

This presentation will cover the Profile Creation Wizard feature of WebSphere Enterprise Service Bus V6.0.1



The goal of this presentation is to discuss Profile creation and augmentation for WebSphere Enterprise Service Bus V6.0.1. The profile wizard and initial profile information will also be introduced, including creation and augmentation of the three types of profiles for WebSphere Enterprise Service Bus. Finally, troubleshooting topics, known limitations, best practices, and debugging and logging information will be covered.



This section will introduce the Profile Creation Wizard for WebSphere Enterprise Service Bus V6.0.1



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 three profile types: Stand-alone WebSphere ESB 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 and is also an option at the end of Custom Install of WebSphere Enterprise Service Bus V6.0.1.



The normal sequence of profile creation wizard screens is shown here. First is the welcome screen, followed by the existing profile detection screen. Next, you can select which profile type to create at 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 pre-profile creation and augmentation summary screen and post-profile creation and augmentation summary will be displayed. A summary of the profile creation will then be displayed along with the option to launch the First Steps page.



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 WebSphere Enterprise Service Bus or have not been federated with a deployment manager. Custom Profiles can be unfederated first so that they can be augmented and then refederated with a WebSphere Enterprise Service Bus deployment manager profile. On this screen, you can choose 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 profiles. The stand-alone WebSphere ESB server profile is a profile that will not be federated to a deployment manager cell because federation of stand-alone WebSphere ESB server profiles is not supported in WebSphere Enterprise Service Bus V6.0.1. The deployment manager profile is used to manage a cell and allows custom profiles to be federated to a deployment manager. The custom profile is an empty node with no server defined, the purpose of which is to be federated to a deployment manager at profile creation time or using the addNode command. Once federated, you would have the option to create a default WebSphere Application Server or WebSphere Enterprise Service Bus server on this node. The profile creation wizard must be run by a user with root privileges on Unix or Linux systems or a member of the Administrator group on a Windows system.



Each of the three profile types have their own wizard flow. Each one will be discussed in this section, beginning with the stand-alone profile flow.



The stand-alone profile for the WebSphere ESB Server follows the same flow as the WebSphere Application Server Profile Creation Wizard with some additional WebSphere ESB specific screens. Screens such as 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 WebSphere Enterprise Service Bus application to run is Service Component Architecture (SCA), which is 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 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 (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 the 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 the Profile Wizard.

Review the **Configuring a DB2 database on a z/OS system** topic at the following location in the information center: **Installing WebSphere ESB > 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** 



When setting up CEI with a DB2 database (not the default Cloudscape database) use the "generate scripts" option to enable reviewing and running 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 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 to a more meaningful database name for CEI. The database name should be 8 characters or less.



The DB2 Universal drivers are shipped with WebSphere Enterprise Service Bus and their location is used for the default Location value, which enables you to easily connect to a remote DB2 server. The profile creation tool looks for the db2jcc.jar file in the 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 enable reviewing and running 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.



The previous section covered the basics of stand-alone WebSphere ESB server profile creation. This section will cover the Deployment Manager Profile Creation and Augmentation, 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 WebSphere Enterprise Service Bus 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 those seen with WebSphere Application Server. However, the deployment manager uses different ports than a stand-alone profile. Additional screens are the same for profile augmentation and the Service Component Architecture (or SCA) configuration is the same as a Stand-alone WebSphere ESB Server profile.



This section will cover the option to create or augment to a custom profile.



Again, the flow is the same as that of the Application Server Profile Creation Wizard plus some additional WebSphere Enterprise Service Bus 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 for augmenting a custom profile. These warnings will be displayed on the "considerations" window during the profile augmentation process.

