



## Planning and Installing Guide

**Note**

Before using this information, be sure to read the general information under “Notices” on page 31.

**Compilation date: April 29, 2007**

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# Contents

**How to send your comments . . . . . v**

**Installing and configuring the product. . . 1**

Planning the installation . . . . . 1

    Installation prerequisites . . . . . 2

    Topology design . . . . . 2

Preparing WebSphere Application Server Network

Deployment to install the product . . . . . 3

Installing the product . . . . . 4

    Installing silently . . . . . 6

    Installing the middleware agent . . . . . 8

    Using the centralized installation manager

    repository tool to add product packages . . . . . 9

    Uninstalling the product . . . . . 10

Developing and installing customized installation

packages for the product . . . . . 12

    Creating a build definition file to generate a CIP . . . . . 12

    Installing a CIP for the product. . . . . 15

    Installing a CIP to apply maintenance to an  
existing product installation . . . . . 17

    Uninstalling CIP updates from an existing  
product installation. . . . . 18

Using the Profile Management tool to create and  
augment profiles . . . . . 19

    Creating profiles. . . . . 20

    Augmenting profiles . . . . . 23

    Non-root profile creation and augmentation . . . 26

    First steps console . . . . . 27

**Index . . . . . 29**

**Notices . . . . . 31**

**Trademarks and service marks . . . . . 33**



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## How to send your comments

Your feedback is important in helping to provide the most accurate and highest quality information.

- To send comments on articles in the WebSphere Extended Deployment Information Center, available at: <http://www.ibm.com/software/webservers/appserv/extend/library/>
  1. Display the article in your Web browser and scroll to the end of the article.
  2. Fill out the **Feedback** link at the bottom of the article and submit.
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## Installing and configuring the product

Use this procedure to install and customize product components. The information includes planning, preparing for, completing, and maintaining product installations, including configuring the product after installation.

Obtain the product code for distributed platforms in one of the following ways:

- from the product disc
- from the Passport Advantage site, where licensed customers can download installation images
- from a customized installation package (CIP) that is created with the Installation Factory

Establishing application serving capability in new and existing environments by installing the product requires you to first plan and prepare your environment.

1. Prepare the WebSphere Application Server Network Deployment Version 6.1 environment to support the product and its features. During this process, you have the option to configure one or more nodes that comprise your Network Deployment cell.
2. Install the product by using the Installation wizard, or you can complete a silent installation.
3. Augment the existing Network Deployment profiles to use the features of the product.

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## Planning the installation

Planning is the process of defining what you want to accomplish with your product and how to meet your business goals. This topic provides basic instructions on various considerations and how to get started with the installation process.

Use this topic to understand the capabilities of the product. Knowing the product capabilities can influence how you install the product and other components.

1. Understand the supported environment for the product. Familiarize yourself with the minimum hardware and software requirements that you need. If your environment does not meet the requirements, then create a plan to meet the minimum requirements necessary to support an installation.

For more information on the hardware and software requirements, see the detailed document on the WebSphere Extended Deployment system requirements.

2. Establish your product topology.
  - a. Establish a simple topology in a test environment.
  - b. Examine the product in a smaller configuration to familiarize yourself with the available features. Next, install more advanced configurations.
3. Carefully plan your application server nomenclature. Use a systematic approach for naming to simplify the administration of the environment.

Your hardware and software requirements are fulfilled, and your environment is now capable of supporting a product installation.

You can now begin the installation process.

## Installation prerequisites

The prerequisites for installing the product are detailed at the [WebSphere Extended Deployment system requirements Web site](#).

## Topology design

Install the product first as a simple topology configuration to familiarize yourself with its features in a test environment. When you are familiar with the advanced features, you can design advanced topologies that apply specifically to your application server environment.

The following graphic represents a supported topology of the product. In this topology, the on demand router (ODR) is between the HTTP server tier and the application server tier. The ODR, with the assistance of the autonomic managers, categorizes and prioritizes the work before routing work to the appropriate nodes. The potential nodes are marked with a circle. The deployment manager is the centralized management communication vehicle, as indicated by the dotted lines.

Install the deployment manager on a separate workstation than the application server nodes to prevent unmanaged work from occurring on the nodes. Deactivating the deployment manager also deactivates preferred coordinators and, therefore, reduces high availability. The solid lines represent the request processing links.

When you are familiar with the product in a simple topology, you can add layers of complexity to your test environment. Include a firewall to secure your environment, and stress test to see the product features in action. Typically, when the workload increases, you must ensure that you have enough resources to manage the workload and that the resources configure and function together. You can also include Internet Protocol (IP) sprayer in this configuration to eliminate any single point of failure, and make this topology highly available. An IP sprayer distributes requests from one IP address to multiple IP addresses.



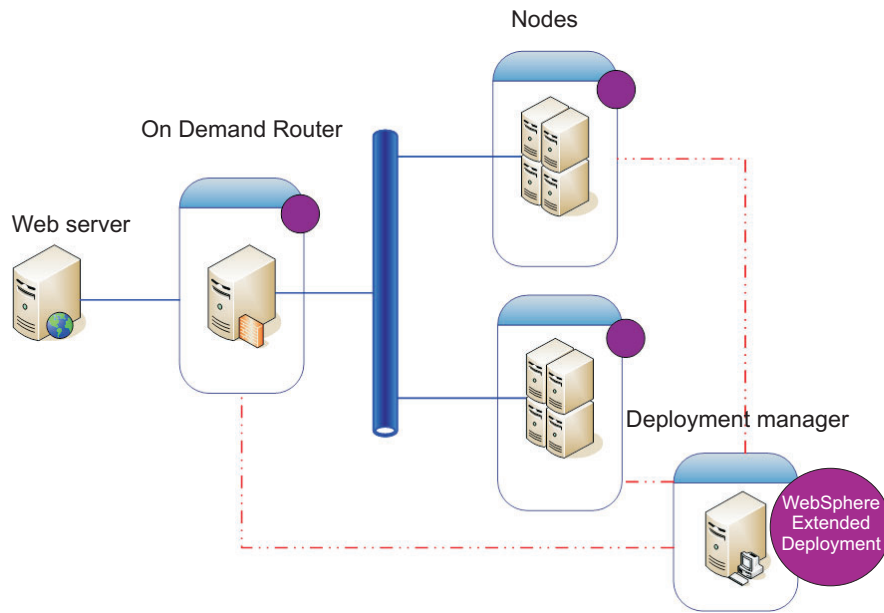


Figure 1. A simple WebSphere Extended Deployment supported configuration

## Preparing WebSphere Application Server Network Deployment to install the product

WebSphere Application Server Network Deployment Version 6.1 is an essential prerequisite for a successful product installation. Before you begin the installation process, you must prepare your Network Deployment environment.

Before preparing the installation environment, complete the following steps:

1. Understand the supported environment for the product.
2. Establish your product topology.
3. Carefully plan your application server nomenclature.

A basic topology consists of a single deployment manager, a single on demand router (ODR), and two application servers. Use three workstations (A, B, and C) for this basic topology. Set up the deployment manager and the nodes with one workstation by combining the requirements of workstations A and B if it is a high-power workstation. Otherwise, set up workstations A and B separately for optimal performance. Set up the deployment manager, workstation A, first.

