

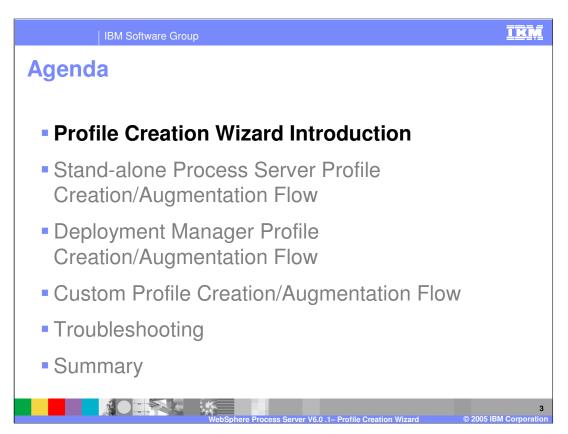
This presentation will cover the Profile Creation Wizard feature of WebSphere Process Server V6.0.1

Goals

- Discuss Profile creation/augmentation for WebSphere Process Server V6.0.1 profiles
 - Cover a profile wizard introduction and initial profile information
 - Step through creation and augmentation of the 3 types of profiles for WebSphere Process Server V6.0.1 (stand-alone, deployment manager, and custom profiles)
 - Discuss troubleshooting topics like known limitations, best practices, and debugging/logging information



troubleshooting topics, known limitations, best practices, and debugging/logging information.



This section will provide an introduction to the Profile Creation Wizard for WebSphere Process Server V6.0.1.

Profile Creation Wizard Overview

- Separate Install Shield Multi-Platform (ISMP) based GUI Wizard
- Supports creation of new profiles and augmentation of existing profiles
- Supports three profile types
 - ▶ Stand-alone process server profile
 - Deployment manager profile
 - Custom node profile
- Provided as a separate tool to support creation of multiple profiles for a single binary install
- Option to run Wizard at end of Custom Install for WebSphere Process Server V6.0.1 install



The Profile Creation Wizard is a separate Install Shield Multiplatform (ISMP) based GUI Wizard that supports creation of new profiles and augmentation of existing profiles. It also supports the three profile types: Stand-alone process server profile, Deployment manager profile, and Custom node profile. The Profile Creation Wizard is provided as a separate tool to support creation of multiple profiles for a single binary install. The option to launch the profile creation wizard is presented at end of a Custom Install for WebSphere Process Server V6.0.1.

Profile Creation Wizard Flow

- Welcome screen
- Existing profile detection screen
- Profile type selection screen
- Profile augmentation selection screen
- Profile type specific configuration screens
- Pre-profile creation/augmentation summary screen
- Post-profile creation/augmentation summary and First Steps page



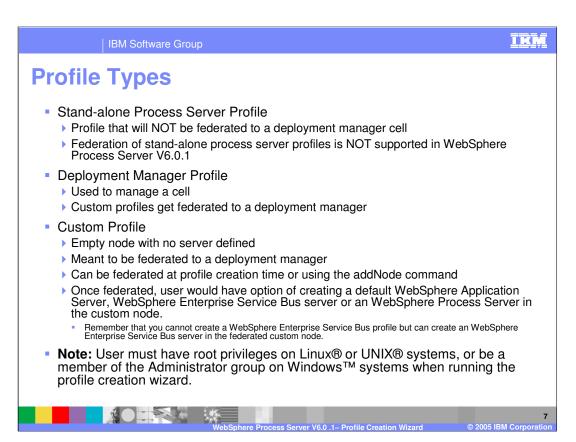
The first screen displayed is the welcome screen, followed by the existing profile detection screen. Next, you must select which profile type to create on the profile type selection screen. If you choose to augment a profile, the profile augmentation selection screen follows along with profile type specific configuration screens. In this presentation, the preprofile creation/augmentation summary screen and post-profile creation/augmentation summary will be displayed. The profile will then be created. The last screen displayed will provide you the opportunity to launch the First Steps page.

Existing Profile Detection

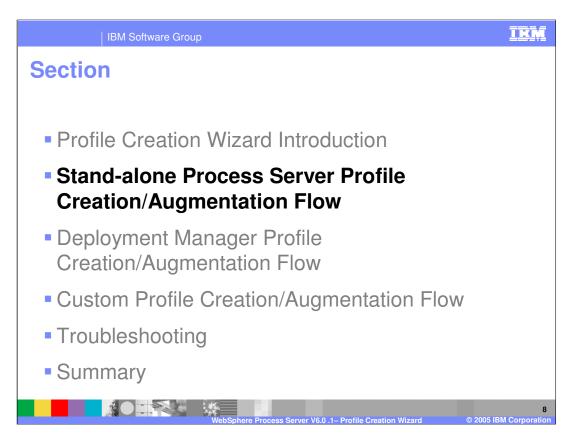
- Existing Profile Detection screen will be displayed if there are existing Application Server profiles that have
 - > not been fully augmented by WebSphere Process Server
 - not been federated to a deployment manager
 - Custom Profiles may be unfederated first so that they can be augmented and then refederated
- Given a choice to either
 - Create a new profile
 - Augment an existing profile
- If "Augment an existing profile" is selected
 - Only those profile types that have valid profiles for augmentation will be displayed on the Profile type selection screen
 - A list of available profiles of that type will be given on the Profile augmentation selection screen



The profile creation wizard can detect existing WebSphere Application Server profiles. The existing profile detection screen will be displayed if there are existing WebSphere Application Server profiles that have not been fully augmented by the Process Server or have not been federated to a deployment manager. Custom Profiles can be unfederated first so that they can be augmented and then refederated to a WebSphere Process Server deployment manager profile. On this screen, you are given a choice to either create a new profile or augment an existing profile. If you choose to "Augment an existing profile", only those profile types that have valid profiles for augmentation will be displayed on the profile type selection screen. A list of available profiles of that type will be given on the profile augmentation selection screen.



