IBM Software Group

WebSphere® Process Server V6.0

Installation Presentation

This presentation will cover installation of WebSphere Process Server V6.0.

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Presentation Goals

- Discuss Installation of WebSphere Process Server V6.0
  - ▸ Cover an overview and initial install information
  - ▸ Step through installation flow discussing information on each installation screen, including uninstall
  - ▸ Discuss troubleshooting topics like known limitations, best practices, and debugging/logging information

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The goal is to provide an overview of initial install information, then step through an installation flow discussing information on each installation screen, including uninstall. Troubleshooting topics such as known limitations, best practices, and debugging/logging information will also be discussed.

Process Server Install - Agenda

- **Installation Overview**

- Install Flow / Information on Install Screens

- Troubleshooting

- Summary

This section will provide an overview of the installation process.

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Installation Overview

- WebSphere Process Server V6.0 GUI Installer is an ISMP based GUI Installer
  - ISMP = InstallShield MultiPlatform

- Supports interactive GUI and silent installs

- Two installation types
  - Complete Install
    - Discussed in this presentation
  - Custom Install
    - Also discussed in this presentation, but profile creation discussed in a separate Profile Creation Wizard presentation

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The WebSphere Process Server V6.0 GUI Installer is an InstallShield MultiPlatform (ISMP) based GUI Installer that supports interactive GUI and silent installs. The two installation types available are complete install, which is covered in detail by this presentation, and custom install. Custom installation is also discussed in this presentation, but profile creation is discussed in a separate Profile Creation Wizard presentation.

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Silent Install

- Install Wizard and Profile Wizard can be invoked silently

- Silent install 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 by customers

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There is a silent install support for WebSphere Process Server V6.0. A sample response file is shipped on the CD and ESD image, allowing you to create your own silent install scripts. It supports custom install only and can be easily modified.

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Process Server Install - Agenda

- Installation Overview
- **Install Flow / Information on Install Screens**
- Troubleshooting
- Summary

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This section will cover a typical installation flow of screens and provide a description of each one.

Typical Flow

- Typical flow of WebSphere Process Server install
  - Welcome screen
  - License acceptance screen
  - System prerequisites check screen
  - Existing WAS/WAS ND detection screen
  - Existing WPS detection screen
  - Installation root directory screen
  - Installation type selection screen
  - Feature selection screen
  - Installation summary screen
  - Finish screen

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A typical sequence of WebSphere Process Server V6.0 installation screen 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. Then the installer will check for existing WAS/WAS ND/WPS installs. You will then be asked where you would like WebSphere Process Server V6.0 installed in the installation root directory screen. Next you will be asked to choose between two installation types, Complete and Custom, in the installation type selection screen. The custom installation provides a feature selection screen. However, both types will show an installation summary screen before installing the server. The last screen is the finish screen, where you will be prompted to open the First Steps or Profile Creation Wizard.

System Prerequisite Check

System prerequisites check

The Installation Wizard checks your system to determine whether a supported operating system is running and whether the operating system has the appropriate service packs and patches. After checking prerequisites, the Installation Wizard checks for existing WebSphere Application Server and WebSphere Process Server products.

Your system completed the prerequisites check successfully.

- Prerequisite check similar to WAS 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
  - Will allow install to proceed after warning even if check fails

The welcome and license acceptance screens are self explanatory. On the System Prerequisite check screen, the installer does a prerequisite check similar to WAS install, 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, install is allowed to proceed.

Install Detections

- Install will detect existing installs of WebSphere Application Server (WAS), WAS ND, and any other WebSphere Process Servers
- User can choose to
  - Install a new copy of WPS 6.0
  - Add new features to an existing installation (incremental install)
  - Launch the Profile Wizard for an existing installation to create a new profile or augment an existing profile
- For incremental install
  - Feature selection screen presented
  - Previously installed features will be listed as "(installed)"
  - Previously installed features cannot be uninstalled, even if the checkbox is unchecked

Detected WebSphere Process Server 6.0

The Installation Wizard detected an existing installation Server 6.0 on your computer. You can install a new copy copy, or launch the Profile Wizard.