1. Set up workstation A, the deployment manager:
  - a. Install WebSphere Application Server Network Deployment.
  - b. Install WebSphere Application Server Version 6.1.0.7 Fix Pack to update your Network Deployment product level. See the instructions for installing the fix pack in the WebSphere Application Server Network Deployment Information Center or in the readme files of the cumulative fix.
  - c. Create a deployment manager profile by using the Profile Management tool.
  - d. Issue the **stopManager** command to stop the deployment manager in preparation for a product installation.
2. Set up workstation B, the managed nodes:

- a. Install WebSphere Application Server Network Deployment.
  - b. Install WebSphere Application Server Version 6.1.0.7 Fix Pack.
  - c. Use the Profile Management tool to create two custom profiles, and federate the node within each custom profile into the deployment manager cell.
  - d. Issue the **stopNode** command to stop each node in the node agent process in preparation for a product installation.
3. Set up workstation C, the on demand router (ODR):
    - a. Install WebSphere Application Server Network Deployment.
    - b. Install WebSphere Application Server Version 6.1.0.7 Fix Pack.
    - c. Use the Profile Management tool to create a custom profile and federate the node within the custom profile into the deployment manager cell.
    - d. Issue the **stopNode** command, and verify that the node stopped in preparation for a product installation.






For more information, see Recommended updates for WebSphere Application Server base and Network Deployment editions

Your WebSphere Application Server Network Deployment environment is now prepared to support the installation of this product.

Install WebSphere Extended Deployment Operations Optimization Version 6.1 on the deployment manager, as well as on each managed node that is located in the cell if the nodes do not share the same installation location. Before you begin the installation process, however, you must restart the deployment manager and each of the nodes to which you plan to install the product. To start the deployment manager, issue the following command from the *profile\_root/bin* directory of the Network Deployment installation:

-  startManager.bat
-     ./startManager.sh

To start each of the nodes, issue the following command from the *profile\_root/bin* directory of the Network Deployment installation:

-  startNode.bat
-     ./startNode.sh

For more information, read the detailed instructions for installing the product.

---

## Installing the product

After you prepare your WebSphere Application Server Network Deployment Version 6.1 environment, install the product by using the graphical user interface (GUI).











Before you install the product, read the readme file, which is located in the CD root directory.

Install WebSphere Application Server Fix Pack 6.1.0.7 to update your Network Deployment product level.

Exit the WebSphere Application Server Network Deployment directory. Installation errors can occur if you inadvertently leave a command line or browser instance open in the *profile\_root/installedApps* directory.

Complete the following steps to install the product, and create a basic environment:

1. Insert the installation CD into the CD-ROM.
2. Stop all the processes that are running on the workstation that you are preparing for installation. Type the following commands:

-     `./stopManager.sh`
-  `stopManager.bat`
-     `./stopNode.sh`
-  `stopNode.bat`

Verify that the running Java processes are stopped. The wizard provides a message of completion.

3. Type the following command to start the installation:

-  `install.bat`
-     `./install.sh`

4. Review the Welcome panel, and click **Next**.
5. Read and accept the license agreement, and click **Next**. After you accept the license, the prerequisite checking automatically begins. If your system is not at the recommended level, a window displays the missing prerequisites. You can proceed with the errors, however, the installation might fail. Click **Next** to continue.
6. Specify the installation location, and click **Next**. Expand the list to select a different WebSphere Application Server installation location, or enter a different location if you do not intend to use WebSphere Application Server.
7. Select the existing profiles for your installation to augment, and click **Next**. Augment the deployment manager and custom profiles to work for this product. You can also augment a profile later by using the Profile Management tool.
8. Optionally, click the check box to add the product to the centralized installation manager repository, and click **Next**. Click **Browse** to specify the location of the repository, and click **Next** to continue. Alternatively, you can add the product to the repository later by using the centralized installation manager repository tool.
9. Click **Next** to accept the installation summary, or click **Back** to change your selections.
10. Review the confirmation panel, and click **Finish** to exit the wizard or to review the log files if the installation fails.
11. Repeat this process to install the product on each node in the cell.

**Tip:** Use the same CD to install the product on the nodes.

Next, configure each node to meet your objectives, which you can do either from the administrative console, or by using the wsadmin tool.

- a. Click **Servers** > **All servers** to configure each node from the administrative console.
- b. See to configure each node by using the wsadmin tool.

The installation wizard installs the product files into the installation root directory.

After you install the product, create a new profile or augment an existing profile by using the Profile Management tool.

## Installing silently

Use either a fully-qualified response file, which you configure specifically to your needs, or parameters that pass to the command line to silently install the product and start the nodes. With a silent installation, you can bypass the Installation wizard, which is useful in some environments.

To perform a silent installation, you must have the appropriate authority. On a Linux or UNIX operating system, you must be authorized as the root user. On a Windows operating system, your user ID must belong to the Administrator group and have the following advanced user rights:

- Act as part of the operating system
- Log on as a service

If you create a new user ID on a Windows operating system, restart the system before attempting a silent installation.

WebSphere Application Server Network Deployment is installed and operational, and your workstation meets all the system requirements. Stop all the nodes and the node agent, but do not stop the entire cell.

A silent installation uses the same installation program that the graphical user interface (GUI) version uses. However, instead of displaying a wizard interface, the silent installation reads all of your responses from a file that you customize or from parameters that you pass to the command line. You can use either method to silently install the product.

1. Optional: If you choose to install the product by launching the response file, first customize the file.
  - a. Copy the response file, `xdsetup.response`, from the product CD to your disk drive. Rename and save the file as `myoptionsfile.txt`.
  - b. Open and edit the response file in the text editor of your choice. The file includes comments to assist the configuration process and must include these parameters:
    - The license agreement
    - The location of the product installation
    - The list of profiles to augment
    - The location of the centralized installation manager repository

**Tip:** The location that you select for your installation is how the installation program determines where your previous WebSphere Application Server instance is located. If you install on a node with multiple WebSphere Application Server instances, clearly define your location.

- c. Issue the proper command to launch your customized response file. Substitute the name and correct path of your response file if you renamed the file to something other than the provided example.
  - `Windows` `install.bat -options C:\drive_path\myoptionsfile.txt -silent`
  - `Linux` `AIX` `HP-UX` `Solaris` `./install.sh -options /absolute_path/myoptionsfile.txt -silent`

The log files are located in the `install_root/logsxd_operations/install` directory. If the installation fails before the installation location is located or

created, the log files are located in the *user\_home/wxd\_install\_logs* directory. For example, if you log in as root, *user\_home* is the */root* directory.

If you install the Operations Optimization component in a Network Deployment environment, you can choose to install the centralized installation manager repository, or include the Operations Optimization component to the existing repository by further customizing the response file.

- Optional: If you choose to install the product by passing certain parameters to the command line, issue the following command to launch the installation:

- Windows** `install.bat -silent -OPT silentInstallLicenseAcceptance=true -OPT installLocation=installation_location`

where *installation\_location* is the location of your existing WebSphere Application Server Network Deployment installation.

Use the following optional parameters to specify particular profiles to augment:

`-OPT profileAugmentList=profiles_separated_by_commas`

- AIX** **HP-UX** **Solaris** `./install -silent -OPT silentInstallLicenseAcceptance=true -OPT installLocation=installation_location`

where *installation\_location* is the location of your existing WebSphere Application Server Network Deployment installation.

Use the following optional parameters to specify particular profiles to augment:

`-OPT profileAugmentList=profiles_separated_by_commas`

- Use the following optional parameters to install the centralized installation manager repository:

- `-OPT installCimgrRepository=true`
- `-OPT cimgrInstallLocation=installation_location/cimgr`

- Review the resulting logs for errors or an installation failure.

You successfully installed the product, and started the nodes without any errors occurring.

Create a new profile, or augment an existing profile by using the Profile Management tool. You can omit this task if you augmented the profile through the Installation wizard.

## Installation arguments

Issue command-line arguments to customize and configure your product installation.

