **logs** directory, **<WTE_HOME>\logs\install** to verify the installation status. Open the **log.txt** file and scroll to the end of the file. You should see the status reported as **INSTCONFSUCCESS**.

Note: The Installation Manager is installed to a default location. For Example on Windows, it is installed at **C:\Program Files\IBM\BPMShared**.

____ 8. Back to the WebSphere Integration Developer Common Launchpad, click **Install the WebSphere test Environment** link

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____ 9. The IBM Installation Manager V1.3.3 is launched. You should see a list of the packages shown below:

__ **a. WebSphere Business Monitor →Version 7.0.0.0**

__ **b. WebSphere Process Server → Version 7.0.0.0**

__ **c. IBM WebSphere Application Server V7 Feature Pack for Service Component Architecture (SCA) →Version 1.0.1.0 → PM00971 1.0.1.0**

__ **d. IBM WebSphere Application Server V7 Feature Pack for XML → Version 1.0.0.0**

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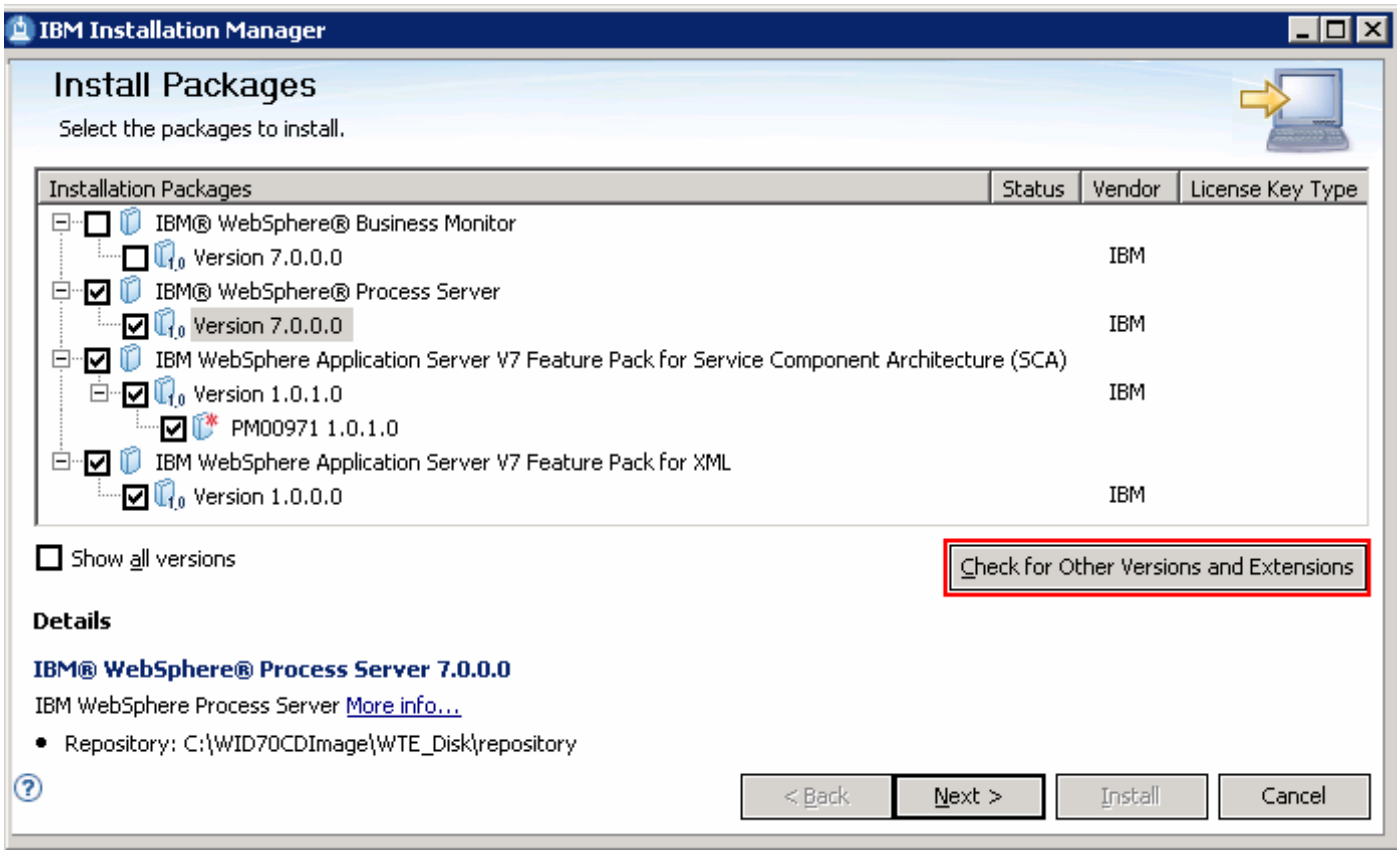


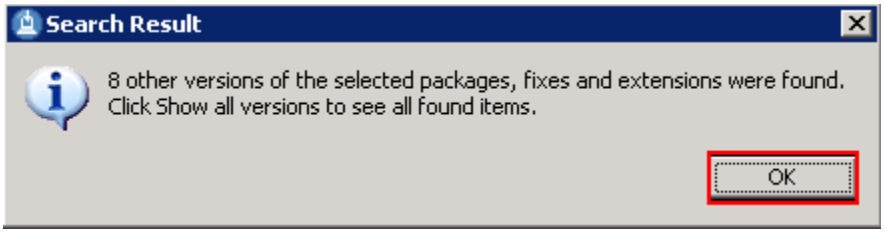
Note: If you do **not** want to update with the latest refresh pack, do not click the **`Check for Other Versions and Extensions`** button. Select the required packages and click **`Next`**.

____ 10. Click **`Check for Other Versions and Extensions`** button to search for the available refresh packs, fixes and extensions. This action give you an opportunity to update the packages with the latest available refresh packs, fixes, extensions and so on at the same time when you install the WebSphere test environment

---

Note: At the time of writing this document, the latest refresh pack for WebSphere Process Server is Version 7.0.0.1. Ensure your machine is connected to the network accessible to the WebSphere Process Server repository Web site.

____ 11. Once the search is complete, you should see an information dialog similar to the one shown in the picture below displaying the number of other versions found



____ 12. Click **`OK`**. You should see the Install Packages panel updated with the latest available packages, for example WebSphere Process Server Version 7.0.0.1

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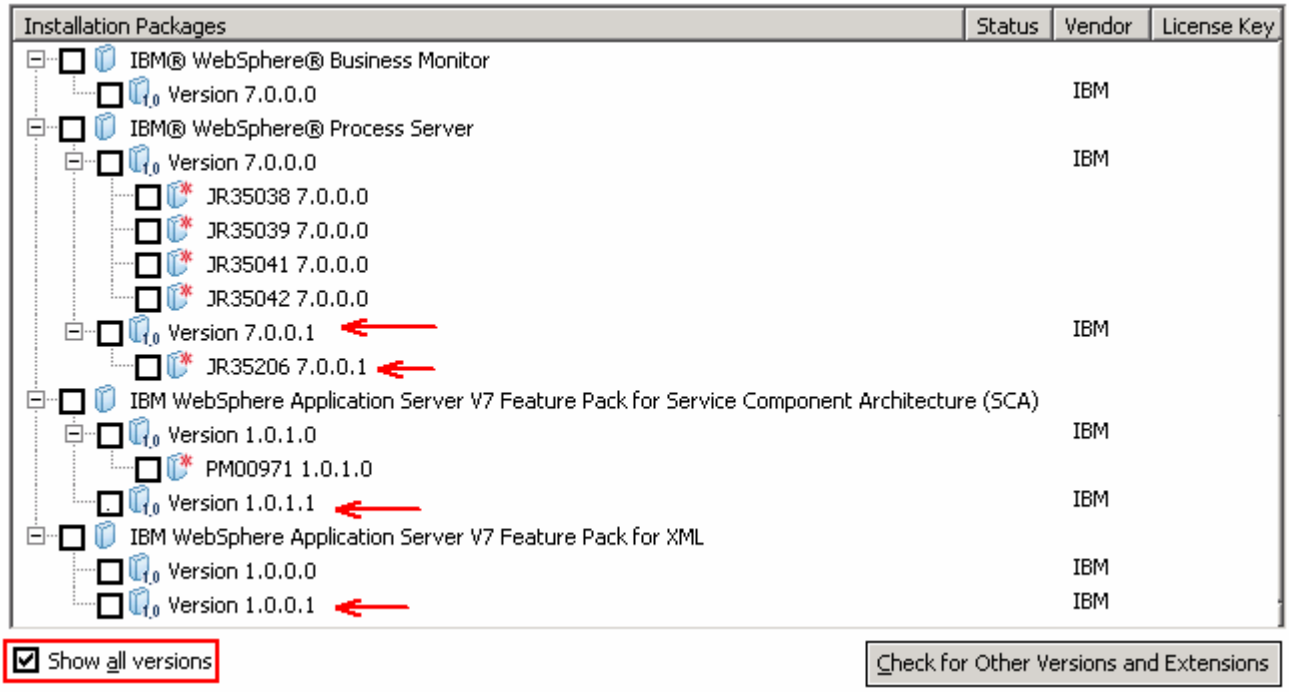
Note: The Installation Manager only lists the latest version of the packages available at the time of search. If you want to install an older version, select the **Show all versions** check box. You should see all the available versions as shown below:



In this exercise, you will install WebSphere Process Server Version 7.0.0.1.

____ 13. In the select packages panel, select the packages with the appropriate versions you like to install

__ a. Optionally select **WebSphere Business Monitor →Version 7.0.0.0**

__ b. Select **WebSphere Process Server → Version 7.0.0.1 → JR35206 7.0.0.1**

__ c. Select **IBM WebSphere Application Server V7 Feature Pack for Service Component Architecture (SCA) →Version 1.0.1.1**

__ d. Select **IBM WebSphere Application Server V7 Feature Pack for XML → Version 1.0.0.1**

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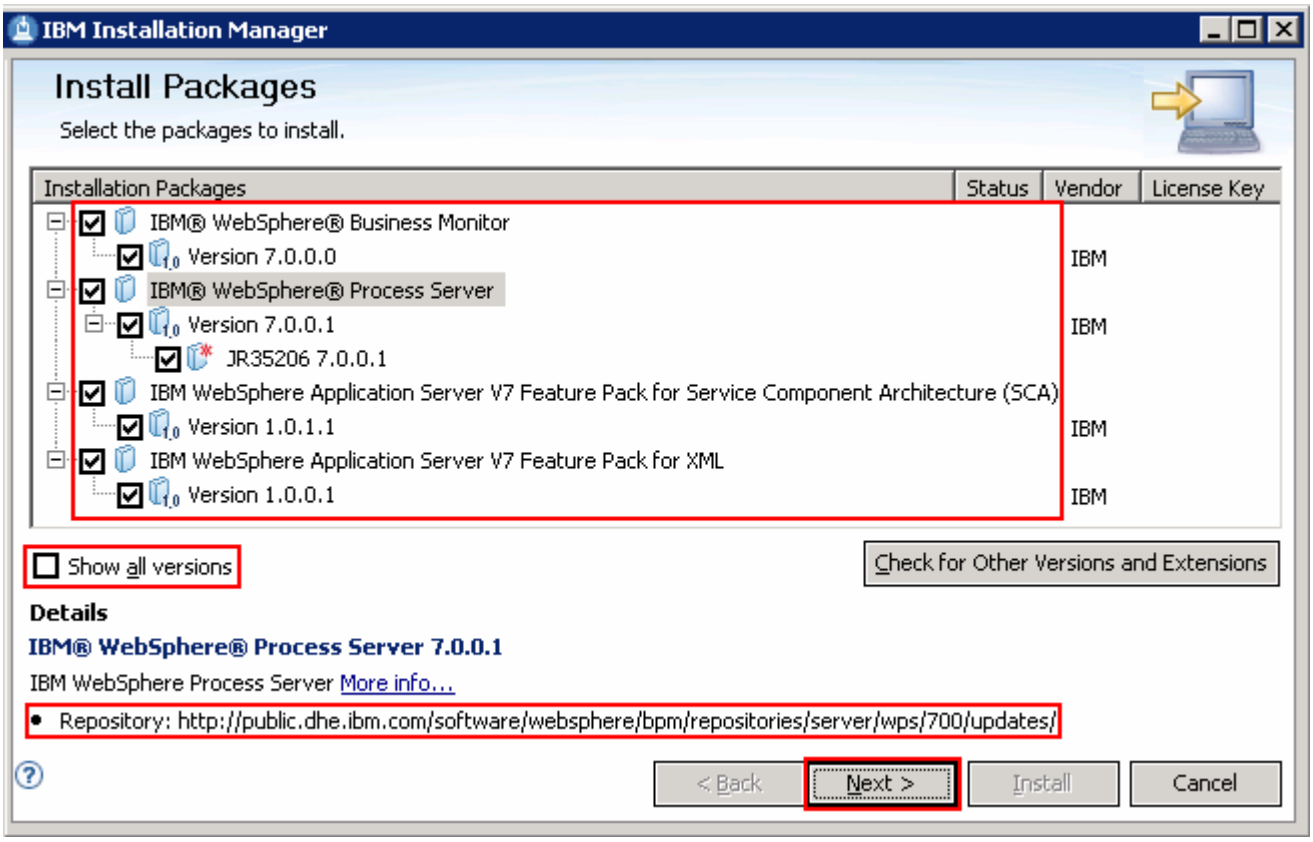

____ 14. Click **`Next`**

____ 15. In the next panel, read the license agreements. If you agree to the terms, select the radio button for **`I accept the terms in the license agreements`** and Click **`Next`**

____ 16. In the next panel, select the radio button for **`Use the existing package group`** and then select **`IBM WebSphere Application Server – ND`** as the **`Package Group Name`**

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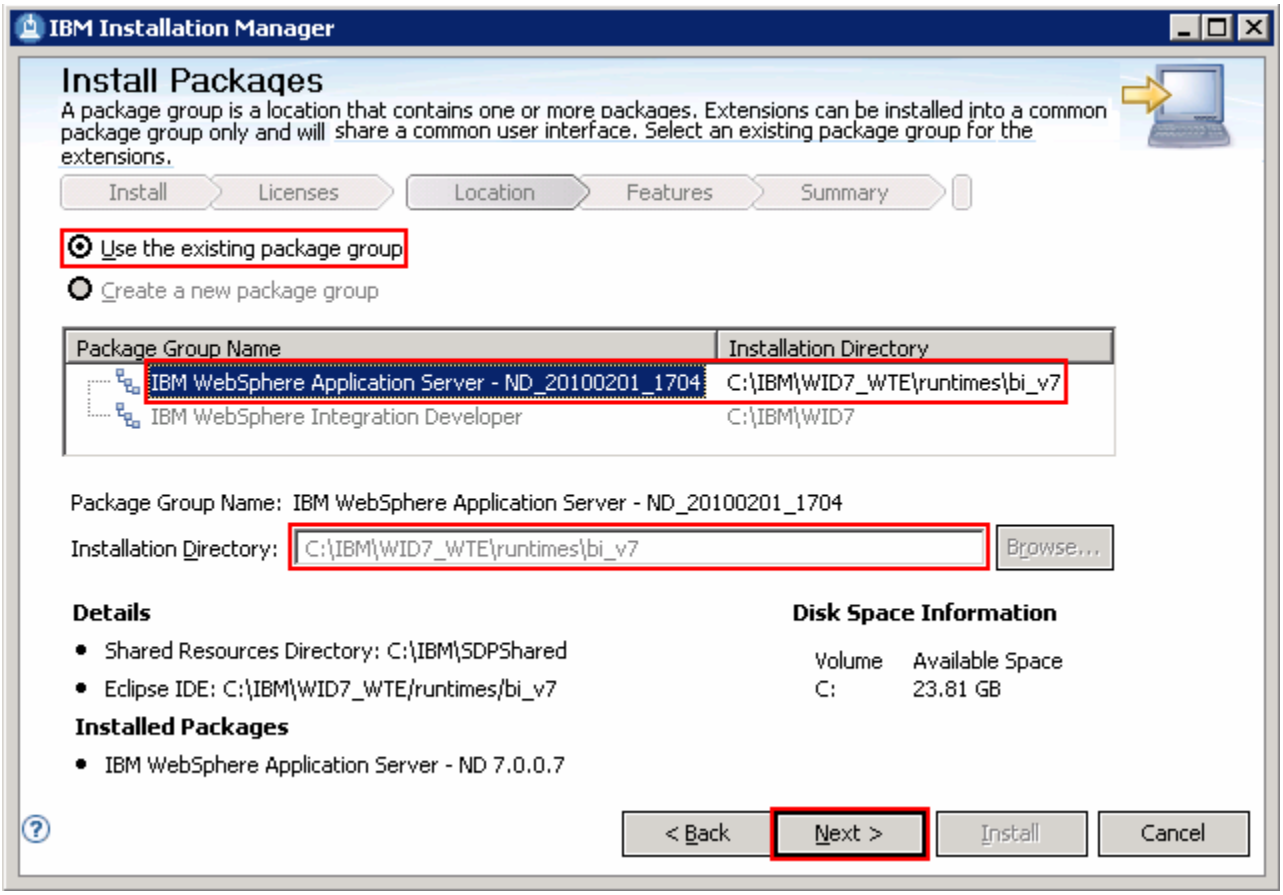

____ 17. Click **Next**

____ 18. In the next panel, click the **Expand All** button to see all the features. Select the features required for your WebSphere test environment:

__ **a. WebSphere Business Monitor 7.0.0.0**

1) WebSphere Business Monitor Server

a) (Optional) **Stand-alone development WebSphere Business Monitor profile (qmwas)**

b) (Optional) **Stand-alone development WebSphere Monitor on WebSphere Process Server profile (qmwps)**

c) (Optional) **Stand-alone development WebSphere Monitor on WebSphere Enterprise Service Bus profile (qmesb)**

2) **Alphablox**

__ b. **WebSphere Process Server 7.0.0.1**

1) **WebSphere Process Server – Client (always installed)**

2) **WebSphere Process Server**

a) (Optional)**Sample applications**

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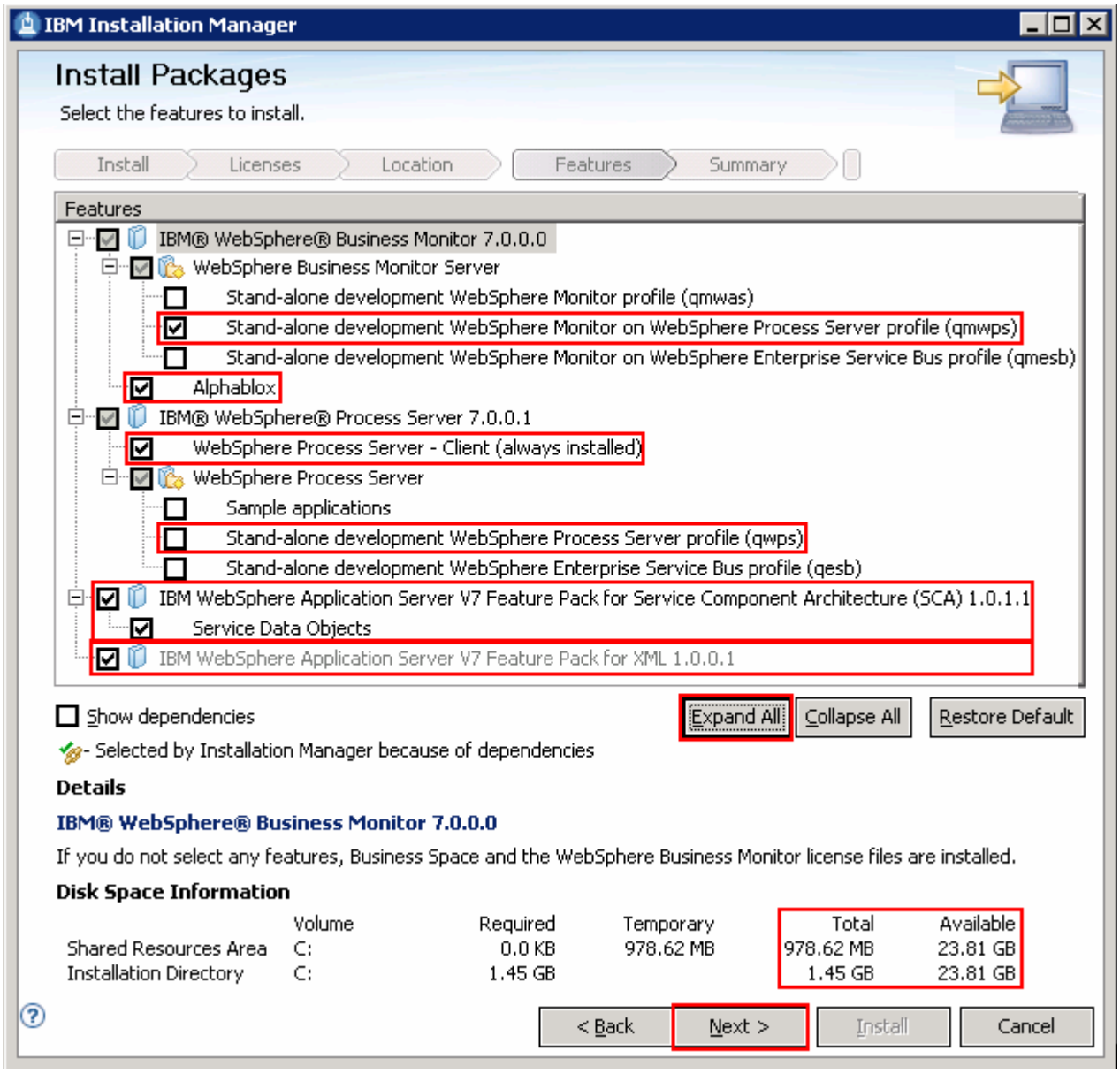
b) (Optional)**Stand-alone development WebSphere Process Server profile (qwps)**

c) (Optional)**Stand-alone development WebSphere Enterprise Service Bus (qesb)**

__ c. **IBM WebSphere Application Server V7 Feature Pack for Service Component Architecture (SCA) 1.0.1.1 → Service Data Objects**

__ d. **IBM WebSphere Application Server V7 Feature Pack for XML 1.0.0.1**

Note: For demonstrational purpose, the **Stand-alone development WebSphere Monitor on WebSphere Process Server profile (qmwps)** option is selected as this profile covers all the capabilities the WebSphere test environment can provide. If you do not need the WebSphere Business Monitor capabilities, select the option for **Stand-alone development WebSphere Process Server profile (qwps)**.



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Note: - Select **`Stand-alone development WebSphere Process Server profile (qwps)`** if the WebSphere Business Monitor runtime binaries are not selected for installation.

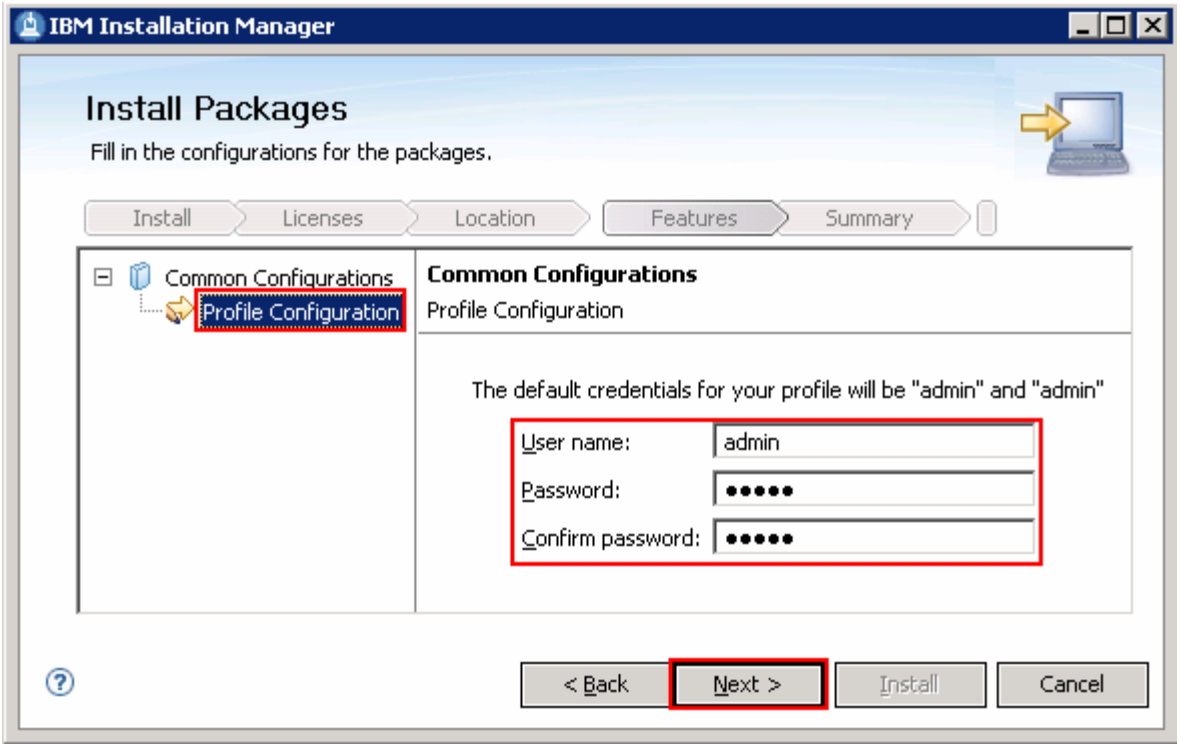
____ 19. Click **`Next`**

____ 20. In the next panel, expand **`Common Configurations`** and select **`Profile Configuration`** from the left navigation frame and then enter the administrative security credentials:

__ a. User name : **`admin`**

__ b. Password : **`admin`**

__ c. Confirm Password : **`admin`**



____ 21. Click **`Next`**

____ 22. In the next panel, verify the WebSphere test environment installation summary

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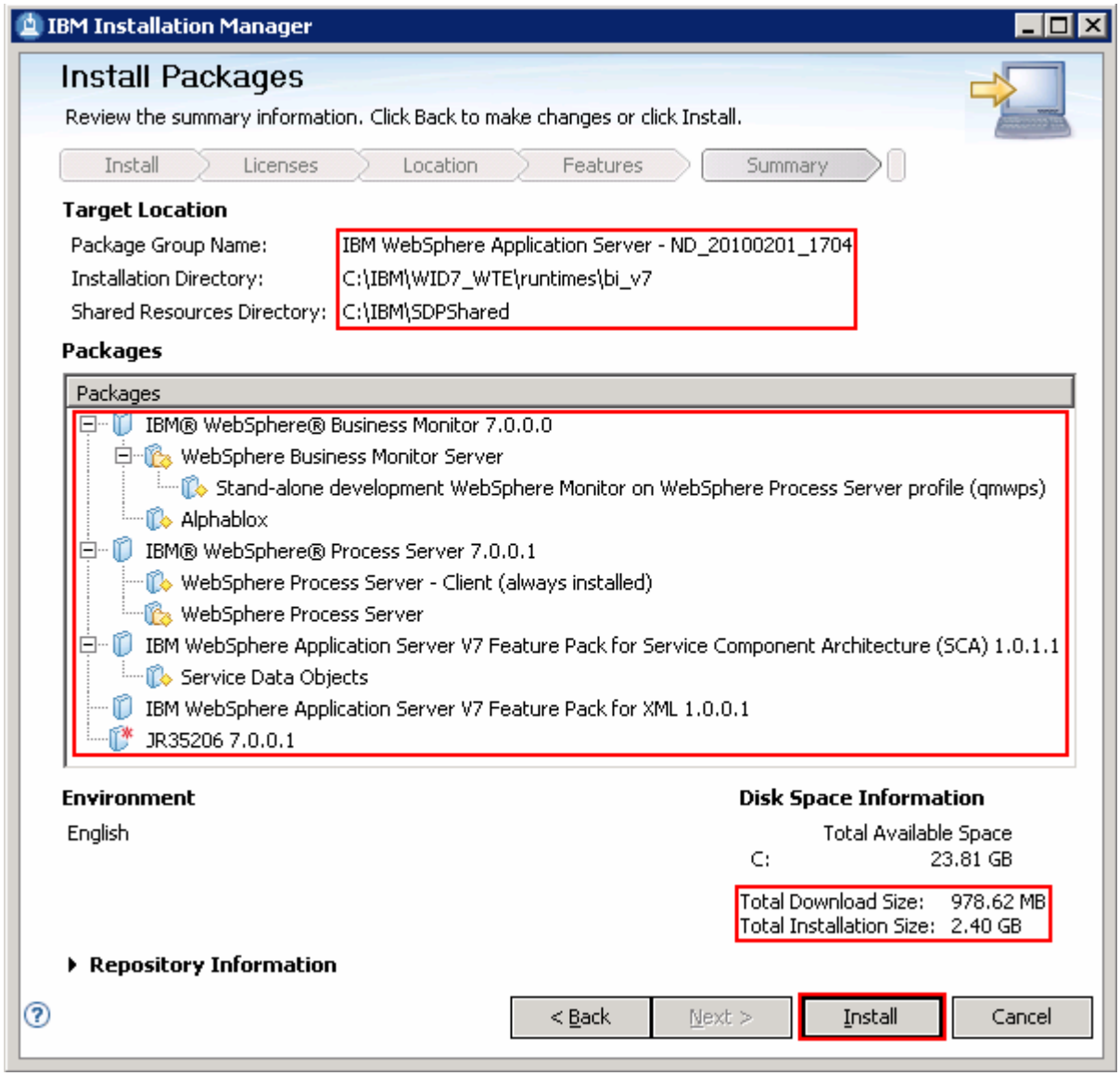
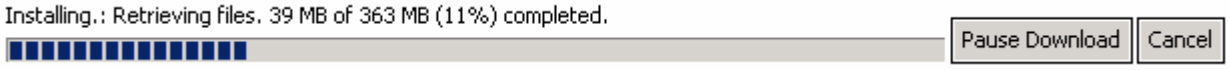


____ 23. Click **`Install`** to continue with the installation. The **WebSphere test environment** installation progresses



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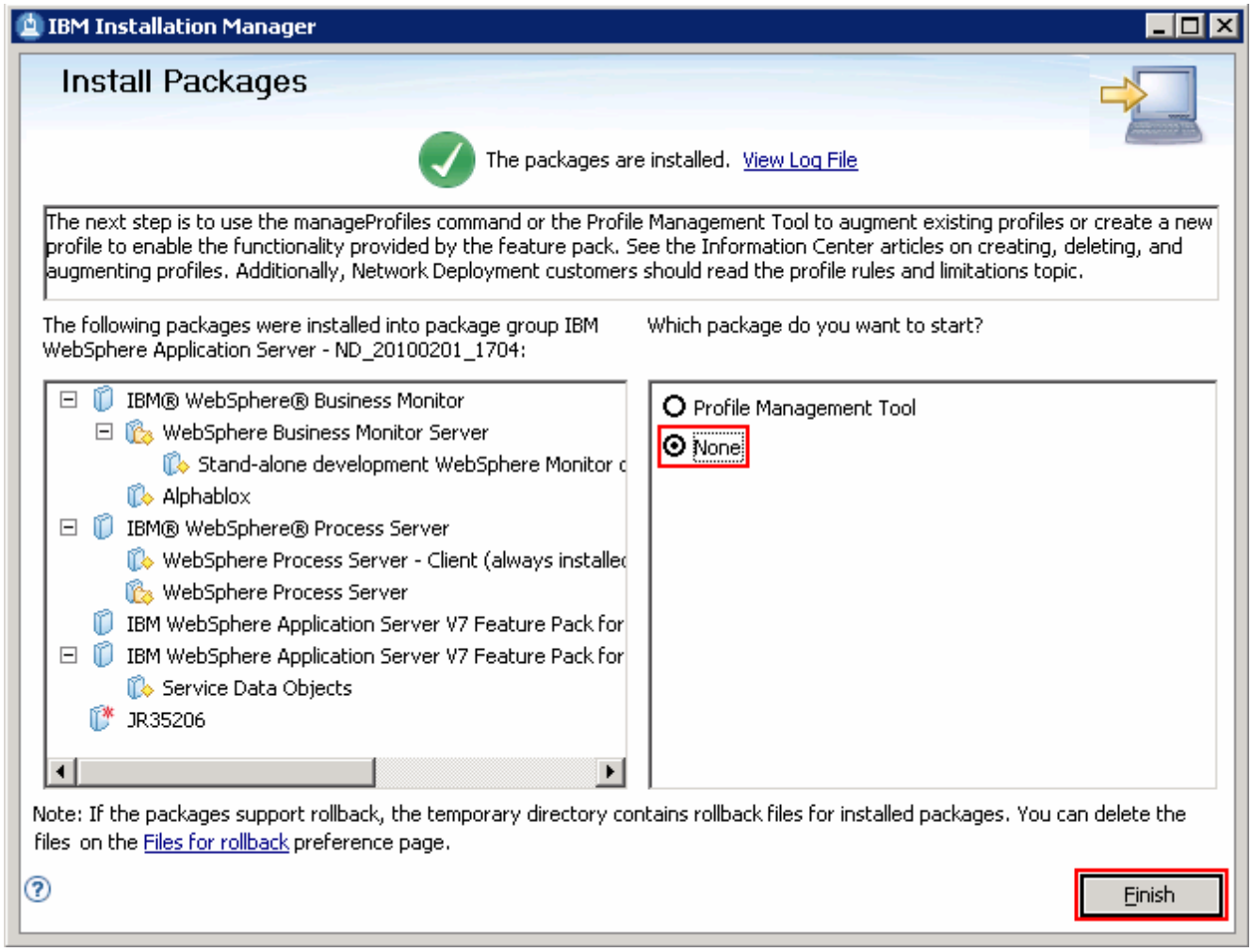

____ 24. Once the installation is complete, select the radio button for **None** and click **Finish** to quit the Installation Manager

---

Note: If you plan to configure Webform Server locally with the process server stand-alone profile, you must install Lotus Forms Server V3.5.1 on this machine with the **Webform Server – Application Server** and **Webform Server – Translator** options selected on the server component panel and the also select the **Deploy Webform Server - Translator Server to WebSphere Application Server** option on the optional Deployment Settings panel. Do not select the **Deploy API to WebSphere Application Server or WebSphere Process Server** option. Visit **Part 4**, **Part 5** and **Task 2** of this document to complete the stand-alone application server profile creation and Lotus Forms Serve installation. Finally visit **Task 1** of this document to manually configure Lotus Forms API with the WebSphere Process Server stand-alone profile.

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Part 4: Prepare for the Lotus Forms Server V3.5.1 FP 1 installation image

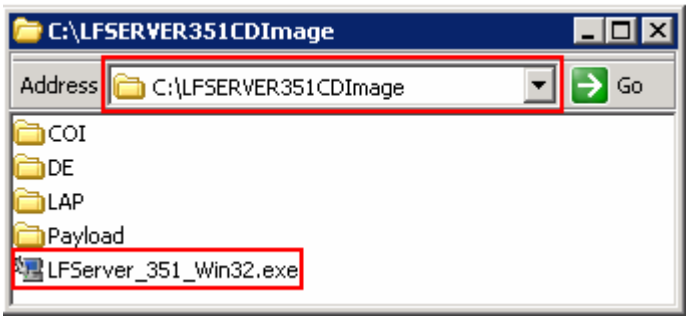
In this part of the exercise, the Lotus Forms Server V3.5.1 FP 1 software is obtained and extracted -- creating the correct on-disk structure for the Lotus Forms Server V3.5.1 FP 1 installation image.

____ 1. The following are the installation files needed to install the Lotus Forms Turbo V3.5.1 FP 1

Product Name	**File Name (Windows)**
Lotus Forms Server V3.5.1 Fixpack 1	CZ28LML.exe

____ 2. Obtain the Lotus Forms Server software and extract in such a way to create the correct on-disk structure for the installation image

____ 3. Extract the archive to a directory (for example **C:\LFSERVER351CDImage**) and confirm that the directories and files are extracted correctly; it should appear similar to the picture below:



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Part 5: Installing Lotus Forms Server V3.5.1 Fixpack 1

Lotus Forms is a suite of products that allows organizations to use electronic forms to gather information from users and transmit that information to other systems. Lotus Forms can be used as the front-end for any business process, such as opening a new account. When a customer enters their information into a form and submits it for processing, their information can pass into a workflow application (such as WebSphere Business Integration), a database (such as DB2 Universal Database™ or DB2 Content Manager), or any other type of application or process.

There are four products in the Lotus Forms suite:

- **IBM Lotus Forms Designer: -** is a '*what you see is what you get*' design tool that allows you to build forms by dragging and dropping items a palette of choices. The forms which are built can be previewed using the IBM Lotus Forms Viewer or IBM Lotus Forms Server – Webform Server.

- **IBM Lotus Forms Server** (Consists of four components):

    - **IBM Lotus Forms Server – API: -** provides low level access to XFDL forms in Java™, C, and COM. The API is used to develop applications that process XFDL forms which includes XForms data models within XFDL forms. With these capabilities, you can create and manage applications that analyze, route, validate and create electronic forms.

      The API also contains the *Function Call Interface* (FCI) library. The capabilities of your forms can be extended using this FCI library, by adding custom XFDL functions that are available to forms designers for use at run time.

    - **IBM Lotus Forms Server – Forms Services Platform: -** helps developers integrate and extend IBM Lotus Forms products with other systems.

      The Forms Services Platform also includes Designer plug-ins that gives an ability to use the IBM Lotus Forms Designer to generate TX maps from a form's instances and schemas. Hence significantly reducing any custom coding required while integrating forms with a vendor database.

    - **IBM Lotus Forms Server – Webform Server: -** translates XFDL documents into HTML/JavaScript documents. This ability allows users to view, fill, sign, and submit XFDL documents using a Web browser, meaning the users can fill the XFDL forms without downloading or installing browser plug-ins.

    - **IBM Lotus Forms Server – P8 Integrator: -** IBM Lotus Forms with FileNet P8 Workplace™ AE 4.0.2 (P8 Application Engine) or Workplace XT™ 1.1.3 of P8 Content Manager 4.0.1 SP™ 1 combines the power of dynamic, intelligent XML forms with workflow and content management.

- **IBM Lotus Forms Turbo: -** Lotus Forms Turbo helps manage the entire forms life cycle in a single, easy-to-use Web-based application. Using Turbo, forms can be quickly composed to collect information, gather information by circulating forms to submitters who can fill and submit forms back, and then analyze the submitted information and create reports to help make meaningful business decisions.

- **IBM Lotus Forms Viewer: -** provides a single interface for users to open, fill, and save forms.

IBM Lotus Forms Server V3.5.1 can be installed in two installation types:

- **Development installation: -** Using this option, you can install and optionally deploy runtime and development components. The development components include toolkits necessary to build Lotus Forms applications and samples (like Forms Servlet application, example Forms within IBM Portal Server and Forms iWidget) which help get the development started in a single server or multiple machines.

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- **Production installation: -** Using this option, you can install and optionally deploy runtime components excluding the samples and development toolkits and components.

Using both the installation options, you can optionally select to deploy the API and Translator Server to an existing WebSphere Application Server stand-alone server profile. However if you chose not to deploy these components, you must perform these deployment tasks manually.

In this exercise, you will install Lotus Forms Server using the development installation type option in a single server topology.

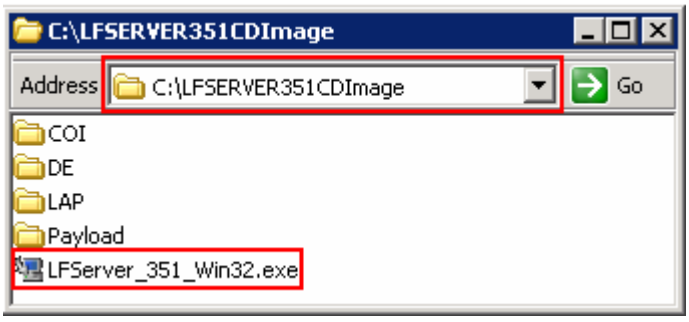
In this part of the exercise, you will use the InstallAnywhere installer to install Lotus Forms Server V3.5.1 Fixpack 1. You will choose to install the Webform Server – Application Server and Webform Server – Translator Server components and deploy Webform Server – Translator Server to WebSphere Application Server stand-alone profile. You will skip deploying the API which will eventually be deployed to a WebSphere Process Server stand-alone profile post Lotus Forms Server installation.

Pre-requisite:

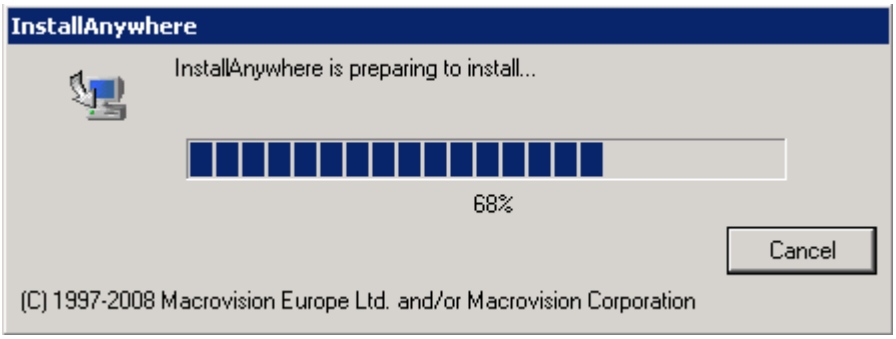
- To complete instructions in this part, a WebSphere Application Server stand-alone profile must exist to configure the Lotus Webform Server – Translator server. Visit **Task 2: Create a WebSphere Application Server stand-alone server profile**.
- Stop any servers if they are running

Complete the instructions below to install Lotus Forms Server V3.5.1 FP 1:

____ 1. Navigate to the directory where the correct on-disk structure for the installation image was created



____ 2. Double-click **`LFServer_351_Win32.exe`** to launch the Lotus Forms Server InstallAnywhere wizard. The InstallAnywhere wizard prepares for the installation



____ 3. Once the preparation is complete, the InstallAnywhere wizard for Lotus Forms Server V3.5.1 is launched

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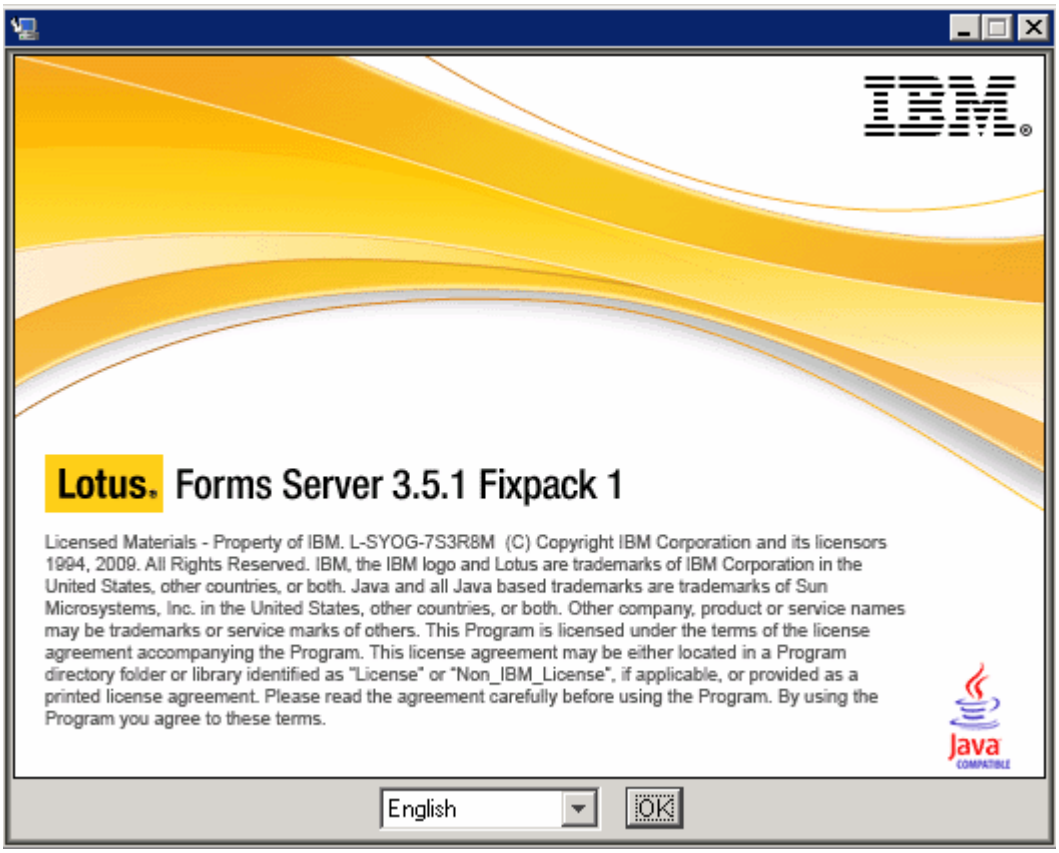
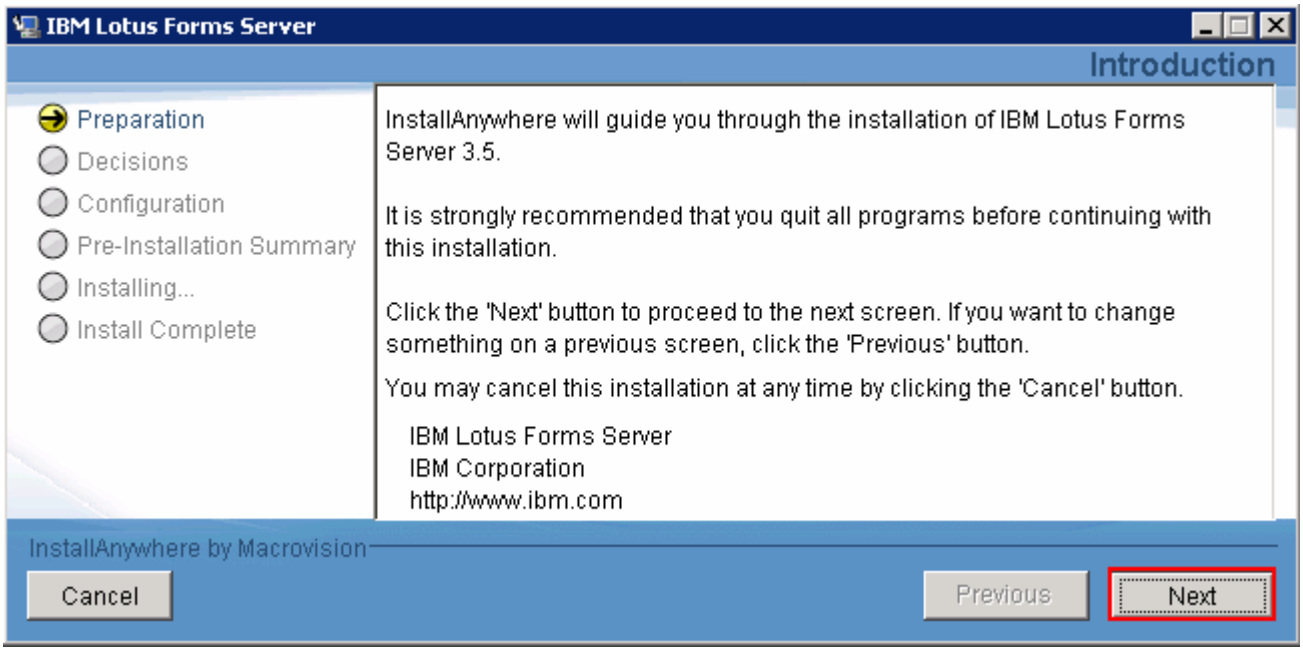


____ 4. Select the language (Ex: English) and click **OK**. The Lotus Forms Server **Introduction** panel is launched



____ 5. In the **Introduction** panel, read the instructions and recommendations. Click **Next**

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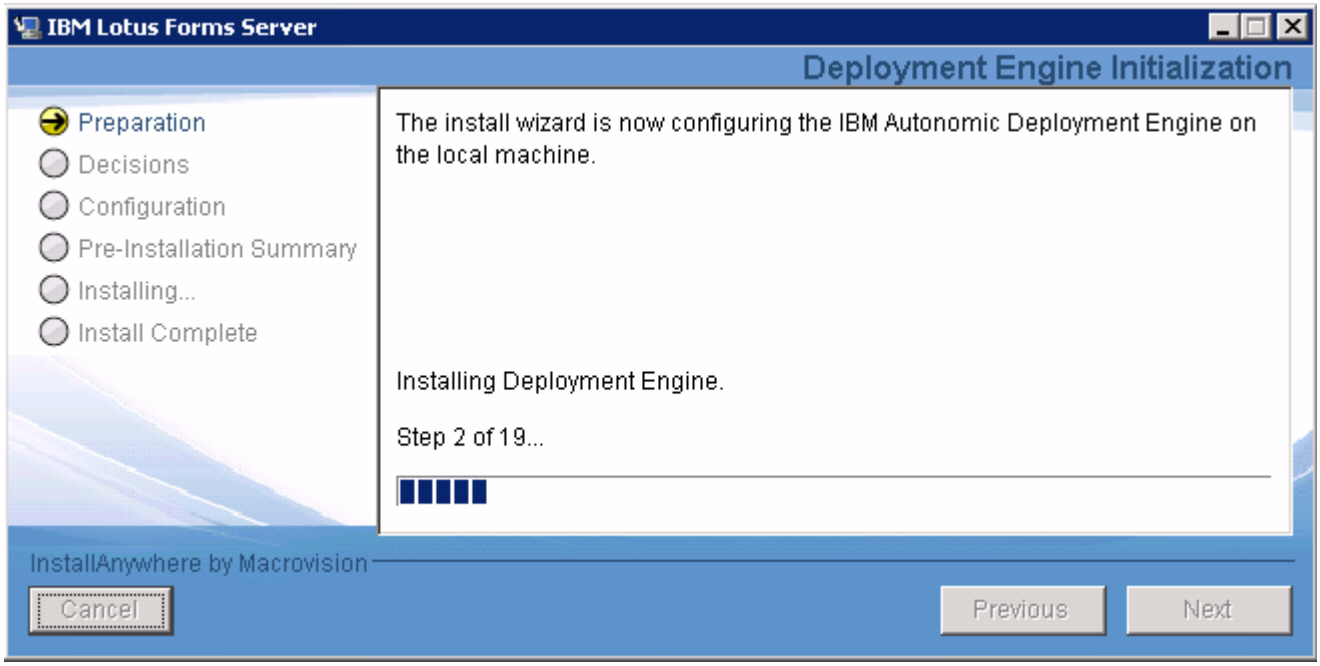
____ 6. In the next **Software License Agreement** panel, read the license agreements. If you agree to the terms, select the radio button for **`I accept the terms in the license agreements`** and Click **`Next`**

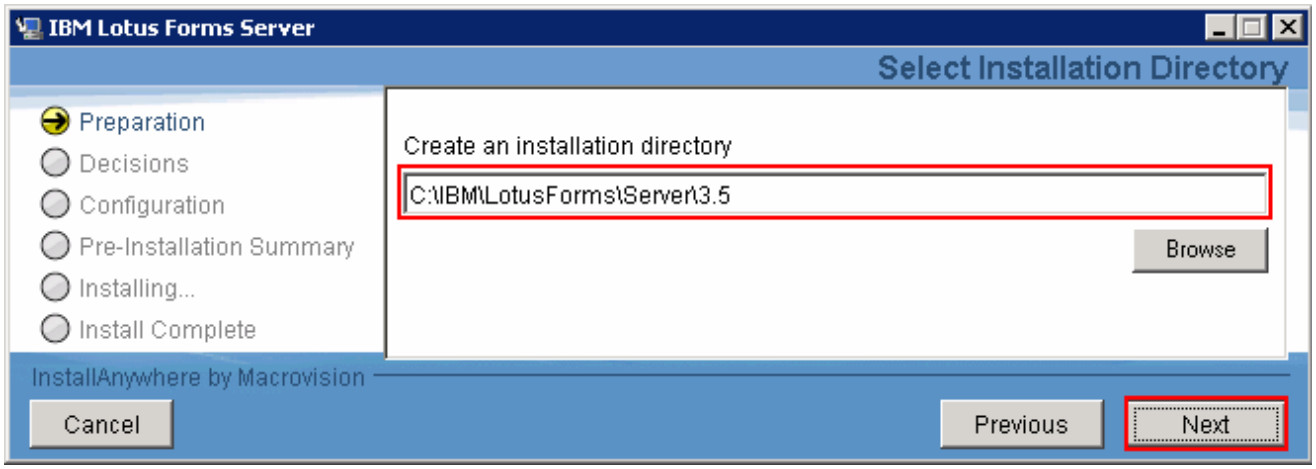
____ 7. The installation wizard configures the IBM Automatic Deployment Engine on the machine



____ 8. Once the Deployment Engine Initialization is complete, click Next

____ 9. In the next **Select Installation Directory** panel, type the Lotus Forms Server installation location

- Create an installation directory : **`C:\IBM\LotusForms\Server\3.5`**



____ 10. Click **`Next`**

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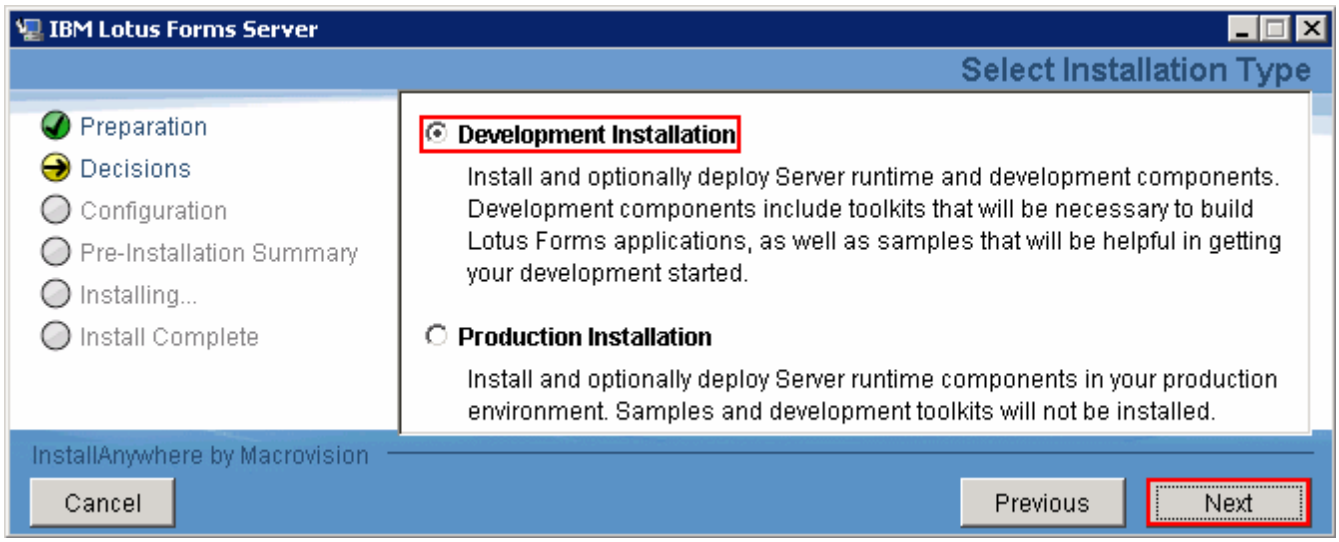
____ 11. In the next **Select Installation Type** panel, select the radio button for **`Development Installation`**