- Install a new copy of WebSphere Process Server 6.0
- Add features to an existing copy of WebSphere Process Server 6.0
- Launch the Profile Wizard for an existing copy of WebSphere Process Server 6.0

In the install detections screen, the installer will detect existing installs of WAS, WAS ND, and WPS. You can choose to Install a new copy of WPS 6.0, add new features to an existing installation (incremental installation), or launch the Profile Wizard for an existing installation to create a new profile or augment for an existing profile.

With the incremental installation the feature selection screen presented, the previously installed features will be listed as "(installed)" though they cannot be uninstalled, even if the checkbox is unchecked.

Installing Over Existing WAS/WAS ND

- Existing install detection screen is displayed if
  - Existing WAS or WAS ND 6.0.0.x or 6.0.1.x installation is detected
  - There is not already a copy of WPS 6.0 installed over the detected WAS/WAS ND

- User can choose to install on top of detected WAS/WAS ND or install a new copy of WAS ND

- Existing version of WAS/WAS ND will be moved up to the proper service level (6.0.1.2 + cum iFix) as part of the install

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If you are installing over an Existing WAS or WAS ND, the existing install detection screen is displayed when an existing WAS or WAS ND 6.0.0.x / 6.0.1.x installation is detected or when there is not already a copy of WPS 6.0 installed over the detected WAS/WAS ND. You can choose to install on top of detected WAS/WAS ND or install a new copy of WAS ND. Any existing version of WAS/WAS ND will be moved up to the proper service level (6.0.1.2 + cum iFix) as part of the install.

Installing Stand-Alone

- WebSphere Process Server V6.0 install ships with a full copy of WAS ND 6.0.1.2 + a cumulative iFix

- WPS install will silently install this version of WAS ND

- Both WPS and WAS ND are installed into the same install location

- Install summary screen displays disk space requirements for both WPS and WAS ND

- If the Process Server samples feature is selected then WAS ND samples are also installed

WebSphere Process Server - Install
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If you are installing a stand-alone WebSphere Process Server V6.0 (WPS), the install ships with a full copy of WAS ND 6.0.1.2 + a cumulative iFix, and will silently install this version of WAS ND. Both WPS and WAS ND are installed into the same install location. The install summary screen displays disk space requirements for both WPS and WAS ND. If the WPS samples feature is selected, then the WAS ND samples are also installed.

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Installation Root Directory

- Highly recommended to install as close to the computer's root directory
  - ▶ The shorter the install path, the less you are prone to run into the 259 character path limit

- Try not to use spaces or non-letter characters in the path name

- Examples:
  - ▶ C:/ProcServer
  - ▶ C:/WPRCS60

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At the Installation Root directory screen, you will be asked where you want to install the Process Server. It is highly recommended that you install as close to the system root directory as possible. The shorter the install path, the less likelihood that you will run into the 259 character path limit some customers run into using long path names. Try not to use spaces or non-alpha characters in the path name. Examples: C:/ProcServer and C:/WPRCS60.

Complete Install

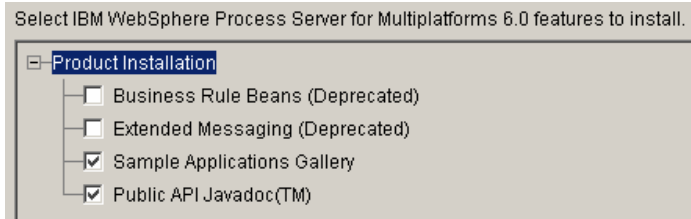
- Complete Install
    - Installs default features (Samples and Javadoc)
    - Silently creates a default stand-alone process server profile
    - Selects defaults for all profile wizard screens and does not provide an option to run the profile wizard
    - Finish screen (last screen) allows launch of First Steps page

For the complete installation, the default features (Samples and Javadoc) are installed. It silently creates a default stand-alone process server profile which selects all the defaults for the profile wizard screens and does not provide an option to run the profile wizard. The finish screen (last screen) allows launch of the First Steps page. A complete install will take over an hour depending on system specs.