## Command-line arguments

You can pass the following arguments during a command-line or options file installation of the product:

Table 1. Command-line arguments

Argument	Description	Examples
-options file_name	Passes the installer an options file, indicated by <i>file_name</i> , which the installer uses as the command-line arguments. This argument is typically used with a silent installation. Properties on the command line take precedence.	install.bat -options c:\drive_path\myoptionsfile.txt
-silent	Suppresses the GUI display and takes all input from the options file by using -options. Otherwise, the default values are used.	install.bat -silent install.bat -silent -options myoptionsfile.txt
-log #!file_name @<events>	Generates an installation log file that logs the following specified event types: <ul style="list-style-type: none"> <li>• err</li> <li>• wrn</li> <li>• msg1</li> <li>• msg2</li> <li>• dbg</li> <li>• ALL</li> </ul>	install.bat -log # !c:\temp\logfile.txt @ALL
-is:log file_name	Creates a log file, indicated by <i>file_name</i> , that contains the Java Virtual Machine (JVM) searches of the installer while attempting to launch the GUI. This log is not created unless specified.	install.bat -is:log c:\logs\javalog.txt
-is:javaconsole	Displays a console window during the installation process.	install.bat -is:javaconsole
-is:silent	Suppresses the Java initialization window that is displayed while initializing the installer.	install.bat -is:silent
-is:tempdir directory	Defines the temporary directory that the installer uses.	install.bat -is:tempdir c:\temp

## Installing the middleware agent

You can install the middleware agent for WebSphere Extended Deployment Operations Optimization Version 6.1 by using the graphical user interface (GUI). The middleware agent is installed to a location in which WebSphere Application Server does not exist.

Augment the deployment manager profile with WebSphere Extended Deployment.

The middleware agent is a server process that is used to manage servers that are not running WebSphere Extended Deployment. You can install the middleware agent on a node that is running other middleware servers that were created outside of WebSphere Extended Deployment. You then can create representations of these nodes and servers and manage them in the administrative console.

Complete the following steps to install the middleware agent on the nodes:

1. Insert the Operations Optimization installation CD into the CD-ROM.
2. Type the following command to start the installation:
  - `install.bat`
  - `./install.sh`
3. Review the Welcome panel, and click **Next**.
4. Read and accept the license agreement, and click **Next**. After you accept the license, the prerequisite checking automatically begins. If your system is not at the recommended level, a window displays the missing prerequisites. You can proceed with the errors, however, the installation might fail. Click **Next** to continue.
5. Specify an empty installation location, and click **Next**.
6. Click **Next** to accept the installation summary, or click **Back** to change your selections.
7. Review the confirmation panel, and click **Finish** to exit the wizard or to review the log files if the installation fails.






The installation wizard installs the middleware agent files to the root directory of the installation location that you specified.

## Using the centralized installation manager repository tool to add product packages

Use the centralized installation manager repository tool to add one or more WebSphere Extended Deployment Version 6.1 components to the repository. From the administrative console, you can then use the centralized installation manager to install your added components from the repository to the nodes.

The centralized installation manager repository tool is installed only during the installation of WebSphere Extended Deployment Operations Optimization, and not WebSphere Extended Deployment Compute Grid or WebSphere Extended Deployment Data Grid. To install the repository for the first time, ensure that the destination directory is empty. Additionally, you can add a product component to the repository only if it does not already contain that specific component.

First install the centralized installation manager repository, and then populate it with one or more product components, which the centralized installation manager then installs to the nodes. The centralized installation manager simplifies the tasks of deploying product packages to your WebSphere Application Server Network Deployment cell and other middleware servers.

1. Launch the repository tool from the following location:
  -  `install_root/bin/xd_cimgrrepository.bat`
  -     `install_root/bin/xd_cimgrrepository.sh`
2. Select one or more product packages to include in the repository, and click **Next**.
3. Read the summary of your selections, and click **Next**.

To change your selections, click **Back**.

4. Click **Browse** to provide the location of the product installation image, and click **Next**.

If you selected to add multiple packages in step 2, this panel displays again to prompt you for the installation image location for each package.

You can install the repository in a high availability (HA) deployment manager:

- Specify the location of the repository from the current installation location.
  - For example, if you install the product in the `c:\Program Files\IBM\WebSphere\AppServer` directory, specify the repository location as `c:\Program Files\IBM\WebSphere\AppServer\repository_folder`.
- After you create the second deployment manager profile, change the value of the `centralized_install_repository_root` property in the `install_root\properties\cimgr.props` file from `c:\Program Files\IBM\WebSphere\AppServer\repository_folder` to `install_root\repository_folder`.

For more information, read about the benefits of having a high availability deployment manager in your environment.

You can also install a customized installation package (CIP) to the centralized installation manager repository. To do so, you must copy the descriptor from the following location to the `install_root/properties/xdcimgr` directory:

- For an Operations Optimization CIP: `wxdop_package/XD/xd.primary.ext.pak/repository/cii_identifier/properties/xdcimgr`
- For a Compute Grid CIP: `wxdcg_package/XD/xd.primary.compute.pak/repository/cii_identifier/properties/xdcimgr`
- For a Data Grid CIP: `wxddg_package/XD/xd.primary.data.pak/repository/cii_identifier/properties/xdcimgr`

5. Review the confirmation panel, and click **Finish** to exit the tool.

The centralized installation manager repository now contains one or more WebSphere Extended Deployment product components. For information on how to install the repository from the command line, read about silently installing the product.

Use the centralized installation manager to install the packages to the nodes and begin managing your environments. In the administrative console, click **System administration > Centralized Installation Manager**.

To uninstall the centralized installation manager repository, run the installer in silent mode with the following option specified:

```
uninstall.bat -OPT uninstallCimgr=true -silent
./uninstall -OPT uninstallCimgr=true -silent
```

**Note:** This option is supported with the uninstallation of WebSphere Extended Deployment Operations Optimization only. For more details, read about the steps to silently uninstall the product.

## Uninstalling the product

You can uninstall the product, or any maintenance that is already applied to the installation. Complete the uninstallation process either silently or by following the graphical user interface (GUI).

Before you can uninstall the product, the `install_root/uninstall_xd_operations` subdirectory must exist. If the installation fails before the uninstallation files are



copied to the machine, you cannot complete this task. Additionally, you must uninstall any existing maintenance before attempting to uninstall the product. The wizard will not proceed with the uninstallation if existing maintenance is detected.

This procedure uninstalls WebSphere Extended Deployment Operations Optimization Version 6.1 only.

1. Stop all processes before starting the uninstallation process. Type the following commands:

- `Linux` `> AIX` `> HP-UX` `> Solaris` `./stopManager.sh`
- `Windows` `stopManager.bat`
- `Linux` `> AIX` `> HP-UX` `> Solaris` `./stopNode.sh`
- `Windows` `stopNode.bat`

Make sure that all the processes are stopped by verifying the running Java processes:

- `Windows` Use the task manager to stop the Java processes.
  - `Linux` `> AIX` `> HP-UX` `> Solaris` Complete a search to validate that the Java processes are stopped.
2. From the `install_root/uninstall_xd_operations` directory, complete the following actions:

- `Windows` Double-click the `uninstall.exe` file.
- `Linux` `> AIX` `> HP-UX` `> Solaris` Issue the `uninstall` file from a command prompt.
- Follow the prompts in the graphical user interface (GUI), and click **Finish** to complete the uninstallation process.

Alternatively, issue the following command to silently uninstall the product:

- `Windows` `uninstall.bat -silent`
  - `Linux` `> AIX` `> HP-UX` `> Solaris` `./uninstall.sh -silent`
3. Uninstall the deployment manager. From the `install_root/uninstall_xd_operations` directory, complete the following actions:
- Double-click the `uninstall.exe` file.
  - Issue the `uninstall` file from a command prompt.

