



IBM Installation Manager. In this unit, you learn about the IBM Installation Manager.



Unit objectives

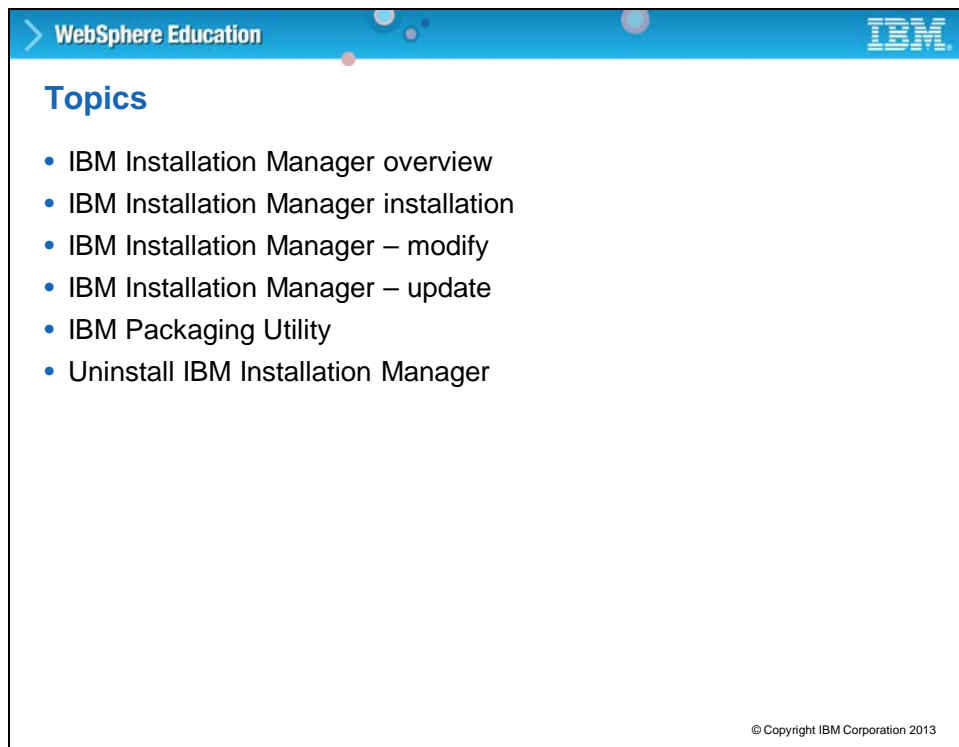
After completing this unit, you should be able to:

- Define the IBM Installation Manager
- Describe the IBM Installation Manager wizards
- Describe the IBM Packaging Utility
- Uninstall IBM Installation Manager

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- Uninstall IBM Installation Manager



The slide features a blue header bar with the text 'WebSphere Education' on the left and the 'IBM' logo on the right. Below the header, the word 'Topics' is written in a bold blue font. A bulleted list follows, containing six items related to IBM Installation Manager and the Packaging Utility. The bottom right corner of the slide contains a small copyright notice.

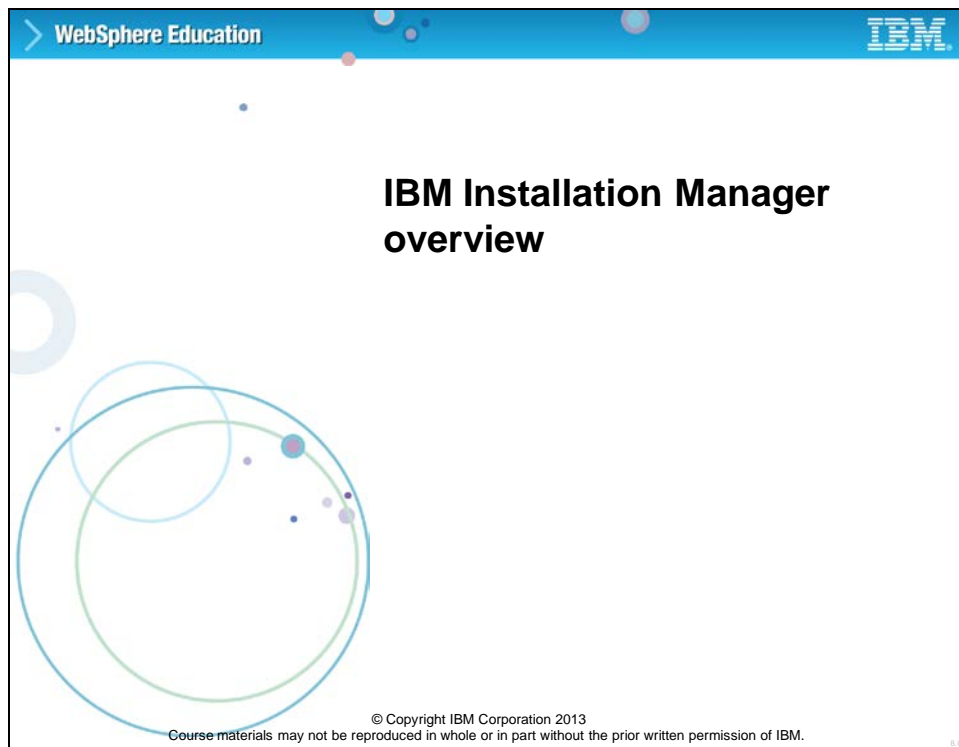
> WebSphere Education IBM

Topics



- IBM Installation Manager overview
- IBM Installation Manager installation
- IBM Installation Manager – modify
- IBM Installation Manager – update
- IBM Packaging Utility
- Uninstall IBM Installation Manager

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This unit is divided into six topics.



Topic: IBM Installation Manager overview. In this topic, you get an introduction to the IBM Installation Manager.



IBM Installation Manager (1 of 3)

- IBM Installation Manager is the Eclipse-based tool to manage the installation, update, modification, rollback, and uninstallation of product packages
- Includes a number of wizards that make it easy to maintain packages throughout their lifecycles:
 - Installation wizard: walks you through the installation
 - Update wizard: searches for updates to packages installed
 - Modify wizard: modifies certain elements of a package
 - Roll back wizard: allows you to revert to a previous version of a package
 - Uninstall wizard: removes a package
 - Manage licenses wizard: allows you to manage and configure various licenses
- Can be installed interactively or silently



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Installation Manager is an installation management tool that installs and maintains Installation Manager-based software packages. It is the Eclipse-based tool that enables you to install and modify packages, search for updates, uninstall, and roll back. Installation Manager makes it easier for you to download and install code for a number of IBM software packages.

The Installation Manager includes a number of wizards to help maintain product packages. Installation Manager V1.5.2 includes the following wizards:

- The Installation wizard steps you through the installation process of a package. It provides various default settings that can be customized for your environment. You can install multiple packages simultaneously.
- The Update wizard allows you to update currently installed packages.
- The Modify wizard allows you to change certain elements of installed packages. After a product package is installed, it can be modified to add or remove features of the package.
- The Rollback wizard allows you to revert to a previous version of a package.
- The Uninstall wizard removes installed packages.
- The Manage Licenses wizard allows you to manage the various licenses for installed packages.

You can install Installation Manager either interactively by using the GUI interface or you can silently install it.



IBM Installation Manager (2 of 3)

- Install binary files relevant to user selections and system environment
- GUI and response file modes of operation
 - GUI to complete individual operations
 - Response files can be recorded from the GUI or created by specifying the appropriate xml
 - Silent mode support for starting multiple operations
- Single user experience across WebSphere, WebSphere components, and various IBM products
 - A single instance of IBM Installation Manager can manage the product lifecycle for any Installation Manager-based products, from WebSphere, Rational, and others
 - Support for WebSphere, IBM HTTP Server, WebSphere Customization Toolbox, and others

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Installation Manager is a single installation program that can use remote or local software flat-file repositories to install, modify, or update new WebSphere Application Server products. It determines and shows available packages, including products, fix packs, and interim fixes, checks the prerequisites and interdependencies, and installs the selected packages.



There are a number of ways you can interact with the Installation Manager.

- Wizard mode: A graphical user interface to run the Installation Manager.
- Command-line mode: The command-line utility (imcl) to manage installations.
- Silent mode: Silent mode allows you to install packages in a non-interactive and non-GUI mode. In a silent mode installation, a response file is used to provide the input for the installation.

The installation experience is now unified across all of the WebSphere platforms and various IBM products use the same Installation Manager installer.



To use the Installation Manager wizard mode, go to the Installation Manager installation directory and enter the IBMIM command. The command starts the Installation Manager and displays the screen capture that is shown on the slide. From here, you select any of the wizards available depending on what you want to do.