There are three types of profile. The stand-alone process server profile is a profile that will not be federated to a deployment manager cell because federation of stand-alone process server profiles is not supported in WebSphere Process Server V6.0.1. The second type of profile is a deployment manager profile, which is used to manage a cell and allows custom profiles to be federated to a deployment manager. The third type of profile is the custom profile, which is an empty node with no server defined. Its purpose is to be federated to a deployment manager, either at profile creation time or using the addNode command. Once federated, you have the option of creating a default WebSphere Application Server, WebSphere Enterprise Service Bus server or a WebSphere Process Server in the custom node. The profile creation wizard must be run by a user with root authority on Linux or UNIX platforms or a member of the Administrator group on Windows platforms.



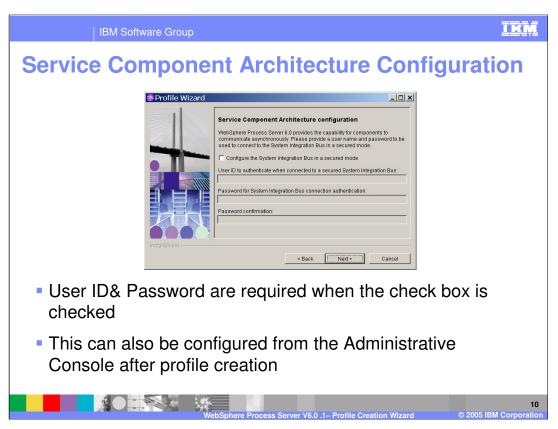
This section will cover wizard flow for the stand-alone profile.

Stand-alone Process Server Profile Creation/Augmentation Flow

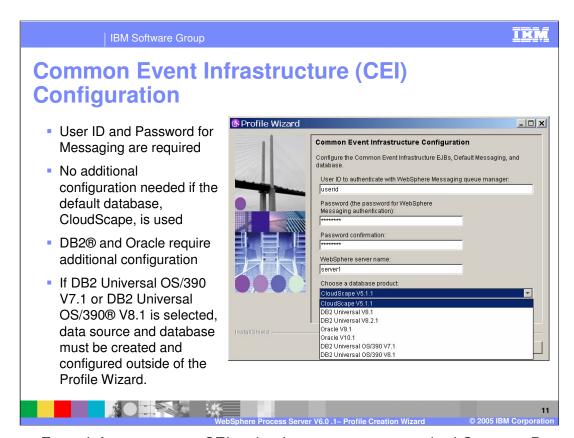
- Same flow as the WebSphere Application Server Profile Creation Wizard plus additional Process Server specific screens
- Following screens are in common with WebSphere Application Server:
 - Profile Name
 - Profile Directory
 - Node and host names
 - Port value assignment
 - Windows service definition (Windows only)



The stand-alone profile for the WebSphere Process Server follows the same flow as the WebSphere Application Server Profile Creation Wizard with some additional Process Server specific screens. Screens such as profile name, profile directory, node/host names, and port value assignment are the same as the profile wizard for WebSphere Application Server.



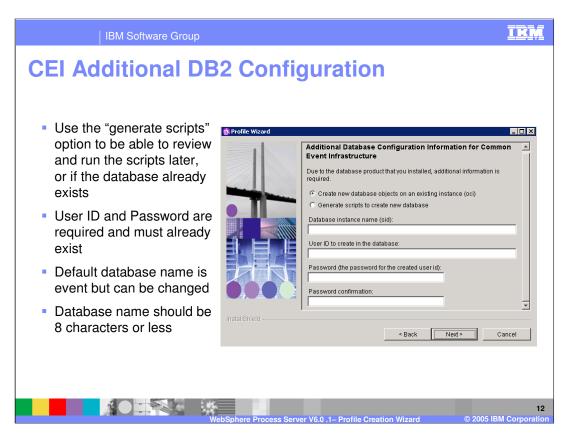
The core technology that allows a process server application to run is Service Component Architecture (SCA), which configured first in the profile creation wizard. A userid and password are required when the check box is checked to configure the SI Bus for running in a secured mode or you can configure security from the Administrative Console after profile creation.



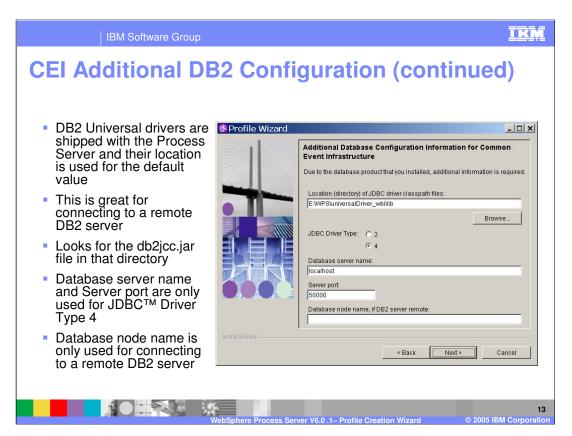
Common Event Infrastructure or CEI technology uses open-standard Common Base Events (CBE) to communicate events, errors, and faults. A user ID and password are required for the messaging engine and no additional configuration is needed if default CloudScape database is used. DB2 and Oracle are supported with additional configuration required.