Review the log files, which are located in the `install_root/logs/xd_package/uninstall/log` directory, for any errors.

4. Uninstall the centralized installation manager repository. Run the uninstaller in silent mode, and specify the following option: `Windows`
- ```
uninstall.bat -OPT uninstallCimgr=true -silent
```

```
Linux > AIX > HP-UX > Solaris  
./uninstall -OPT uninstallCimgr=true -silent
```

**Restriction:** The option is only supported with the uninstallation of WebSphere Extended Deployment Operations Optimization Version 6.1.

You successfully uninstalled the product.

---

## Developing and installing customized installation packages for the product

A customized installation package (CIP) is a customized product installation image that can include one or more maintenance packages, configuration scripts, and other files that help customize the resulting installation. The WebSphere Extended Deployment Installation Factory plug-in creates the CIP.

Before you can create and install a CIP, first set up the Installation Factory for WebSphere Application Server on your system by completing the following steps:

1. Download the packed code from the .
2. Unpack the code.

For more information on the IBM Installation Factory for WebSphere Application Server, see *Developing and installing customized installation packages*

The WebSphere Extended Deployment Installation Factory plugin creates the CIP to simplify the steps required to install the product. The CIP Installation wizard installs a new product at the maintenance level that is included in the CIP, performs a customized installation that adds product features, or updates the existing product to the maintenance level that is included in the CIP.

1. After you install the IBM Installation Factory for WebSphere Application Server 6.1, download the WebSphere Extended Deployment Installation Factory plugin.
2. Create a build definition file. This XML file describes specific options, which you select, to include in the customized installation image.
3. Generate the CIP. You can either generate the CIP by using the Build Definition wizard, or by using the `ifcli` command.
4. Prepare your environment to support a customized product installation.
5. Install a CIP for WebSphere Extended Deployment Operations Optimization. Choose one of the following installation scenarios:
  - Complete a custom installation with the CIP Installation wizard.
  - Silently complete a custom installation by using the CIP Installation command-line interface tool.

You completed the necessary prerequisites to create and install a CIP for the product.

Next, you can create a profile, or augment an existing profile, by using the Profile Management tool.

### Creating a build definition file to generate a CIP

A build definition file is a an XML document that specifies how to build and customize the customized installation package (CIP) for the product. The build definition describes what product package to install, the location of the CIP, the maintenance packages to include in the installation, the install scripts, and any additional files to include in the CIP.

Download the IBM Installation Factory for WebSphere Application Server and the WebSphere Extended Deployment Installation Factory plugin to your system.

The Build Definition wizard, from within the Installation Factory graphical user interface (GUI), steps you through the process of creating a build a definition file.

1. Gather the components to include in the customized installation package (CIP). Optional assets can include maintenance packages and additional files to install on the system. Make all of the assets available on the workstation where you intend to create your CIP.
2. Launch the console from the `bin/ifgui` directory.
3. Click the **New Build Definition** icon after you launch the console. With this option, you can create a new build definition file, and optionally generate a CIP.
4. From the Product Selection wizard, select the product for the build definition file, and click **Next**. You can select any of the following products:
  - WebSphere Application Server 6.1.0
  - WebSphere Extended Deployment Operations Optimization 6.1.0
  - WebSphere Extended Deployment Compute Grid 6.1.0
  - WebSphere Extended Deployment Data Grid 6.1.0

Note that you must create an individual CIP for each product. A CIP used for all products cannot be created.

5. Based on your product selection in step 4, select the appropriate product edition from the list, and click **Next**.
6. Again, based on your product selection in step 4, select the appropriate package from the list, and click **Finish** to launch the Build Definition wizard.
7. Select **Connected** or **Disconnected** from the **Mode Selection** panel in the Build Definition wizard. Select **Connected** if you plan to create a CIP on the same workstation that you create the build definition file. To create the build definition file for use on another workstation, select **Disconnected**.  
Select the platforms on which you intend to create the CIP, and click **Next**. You can install the CIP only on the target platforms that you select from this panel.

8. Type a unique identifier and a version number for the CIP in the provided fields, and click **Next**.

The identifier is combined with the version number to create a full package identifier, which is then used to create a directory during installation that contains the customization files for the selected package.

9. Type the location of the build definition file, type the location of the CIP, and click **Next**. The build definition file is always saved to a directory path on the Build Definition wizard workstation.
10. Type the location of the product installation image, and click **Next**.
11. Optionally, type the location of each of the maintenance packs you want to include in the CIP. You can choose to include any available refresh packs, fix packs, or interim fixes.
12. Click **Add Scripts...** to populate the table with any customized install scripts. Next, type the location of the script files, and clear the check box to continue if an error occurs. The default action is to stop the operation. Click **OK** to return to the panel.

Organize the script files in the exact order that they should be performed after the installation process successfully completes, and click **Next**. These scripts always run by default, regardless if the process is a new installation or a slip installation, except that `.bat` files will run only on Windows systems, and `.sh` files will run only on UNIX and Linux platforms.

You can choose not to run any custom scripts during the installation by adding the following argument to the install command:

```
-OPT runCustomScripts=false
```

13. Optionally, click **Add Files...** or **Add Directories...** to populate the table with additional files or directories for the CIP to install, and click **Next**.
14. Optionally, provide the organization, description, and additional information about the product package, which can be viewed by the person responsible for performing the installation, and click **Next**.
15. Review the summary of your selections, and click **Finish** to generate the CIP. Click **Back** to make changes to any of the previous panels.

If you chose to create the build definition file in the disconnected mode, you can save the build definition file, but you do not have the option to generate the CIP.

A message of completion confirms that the new build definition file is saved to the directory that you specified in step 9. By default, this directory is actually the combined identifier and version number that you specified in step 8.

You created and customized the build definition file.

If the Build Definition wizard did not provide you with the option to generate the CIP from the build definition file, you can still generate it by using the `ifcli` command. For further details, read the information on how to silently create a CIP for the product by issuing the command.

After you generate the CIP, you can then install it. Use the InstallShield for Multiplatforms (ISMP) Installation wizard, or run the installation command.

### **Build definition file**

A build definition file is an XML document that specifies how to build and customize the customized installation package (CIP) for the product. The build definition file describes exactly what features the Installation Factory includes in the CIP for you to achieve a customized installation.

Before you can create a customized installation package (CIP), you must create a build definition file for the CIP. The Build Definition wizard, from within the Installation Factory graphical user interface (GUI), steps you through the process of creating a build definition file. You can also use the wizard to modify an existing build definition file.

Each panel in the Build Definition wizard prompts you for information about the CIP. For example, panels prompt you to provide the package identification, the build information, and the location of maintenance packages. Another panel requests the location for generating the CIP. All of this information is saved in the new build definition file, or modified and saved in an existing build definition file that you are changing. For further details, read about the panel definitions in the WebSphere Application Server Information Center.

To use the Build Definition wizard to create a build definition file and then generate the customized installation package (CIP), use the `ifgui` command from the `bin` directory to launch the GUI. To create only the build definition file, you can use the command-line interface tool to generate the CIP outside of the GUI. Refer to the actual steps to create a build definition file for more information on the wizard.

## Installing a CIP for the product

Generate a customized installation package (CIP) as you create the build definition file by using the IBM Installation Factory. You can then install the product from the CIP image.

Before you can install a customized installation package (CIP), you must create a build definition file to specify what options to include in the CIP.

Read the readme file, which is located in the CD root directory, and prepare your environment to support an installation. Exit the WebSphere Application Server Network Deployment directory. Installation errors can occur if you inadvertently leave a command line or browser instance open in the *profile\_root/installedApps* directory.