IBM Installation Manager history

- IBM Installation Manager product was originally introduced to support the installation of IBM Rational desktop products
- Currently multiple products across IBM use Installation Manager
 - A single instance of IBM Installation Manager can manage the product lifecycle for any IBM Installation Manager based product from WebSphere, Rational, Lotus, or any other brand within IBM
- IBM Installation Manager supports
 - Full graphical user interface (GUI)
 - Command-line (IMCL) mode and response file
- IBM Installation Manager can install the product directly from:
 - Product (DVD) media
 - IBM Passport Advantage website
 - Customer internal enterprise intranet



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IBM Installation Manager was originally introduced to support the installation of IBM Rational desktop products and now many products across IBM use it. A single instance of Installation Manager can manage the product lifecycle for any IBM Installation Manager based product from WebSphere, Rational, Lotus, and any other brand within IBM.

The IBM Installation Manager full product installation lifecycle management includes product installation, adding or removing features, uninstallation, and full service management, which includes installing and uninstalling fixes and applying and rolling back service fix packs. You must run Installation Manager only on those systems on which you install or update product code. You normally need only one Installation Manager on a system because one Installation Manager can track any number of product installations.

IBM Installation Manager provides a full graphical user interface for distributed platforms, excluding z/OS and IBM i operation systems, but it provides command-line interface for all platforms. Using the Installation Manager command-line utility (IMCL) and the response files, you can install products silently.

Every product is packaged and delivered differently. You can download installation files for a product or you can obtain product disk that contains installation files. When you insert a disk into a local computer, the IBM Installation Manager starts automatically. If you are not using a disk on a local computer, you must start the installation process yourself. Extract the downloaded files or copy the disk files to a common location, and then you can determine the files to use to start the installation.



IBM Installation Manager basics



- The IBM Installation Manager can be used to interactively install or update packages
 - Set repository preferences to indicate where to get the data for installing or updating packages
 - Default repository preferences is a service repository which requires Internet connectivity
 - Can modify repository preference to use local repository
- Starting the IBM Installation Manager:
 - Can be started by using the Start/Computer menu
 - Can be started by using the `IBMIM` command
 - In `<install_root>/IBM/InstallationManager/eclipse`
- More information about the IBM Installation Manager can be found by using the information center
 - <http://publib.boulder.ibm.com/infocenter/install/v1r5/index.jsp>

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You can influence the characteristics of Installation Manager by setting preferences. The Installation Manager has a number of preferences that are defined for repositories, appearance, files for rollback, help, Internet settings, Passport Advantage settings, and updates. You can keep the default settings for preferences or they can be modified to suit your environment.

The first thing to do is start the Installation Manager by using one of the options on the slide. Then, you can modify any needed preferences.

For more information about the Installation Manager, **see the** information center URL that is shown on the slide.





Installation Manager command line

- When you cannot use the IBM Installation Manager user interface, you can use IBM Installation Manager command line to manage installations
 - In `<IM_install_root>/tools/imcl`
- Use imcl commands with either the installed version of Installation Manager or the Installation Manager installer
- From the command line, you can:
 - Manage installations
 - View repository contents, available packages, fixes, and others
 - Run installation scripts that include commands and options for specifying the details of your installation
- Run the help command to view the available commands for Installation Manager
 - For example, `<IM_install_root>/tools/imcl -help`

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If you cannot use the GUI mode, or have a preference for a non-GUI environment, you can use the command-line mode to manage installations. Using the command-line mode, you can install, update, and uninstall packages, list installed features and packages, list available packages, and display version information. You can also import a response file that is used for a silent installation, and obtain help for the command line.

The imcl command can be found in the `<IM_install>/tools/` directory.





IBM Installation Manager repository (1 of 3)

- Contains one or multiple product offerings that have both metadata and actual payload for the offerings
- Metadata describes such aspects of the offering as:
 - Name, version, supported platforms, and other items
 - Components of the offering (optional and required feature)
 - Relationships between offerings and features of the offerings
- Repository normally contains full content that is required to install certain offering of various platforms, operating systems, and others
- Different IBM Installation Managers, on different workstations, can reference the same repository

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The Installation Manager uses a repository for all tasks. A repository is a location that stores data for installing, modifying, rolling back, updating, or uninstalling packages. You can add, edit, or remove repositories and modify the repository order in the repository table. The IBM Installation Manager repository contains one or multiple product offerings that have both metadata and actual payload for the offerings. The offering metadata describes such aspects of the offering as: name, version, supported platforms, required and optional features, and relationships and dependency between offerings and features of offerings.

Normally, an IBM Installation Manager repository contains the full content that is required to install on various platforms, operating system, and others. Remote repositories are available for installation through the web, or product images and fixes can be stored in local repositories and customized.



IBM Installation Manager repository (2 of 3)

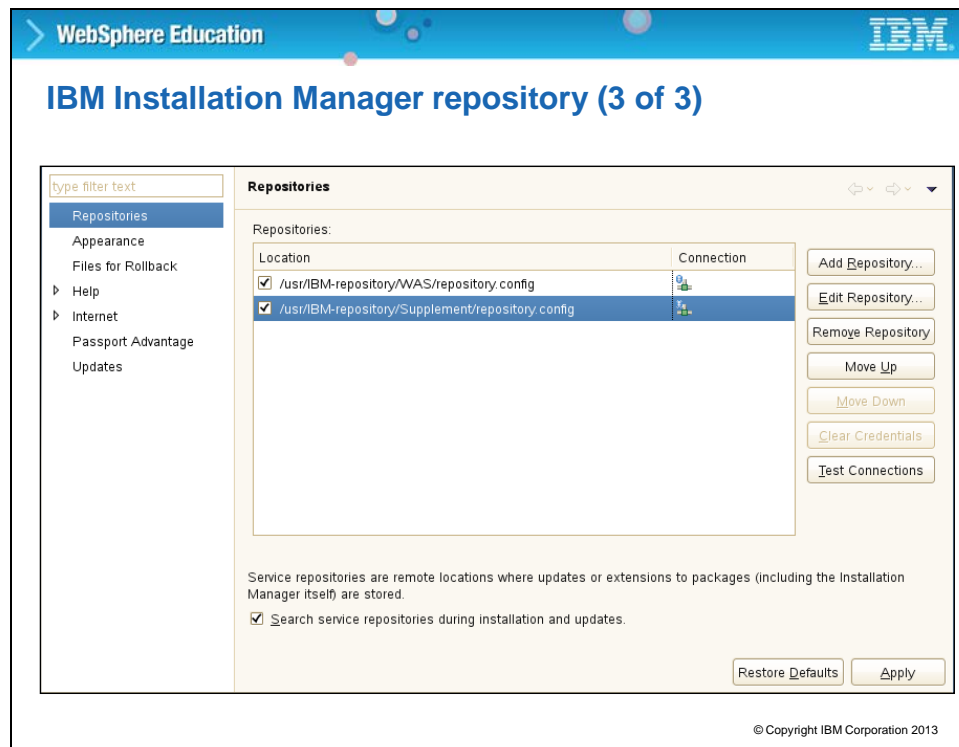
- Repository topologies can be generalized in the following three categories
 - Public IBM hosted repository (accessible to general public using URL)
 - Enterprise hosted repository (located behind the firewall that multiple computers within the enterprise access)
 - Local Installation Manager repository (single user accesses repository, not shared with others)
- Tools are provided to copy offerings from one repository to another
 - IBM Package Utility or file transfer tools

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Different IBM Installation Managers can reference a repository on different systems and the repository topologies can be generalized in three categories:

- A public repository that can be publicly accessible by using a URL with an internal connect or local share file system
- An enterprise repository that usually behind the firewall and only accessed by multiple systems within the enterprise intranet
- A local repository that used by a single user and not shared with others

