Product Update Bulletin: SonicMQ Version 3.0

This bulletin documents new and changed features for the Version 3.0 release and includes the following sections:

- "New Features in Version 3.0" on page 2 describes the new features in Version 3.0.

- "Features Changed Since Version 2000.1" on page 7 describes the features that have changed since Version 2000.1.

- "Migration from Version 2000 or 2000.1" on page 10 provides information on migrating to Version 3.0.

Note The following feature descriptions include references to books and chapters that contain primary documentation on the specified features. The chapter name for each reference is surrounded by a blue box. If you click in the box, Acrobat Reader opens the specified chapter in the product documentation.

New Features in Version 3.0

Table 1 shows the new features for this release and where you can find more information about them.

Table 1. New Features in the Version 3.0 Release

New Feature	*Book: Chapter*
A Professional Developer Edition introduced, allowing full-featured development without deployment; the Small Business Edition retired as of Version 3.0	*SonicMQ Installation and Administration Guide*: "Installation"
New sample applications: ■ DurableChat application ■ ReliableChat application ■ SelectorChat application ■ HierarchicalChat application ■ ReliableTalk application ■ SelectorTalk application ■ QueueRoundTrip application ■ DeadMessages application ■ GlobalTalk application Removed sample applications: ■ GuaranteedChat application (replaced by new DurableChat and ReliableChat applications) ■ Apptivity AppletChat application	*SonicMQ Getting Started*: "SonicMQ At Work" (except for DeadMessages and GlobalTalk) *SonicMQ Programming Guide*: "Examining the SonicMQ Samples" (including DeadMessages) *SonicMQ Deployment Guide*: "Running a Sample Multi-node Application with the Dynamic Routing Architecture" (GlobalTalk only)

Table 1. New Features in the Version 3.0 Release (*continued***)**

New Feature	*Book: Chapter*
Server Management API to SonicMQ administrative functions, and the following new sample applications to demonstrate it: ■ Events application ■ Metrics application ■ SetupQueues application ■ Shutdown application	*SonicMQ Programming Guide*: "Management API"
Unattended (batch) installation	*SonicMQ Installation and Administration Guide*: "Installation"
Client-only installation instructions and support for a smaller client for Java applets: ■ webclient.jar (580KB) — Supports SonicMQ server connections using HTTP ■ SonicSSL.jar (51KB) — Supports SonicMQ server connections using SSL, when used with webclient.jar	*SonicMQ Installation and Administration Guide*: "Installation"
Certificate management tool to generate and manage certificate chains and KeyStores in the SonicMQ Explorer	*SonicMQ Installation and Administration Guide*: "Graphical Administration Tool"
Using a certificate identity as the SonicMQ username	*SonicMQ Installation and Administration Guide*: "Administration Concepts"

Table 1. New Features in the Version 3.0 Release (_continued_**)**

New Feature	Book: Chapter
Certificate-based mutual authentication for client-to-server and server-to-server SSL connections	_SonicMQ Installation and Administration Guide_: "Administration Concepts" _SonicMQ Deployment Guide_: ■ "Dynamic Routing Architecture in a Multi-node Application" ■ "Security"
Support for the following SSL implementations: ■ SSLJ3.1 from RSA Security, installed with SonicMQ ■ IAIK (Institute for Applied Information Processing and Communications), not installed with SonicMQ	_SonicMQ Installation and Administration Guide_: "Installation"
Dynamic Routing Architecture, supporting: ■ Dynamic global routing across queues over statically defined routing connections ■ Store and forward of messages ■ Idle time-out for connections	_SonicMQ Programming Guide_: "Dynamic Routing Architecture" _SonicMQ Deployment Guide_: "Dynamic Routing Architecture in a Multi-node Application"
Administration of centralized routing and connection management in the SonicMQ Admin and Explorer tools	_SonicMQ Installation and Administration Guide_: ■ "Graphical Administration Tool" ■ "Command-line Administration Tool"

Table 1. New Features in the Version 3.0 Release (_continued_**)**

New Feature	*Book: Chapter*
Dead message queue support	*SonicMQ Getting Started*: "Introducing Progress SonicMQ" *SonicMQ Programming Guide*: ■ "Point-to-point Messaging" (undelivered messages) ■ "Examining the SonicMQ Samples" (new sample: `DeadMessages` application) ■ "Messages" (provider-specific properties) *SonicMQ Deployment Guide*: "Guaranteeing Messages"
Failover of client-to-server and server-to-server connections with user-selectable algorithms	*SonicMQ Deployment Guide*: "Failover and Load Balancing"
Load-balancing of client-to-server and server-to-server connections based on a round-robin algorithm	*SonicMQ Deployment Guide*: "Failover and Load Balancing"
New administration events: ■ Dead message queue status (`dmqstatus`) ■ Connection redirection (`redirect`) ■ Undelivered message sent to dead message queue (`undelivered`)	*SonicMQ Installation and Administration Guide*: "Graphical Administration Tool"
Encryption of the `broker.ini` file to protect sensitive information	*SonicMQ Deployment Guide*: "Security"

Table 1. New Features in the Version 3.0 Release (*continued***)**

New Feature	*Book: Chapter*
A non-JMS acknowledgement mode, `progress.message.jclient.Session.SINGLE_MESSAGE_ACKNOWLEDGE`, that allows a SonicMQ client to selectively acknowledge individual messages, rather than always acknowledging all messages previously received in the session (the behavior of standard JMS `javax.jms.Session.CLIENT_ACKNOWLEDGE` mode)	*SonicMQ Programming Guide*: "SonicMQ Client Sessions"
Improved handling of large messages, certified to a size of 10MB	—

Features Changed Since Version 2000.1

This section describes changes that might effect existing code or the way in which you use the product. Table 2 shows the changed features for this release and where you can find more information about them.

