IBM Software Group

IBM WebSphere® Process Server V6.0.1

Installation

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This presentation will cover installation of WebSphere Process Server V6.0.1.

Goals

- Discuss installation of WebSphere Process Server V6.0.1
    - ▸ 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 and logging information

2

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The goal is to provide an overview of initial installation 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 and logging information will also be discussed.

Agenda

- Installation overview

- Installation flow and installation screens

- Troubleshooting

- Summary

This section will provide an overview of the installation process.

Installation overview

- WebSphere Process Server V6.0.1 Installer
  - Based on InstallShield MultiPlatform
  - Supports interactive GUI and silent installs

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

The WebSphere Process Server V6.0.1 GUI Installer is an InstallShield MultiPlatform based GUI Installer that supports interactive GUI and silent installs. The two installation types available are complete installation, which is covered in detail by this presentation, and custom installation. Custom installation is also discussed in this presentation, but profile creation is discussed in a separate Profile Creation Wizard presentation.
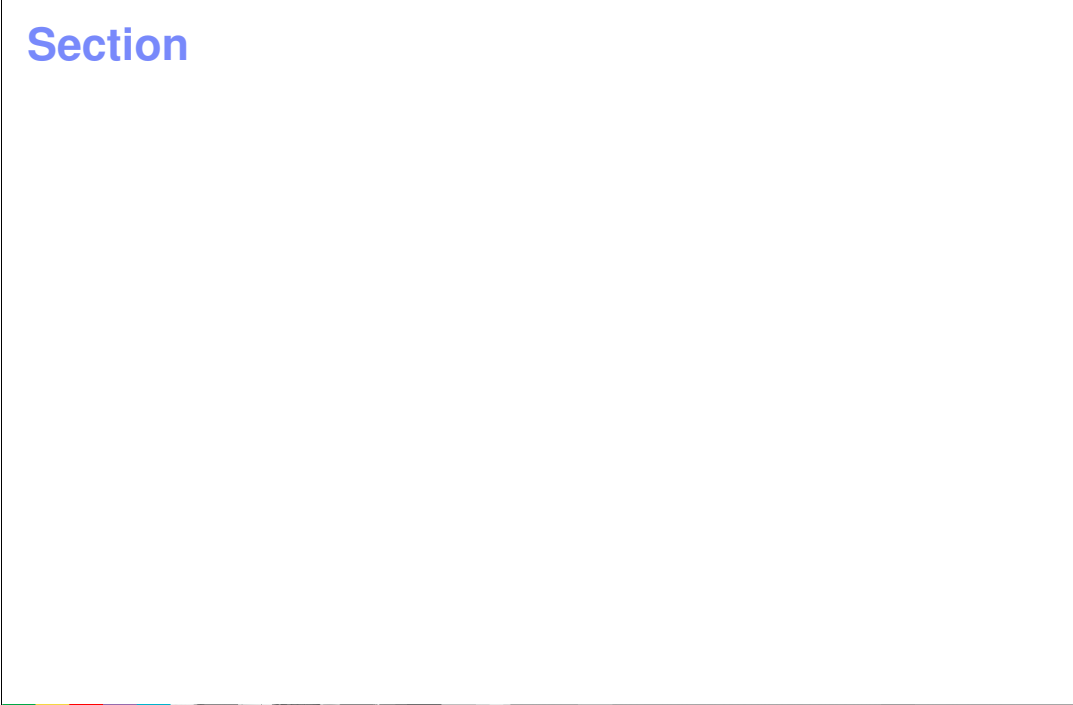
Silent installation

