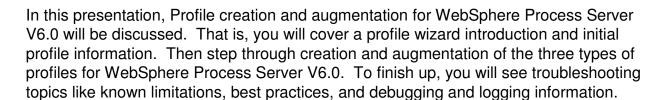


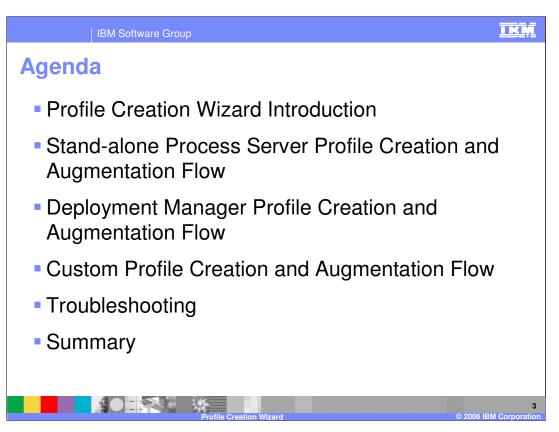
This presentation covers the Profile Creation Wizard for WebSphere Process Server V6.0

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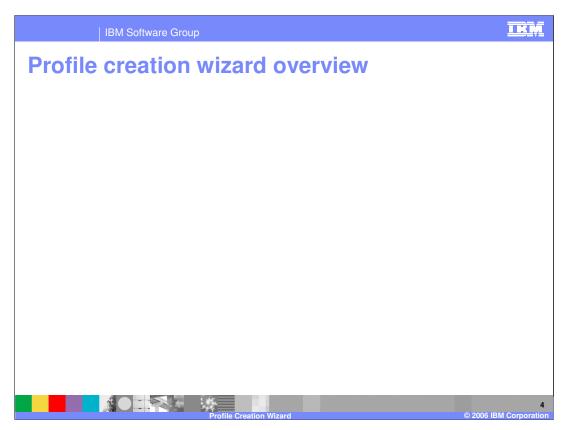
#### Goals

- Discuss Profile creation and augmentation for WebSphere Process Server V6.0 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 (standalone, deployment manager, and custom profiles)
  - Discuss troubleshooting topics like known limitations, best practices, and debugging and logging information





The agenda for this presentation starts with an introduction to the Profile Creation Wizard, then examines creating the three profile types, followed by some troubleshooting information.



The Profile Creation Wizard is a GUI wizard created with Install Shield Multiplatform (ISMP). It supports creation of new profiles and augmentation of existing profiles. It also supports 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 installation. It also is an option at end of Custom Installation for WebSphere Process Server V6.0.

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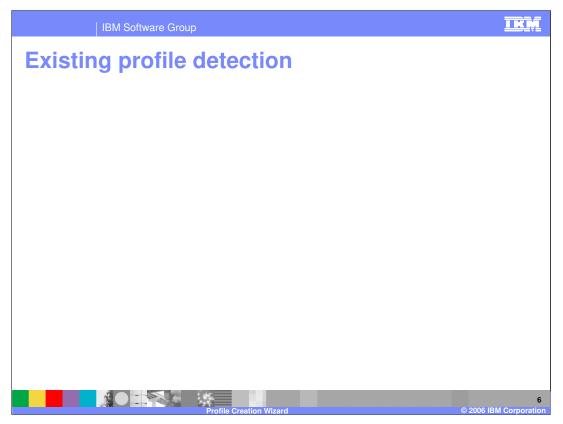
#### **Profile creation wizard flow**

- 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

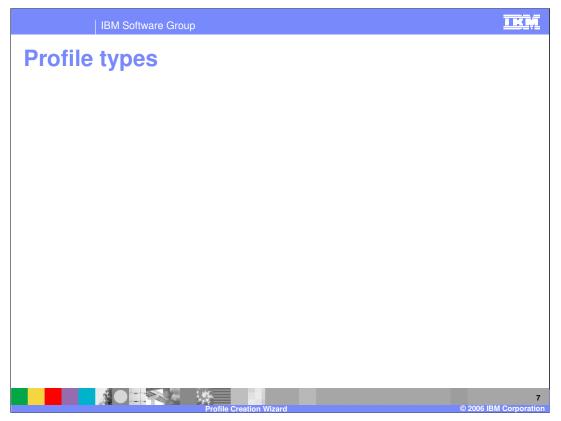


The normal profile creation wizard will flow like this. First is the welcome screen, and then the existing profile detection screen follows. Then you select which profile type to create. If you are going to augment a profile, the profile augmentation selection screen follows along with profile type specific configuration screens. In this presentation, the pre-profile creation or augmentation summary screen and post-profile creation or augmentation summary will be displayed. Then the profile will be created. The last screen will include an option to open the First Steps page.