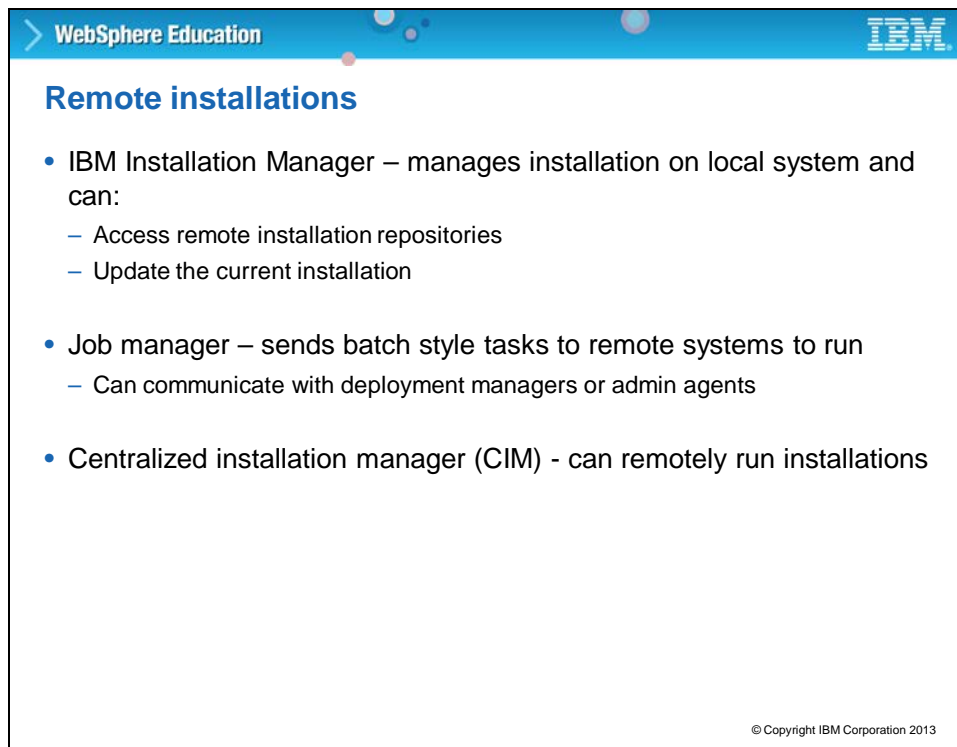
There are tools available to copy offerings from one repository to another. For example, the IBM Package Utility can be used to create a repository and to copy offerings from one repository to another. If you are using third-party tool to transfer the repository between systems, you must use binary transfer mode.



To verify or modify the service repository setting, click **File > Preferences > Repositories** in the Installation Manager GUI. The Repositories tab contains the area for repository configuration. In the Repositories window, you can add, edit, or remove repositories and modify the repository order in the repository table. You can clear credentials for a repository or test a connection to a repository. You might find both a diskTag.inf and a repository.config file in the IBM product installation files.

The Installation Manager searches the repositories in the order they are listed in the repository window. If two repositories use the same package, the repository listed higher in the order is used. You can move a repository up and down in the order that is listed by selecting the appropriate repository and clicking either **Move Up** or **Move Down**.

The Installation Manager searches only the repositories that you selected in the repository page. To select a repository, select the check box before the repository name. If you clear the check box before the repository name, the Installation Manager does not search the repository.



The slide is titled "Remote installations" and is part of a "WebSphere Education" presentation. It features a blue header with the "WebSphere Education" text and the IBM logo. The main content is a bulleted list describing the capabilities of IBM Installation Manager. The list includes: IBM Installation Manager (manages local installation and can access remote repositories and update the current installation), Job manager (sends batch style tasks to remote systems and can communicate with deployment managers or admin agents), and Centralized installation manager (CIM) (can remotely run installations). A copyright notice for IBM Corporation 2013 is at the bottom right.

- IBM Installation Manager – manages installation on local system and can:
 - Access remote installation repositories
 - Update the current installation
- Job manager – sends batch style tasks to remote systems to run
 - Can communicate with deployment managers or admin agents
- Centralized installation manager (CIM) - can remotely run installations



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In a flexible management environment, you can submit the **Install IBM Installation Manager** job to install the Installation Manager on registered hosts of the job manager. You can use the administrative console of the job manager or the deployment manager to submit the job.

Use the centralized installation manager (CIM) to shorten the number of steps that are required to create and manage environments that contain previous versions of WebSphere Application Server. As an administrator, you can remotely install or uninstall product components and apply maintenance from the administrative console.



Topic: IBM Installation Manager installation. This topic describes the installation of IBM Installation Manager.

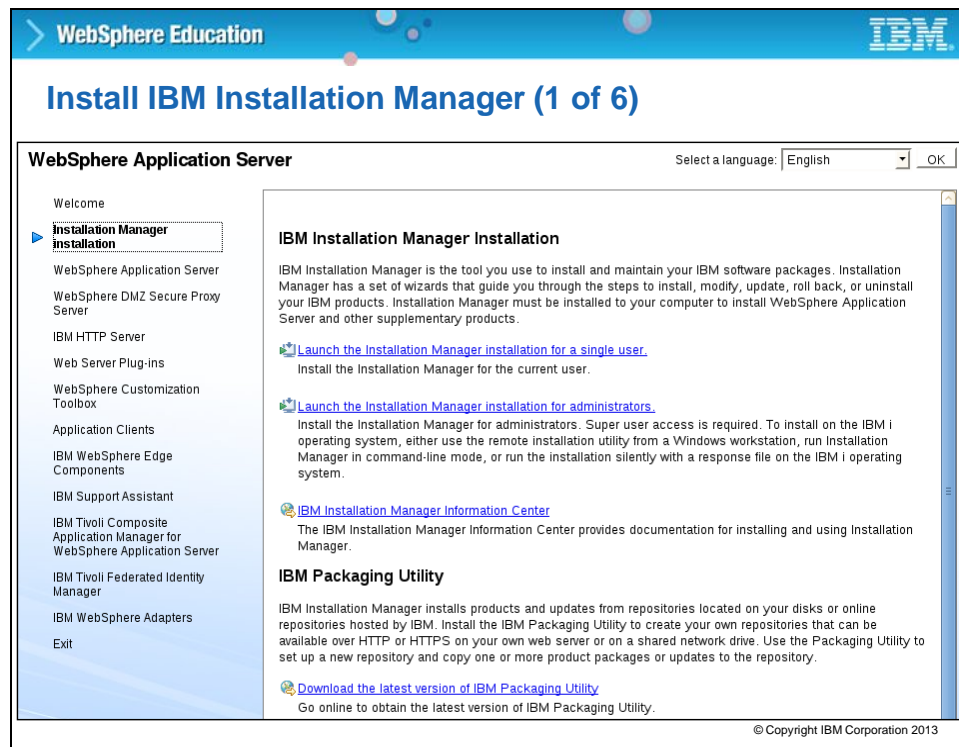


Installing the IBM Installation Manager

- For computers that do not have internet access, you must download the installer package on a computer that has internet access
 - Download the installer package, `agent.installer.platform.zip`, for a specific platform
 - Copy the compressed file to the computer where you are installing the Installation Manager
- Multiple installation options
 - IBM Installation Manager user interface (GUI installation)
 - Silently
- Starting the IBM Installation Manager user interface
 - Windows: `install.exe`
 - UNIX: `./install`

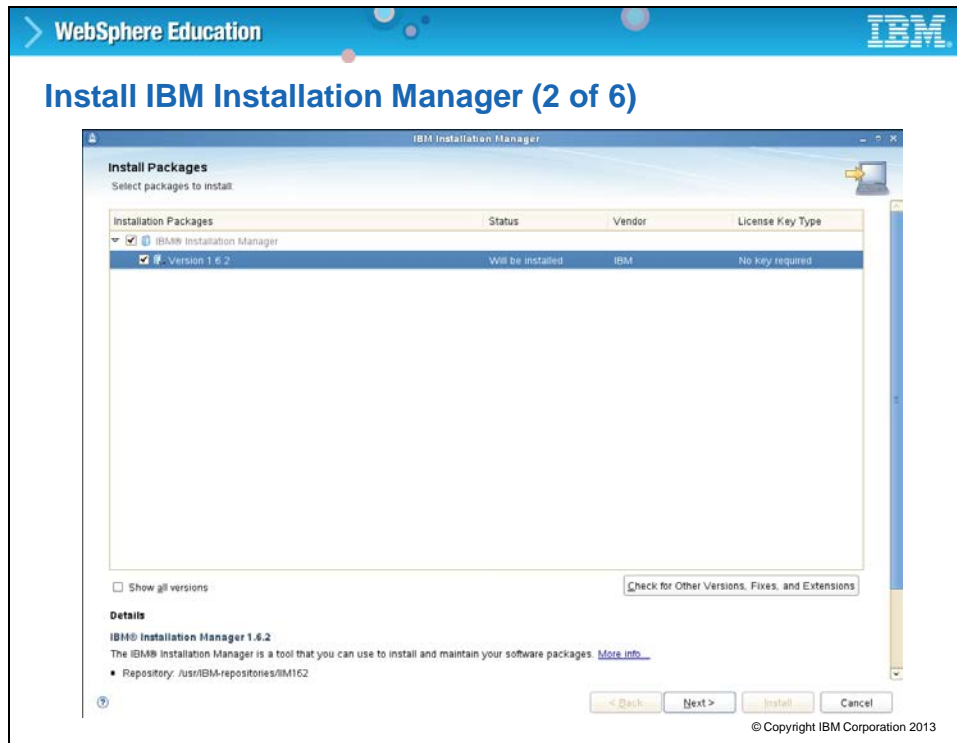
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Installation Manager comes in a form of an installation kit, which is an archive file that contains a set of Installation Manager binary files and a flat-file repository for the Installation Manager product. The installation kit is only used for setup and maintenance of Installation Manager. You run Installation Manager only on systems on which you install or update product code. Typically, you need only one Installation Manager instance on a computer because one instance can track any number of product installations.