Table 2. Features Changed Since Version 2000.1

Changed Feature	*Book: Chapter*
Terminology change from Version 2000.1: Most references in the documentation to the word "broker" have been changed to "server" in Version 3.0. Thus, what was called a message broker in Version 2000.1 is called a message server in Version 3.0. Note that where the SonicMQ tools and APIs refer to "broker," this means the same thing as "server."	All
In Version 2000.1, a message server can be part of multiple clusters. In Version 3.0, a message server can be a member of only one cluster at a time. Thus, overlapping clusters are not supported.	*SonicMQ Installation and Administration Guide*: "Administration Concepts"

Table 2. Features Changed Since Version 2000.1 (*continued***)**

Changed Feature	*Book: Chapter*
Unlike Version 2000.1, in Version 3.0, queue and topic names: ■ Cannot contain a double colon (::) ■ Cannot start with the reserved, case-sensitive string, "SonicMQ." (SonicMQ.) Note that if you have defined a queue or topic starting with SonicMQ., you cannot administratively delete that queue or topic in Version 3.0.	*SonicMQ Installation and Administration Guide*: ■ "Graphical Administration Tool" ■ "Command-line Administration Tool" *SonicMQ Programming Guide*: "Management API" *SonicMQ Deployment Guide*: "Multi-node Architecture"
In Version 2000.1, to create a ConnectionFactory in the Explorer, you specify the protocol, host, and port using separate fields. In Version 3.0, you must specify the protocol, host, and port in a single field using the syntax for a complete URL.	*SonicMQ Installation and Administration Guide*: "Graphical Administration Tool"
In Version 2000.1, you can set the name of a queue and the QoP option at the same time using a single set queue administration command. In Version 3.0, you must set the queue name using a set queue command, then set the QoP option using a separate set queue qop command.	*SonicMQ Installation and Administration Guide*: "Command-line Administration Tool"

Table 2. Features Changed Since Version 2000.1 (*continued***)**

Changed Feature	*Book: Chapter*
The syntax for the `store queuefactory` and `store queuefactory` commands has changed to support connection failover and load balancing in Version 3.0. You must update any existing scripts that use these commands with the new syntax or they will fail to execute.	*SonicMQ Installation and Administration Guide*: "Command-line Administration Tool"
Unlike Version 2000.1, `AUTHENTICATED` is a reserved word in usernames for routing nodes. In Version 3.0, if a connection URL specifies the SSL protocol, the username `AUTHENTICATED` allows authentication using the SSL certificate rather than a password.	*SonicMQ Installation and Administration Guide*: "Administration Concepts"
In Version 2000.1, the `webclient.jar` file used for Java applet clients includes support for SSL. In Version 3.0, you must add `sonicSSL.jar` to the client `CLASSPATH` to support SSL in Java applet clients using `webclient.jar`.	*SonicMQ Installation and Administration Guide*: "Installation"

Migration from Version 2000 or 2000.1

If you currently have Version 2000 or 2000.1 installed and want to run an existing SonicMQ deployment under Version 3.0, you must run a migration utility to move the deployment to Version 3.0. This utility will be made available at a date to be announced.

For more information on migration utility availability, contact SonicMQ Technical Support or visit the SonicMQ Web site at www.sonicmq.com. Until then, you can prepare for Version 3.0 migration.

When you install Version 3.0, make sure that you install it in a configuration that does not replace or otherwise corrupt any existing Version 2000 or 2000.1 deployment that you want to maintain or migrate later. In addition, you can prepare by completing these tasks for each deployment that you plan to migrate:

- Version 3.0 does not allow overlapping clusters. If your deployment has more than one cluster, make sure that each message server is a member of one and only one cluster at a time.

- Version 3.0 reserves the username AUTHENTICATED. Make sure that you do not have any SonicMQ user defined with the name AUTHENTICATED.

- Version 3.0 places additional restrictions on queue and topic names. Make sure that you have no queue or topic names that:

    - Start with the case-sensitive string, "SonicMQ.", for example:

      SonicMQ.UrgentMessages

      You might rename this to MySonicMQ.UrgentMessages.

    - Contain a double quote (::), for example:

      Sales::UrgentMessages

      You might rename this to Sales_UrgentMessages.

Note that, in Version 3.0, you cannot delete any queues or topics with names that begin with "SonicMQ." because this are considered system queues and topics.