The CIP installation process is very similar to a typical product installation process.

1. Insert the installation CD that contains the customized installation package (CIP) into the CD-ROM, or access the directory in which the CIP is located.
2. Stop all WebSphere Application Server and WebSphere Extended Deployment processes that are running on the machine that you are preparing for installation.


To stop the deployment manager, issue the following command:

```
profile_root/bin/stopManager.sh
```

To stop the nodes, issue the following command:

```
profile_root/bin/stopNode.sh
```

Verify that all the processes are stopped by verifying the running Java processes. The graphical user interface (GUI) provides a message of completion.

3. Run the following command to start the installation:   
install.bat

```
./install
```

4. Review the characteristics of the CIP by clicking **About this custom installation package**, and click **Next**.
5. Accept the license agreement, and click **Next**. After the license is accepted, the prerequisite checking automatically begins. If your system does not have the prerequisites, a window displays the missing prerequisites. Cancel the installation, make the required changes, and restart the installation.
6. Specify the installation location, and click **Next**. Expand the list to select a different WebSphere Application Server installation location, or enter a different location if you do not intend to use WebSphere Application Server.
7. Select the existing profiles for your installation to augment, and click **Next**. You can also augment a profile later by using the Profile Management tool or the **manageprofile** command. Augment the deployment manager and custom profiles to work for the product.
8. To not add the CIP to the centralized installation manager repository, do not select the check box. Click **Next**. If you do choose to add the CIP to the repository, you must specify the name of the directory for the CIP image as the same name that you specified for the unique CIP identifier in the Build Definition wizard. Because the identifier must be unique, only one CIP can

exist the directory regardless of what package that you are installing. Refer to steps 8 and 9 in **Creating a build definition file to generate a CIP** before you continue to the next step.

9. Click **Next** to accept the resulting summary of your selections.
10. Click **Next** to start the installation process.
11. Review the confirmation panel, and click **Finish** to exit the wizard or to review the log files if the installation fails.
12. Repeat this process for each node in the cell.

You successfully installed the CIP. You can uninstall the product from the *install\_root/uninstall\_xd\_operations* subdirectory.

After you install the CIP, create a new profile or augment an existing profile by using the Profile Management tool. You can omit this task if you augmented the profile through the Installation wizard.

### **Silently installing a CIP for WebSphere Extended Deployment**

You can silently install a customized installation package (CIP) for the product by using either a fully-qualified response file, which you configure specifically to your needs, or parameters that pass to the command line. With a silent installation, you can bypass the Installation wizard, which is useful in some environments.

To perform a silent installation, you must have the appropriate authority. On a Linux or UNIX operating system, you must be authorized as the root user. On a Windows operating system, your user ID must belong to the Administrator group and have the following advanced user rights:

- Act as part of the operating system
- Log on as a service

If you create a new user ID on a Windows operating system, restart the system before attempting a silent installation.

Create the build definition file and the CIP before you silently install the CIP.

A silent installation uses the same installation program that the graphical user interface (GUI) version uses. However, instead of displaying a wizard interface, the silent installation reads all of your responses from a file that you customize, or from parameters that you pass to the command line. You can use either method to silently install the product. The silent and command-line installations accept a series of parameters. For further details, learn about the specific installation arguments.

1. Optional: If you choose to install the CIP by launching the options response file, first customize the file.
  - a. Copy the response file, *xdsetup.response.txt*, from the product CD to your disk drive. Rename and save the file as *myoptionsfile.txt*.
  - b. Open and edit the response file in the text editor of your choice. The file includes comments to assist the configuration process and must include these parameters:
    - The license agreement
    - The location of the product installation
    - The list of profiles to augment
    - The location of the centralized installation manager repository

**Tip:** The location that you select for your installation is how the installation program determines where your previous WebSphere Application Server instance is located. If you install on a node with multiple WebSphere Application Server instances, clearly define your location.

- c. Issue the proper command to launch your customized response file. Substitute the name and correct path of your response file if you renamed the file to something other than the provided example.

- **Windows** `install.bat -options C:\drive_path\myoptionsfile.txt -silent`
- **Linux** **AIX** **HP-UX** **Solaris** `./install -options /absolute_path/myoptionsfile.txt -silent`

The log file is `install_root/logs/xd_operations/install/log.txt`.

2. Optional: If you choose to install the CIP by passing certain parameters to the command line, issue the following command to launch the installation:

- **Windows** `install.bat -silent -OPT silentInstallLicenseAcceptance=true -OPT installLocation=installation_location`

where `installation_location` is the location of your existing WebSphere Application Server Network Deployment installation.

Use the following optional parameters to specify particular profiles to augment:

`-OPT profileAugmentList=profiles_separated_by_commas`

- **Linux** **AIX** **HP-UX** **Solaris** `./install -silent -OPT silentInstallLicenseAcceptance=true -OPT installLocation=installation_location`

where `installation_location` is the location of your existing WebSphere Application Server Network Deployment installation.

Use the following optional parameters to specify particular profiles to augment:

`-OPT profileAugmentList=profiles_separated_by_commas`

- a. Use the following optional parameters to install the centralized installation manager repository:

- `-OPT installCimgrRepository=true`
- `-OPT cimgrInstallLocation=installation_location/cimgr`

3. Review the resulting logs for errors or an installation failure.

You silently installed the customized installation package (CIP).

Create a new profile, or augment an existing profile by using the Profile Management tool. You can omit this task if you augmented the profile through the Installation wizard.

## Installing a CIP to apply maintenance to an existing product installation

You can apply maintenance packages to an existing product installation by installing a customized installation package (CIP).

Create the build definition file and the CIP before you install the CIP.

Complete the following steps to add maintenance to an existing product installation, which is commonly referred to as a *slip installation*.

1. Insert the installation CD that contains the CIP into the CD-ROM, or access the directory in which the CIP is located.
2. Stop all WebSphere Application Server and WebSphere Extended Deployment processes that are running on the machine that you are preparing for installation.

To stop the deployment manager, issue the following command:

```
profile_root/bin/stopManager.sh
```

To stop the nodes, issue the following command:

```
profile_root/bin/stopNode.sh
```

Verify that all the processes are stopped by verifying the running Java processes. The graphical user interface (GUI) provides a message of completion.

3. Run the following command to start the installation: Windows  
install.bat

Linux ▶ AIX ▶ HP-UX ▶ Solaris

```
./install
```

4. Review the Welcome panel, and click **Next**.
5. Read and accept the license agreement, and click **Next**. After you accept the license, the prerequisite checking automatically begins. If your system is not at the recommended level, a window displays the missing prerequisites. You can proceed with the errors, however, the installation might fail.
6. Type the location of the existing product installation. The Installation wizard then validates the location.

When applying maintenance with a CIP that contains a refresh pack, a fix pack, or both, all previously installed authorized program analysis reports (APAR) are uninstalled by the wizard. If the CIP is on the same level that the product is installed, previously installed APARs remain only if they are packaged in the CIP.

To successfully apply maintenance or updates to an installation, the CIP must include the installed features.

The installation preview summary lists the resulting product version and any applicable features and interim fixes. Next, the Installation wizard successfully applies the maintenance, and updates the features or component of the product.

The product binaries are copied to the `was_home/properties/version/nif/backup` directory. You can use the Update Installer for WebSphere Software 6.1.0.2 to uninstall the update and restore your workstation.

## Uninstalling CIP updates from an existing product installation

You can remove the customized installation package (CIP) updates from an existing product installation without removing the entire product. Use the Update Installer for WebSphere Software to uninstall any CIP updates. This task is also referred to as a *slip uninstallation*.

You must have at least one existing copy of the product installed on the system.