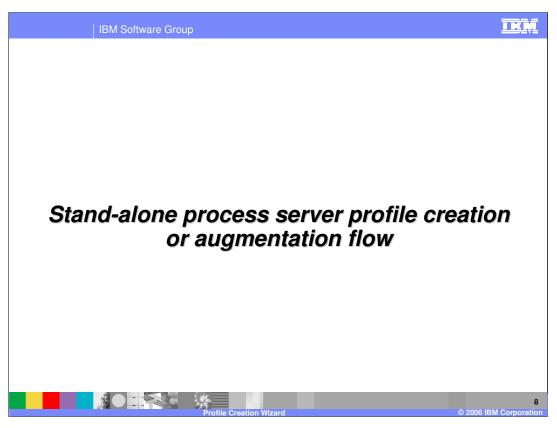
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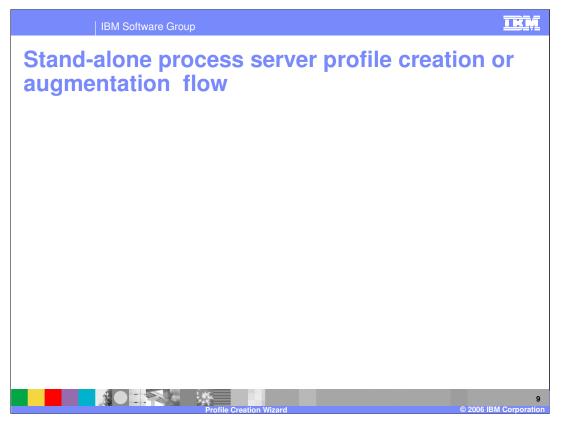
The profile creation wizard can detect existing WebSphere Application Server profiles. The existing profile detection screen will be displayed if there are existing WebSphere Application Server profiles that have not been fully augmented by the Process Server or have not been federated to a deployment manager. Custom Profiles may be unfederated first so that they can be augmented and then refederated to a WebSphere Process Server deployment manager profile. At 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.



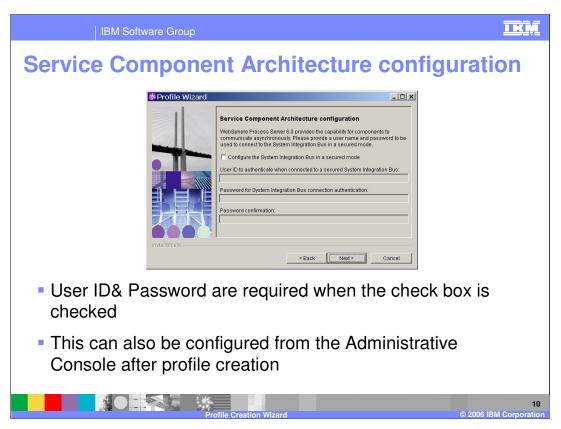
There are three types of profile types. The first is the stand-alone process server profile. This is a profile that will not be federated to a deployment manager cell because federation of stand-alone process server profiles is not supported in WebSphere Process Server V6.0. The second type of profile is a deployment manager profile. This profile 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, and can be federated at profile creation time or with the addNode command.



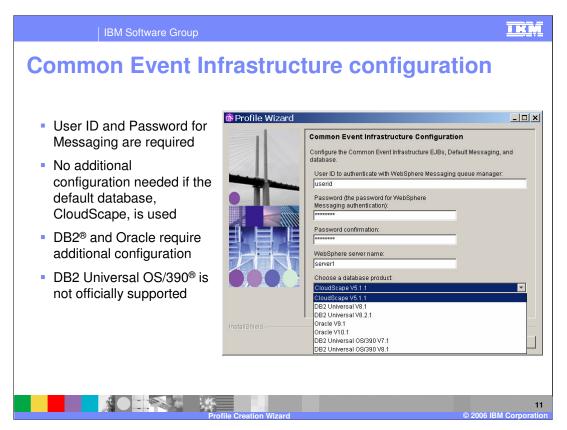
Each of the three profile types have their own wizard flow. Each one will be discussed starting with the stand-alone profile flow.



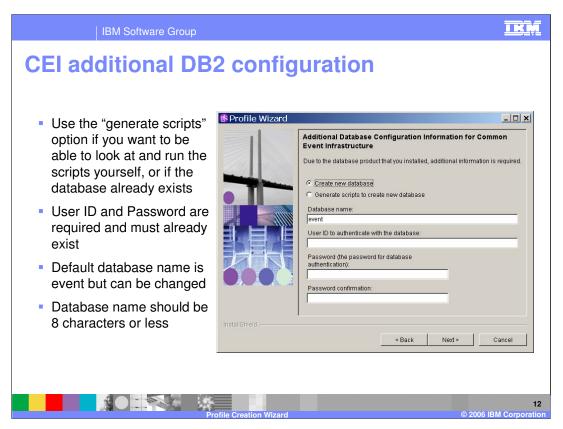
The stand-alone profile for the WebSphere Process Server follows the same flow as the WebSphere Application Server Profile Creation Wizard plus additional Process Server specific screens. Screens like profile name, profile directory, node and host names, and port value assignment are the same as the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



