IBM Software Group

IBM WebSphere Enterprise Service Bus V6
IBM WebSphere Process Server V6

Installation and profile management
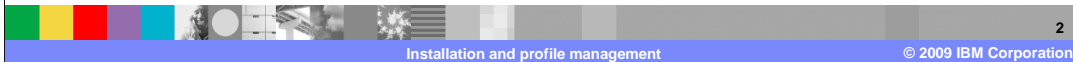
This module covers the installation process for the WebSphere® Enterprise Service Bus and the WebSphere Process Server V6.

Goals

- Overview and initial install information

- Installation and Profile management flow
  - ▸ Each installation screen

- Uninstall

- Installation process
  - ▸ WebSphere Enterprise Service Bus
  - ▸ WebSphere Process Server

2

The goal for this module is to provide an overview of initial installation information, then step through an installation and profile management creation flows discussing information on each installation screen. The silent install and uninstalling the product will also be covered. The installation process is now common for the WebSphere Enterprise Service Bus and the WebSphere Process Server V6. From this point forward, all slides represent the installation for both the WebSphere Enterprise Service Bus and the WebSphere Process Server. Only the very few differences are pointed out.

Section

Installation overview

3
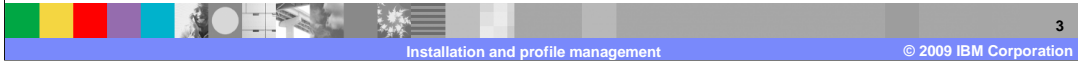
This section provides an overview of the installation process.

Installation overview

- V6 Installer
  - ▶ Based on InstallShield MultiPlatform
  - ▶ Supports interactive and 'silent' installation
  - ▶ Common installation process
    - WebSphere Enterprise Service Bus
    - WebSphere Process Server
  - ▶ Database scripts provided separately

- Profile management tool
  - ▶ Basic profile creation - typical
  - ▶ Deployment environment installation
    - Security enabled
   - Three network deployment topologies

4
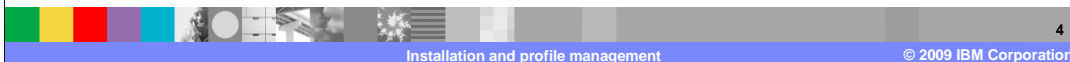
The WebSphere Process Server V6 installer is an InstallShield MultiPlatform based installer that supports interactive and silent installs. The WebSphere Enterprise Service Bus installation is a subset of the installation process but follows the same flow as the installation of the WebSphere Process Server. When installing the WebSphere Process Server, the WebSphere Enterprise Service Bus is included as part of that installation. The database scripts are provided separately on the installation DVD to allow the database to be created before installation.

The installation process will run the profile management tool as part of the installation. During the installation panel flow there are settings that are used for the creation of a profile if a profile type is selected. The typical installation allows the creation of stand-alone, deployment manager or custom profiles. The deployment environment installation requires that security is enabled and allows the selection of one of the three standard network deployment topology types.

Interim fixes

- Custom install packages only

- Default directory
  - <INSTALL_IMAGE_LOC>/WBI/WBI_Fixes

- Specified directory
  - Windows®: install.bat –OPT fixLocation=<user_fix_dir>
  - UNIX®: install.sh –OPT fixLocation=<user_fix_dir>

- Installation order
  - Check WBI_Fixes
  - Check user_fix_dir - takes precedence

- iFixes shown in final installation panel

5
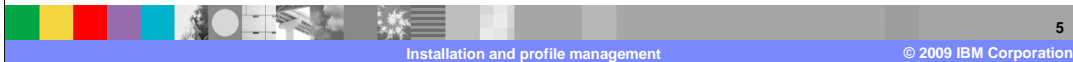
The installation now allows iFixes to be installed during the product installation. These iFixes must be packaged as a custom install package and be located in a directory that can be found by the installation. This requires that the installation disks be copied to writable media to use the default directory. During silent installation using scripts, a location can be specified. During installation, the default directory is checked followed by the specified directory which takes precedence. A GUI installation will show all iFixes being installed on the final installation panel.