____ 12. Click **`Next`**

____ 13. In the next **Select Server Components** panel, select the check boxes for the server components:

__ a. Select **`Webform Server – Application Server`**

__ **b.** Select **`Webform Server – Translator Server`**

__ **c.** Select **`API`**

__ **d.** Select **`Forms Services Platform`**

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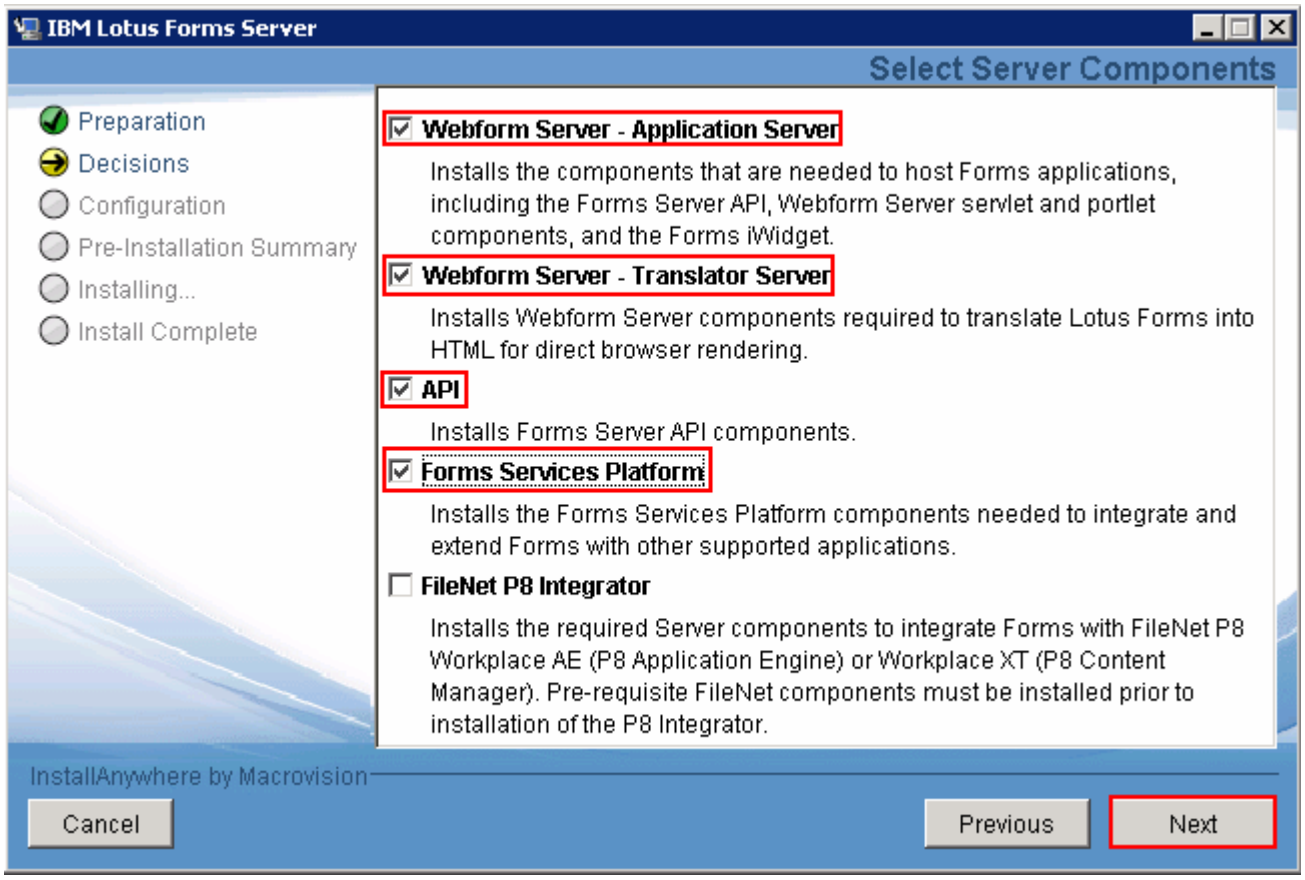

____ 14. Click **`Next`**

____ 15. In the next **Select Component Features** panel, select the check boxes for component features:

__ a. Optionally select **`Sample Servlet`**, which is simple example of a Form Servlet application

__ b. Optionally select **`Sample List and Forms Display Portlets`**, which is a simple example of Forms within IBM Portal Server (select this option if using a Portal Server)

__ c. Optionally select **`Forms iWidgets`**, for use with IBM Mashup Center to render forms as an iWidget

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Note: The **`IBM Lotus Forms Server – API`** and **`IBM Lotus Forms Framework`** components are installed by default.

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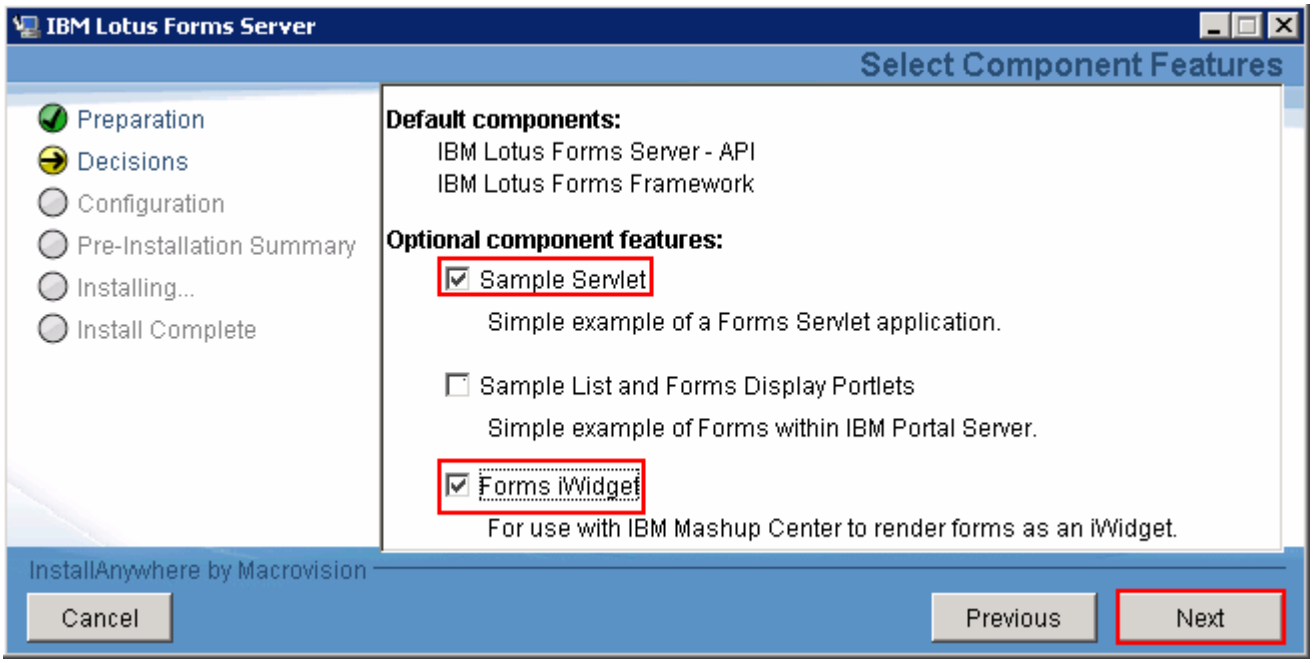
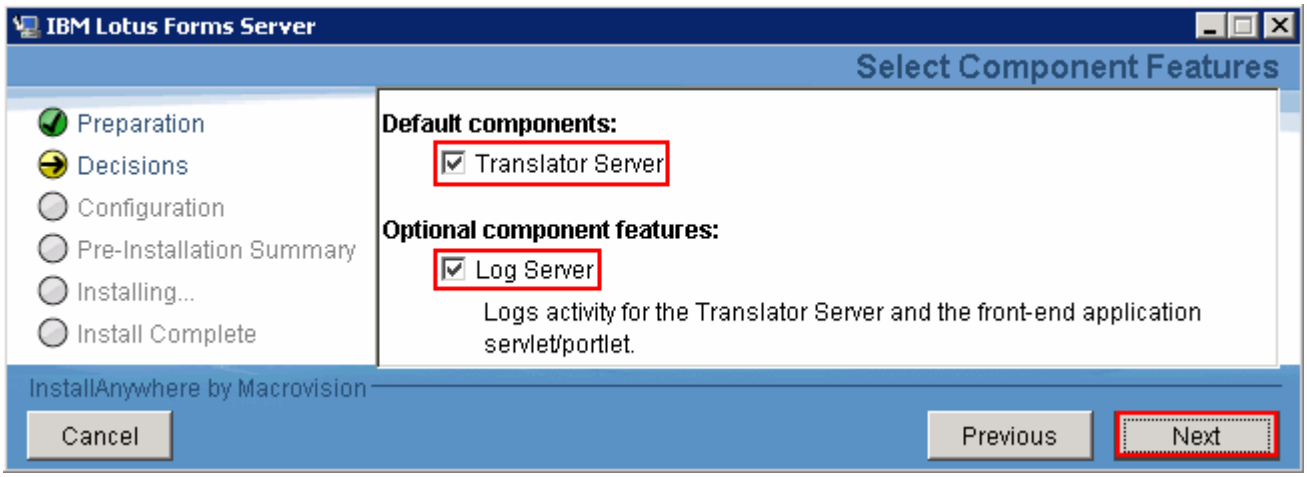


____ 16. Click **`Next`**

____ 17. In the next **Select Component Features** panel, select the check boxes for the default and optional component features:

__ a. Select **`Translator Server`**

__ b. Optionally select **`Log Server`** which logs the activity for the Translator Server and the front-end application servlet/portlet



____ 18. Click **`Next`**

____ 19. In the next **Optional Development Settings** panel, select the check boxes for the optional deployment settings:

__ a. Clear **`Deploy API to WebSphere Application Server or WebSphere Process Server`**

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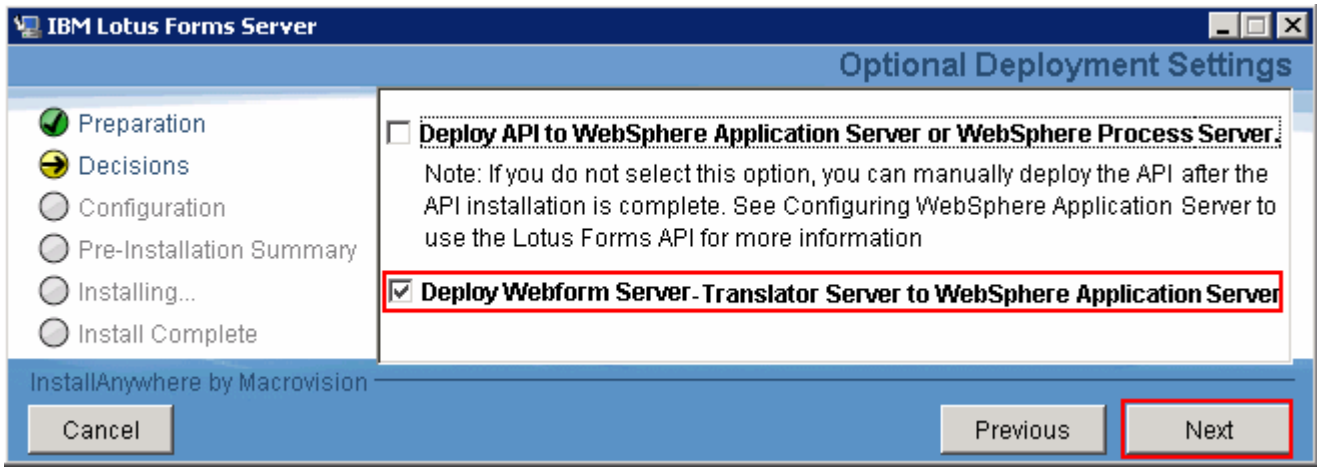
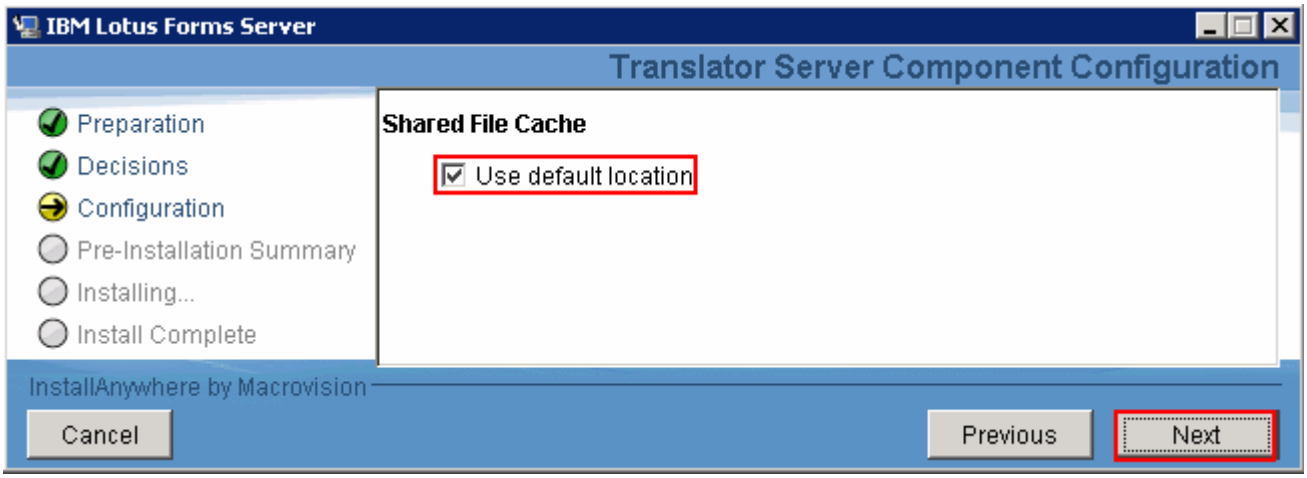
__ b. Select **`Deploy Webform Server – Translator Server to WebSphere Application Server`**



____ 20. Click **Next**

____ 21. In the next **Translator Server Component Configuration** panel, select the check box for **`Use default location`** for Shared File Cache service



____ 22. Click **`Next`**

____ 23. In the next **Database Connection Information** panel, enter the supported database type connection information:

__ a. Database Type : Ex: Select **`DB2`**, **`Oracle`** or **`Cloudscape/Derby`** from the list

__ b. (DB2, Oracle) Database name : **`WS_ACDB`** (default)

__ c. (DB2, Oracle) Host IP : Ex: **`dbserver.austin.ibm.com`** (fully qualified host name or IP address of the database server host machine)

__ d. (DB2, Oracle) Host Port : **`50000`** (default)

__ e. (DB2, Oracle) Username : Ex: **`db2admin`**

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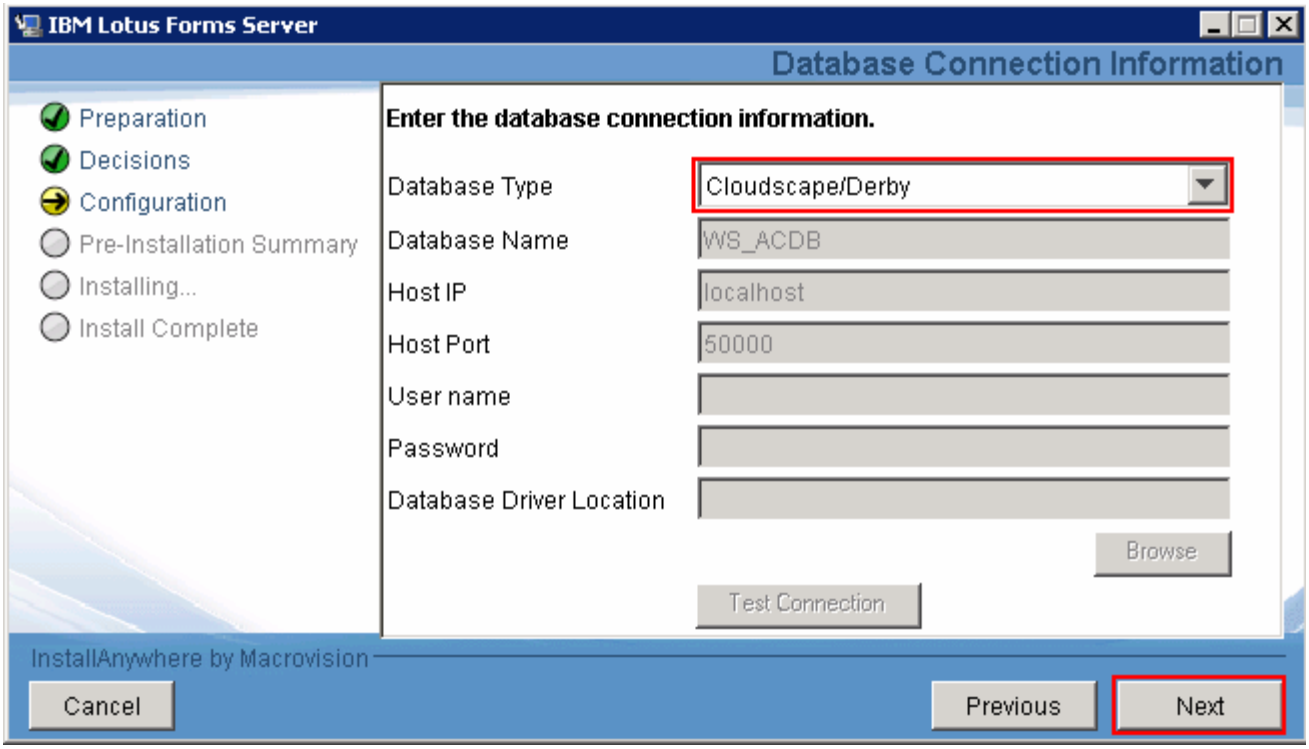
__ f. (DB2, Oracle) Password : Ex: **superSecret**

__ g. (DB2, Oracle) Database Driver Location : Ex: **C:\IBM\SQLLIB\java**

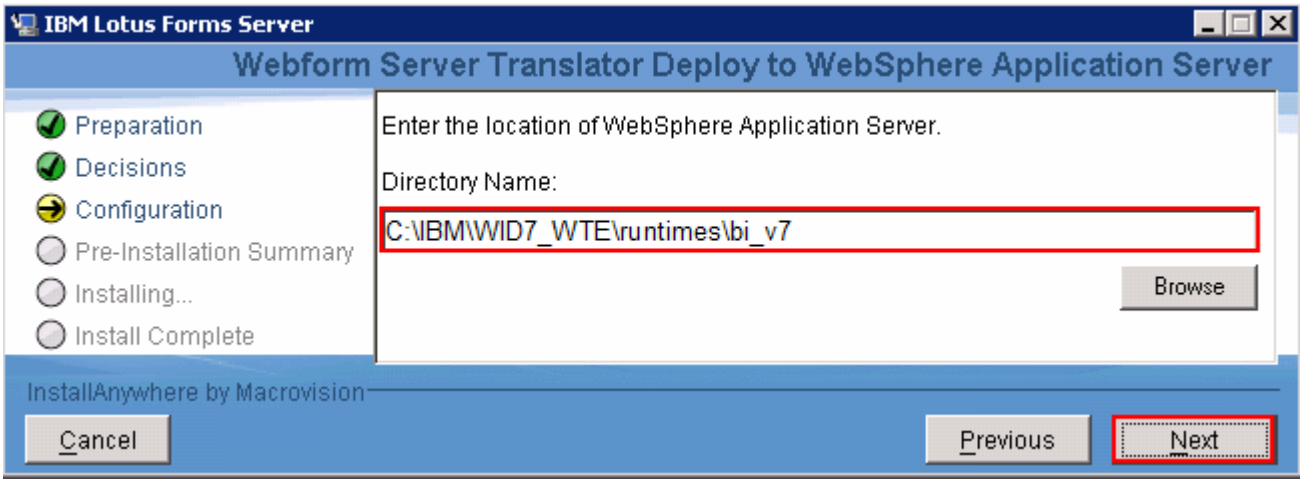


Note: In this exercise, **Cloudscape/Derby** is used as database type

____ 24. Click **Next**

____ 25. In the next **WebForm Server Translator Deploy to WebSphere Application Server** panel, enter the installation location of the WebSphere Application Server

__ a. Directory Name : Ex: **C:\IBM\WID7_WTE\runtimes\bi_v7**



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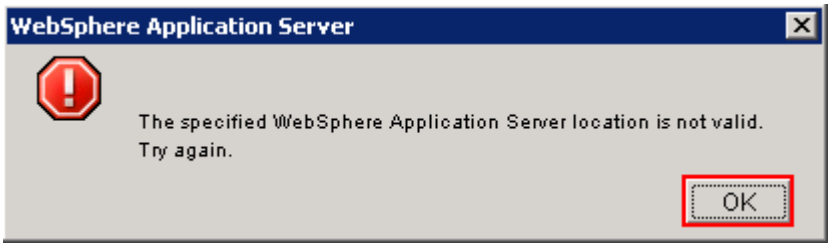
Note: Enter the correct installation location of the WebSphere Application Server. If it is not installed click the **`Cancel`** button to quit the installer and install the WebSphere Application Server. You can not continue to the next step if the WebSphere Application Server installation location entered is not valid.



____ 26. Click **`Next`**

____ 27. In the next **WebSphere Application Server Settings** panel, enter the details:

__ a. Translator Deploy to WebSphere Application Server Details

- From the drop down, select the **`Profile`** (must already exist) name: Ex: **`AppSrv01`**
- Verify or type the **`Cell`** (must already exist) name: Ex: **`appNode01Cell`**
- Verify or type the **`Node`** (must already exist) name: Ex: **`appNode01`**
- Type or accept the default **`Server Name`** (must already exist) : **`TranslatorServer`**

Note: The server name you enter must not exist in the WebSphere Application Server configuration at this time. A new server is created and configured using the name entered in the Server Name field.

- Application Name : **`TranslatorApp`** (default)

__ b. Enter the WebSphere Application Server administrative credentials:

- User name : Ex: **`admin`**
- Password : Ex: **`superSecret`**

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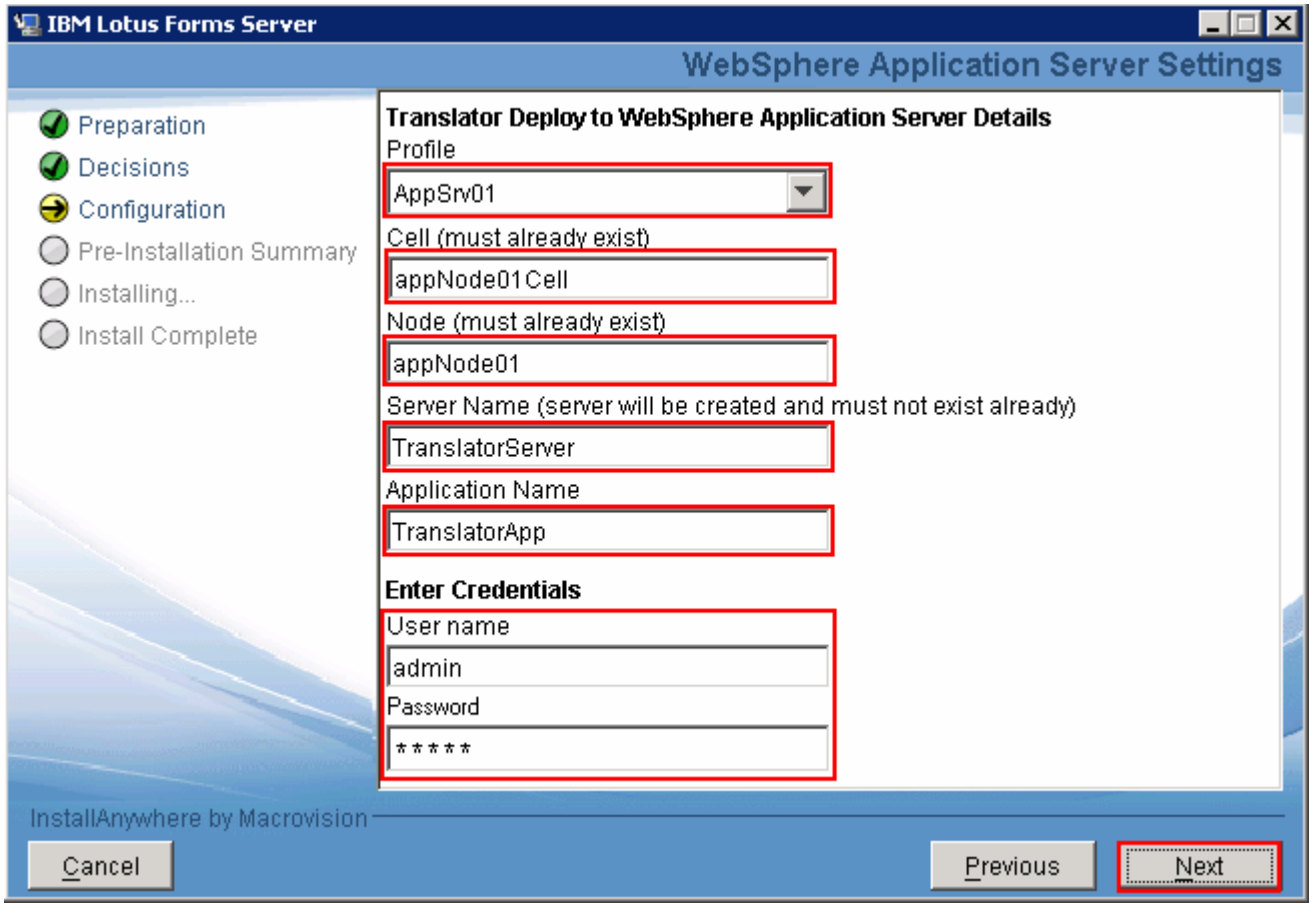
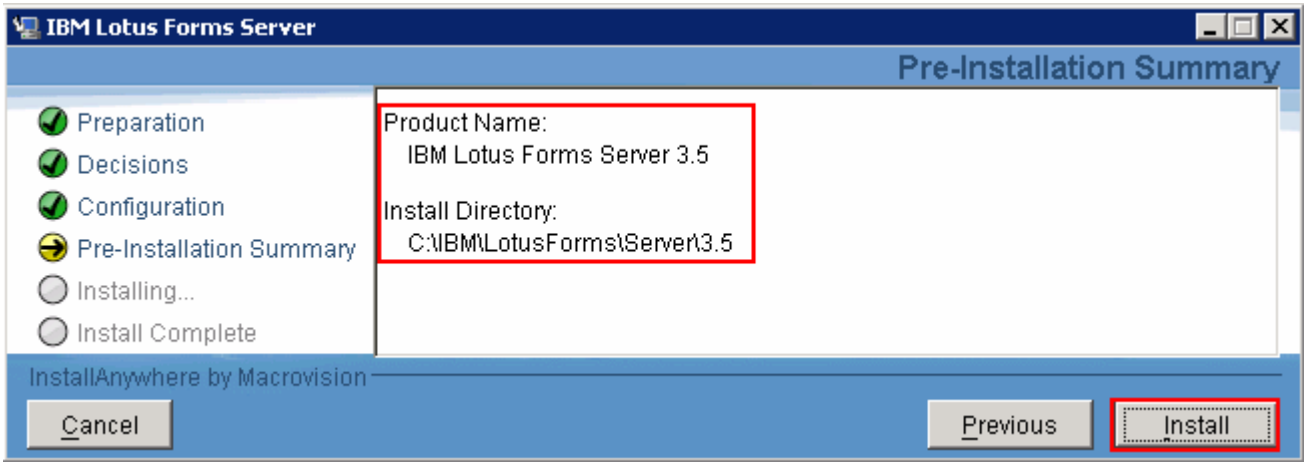


____ 28. Click **`Next`**

Note: On clicking **`Next`**, the WebSphere Application Server details are verified by the installer and warned for incorrect Cell and Node names. The installer also warns if the server name entered already exists in the configuration.

