
GemStone®

GemStone/S 64 Bit™ Release Notes

Limited Distribution
Special Release

Version 2.2.6.3

July 2013



INTELLECTUAL PROPERTY OWNERSHIP

This documentation is furnished for informational use only and is subject to change without notice. GemTalk Systems LLC assumes no responsibility or liability for any errors or inaccuracies that may appear in this documentation.

This documentation, or any part of it, may not be reproduced, displayed, photocopied, transmitted, or otherwise copied in any form or by any means now known or later developed, such as electronic, optical, or mechanical means, without express written authorization from GemTalk Systems.

Warning: This computer program and its documentation are protected by copyright law and international treaties. Any unauthorized copying or distribution of this program, its documentation, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted under the maximum extent possible under the law.

The software installed in accordance with this documentation is copyrighted and licensed by GemTalk Systems under separate license agreement. This software may only be used pursuant to the terms and conditions of such license agreement. Any other use may be a violation of law.

Use, duplication, or disclosure by the Government is subject to restrictions set forth in the Commercial Software - Restricted Rights clause at 52.227-19 of the Federal Acquisitions Regulations (48 CFR 52.227-19) except that the government agency shall not have the right to disclose this software to support service contractors or their subcontractors without the prior written consent of GemTalk Systems.

This software is provided by GemTalk Systems LLC and contributors "as is" and any expressed or implied warranties, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose are disclaimed. In no event shall GemTalk Systems LLC or any contributors be liable for any direct, indirect, incidental, special, exemplary, or consequential damages (including, but not limited to, procurement of substitute goods or services; loss of use, data, or profits; or business interruption) however caused and on any theory of liability, whether in contract, strict liability, or tort (including negligence or otherwise) arising in any way out of the use of this software, even if advised of the possibility of such damage.

COPYRIGHTS

This software product, its documentation, and its user interface © 1986-2015 GemTalk Systems LLC. All rights reserved by GemTalk Systems.

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.

TRADEMARKS

GemTalk, **GemStone**, **GemBuilder**, **GemConnect**, and the GemStone and GemTalk logos are trademarks or registered trademarks of GemTalk Systems LLC, or of VMware, Inc., previously of GemStone Systems, Inc., in the United States and other countries.

VMware is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Sun, **Sun Microsystems**, and **Solaris** are trademarks or registered trademarks of Oracle and/or its affiliates. **SPARC** is a registered trademark of SPARC International, Inc.

Intel, **Pentium**, and **Itanium** are registered trademarks of Intel Corporation in the United States and other countries.

Microsoft, **MS**, **Windows**, **Windows XP**, **Windows 2003**, **Windows 7**, **Windows Vista** and **Windows 2008** are registered trademarks of Microsoft Corporation in the United States and other countries.

Linux is a registered trademark of Linus Torvalds and others.

Red Hat and all Red Hat-based trademarks and logos are trademarks or registered trademarks of Red Hat, Inc. in the United States and other countries.

Ubuntu is a registered trademark of Canonical Ltd., Inc., in the U.S. and other countries.

SUSE is a registered trademark of Novell, Inc. in the United States and other countries.

AIX, **POWER5**, **POWER6**, and **POWER7** are trademarks or registered trademarks of International Business Machines Corporation.

Apple, **Mac**, **Mac OS**, **Macintosh**, and **Snow Leopard** are trademarks of Apple Inc., in the United States and other countries.

Other company or product names mentioned herein may be trademarks or registered trademarks of their respective owners. Trademark specifications are subject to change without notice. GemTalk Systems cannot attest to the accuracy of all trademark information. Use of a term in this documentation should not be regarded as affecting the validity of any trademark or service mark.

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

GemStone/S 64 Bit

2.2.6.3 Release Notes (Limited Distribution Special Release)

Overview

GemStone/S 64 Bit 2.2.6.3 is a new limited distribution special release version of the GemStone/S 64 Bit object server.

These release notes provide changes between the previous version of GemStone/S 64 Bit, version 2.2.6.2, and version 2.2.6.3. If you are upgrading from a version prior to 2.2.6.2, review the release notes for each intermediate release to see the full set of changes.

Supported Platforms

Platforms for Version 2.2.6.3

GemStone/S 64 Bit version 2.2.6.3 is supported on the following platforms:

- ▶ AIX 6.1, TL1, SP1, 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

Remote User Actions may fail if GCI compression enabled

The RPC protocol for certain packet types may fail with GCI compression, which may result in LGC protocol errors. (#41096)

Terminate of idle session may not have completed correctly

When an idle gem was killed, there was a possible race condition between the internal disconnect and the process kill of the session. This could result in the session's socket not getting the disconnect. The gem remained in AFTER_LOGOUT_PGSRV_WAIT, and continued to occupy its slot in the process table, though the OS process itself was gone. (#43205)

On Windows, GciFltToOop() with negative argument returned result with wrong sign

Windows only

When GciFltToOop() is called with a negative SmallDouble, the result returned has the wrong sign. This is related to a bug in the optimized code produced by the Windows C compiler used with this version of GemStone/S 64 Bit; this build includes a workaround. (#39516)

Added GCI RPC packet tracing

This release has added GCI RPC packet tracing code, to allow debugging of network protocol errors.