Custom Install

Select IBM WebSphere Process Server for Multiplatforms 6.0 features to install.

```
□ Product Installation
    □ Business Rule Beans (Deprecated)
    □ Extended Messaging (Deprecated)
    ☑ Sample Applications Gallery
    ☑ Public API Javadoc(TM)
```

- Custom Install
  - ▶ Can check or uncheck 4 features
    - Samples, JavaDoc
    - Extended Messaging, Business Rule Beans (both deprecated in V6.0)
  - ▶ Selection of Samples will also cause WAS ND Samples to be installed
  - ▶ Does not create a default profile
  - ▶ Finish screen (last screen) allows launch of the Profile Wizard
  - ▶ Profile setup discussed in Profile Creation Wizard presentation

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The custom install allows you to check or uncheck the 4 features. Samples and JavaDoc are installed by default by the Complete Install. Both Extended Messaging and Business Rule Beans will run on 6.0, but do not have creation support and are not slated to be in the next full version. Selection of Samples will also cause WebSphere ND Samples to be installed.

Custom install is recommended for most customers. It does not create a default profile, but allows you to launch the Profile Creation Wizard on the finish screen (last screen) to define your own profile. The Process Server Profile needs more details than WebSphere Profile, which is the reason for recommending a Custom install.   Profile setup is discussed in the Profile Creation Wizard content.

Custom installation will take less time since a default profile is not created. However, a profile is needed to start the server.

Installation Summary screen

- Lists out features to be installed

- Lists out and checks for available disk space

- Also checks for available temporary disk space on Unix/Linux systems
  - ▸ Does not check for this on Windows (open issue)

- Includes space needed for the umbrella WAS ND install (when performed)

- Includes space needed for default profile for Complete installs

The installation summary screen lists the features to be installed and checks for available temporary disk space on Unix and Linux systems. This check is not currently performed on Windows systems. The check includes space needed for the umbrella WAS ND install (when performed) and the default profile for Complete installs.

Uninstall

- Allows the user to uninstall the underlying WAS or WAS ND

- Underlying WAS ND will be selected for uninstallation by default if WebSphere Process Server was an umbrella install

- If you do not uninstall the underlying WAS
  - Any profiles that have been augmented by WPS will be unaugmented as long as WPS is the last augmentor

- If you do uninstall the underlying WAS
  - All profiles will be first unaugmented and then deleted

- Uninstall can be run silently

The uninstaller allows you to uninstall the underlying WAS or WAS ND. The underlying WAS ND will be selected for uninstallation by default if WebSphere Process Server was an umbrella install. If you do not uninstall the underlying WAS any profiles that have been augmented by WPS will be unaugmented as long as WPS is the last augmentor. If you do uninstall the underlying WAS, all profiles will be first unaugmented and then deleted. Uninstall can also be run silently.

Process Server Install - Agenda

- Installation Overview

- Install Flow / Information on Install Screens

- **Troubleshooting**

- Summary

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This section covers troubleshooting, including known limitations, best practices, debug and logging information.