- 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 V6.0.1. A sample response file is shipped on the CD and ESD image, allowing you to create custom silent installation scripts. It supports custom installation only and can be easily modified.
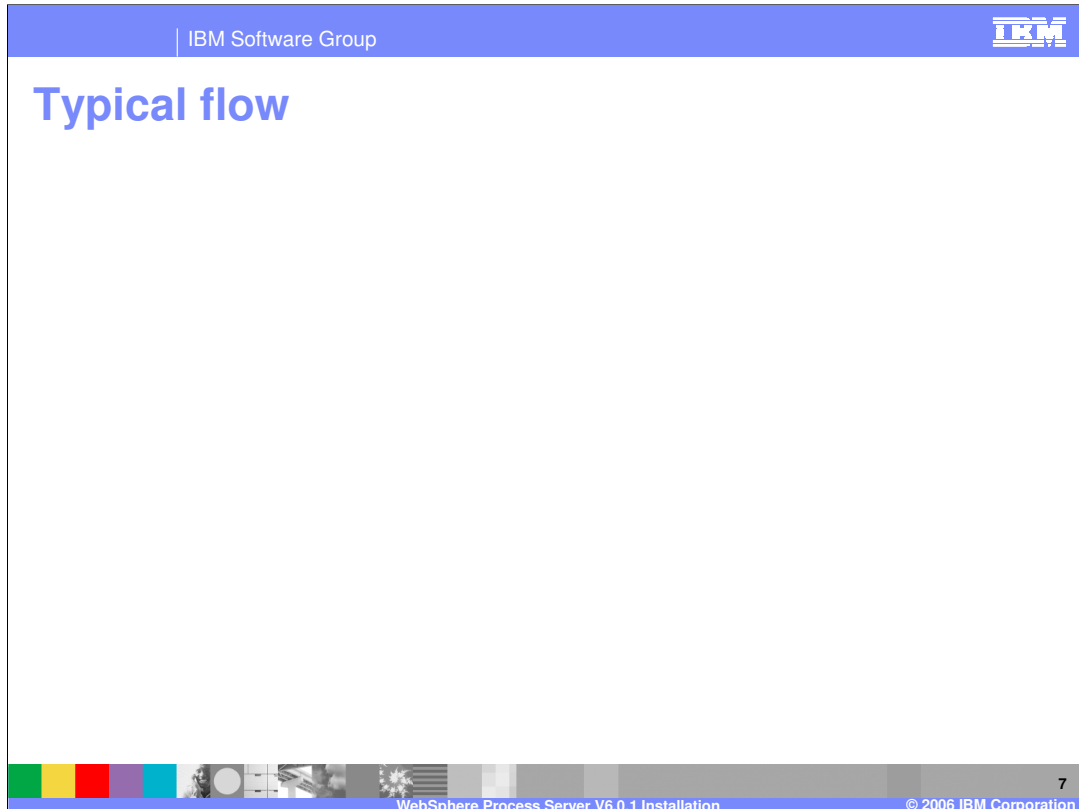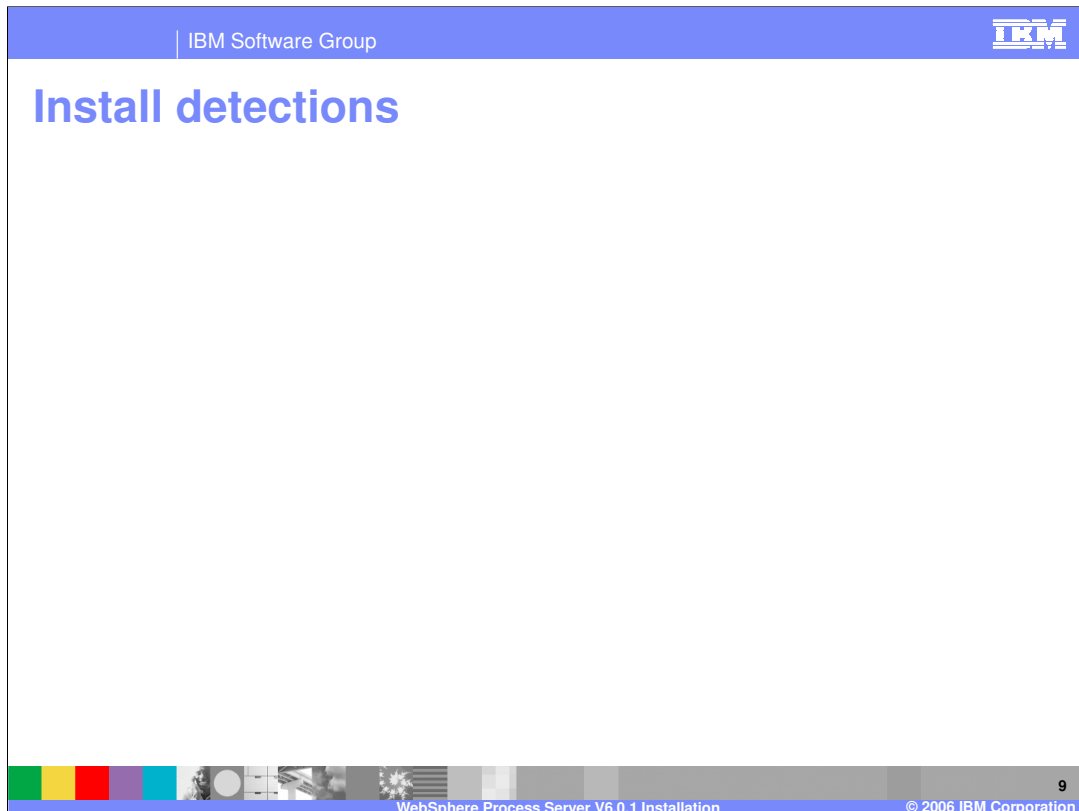
Section

