IBM WebSphere® Enterprise Service Bus V6.1
IBM WebSphere Process Server V6.1

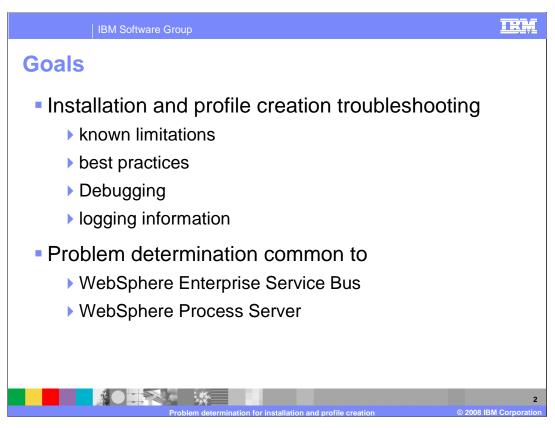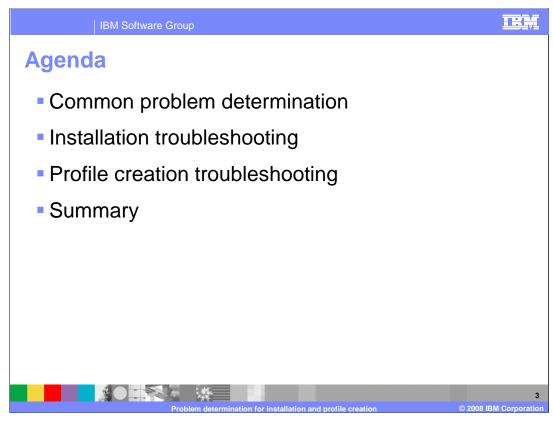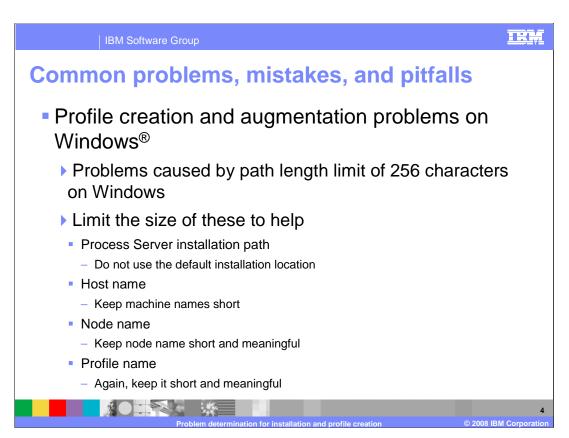## *Problem determination for installation and profile creation*

This presentation will cover the problem determination for installation and profile creation of the WebSphere Enterprise Service Bus and the WebSphere Process Server V6.1.

Goals

- Installation and profile creation troubleshooting
  - known limitations
  - best practices
  - Debugging
  - logging information
- Problem determination common to
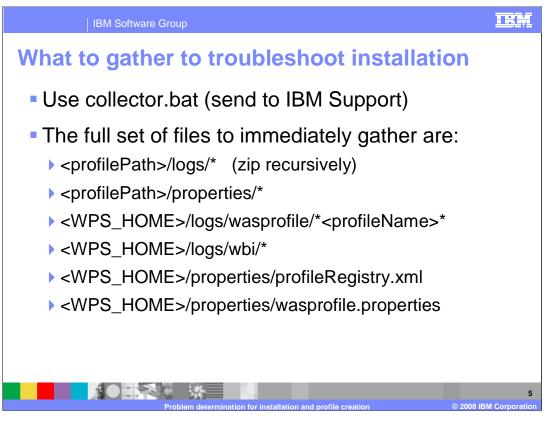 - WebSphere Enterprise Service Bus
  - WebSphere Process Server