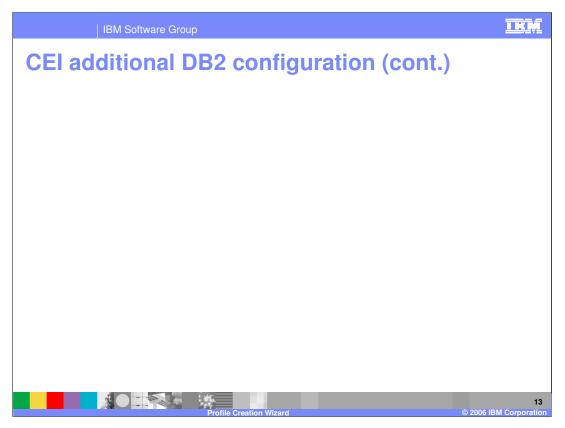
The core technology that allows a process server applications to run is SCA or Service Component Architecture. Being one of the most important, SCA is configured first in the profile creation wizard. A userid and password are required when the check box is checked to configure the System Integration Bus for running in a secure mode. This can also be configured from the Administrative Console after profile creation.



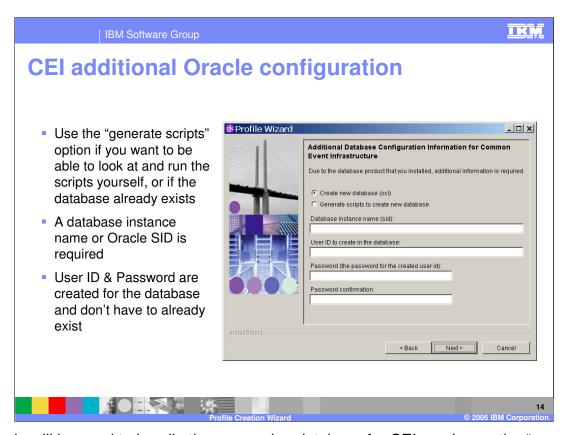
Common Event Infrastructure or CEI is a technology that uses open-standard Common Base Events to communicate events, errors, faults, and so on. A user ID and password are required for the messaging engine. No additional configuration needed if default database, CloudScape, is used. DB2 and Oracle are supported and require additional configuration to set up. Though DB2 Universal OS/390 is an option in the drop down list for databases supported by the CEI configuration, it is NOT officially supported.



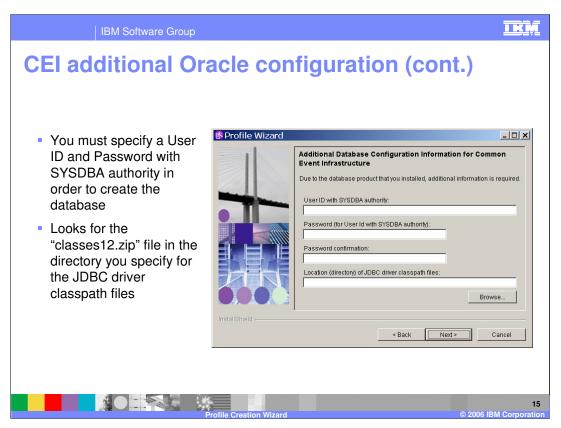
If you are setting up CEI with a DB2 database, and not the default Cloudscape database, use the "generate scripts" option so that you are able to look at and run the scripts yourself. You can also see if the database already exists. The user ID and password are required and must already exist, meaning the database will have to be created already in a 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 simply a more meaningful database name for CEI. Reminder: the database name should be 8 characters or less.



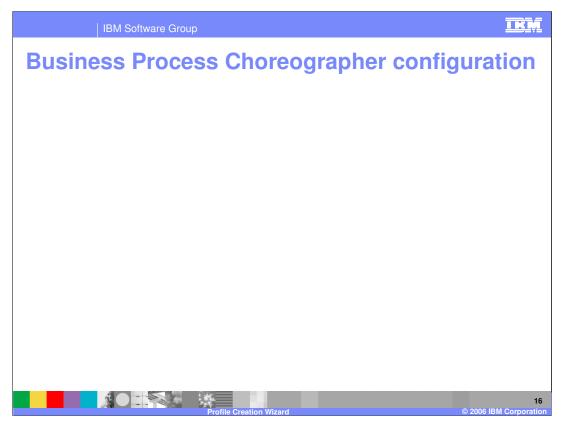
Another point to note is that DB2 Universal drivers are shipped with the Process Server and their location is used for the default value. This is great for connecting to a remote DB2 server. What the profile creation tool does is look for the db2jcc.jar file in that default directory. The database server name and server port are only used for JDBC Driver Type 4. The database node name is only used for connecting to a remote DB2 server.