____ 29. In the next **Pre-Installation Summary** panel, verify the Lotus Forms Server installation information



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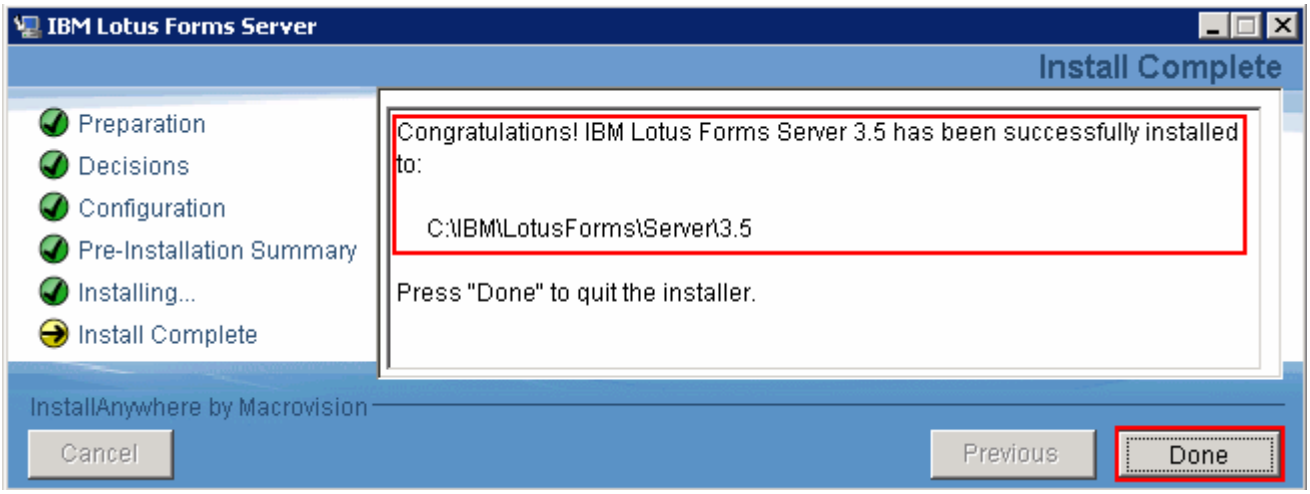
____ 30. Click **`Install`**. The Lotus Forms Server V3.5.1 installation progresses and might take couple of minutes to complete based on the processing power of the host machine

____ 31. In the **Install Complete** panel, ensure the Lotus Forms Server V3.5.1 installation is successful once the installation is complete



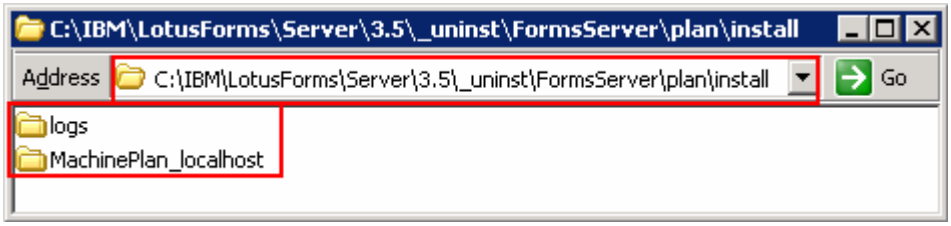
____ 32. Click **`Done`**

____ 33. Troubleshooting the Lotus Forms Server installation

__ a. Navigate to **`<LFSERVER_HOME>\_uninst\FormsServer\plan\install`**.

Ex: **`C:\IBM\LotusForms\Server\3.5\_uninst\FormsServer\plan\install`**

__ b. You should see two directories named **logs** and **MachinePlan_localhost**



__ c. Navigate through the **`logs`** and **`MachinePlan_localhost`** directories for installation and configuration log files for various Lotus Forms Server components.

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Task 1: Manually deploy the Lotus Forms API to Process Server

In this part of the exercise, you will manually deploy the Lotus Forms API to the WebSphere Process Server stand-alone profile.

Prerequisites: Before proceeding to the next step,

- You must create a WebSphere Process Server stand-alone profile with the 'Configure WebForm Server' option not selected
- You must create a WebSphere Application Server stand-alone profile
- You must install Lotus Forms Server V3.5.1 locally, with 'Webform Server – Application Server' and 'Webform Server – Translator' options selected on the server component panel and select the 'Deploy Webform Server - Translator Server to WebSphere Application Server' option on the optional Deployment Settings panel. You must skip the 'Deploy API to WebSphere Application Server or WebSphere Process Server' option on the optional Deployment Settings panel
- Stop the process server processes if they are running

Complete the instructions below to manually deploy Lotus Forms API to a WebSphere Process Server stand-alone profile:

____ 1. Open a command window and change directories to **<WTE_PROFILE_HOME>\bin** directory

Ex: **C:\IBM\WID7_WTE\runtimes\bi_v7\profiles\qmwps\bin**

____ 2. Run the wsadmin command as shown below to connect to the command line administration tool:

wsadmin.bat -conntype NONE

Ex: wsadmin.bat -conntype NONE

- Press the **<ENTER>** key

____ 3. Now at the wsadmin command prompt, run the wsadmin command with the correct parameters for your environment

```
$AdminTask configureLotusWebformServer {-nodeName <node_name> -
serverName <server_name> -translatorHTTPLocation
http://localhost:8085/translator -serverInstallRoot
<LFSERVER_HOME>/WebFormServer}
```

```
Ex: $AdminTask configureLotusWebformServer {-nodeName qmwps -
serverName server1 -translatorHTTPLocation
http://localhost:8085/translator -serverInstallRoot
C:/IBM/LotusForms/3.5/WebformServer}
```

- Press the **<ENTER>** key

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____ 4. Now save to the master configuration

$AdminConfig save

- Press the **<ENTER>** key

____ 5. Quit the command line administration tool

____ 6. Start the process server stand-alone server and verify a clean start of the server

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Task 2: Create a WebSphere Application Server stand-alone profile

In this part of the exercise, you will create a WebSphere Application Server stand-alone profile.

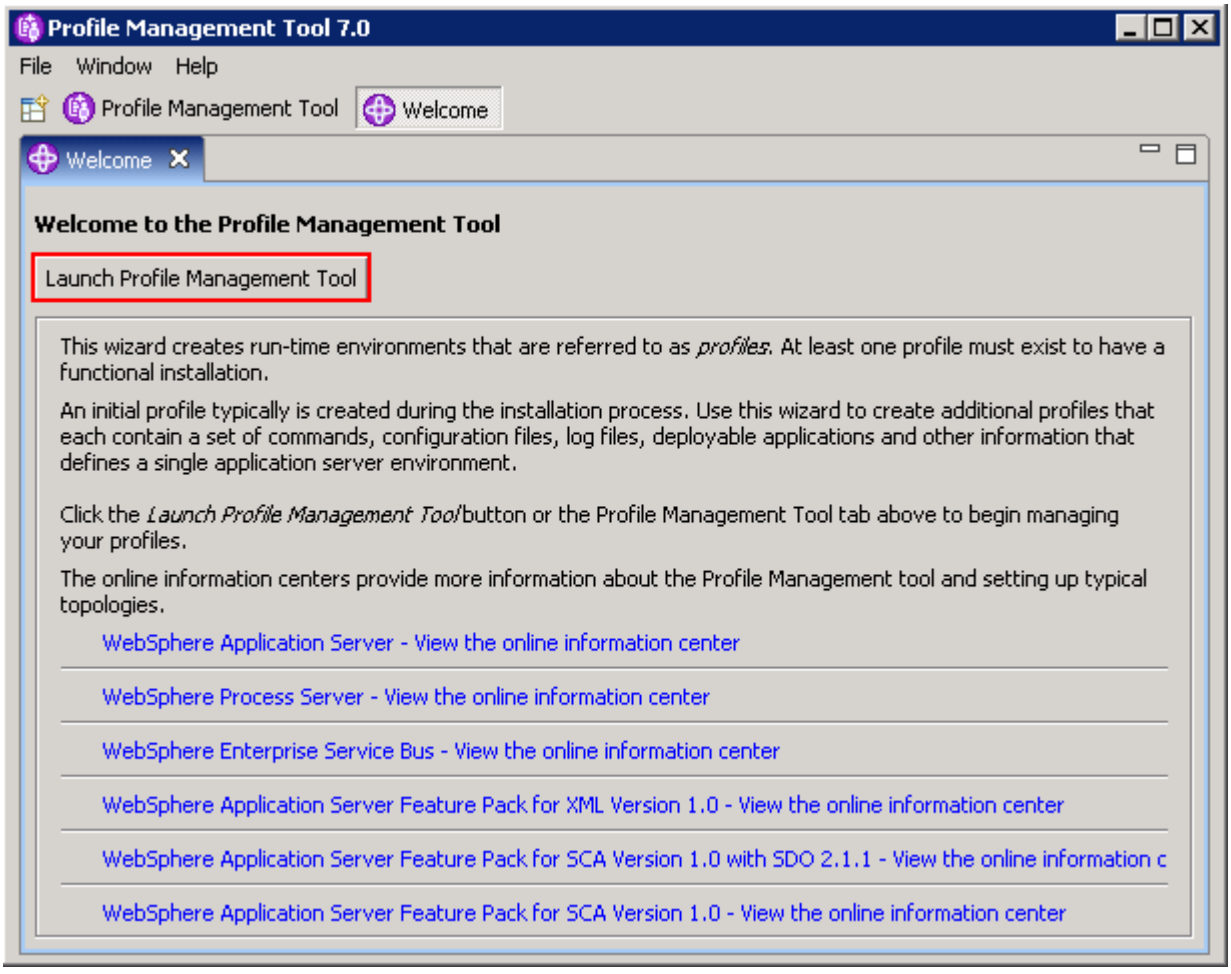
Pre-requisite: Before continuing to the next step, you must install the WebSphere Application Server V7.0.0.7 binaries. Visit **Part 2: Installing WebSphere Process Server**.

Complete the instructions below to create a WebSphere Application Server stand-alone profile:

____ 1. Launch the Profile Management Tool

__ a. From the start menu, select **`IBM WebSphere → Process Server 7.0 → Profile Management Tool`**

Note: Alternatively to launch the Profile Management Tool, navigate to **`<WTE_HOME>\bin\ProfileManagement`**, double click **`pmt.bat`**



____ 2. Select the **`Profile Management Tool`** button

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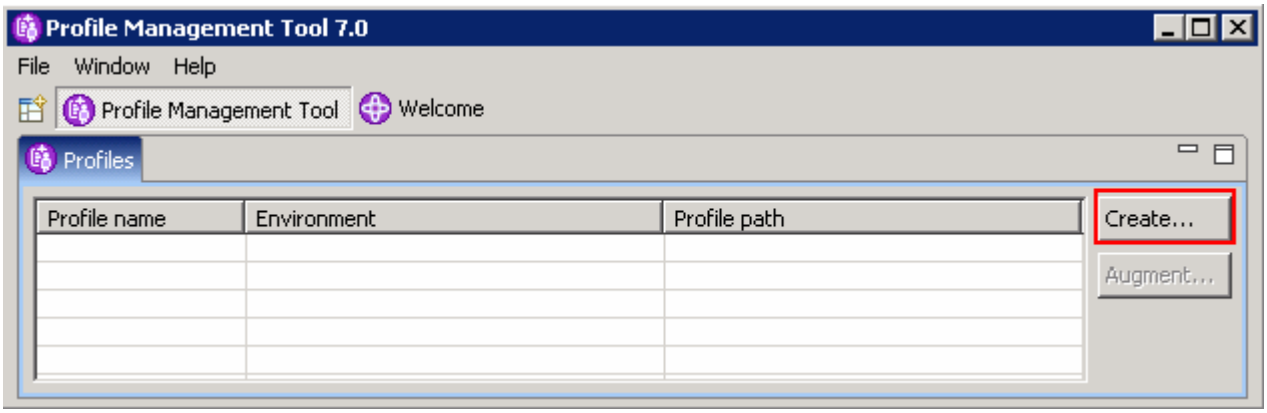
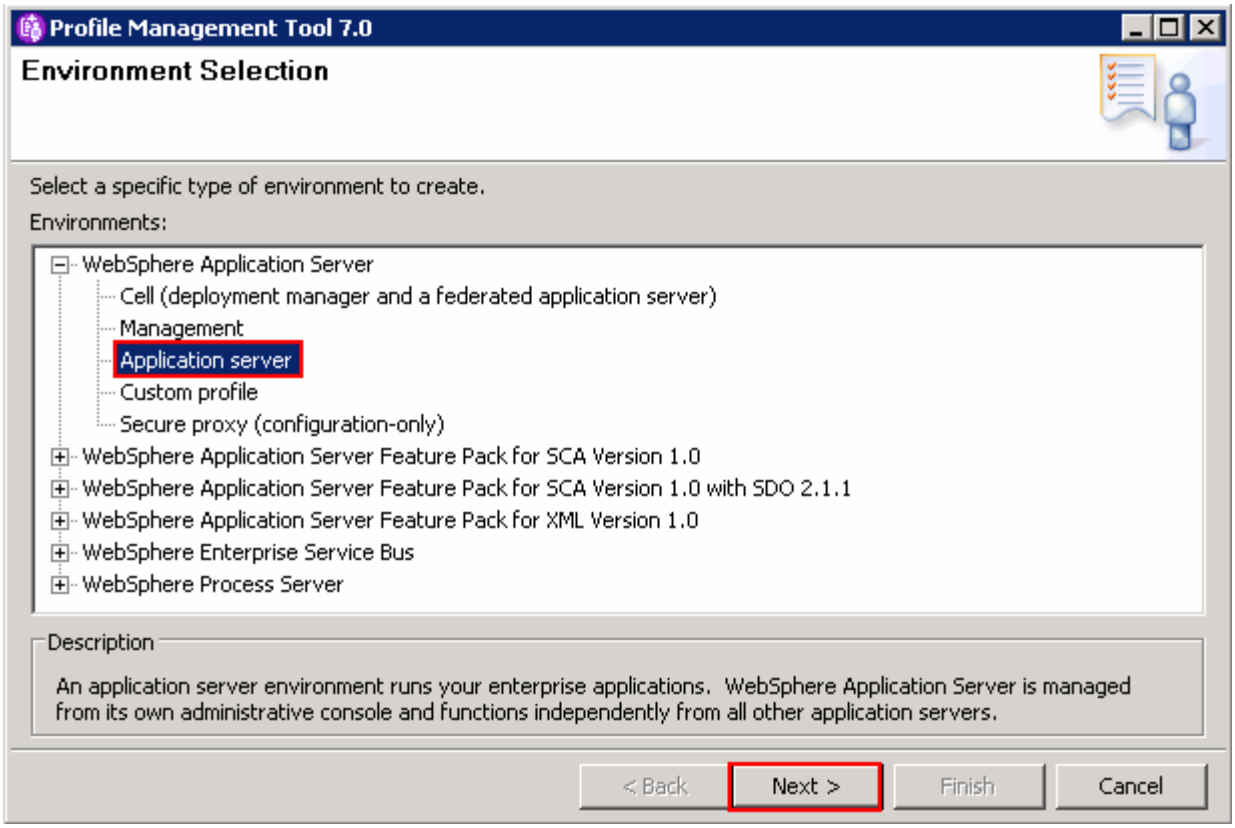


____ 3. Click the **`Create`** button. The **Environment** selection panel is launched

____ 4. In the **Environment** selection panel, expand **`WebSphere Application Server`** and select **`Application server`**



____ 5. Click **`Next`**

____ 6. In the next **Profile Creation Options** panel, select the radio button for **`Advanced profile creation`**

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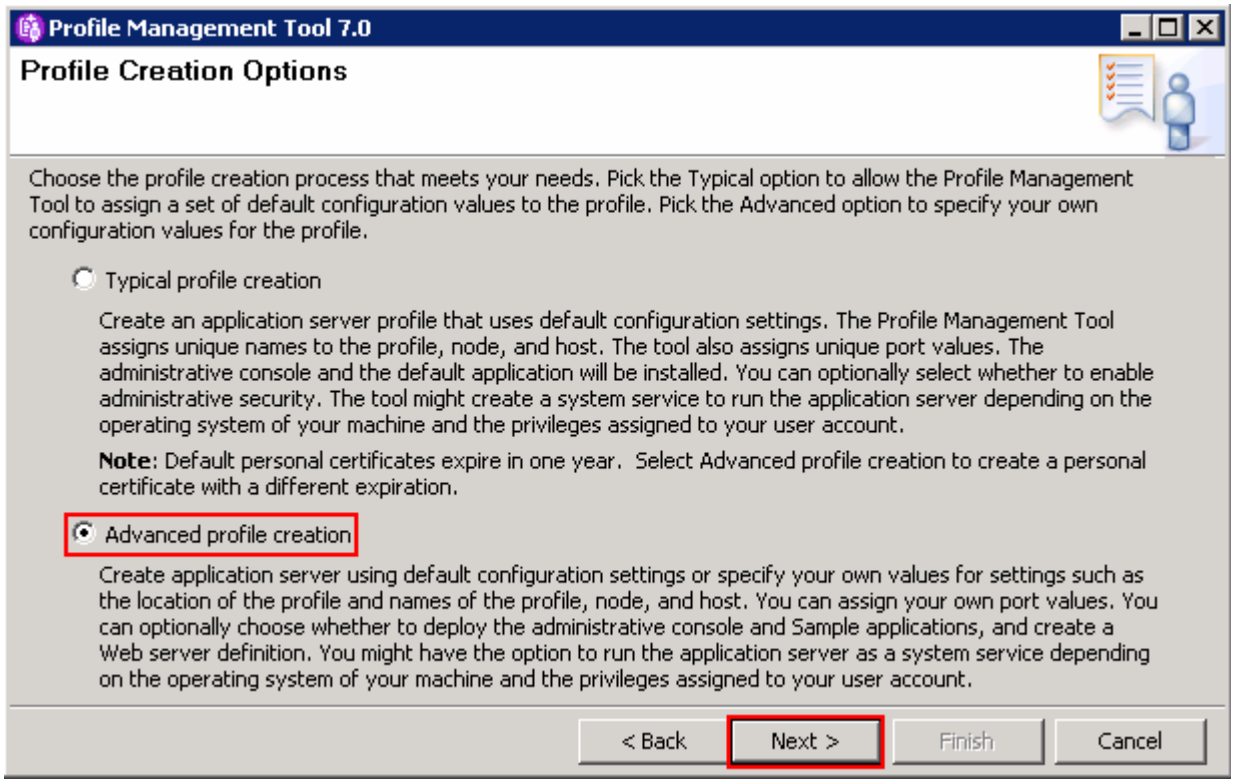


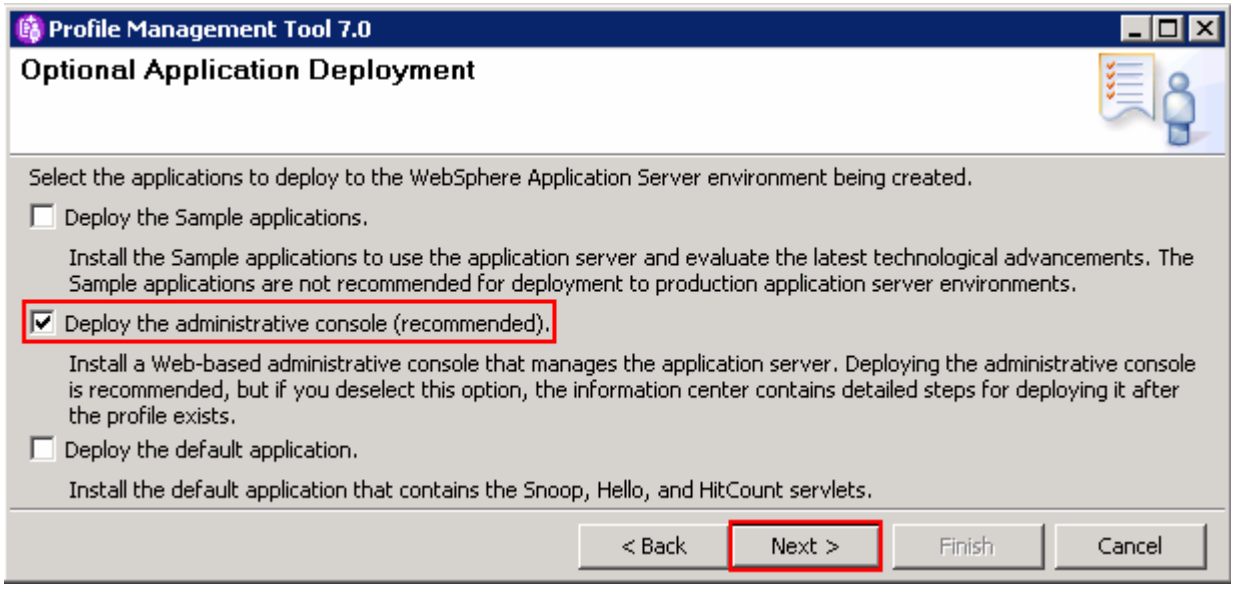
____ 7. Click **`Next`**

____ 8. In the next **Optional Application Development** panel, select the applications to deploy to the WebSphere Application Server environment being created:

__ **a.** (Optional) **`Deploy the Sample applications`**

__ **`b. Deploy the administrative console (recommended)`**

__ c. (Optional) **`Deploy the default application`**



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____ 9. Click **Next**

____ 10. In the next **Profile Name and Location** panel, specify the profile name, directory path to the profile being created

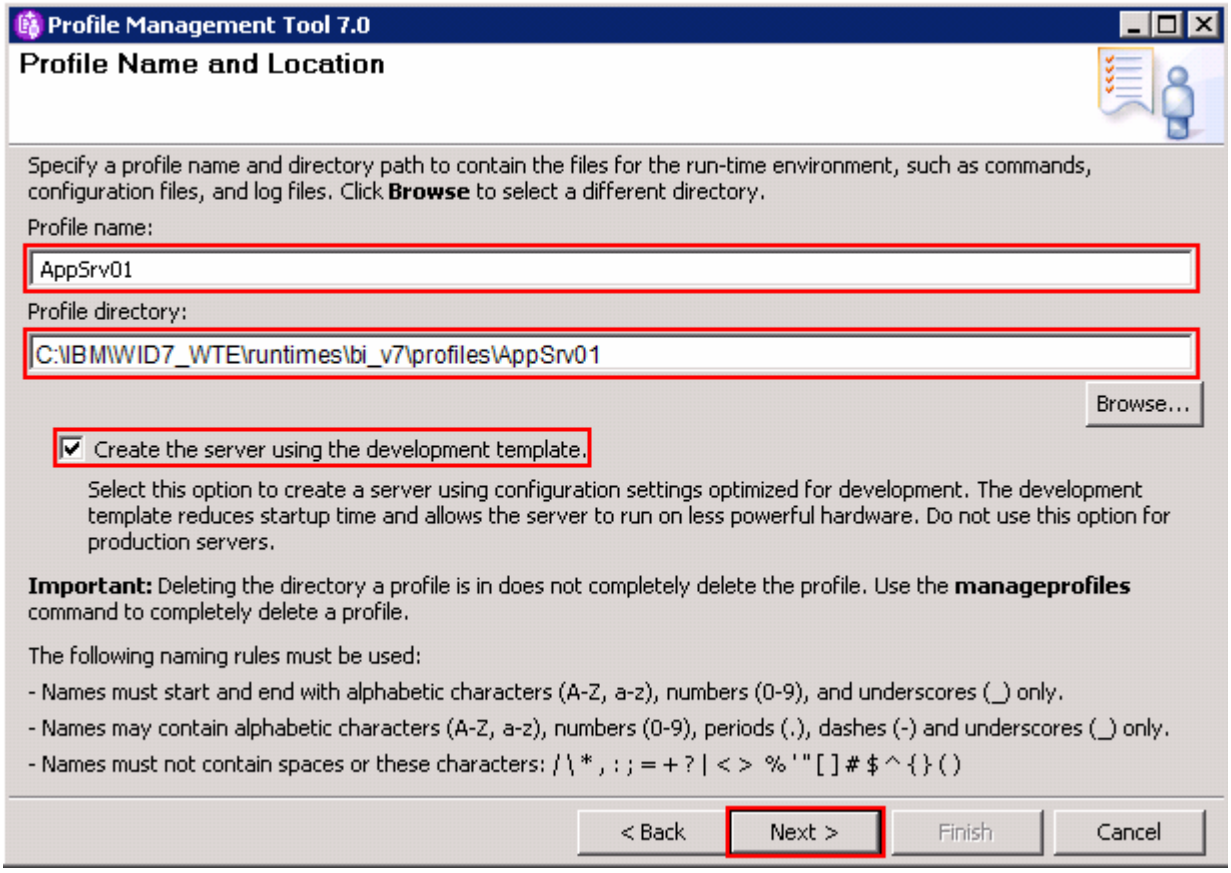
__ a. Profile name : **AppSrv01**

__ b. Profile Directory : **<WAS_HOME>\profiles\AppSrv01**

Ex: **C:\IBM\WID7_WTE\runtimes\bi_v7\profiles\AppSrv01**

__ c. (Optional) Select the check box for **Create the server using the development template**

Note: Creating the WebSphere Application Server profile using the development template, creates a server using configuration settings optimized for development. The development template reduces start time and allows the server to run on less powerful hardware.