The goal of this presentation is to discuss troubleshooting topics, known limitations, best practices, and debugging and logging information for the WebSphere Enterprise Service Bus and the WebSphere Process Server V6.1 Profile creation and augmentation. The information discussed in this presentation applies to both the WebSphere Enterprise Service Bus and the WebSphere Process Server V6.1.
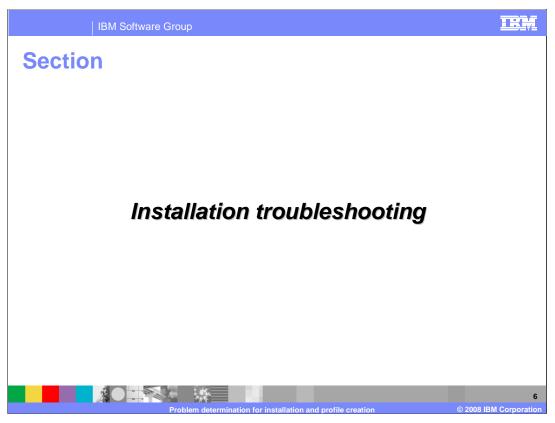
Agenda

- Common problem determination

- Installation troubleshooting

- Profile creation troubleshooting

- Summary

This section will provide an overview of common problem determination.

Common problems, mistakes, and pitfalls

- Profile creation and augmentation problems on Windows®
  - ▶ Problems caused by path length limit of 256 characters on Windows
  - ▶ Limit the size of these to help
    - Process Server installation path
      - – Do not use the default installation location
    - Host name
      - – Keep machine names short
    - Node name
      - – Keep node name short and meaningful
    - Profile name
      - – Again, keep it short and meaningful

The most common pitfall with profile creation and augmentation on Windows is related to the Windows limitation of 256 characters in a path length.   Create the profile as close to the root drive as possible; for example, C:/ProcServer/profile1/. You should limit the length of the WebSphere Process Server installation path; do not use the default installation location, host name, node name, and profile name. All names and paths should be kept short and meaningful.

What to gather to troubleshoot installation

- 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/*<profileName>*
  - ▶ <WPS_HOME>/logs/wbi/*
  - ▶ <WPS_HOME>/properties/profileRegistry.xml
  - ▶ <WPS_HOME>/properties/wasprofile.properties

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In order to help debug a problem or find out what to send to IBM support, use collector.bat. The collector will combine the files that help debug a problem if they are gathered immediately after a problem or failure. The files collected are listed here.
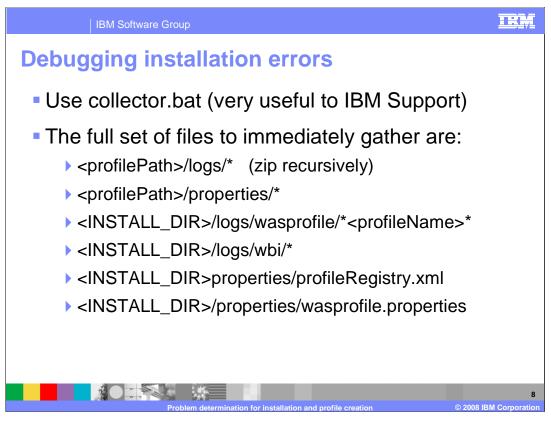
Section

Installation troubleshooting

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This section covers troubleshooting, including best practices, debugging and logging information.

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 V6.1 online information center

  http://publib.boulder.ibm.com/infocenter/dmndhelp/v6r1mx/index.jsp?topic=/com.ibm.websphere.wps.610.doc/welcome_top_wps.htm

- If installation fails
  - ▶ Refer to the information center when uninstalling any installed portions before reinstalling
    - Go to next selection in the navigation panel:
      WebSphere Process Server for Multiplatforms 6.0 > 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 V6.1 online Information Center.

If the installation fails, refer to the Information Center when uninstalling any installed portions before reinstalling.

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

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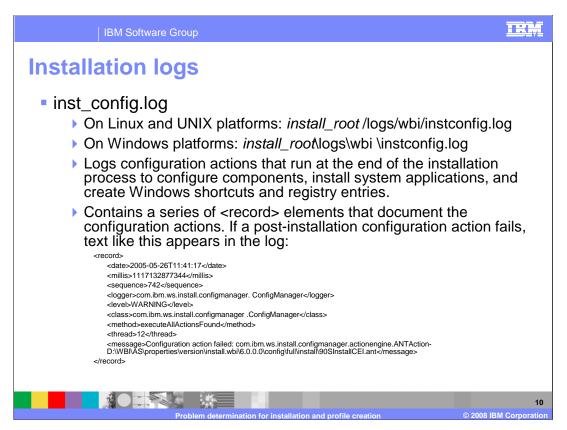Problem determination for installation and profile creation   © 2008 IBM Corporation