The process for removing updates from a product CIP installation is the same as uninstalling maintenance packages in a WebSphere Application Server Network Deployment environment.



1. Download and install the Update Installer 6.1.0.2 from the IBM Support and downloads Web site if it does not already exist.
2. Uninstall any fix pack, refresh pack, or interim fix that you installed after installing the CIP. This process is the same as uninstalling any other maintenance packs.
3. Uninstall any interim fixes that were installed as part of the slip installation. This process is the same as uninstalling a single fix pack or refresh pack. However, the maintenance that was included in the customized installation package CIP is now included in a single operation.
4. Uninstall the CIP by using the Update Installer. The maintenance levels return to the pre-update state, and the CIP is denoted by the the CIP identifier prepended to its filename. The following example illustrates how a CIP displays differently than other regular maintenance packages in the Update Installer maintenance package selection panel:

- **CIP**

com.ibm.ws.cip.6101.xd.primary.ext.pak

You successfully removed the CIP updates from an existing product installation.

---

## Using the Profile Management tool to create and augment profiles

After you install the product, you can use the Profile Management tool plugin to create unique types of profiles and augment existing profiles for WebSphere Extended Deployment Operations Optimization Version 6.1. Use the graphical user interface (GUI), which is provided by the Profile Management tool, to easily complete these tasks.

You must augment at least one profile to use the features of the product.

Ensure that your environment meets all of the hardware and software requirements. Install WebSphere Application Server Network Deployment Version 6.1, and apply WebSphere Application Server Fix Pack 6.1.0.7 to update your Network Deployment product level. Next, install WebSphere Extended Deployment Operations Optimization .

With the Profile Management tool plugin for WebSphere Extended Deployment Operations Optimization, you can create various types of profiles, and augment existing profiles, by following the steps that are outlined in the GUI. The Profile Management tool plugin replaces the InstallShield for Multiplatforms (ISMP) Profile wizard that was offered with WebSphere Extended Deployment before the release of Version 6.1. Depending on what your specific goals are, complete any of the following tasks to create or augment profiles.

- Create a WebSphere Application Server profile for WebSphere Extended Deployment Operations Optimization.

### **Stand-alone application server profile**

This topic describes how to create a standalone node profile type, which is also augmented to use the product features.

- Create a deployment manager profile for WebSphere Extended Deployment Operations Optimization.

### **Deployment manager profile**

The deployment manager administers the application servers that are federated into the cell. This particular profile is already augmented to use the product features.

- Create a cell profile for WebSphere Extended Deployment Operations Optimization.

#### **Cell profile**

A cell profile consists of a deployment manager and a federated node. You can use this profile to test the functionality of the product.

- Create a custom profile for WebSphere Extended Deployment Operations Optimization.

#### **Custom profile**

A custom profile is an empty node that you customize through the deployment manager to include application servers, clusters, or other Java™ processes, such as a messaging server.

- Create a profile for multiple product packages.  
This topic describes how to create a profile that uses the features that are available in each of the three WebSphere Extended Deployment packages: Operations Optimization, Compute Grid, and Data Grid.
- Create a profile to use WebSphere Extended Deployment features with the features of other IBM products.  
This topic describes how to create a profile that uses the features of multiple WebSphere Extended Deployment packages with other IBM products.
- Create a profile for a non-root user.  
This topic describes how to give non-root user permissions for files and directories so that a non-root user can create a profile
- Augment an existing profile to use the features of WebSphere Extended Deployment Operations Optimization.  
With this augmentation, the profile can apply the specific product functionality.
- Augment an existing profile for multiple product packages.  
This topic describes how to update an existing deployment manager and nodes to obtain the functionality of all three WebSphere Extended Deployment packages: Operations Optimization, Compute Grid, and Data Grid.
- Augment a profile as a non-root user.  
This topic describes how a non-root user can augment a profile that was created by a root user, a different non-root user, or the same non-root user.

Your product environment now contains augmented profiles.

Depending on which task you choose to complete, launch the First steps console for assistance with configuring and testing your product environment. Alternatively, repeat any of the preceding tasks to create or augment additional profiles.

## **Creating profiles**

Use the Profile Management tool plugin to create profiles for WebSphere Extended Deployment Operations Optimization Version 6.1. A profile is a set of files that define the runtime environment.

To use the product features, you must augment at least one profile.

Ensure that your environment meets all of the hardware and software requirements. Install WebSphere Application Server Network Deployment Version 6.1, and apply WebSphere Application Server Fix Pack 6.1.0.7 to update your

Network Deployment product level. Next, install WebSphere Extended Deployment Operations Optimization Version 6.1.

The Profile Management tool plugin enables the graphical user interface (GUI) to assist you in creating profiles, such as a WebSphere Application Server profile, a deployment manager profile, a product cell profile, and a custom profile, to utilize the product features.

1. Start the Profile Management tool plugin for WebSphere Extended Deployment Operations Optimization. Click **Profile Management tool** from either the First Steps Console or the **Start menu**.
2. Click **Create** to launch the profile creation wizard and create a new profile. This panel appears only if there is an existing profile and an existing profile template present.
3. Review the Welcome panel, and click **Next**.
4. Select the type of environment to create, and click **Next**.
  - Select WebSphere Extended Deployment Operations Optimization to create an environment that optimizes dynamic operations.
  - Select WebSphere Extended Deployment Data grid to use the compute grid features.
  - Select WebSphere Extended Deployment Compute Grid to create an environment that to use the data grid features.
5. Select a profile type to include the selected environment, and click **Next**. The available profile types are standalone application server, deployment manager, product cell, and custom.
6. Choose a profile creation option, and click **Next**.

Select **Typical profile creation** to create profile that uses the default configuration settings. Enable security by clicking **Enable administrative security**, provide a user ID and password to access the administrative tools, and click **Next**.

To specify unique configuration settings, select **Advanced profile creation**. Next, provide the values for the settings in the panels that appear when you select the advanced option only:

- a. Clear the check box to choose not to deploy the administrative console and applications, and click **Next**. Sample applications are not selected by default.
  - b. Type the name of the profile, the path to its intended location, and click **Next**. The default values are AppSrv\_ProfileNumber and *install\_root/profiles/profileName*.
  - c. Type the node name and the host name of the profile, and click **Next**. The default values are shortHostname\_Node\_NodeNumber and *hostname*.
  - d. Enable security by clicking **Enable administrative security**, provide a user ID and password to access the administrative tools, and click **Next**. If you selected the sample applications in step a., you must provide a password for the user ID *samples*.
  - e. Type the port values for this specific profile, and click **Next**.
  - f. Choose to create a service for the server, and click **Next**.
  - g. Select the web server definition options, and click **Next**.
7. Review the summary of your selections, and click **Create**. To make changes to any preceding panels, click **Back**. As the wizard creates the profile, a panel displays the details of the creation process.
  8. Review the completion panel, and click **Finish** to exit the wizard.

You created a profile to use the features of specific product packages.

The next step is to continue establishing your product environment by starting the deployment manager, and federating one or more nodes into its cell. You can also choose to create another profile. If the type of profile that you just created is a deployment manager profile, a product cell profile, or a WebSphere Application Server profile, you can launch the First steps console, which also has links to an installation verification test, and other information and features that relate to the deployment manager.

## Creating profiles from the command line

Use the **manageprofiles** command utility to create profiles from the command line.

To use the product features, you must augment at least one profile. Ensure that your environment meets all of the hardware and software requirements. Install WebSphere Application Server Network Deployment Version 6.1, and apply WebSphere Application Server Fix Pack 6.1.0.7 to update your Network Deployment product level. Next, install WebSphere Extended Deployment Operations Optimization Version 6.1.