____ 11. Click **Next**

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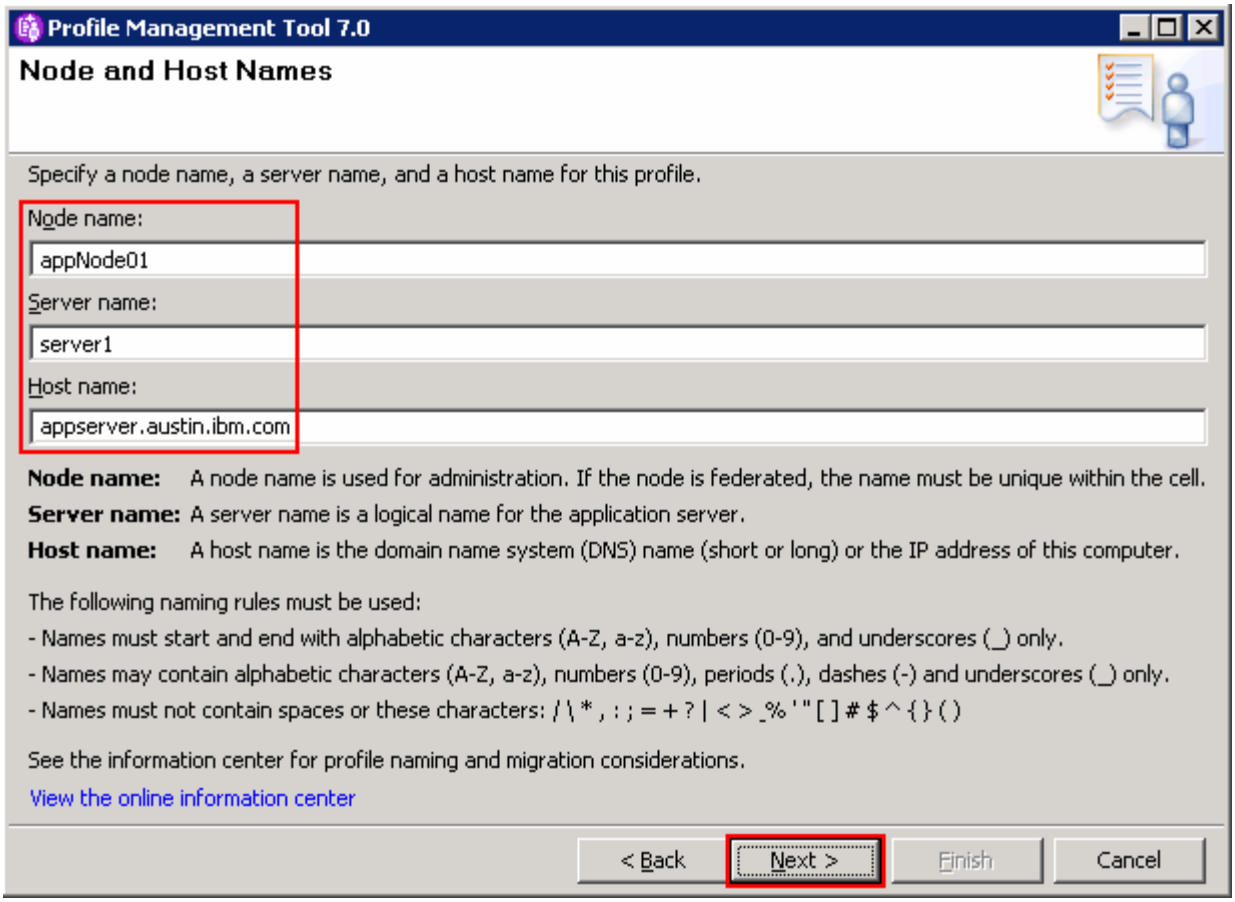
____ 12. In the next **Node and Host Names** panel, specify the node name, server name, host name and cell name for this profile

__ a. Node name : **`appNode01`**

__ b. Server name : **`server1`**

__ c. Host name : Ex: **`appserver.austin.ibm.com`**



____ 13. In the next **Administrative Security** panel, select the check box for **`Enable administrative security`** and enter the administrative username and password:

__ a. User name : **`admin`**

__ b. Password : **`superSecret`**

__ c. Confirm Password : **`superSecret`**

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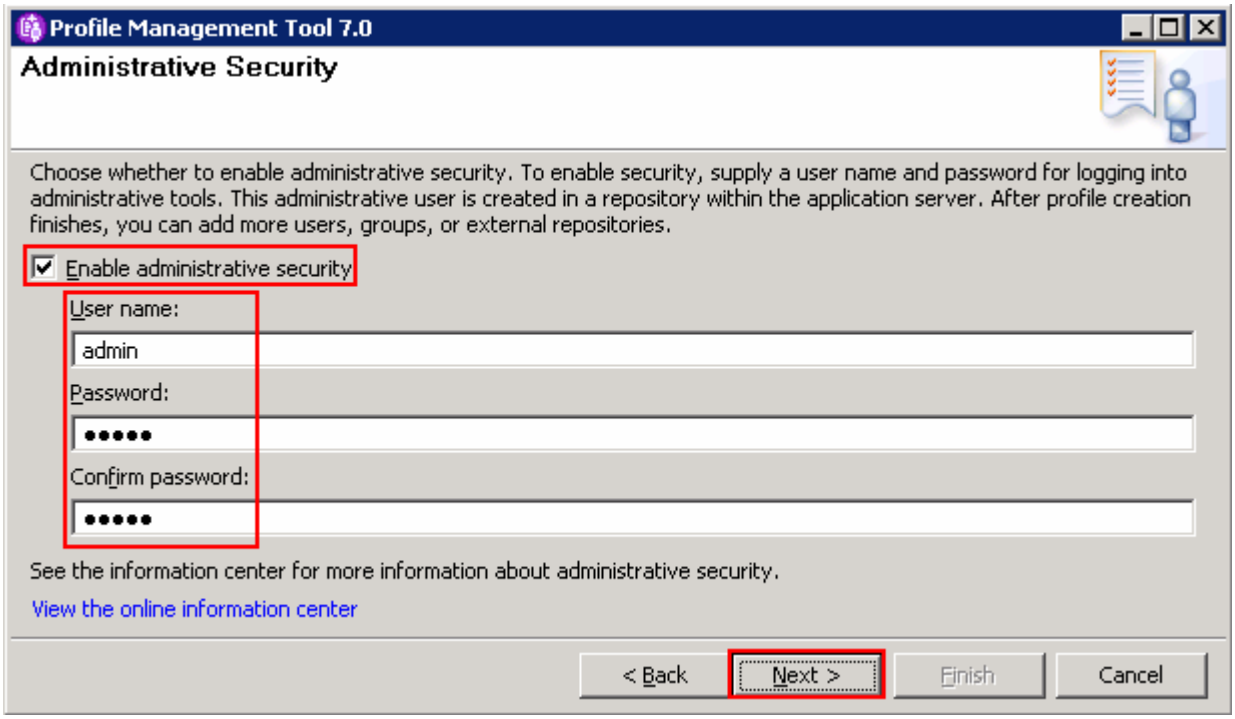

____ 14. Click **`Next`**

____ 15. In the next **Security Certificate (Part 1)** panel, accept the defaults and click **`Next`**

____ 16. In the next **Security Certificate (Part 2)** panel, accept the defaults and click **`Next`**

____ 17. In the next **Port Values Assignment** panel, review the ports assigned. You can change them to the required values, but ensure that the port numbers do not conflict with other services running on this machine. Click **`Next`**

____ 18. In the next **Widows Service Definition** panel, clear the check box for **`Run the application server process as a Windows service`**

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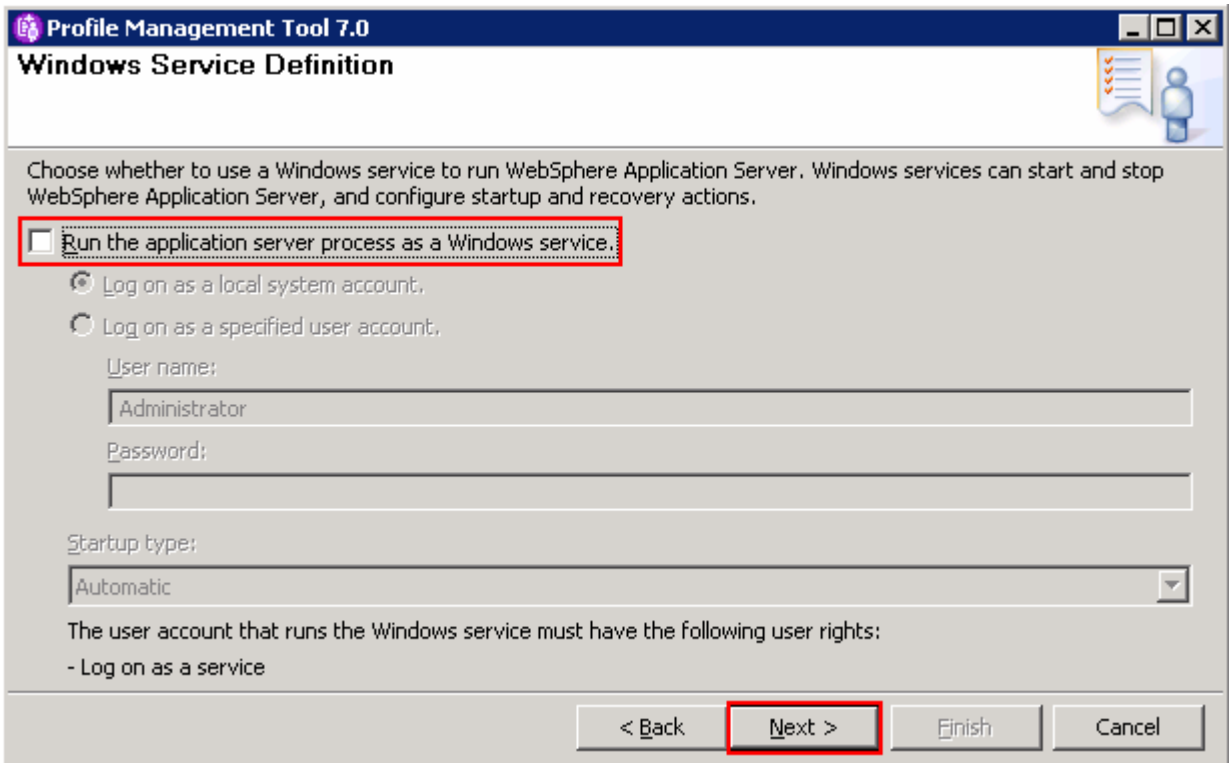
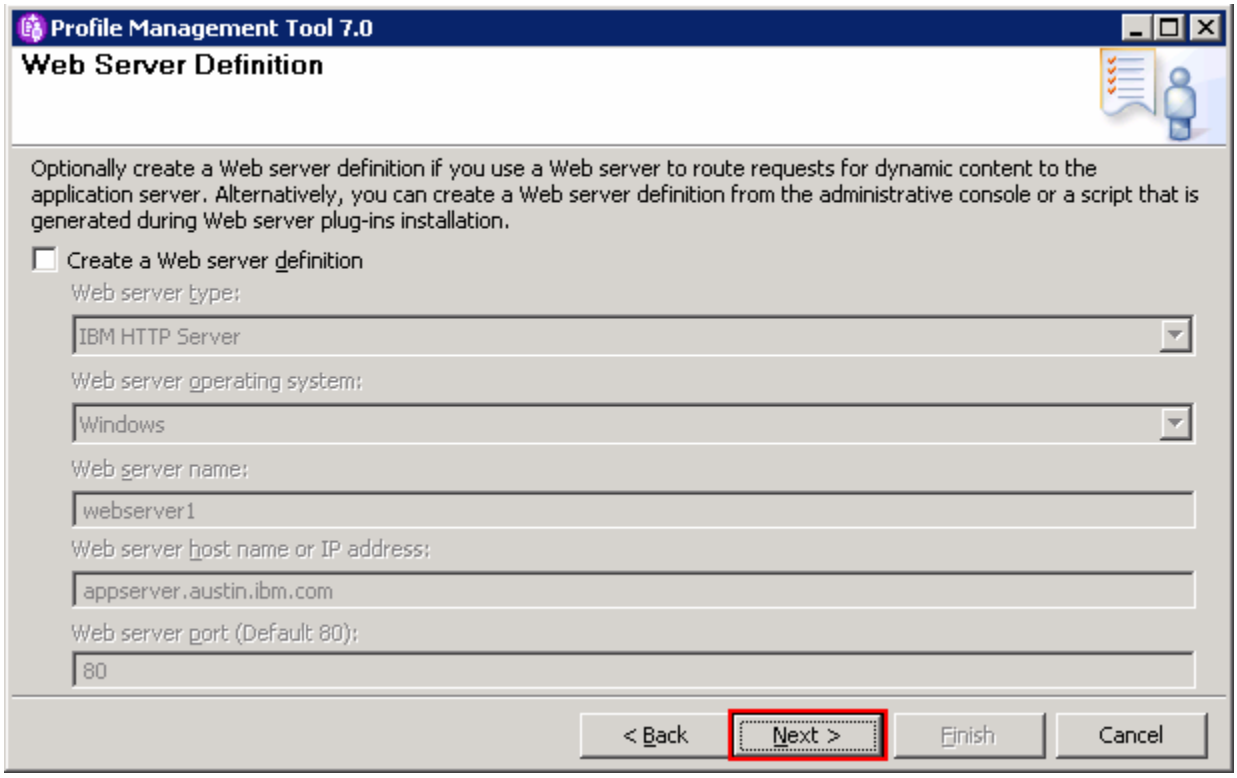


____ 19. Click **`Next`**

____ 20. In the next **Web Server Definition** panel, clear the check box for **`Create a Web server definition`**



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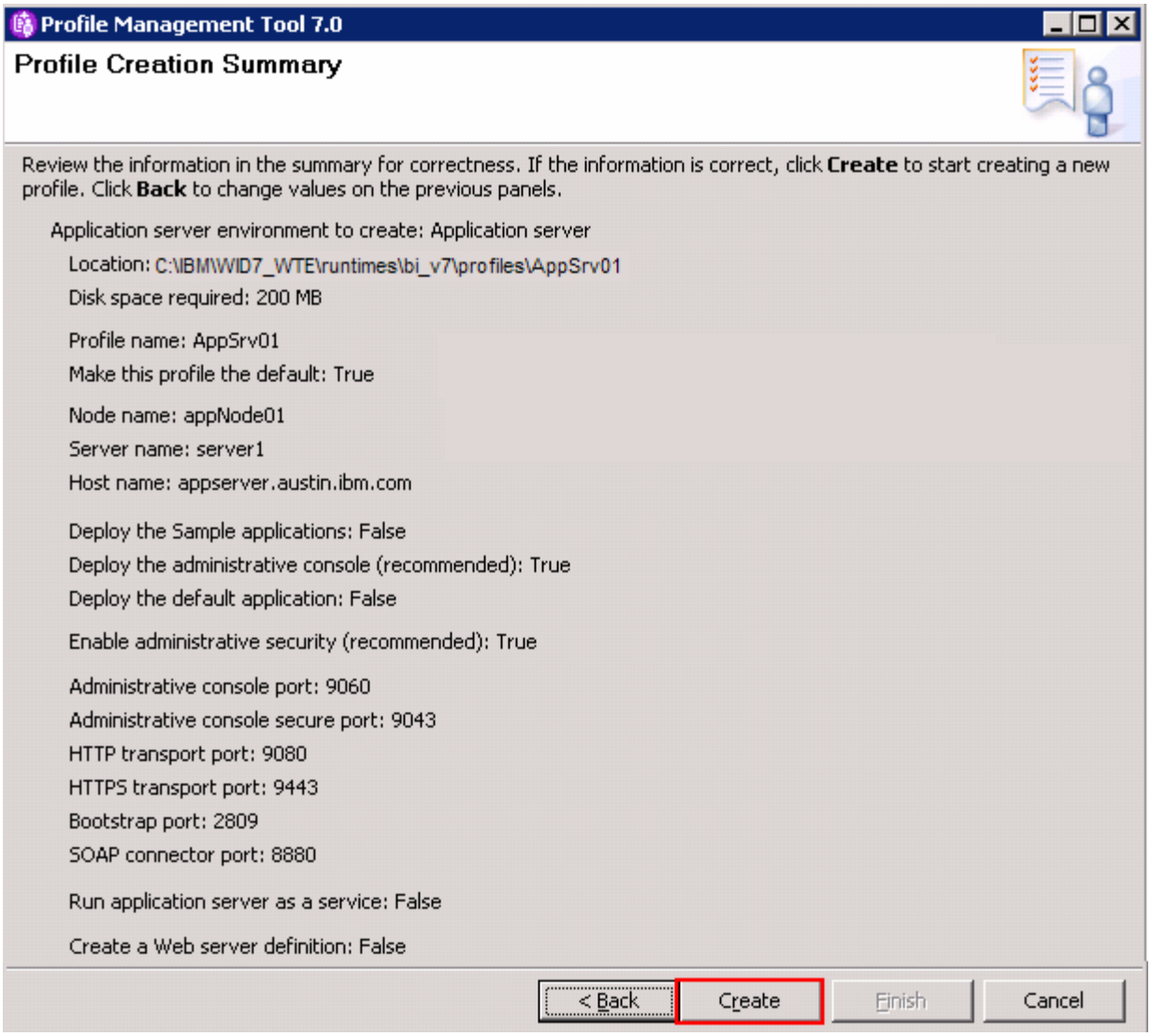
Note: Creating a Web server definition is out of scope to this document.

____ 21. Click **`Next`**

____ 22. In the next **Profile Creation Summary** panel, verify the profile creation summary



____ 23. Click **`Create`**

____ 24. Once the profile creation is complete, ensure the **`Launch the WebSphere Application Server first steps`** console check box is selected in the **Profile Creation Complete** panel

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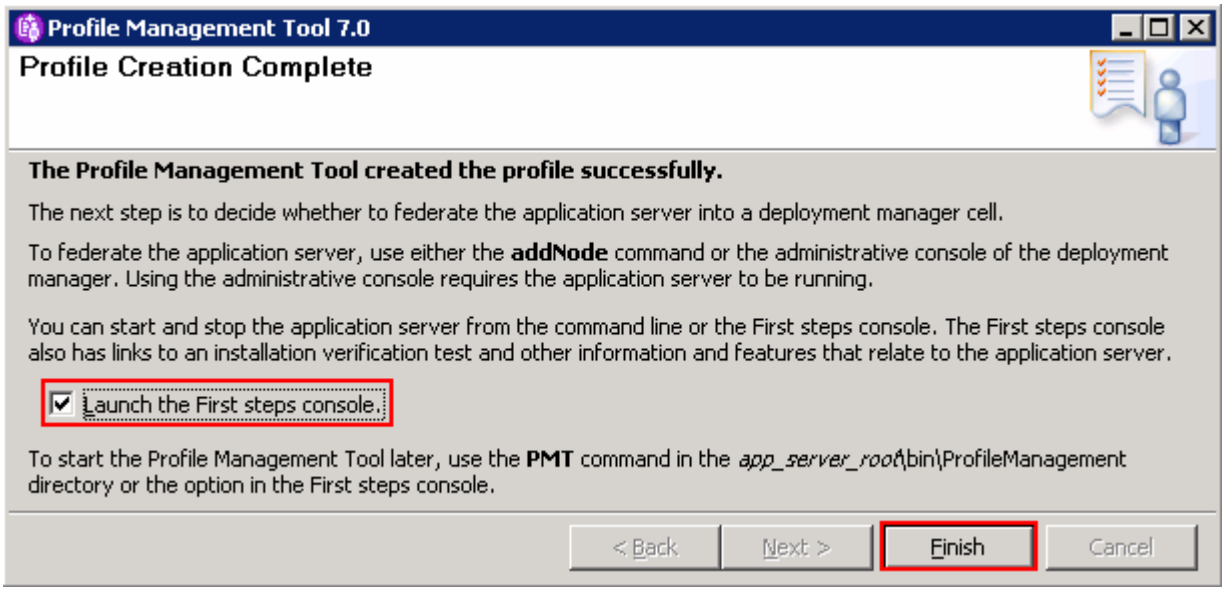
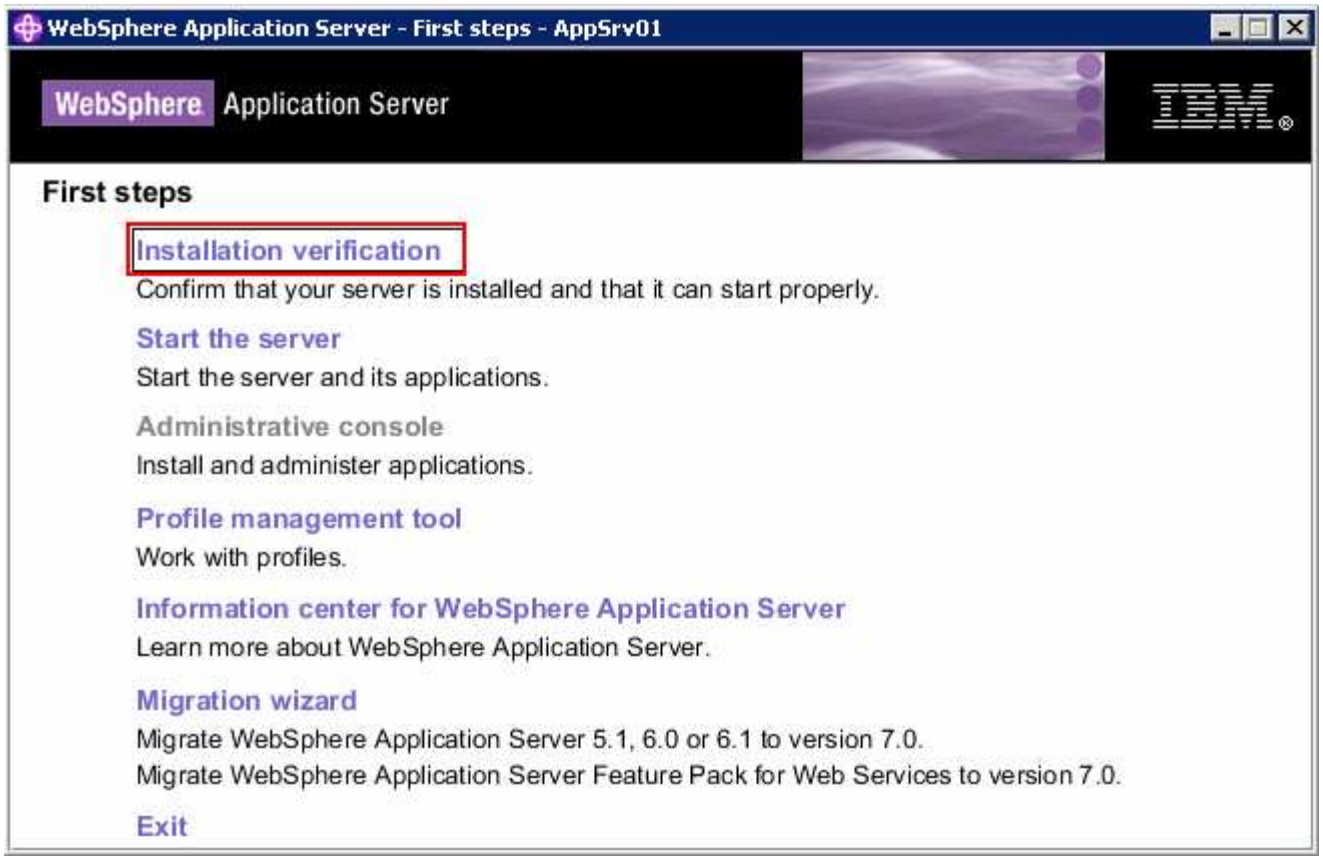


____ 25. Click **`Finish`**. The First Steps Console is launched as shown below:



____ 26. Click the **`Installation Verification`** link. The installation verification test utility starts the process server. Review the SystemOut.log to ensure the server is started without any errors

____ 27. Close the First Steps console

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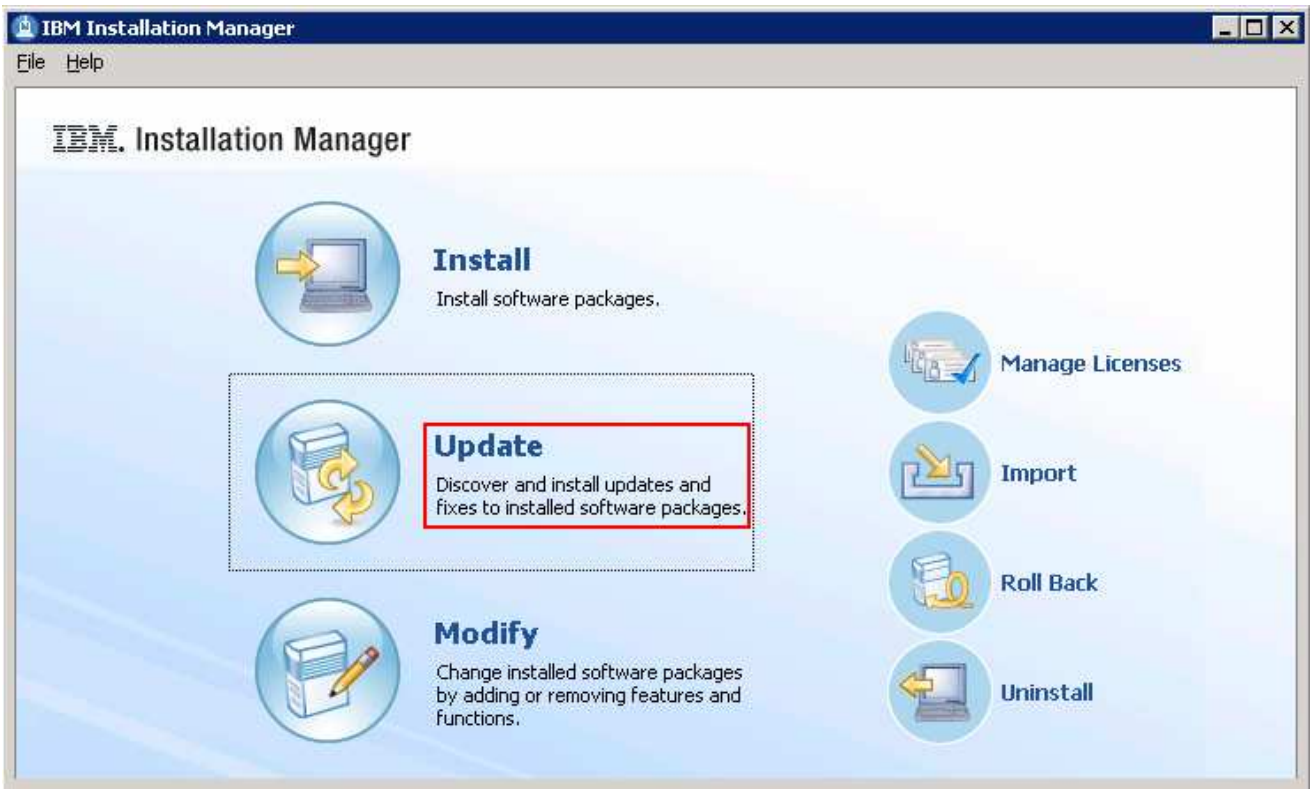
Task 3: Update WebSphere Integration Developer V7.0 using the Update Packages wizard

This part of the exercise demonstrates how to update the WebSphere Integration Developer package group using the Update Packages wizard in the Installation Manager. Updating a package in the Installation Manager context is to upgrade an existing version of the package group to a newer version.