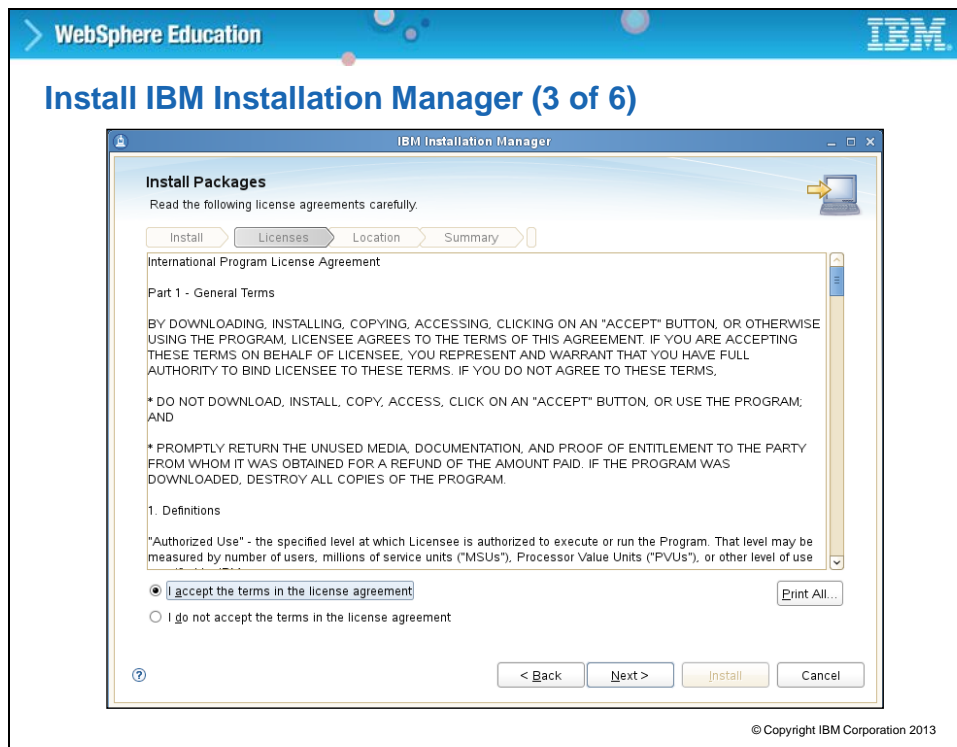
The launchpad application is the starting point for installing a WebSphere Application Server environment. The launchpad identifies components on the product disk that you can install or start. It is a single point of reference for installing the entire application server environment. The launchpad contains links that start the installer program for the different products that are listed in the launchpad. If you click a link in the launchpad that points to a product repository on another disk, you are prompted for that disk. After IBM Installation Manager is installed, it can be used to install IBM WebSphere Application Server Network Deployment, add or remove more optional features to the IBM WebSphere Application Server Network Deployment installation, or uninstall the product.

Start the launchpad from the product DVD media. Click the link to open the Installation Manager installation for administrators.

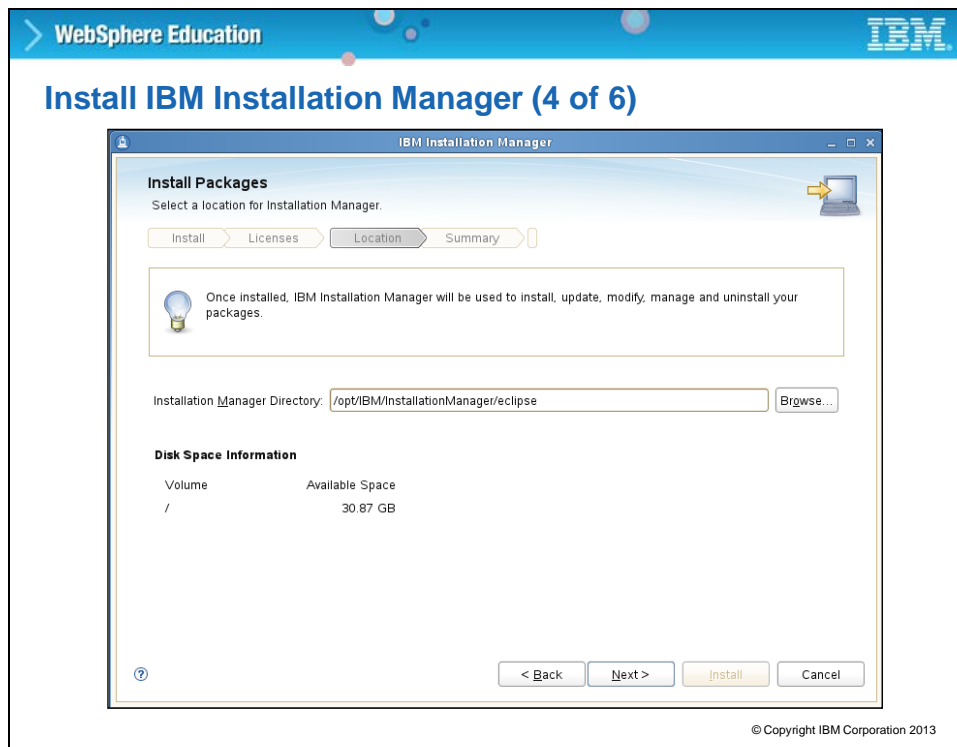


The Installation Manager installation wizard displays. The Installation Manager package is selected by default. The status indicates that the package is ready to install. Click **Next** to continue.

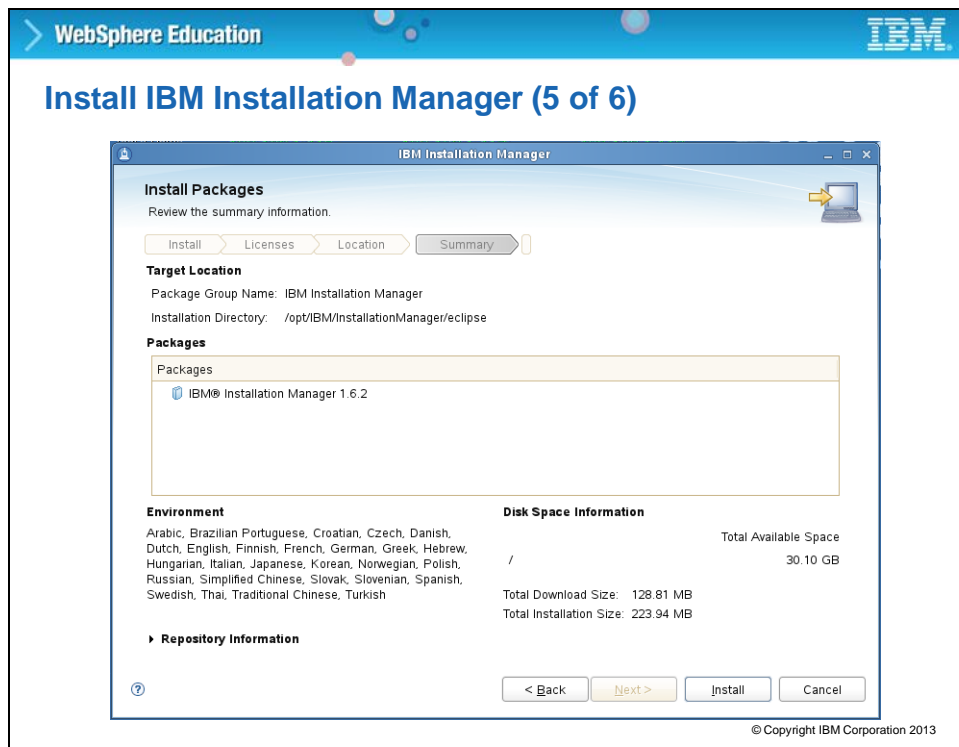
Remember, you cannot have multiple versions of Installation Manager that are installed on the same physical system in the same mode. If you try to install more instances of Installation Manager on the same physical system, it returns an error that indicates that it is already installed.



