

Sterling Integrator



WebSphere MQ Suite

Version 5.1

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Note

Before using this information and the product it supports, read the information in "Notices" on page 11.

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Chapter 1. New WebSphere MQ Suite and Adapter Functionality

The WebSphere MQ Suite is a new group of services that provide maximum flexibility and functionality by enabling you to script a complete MQ session using a business process. The suite also includes a new adapter that you can use for asynchronous receiving, the WebSphere MQ Async Receiver adapter.

The original WebSphere MQ adapter may serve your needs better if your MQ communications are fairly basic.

The following table contains a comparison of the original WebSphere MQ adapter and the new WebSphere MQ Suite of services:

Function	WebSphere MQ Suite	WebSphere MQ Adapter
Reuse	The eight default services can access multiple MQ Queue Managers or MQ Queue combinations – you do not have to create new configurations of each service for different MQ Queue Managers or MQ Queue combinations.	Requires a separate adapter configuration for one MQ Queue Manager and one MQ Queue combination.
Control over the process	Enables you to determine exactly how and when each operation should be performed and can work with multiple MQ Queues and/or MQ Queue Managers within one SyncPoint operation	Runs entire session in one invocation call from the business process. It connects to the configured MQ Queue Manager and MQ Queue (or re-uses an existing connection from the pool), sends or receives messages, and performs the commit or backout as appropriate.
Browsing capability? (getting messages without removing them from the queue)	Yes	No
Batch mode support	Supports enhanced batch mode functionality for both sending and receiving, including in AsyncRcv mode.	Limited batch mode support (sending multiple workflow documents in one call), for Send operations only.

Chapter 2. WebSphere MQ Suite

The WebSphere MQ Suite is a new group of services that provide maximum flexibility and functionality by enabling you to script a complete MQ session using a business process. The suite also includes a new adapter that you can use for asynchronous receiving, the WebSphere MQ Async Receiver adapter.

Sterling Integrator still includes the original WebSphere MQ adapter, which may serve your needs better if your MQ communications are fairly basic.

For information about the original adapter, see *WebSphere MQ Adapter*.

Chapter 3. Components of the WebSphere MQ Suite

The WebSphere MQ Suite includes a communications adapter and eight services that enable you to use Sterling Integrator to perform many functions with a WebSphere MQ server. Use the services in your business processes to define actions to take while connected to a WebSphere MQ server. Optionally, you can use the WebSphere MQ Suite adapter to connect to a remote WebSphere MQ server.

- *WebSphere MQ Suite Async Receiver Adapter* – Receives messages as soon as they are available on the queue instead of waiting for a scheduled job to poll the queue.
- *WebSphere MQ Suite Open Session Service* – Opens a session, which establishes a connection to a WebSphere MQ Queue Manager.
- *WebSphere MQ Suite Open Queue Service* – Opens a queue.
- *WebSphere MQ Suite Get Message Service* – Gets or browses messages in a queue.
- *WebSphere MQ Suite Put Message Service* – Puts messages on a queue.
- *WebSphere MQ Suite Commit Service* – Commits SyncPoint operations for a given WebSphere MQ Queue Manager.
- *WebSphere MQ Suite Backout Service* – Backs out SyncPoint operations for a given WebSphere MQ Queue Manager.
- *WebSphere MQ Suite Close Session Service* – Closes an existing session and disconnect from the WebSphere MQ Queue Manager.
- *WebSphere MQ Suite Close Queue Service* – Closes a queue.

Chapter 4. WebSphere MQ Suite Components Configuration Checklist

Use the following checklist to gather necessary information prior to configuring the WebSphere MQ Suite components.

Information	Description
Business process to invoke	What business process should the WebSphere MQ Suite Async Receiver adapter invoke when a message is received?
Channel	What channel should be used for the Async Receiver adapter?
Document name	What document name should be associated with the data received?
Failure workflow	What business process should be invoked if retries are exhausted?
Host name	What is the host name or IP address of the WebSphere MQ server?
Metadata to include	Which metadata fields from the message should be included with the document in process data?
Message handling	What type of message handling should be used?
Queue manager	What queue manager should be used?
Queue name	What previously opened queue should be used to PUT messages?
Password	What is the password, if required for access to the WebSphere MQ server?
Listening port	What is the listening port of the WebSphere MQ server?
Get type	What type of Get should be performed? <ul style="list-style-type: none">• GETONE (default)• GETALL• GETUNDERCURSOR• BROWSEALL• BROWSENEXT• BROWSEFIRST• BROWSEUNDERCURSOR
User identifier	What is the user identifier, if required, to access WebSphere MQ server?
Run as User	What is the Sterling Integrator user account to use for the invoked business process?

Chapter 5. Obtain and Install Third Party Files

About this task

Before you use the WebSphere MQ Suite, you must obtain a vendor library package. The WebSphere MQ Classes for Java (com.ibm.mq.jar version 5.2.0 or higher and associated message catalog property files, mqji_en_US.property) must be installed on the host computer where Sterling Integrator is installed. For more information about the WebSphere MQ Classes for Java, go to the IBM WebSphere MQ site at <http://www-01.ibm.com/software/integration/wmq/v53/>.

To install the .jar file:

Procedure

1. From the computer where the WebSphere MQ server is installed, copy the com.ibm.mq.jar file to a directory on your local server.
2. From the directory on your local server, copy the com.ibm.mq.jar file to a directory on the host computer where Sterling Integrator is installed. In the space below, record the path and name of the directory. Path:

3. Stop Sterling Integrator if it is running.
4. From the bin directory where Sterling Integrator is installed, install the vendor library package (com.ibm.mq.jar) by running the install3rdParty script included with Sterling Integrator. Use the WebSphere MQ server version number and the path and name of the directory that you documented in step 2 to enter commands similar to the following examples:
 - On a UNIX system, enter: `install3rdParty.sh ibm 5_3 -j directory/com.ibm.mq.jar`
 - On a Windows system, enter: `install3rdParty.cmd ibm 5_3 -j directory/com.ibm.mq.jar`
5. Restart Sterling Integrator.

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