Complete the instructions below to update the WebSphere Integration Developer package group:

____ 1. Launch the Installation Manager. From the Windows Start menu, select **`Programs → IBM Installation Manager → IBM Installation Manager`**



____ 2. Once the Installation Manager is launched, click **`Update`**. The **Update Packages** wizard is launched

____ 3. In the Update Packages panel, select the package group you want to update

__ a. Select the package group name as **`IBM WebSphere Integration Developer`**

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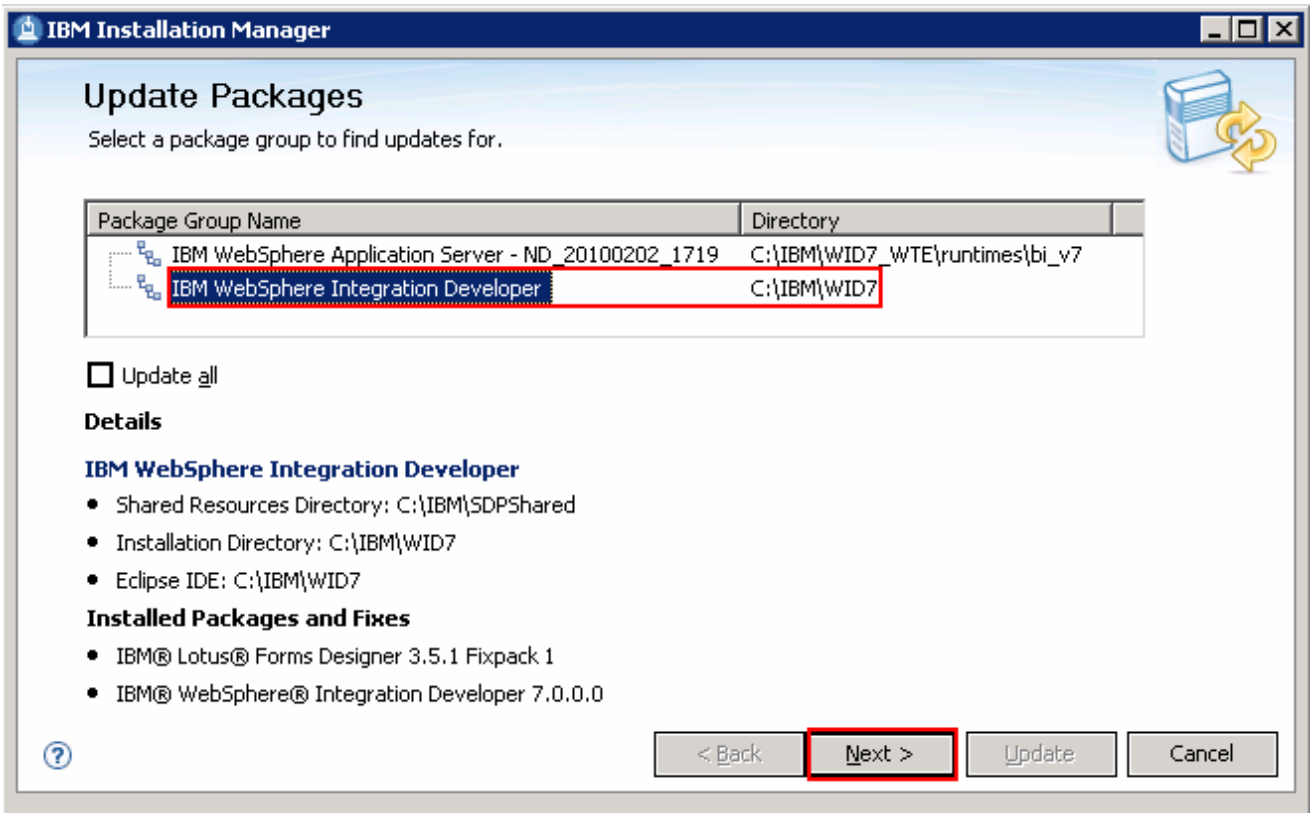
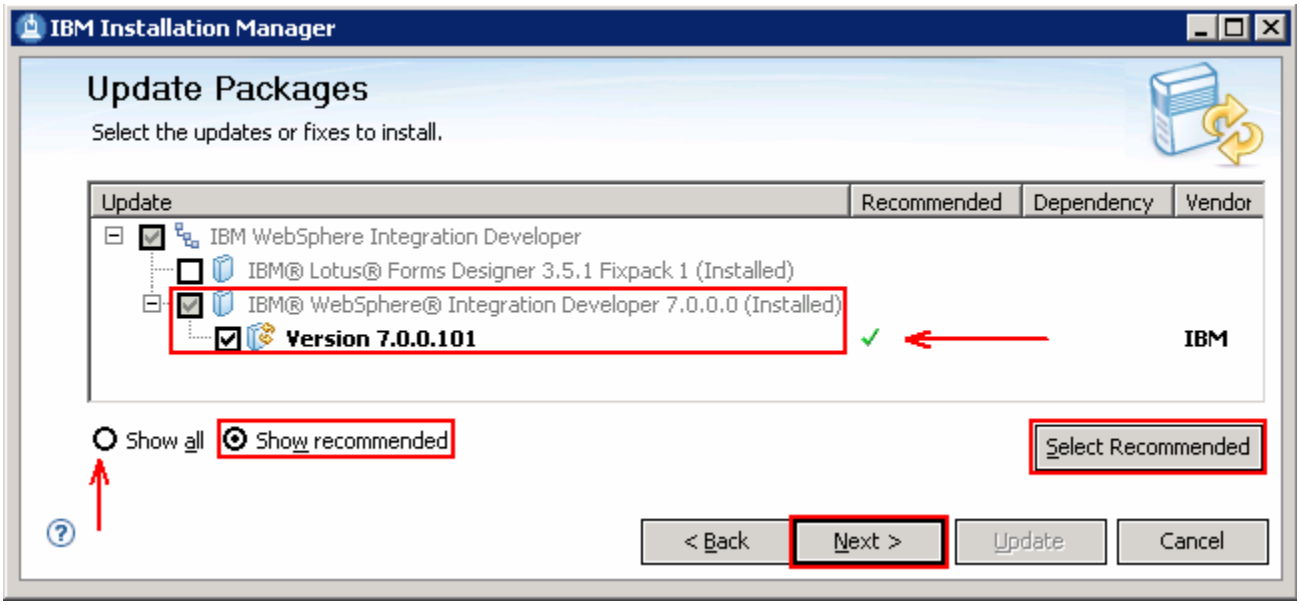


____ 4. Click **`Next`**

____ 5. In the next panel, select the radio button for **`Show recommended`** and then click the **`Select Recommended`** button. These actions search for the latest available refresh pack, fixes, extensions and so on and then select the recommended updates to install



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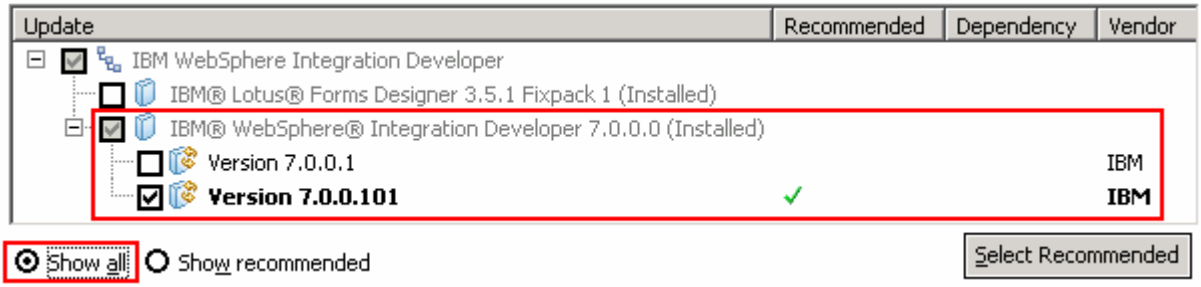
Note: Select the radio button for **`Show all`** if you want to install a different version of the available updates. You should see all the available versions listed along with the recommended version. Select the required update and click **`Next`**

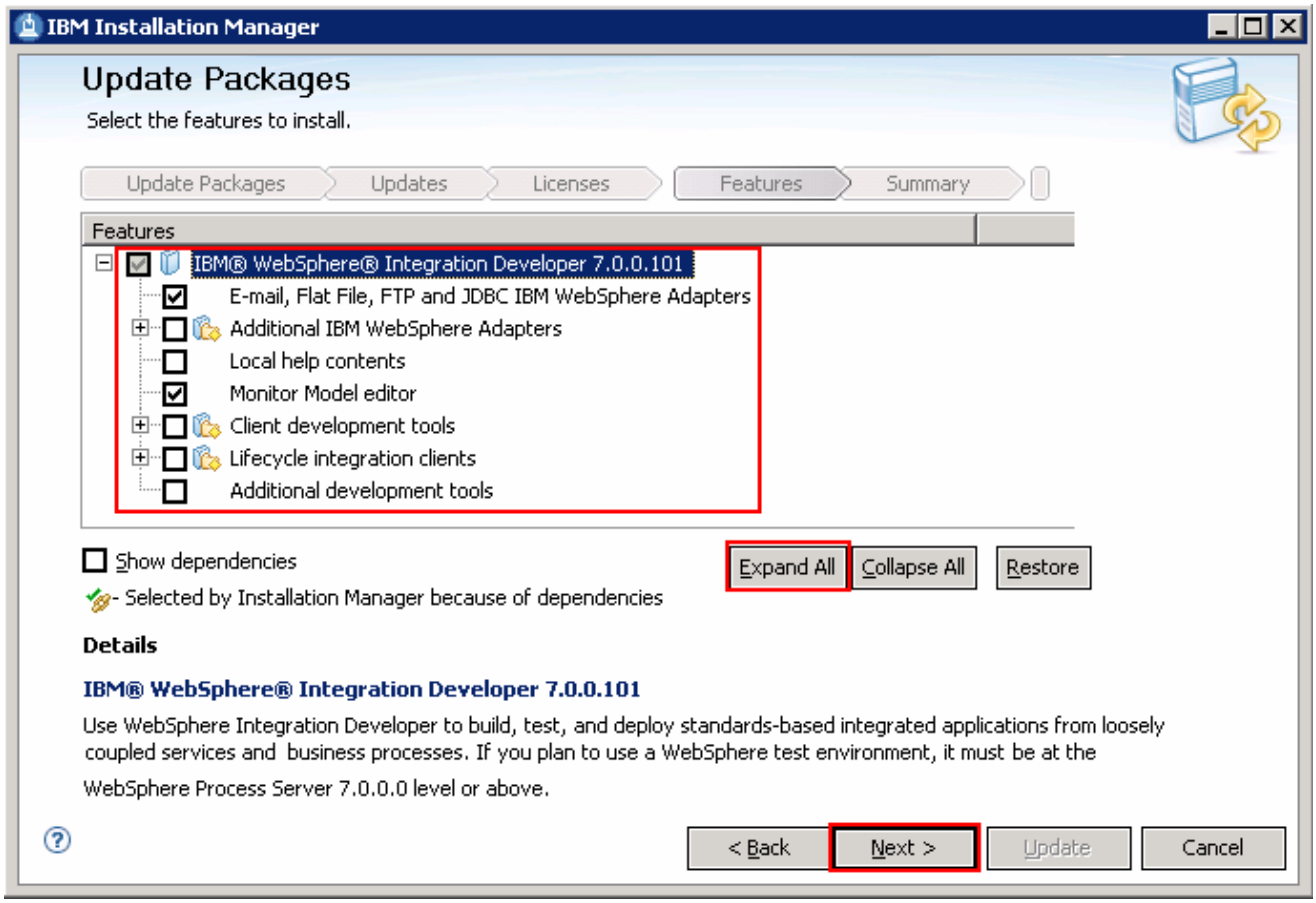


In this exercise, you will select the recommended update (Version 7.0.0.101) for installation.

____ 6. Click **`Next`**

____ 7. In the next panel, read the license agreements. If you agree to the terms, select the radio button for **`I accept the terms in the license agreements`** and Click **`Next`**

____ 8. In the next features panel, click the **`Expand`** button to view all the available features, and then select the futures you want to install. Clear a feature if you want to remove it



____ 9. Click **`Next`**

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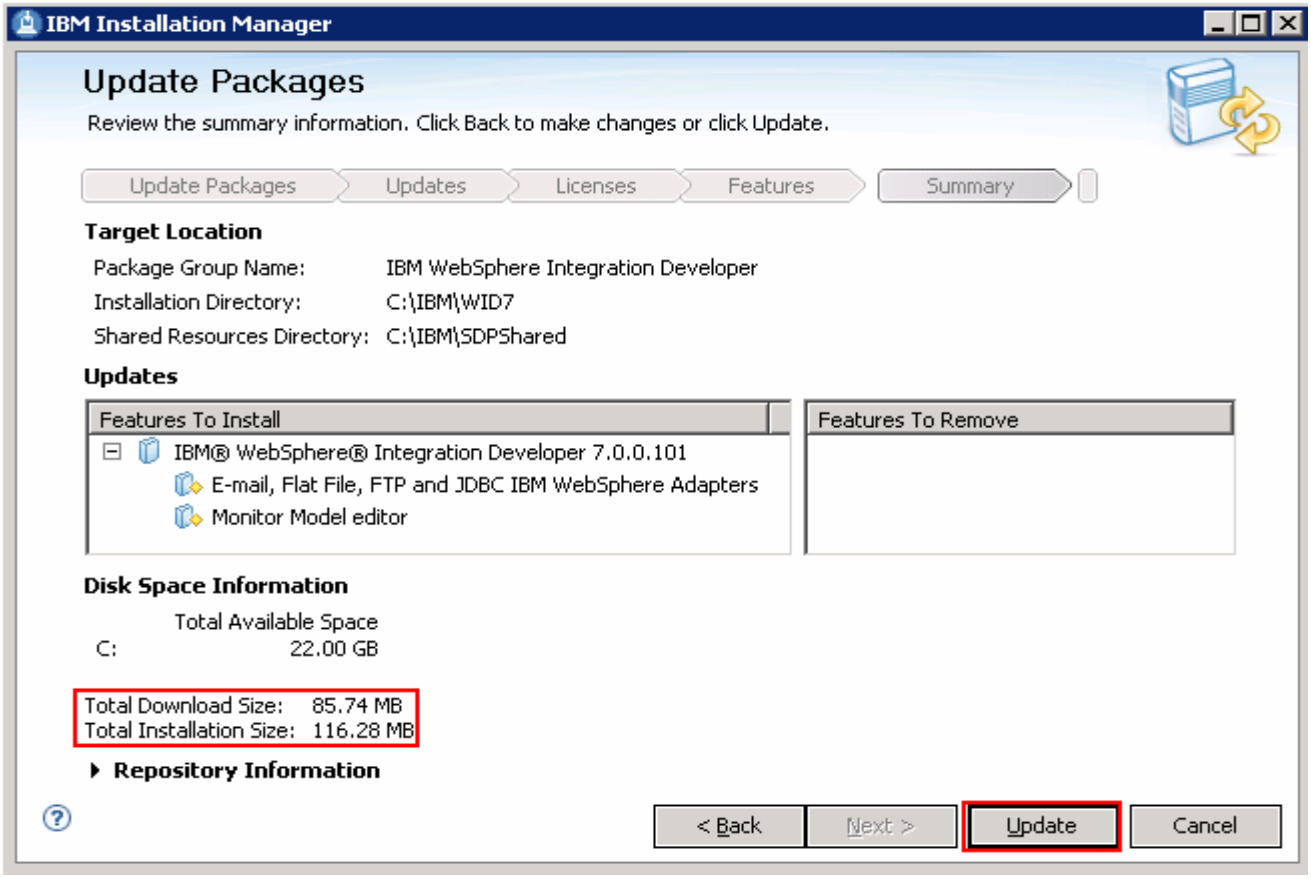
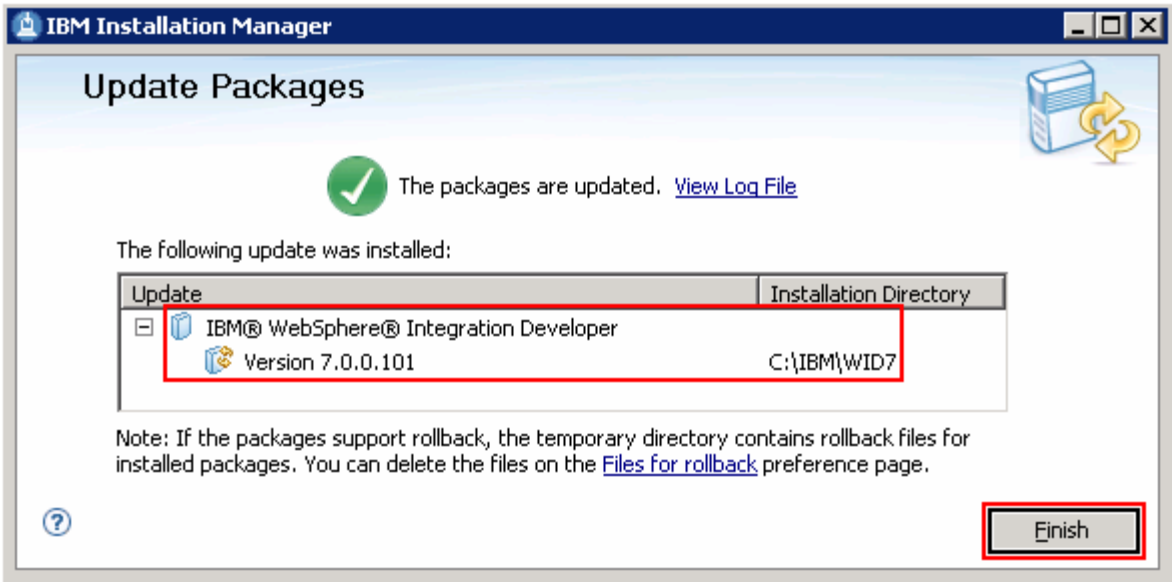
____ 10. In the next panel, verify the updates being made for the WebSphere Integration Developer package group



____ 11. Click **`Update`**. The installation progresses



____ 12. Once the installation is complete, click **`Finish`** to quit the Installation Manager

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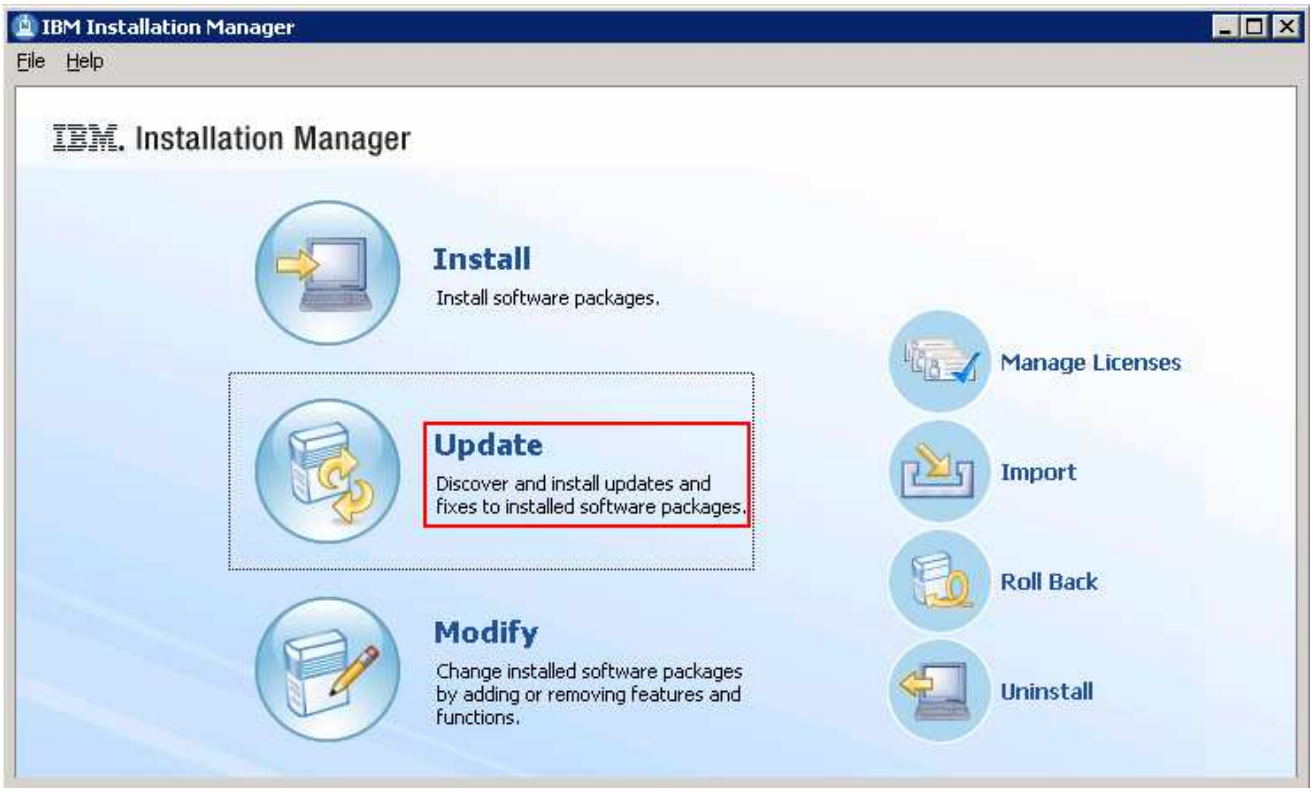
Task 4: Update WebSphere test environment using Update Packages wizard

This part of the exercise demonstrates how to update the WebSphere test environment which is the WebSphere Application Server –ND package group using the Update Packages wizard in the Installation Manager. Updating a package in the Installation Manager context is to upgrade an existing version of the package group to a newer version.

Complete the instructions below to update the WebSphere Application Server – Network Deployment package group:

____ 1. Launch the Installation Manager. From the Windows Start menu, select **`Programs → IBM Installation Manager → IBM Installation Manager`**



____ 2. Once the Installation Manager is launched, click **`Update`**. The **Update Packages** wizard is launched

____ 3. In the Update Packages panel, select the package group you want to update

__ a. Select the package group name as **`IBM WebSphere Application Server - ND`**

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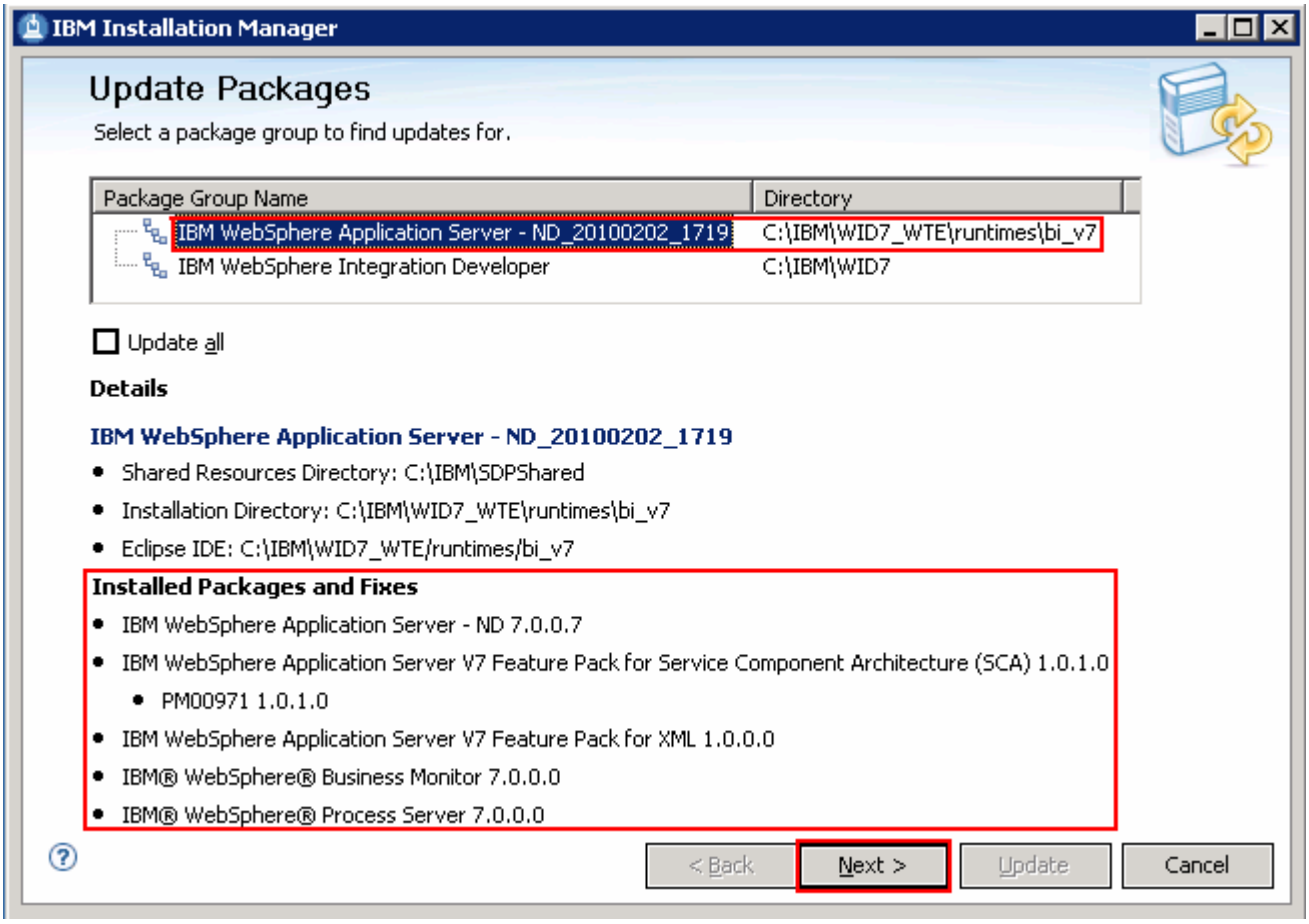

____ 4. Click **`Next`**

____ 5. In the next panel, select the radio button for **`Show recommended`** and then click the **`Select Recommended`** button. These actions search for the latest available refresh pack, fixes, extensions and so on and then select the recommended updates to install

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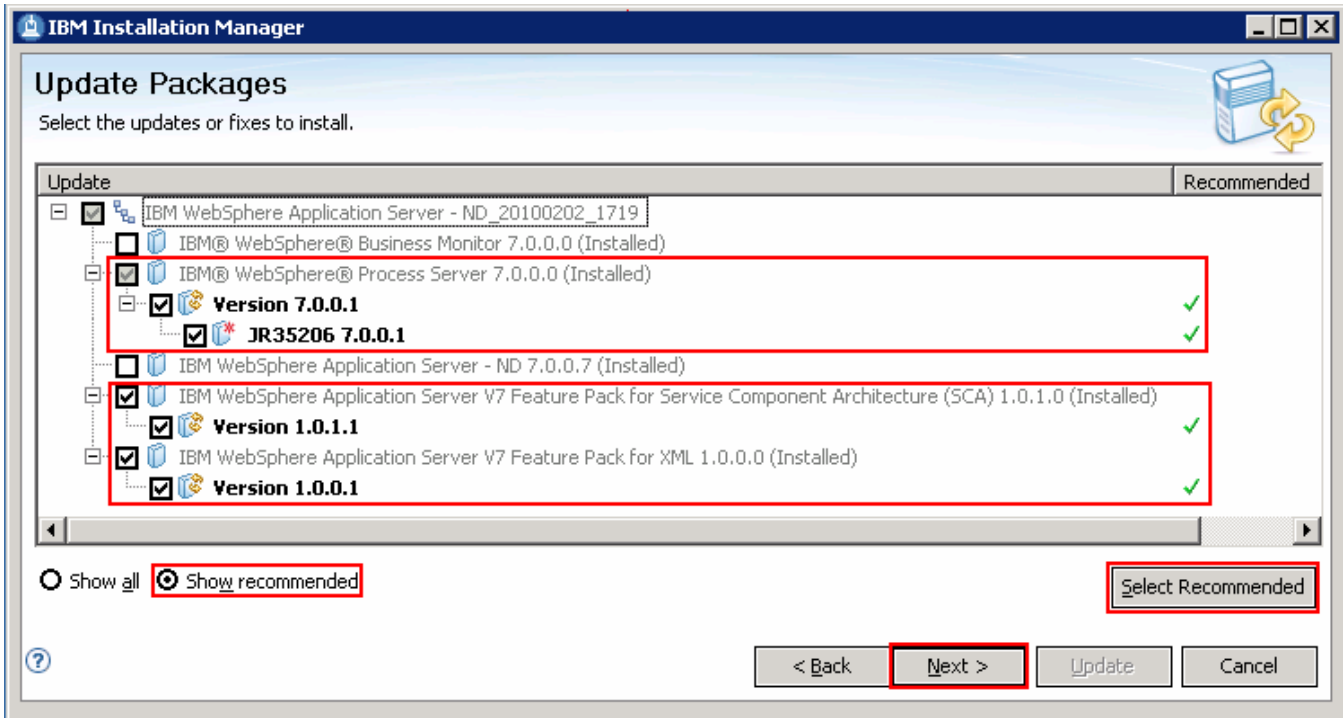
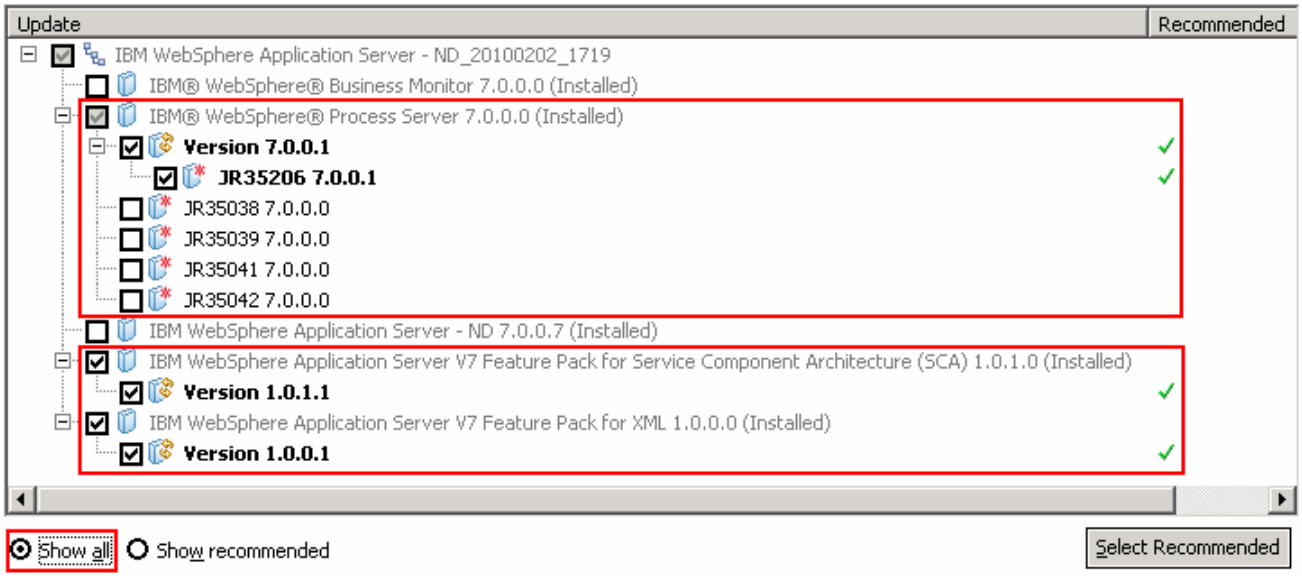


Note: Select the radio button for **Show all** if you want to install a different version of the available updates. You should see all the available versions listed along with the recommended version. Select the required update and click **Next**



In this exercise, you will select the recommended update (Version 7.0.0.1) for installation.