If DB2 Universal OS/390 V7.1 or DB2 Universal OS/390 V8.1 is selected, the data source and database must be created and configured outside of the Profile Wizard.

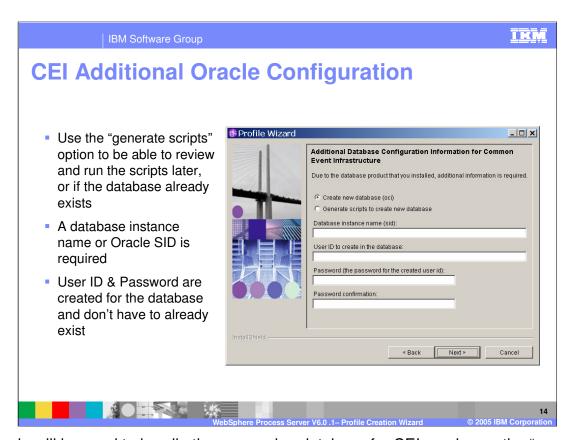
Review the following topic in the information center: Installing > Configuring the product after installation > Configuring the Common Event Infrastructure > Post-installation configuration > Configuring the event database > Configuring a DB2 database on a z/OS system



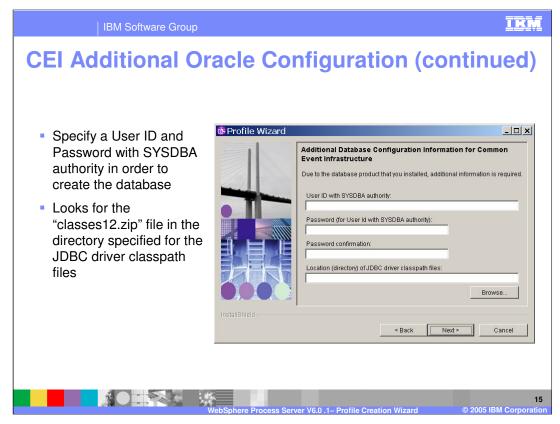
If setting up CEI with a DB2 database instead of the default Cloudscape database, use the "generate scripts" option to review and run the scripts later, or if the database already exists. The user ID and password are required and must already exist, meaning the database will have to be already be created in the database utility. The default database name is event, but it is recommended that you change it to match the database name already set up or a more meaningful database name of 8 characters or less for CEI.



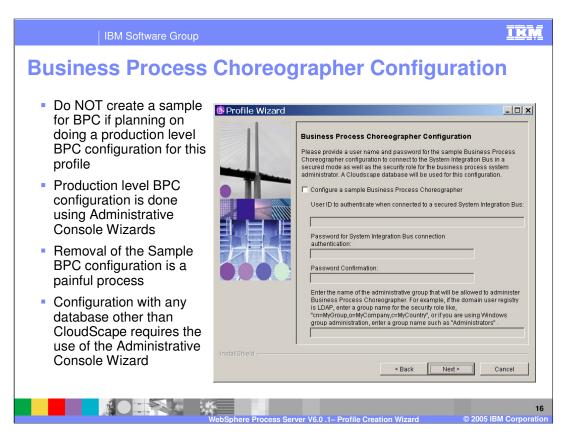
DB2 Universal drivers are shipped with the Process Server and their location is used for the default value. These can be used to connect to a remote DB2 server. The profile creation tool looks for the db2jcc.jar file in that default directory. The database node name is only used for connecting to a remote DB2 server and the database server name and server port are only used for JDBC Driver Type 4.



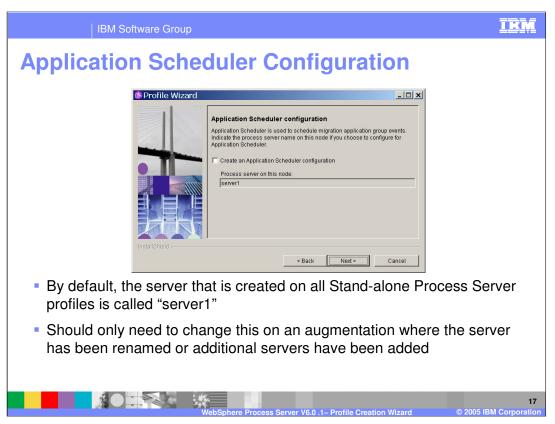
If Oracle will be used to handle the messaging database for CEI, again use the "generate scripts" option to review and run the scripts later, or if the database already exists . A database instance name or Oracle SID is required and the user ID and password are created for the database and do not have to already exist.