Database scripts available

- DB scripts to be exposed:
  - scheduler.wbi
  - common.wps
  - common.esb
  - sibxmeditiation.scripts
  - persistentLockManager
  - interfaceMediation
  - recovery.ejb
  - relationshipService
  - customization
  - bpcobservermodel
  - workflow.common
- Launchpad access
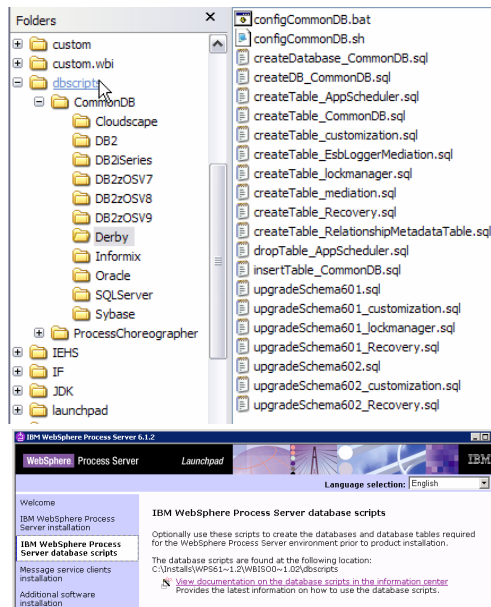
All of the database scripts have been provided in a separate dbscripts directory to allow these to be used outside of the installation. These scripts can also be accessed directly through the launchpad. There are many scenarios where you might prefer to have the databases created before the installation. Many configurations require the database to be on a separate system.

Section

New installation
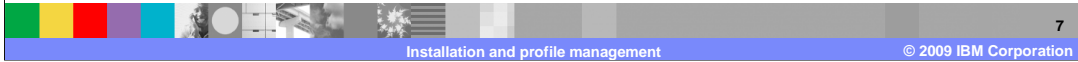
This section covers the installation process.

Typical flow

- Typical flow of install process
  - ▶ Launchpad screen
  - ▶ Welcome screen
  - ▶ License acceptance screen
  - ▶ System prerequisites check screen
  - ▶ Existing server detection screen
  - ▶ Existing WebSphere Application Server detection screen
  - ▶ Installation type selection screen
  - ▶ Feature selection screen
  - ▶ Installation root directory screen
  - ▶ Server environment
  - ▶ Enable security
  - ▶ Installation summary screen
  - ▶ Finish screen

8

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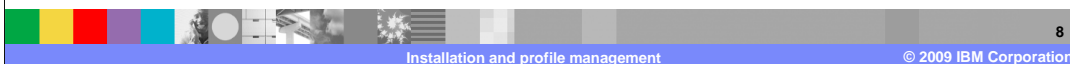
Once you select the WebSphere Process Server installation from the launchpad screen, a typical sequence of V6.2 installation screens is shown here. The first one is the welcome screen, which always leads into the license acceptance screen. Then the installer will do a system prerequisites check similar to WebSphere Application Server installation. The installer will check for existing WebSphere Application Server or WebSphere Application Server Network Deployment or WebSphere Process Server installations. As the installation flows through each panel, installation options for feature selection, installation root and the server environment must be entered. The security panel has security enabled as the default which requires a username and password to be entered. The installation summary reviews the previous selections and allows backward movement to make any required changes.

Runtime installation features

- Full V6 installations based on the common installation engine
  - SOA Core
  - BPC
  - WebSphere Enterprise Service Bus
  - WebSphere Process Server
- Trade up installations
  - SOA Core -> BPC
  - SOA Core -> WebSphere Enterprise Service Bus
  - SOA Core -> WebSphere Process Server
  - BPC -> WebSphere Process Server
  - WebSphere Enterprise Service Bus -> WebSphere Process Server
  - No BPC -> WebSphere Enterprise Service Bus or WebSphere Enterprise Service Bus -> BPC since these are not subsets or supersets of each other
- Install WebSphere Application Server Network Deployment V6 or use existing V6 installation
- Install as a non-root user
- Profile creation and augmentation
- Install latest documentation and Eclipse viewer

