IBM® WebSphere® Extended Deployment V6.1

Installation

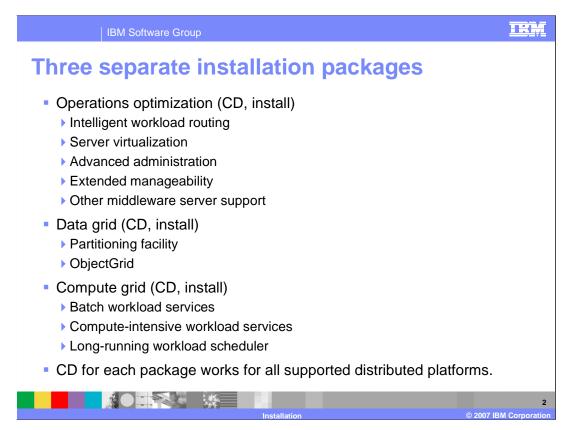This presentation will cover installing WebSphere Extended Deployment version 6.1.

This module references

WebSphere Extended Deployment Data Grid, which is now called WebSphere eXtreme Scale; and

WebSphere Extended Deployment Operations Optimization, which is now called WebSphere Virtual Enterprise.

Though the module uses the previous names, the technical material covered is still accurate.

Three separate installation packages

- Operations optimization (CD, install)
  - Intelligent workload routing
  - Server virtualization
  - Advanced administration
  - Extended manageability
  - Other middleware server support
- Data grid (CD, install)
  - Partitioning facility
  - ObjectGrid
- Compute grid (CD, install)
  - Batch workload services
  - Compute-intensive workload services
  - Long-running workload scheduler
- CD for each package works for all supported distributed platforms.

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WebSphere Extended Deployment version 6.1 is composed of three separate packages:

Operations optimization contains many performance, scalability, and administrative enhancements, and extends the WebSphere administrative domain to include support for middleware servers on nodes not running WebSphere Extended Deployment.

Data grid enables high-volume data-intensive applications.

Compute grid extends WebSphere application servers to allow long running work to run within the WebSphere J2EE environment.

Each of these packages is provided on a separate CD and must be installed separately.

Two ways to install

- As an 'add-on' product for WebSphere Application Server Network Deployment
  - ▶ Requires WebSphere Application Server V6.1
  - ▶ Fundamentally alters WebSphere Network Deployment operations

- WebSphere Extended Deployment middleware agent
  - ▶ Used to manage servers that are not running WebSphere Extended Deployment.
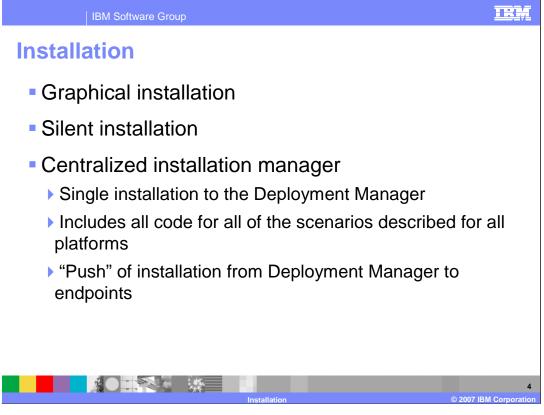 - ▶ Does not require WebSphere Application Server

The WebSphere Extended Deployment installer allows you to choose one of two installation types.

To install as an extension to WebSphere Application Server Network Deployment node, you must first install WebSphere Application Server Network Deployment version 6.1 and any required fixpacks and interim fixes. This option enables you to create WebSphere Extended Deployment resources like nodes, application servers, and dynamic clusters.

The second installation option installs a Java™-based agent to a system that does not have WebSphere Network Deployment previously installed. You can install the middleware agent on a node that is running other middleware servers that were created outside of WebSphere Extended Deployment.

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Installation

- Graphical installation

- Silent installation

- Centralized installation manager
  - ▶ Single installation to the Deployment Manager
  - ▶ Includes all code for all of the scenarios described for all platforms
  - ▶ "Push" of installation from Deployment Manager to endpoints

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You can install the product from the installation media by using the graphical interface or silently by specifying a fully-qualified response file, which you configure specifically to your needs.