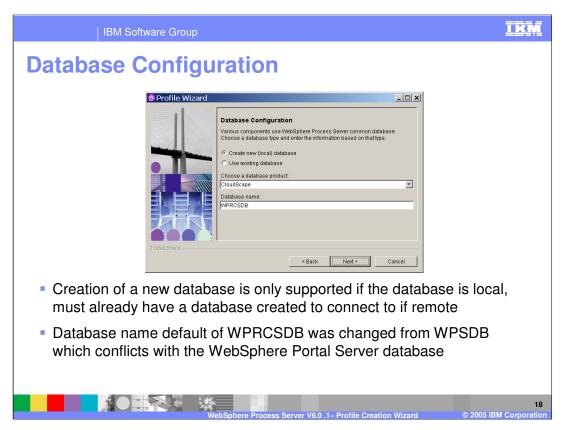
For Oracle, specify a User ID and Password with SYSDBA authority in order to create the database. The profile creation wizard looks for the "classes12.zip" file in the directory specified for the JDBC driver classpath files.



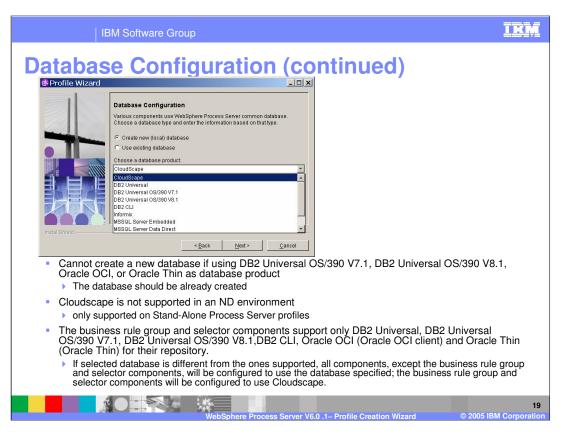
When configuring the business process choreographer, do not create a sample for BPC if you plan on doing a production level BPC configuration for this profile. Production level BPC configuration is done using the Administrative Console Wizards and can be done after the Process Server is fully installed with a profile to run from. Removal of the Sample BPC configuration is a difficult process that can be avoided by not installing them. Configuration with a database other than CloudScape requires the use of the Administrative Console Wizard.



The Profile Creation Wizard also allows you to configure the application scheduler, which can be used to start and stop applications at certain times according to a schedule that you define. By default, the server that is created on all Stand-alone Process Server profiles is called "server1". You should only need to change this on an augmentation where the server has been renamed or additional servers have been added.

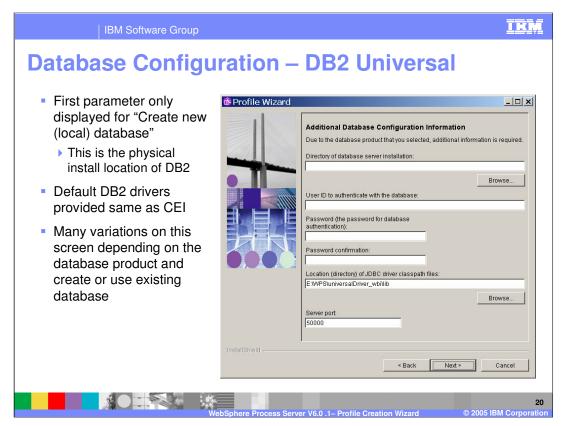


The Process Server uses a central database to run applications and correlate data. The name of this database is the WPRCSDB, not the WPSDB, which conflicts with the WebSphere Portal Server database. Creation of a new database is only supported if the database is local, so if you are connecting to a remote database, that database must already exist.



DB2 Universal OS/390, Oracle OCI and Oracle Thin client (below the scroll bar on this screen) configuration require that the WPRCSDB database is already created. Cloudscape is not supported in an ND environment (only supported on Stand-Alone Process Server profiles).

The business rule group and selector components support only DB2 Universal, DB2 Universal OS/390 V7.1, DB2 Universal OS/390 V8.1, DB2 CLI, Oracle OCI (Oracle OCI client) and Oracle Thin client for their repository. If the selected database is different from the ones supported, all components except the business rule group and selector components will be configured to use the database specified and the business rule group and selector components will be configured to use Cloudscape.



With the WPRCSDB, the first parameter is only displayed for "Create new (local) database" and is the physical install location of DB2. Default DB2 drivers provided are the same as with CEI. There are many variations on this screen depending on the database product and whether you select create or use existing database.



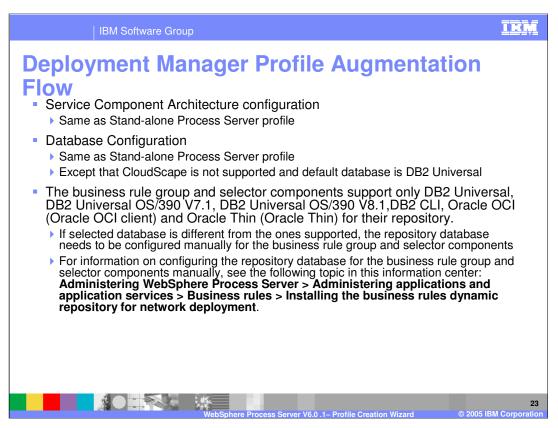
This section will cover the Deployment Manager Profile Creation/Augmentation Flow.