Each of these component installations is based on the Common Install Engine. This makes it possible to upgrade from a subset installed component to a component that contains that subset. The most common scenario might be an installed WebSphere Enterprise Service Bus being upgraded to support the WebSphere Process Server as the need for J2EE™ applications becomes a requirement. During the installation of any of these components, a WebSphere Application Server for Network Deployment is installed or an existing V6 application server which is already installed can be used. Installation as a non-root user is now available on all components and platforms and the profile management tool is called directly through extensions for profile creation and augmentation during installation. In addition to the component install enhancements, the latest documentation and the Eclipse viewer can be installed over the internet from the product launchpad.

Launchpad options

The launchpad provides additional installation options that support the WebSphere Process Server installation, which is launched from here. The stand-alone message clients for C and C++ or .NET are available. Additional software installation provides the IBM HTTP server, Web server plug-ins, application clients, and the application server toolkit. The creation of customized installation packages is supported using the IBM Installation Factory. Documentation and support are provided through the Eclipse help system, the IBM Support Assistant, and through links to the product Web sites.

System prerequisites check

System prerequisites check

Passed: Your operating system completed the prerequisites check successfully.

The installation wizard checks your system to determine whether a supported operating system is installed and whether the operating system has the appropriate service packs and patches.

- Prerequisite check similar to WebSphere Application Server install
  - Checks for supported OS levels
  - Checks for required fix packs, service packs or patches
  - Does not check for
    - Minimum memory or processor requirements
    - Minimum disk space requirements
    - Any other required software
  - Allows installation to proceed after warning even if check fails

11
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The welcome and license acceptance screens are self explanatory. On the System Prerequisite check screen, the installer does a prerequisite check similar to WebSphere Application Server installation, checking for supported OS levels, required fix packs, service packs, or patches. However, it does not check for minimum memory or processor requirements, minimum disk space requirements, or any other required software at this time. Even if this check fails, installation is allowed to proceed.

Installation type

WebSphere Process Server Installation Type Selection

Select the type of installation that best suits your needs.
Installation Types:
Typical Installation
Deployment Environment Installation
Client Installation

- Typical
  - ▸ Stand-alone server
  - ▸ Deployment manager
  - ▸ Custom profile
- Complete deployment environment installation – Discussed in clustering
- Client – small footprint

The installation type panel allows selection of typical, deployment environment or a client installation. The typical installation supports a stand-alone server, a deployment manager, a custom profile to by used as a node, or none. The deployment environment allows the selection of one of three preconfigured Network Deployment topologies. This installation type is discussed in detail in the clustering modules. The client installation provides a lightweight client environment which is used to access applications running in the WebSphere Process Server. The client installation is not supported in the WebSphere Enterprise Service Bus installation.

Installation detections

- Installation will detect existing installations of:
  - WebSphere Application Server
  - WebSphere Application Server Network Deployment
  - WebSphere Enterprise Service Bus
  - WebSphere Process Servers

- You can choose to
  - Install a new copy of V6
  - Add new features to existing installation (incremental installation)
    - Feature selection screen presented
    - Previously installed features is listed as "(installed)"
    - Previously installed features cannot be uninstalled, even if the check box is cleared
  - Create or augment an existing profile
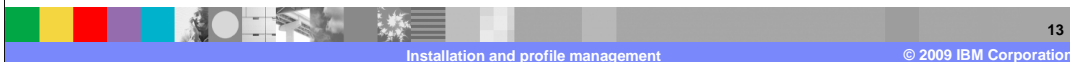
In the installation detections screen, the installer will detect existing installations of WebSphere Application Server, WebSphere Application Server Network Deployment, and WebSphere Process Server. You can choose to install a new copy of WebSphere Process Server V6 or add new features to an existing installation (incremental installation). The Profile Wizard can be launched for an existing installation to create a new profile or augment an existing profile. With the incremental installation, the feature selection screen is presented and previously installed features are listed as "(installed)" though they cannot be uninstalled, even if the check box is cleared.