6

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

Typical flow

7

A typical sequence of WebSphere Process Server V6.0.1 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 WebSphere Application Server or WebSphere Application Server Network Deployment or WebSphere Process Server installations. The next step prompts you for the WebSphere Process Server V6.0.1 installation root directory. 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.

WPIv601_WPSInstallation.ppt

System prerequisites check
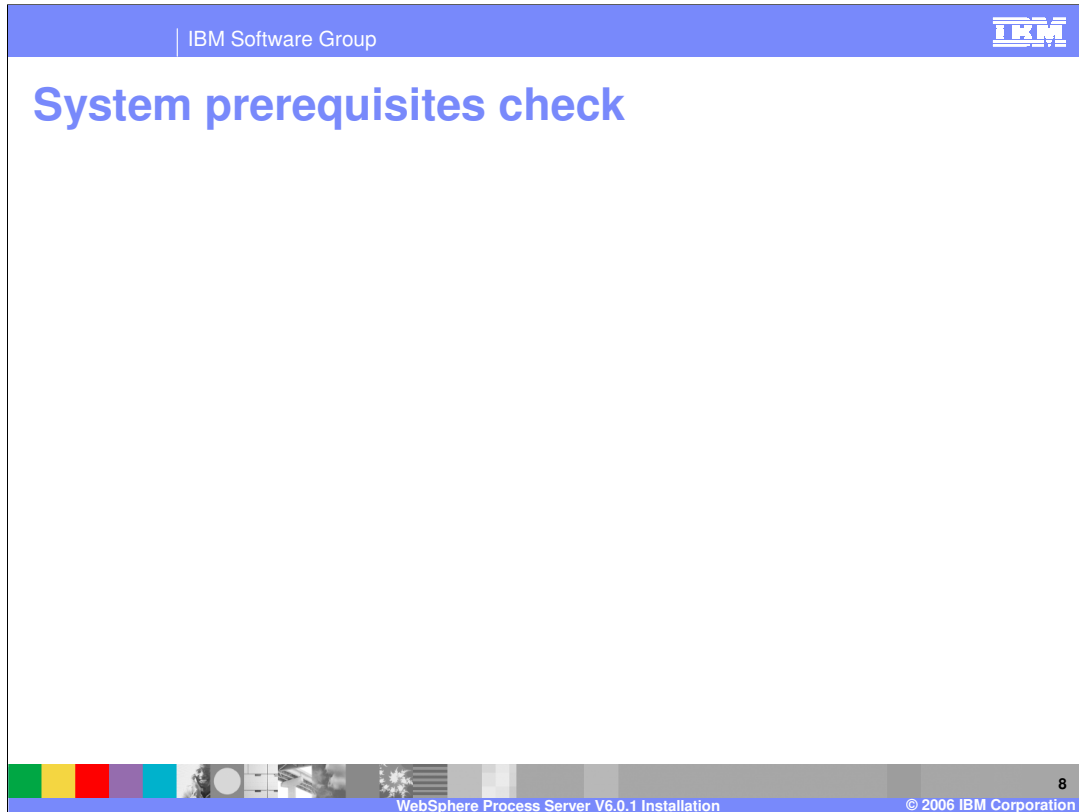
The welcome and license acceptance screens are self explanatory. On the System Prerequisite check screen, the installer does a prerequisite check similar to WebSphere Application Server installation, checking for supported OS levels, required fix packs, service packs or patches. However, it does not 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.