Deployment Manager Profile Creation Flow

- Same flow as the Application Server Profile Creation
 Wizard plus additional Process Server specific screens
- Following screens are in common with Application Server:
 - Profile Name
 - ▶ Profile Directory
 - Node, host, and cell names
 - Port value assignment (different than stand-alone ports)
 - Windows service definition (Windows only)
- Additional screens that follow are the same for profile augmentation



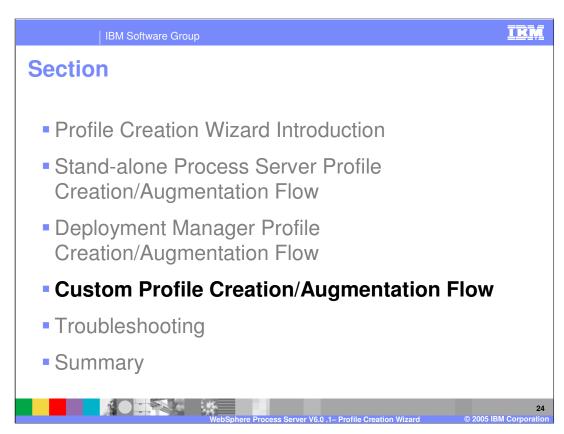
The deployment manager profile creation has the same flow as the Application Server Profile Creation Wizard with a few additional Process Server specific screens. Again the profile name, profile directory, node, host, cell names, port value assignment, and Windows service definition screens (Windows only) are the same as with the Application Server. However, the deployment manager uses different ports than the stand-alone profile. Additional screens that follow are the same for profile augmentation.



The Service Component Architecture (or SCA) configuration is the same as a Stand-alone Process Server profile. However, the database configuration is different in that CloudScape is not supported and the default database is DB2 Universal. The business rule group and selector components support only DB2 Universal, DB2 Universal OS/390 V7.1, DB2 Universal OS/390 V8.1,DB2 CLI, Oracle OCI (Oracle OCI client) and Oracle Thin client for their repository.

If the selected database is different from the ones supported, the repository database must be configured manually for the business rule group and selector components.

For more details see the following topic in the information center: **Administering**WebSphere Process Server > **Administering applications and application services** >
Business rules > Installing the business rules dynamic repository for network deployment.



This section will cover the Custom Profile Creation and Augmentation Flow.

Custom Profile Creation Flow

Same flow as the Application Server Profile Creation Wizard plus additional Process Server specific screens

Following screens are in common with the Application Server:

Federation

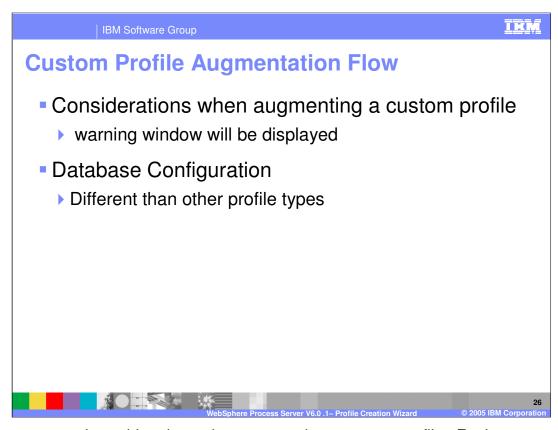
Profile Name

Profile Directory

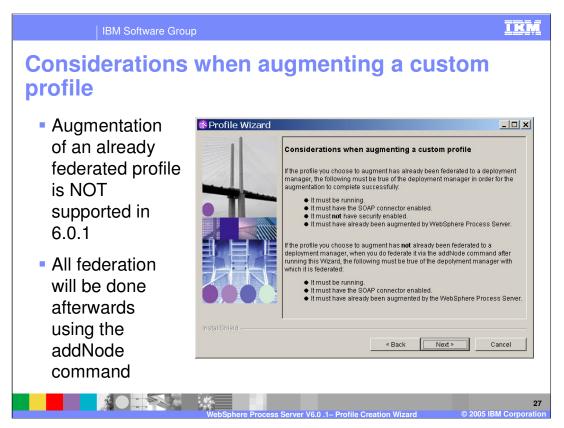
Node and Host Names

Additional screens are same as for profile augmentation

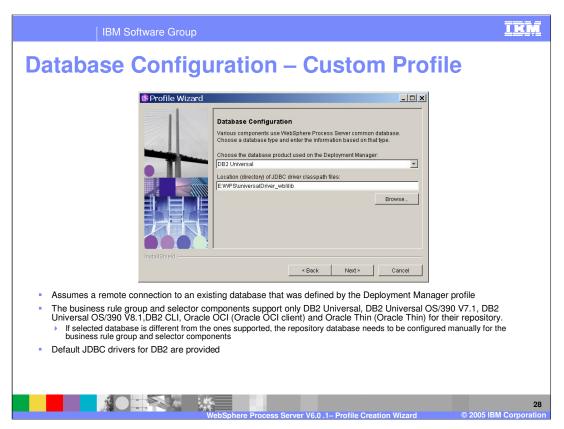
Custom profile creation has the same flow as the Application Server Profile Creation Wizard with some additional Process Server specific screens, such as Federation, Profile Name, Profile Directory, Node, and Host Names. Additional screens are the same as for profile augmentation.



There are several considerations when augmenting a custom profile. For instance, the augmentation warnings will be displayed on the "considerations" window in the profile augmentation process and the database configuration is different than with other profile types.



For example, the considerations warning shown here will appear. The main warning is that augmentation of an already federated profile is NOT supported in V6.0.1. Node federation must be done afterwards using the addNode command.