Features selection

- Samples

- WebSphere Process
  Server deprecated features

Features Selection

Select IBM WebSphere Process Server features to install. See the information center for descriptions of the features.

- [ ] Business Rule Beans (deprecated)
- [ ] Extended Messaging Service(deprecated)
- [ ] WebSphere Process Server samples

- WebSphere Enterprise
  Service Bus

Features Selection

Select IBM WebSphere Enterprise Service Bus features to install. See the information center for descriptions of the features.

- [ ] WebSphere Enterprise Service Bus samples

Both Extended Messaging and Business Rule Beans will run on V6, but do not have creation support. These deprecated features have now been removed from the installation. Selecting Samples will also cause WebSphere Network Deployment Samples to be installed. The WebSphere Enterprise Service Bus installation only allows you to select samples. The JavaDoc for the usage APIs is installed by default.

Installation root directory

- Install close to the root directory
    - ▶ 256 character path limit for Windows

- No spaces or non-letter characters in the path name

- Examples:
    - ▶ C:\ProcServer
    - ▶ C:\WPRCS61

15

At the Installation Root directory screen, you are prompted for the WebSphere Process Server installation root. Install as close to the system root directory as possible. With a shorter path, you are less likely to run into the 256 character path limit. Try not to use spaces or non-alpha characters in the path name.

Environments

WebSphere Process Server Environments

Select the type of WebSphere Process Server environment to create during installation. Although only one environment type can be chosen, additional profiles can be created after installation using the Profile Management Tool.

Stand-alone server
Deployment manager
Custom
None

- Installation includes
  - ▶ WebSphere Application Server Network Deployment
  - ▶ WebSphere Enterprise Service Bus
  - ▶ WebSphere Process Server
- Environments
  - ▶ Stand-alone server
  - ▶ Deployment manager
  - ▶ Custom
    - ▪ Federate node
    - ▪ Deployment manager security
  - ▶ None

Enable Administrative Security

Choose whether to enable adminstrative security. To ena user name and password to log in to the administrative to user is created in a repository within the process server c Bus. After installation finishes, you can add more users, repositories.

☑ Enable administrative security.

User name:

Password:

Confirm password:

Federation

Specify the host name or IP address and the SOAP port number for an existing deployment manager. Federation can occur only if the deployment manager is running and the SOAP connector is enabled. Otherwise, choose to federate the node later.

Deployment manager host name or IP address:

localhost

Deployment manager SOAP port number (8879 is the default):

8879

Deployment manager authentication

If administrative security is enabled on the deployment manager, provide a user name and password that can be authenticated.

User name:

Password:

☐ Federate this managed node later using the **addNode** command.

If you are installing a stand-alone WebSphere Process Server V6, the installation includes WebSphere Application Server Network Deployment V6 and will also include an installation of the WebSphere Enterprise Service Bus. All installations are installed at the same location install root.

A stand-alone server, deployment manager, or custom environment can be selected to create a profile during the installation. If none is selected, then no profile is created and the profile management tool must be run to create a profile before the server can be used. Both the stand-alone server and the deployment manager server have security enabled by default. The custom selection allows the node to be federated into a Network Deployment configuration by specifying the deployment manager with the user-name and password. There is also an option to federate this custom node later after the installation.

Installation summary screen

- Features to be installed

- Checks for available disk space

- Checks available temporary disk space on UNIX and Linux® systems
  - ▸ Does not check for this on Windows

- Profile type

- Security enabled

Installation Summary

Review the summary for correctness. Click **Back** to change values on previous panels. Click **Next** to start installing WebSphere Process Server.

The following products will be installed:

- **WebSphere Process Server**
  Product installation location: C:\Program Files\IBM\WebSphere\ProcServer
- **WebSphere Application Server Network Deployment**
  Product installation location: C:\Program Files\IBM\WebSphere\ProcServer

The following features will be included:

- Core product files
- WebSphere Process Server samples

The total size will be:

- 1699 MB

The following profile type was selected:

- Stand alone

Administrative security enabled:

- False

The installation summary screen lists the products and features to be installed and checks for available temporary disk space on UNIX and Linux systems. This check is not performed on Windows systems. Clicking on next will start the installation with a progress bar being shown. A final panel is shown showing the status of the installation. Clicking on finish will open the first steps panel.