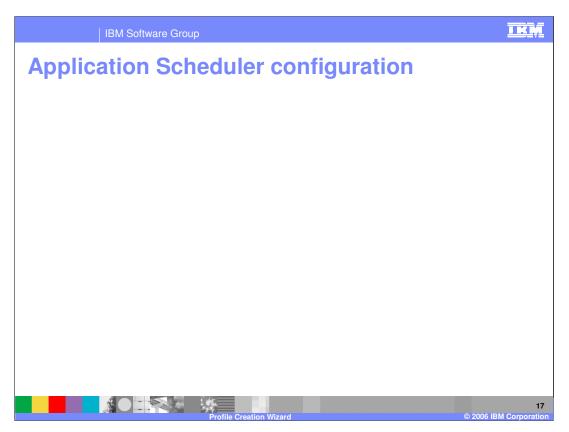
If Oracle will be used to handle the messaging database for CEI, again use the "generate scripts" option so that you are able to look at and run the scripts yourself. You can also see if the database already exists. A database instance name or Oracle SID is required. The user ID & password are created for the database and don't have to already exist.



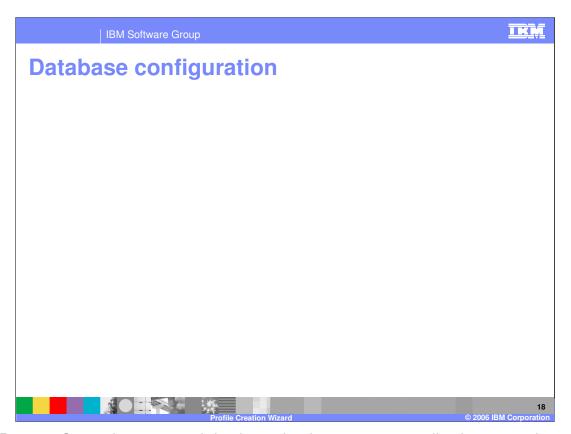
For Oracle, you must specify a User ID and Password with SYSDBA authority in order to create the database. What the profile creation wizard does is look for the "classes12.zip" file in the directory you specify for the JDBC driver classpath files.



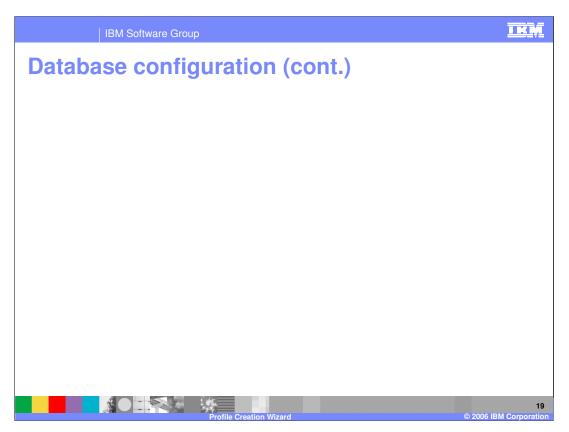
Do not create a sample for Business Process Choreographer if you plan on configuring Business Process Choreographer on this profile in production. Production level Business Process Choreographer configuration is done with the Administrative Console Wizards which can be done after the Process Server is fully installed with a profile to run from. Removing of the Sample Business Process Choreographer configuration is complex. Configuration with any database other than CloudScape requires the use of the Administrative Console Wizard.



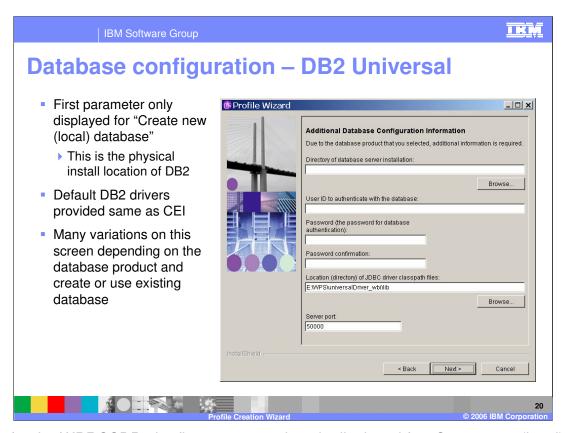
In the profile creation wizard, you can also configure the application scheduler. It does exactly what the name says, it starts and stops applications at certain times given a schedule that you set up. By default, the server that is created on all Stand-alone Process Server profiles is called "server1". 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 has a central database that it uses to run applications, correlate data, and more. The name of this database is the WPRCSDB, and not the WPSDB which conflicts with the WebSphere Portal Server database. Creation of a new database is only supported if the database is local; you must already have created a database to connect to if the database is remote.



Using DB2 Universal OS/390 remote connection for the process server database, WPRCSDB, is not officially supported in WebSphere Process Server 6.0. Configuration of Oracle OCI & Oracle Thin client (which are below the scroll bar on this screen) require the database to be already created. Cloudscape is not supported in a Network Deployment environment; it is only supported on Stand-Alone Process Server profiles.