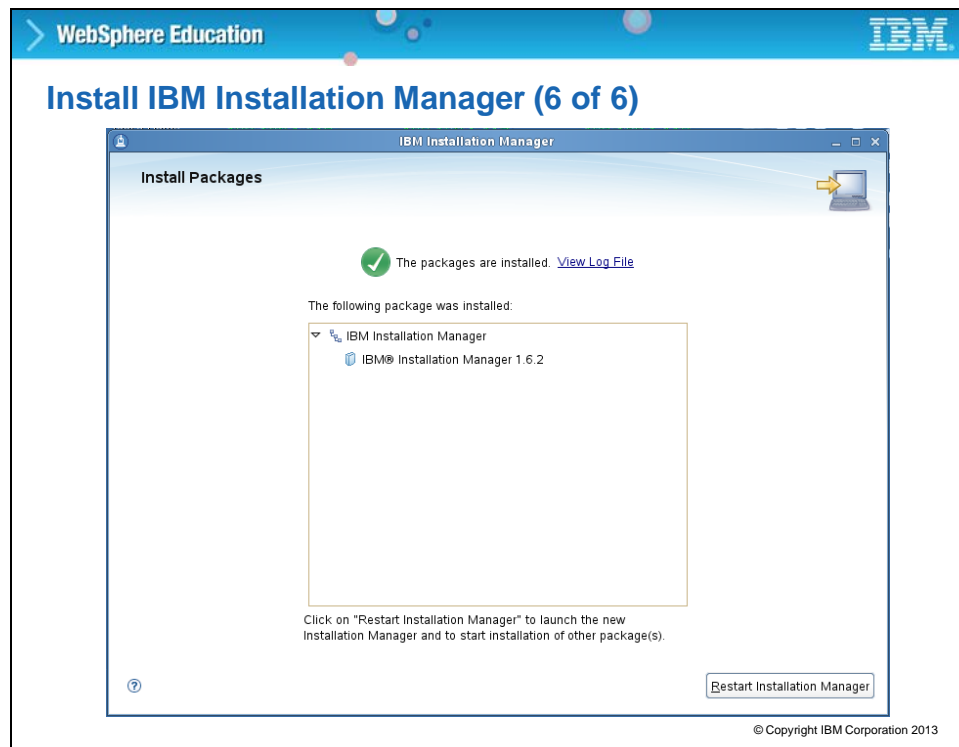
Read and accept the license agreement to proceed with the installation.





In the Location page, the installation directory is entered. Enter an Installation Manager Location directory, or keep the default directory. The installation location must be a directory that is named eclipse. The default directory location differs depending upon the operating system of the system.



After reviewing the installation summary page, click **Install** to continue with the installation.



After the installation is completed, click the **Restart Installation Manager** to exit the installation wizard and restart the newly installed Installation Manager.

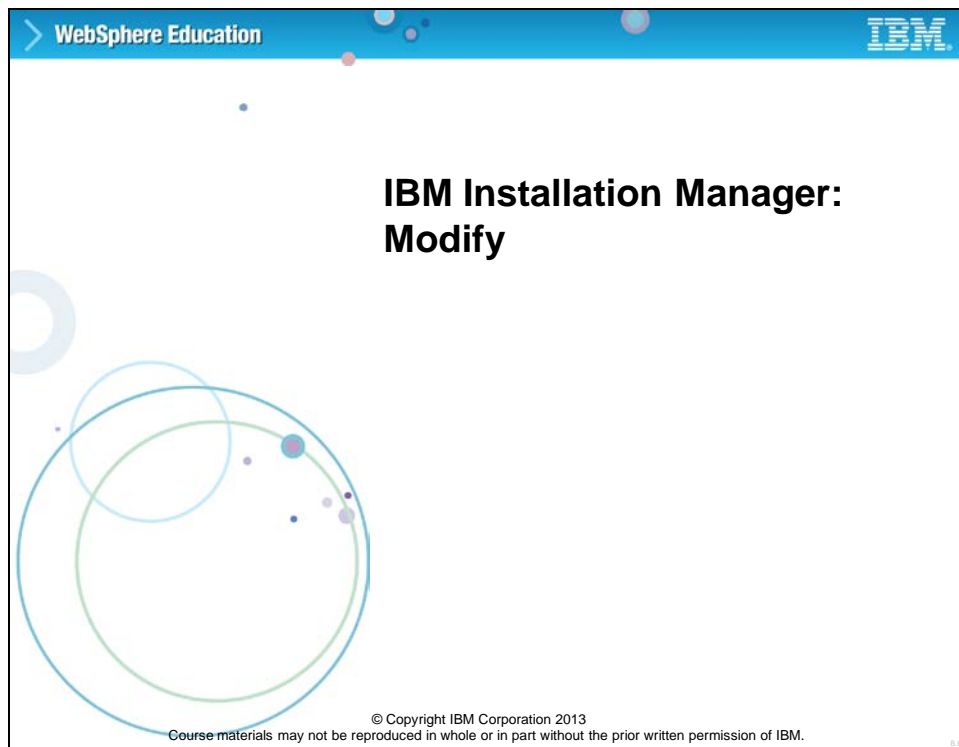


Install IBM Installation Manager silently

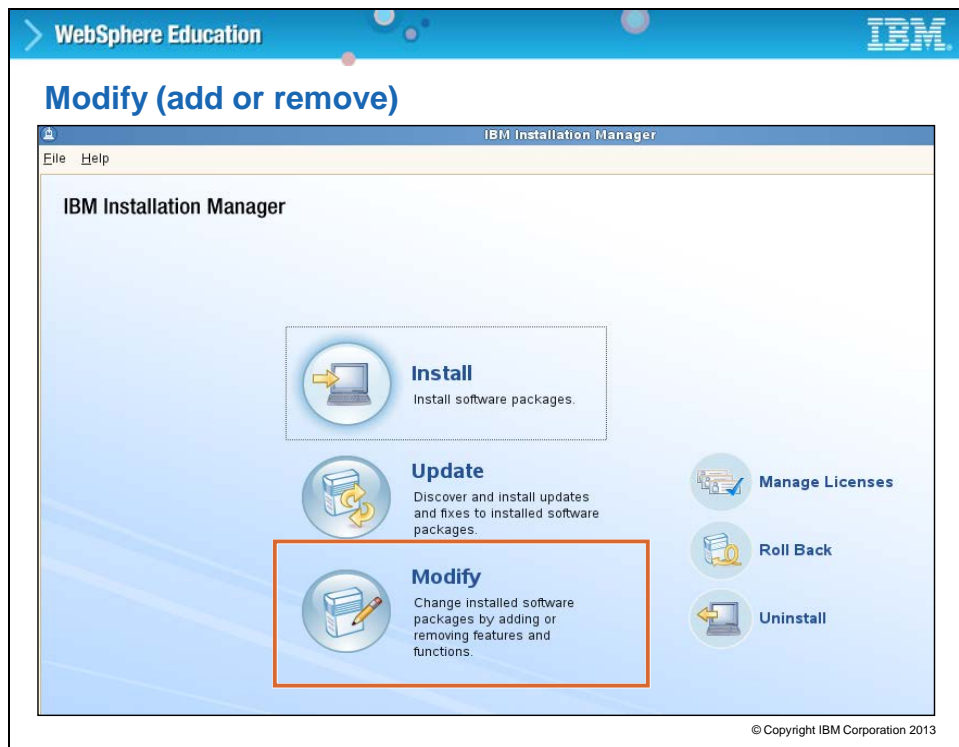
- Silently installing IBM Installation Manager methods
 - Open a command prompt to the directory where you extracted the compressed file
 - Windows: `installc.exe -acceptLicense`
 - UNIX: `./installc -acceptLicense`

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Silent mode allows you to install packages in a non-interactive and non-GUI mode. It uses a response file to provide the input for each installation. The key to silent mode installations, is the creation of the response files that guide each effort. Response files can be used to install, update, modify, roll back, and uninstall software packages.