First steps

IBM WebSphere Enterprise Service Bus (ESB) - First steps - ESB01

This is the first steps console for the stand-alone server defined in the following profile: ESB01

Installation verification
Confirm that your server is installed and that it can start properly.

Start the server
The server is not running: click here to start the server and its applications.

Administrative console
Deploy service applications, configure and manage application integration, the server and bus environment, and the underlying full administrative resources. To activate this link, start the server.

Profile Management Tool
Create or augment another profile. For more information about profiles, see the information center.

Samples gallery
See WebSphere ESB and WebSphere Application Server in action. To activate this link, start the server.

Information center
Find all the information you need to install, maintain and use WebSphere ESB and WebSphere Integration Developer.

Migration wizard
Migrate a profile to WebSphere ESB Version 6.1.

Exit

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18

The first steps panel is a single place to control, manage, and configure the server. The administrative console can be launched into a browser which allows application deployment, configuration, and management of the server environment. Starting the profile management tool will allow additional servers to be created or enhancements to be made to the existing server. Access to sample applications and documentation in the information center is also provided. The migration wizard allows the profile, applications, and database information to be migrated from a previous V6 installation.

Silent installation

- Install wizard and profile wizard can be invoked silently

- Silent installation can be linked to silent profile wizard invocation

- Sample response file is shipped on the CD and ESD image
  - Supports custom install only
  - Can be easily modified

There is silent installation support for WebSphere Process Server V6. A sample response file is shipped on the CD and ESD image, allowing you to create custom silent installation scripts. The sample supports custom installation only and can be easily modified.

Uninstalling

- **WebSphere Process Server stand-alone installations**
    - ▶ Option to uninstall the underlying WebSphere Application Server
        - ▪ Default will uninstall the underlying WebSphere Application Server
    - ▶ Profiles augmented by WebSphere Process Server are un-augmented
    - ▶ Uninstall the underlying WebSphere Application Server
        - ▪ all profiles are first unaugmented and then deleted
- **Uninstall can be run silently**

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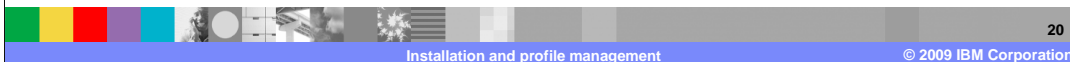
The uninstaller allows you to uninstall the underlying WebSphere Application Server or WebSphere Application Server Network Deployment. The underlying WebSphere Application Server Network Deployment can be selected for uninstallation by default if WebSphere Process Server was an umbrella installation. If you choose not to uninstall the underlying WebSphere Application Server, any profiles that have been augmented by WebSphere Process Server can be unaugmented as long as WebSphere Process Server is the last augmenter. If you choose to uninstall the underlying WebSphere Application Server, all profiles are first unaugmented and then deleted. The uninstall process can also be run silently.

Section

Summary

Installation and profile management

This section summarizes the topics discussed in this presentation.

Summary

- Discussed Installation of WebSphere Process Server V6
  - Covered an overview and initial install information
  - Stepped through installation flow discussing information on each installation screen and uninstall

- Profile management tool
  - Typical installation
  - Deployment environment installation

This module covered the WebSphere Process Server V6 installation. It also covered initial installation information and stepped through the installation flow. You were shown how to update an existing installation and how to uninstall. Troubleshooting topics like known limitations, best practices, and debugging and logging information were also covered. The profile management tool was shown as part of the installation but can also be run separately to create additional profiles. The deployment environment creation option in the profile management tool is discussed in the clustering modules.
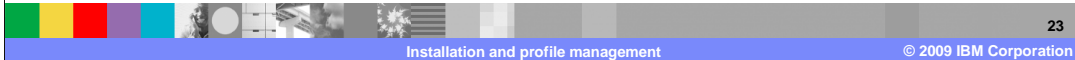
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23

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