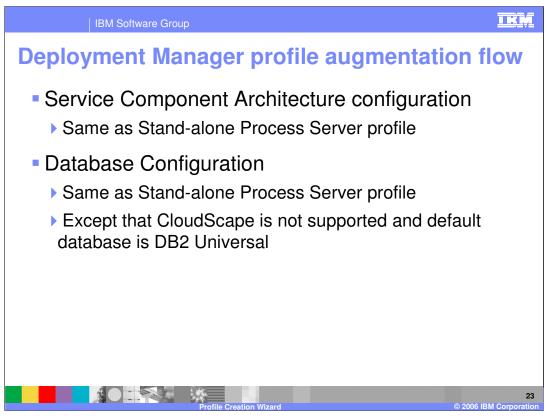
Again for the WPRCSDB, the first parameter is only displayed for "Create new (local) database". This is the physical installation location of DB2. Default DB2 drivers provided, which is the same as CEI. There are many variations on this screen depending on the database product and whether you are creating a database or using an existing database.



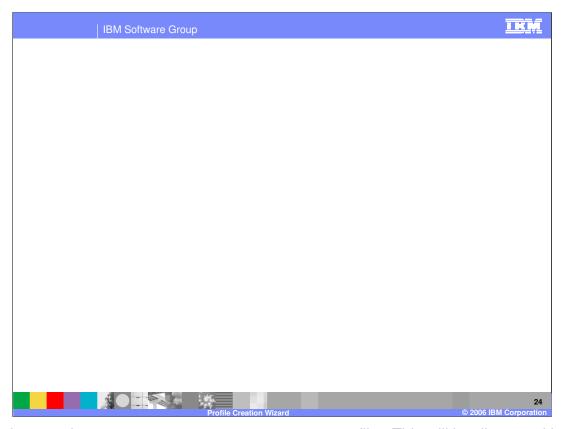
The basics have been covered when discussing the stand-alone process server profile creation. However, the Deployment Manager Profile Creation/Augmentation Flow needs to be discussed since there is one major difference between stand-alone and deployment manager profiles.



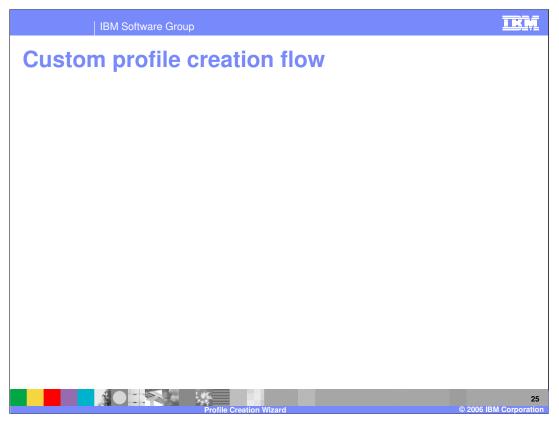
The deployment manager profile creation has the same flow as the Application Server Profile Creation Wizard plus a few additional Process Server specific screens. Again the profile name, profile directory, node, host, cell names, port value assignment, and windows service definition screens (Windows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



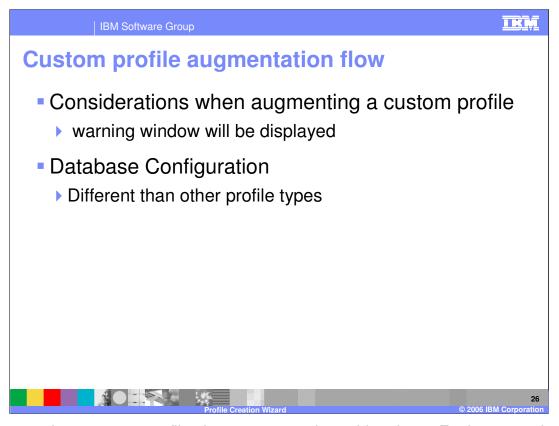
The Service Component Architecture (or SCA) configuration is the same as a Stand-alone Process Server profile. However, the database configuration is different in that CloudScape is not supported and the default database is DB2 Universal.



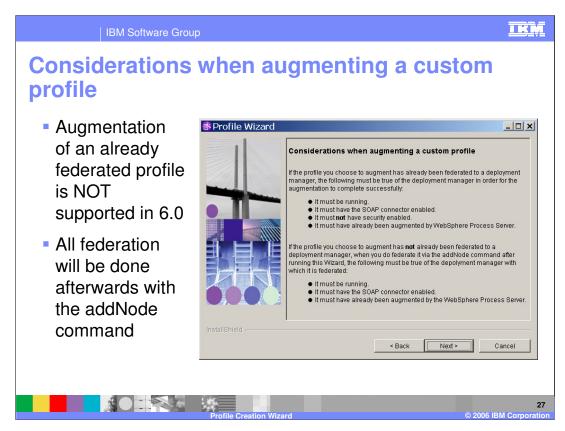
There is an option to create or augment to a custom profile. This will be discussed in the next couple slides.



