
GemStone®

GemStone/S 64 Bit™

Release Notes

Version 2.4.8

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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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GemTalk Systems
15220 NW Greenbrier Parkway
Suite 240
Beaverton, OR 97006

GemStone/S 64 Bit

2.4.8 Release Notes

Overview

GemStone/S 64 Bit 2.4.8 is a new version of the GemStone/S 64 Bit object server. This release fixes several critical bugs.

The GemStone/S 64 Bit 2.4.x version line is under legacy support; we recommend customers upgrade to the latest version, currently 3.3, to take advantage of the many performance benefits, new features, and bug fixes.

These release notes provide changes between the previous version of GemStone/S 64 Bit, version 2.4.7, and version 2.4.8. If you are upgrading from a version prior to 2.4.7, review the release notes for each intermediate release to see the full set of changes.

For installation, upgrade and conversion instructions, use the *Installation Guide* for version 2.4.7.

Supported Platforms

Platforms for Version 2.4.8

GemStone/S 64 Bit version 2.4.8 is supported on the following platforms:

- ▶ Solaris 10 and 11 on SPARC
- ▶ Solaris 10 on x86
- ▶ AIX 6.1 and 7.1
- ▶ Red Hat Linux ES 6.4, 6.5, and 6.7; Ubuntu 12.04; and SUSE Linux Enterprise 12, all on x86

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

GBS Versions

The following versions of GBS are supported with GemStone/S 64 Bit version 2.4.8.

GBS version 7.6.1

VisualWorks 7.10.1 32-bit	VisualWorks 7.10.1 64-bit	VisualWorks 7.9.1 32-bit
<ul style="list-style-type: none"> ▶ Windows 8, Windows 2008 R2, and Windows 7 ▶ Solaris 10 on SPARC ▶ RedHat Linux ES 6.4 and 6.5, and SUSE Linux ES 12 	<ul style="list-style-type: none"> ▶ Solaris 10 on SPARC ▶ RedHat Linux ES 6.4 and 6.5, and SUSE Linux ES 12 	<ul style="list-style-type: none"> ▶ Windows 2008 R2 and Windows 7 ▶ Solaris 10 on SPARC ▶ RedHat Linux ES 6.4 and 6.5, and SUSE Linux ES 12

GBS version 7.4.1

VisualWorks 7.8.1 32-bit
<ul style="list-style-type: none"> ▶ Windows 7

GBS version 5.3.2

VA Smalltalk 8.5.2	VA Smalltalk 8.0.2
<ul style="list-style-type: none"> ▶ Windows 2008 R2 and Windows 7 	<ul style="list-style-type: none"> ▶ Windows 2008 R2 and Windows 7

For more details on supported GBS and client Smalltalk platforms and requirements, see the *GemBuilder for Smalltalk Installation Guide* for that version of GBS.

VSD Version

The GemStone/S 64 Bit v2.4.8 distribution includes VSD version 5.1.1. The previous version of GemStone/S 64 Bit, v2.4.7, included VSD v5.0.

Changes between v5.0 and v5.1.1 include:

- ▶ Ability to select multiple files to load, and to load these files either independently or appended.
- ▶ Title bar now includes VSD version.
- ▶ Record the last used file directory over VSD restart
- ▶ Load very large (10GB) data files on Windows
- ▶ Changes in the statistic type for a number of statistics, affecting combined graphs.
- ▶ Several other minor fixes and changes.

For more details, see the *Release Notes* for VSD v5.1 and v5.1.1.

Release Notes for versions of VSD are available at <https://gemtalksystems.com/products/vsd/history/>.

Bugs Fixed

The following bugs are fixed in version 2.4.8:

Vote state incorrect after recovery

After recovery from an unexpected shutdown, the internal vote state is set to 2/VOTE_DONE_VOTING, which was incorrect if the state before the shutdown had not been in voting. This prevented other GC operations from running. (#45980)

Stone may hang on AIX when swap space becomes very low

AIX only

When swap space on AIX becomes very low, AIX sends SIGDANGER. The Stone did not respond properly to this signal, and hung. The fix for this also corrects handling for SIGHUP. (#44060)

Write on closed socket may cause hang on AIX

AIX only

If write is attempted on a closed socket, a SIGPIPE gets sent with the SA_RESTART flag set. However, on AIX, this does not restart the send(), which results in a infinite loop in the Stone or other calling process.