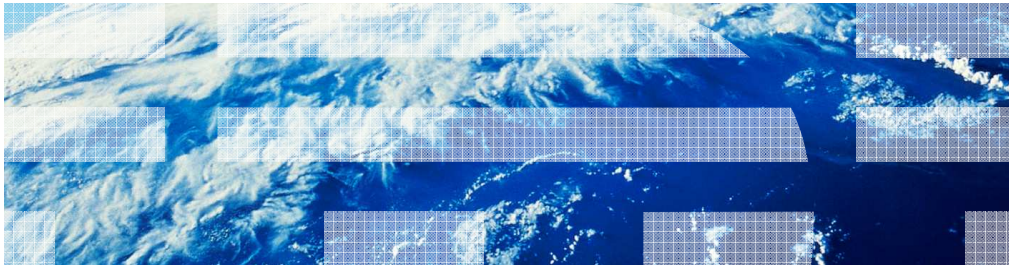


IBM WebSphere Application Server V8.5

Better disaster recovery for service integration bus messaging engine



© 2012 IBM Corporation

This presentation describes support for “Better disaster recovery for Service Integration Bus Messaging Engine” included in IBM WebSphere® Application Server V8.5

Overview

Better disaster recovery for Service Integration Bus Messaging Engine feature will enable users to recover the lost configuration of messaging engine and configuration of its queue and topic destinations from the message store. The service integration bus messaging engine connects to a message store to store persistent messages. The following are the two types of message store: the database system and the file system.

Background

- Service integration bus messaging engine can be configured to use either Database or FileStore as its persistence store. Each of the messaging engine in service integration bus has a unique messaging engine UUID.
- This messaging engine UUID is burnt into the persistence layer such that no other messaging engine can use this persistence layer.
- In the event of an messaging engine failing to restart (because the server instance or messaging engine is corrupted or some reason unavailable) the persistence layer becomes inaccessible.
- No other messaging engine can access this persistence layer, since the messaging engine UUID is burnt into the persistence layer.
- All the messages held in the persistence layer remains locked and not reachable.

When a server or a cluster is added as a new service integration bus member, service integration bus creates a new messaging engine with a unique UUID for it in the configuration. On messaging engine start, it burns this UUID in the message store, such that only the same messaging engine can use it. If the messaging engine fails or it gets corrupted and its configuration is lost, then the persistent messages in the message store to which it was connected to cannot be recovered. The reason for inability to recover persistent messages is that the service integration bus creates a new messaging engine UUID in its configuration when it tries to add new bus member. The new UUID does not match with the UUID of the previous messaging engine stored in the message store and so it is unable to process the persistent messages.

What is better disaster recovery for service integration bus messaging engine ?

- The new feature provides disaster recovery of the service integration bus messaging engine such that the recovered messaging engine takes over the corrupted messaging engine and connects to the persistence layer that the corrupted messaging engine was using before.
- The user can start the recovered messaging engine and can process the persistent messages in queue and topic destinations of the messaging engine message store.

The feature provides new WSADMIN command “recoverMEConfig”, which connects to the message store to which the previously corrupted messaging engine was using and then recovers the UUID of the previous messaging engine. It also recovers the UUID of the queue and topic destinations of the previous messaging engine and default values for all other configuration properties.

After the WSADMIN command completes, you can start and run the new messaging engine to process the persistent messages of the locked messaging engine .

Section

Usage scenarios

The following slide describes an usage scenario.

You want to configure a new messaging engine in the service integration bus to take over a corrupted messaging engine and connect to the persistence layer

- You recover the failed or corrupted messaging engine configuration by running the new WSADMIN command *recoverMEConfig* .
- *recoverMEConfig* command recovers the messaging engine configuration at server level and cluster level.
- User uses this command if the backup of the configuration data of the failed or locked messaging engine is not available.

This command recovers the UUID of the messaging engine and UUID of messaging engine queues and topics from the message store. Default values are recovered for the other configuration properties. It can recover the messaging engine configuration for server bus member and for cluster bus member.

Section

Summary

7

Better disaster recovery for service integration bus messaging engine

© 2012 IBM Corporation

In summary ..

Summary

- New WSADMIN command **recoverMEConfig** provides better disaster recovery of failed or corrupted messaging engine configuration.
- The command recovers the messaging engine configuration at the server or at the cluster level.
- It connects to the service integration bus messaging engine message store and recovers the messaging engine UUID and UUID of messaging engine queue and topic destinations.
- The user can then start and run the messaging engine to process the persistent messages

The persistent messages in service integration bus messaging engine message store cannot be recovered if the configuration of the messaging engine is lost. To recover these messages the new WSADMIN command “recoverMEConfig” is provided. The command recovers the lost messaging engine configuration which was previously defined at server or at cluster level. The command starts by connecting to the message store, reading the stored messaging engine UUID and UUID of its destinations . The command completes by creating the lost messaging engine configuration. When you start the messaging engine , the persistent messages are recovered and can be processed further.

References

- Link to new command recoverMEConfig

http://pic.dhe.ibm.com/infocenter/wasinfo/v8r5/topic/com.ibm.websphere.nd.multiplatform.doc/ae/rikk_recoverme_config.html

See these references for additional information about disaster recovery of systems integration bus messaging engine configuration.

Feedback

Your feedback is valuable

You can help improve the quality of IBM Education Assistant content to better meet your needs by providing feedback.

- Did you find this module useful?
- Did it help you solve a problem or answer a question?
- Do you have suggestions for improvements?

Click to send email feedback:

mailto:iea@us.ibm.com?subject=Feedback_about_WASV85_SIBus_ME_Recovery.ppt

This module is also available in PDF format at: ..\\WASV85_SIBus_ME_Recovery.pdf

You can help improve the quality of IBM Education Assistant content by providing feedback.



Trademarks, disclaimer, and copyright information

IBM, the IBM logo, ibm.com, and WebSphere are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of other IBM trademarks is available on the web at "[Copyright and trademark information](http://www.ibm.com/legal/copytrade.shtml)" at <http://www.ibm.com/legal/copytrade.shtml>

THE INFORMATION CONTAINED IN THIS PRESENTATION IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. WHILE EFFORTS WERE MADE TO VERIFY THE COMPLETENESS AND ACCURACY OF THE INFORMATION CONTAINED IN THIS PRESENTATION, IT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. IN ADDITION, THIS INFORMATION IS BASED ON IBM'S CURRENT PRODUCT PLANS AND STRATEGY, WHICH ARE SUBJECT TO CHANGE BY IBM WITHOUT NOTICE. IBM SHALL NOT BE RESPONSIBLE FOR ANY DAMAGES ARISING OUT OF THE USE OF, OR OTHERWISE RELATED TO, THIS PRESENTATION OR ANY OTHER DOCUMENTATION. NOTHING CONTAINED IN THIS PRESENTATION IS INTENDED TO, NOR SHALL HAVE THE EFFECT OF, CREATING ANY WARRANTIES OR REPRESENTATIONS FROM IBM (OR ITS SUPPLIERS OR LICENSORS), OR ALTERING THE TERMS AND CONDITIONS OF ANY AGREEMENT OR LICENSE GOVERNING THE USE OF IBM PRODUCTS OR SOFTWARE.

© Copyright International Business Machines Corporation 2012. All rights reserved.