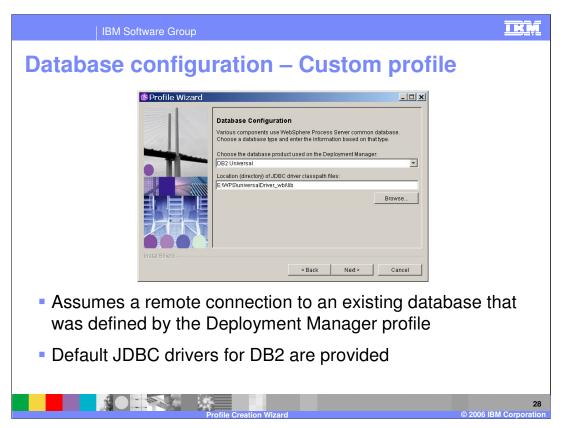
Custom Profile creation has the same flow as the Application Server Profile Creation Wizard plus additional Process Server specific screens, including Federation, Profile Name, Profile Directory, Node, and Host Names. Additional screens are same as for profile augmentation.



For augmenting a custom profile, there are several considerations. For instance, the augmentation warnings will be displayed on "considerations" window in the profile augmentation process. In addition, the database configuration is going to be different than other profile types.



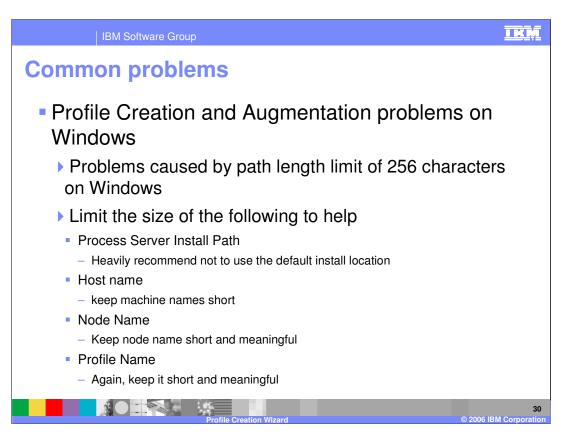
For example, this considerations warning will appear. The main warning is augmentation of an already federated profile is NOT supported in 6.0. If you need to federate a node, it will be done afterwards with the addNode command.



The database configuration for a customer 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 for you in the Process Server directory.



Now for troubleshooting profile creation or augmentation.



The most common pitfall with profile creation and augmentation on windows deals with the Windows limitation of 256 characters in a path length. To avoid this problem, create the profile as close to the root directory as possible. You can limit the size of the Process Server install path by not using the default installation location. You can limit the length of the host name, node name, and profile name. The important thing to remember for all locations is to keep the file and folder names short and meaningful.

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### **Known limitations**

- Cannot augment an already federated custom profile
  - There is a technote on how to unfederate a node
- DB2 on OS/390 is not supported in WebSphere 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
  - There are a number of technotes written on these problems

There are a few limitations that need to be discussed for the Process Server. You will not be able to augment an already federated custom profile. However, there is a technote on how to unfederate a node. 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, however there are a number of technotes written on these problems located at the Process Server support

page from www.ibm.com.

- <WAS HOME>/logs/wbi/\*
- <WAS\_HOME>/properties/profileRegistry.xml
- <WAS\_HOME>/properties/wasprofile.properties

In order to help debug a problem or find out what to send to IBM support, use the collector.bat. The collector.bat will combine the following files that help debug a problem

profilePath/(zip recursively)

cprofilePath>/properties/\*

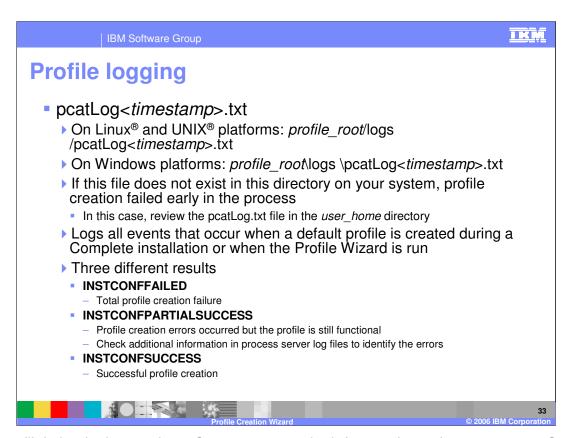
if immediately gathered.