The **manageprofiles** command creates the runtime environment for a WebSphere Extended Deployment process in a set of files called a profile. The profile defines the runtime environment, and includes all of the files that the server processes in the runtime environment can change.

## Profile creation templates

Use the `xd_augment` template to create profiles for the Operations Optimization component. The following steps describe how to create a stand-alone application server, deployment manager, custom, or cell profile:

1. To create a stand-alone application server profile, issue the following from the command line:
  - `install_root\bin\manageprofiles.bat (.sh) -create -templatePath install_root\profileTemplates\xd_augment\default`
2. To create a deployment manager profile, issue the following from the command line:
  - `install_root\bin\manageprofiles.bat (.sh) -create -templatePath install_root\profileTemplates\xd_augment\dmgr`
3. To create a custom profile, issue the following from the command line:
  - `install_root\bin\manageprofiles.bat (.sh) -create -templatePath install_root\profileTemplates\xd_augment\managed`
4. To create a cell profile, issue the following from the command line:
  - `install_root\bin\manageprofiles.bat (.sh) -create -templatePath install_root\profileTemplates\xd_augment\cell\dmgr -nodeProfilePath install_root\profiles\AppSrv01 -cellName cell01dmgr -nodeName node01dmgr -appServerNodeName node01`
  - `install_root\bin\manageprofiles.bat (.sh) -create -templatePath install_root\profileTemplates\xd_augment\cell\default -dmgrProfilePath install_root\profile\Dmgr01 -portsFile install_root\profile\Dmgr01\properties\portdef.props -nodePortsFile install_root\profiles\Dmgr01\properties\nodeportdef.props -cellName cell01dmgr -nodeName node01dmgr -appServerNodeName node01`

## Creating profiles for multiple products

You can create profiles for multiple product packages to further enhance your environment and utilize all of the product features that are available. You can also

create profiles that use WebSphere Extended Deployment features with the features of other IBM products, such as WebSphere Commerce Server and WebSphere Portal for Multiplatforms.

To create either type of profile, ensure that your environment meets all of the hardware and software requirements. Install WebSphere Application Server Network Deployment Version 6.1, and apply WebSphere Application Server Fix Pack 6.1.0.7 to update your Network Deployment product level.

- To create a profile that uses all of the features that are offered by the product, first install each of the three WebSphere Extended Deployment Version 6.1 packages: Operations Optimization, Compute Grid, and Data Grid. Continue this task by completing the following steps:
  1. Launch the Profile Management tool by clicking **Profile Management tool** from either the First Steps Console or the **Start menu**.
  2. Create a profile for WebSphere Extended Deployment Operations Optimization by following the steps that are outlined in the wizard. For further details, read about the profile creation process for individual product packages.
  3. Augment your newly created Operations Optimization profile by first applying the augment template for WebSphere Extended Deployment Data Grid. Next, augment the same profile by using the augment template for WebSphere Extended Deployment Compute Grid. Refer to the augmentation process for more information.
- To create a profile that combines the product features with other IBM products, install the other IBM product in your WebSphere Application Server Network Deployment environment. Additionally, ensure that your environment contains one or more WebSphere Extended Deployment Version 6.1 packages. Continue this task by completing the following steps:
  1. Start the Profile Management tool by clicking **Profile Management tool** from either the First Steps Console or the **Start menu**.
  2. Create a profile for WebSphere Extended Deployment Operations Optimization by following the steps that are outlined in the wizard. For further details, read about the profile creation process for individual product packages.
  3. Depending on what other product packages exist in your environment, augment the Operations Optimization profile by applying the augment template for the other package, either Compute Grid or Data Grid. If you install all three WebSphere Extended Deployment packages, complete a second augmentation of the Operations Optimization profile by applying the augment template for the remaining template. Refer to the augmentation process for additional details.

## Augmenting profiles

After you install the product, you can augment an existing profile to make it compatible with WebSphere Extended Deployment Operations Optimization Version 6.1. To use WebSphere Extended Deployment features, at least one profile augmented for the product must exist in your environment. Use the graphical user interface (GUI), which is provided by the Profile Management tool plugin, to complete this task.

Ensure that your environment meets all of the hardware and software requirements. Install WebSphere Application Server Network Deployment Version 6.1, and apply WebSphere Application Server Fix Pack 6.1.0.7 to update your

Network Deployment product level. Next, install WebSphere Extended Deployment Operations Optimization Version 6.1. At least one profile, which can already be augmented, must exist on your system to successfully complete this task.

. The Profile Management tool plugin for WebSphere Extended Deployment Operations Optimization enables the graphical user interface (GUI) to assist you in augmenting profiles to fully utilize the product features.

1. Launch the Profile Management tool. Click **Profile Management tool** from either the First Steps Console or the **Start menu**.
2. Click **Augment** to launch the profile augmentation wizard and augment a new profile. This panel appears only if there is an existing profile and an existing profile template present.
3. Review the Welcome panel, and click **Next**.
4. Select the existing profile from the list that you want to augment, and click **Next**.
5. Select the augment that you want to apply to the profile, and click **Next**. Note that some augment templates cannot be used more than once with each profile. If unsuccessfully attempted, a message appears that states the selected template does not support multiple augmentations. Click **OK**, and select a different template. The next panel verifies if the profile can be augmented by the selected template by checking for any server that is running in a profile.
6. Review the augmentation summary, and click **Augment**.
7. Review the completion, and click **Finish** to exit the wizard.

You successfully augmented the profile for WebSphere Extended Deployment Operations Optimization Compute Grid Data Grid.

As a next step, you can choose to launch the First Steps Console, or you can augment another profile. You can also federate the application server into a deployment manager cell by using either administrative console of the deployment manager or the **addNode** command.

## Augmenting and unaugmenting an application server profile with the WebSphere Extended Deployment templates

Use this utility to augment or unaugment an existing application server profile with the WebSphere Extended Deployment templates. An option to augment or unaugment a profile with the product templates is available during the installation of WebSphere Extended Deployment. If you did not select this option during installation and you want to augment or unaugment a profile, use this utility.

### Augmenting an existing application server profile

Use the **manageprofiles** command line tool to augment an existing application server profile with the WebSphere Extended Deployment templates. A script entitled **manageprofiles** is provided with the product. During the installation process, the script is copied onto the installation target workstations in the *install\_root*\bin directory.

Each product component has a specific template to use for profile augmentation:

1. To augment a stand-alone application server profile, issue the following from the command line:

- `install_root\bin\manageprofiles.bat (.sh) -augment -templatePath install_root\profileTemplates`

2. To augment a deployment manager profile, issue the following from the command line:

- `install_root\bin\manageprofiles.bat (.sh) -augment -templatePath install_root\profileTemplates\dmgr`

3. To augment a custom profile, issue the following from the command line:

- `install_root\bin\manageprofiles.bat (.sh) -augment -templatePath install_root\profileTemplates\custom`

4. To augment a cell profile, issue the following from the command line:

- `install_root\bin\manageprofiles.bat (.sh) -augment -profileName profile_name -templatePath install_root\profileTemplates\xd_augment\cell\dmgr`  
`install_root\bin\manageprofiles.bat (.sh) -augment -profileName profile_name -templatePath install_root\profileTemplates\xd_augment\cell\default`

## Unaugmenting an existing application server profile

Use the **manageprofiles** command line tool to unaugment an existing application server profile with the WebSphere Extended Deployment templates. The profile that you select to augment must not be the last profile that you augmented.