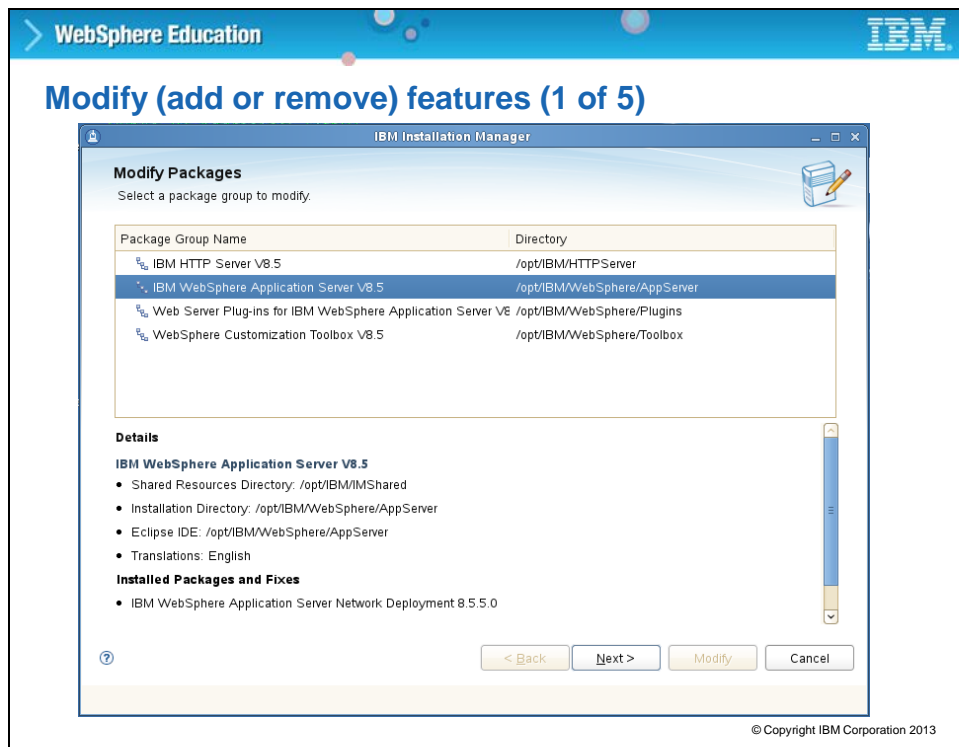


Topic: IBM Installation Manager – modify. In this topic, you learn about the modify functions that the IBM Installation Manager provides.

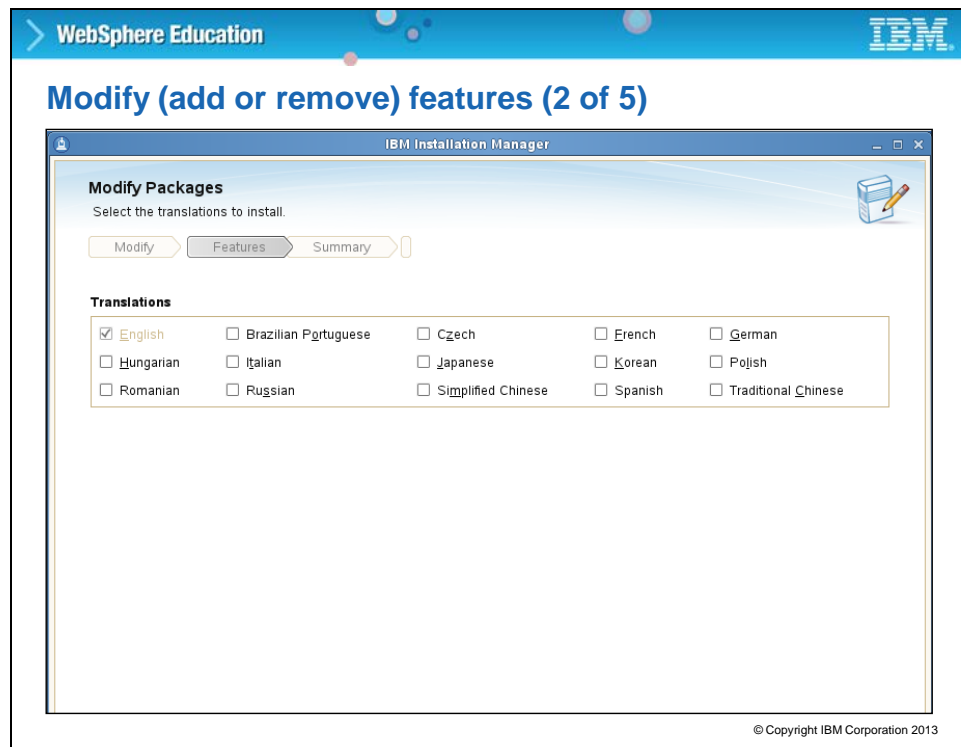


Using the Installation Manager modify feature, you can modify the packages that are installed by using the Installation Manager, which includes adding or removing features for an installed package. For example, you want to add a language pack to the current installation of WebSphere Application Server.

First, start IBM Installation Manager on your system and click the modify icon from the IBM Installation Manager welcome page.



Select the Package Group that you would like to modify and click **Next** to proceed. There is more than one choice if you have multiple installations of WebSphere Application Server. Each package group is corresponding to an installation location.



Select new optional language to install or clear already installed optional language to uninstall. Click **Next** to proceed.

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IBM

Modify (add or remove) features (3 of 5)

Modify Packages

Select the features to install or clear the features to remove.

Modify

Features

Summary

Features

☒ IBM WebSphere Application Server Network Deployment 8.5.5.0

☒ WebSphere Application Server Full Profile

☒ EJBDeploy tool for pre-EJB 3.0 modules

☒ Stand-alone thin clients, resource adapters and embeddable containers

☒ Stand-alone thin clients and resource adapters

☒ Embeddable EJB container

☒ Sample applications

☐ Show dependencies

Expand All

Collapse All

Restore

Selected by Installation Manager because of dependencies

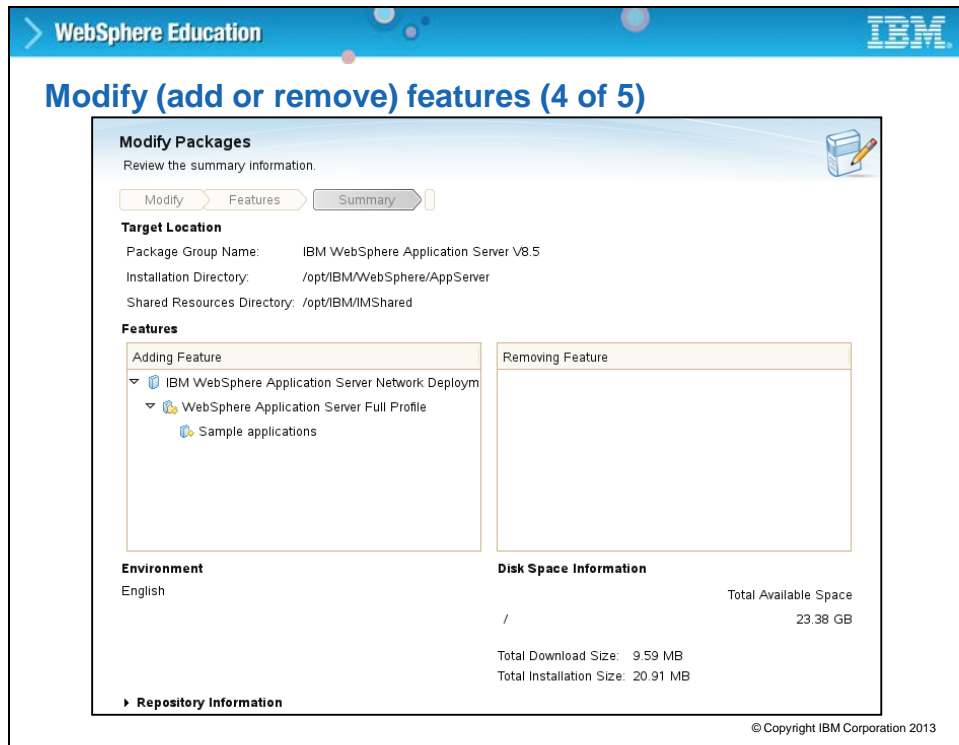
Details

Sample applications

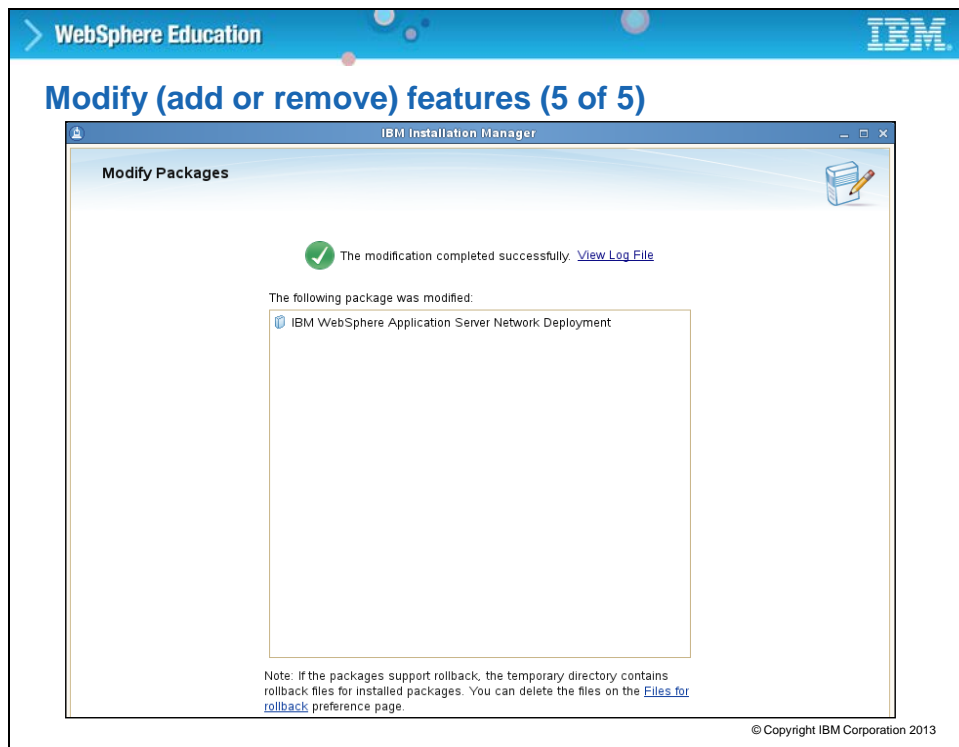
The Samples include both source code files and integrated enterprise applications that demonstrate some of the latest Java (TM) Platform, Enterprise Edition (Java EE) and WebSphere technologies. The samples are recommended for installation to learning and demonstration environments, such as development environments. However, they are not