<WAS HOME>/logs/wasprofile/\*<profileName>\*

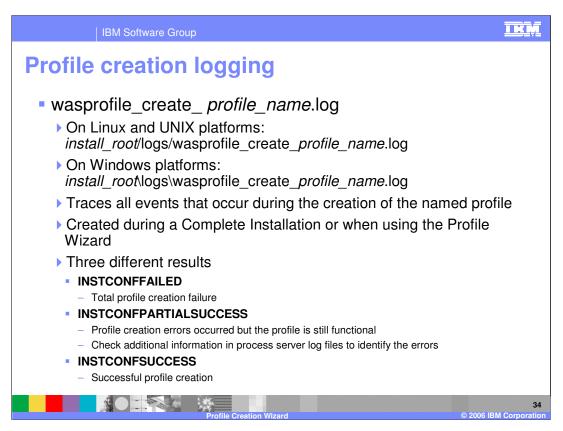
<WAS HOME>/logs/wbi/\*

<WAS HOME>/properties/profileRegistry.xml

<WAS HOME>/properties/wasprofile.properties

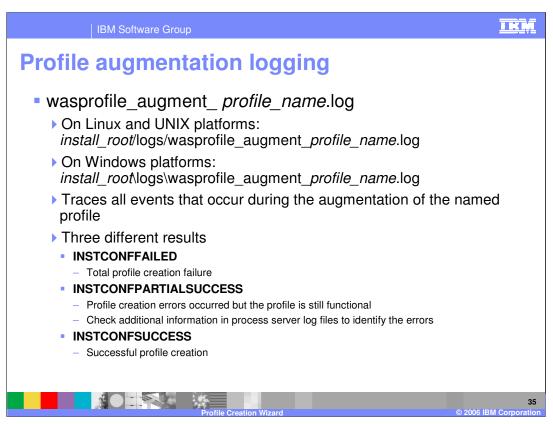


The profile's log is the pcatLog. On your system look for pcatLog<*timestamp*>.txt. On Linux and UNIX platforms it will be located at *profile\_root*/logs /pcatLog<*timestamp*>.txt. On Windows platforms the pcatlog will be located at *profile\_root*/logs \pcatLog<*timestamp*>.txt. If this file does not exist in this directory on your system, profile creation failed early in the process. In this case, review the pcatLog.txt file in the *user\_home* directory. What the pcatLog does is log all events that occur when a default profile is created during a complete installation or when the Profile Wizard is run. There are 3 different results you will have when looking at the pcatLog. INSTCONFFAILED means that the total profile creation failed. INSTCONFPARTIALSUCCESS means the profile creation errors occurred but the profile is still functional. Check additional information in process server log files to identify any errors. INSTCONFSUCCESS means the total profile creation was successful.



Another log file to check when creating a profile is wasprofile\_create\_profile\_name.log. On Linux and UNIX platforms it is located at

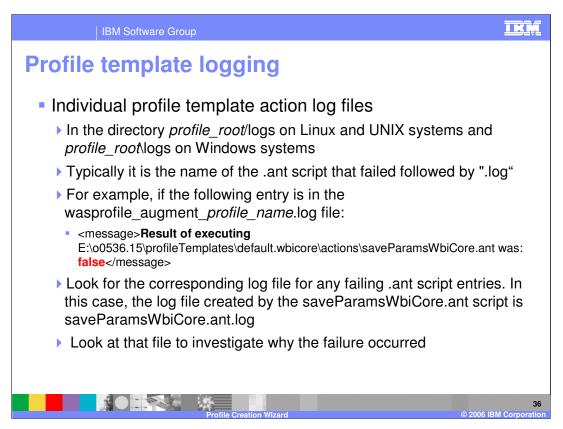
install\_root/logs/wasprofile\_create\_profile\_name.log. On Windows platforms it is located at install\_root/logs/wasprofile\_create\_profile\_name.log. What it does is trace all events that occur during the creation of the named profile. Again, it is created during a complete Installation or when using the profile wizard. Like the pcatLog, there are 3 different results you will have when looking at the wasprofile\_creat\_profile\_name.log after a profile has been created (complete install). INSTCONFFAILED means that the total profile creation failed. INSTCONFPARTIALSUCCESS means the profile creation errors occurred but the profile is still functional. Check additional information in process server log files to identify any errors. INSTCONFSUCCESS means the total profile creation was successful.



Just like the wasprofile\_create\_profile\_name.log, there is a separate log for augmenting a profile. The wasprofile\_augment\_profile\_name.log is located at install root/logs/wasprofile augment profile name.log on Linux and UNIX platforms. On

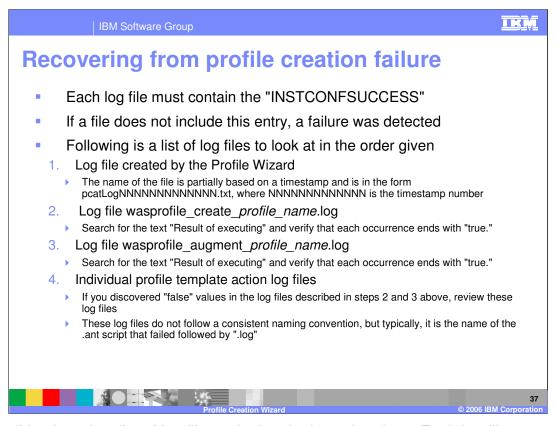
Windows platforms the log is located at

install\_root\logs\wasprofile\_augment\_profile\_name.log. What this log does is trace all events that occur during the augmentation of the named profile. Of course, there are the 3 different results (INSTCONFFAILED, INSTCONFPARTIALSUCCESS, INSTCONFSUCCESS).



Each individual profile template has its own action log files. These action log files are 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:\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.