____ 6. Click **Next**

____ 7. In the next panel, read the license agreements. If you agree to the terms, select the radio button for **I accept the terms in the license agreements** and Click **Next**

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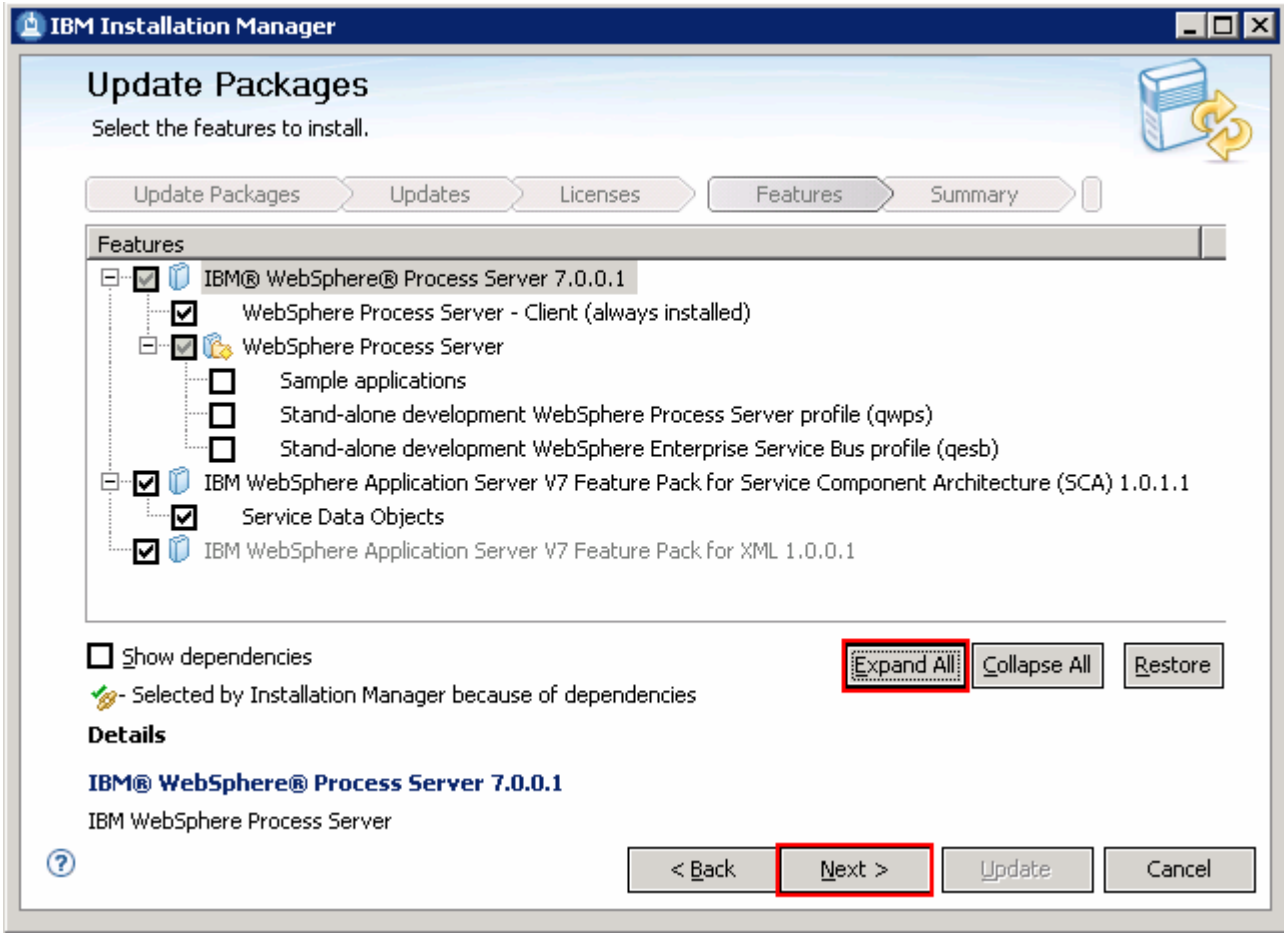
____ 8. In the next features panel, click the **Expand** button to view all the available features, and then select the futures you want to install. Clear a feature if you want to remove it. You can not be able to remove feature in some cases.



____ 9. Click **`Next`**

____ 10. In the next panel, verify the updates being made for the WebSphere Integration Developer package group

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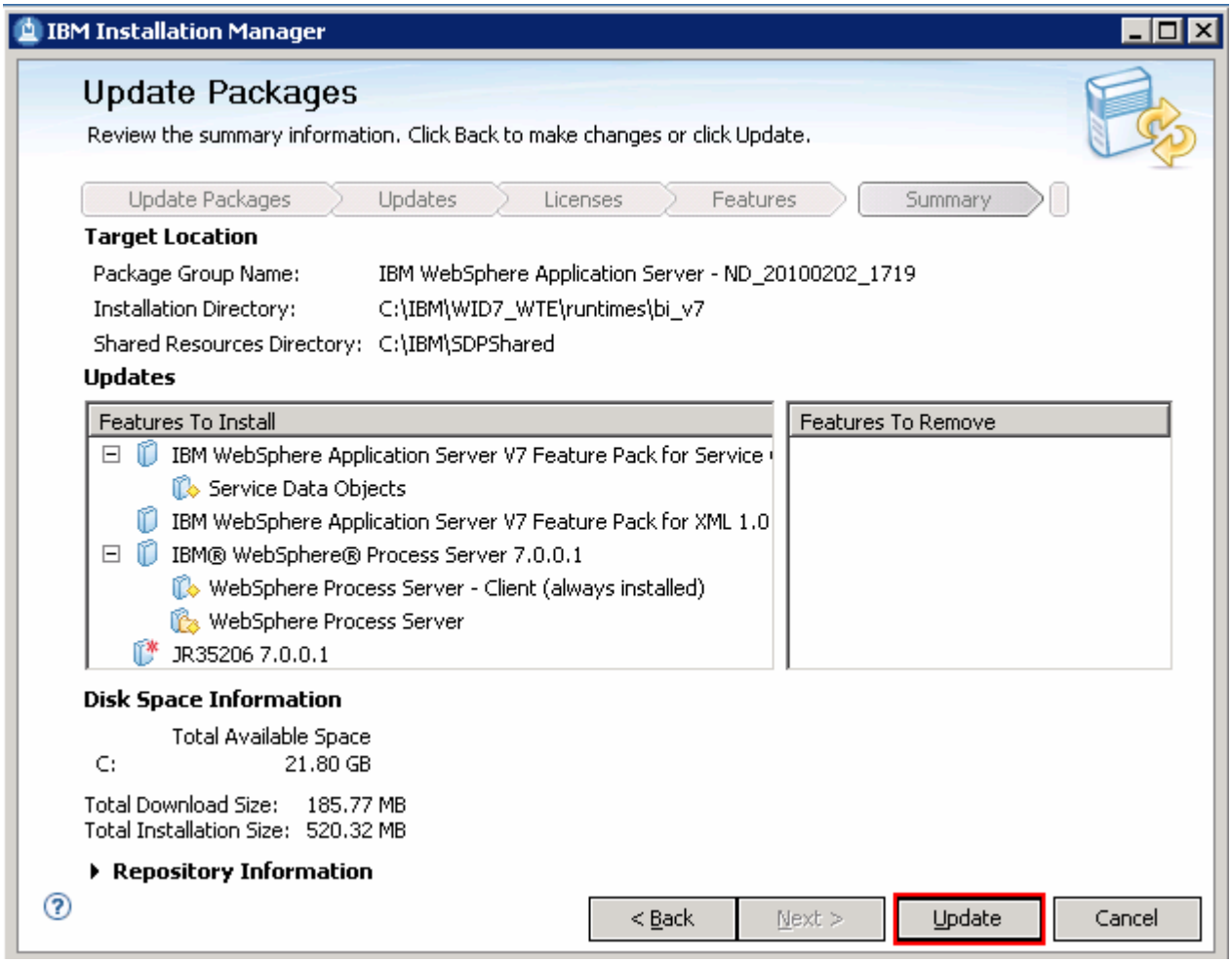

____ 11. Click **`Update`**. The installation progresses

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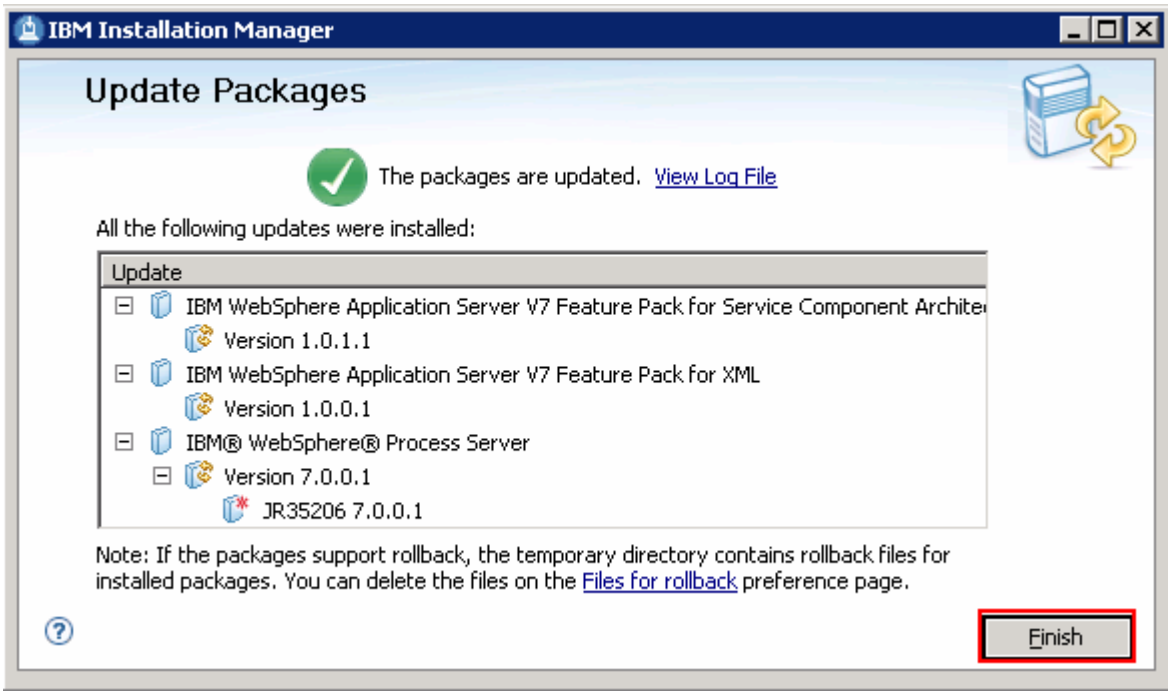

____ 12. Once the installation is complete, click **`Finish`** to quit the Installation Manager

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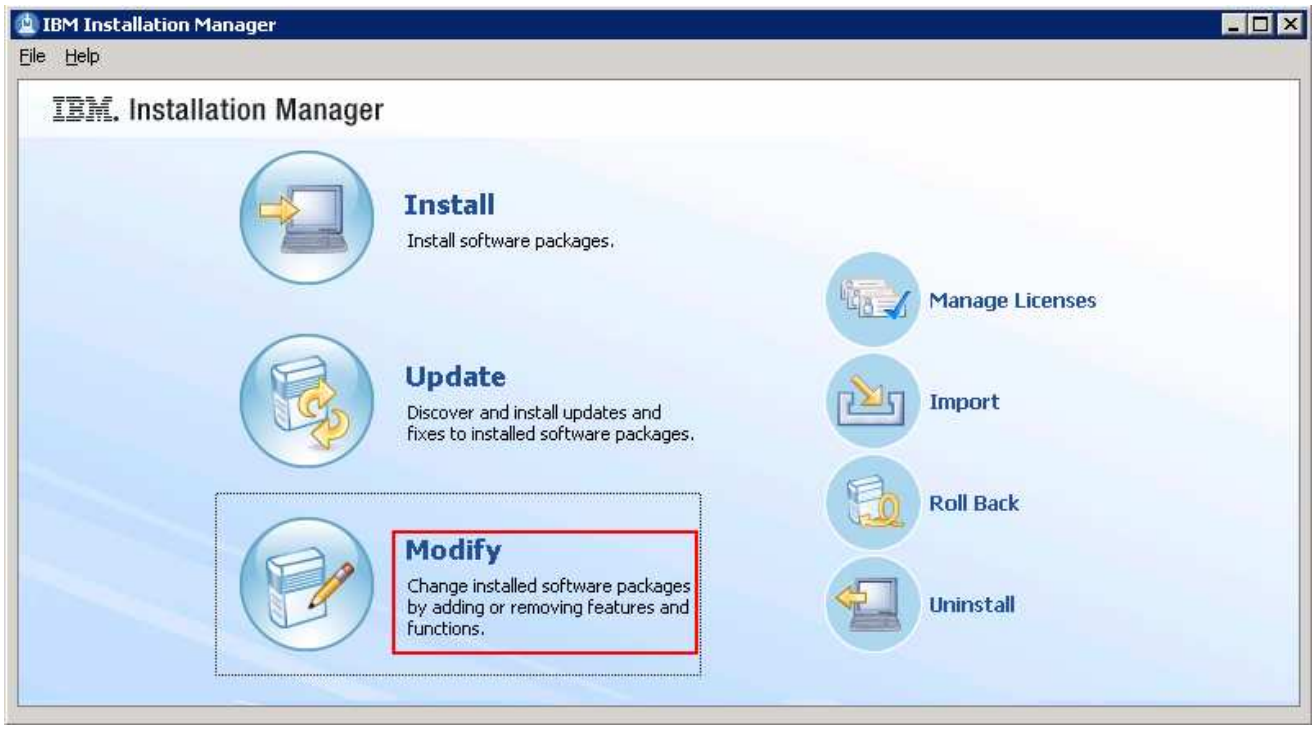
Task 5: Modify WebSphere Integration Developer using the Modify Packages wizard

This part of the exercise demonstrates how to modify the WebSphere Integration Developer package group using the Modify Packages wizard in the Installation Manager. Modifying a package in the Installation Manager context is to add or remove a feature from the selected package group, provided the pre-requisites are met.

Complete the instructions below to modify the WebSphere Integration Developer package group:

____ 1. Launch the Installation Manager. From the Windows Start menu, select **`Programs → IBM Installation Manager → IBM Installation Manager`**



____ 2. On the Installation Manager is launched, click **`Modify`**. The **Modify Packages** wizard is launched

____ 3. In the Modify Packages panel, select the package group you want to modify

__ a. Select the package group name as **`IBM WebSphere Integration Developer`**

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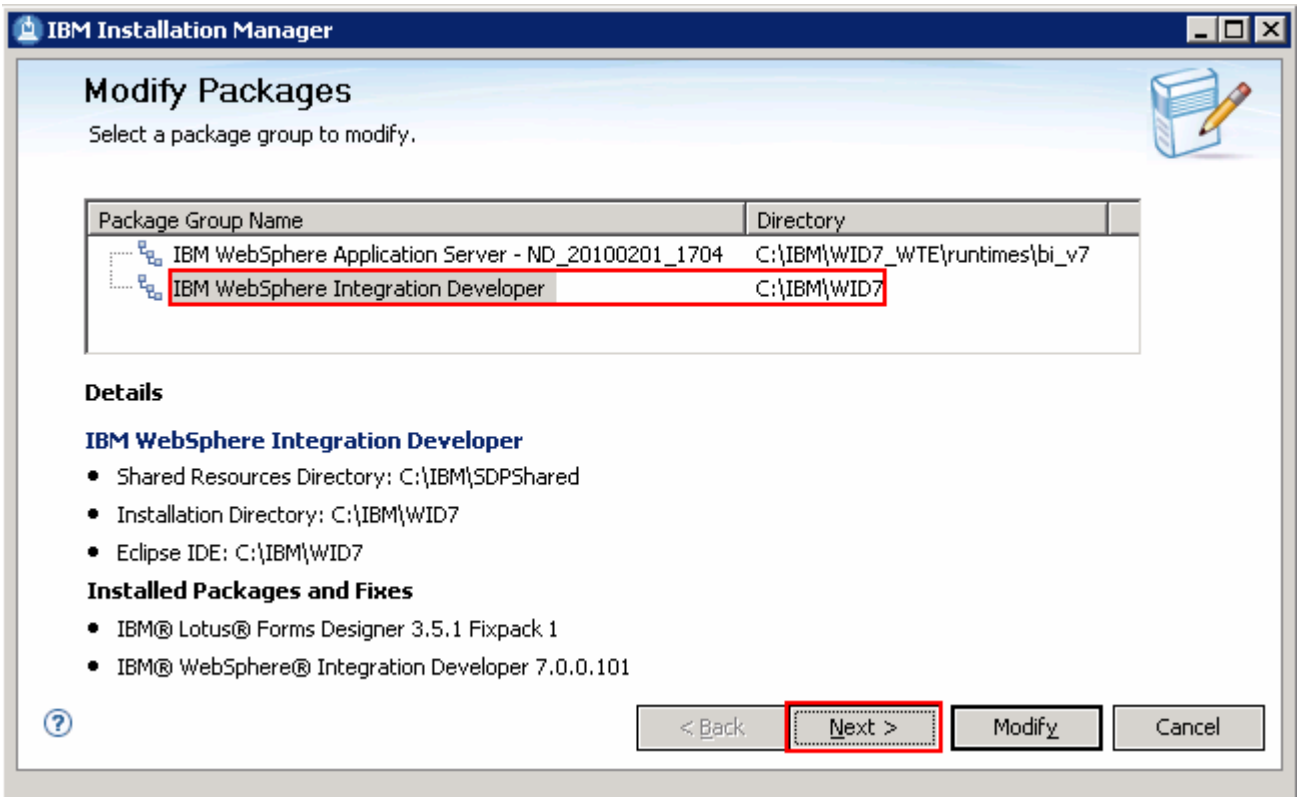
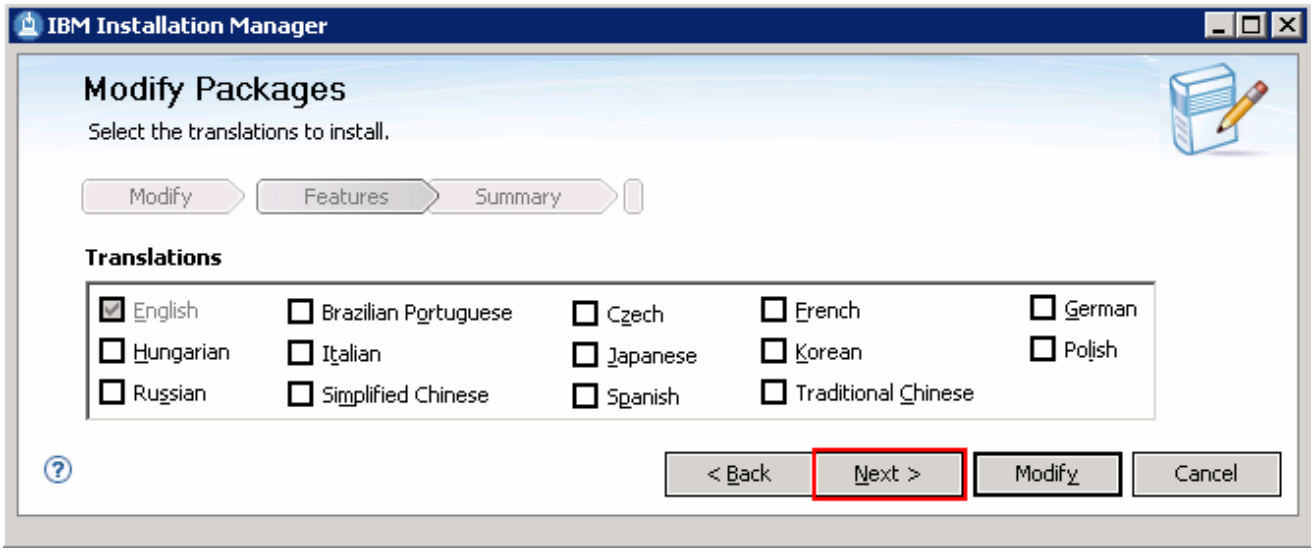


____ 4. Click **Next**

____ 5. In the next panel, select the translations you want to install



____ 6. Click **Next**

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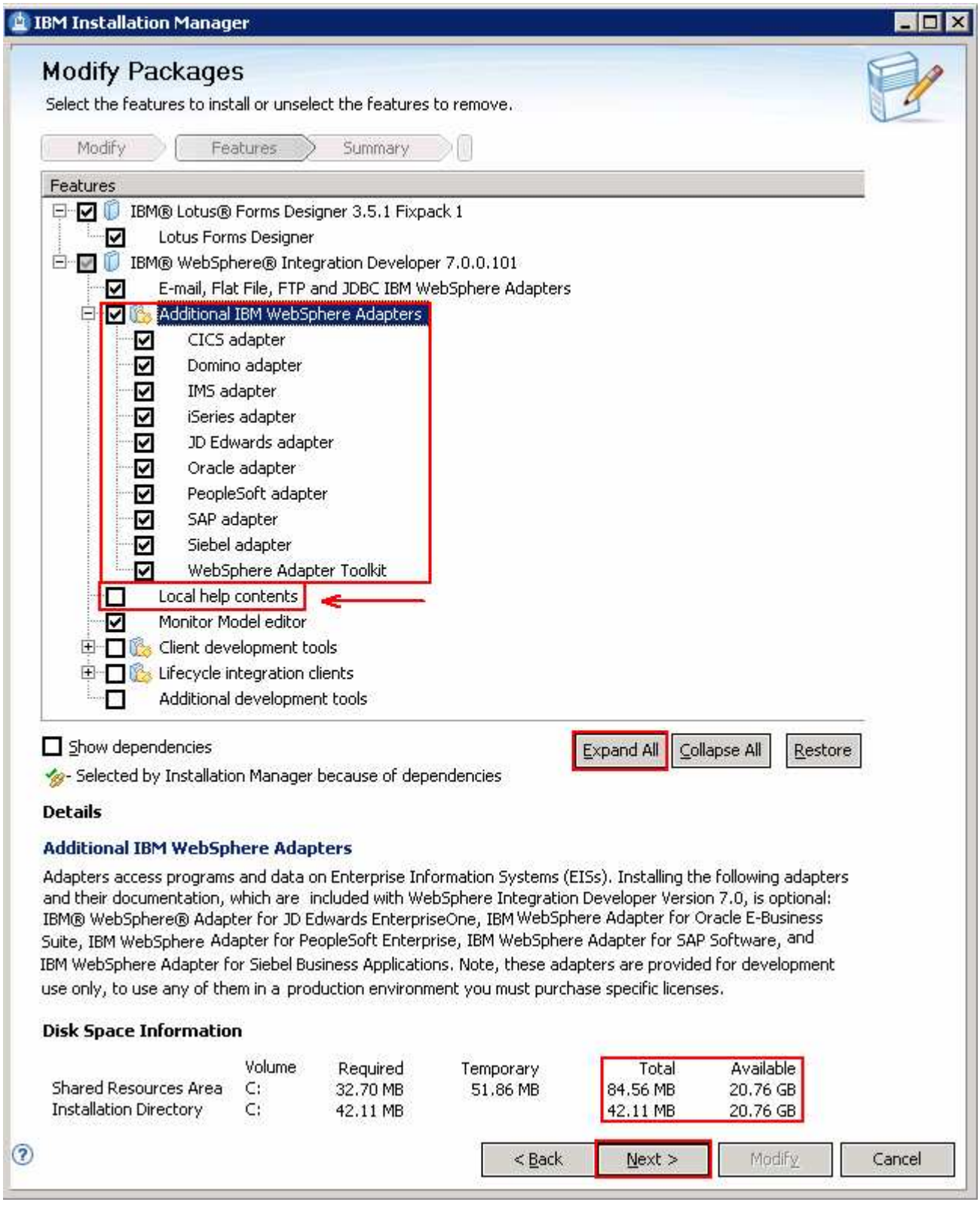
____ 7. In the next features panel, select or clear the WebSphere Integration Developer features you want to add or remove. For demonstrational purposes, select to add the **`Additional IBM WebSphere Adapters`** and clear to remove **`Local help contents`**



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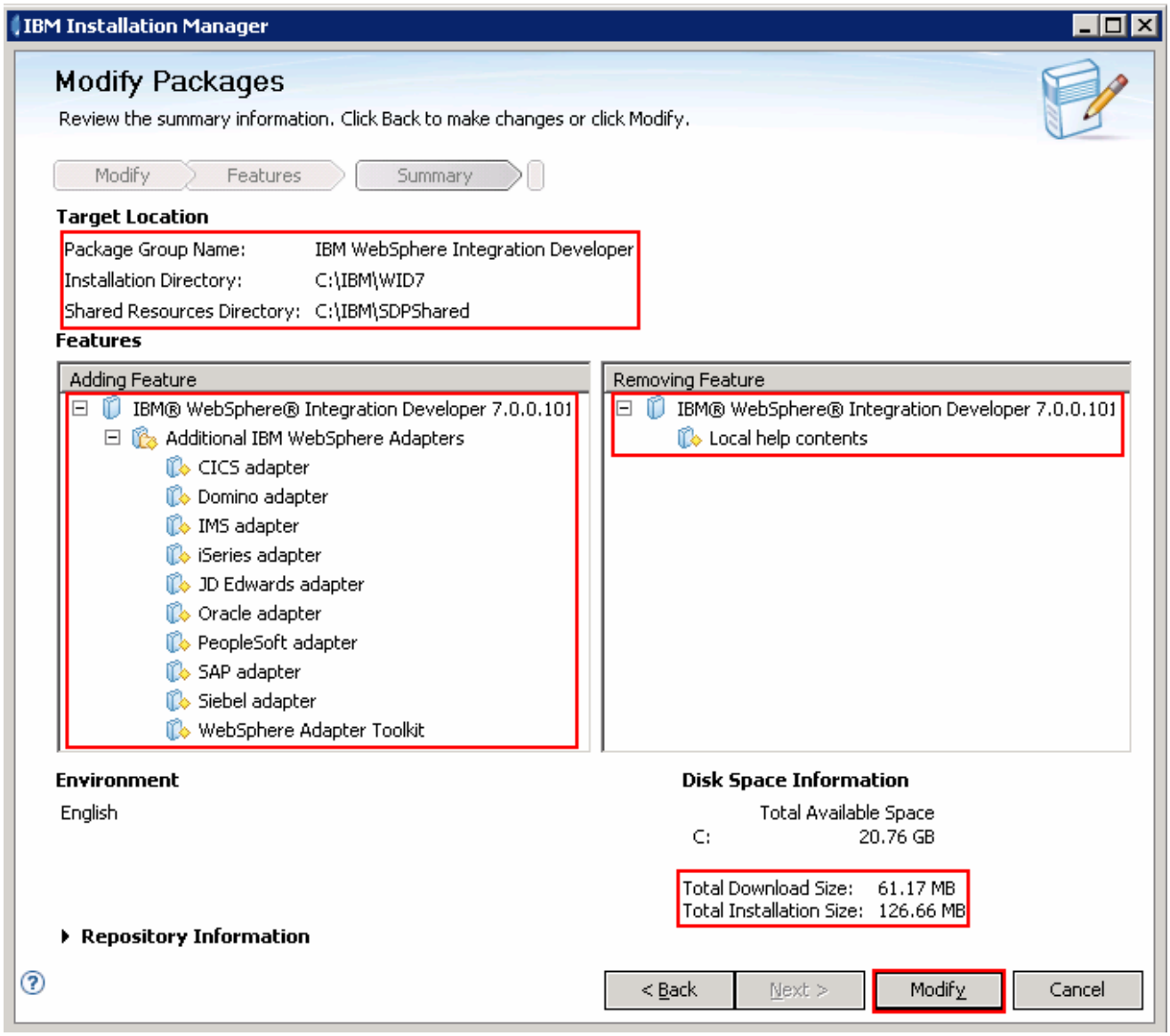
____ 8. Click **Next**

