


GemStone/S 64 BitTM

Release Notes

Limited Distribution
Special Release

Version 3.6.6.2

September 2023



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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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Release Notes for 3.6.6.2

GemStone/S 64 Bit™ 3.6.6.2 is a limited-distribution special release version of the GemStone/S 64 Bit object server, fixing a critical bug.

These Release Notes include changes between the previous version of GemStone/S 64 Bit, v3.6.6.1, and v3.6.6.2.

Supported Platforms

GemStone/S 64 Bit version 3.6.6.2 is supported on Linux only, and with clients running on Windows and Linux.

Upgrade

GemStone/S 64 Bit v3.6.6.2 contains no image-level changes from v3.6.6.1. While running **upgradeImage** is generally recommended, it is not required when upgrading from 3.6.6.1.

When upgrading directly from v3.6.6 or v3.6.6.1 to v3.6.6.2, you may restart GemStone with the new executables without running **upgradeImage**. In this case, you must execute `SystemRepository _setVersion` as `SystemUser`, to allow logins for non-SystemUser users.

VSD Version

This release includes the released version v5.6.1; the previous release, 3.6.6, included a pre-release version of VSD v5.6.1. There were no functional changes between these builds. For details or to download, go to <https://gentalksystems.com/vsd/>.

Changes in this release

NetLDI shutdown timing issue resulted in unable to restart

When a NetLDI services a request to fork a gem, it forks a child process and then does an exec. During the period after the fork and before the exec, a thread in the child process makes system calls to collect information for printing the log file banner. If the NetLDI is stopped using either kill -TERM or stopnetldi while a thread is making a system call, this can result in a deadlock in the child.

The fix removes the system call in which the deadlock has been observed. The forked child also now immediately closes its inherited file descriptor for the NetLDI's listening socket, rather than waiting for the close-on-exec of that socket to take effect.

Since informational system calls are no longer made during the forked period, the Gem log headers now show a reduced section for "NetLDI Child Task", which includes only the Gem command line. The system information is already duplicated in the header information printed by the Gem. (#50697)