The database configuration for a custom profile assumes a remote connection to an existing database was defined by the Deployment Manager profile. Again, the default JDBC drivers for DB2 are provided in the Process Server directory.

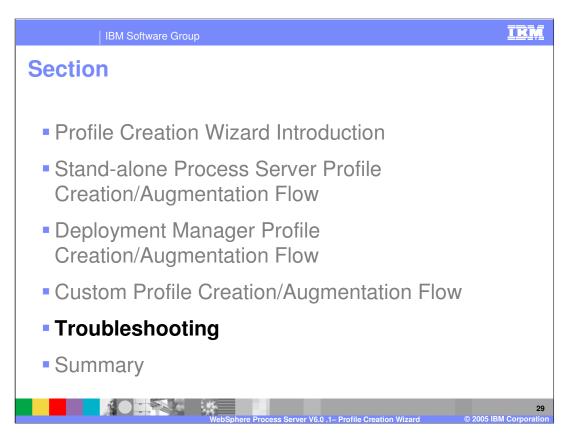
The business rule group and selector components support only DB2 Universal, DB2 Universal OS/390 V7.1, DB2 Universal OS/390 V8.1, DB2 CLI, Oracle OCI (Oracle OCI client) and Oracle Thin client for the repository.

If the selected database is different from the ones supported, the repository database must be configured manually for the business rule group and selector components.

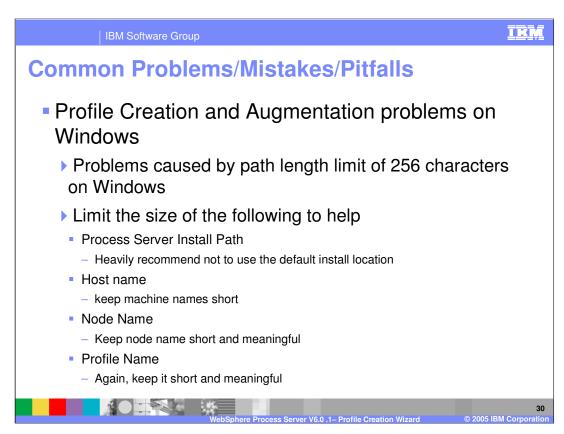
For information on configuring the repository database for the business rule group and selector components manually, see the following topic in this information center:

Administering WebSphere Process Server > Administering applications and

application services > Business rules > Installing the business rules dynamic repository for network deployment.



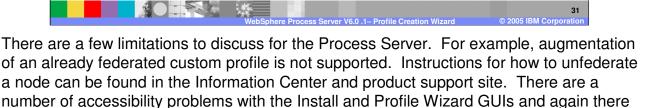
This section will cover troubleshooting profile creation or augmentation.



The most common pitfall with profile creation and augmentation on Windows is related to the Windows limitation of 256 characters in a path length. Therefore, you should create the profile as close to the root drive as possible (for example C:/ProcServer/profile1/). You should limit the length of the Process Server install path and it is highly recommend that you not use the default install location, host name, node name, and profile name. All names and paths should be kept short and meaningful.

Known Limitations

- Cannot augment an already federated custom profile
 - There is a technote on how to unfederate a node
- There are a number of accessibility problems with the Install and Profile Wizard GUIs
 - There are a number of technotes written on these problems

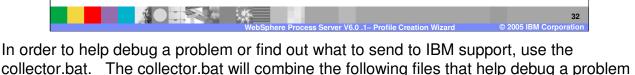


are technotes covering these problems, which can be found at the Process Server support

page from www.ibm.com.

What to gather to debug an install problem

- Use collector.bat (send to IBM Support)
- The full set of files to immediately gather are:
 - > profilePath>/logs/* (zip recursively)
 - > profilePath>/properties/*
 - <WPS_HOME>/logs/wasprofile/*fileName>*
 - <WPS HOME>/logs/wbi/*
 - <WPS_HOME>/properties/profileRegistry.xml
 - <WPS HOME>/properties/wasprofile.properties



profilePath/(zip recursively)

cprofilePath>/properties/*

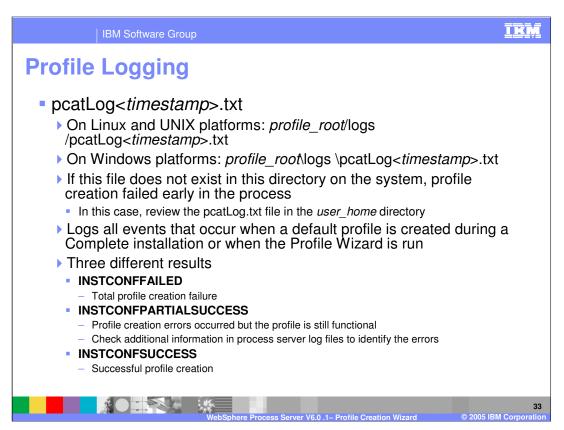
<WPS_HOME>/logs/wasprofile/*fileName>*

<WPS_HOME>/logs/wbi/*

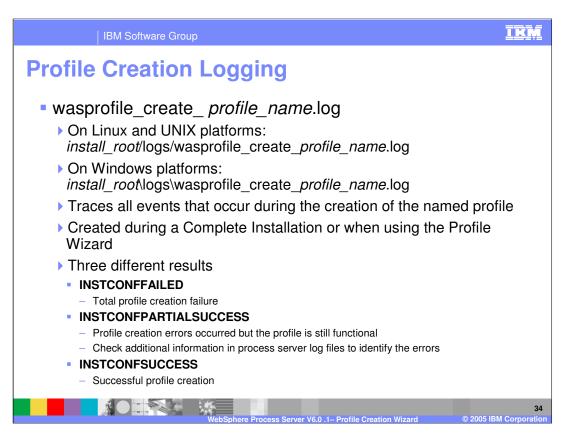
<WPS_HOME>/properties/profileRegistry.xml

if they are gathered immediately after a problem or failure.