Known Limitations

- Cannot augment an already federated custom profile
  - ▶ Check Process Server technotes on how to unfederate a node

- DB2 on OS/390 is not supported in Process Server 6.0
  - ▶ Even though support is listed on the panels

- There are a number of accessibility problems with the Install and Profile Wizard GUIs
  - ▶ Again, check Process Server technotes written on these problems

- Installer is English only for Process Server 6.0
  - ▶ May run into problems installing with CEI onto double byte systems
    - ▪ CEI is installed as part of the WPS Install

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There are several known limitations pointed out in the WebSphere Process Server readme and release notes. However, there are a couple that will be pointed out here. For instance, you cannot augment an already federated custom profile. Check the Process Server technotes on how to unfederate a node since that is beyond the scope of this presentation. DB2 on OS/390 is not supported in WebSphere Process Server V6.0 even though support is listed on the panels. There are a number of accessibility problems with the Install and Profile Wizard GUIs. Again, there are a number of Process Server technotes written on these problems. The installer is English only for WebSphere Process Server 6.0. You might also, encounter problems installing with common event infrastructure (CEI) onto double byte systems. CEI is installed as part of the Process Server install.

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Best Practices

- Limit use of Complete install
    - Does not let you configure your profile
    - Selects all defaults
    - Use Custom install and run the Profile Wizard

- Use the Installation Guide from WebSphere Process Server V6.0 online Information Center (InfoCenter)
    - http://publib.boulder.ibm.com/infocenter/dmndhelp/v6rxmx/index.jsp

- If installation failed
    - Refer to InfoCenter when uninstalling any installed portions before reinstalling
        - Go to the following selection in the navigation panel: WebSphere Process Server 6.0 > Installing > Uninstalling the product > Preparing for reinstallation after a failed uninstallation.

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Here are a few best practices, in addition to the information in the information center, readme, and release notes. Limit use of Complete install since it does not let you configure your profile and selects all the defaults for that profile. Instead, use "Custom" install and run the Profile Wizard.

Always refer to the Installation Guide from WebSphere Process Server V6.0 online Information Center (InfoCenter) at
http://publib.boulder.ibm.com/infocenter/dmndhelp/v6rxmx/index.jsp

If the installation fails, refer to the Information Center when uninstalling any installed portions before reinstalling. Go to the WebSphere Process Server 6.0 > Installing > Uninstalling the product > Preparing for reinstallation after a failed uninstallation navigation panel for more information.

Debug Install Errors

- Use collector.bat (very useful to IBM Support)
- The full set of files to immediately gather are:
  - ▶ <profilePath>/logs/*   (zip recursively)
  - ▶ <profilePath>/properties/*
  - ▶ <WAS_HOME>/logs/wasprofile/*<profileName>*
  - ▶ <WAS_HOME>/logs/wbi/*
  - ▶ <WAS_HOME>/properties/profileRegistry.xml
  - ▶ <WAS_HOME>/properties/wasprofile.properties

To debug install errors, immediately gather the full set of files listed here:

<profilePath>/logs/*   (zip recursively)

<profilePath>/properties/*

<WAS_HOME>/logs/wasprofile/*<profileName>*

<WAS_HOME>/logs/wbi/*

<WAS_HOME>/properties/profileRegistry.xml

<WAS_HOME>/properties/wasprofile.properties

When working with IBM support, you can quickly run the collector.bat to collect all the necessary files to send to support.

Install Logs

- log.txt
  - On Linux and UNIX platforms: *install_root*/logs/wbi/log.txt
  - On Windows platforms: *install_root* \logs\wbi\log.txt
  - Logs all installation events relating to WebSphere Process Server
  - **INSTCONFFAILED**
    - Total installation failure
  - **INSTCONFSUCCESS**
    - Successful installation
  - **INSTCONFPARTIALSUCCESS**
    - Installation errors occurred but the installation is still usable
    - Additional information in other log files identifies the errors

There is an install log aptly called log.txt. On Linux, UNIX, and Windows platforms, this file can be found in *install_root*/logs/wbi/log.txt. The log.txt logs all installation events relating to WebSphere Process Server. There are three possible results in the log.

INSTCONFFAILED means the installation failed.

INSTCONFSUCCESS means the installation was successful.

INSTCONFPARTIALSUCCESS means that errors occurred during the installation, but the installation is still usable. Additional information in other log files identifies the errors.