After Extended Deployment is installed on the Deployment Manager, you can use the centralized installation manager, a component of operations optimization, to install WebSphere Extended Deployment on other nodes within the cell.
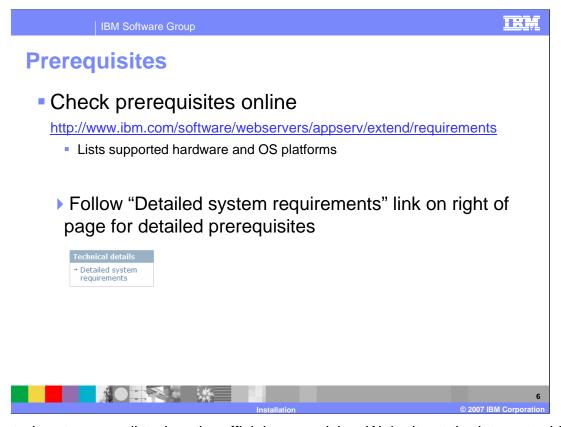
General installation process

- As extension to WebSphere Network Deployment, install:
  - WebSphere Application Server V6.1
  - Required WebSphere Application Server V6.1 fix packs
    - Both SDK and WebSphere
  - Required WebSphere Application Server interim fixes
  - WebSphere Extended Deployment V6.1

- Can create individual profiles before or after installation of WebSphere Extended Deployment
  - Existing profiles can be 'augmented' by Extended Deployment installer

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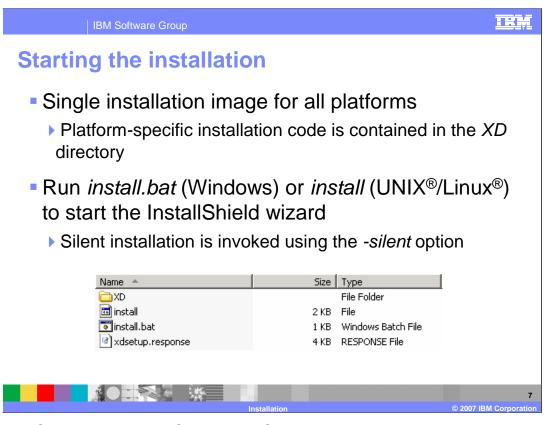Installation   © 2007 IBM Corporation

The general process for installing WebSphere Extended Deployment is as follows: First, install WebSphere Application Server Network Deployment version 6.1 and any required fixpacks and interim fixes. After you have fully updated your WebSphere Application Server installation, you can install WebSphere Extended Deployment. You can create profiles either before or after installing WebSphere Extended Deployment. If you create profiles before installation, the WebSphere Extended Deployment installer will allow you to augment your existing profiles, turning them into WebSphere Extended Deployment profiles.

Prerequisites

- ## Check prerequisites online

  http://www.ibm.com/software/webservers/appserv/extend/requirements

  - Lists supported hardware and OS platforms

  - ▸ Follow "Detailed system requirements" link on right of page for detailed prerequisites

    Technical details
    → Detailed system requirements

Supported systems are listed on the official prerequisites Web site at the internet address listed on this slide. Consult this site to check that you have the proper prerequisite hardware and software. This site specifies up to date platform support and prerequisite information, including version numbers.

Starting the installation

- Single installation image for all platforms
  - ▸ Platform-specific installation code is contained in the *XD* directory

- Run *install.bat* (Windows) or *install* (UNIX®/Linux®) to start the InstallShield wizard
  - ▸ Silent installation is invoked using the *-silent* option

Name ▲	Size	Type
XD		File Folder
install	2 KB	File
install.bat	1 KB	Windows Batch File
xdsetup.response	4 KB	RESPONSE File

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Unlike WebSphere Application Server, WebSphere Extended Deployment is delivered as a monolithic installation image that contains installation code for all of the supported platforms. After you have installed WebSphere Application Server and the necessary maintenance, launch the installer from the CD by running install or install.bat. As with other WebSphere product installers, silent installation can be invoked using the "-silent" option.