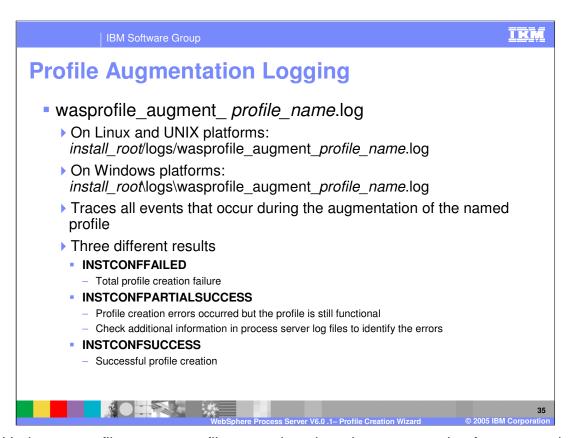
<WPS_HOME>/properties/wasprofile.properties



The profile log file is the pcatLog, which appears as pcatLog<timestamp>.txt in the profile_root/logs directory. If this file does not exist in this directory on the system, then profile creation failed early in the process. In this case, review the pcatLog.txt file in the user_home directory. The pcatLog contains all events that occur when a default profile is created during a complete installation or when the Profile Wizard is run. There are three possible results when looking at the pcatLog. INSTCONFFAILED means that profile creation failed. INSTCONFPARTIALSUCCESS means profile creation errors occurred but the profile is still functional. Check additional information in process server log files to identify specific errors. INSTCONFSUCCESS means that profile creation was successful.



Another log file to check when creating a profile is wasprofile_create_profile_name.log located in the <code>install_root/</code>logs directory. This log traces all events that occur during the creation of the named profile and again is created during a complete Installation or when using the profile wizard. Like the pcatLog, there are three different results when looking at the wasprofile_creat_profile_name.log after a profile has been created (complete install); INSTCONFFAILED, INSTCONFPARTIALSUCCESS, and INSTCONFSUCCESS.



As with the wasprofile_create_profile_name.log, there is a separate log for augmenting a profile. The wasprofile_augment_profile_name.log is located in the install_root/logs/directory. This log traces all events that occur during the augmentation of the named profile and again there are three possible results; INSTCONFFAILED, INSTCONFPARTIALSUCCESS, INSTCONFSUCCESS.

Profile Template Logging

- Individual profile template action log files
 - ▶ In the directory profile_root/logs on Linux and UNIX systems and profile_root/logs on Windows systems
 - Typically it is the name of the .ant script that failed followed by ".log"
 - For example, if the following entry is in the wasprofile_augment_profile_name.log file:
 - <message>Result of executing E:\00536.15\profileTemplates\default.wbicore\actions\saveParamsWbiCore.ant was: false</message>
 - ▶ Look for the corresponding log file for any failing .ant script entries. In this case, the log file created by the saveParamsWbiCore.ant script is saveParamsWbiCore.ant.log
 - Look at that file to investigate why the failure occurred



profile root/logs directory. Typically it is the name of the .ant script that failed followed by

".log". For example, if the following entry is in the wasprofile_augment_profile_name.log file: <message>Result of executing

E:\o0536.15\profileTemplates\default.wbicore\actions\saveParamsWbiCore.ant was: **false**</message>. Look for the corresponding log file for any failing .ant script entries. In this case, the log file created by the saveParamsWbiCore.ant script is saveParamsWbiCore.ant.log. Look at that file to investigate why the failure occurred.

IBM Software Group Recovering from profile creation/augment failure Each log file must contain the "INSTCONFSUCCESS" If a file does not include this entry, a failure was detected Following is a list of log files to look at in the order given Log file created by the Profile Wizard The name of the file is partially based on a timestamp and is in the form pcatLogNNNNNNNNNNNNNN.txt, where NNNNNNNNNNN is the timestamp number Log file wasprofile create profile name.log > Search for the text "Result of executing" and verify that each occurrence ends with "true." Log file wasprofile_augment_profile_name.log > Search for the text "Result of executing" and verify that each occurrence ends with "true." 4. Individual profile template action log files If discovered "false" values in the log files described in steps 2 and 3 above, review these log These log files do not follow a consistent naming convention, but typically, it is the name of the .ant script that failed followed by ".log"

Next, check the wasprofile_create_profile_name.log, located in the install_root/logs/wasprofile directory. Search for the text "Result of executing" and verify that each occurrence ends with "true."

Next, check the wasprofile_augment_profile_name.log, located in the install_root/logs/wasprofile directory. Search for the text "Result of executing" and verify that each occurrence ends with "true."

Finally, check the Individual profile template action log files. If you discovered "false" values in the log files described in steps 2 and 3 above, review these log files in the *profile_root*/logs directory. These log files do not follow a consistent naming convention, but typically, it is the name of the .ant script that failed followed by ".log".