## **Considerations when augmenting a custom** profile Augmentation 🚯 Profile Wizard \_ 🗆 🗙 of an already Considerations when augmenting a custom profile federated profile If the profile you choose to augment has already been federated to a deployment manager, the following must be true of the deployment manager in order for the augmentation to complete successfully: is NOT It must be running. It must have the SOAP connector enabled. It must not have security enabled. It must have already been augmented by WebSphere Process Server. supported in 6.0.1 If the profile you choose to augment has **not** already been federated to a deployment manager, when you do federate it via the addNode command after running this Wizard, the following must be true of the depolyment manager with All federation which it is federated: It must be running. It must have the SOAP connector enabled. It must have already been augmented by the WebSphere Process Server will be done afterwards using the < Back Next > Cancel addNode command 21

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An example of the considerations warning is shown here. The main warning is that augmentation of an already federated profile is NOT supported in V6.0.1. Federating a node must be performed afterwards using the addNode command.

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This section will cover troubleshooting profile creation or augmentation.



The most common pitfall with profile creation and augmentation on Windows is the Windows limitation of 256 characters in a path length. Therefore, you should create the profile as close as possible to the root (for example C:/WESB/profile1/). You should also limit the length of the WebSphere Enterprise Service Bus install path, host name, node name, and profile name. For this reason, it is highly recommended that you not use the default install location. You should instead keep names for paths and folders short and meaningful.



There are a few limitations related to WebSphere Enterprise Service Bus that must be discussed. For instance, augmenting an already federated custom profile is not supported. Information describing how to unfederate a node can be found in the information center. There are a number of accessibility related limitations with the Install and Profile Wizard GUIs. There are technotes written on these problems located at the WebSphere Enterprise Service Bus support page from www.ibm.com.



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

<profilePath>/logs/\* (zip recursively)

<profilePath>/properties/\*

<WESB\_HOME>/logs/wasprofile/\*<profileName>\*

<WESB\_HOME>/logs/wbi/\*

<WESB\_HOME>/properties/profileRegistry.xml

<WESB\_HOME>/properties/wasprofile.properties



The profile log is the pcatLog. Look for pcatLog<*timestamp*>.txt on the system. On Linux, UNIX and Windows platforms it will be located at *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. The pcatLog logs 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. INSTCONFFAILED means that the profile creation failed, INSTCONFPARTIALSUCCESS means errors occurred during profile creation, but the profile is still functional. Check for additional information in the WebSphere Enterprise Service Bus log files to identify any errors. INSTCONFSUCCESS means the profile creation was successful.



Another log file to check when creating a profile is wasprofile\_create\_ profile\_name.log. On Linux, UNIX and Windows platforms it is located in the *install\_root*/logs/ directory This log file traces 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. Again, the three possible results are 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 *install\_root*/logs/ directory. This log traces all events that occur during the augmentation of the named profile. Again, the three possible results are INSTCONFFAILED, INSTCONFPARTIALSUCCESS, and INSTCONFSUCCESS.



Each individual profile template has its own action log files, which are located in the *profile\_root*/logs directory on Linux, UNIX and 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.



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, 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 pcatLogNNNNNNNNNNNNN.txt, where NNNNNNNNNNNNN is the timestamp number. This file can be found in the *profile\_root*/logs directory.

Next, check the wasprofile\_create\_*profile\_name*.log file, 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 file, 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 any "false" values are discovered in the log files described in steps 2 and 3 above, review the 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".



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 Enterprise Service Bus Profile Wizard, the wizard first creates a WebSphere Application Server profile and then augments it with WebSphere Enterprise Service Bus profile templates to create a WebSphere Enterprise Service Bus profile. When a profile creation failure is encountered, 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 (.bat on Windows). If the profile name used for creation does not exist, re-create the profile. If the profile name exists, then the profile was created and augmentation failed. 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 Enterprise Service Bus profile.

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

Choose the appropriate profile and enter the correct information for it.

Some of the augmentations might have completed successfully the first time the 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.



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

Before manually deleting a WebSphere Enterprise Service Bus profile, you must first remove all augmentations that have been made to it.

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

The Profile Wizard can lead you 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 creating a custom profile and when the deployment manager indicated to federate to was not running or available



This section will provide a summary of this presentation.



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