____ 9. In the next panel, verify the modification summary of the package group you selected



____ 10. Click **Modify**. The addition or removal process, which is the modification process progresses

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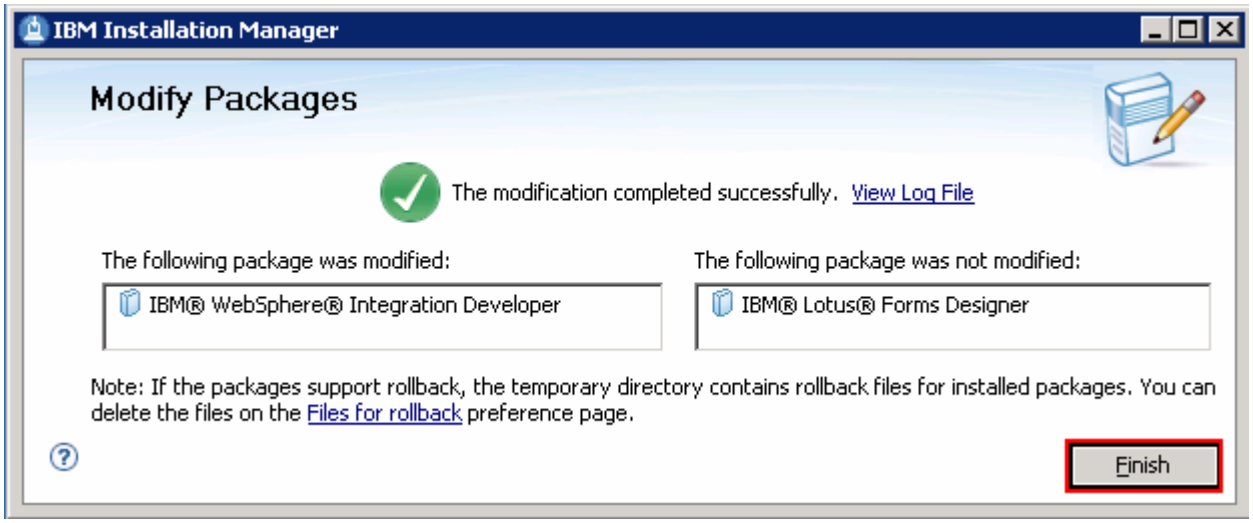

____ 11. Once the modification is complete, click **`Finish`** to quit the Installation Manager

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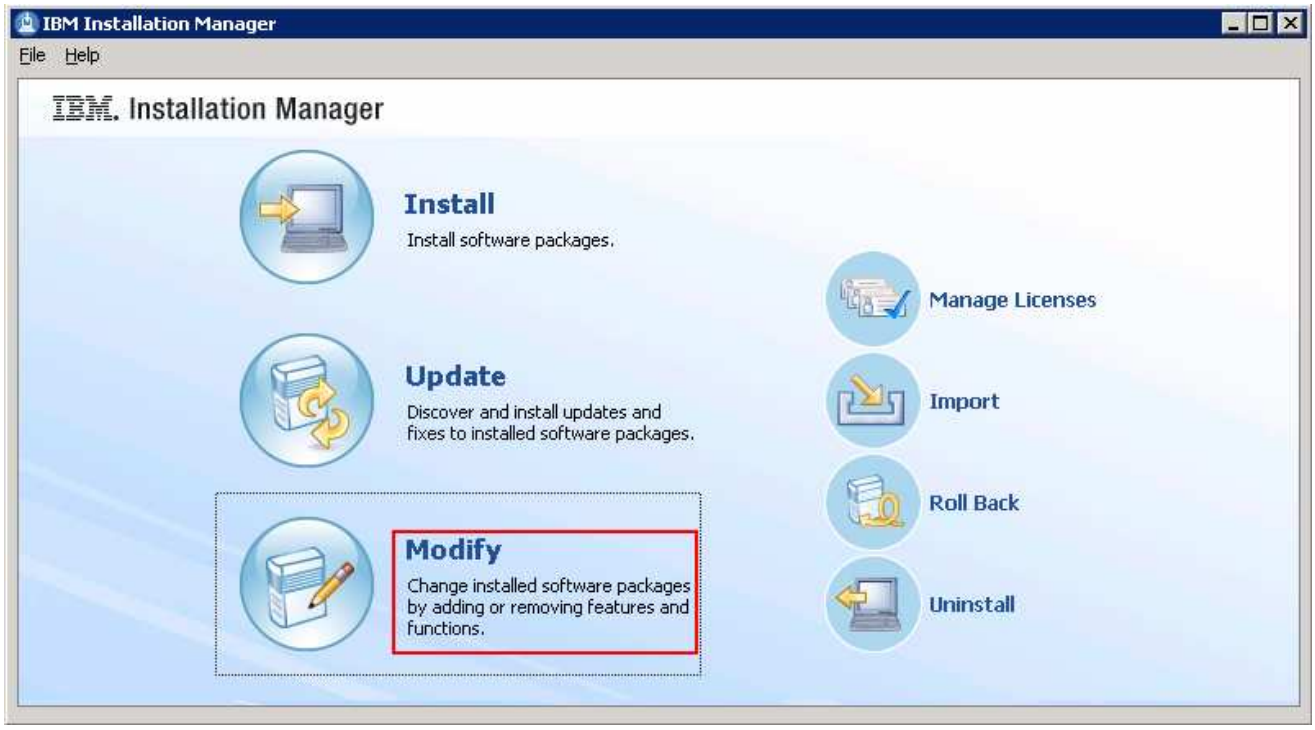
Task 6: Modify WebSphere test environment using Modify Packages wizard

This part of the exercise demonstrates how to modify the WebSphere test environment package group which is the IBM WebSphere Application Server package group, using the Modify Packages wizard in the Installation Manager. Modifying a package in the Installation Manager context is to add or remove a feature from the selected package group, provided the pre-requisites are met.

Complete the instructions below to modify the WebSphere Application Server package group:

____ 1. Launch the Installation Manager. From the Windows Start menu, select **`Programs → IBM Installation Manager → IBM Installation Manager`**



____ 2. On the Installation Manager is launched, click **`Modify`**. The **Modify Packages** wizard is launched

____ 3. In the Modify Packages panel, select the package group you want to modify

__ a. Select the package group name as **`IBM WebSphere Application Server – ND`**

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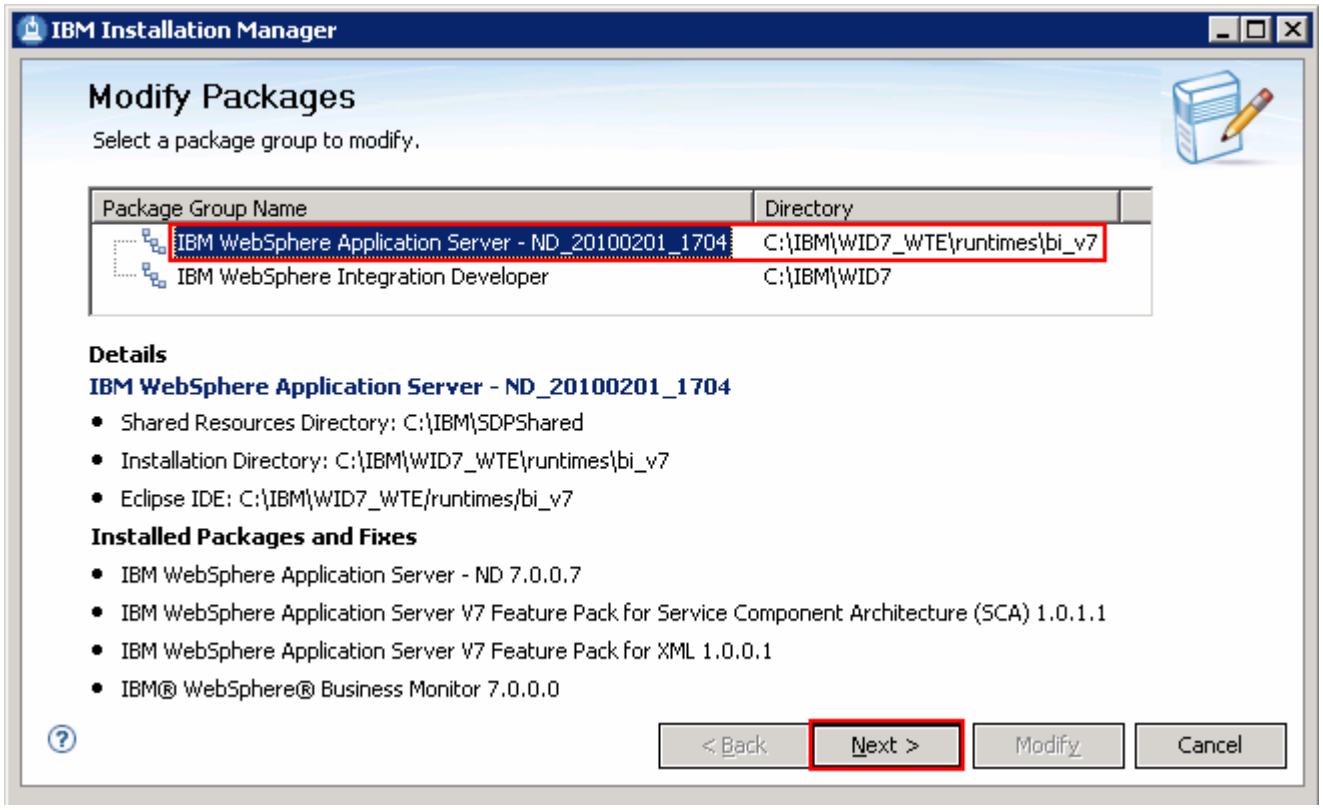
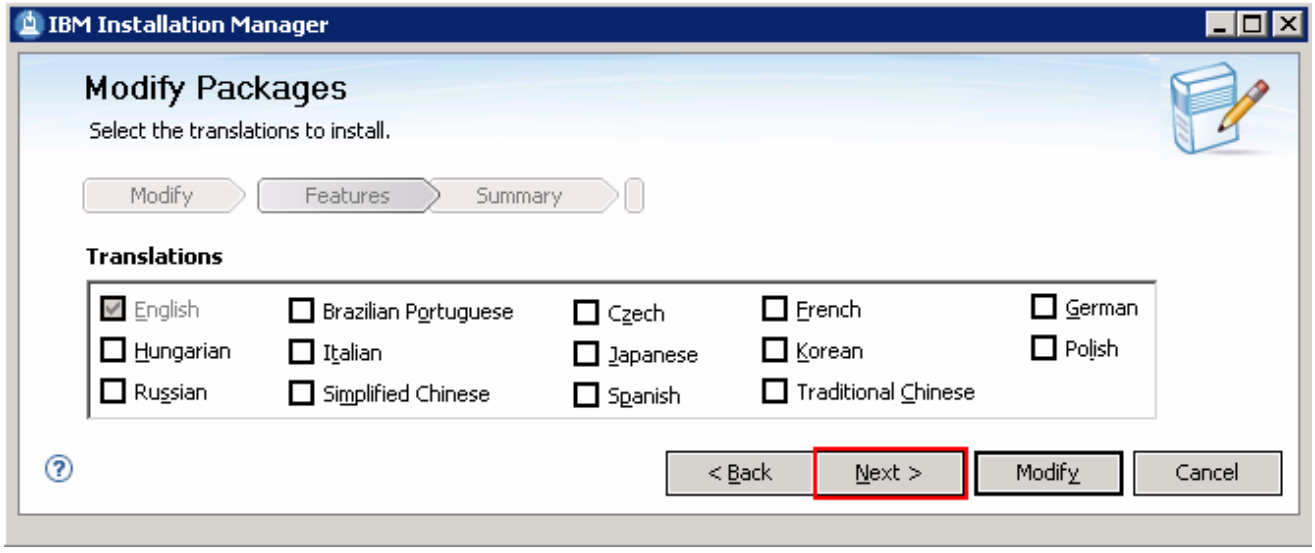


____ 4. Click **`Next`**

____ 5. In the next panel, select the translations you want to install



____ 6. Click **`Next`**

____ 7. In the next features panel, select or clear the WebSphere test environment features you want to add or remove. For demonstrational purposes, select to add the **`Stand-alone development WebSphere Process Server profile (qwps)`**

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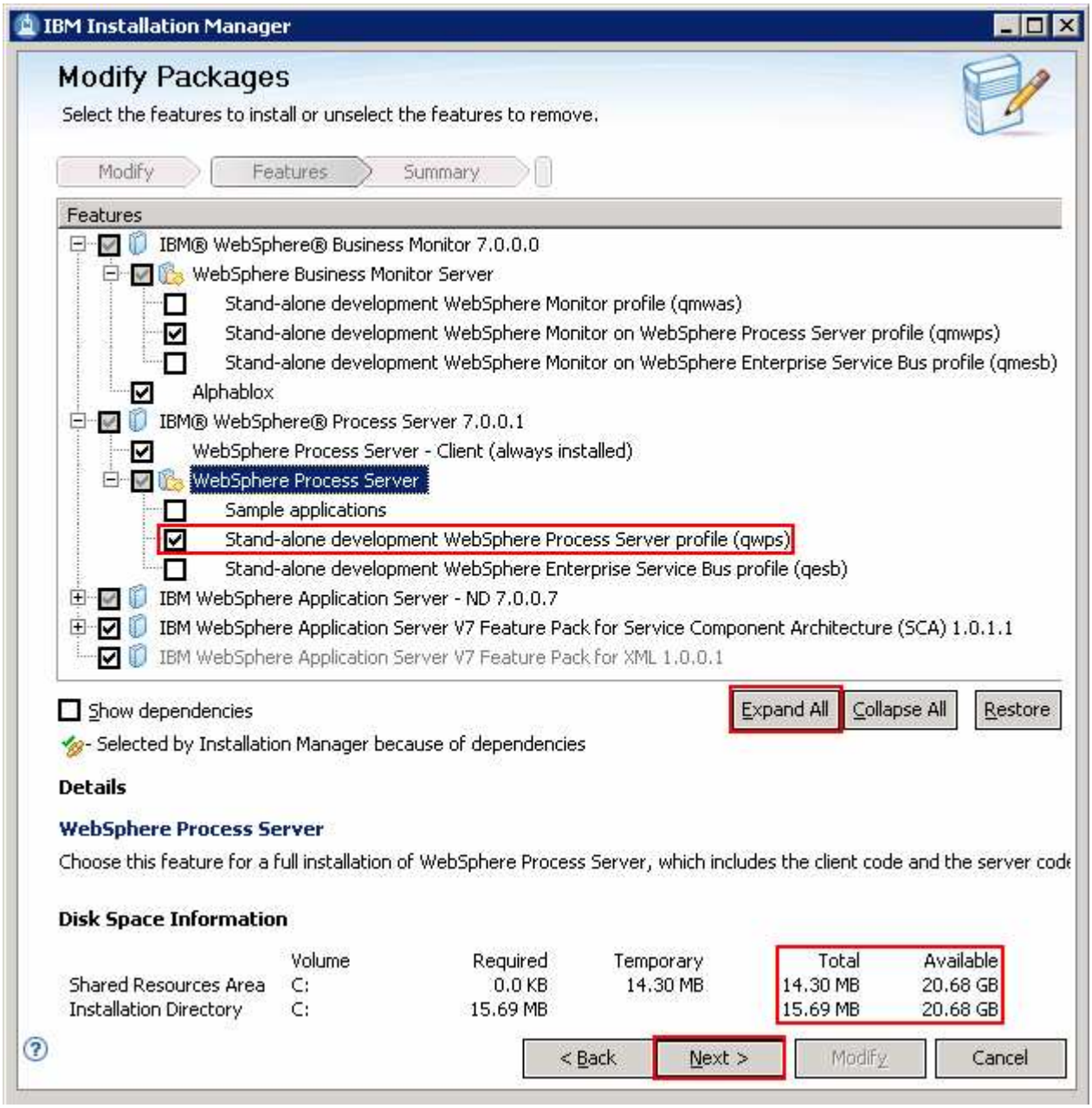

____ 8. Click **`Next`**

____ 9. In the next panel, expand **`Common Configurations`** and select **`Profile Configuration`** from the left navigation frame and then enter the administrative security credentials:

__ a. User name : **`admin`**

__ b. Password : **`superSecret`**

__ c. Confirm Password : **`superSecret`**

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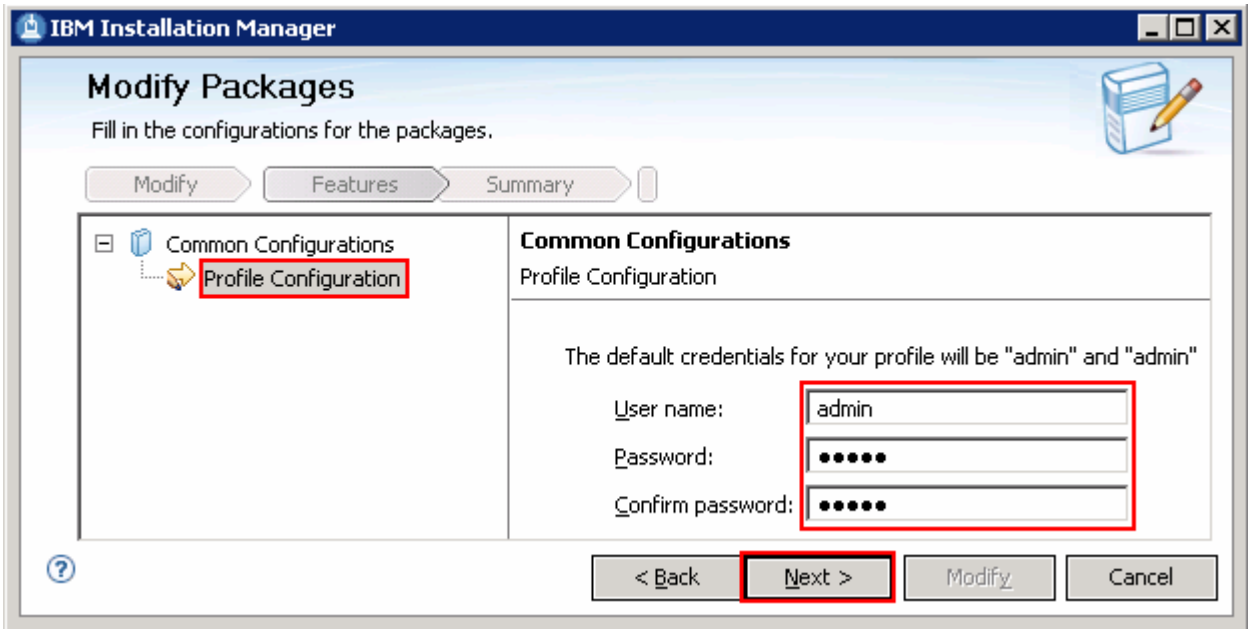
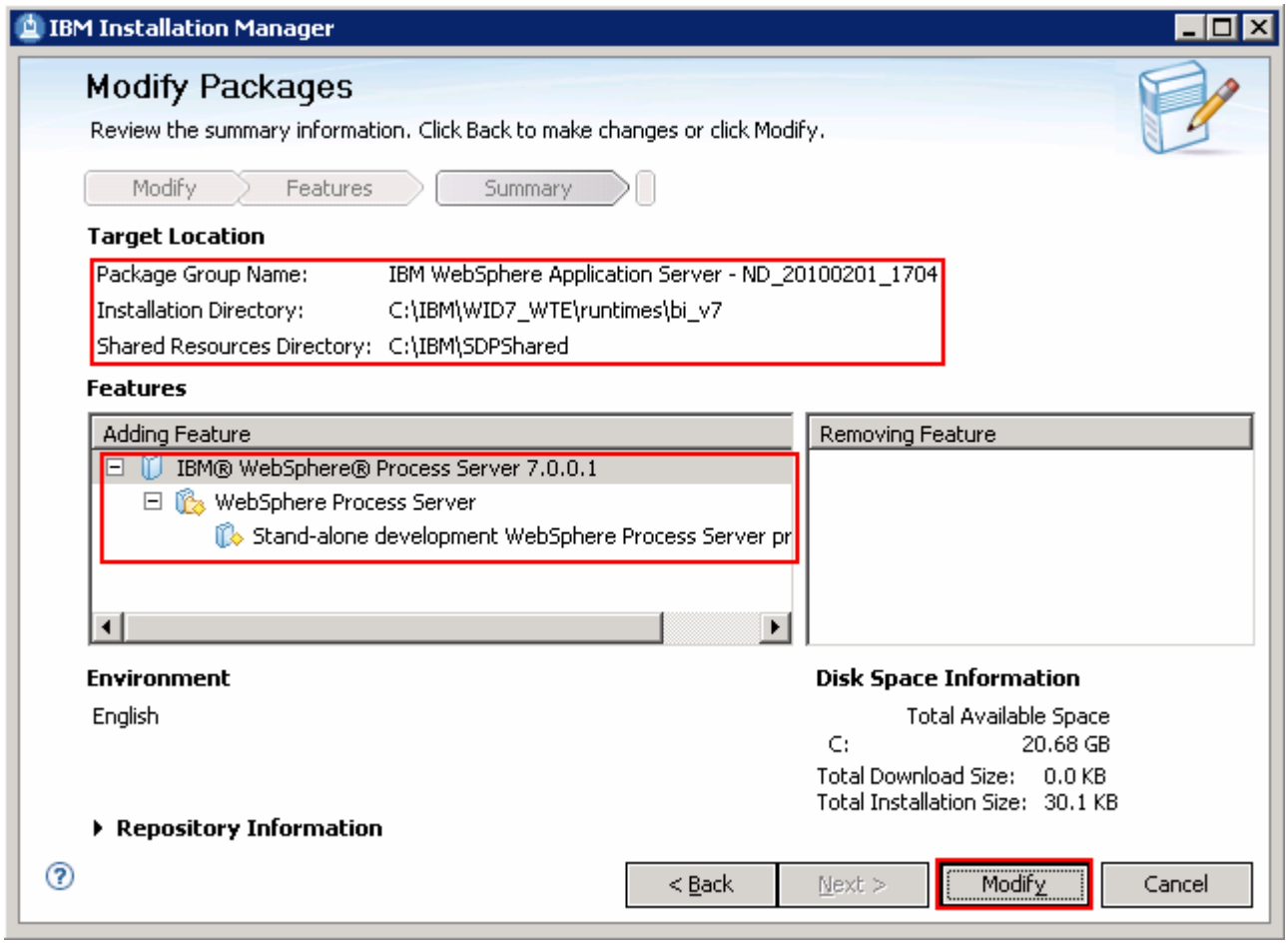


____ 10. Click **`Next`**

____ 11. In the next panel, verify the modification summary of the package group you selected



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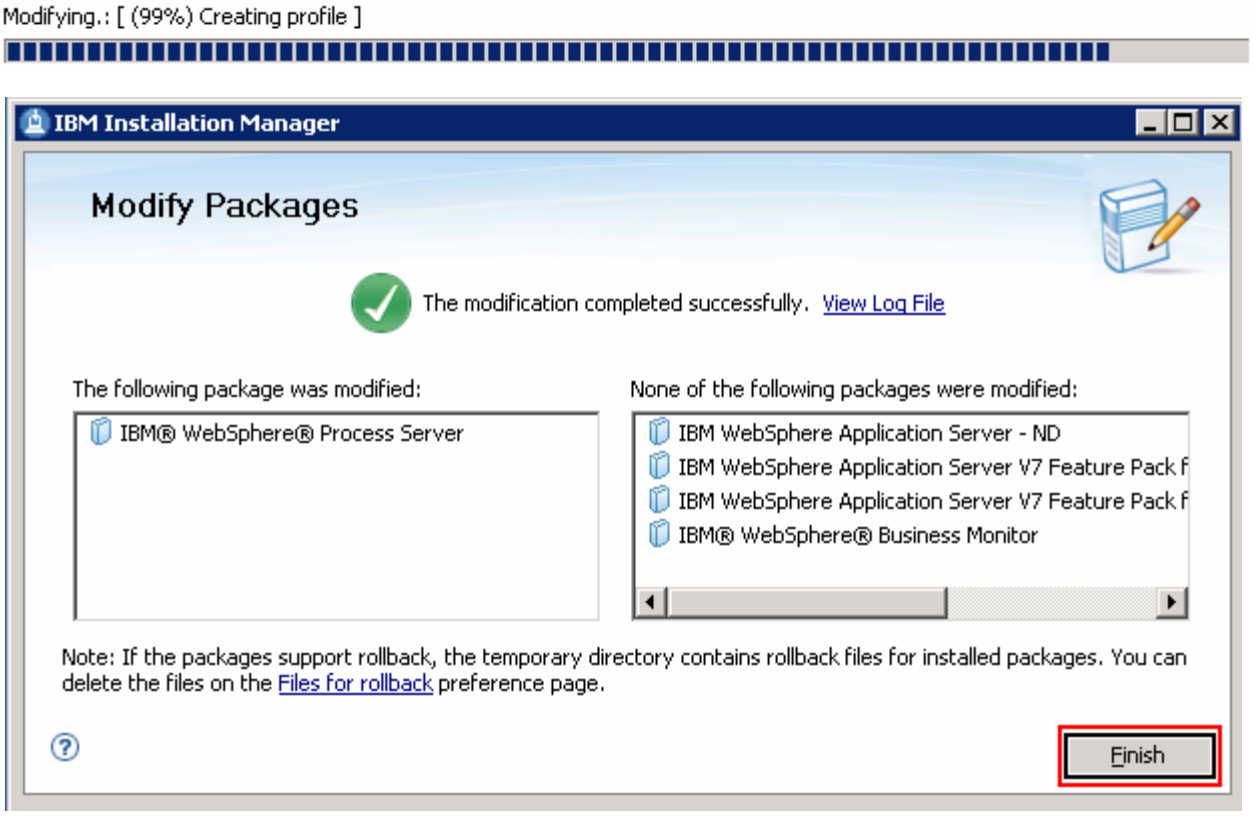
____ 12. Click **Modify**. The addition or removal process, which the modification process progresses



____ 13. Once the modification is complete, click **Finish** to quit the Installation Manager

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