XD61_Install.ppt

Installation logs

- Main WebSphere Extended Deployment installation logs
  - ▸ <install_root>/logs/xd_operations/install/install.log
  - ▸ <install_root>/logs/xd_computegrid/install/install.log
  - ▸ <install_root>/logs/xd_datagrid/install/install.log

- augmentProfile<*profile_name*>.log
  - ▸ Logs for profile augmentation
  - ▸ Will contain reason for failure if the augment process fails

The installation log is located in the logs subdirectory of the directory that you selected for installation. The main installation log is named install.log. If your installation fails, check this log for errors. Tasks launched by the installer, such as profile augmentation, also have their own logs, but may exist inside the logs directory of an individual profile.

Uninstall

- WebSphere Extended Deployment has a separate uninstaller
  - ▶ Extended Deployment can be removed and a regular WebSphere Application Server installation will remain
  - ▶ Augmented profiles with be 'un-augmented'

- Located in <*INSTALL_ROOT*>/
  uninstall_xd_operations
  uninstall_xd_datagrid
  uninstall_xd_computegrid

- Silent uninstall also supported
  - ▶ Pass the -silent flag to the uninstaller

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Each WebSphere Extended Deployment package has its own uninstaller, located in the 'uninstall_xd_xxx' subdirectory. The uninstaller will remove WebSphere Extended Deployment, and leave your WebSphere Application Server installation in place. As with the WebSphere Application Server uninstaller, you can launch a silent uninstallation by passing the '-silent' flag to the uninstall program.

WebSphere Extended Deployment profiles

- Profiles not augmented during install must be augmented to have Extended Deployment capabilities

- Extended Deployment provides a plug-in to the profile creation and augmentation tool
  - ▶ Creates new WebSphere Extended Deployment profiles
  - ▶ Can create normal WebSphere profiles
    - These profiles have no WebSphere Extended Deployment capabilities unless they are augmented
  - ▶ Augments WebSphere Application Server profiles

Once you have installed WebSphere Extended Deployment, it is important to remember that profiles must be augmented before they gain WebSphere Extended Deployment capabilities. If you did not augment your profiles from the installer, use the manageprofiles command-line tool, or the profile creation and augmentation tool. WebSphere Extended Deployment extends the profile creation tool, provided with WebSphere Application Server, to allow it to create and augment WebSphere Extended Deployment profiles.

Summary

- WebSphere Extended Deployment is installed as an add-on to WebSphere Application Server Network Deployment
  - ▸ Requires WebSphere Application Server V6.1

- Extended Deployment provides a new profile creation tool
  - ▸ Creates new Extended Deployment profiles and augments existing profiles

- Installer can also install the remote monitoring agent
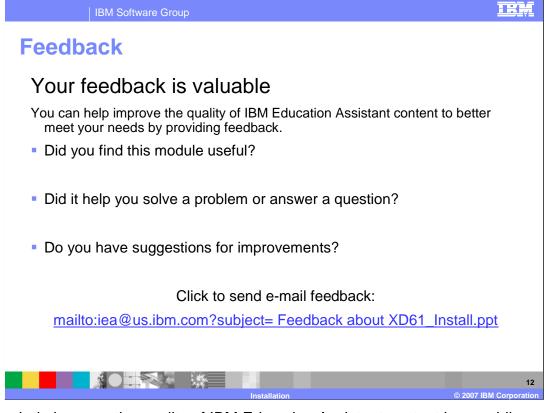
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In summary, installing WebSphere Extended Deployment version 6.1 requires that you first install WebSphere Application Server version 6.1, since WebSphere Extended Deployment is an add-on product, rather than a stand-alone product.

You must also augment your profiles, giving the nodes created on them WebSphere Extended Deployment capabilities.

In addition to installing the full WebSphere Extended Deployment product, the installer can also install a remote agent server on non-WebSphere nodes that you plan to include in your WebSphere Extended Deployment environment.

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