
GemStone®

GemStone/S 64 Bit™
Release Notes

Limited Distribution Special Release

Version 2.2.6.2

February 2013

vmware®

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PATENTS

GemStone software is covered by U.S. Patent Number 6,256,637 "Transactional virtual machine architecture", Patent Number 6,360,219 "Object queues with concurrent updating", Patent Number 6,567,905 "Generational garbage collector with persistent object cache", and Patent Number 6,681,226 "Selective pessimistic locking for a concurrently updateable database". GemStone software may also be covered by one or more pending United States patent applications.

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GemStone/S 64 Bit

2.2.6.2 Release Notes

(Limited Distribution Special Release)

Overview

GemStone/S 64 Bit 2.2.6.2 is a new limited distribution special release version of the GemStone/S 64 Bit object server. This release contains changes that address issues with session termination that can cause serious problems.

These release notes provide changes between the previous version of GemStone/S 64 Bit, version 2.2.6.1, and version 2.2.6.2. If you are upgrading from a version prior to 2.2.6.1, please also review the release notes for each intermediate release to see the full set of changes.

No separate Installation Guide is provided with this release. For installation instructions, use the Installation Guide for version 2.2.5.2.

Supported Platforms

Platforms

GemStone/S 64 Bit version 2.2.6.2 is supported on the following platforms:

- ▶ AIX 5.3, AIX 6.1, and AIX 7.1
- ▶ Solaris 10 on x86

For more information and detailed requirements for each supported platforms, please refer to the GemStone/S 64 Bit v2.2.5.2 Installation Guide for that platform.

Changes in this release

CommitRecordBacklog created by terminated session

It was possible for a session that is no longer logged in to hold the oldest commit record, causing a commit record backlog that could not be recovered normally (by terminating the session). The specific scenario involved a session killed by idle session timeout and exiting with a fatal error in such a way that the OOB socket was not properly terminated. (#42690)

Improved statmonitor tracking

In addition to ensuring terminated sessions are always entirely terminated, information is now recorded about session state in cache statistics, using GlobalStat43..47. Also, statmonitor will now continue to record session data until the internal sessionId, as well as the processId, is released.

During the session shutdown process, any application data in GlobalStat43...GlobalStat47 will be overwritten by shutdown tracking information.

Tracking out-of-memory with added stat OldGenPreGcSizeBytes

The cache statistic **OldGenSizeBytes** tracks old-gen memory use at the end of an in-memory garbage collection operation. When there is heavy demand on memory, this may not be helpful in tracking the peak memory use, to avoid out of memory conditions. The following stat has been added, which records the memory use prior to the in-memory GC.

Added Cache Statistic

OldGenPreGcSizeBytes (Gem)

Number of used bytes in the old generation at the beginning of mark/sweep.