Install detections

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 6.0.1, 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 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 WebSphere Application Server
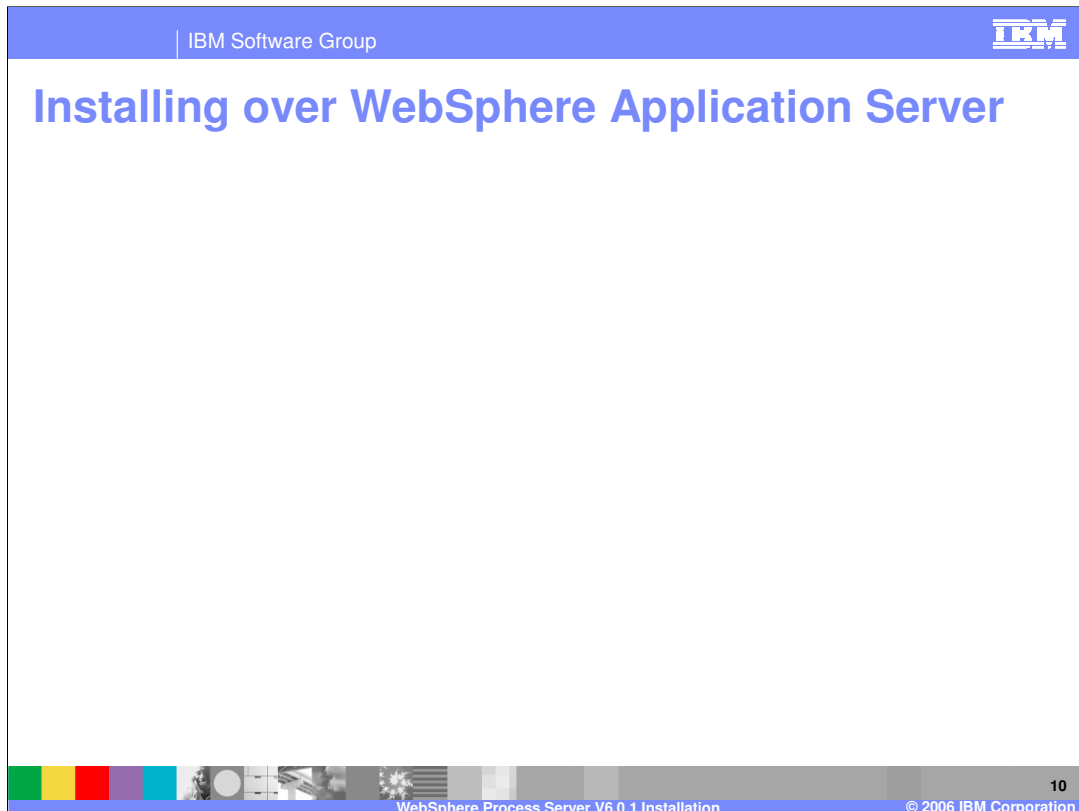
If installing over an Existing WebSphere Application Server or WebSphere Application Server Network Deployment, the existing installation detection screen is displayed when an existing WebSphere Application Server or WebSphere Application Server Network Deployment 6.0 installation is detected or when there is not already a copy of WebSphere Process Server 6.0.1 installed over the detected WebSphere Application Server or WebSphere Application Server Network Deployment.

You can choose to install on top of a detected WebSphere Application Server or WebSphere Application Server Network Deployment, or to install a new copy of WebSphere Application Server Network Deployment.

If you choose to install WebSphere Process Server over an existing installation of WebSphere Application Server or WebSphere Application Server Network Deployment, you must ensure that the global security of WebSphere Application Server or WebSphere Application Server Network Deployment V6.0 has been disabled. Note that the existing version of WebSphere Application Server will be moved up to the proper service level (6.0.2.3) as part of the installation.

Installing stand-alone WebSphere Process Server

If you are installing a stand-alone WebSphere Process Server V6.0.1, the installation includes WebSphere Application Server Network Deployment 6.0.2.3, and will silently install this version of WebSphere Application Server Network Deployment. Both WebSphere Process Server and WebSphere Application Server Network Deployment are installed at the same location. The installation summary screen displays disk space requirements for both WebSphere Process Server and WebSphere Application Server Network Deployment. If you select the WebSphere Process Server samples feature, the WebSphere Application Server Network Deployment samples are also installed.