Recovering from profile creation failure

- After determining why profile creation failed and addressing the cause of the failure, try to create the profile again
- When creating a profile using the WebSphere Process Server Profile Wizard
 - the wizard first creates a WebSphere Application Server profile
 - then augments it with WebSphere Process Server profile templates to create a WebSphere Process Server profile
- When encountered with a profile creation failure
 - a profile can exist that does not have all the needed augmentations (presumably because of the failure)
- To determine if the profile exists, run the command install root/bin/wasprofile.sh -listProfiles on Linux and UNIX systems or install_root\bin\wasprofile.bat -listProfiles on Windows systems
 - If the profile name used for creation does not exist, re-create the profile
 - If the profile name used for creation exists, then the profile was created and has encountered an augmentation failure
 - For tips on recovering from an augmentation failure, see the next section



After determining why profile creation failed and addressing the cause of the failure, try to create the profile again.

When creating a profile using the WebSphere Process Server Profile Wizard, the wizard first creates a WebSphere Application Server profile and then augments it with WebSphere Process Server profile templates to create a WebSphere Process Server profile. When profile creation fails, a profile can exist that does not have all the necessary augmentations (presumably because of the failure). To determine if the profile exists, run the command *install root*/bin/wasprofile.sh -listProfiles. If the profile name used for creation does not exist, recreate the profile. If the profile name does exist, then the profile was created and has encountered an augmentation failure. The following section will provide tips on recovering from an augmentation failure.

After determining why profile augmentation failed and addressing the cause of the failure, try to augment the existing profile again to successfully create a complete WebSphere Process Server profile.

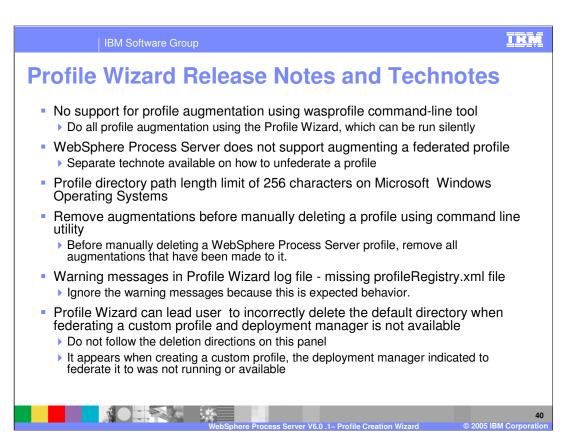
start the Profile Wizard, and instead of creating a new profile, choose to augment an existing profile.

Choose the profile and enter the correct information for it

Some of the augmentations may have completed successfully the first time Profile Wizard was run

As a result, not all the panels that were presented the first time will be displayed. This is because the Profile Wizard detects which remaining augmentations must be completed and displays only the necessary panels.

panels

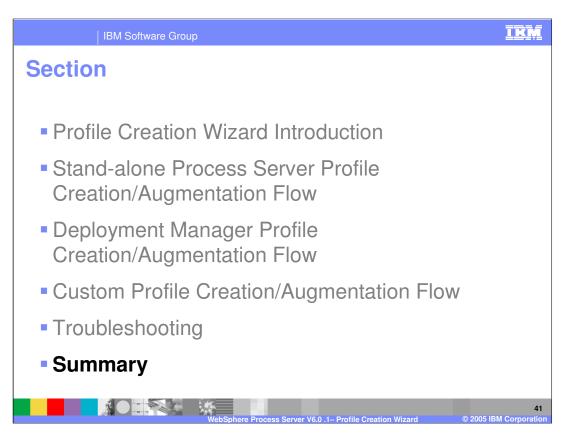


Here are a few tips from the Release Notes and Technotes found on the Process Server support page from www.ibm.com. There is no support for profile augmentation using wasprofile command-line tool, so all profile augmentation is done using the Profile Wizard, which can be run silently. WebSphere Process Server does not support augmenting a federated profile. There is a profile directory path length limit of 256 characters on Windows systems.

You should remove augmentations before manually deleting a profile using command line utility

Ignore the missing profileRegistry.xml file messages in profile wizard logs.

The Profile Wizard can incorrectly lead you to delete the default directory when federating a custom profile and when the deployment manager is not available. Do not follow the deletion directions on this panel. These appear when creating a custom profile when the deployment manager indicated to federate to was not running or available.



This section will provide a summary of this presentation.

Summary

- Discussed Profile creation and augmentation for WebSphere Process Server V6.0.1 profiles
- Covered a profile wizard introduction and initial information on profiles
- Stepped through creation and augmentation of the 3 types of profiles for WebSphere Process Server V6.0.1
 - stand-alone
 - deployment manager
 - custom profiles
- Discussed troubleshooting topics like known limitations, best practices, and debugging/logging information



In this presentation, profile creation and augmentation for WebSphere Process Server V6.0.1 profiles was discussed. A profile wizard introduction and initial information on profiles was covered. Next, profile creation and augmentation of the 3 types of profiles for WebSphere Process Server V6.0.1 (stand-alone, deployment manager, and custom profiles) was covered. Finally, troubleshooting topics such as known limitations, best practices, and debugging/logging information for the Profile Wizard in WebSphere Process Server V6.0.1 was discussed.



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