Second, check the log file wasprofile\_create\_profile\_name.log. This log file is located in the directory <code>install\_root</code>/logs/wasprofile on Linux and UNIX systems and <code>install\_root</code>/logs/wasprofile on Windows systems. Search for the text "Result of executing" and verify that each occurrence ends with "true."

Third, check the log file wasprofile\_augment\_profile\_name.log. This log file is located in the directory <code>install\_root/logs/wasprofile</code> on Linux and UNIX systems and <code>install\_root/logs/wasprofile</code> on Windows systems. Search for the text "Result of executing" and verify that each occurrence ends with "true."

Lastly, 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 the log files in the directory <code>profile\_root/logs</code> on Linux and UNIX systems and <code>profile\_root/logs</code> on Windows systems. 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".

TERM **IBM Software Group** Recovering from profile creation failure (cont.) After you determine why profile creation failed and address the cause of the failure, you can try to create the profile again When you create 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 If you encountered 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 you used for creation does not exist, you can re-create the profile If the profile name you used for creation exists, then the profile was created

Profile Creation Wizard © 2006 IBM Corporation

For tips on recovering from an augmentation failure, see the next section

and you have encountered an augmentation failure

After you determine why profile creation failed and address the cause of the failure, you can try to create the profile again.

The WebSphere Process Server Profile Wizard first creates a WebSphere Application Server profile and then augments it with WebSphere Process Server profile templates.

Even if you encountered a profile creation failure, a profile can exist that does not have all the needed augmentations.

To determine if the profile exists, run the listed wasprofile command with the listProfiles option. If the profile name you used for creation does not exist, you can re-create the profile.

If the profile name you used for creation does exist, then the profile was created and you have encountered an augmentation failure.

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## Recovering from profile augmentation failure

- After you determine why profile augmentation failed and address the cause of the failure, you can try to augment the existing profile again to successfully create a complete WebSphere Process Server profile
- Start the Profile Wizard
  - Instead of creating a new profile, choose to augment an existing profile
  - Choose the profile you were working with and enter the correct information for it
- Some of the augmentations may have completed successfully the first time you ran the Profile Wizard
  - As a result, you may not see all of the panels that you saw the first time you tried to create the profile
  - This is because the Profile Wizard detects which remaining augmentations must be completed and displays only the necessary panels



After you determine why profile augmentation failed and address the cause of the failure, you can try to augment the existing profile again to successfully create a complete WebSphere Process Server profile. What you will do is start the Profile Wizard, and instead of creating a new profile, choose to augment an existing profile. Choose the profile you were working with and enter the correct information for it

Some of the augmentations may have completed successfully the first time you ran the Profile Wizard. As a result, you may not see all of the panels that you saw the first time you tried to create the profile. This is because the Profile Wizard detects which remaining augmentations must be completed and displays only the necessary panels.

TERM IBM Software Group Profile wizard release notes and Technotes No support for profile augmentation using wasprofile command-line tool Do all profile augmentation with the Profile Wizard, which can be run silently WebSphere Process Server does not support augmenting a federated profile > Separate technote available on how to unfederate a profile Profile directory path length limit of 256 characters on Windows Operating Systems Remove augmentations before manually deleting a profile using command line utility wasprofile ▶ Before you can manually delete a WebSphere Process Server profile, you must remove all augmentations that have been made to it. Warning messages in Profile Wizard log file - missing profileRegistry.xml file Ignore the warning messages because this is expected behavior. Profile Wizard can lead user to incorrectly delete the default directory when federating a custom profile and deployment manager is not available Do not follow the deletion directions on this panel It appears when you are creating a custom profile and the deployment manager you indicated to federate it to was not running or available

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. You will have to do all profile augmentation with the Profile Wizard, which can be run silently. The WebSphere Process Server does not support augmenting a federated profile. There is a separate technote available on how to unfederate a profile. Profile directory path length limit of 256 characters on Windows Operating Systems. Remove augmentations before manually deleting a profile using command line utility wasprofile. Before you can manually delete a WebSphere Process Server profile, you must remove all augmentations that have been made to it. Whenever you see the warning messages in Profile Wizard log file - missing profileRegistry.xml file – ignore them since this is expected behavior. The Profile Wizard can lead user to incorrectly delete the default directory when federating a custom profile and deployment manager is not available. Do not follow the deletion directions on this panel. It appears when you are creating a custom profile and the Deployment Manager you indicated to federate it to was not running or available



And, in summary...

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# **Summary**

- Discussed Profile creation and augmentation for WebSphere Process Server V6.0 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
  - stand-alone
  - deployment manager
  - custom profiles
- Discussed troubleshooting topics like known limitations, best practices, and debugging and logging information



This presentation covered profile creation and augmentation for WebSphere Process Server V6.0 profiles. A profile wizard introduction and initial information on profiles was covered. Then you stepped through creation and augmentation of the three types of profiles for WebSphere Process Server V6.0 (stand-alone, deployment manager, and custom profiles). Finally, you were able to look at troubleshooting topics like known limitations, best practices, and debugging and logging information for the Profile Wizard in WebSphere Process Server V6.0.



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