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
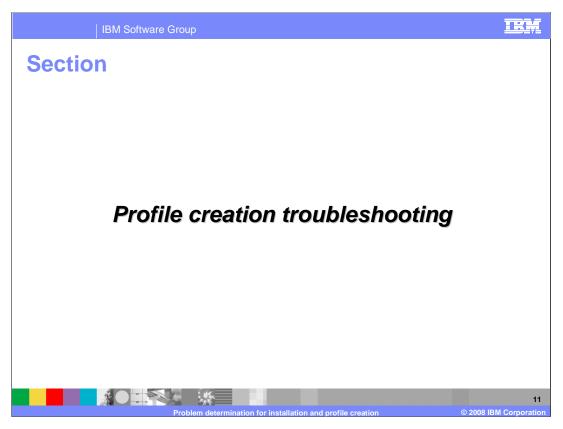   - Additional information in other log files identifies the errors

There is an installation 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.

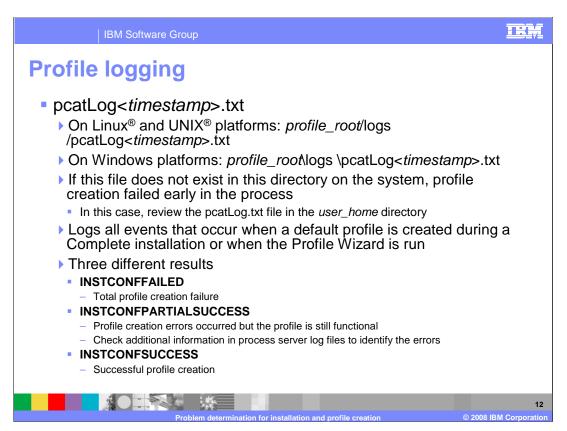INSTCONFSUCCESS means the installation was successful.