Install Logs

- inst_config.log
  - On Linux and UNIX platforms: *install_root* /logs/wbi/instconfig.log
  - On Windows platforms: *install_root*\logs\wbi \instconfig.log
  - Logs configuration actions that run at the end of the installation process to configure components, install system applications, and create Windows shortcuts and registry entries.
  - Contains a series of <record> elements that document the configuration actions. If a post-installation configuration action fails, text like the following appears in the log:

```
<record>
    <date>2005-05-26T11:41:17</date>
    <millis>1117132877344</millis>
    <sequence>742</sequence>
    <logger>com.ibm.ws.install.configmanager. ConfigManager</logger>
    <level>WARNING</level>
    <class>com.ibm.ws.install.configmanager .ConfigManager</class>
    <method>executeAllActionsFound</method>
    <thread>12</thread>
    <message>Configuration action failed: com.ibm.ws.install.configmanager.actionengine.ANTAction-
    D:\WBI\AS\properties\version\install.wbi\6.0.0.0\config\full\install\90SInstallCEI.ant</message>
</record>
```

The inst_config.log will log configuration actions that run at the end of the installation process to configure components, install system applications, and create Windows shortcuts and registry entries.   This file is found on Linux, UNIX, and Windows platforms under *install_root* /logs/wbi/instconfig.log. It contains a series of <record> elements that document the configuration actions. If a post-installation configuration action fails, text like that shown in the above screen appears in the log.

Install Release Notes/ Technotes

- Segmentation fault while launching profile wizard or uninstaller
  - Do not install WebSphere Process Server, version 6.0, to an installation path that is longer than 256 characters on Linux platforms.
- Installation fails on Windows for Arabic locale
  - The Java® 2 Platform, Standard Edition (J2SE) 1.4.2 causes an unsupported code page (cp720) to be used for the Arabic locale.
- Installation failure java.util.ZipException with unmapped network drive
  - Installing WebSphere Process Server, version 6.0, from an unmapped network drive is not supported.
- Installation fails due to insufficient disk space on Windows.
  - The silent installation of the underlying WebSphere Application Server Network Deployment, version 6.0, requires approximately 1 GB of additional free disk space beyond what is actually used.
- WebSphere Integration Developer uninstallation failure
  - Stop the nodeagent process and all application and process servers before uninstalling WebSphere Integration Developer or WebSphere Process Server

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Some important points from the Process Server release notes and technotes are shown here. You can get a segmentation fault while launching the profile wizard or uninstaller. The problem is the installation path is longer than 256 characters on Linux platforms. Installation also fails on Windows for Arabic locale. The Java® 2 Platform, Standard Edition (J2SE) 1.4.2 causes an unsupported code page (cp720) to be used for the Arabic locale.   Installation can fail with a java.util.ZipException with an unmapped network drive. Installing WebSphere Process Server, version 6.0, from an unmapped network drive is not supported. Installation fails due to insufficient disk space on Windows.   The silent installation of the underlying WebSphere Application Server Network Deployment version 6.0, requires approximately 1 GB of additional free disk space beyond what is actually used. If the WebSphere Integration Developer uninstallation fails, stop the nodeagent process and all applications and process servers before uninstalling it.

Process Server Install - Agenda

- Installation Overview
- Install Flow / Information on Install Screens
- Troubleshooting
- **Summary**

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This section will provide a summary of topics discussed in this presentation.

Summary

- Discussed Installation of WebSphere Process Server V6.0
  - ▸ Covered an overview and initial install information
  - ▸ Stepped through installation flow discussing information on each installation screen, including uninstall
  - ▸ Discussed troubleshooting topics like known limitations, best practices, and debugging/logging information

This presentation covered the WebSphere Process Server V6.0 installation. It also provided an overview and initial install information, and stepped through the installation flow, discussing information on each installation screen, including uninstall. Troubleshooting topics like known limitations, best practices, and debugging/logging information was also discussed.

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WPSv6_Installation_IEA.ppt