Installation root directory

- Install close to the root directory
  - Short installation path is less likely to run into the 256 character path limit

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

- Examples:
  - C:\ProcServer
  - C:\WPRCS601

At the Installation Root directory screen, you will be 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.
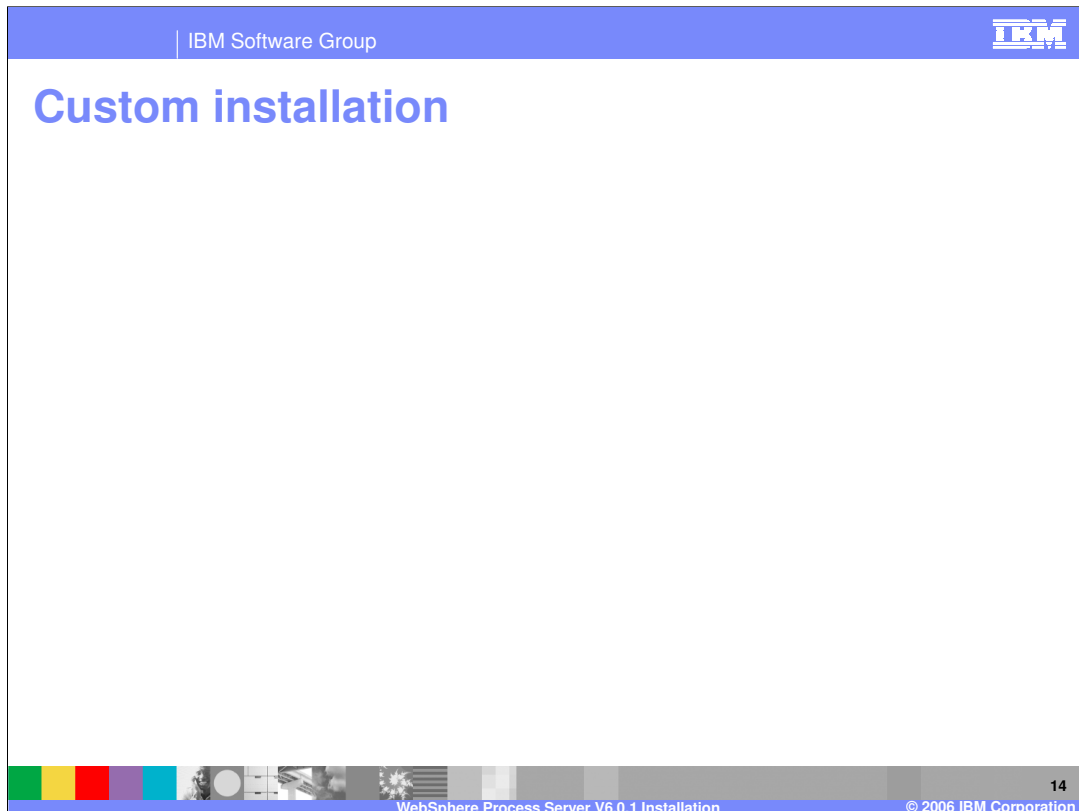
Complete installation

⊙ Complete installation
   Everything needed to start running your WebSphere Process Server is
   installed. See the installation information for descriptions of the default
   configuration settings used during a Complete installation.

○ Custom installation
   More flexibility provided for component installation, with the option to
   launch the Profile Wizard. See the installation information for
   descriptions of the product features you can install and configure.

- Complete installation
  - ▸ 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 installation can take over an hour depending on system specifications.

Custom installation

The custom installation allows you to select four features. Samples and JavaDoc are installed by default by the Complete Installation. Both Extended Messaging and Business Rule Beans will run on 6.0, but do not have creation support. Selecting Samples will also cause WebSphere Network Deployment Samples to be installed.

Most installations should be Custom installations. A Custom installation does not create a default profile, but launches the Profile Creation Wizard from the finish screen. The WebSphere Process Server Profile needs more details than a WebSphere Profile, which is the reason for suggesting a Custom install.   Profile setup is discussed in the Profile Creation Wizard presentation.

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

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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® and Linux® systems
  - ▶ Does not check for this on Windows™ (open issue)

- Includes space needed for the umbrella WebSphere Application Server Network Deployment install (when performed)

- Includes space needed for default profile for Complete installs

15

WebSphere Process Server V6.0.1 Installation   © 2006 IBM Corporation

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 performed on Windows systems. The check includes space needed for the umbrella WebSphere Application Server Network Deployment installation (when performed) and the default profile for Complete installations.