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 this 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>
```

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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 as <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.
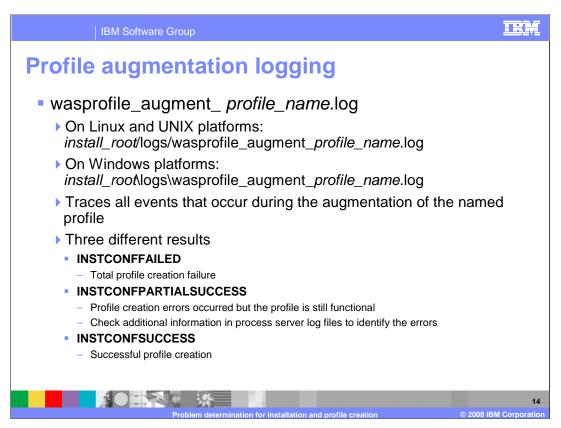
Section

Profile creation troubleshooting

Problem determination for installation and profile creation

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

Profile logging

- pcatLog<*timestamp*>.txt
  - On Linux® and UNIX® platforms: *profile_root*/logs /pcatLog<*timestamp*>.txt
  - On Windows platforms: *profile_root*\logs \pcatLog<*timestamp*>.txt
  - If this file does not exist in this directory on the system, profile creation failed early in the process
    - In this case, review the pcatLog.txt file in the *user_home* directory
  - Logs all events that occur when a default profile is created during a Complete installation or when the Profile Wizard is run
  - Three different results
    - **INSTCONFFAILED**
      - Total profile creation failure
    - **INSTCONFPARTIALSUCCESS**
      - Profile creation errors occurred but the profile is still functional
      - Check additional information in process server log files to identify the errors
    - **INSTCONFSUCCESS**
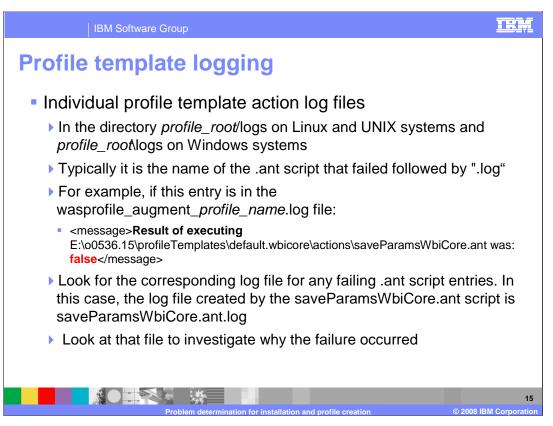   - Successful profile creation

The profile log file is the pcatLog, which appears as "pcatLog" followed by a timestamp and the extension ".txt". It is located 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.

Profile creation logging

- wasprofile_create_ *profile_name*.log
  - On Linux and UNIX platforms:
    install_root/logs/wasprofile_create_*profile_name*.log
  - On Windows platforms:
    install_root\logs\wasprofile_create_*profile_name*.log
  - Traces all events that occur during the creation of the named profile
  - Created during a Complete Installation or when using the Profile Wizard
  - Three different results
    - **INSTCONFFAILED**
      - Total profile creation failure
    - **INSTCONFPARTIALSUCCESS**
      - Profile creation errors occurred but the profile is still functional
      - Check additional information in process server log files to identify the errors
    - **INSTCONFSUCCESS**
      - Successful profile creation

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Problem determination for installation and profile creation
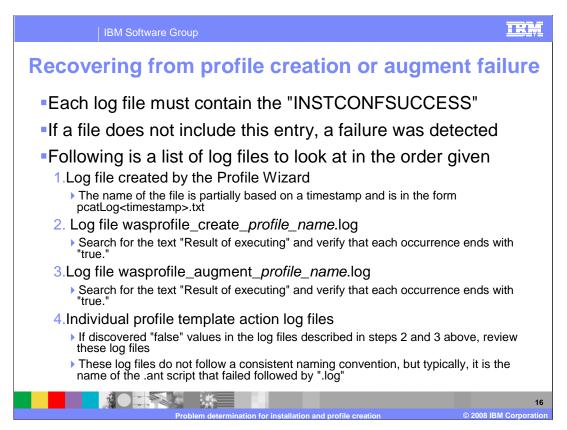
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Another log file to check when creating a profile is listed here. This log traces all events that occur during the creation of the named profile and is created during a complete installation or when using the profile wizard. Like the pcatLog, the same three results messages can be returned after a profile has been created.

Profile augmentation logging

- wasprofile_augment_ *profile_name*.log
  - On Linux and UNIX platforms:
    install_root/logs/wasprofile_augment_*profile_name*.log
  - On Windows platforms:
    install_root\logs\wasprofile_augment_*profile_name*.log
  - Traces all events that occur during the augmentation of the named profile
  - Three different results
    - **INSTCONFFAILED**
      – Total profile creation failure
    - **INSTCONFPARTIALSUCCESS**
      – Profile creation errors occurred but the profile is still functional
      – Check additional information in process server log files to identify the errors
    - **INSTCONFSUCCESS**
      – Successful profile creation

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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 as shown here.

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 this 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

Each individual profile template has its own action log files, which can be found in the *profile_root*/logs directory. Typically it is the name of the .ant script that failed followed by ".log". For example, if the entry shown here is in the profile augment log, 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.