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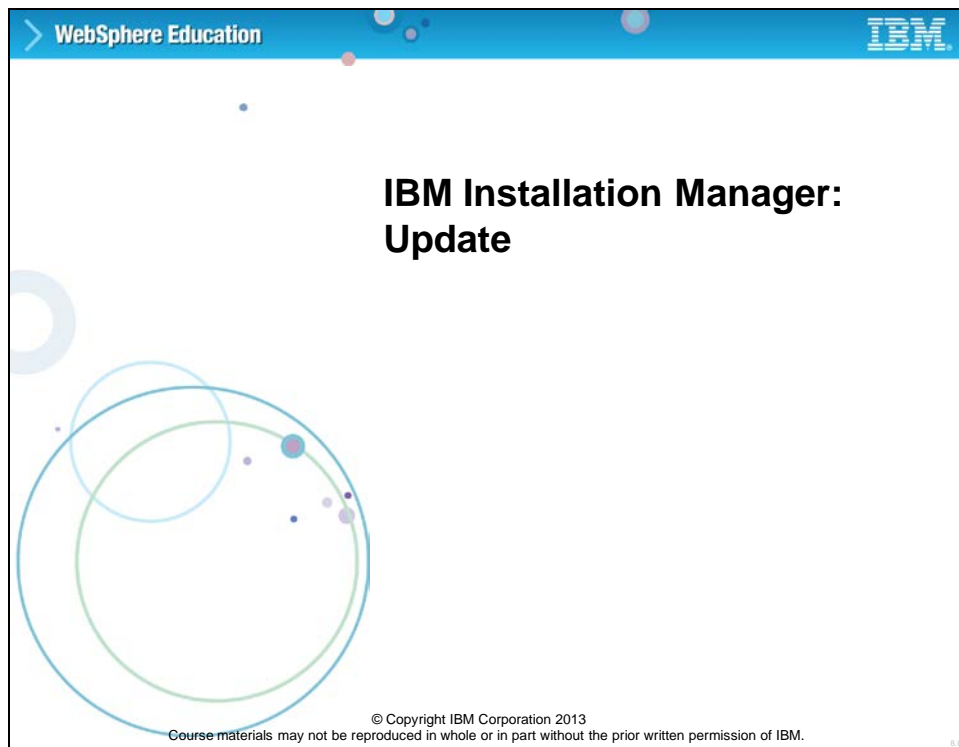
Select or clear the optional features to install or uninstall. Click **Next** to proceed.



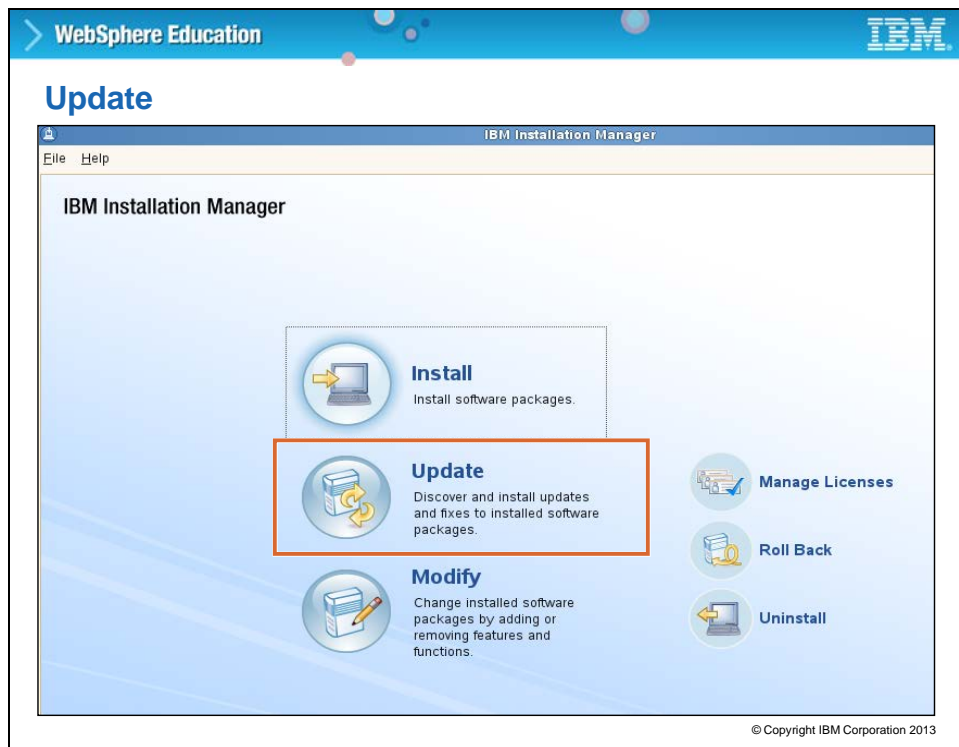
Review the Modify summary panel. Click **Modify** to start the add or remove feature operation.



When the modification completes, there is a final installation status on the last page. You can also click the **View Log File** link to review the log.





Topic: IBM Installation Manager – update. In this topic, you learn about the update functions provided by the IBM Installation Manager.



Using the Installation Manager update feature, you can locate and install product updates and new features for packages that the Installation Manager installs. You can update a package by automatically searching for and applying an update if the Search service repositories during installation and updates option is selected, or you can download an update and apply it manually. The Search service repositories during installation and updates option can be modified on the repositories preferences page.

To update, start IBM Installation Manager on your system and click the update icon from the IBM Installation Manager welcome page.



Updating the software silently

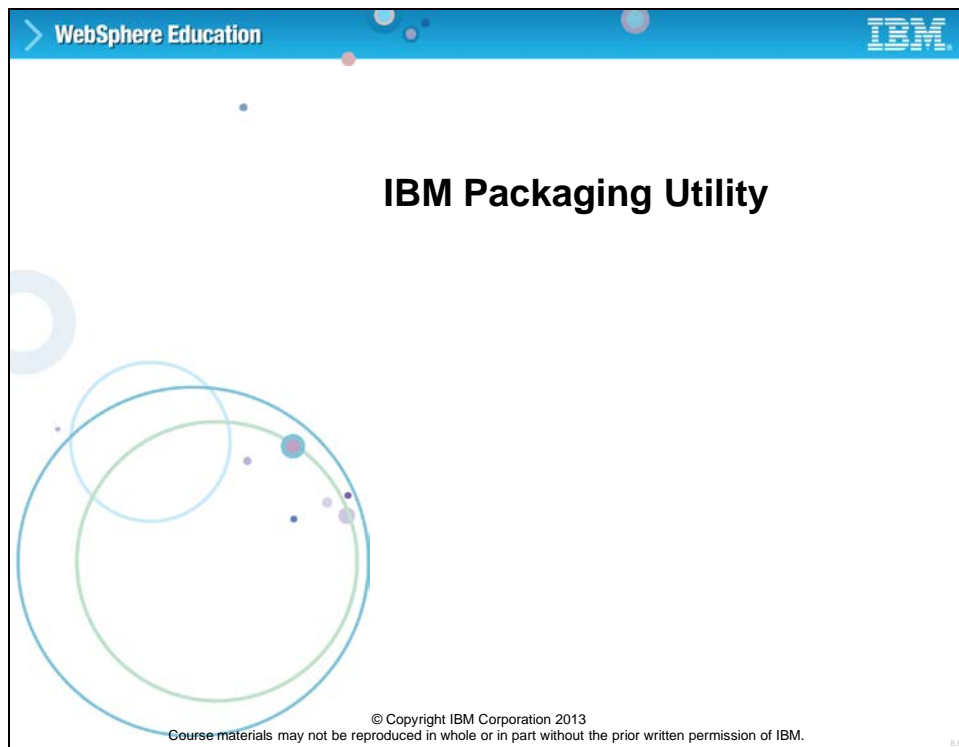
- Can silently update packages that are installed by using the IBM Installation Manager
 - On Windows, enter the command:
`<IM_install_root>\tools\ibmcl -launcher.ini silent-install.ini -updateAll -log <log_path_and_name>`
 - On UNIX, enter the command:
`<IM_install_root>/tools/ibmcl -launcher.ini silent-install.ini -updateAll -log <log_path_and_name>`
- Requires Internet connectivity
 - Modify repository preferences point to a local repository
- Cannot use the IBM Installation Manager to install updates on the underlying WebSphere Application Server Network Deployment installation
 - Must install updates by using the IBM Update Assistant and then reimport the installation into the IBM Installation Manager
 - Only required for fix pack updates, not interim fixes

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Before you can update a package, Installation Manager must have access to the repository that contains the package updates. Internet access might be required.