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Uninstalling

- For WebSphere Process Server stand-alone installs (that was not installed on any existing WebSphere Application Server or WebSphere Application Server Network Deployment):
  - ▶ Provides option to uninstall the underlying WebSphere Application Server or WebSphere Application Server Network Deployment
  - ▶ By default, it will uninstall the underlying WebSphere Application Server or WebSphere Application Server Network Deployment
  - ▶ If the option is to keep the underlying install of WebSphere Application Server or WebSphere Application Server Network Deployment, any profiles that have been augmented by WebSphere Process Server will be un-augmented, as long as WebSphere Process Server is the last augmenter
  - ▶ If the option is to uninstall the underlying WebSphere Application Server or WebSphere Application Server Network Deployment, all profiles will be first unaugmented and then deleted
- Uninstall can be run silently

The uninstaller allows you to uninstall the underlying WebSphere Application Server or WebSphere Application Server Network Deployment. The underlying WebSphere Application Server Network Deployment will 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 will be unaugmented as long as WebSphere Process Server is the last augmentor. If you choose to uninstall the underlying WebSphere Application Server, all profiles will be first unaugmented and then deleted. The uninstall process can also be run silently.

Section

Troubleshooting

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

Known limitations

- When installing WebSphere Process Server over an existing WebSphere Application Server install, the global security for WebSphere Application Server or WebSphere Application Server Network Deployment must be turned off

- Cannot augment an already federated custom WebSphere Process Server profile

18

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There are several known limitations pointed out in the WebSphere Process Server read-me and release notes. However, there are a few listed here.

Installing WebSphere Process Server over an existing WebSphere Application Server or WebSphere Application Server Network Deployment environment with global security enabled requires that the security must be turned off before installation starts.

A Custom WebSphere Process Server profile cannot be augmented if the custom node or profile is already federated with a deployment manager.

Best practices

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

- Use the Installation Guide from WebSphere Process Server V6.0.1 online Information Center
    - ▶ http://publib.boulder.ibm.com/infocenter/dmndhelp/v6rxmx/index.jsp

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

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

Always refer to the Installation Guide from WebSphere Process Server V6.0.x online Information Center

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

Debugging installation errors

- Use collector.bat (very useful to IBM Support)

- The full set of files to immediately gather are:
  - ‣ <profilePath>/logs/*   (zip recursively)
  - ‣ <profilePath>/properties/*
  - ‣ <INSTALL_DIR>/logs/wasprofile/*<profileName>*
  - ‣ <INSTALL_DIR>/logs/wbi/*
  - ‣ <INSTALL_DIR>properties/profileRegistry.xml
  - ‣ <INSTALL_DIR>/properties/wasprofile.properties

To debug installation errors, gather the full set of files listed here.

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

Installation logs

- log.txt
    - On Linux and UNIX platforms: <INSTALL_DIR>/logs/wbi/log.txt
    - On Windows platforms: <INSTALL_DIR>\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 named log.txt. On Linux, UNIX, and Windows platforms, this file can be found in <INSTALL_DIR>/logs/wbi/log.txt. The log.txt contains 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.

Installation 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_DIR>/logs/wbi/inst_config.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 this slide appears in the log.

Installation release notes and Technotes

- 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.
- Profile directory path length limit of 256 characters on Microsoft™ Windows Operating Systems.
  - ▶ Profile creation fails on Microsoft Windows operating systems if you choose a profile path that is too long. The operating systems places a limit of 256 characters on a fully qualified path.
- Installation failure java.util.ZipException with unmapped network drive
  - ▶ Installing WebSphere Process Server V6.0.1 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.x, requires approximately 1 GB of additional free disk space beyond what is actually used.
- The presentation does not list all the release notes. To get the complete list, use following link
  - ▶ http://publib.boulder.ibm.com/infocenter/dmndhelp/v6rxmx/index.jsp?topic=/com.ibm.wsps.doc/doc/relnote_wps_60.html

Some important points from the WebSphere Process Server release notes and technotes are shown here. 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 also fails if the profile directory path exceeds 256 characters. Installation can fail with a java.util.ZipException with an unmapped network drive. Installing WebSphere Process Server V6.0.1 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 V6.0 requires approximately 1 GB of additional free disk space beyond what is finally used.

Section

Summary

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

Summary

- Discussed Installation of WebSphere Process Server V6.0.1
  - ▸ 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

WebSphere Process Server V6.0.1 Installation
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This presentation covered the WebSphere Process Server V6.0.1 installation. It also provided an overview and initial installation information, and stepped through the installation flow, discussing information on each installation screen, including uninstall. Troubleshooting topics like known limitations, best practices, and debugging and logging information was also discussed.

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