Recovering from profile creation or 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
  1. Log file created by the Profile Wizard
     ▸ The name of the file is partially based on a timestamp and is in the form pcatLog<timestamp>.txt
  2. Log file wasprofile_create_*profile_name*.log
     ▸ Search for the text "Result of executing" and verify that each occurrence ends with "true."
  3. 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 files
     ▸ 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"

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This slide shows a list of log files to look at in the order given. Each log file must contain the entry "INSTCONFSUCCESS." If a file does not include this entry, that means a failure was detected. First, check the log file created by the Profile Wizard. The name of the file is partially based on a timestamp and is in the form pcatLog<timestamp>.txt. This file can be found in the *profile_root*/logs directory.

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".
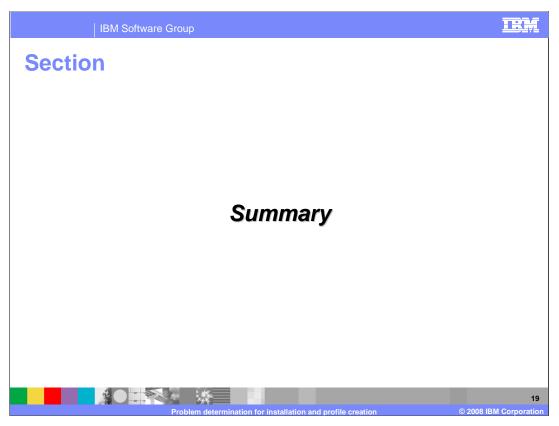
Recovering from profile creation failure

- 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:
  - ▶ wizard first creates a WebSphere Application Server profile
  - ▶ then augments it with WebSphere Process Server profile templates
    - ▪ This creates a WebSphere Process Server profile
- When profile creation fails:
  - ▶ a profile can exist that does not have all the needed augmentations
- To determine if the profile exists, run the command:
  install_root/bin/wasprofile.sh –listProfiles (Linux or UNIX)
  install_root\bin\wasprofile.bat –listProfiles (Windows)
  - ▶ If profile name does not exist, re-create the profile
  - ▶ If the profile name exists, then the profile was created but augmentation failed

After determining why profile creation failed and addressing the cause of the failure, 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 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 wasprofile command with a parameter of "-listProfiles". If the profile name used for creation does not exist, re-create the profile. If the profile name does exist, then the profile was created and has encountered an augmentation failure.

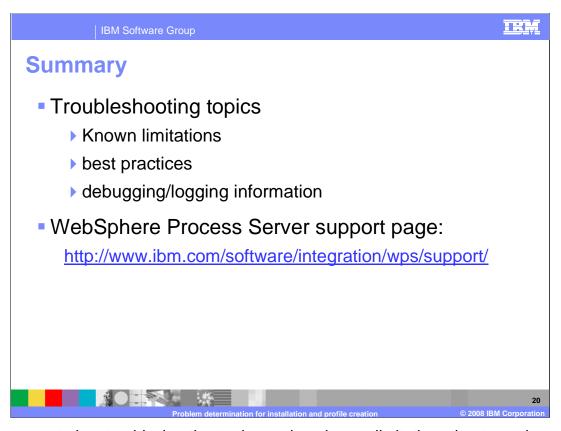# Recovering from profile augmentation failure

- 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
  - ▶ Instead of creating new profile, augment an existing profile
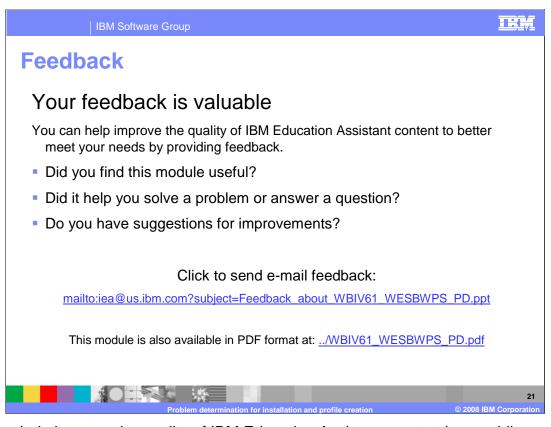 - ▶ Choose the profile and enter the correct information for it

- Some of the augmentations might have completed successfully the first time profile wizard was run
  - ▶ Not all panels are displayed
  - ▶ The profile wizard detects which remaining augmentations must be completed and displays only the necessary panels

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 might have completed successfully the first time profile wizard was run. As a result, not all the panels that were presented the first time are displayed.

This is because the Profile Wizard detects which remaining augmentations must be completed and displays only the necessary panels.

Section

Summary

This section will provide a summary of this presentation.

Summary

- Troubleshooting topics
    - Known limitations
    - best practices
    - debugging/logging information

- WebSphere Process Server support page:

    http://www.ibm.com/software/integration/wps/support/

In this presentation, troubleshooting topics such as known limitations, best practices, and debugging and logging information for the installation and profile creation were discussed. Refer to the support page for the latest information in Technotes and troubleshooting guides.

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