1. To unaugment a profile with the Operations Optimization `xd_augment` template, issue the following from the command line:

- a. `install_root\bin\manageprofiles.bat (.sh) -unaugment -ignoreStack -templatePath install_root\profileTemplates\xd_augment\profileType`

where `profileType` specifies one of the four profile types:

- Stand-alone application server profile
- Deployment manager profile
- Custom profile
- Cell profile

2. To unaugment a profile with the Compute Grid `wxdcg_augment` template, issue the following from the command line:

- a. `install_root\bin\manageprofiles.bat (.sh) -unaugment -ignoreStack -templatePath install_root\profileTemplates\wxdcg_augment\profileType`

where `profileType` specifies one of the four profile types:

- Stand-alone application server profile
- Deployment manager profile
- Custom profile
- Cell profile

3. To unaugment a profile with the Data Grid `wxddg_augment` template, issue the following from the command line:

- a. `install_root\bin\manageprofiles.bat (.sh) -unaugment -ignoreStack -templatePath install_root\profileTemplates\wxddg_augment\profileType`

where `profileType` specifies one of the four profile types:

- Stand-alone application server profile
- Deployment manager profile
- Custom profile
- Cell profile

## Augmenting profiles for multiple products

Augment profiles for multiple products to update your cell to include the functionality of all three WebSphere Extended Deployment Version 6.1 packages.

Install WebSphere Application Server Network Deployment Version 6.1, and then install each of the three WebSphere Extended Deployment packages: Operations Optimization, Compute Grid, and Data Grid.

Complete the following steps to augment a profile for multiple products, and update your deployment manager and nodes with all of the available product features.

1. Launch the Profile Management tool by clicking **Profile Management tool** from either the First Steps Console or the **Start menu**.
2. Follow the steps that are outlined in the wizard to apply the augment template for WebSphere Extended Deployment Operations Optimization.
3. Next, augment the same profile by using the augment template for the Compute Grid package.
4. Augment the profile again by using the augment template for the Data Grid package. Refer to the augmentation process for more information.

You successfully augmented the profile for multiple products.

## Non-root profile creation and augmentation

Use this topic to learn how to give a non-root user permissions for files and directories so that the non-root user can create a profile for the product.

Overall, non-root users are limited in being able to create and use profiles in their environment. Within the Profile Management tool, unique names and port values are disabled for non-root users. The non-root user must change the default field values in the Profile Management tool for the profile name, node name, cell name, and port assignments. Consider assigning non-root users a range of values for each of the fields. You can assign responsibility to the non-root users for adhering to their proper value ranges and for maintaining the integrity of their own definitions.

The term *installer* refers to either a root or non-root user. As an installer, you can grant non-root users permissions to create profiles and establish their own product environments. For example, a non-root user might create a product environment to test application deployment with a profile that he owns. Specific tasks that you can complete to allow non-root profile creation include the following items:

- Creating a profile and assigning ownership of the profile directory to a non-root user so that the non-root user can start WebSphere Application Server for a specific profile.
- Granting write permission of the appropriate files and directories to a non-root user, which allows the non-root user to then create the profile. With this task, you can create a group for users who are authorized to create profiles, or give individual users the ability to create profiles.
- Installing maintenance packages for the product, which includes required services for existing profiles that are owned by a non- user. As the installer, you are the owner of any new files that the maintenance package creates.

For further details, read the detailed information on creating profiles for non-root users, which includes the steps to complete the preceding task examples, in the WebSphere Application Server Network Deployment 6.1 Information Center.

As an installer, you can also grant permissions for a non-root user to augment profiles. For example, a non-root user can augment a profile that is created by an



installer, or augment a profile that he creates. Follow the WebSphere Application Server Network Deployment non-root user augmentation process to complete these tasks.

However, there are exceptions to note. When a non-root user augments a profile that is created by the installer, the following files do not need to be created by the non-root user before augmentation, because they were established during the profile creation process:

- `app_server_root/logs/manageprofiles.xml`
- `app_server_root/properties/fsdb.xml`
- `app_server_root/properties/profileRegistry.xml`

Also, do not modify the Linux or UNIX operating systems **Start menu** permissions.

When a non-root user augments a profile that he creates, the non-root user must modify the permissions for the documents that are located within the WebSphere Extended Deployment profile templates.

## First steps console




The First steps console is a post-installation ease-of-use tool for directing product elements from one place to another. Options display dynamically on the first steps console, depending on the features that you install and the availability of certain elements of a particular operating system.

### First steps options

Use the Profile Management tool to get started defining a cell, a deployment manager, and application servers for the cell. A cell consists of a deployment manager profile and a federated application server profile. You can also define stand-alone application servers. Each profile has its own First steps console. Options include verifying the installation, starting the deployment manager and application server processes, creating profiles, accessing the administrative console, launching the Migration wizard, and accessing the online information center.

A prompt to launch the First steps console displays on the last panel of the Profile Management tool, or you can also choose to start the First steps console later from the command line.

Launch the First steps console from the following location:

-     `install_root/firststeps/firststeps.sh`
-  `install_root\firststeps\firststeps.bat`

In addition to launching the First steps console from the WebSphere Extended Deployment Profile wizard, you can launch the tool manually by issuing the following commands:






-     `profile_root/firststeps/XD/` using `firststeps.sh`
-  `profile_root\firststeps\firststeps.bat`

Table 2. Available options for WebSphere Extended Deployment V6.1

| Option                       | Product | Profiles  |           |                    |                                |        |
|------------------------------|---------|-----------|-----------|--------------------|--------------------------------|--------|
|                              |         | Cell *    |           | Deployment manager | Stand-alone application Server | Custom |
|                              |         | Cell dmgr | Cell node |                    |                                |        |
| Installation verification    | No      | Yes       | No        | Yes                | Yes                            | No     |
| Start the deployment manager | No      | Yes       | No        | Yes                | No                             | No     |
| Start the server             | No      | No        | No        | No                 | Yes                            | No     |
| Administrative console       | No      | Yes       | No        | Yes                | Yes                            | No     |
| Profile Management tool      | Yes     | Yes       | Yes       | Yes                | Yes                            | Yes    |
| Information center           | Yes     | Yes       | Yes       | Yes                | Yes                            | Yes    |
| Migration wizard             | Yes     | Yes       | Yes       | Yes                | Yes                            | Yes    |
| Exit                         | Yes     | Yes       | Yes       | Yes                | Yes                            | Yes    |

\*When launching the First steps console from the Profile Management tool in a cell-creation flow, the Dmgr instance is used.

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## Index

### A

administrative console 27  
advanced topology 2  
Application server profile  
  augmenting 24

### C

command line 7  
console window 7  
create profiles 20, 23

### D

deployment manager 2, 3, 10

### F

firewall 2  
first steps 20, 23, 27

### H

high availability 2

### I

IBM Installation Factory 14  
install silently 7  
installation verification 27  
IP sprayer 2

### L

log file 6, 7, 16

### M

migration 27  
monitoring agent 2

### N

nodes 2  
non-root user 26

### O

ODR tier 2  
options file 7

### P

parameters 6, 7, 16  
port values 19, 20, 23  
prerequisites 2

profile 23, 26, 27  
profile list 6, 16  
profile management 19  
Profile Management tool plugin 19

### R

readme 4, 8  
repository 9  
response file 6, 16

### S

stand-alone application server 27

### T

test environment 2  
topology 3

### U

uninstall 10  
uninstalling silently 10

### W

WebSphere Application Server Network  
  Deployment 1  
WebSphere Extended Deployment 23  
  installing 1  
    centralized installation manager 9  
    configuring after install 20, 23, 26  
    preparing WebSphere Application  
      Server Network Deployment 3  
    silent installation 6, 16  
    steps for 4, 8  
  planning 2  
  planning to install 1  
  requirements 2  
  topology configuration 2  
  uninstalling 10



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