Each installed package has an embedded location for its default update repository. For the Installation Manager to search the default repository locations for the installed packages, the preference **Search service repositories during installation and updates** must be selected.

If you use another installer besides Installation Manager to update a package, Installation Manager might not be able to recognize the change. You might be required to uninstall the update from the other installer to use Installation Manager to update later.



Topic: IBM Packaging Utility. In this topic, you learn about the IBM Packaging Utility.




IBM Packaging Utility (1 of 2)

- A packaging tool that creates and manages software repository content in the correct format for IBM Installation Manager
 - WebSphere Application Server V8.5.5 depends on the IBM Packaging Utility 1.6.2
- Allow you to manage repository content by using CD images, PPA compressed files, IBM hosted repositories, and custom repositories
- The packaging utility can:
 - Create a repository
 - Copy multiples packages into a single repository
 - Copy multiple versions of a product to a repository
 - Copy packages from Passport Advantage to a local repository
 - Delete packages
 - Add fixes to a repository

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You can use the **IBM Packaging Utility** to create custom or “enterprise” IBM Installation Manager repositories that contain multiple products and maintenance levels that fit the needs of your business. As an administrator, you can control the content of your enterprise repository, which then can serve as the central repository to which your organization connects to complete product installations and updates. IBM Packaging Utility essentially copies from a set of source IBM Installation Manager repositories to a target repository and eliminates duplicate artifacts, helping to keep the repository size as small as possible.

You cannot use the Packaging Utility to install Installation Manager. Installation Manager must be installed on the local computer to use a repository that **the** Packaging Utility creates. However, if Installation Manager is not already installed, it is installed when the Packaging Utility is installed. The installation files for Installation Manager are included with the installation files for Packaging Utility.

WebSphere Education




IBM Packaging Utility (2 of 2)

- After installation of the IBM Packaging Utility, it includes
 - A GUI interface
 - The **PUCL** command-line interface
- Includes the **-platform** option that can copy repository files for specific platform.
 - Saves disk space and network bandwidth by copying only the files you need
 - Example: **-platform os=os,arch=arch**
- Example: create a repository for installation on Linux
 - **PUCL.exe copy com.ibm.Websphere.ND.v80_8.5.0.20120222_0247 -repositories http://ibm.com/repository/package -target "/IBM/IBMPackages/" -platform os=linux,arch=ppc -acceptLicense**

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Like IBM Installation Manager, the packaging utility has GUI and command-line interfaces. To create a repository from which IBM Installation Manager can install a product, you must use the IBM Packaging Utility to copy the product package to the repository.

The IBM Packaging Utility includes a platform slicing option, which enables you to create a repository that is scoped to the platforms and architectures that your business uses, and save gigabytes of network bandwidth and disk space. Your repository can be scoped for different platforms than the one on which it is created or stored. For example, you can run the Packaging Utility on Windows to create a repository with the content needed to install on Linux. During installation on Linux, you direct the Installation Manager to your custom repository. An example of the command is on the slide.



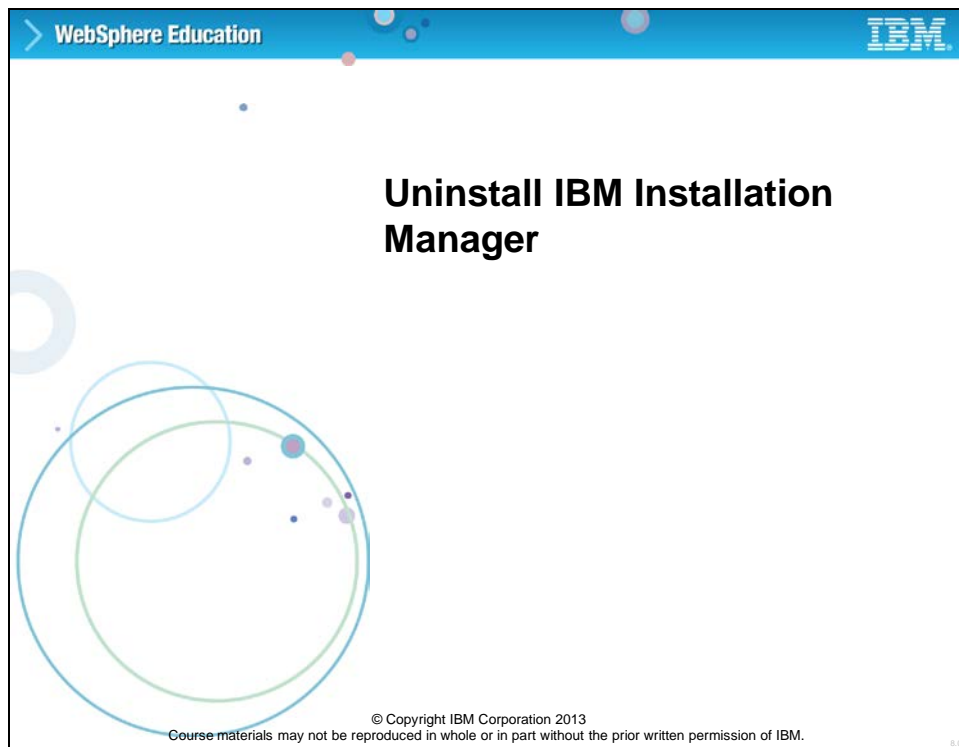
Technical preview

- IBM Packaging Utility V1.6.2 includes the **-updateFromVersion** technical preview
 - Creates a repository that contains the files for updating from the specified version to another version
 - Copies only the files that are required to update to a later version
 - Only available for the **PUCL** command-line interface
 - Works only with packages and does not work with fixes
- Example for a repository update on Linux
 - `PUCL.exe copy com.ibm.package.1.2 -updateFromVersion 1.1 -repositories http://ibm.com/repository/package -target "/IBM/IBMPackages/"`
- For complete details, visit: <http://www.ibm.com/support/docview.wss?uid=swg27023960>



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IBM Packaging Utility 1.5.2 includes a technical preview of the **-updateFromVersion** option. Use the **-updateFromVersion** option to copy only the files that are required to update to a later version. The *version* value is the version of the package that you are updating from. The package that you are copying is the version that you are updating to. An update might require files from a base offering. Use the **-repositories** option to list the repository for the base offering.

For more information on this technical preview, see the URL on the slide.



Topic: Uninstall IBM Installation Manager. In this topic, you learn about the process to uninstall the IBM Installation Manager.





Uninstalling the IBM Installation Manager

- Before you uninstall IBM Installation Manager, you must uninstall all the packages that the IBM Installation Manager installed
 - Close Installation Manager before starting the uninstall process
- To uninstall IBM Installation Manager:
 - On Windows, use **Control Panel > Add or Remove Programs**
 - On UNIX, use the uninstall IBM Installation Manager icon
 - By using the `/var/ibm/InstallationManager/uninstall/uninstall` command

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Before you uninstall Installation Manager, you must uninstall all of the packages that the Installation Manager previously installed. Be sure to also close the Installation Manager before starting the uninstall process. You must also log in to the system as the identity you used when installing Installation Manager.

Unit summary

Having completed this unit, you should be able to:

- Define the IBM Installation Manager
- Describe the IBM Installation Manager wizards
- Describe the IBM Packaging Utility
- Uninstall IBM Installation Manager

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You completed this unit.

Having completed this unit, you should be able to:

- Define the IBM Installation Manager
- Describe the IBM Installation Manager wizards
- Describe the IBM Packaging Utility
- Uninstall IBM Installation Manager