


GemStone/S 64 BitTM

Release Notes

Limited Distribution
Special Release

Version 3.4.6.2

March 2021



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PATENTS

GemStone software is or has been covered by U.S. Patent Number 6,256,637 "Transactional virtual machine architecture" (1998-2018), Patent Number 6,360,219 "Object queues with concurrent updating" (1998-2018), Patent Number 6,567,905 "Generational garbage collector with persistent object cache" (2001-2021), and Patent Number 6,681,226 "Selective pessimistic locking for a concurrently updateable database" (2001-2021).

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GemStone/S 64 Bit

3.4.6.2 Release Notes

Overview

GemStone/S 64 Bit™ 3.4.6.2 is a limited-distribution special release version of the GemStone/S 64 Bit object server, with a fix for a critical bug in hot standby. This release includes all changes in v3.4.6 and 3.4.6.1.

Supported Platforms

GemStone/S 64 Bit version 3.4.6.2 is supported on the following platforms:

- ▶ Red Hat Enterprise Linux Server and CentOS Linux versions 7.9 and 8.3; Ubuntu version 16.04, 18.04, and 20.04

Changes in this release

logsender may read incomplete tranlog records

In a hotstandby system, when the logsender transmit records to the logreceiver, there is the possibility that while the write operation to the transaction log completed, the disk fsync was not complete, and so the record read from disk by the logsender and sent to the logreceiver may be incomplete. (#49449)

A related problem still exists in this version, in the case where the logsender is not connected to the master Stone (using the `-s` flag), and therefore has to rely on disk file writes to detect when a new record is available. A logical record may cross a file system block boundary, and this is not detected by the logsender's disk file checks. It is strongly encouraged to use the `-s` flag to avoid this risk; the Stone tracks the logical record boundaries and provides this information to the logsender.