


GemBuilderTM for Smalltalk/VW Release Notes

Version 8.7

September 2023

Doc rev 237.1



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PATENTS

GemStone software has been 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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Preface

About This Documentation

These Release Notes describe the changes in the GemBuilder™ for Smalltalk/VW version 8.7 release.

For information on installing or upgrading to this version of GemBuilder for Smalltalk, please refer to the *GemBuilder for Smalltalk Installation Guide* for version 8.7.

Terminology Conventions

The term “GemStone” is used to refer to the server products GemStone/S 64 Bit and GemStone/S, and the GemStone family of products; the GemStone Smalltalk programming language; and may also be used to refer to the company, now GemTalk Systems, previously GemStone Systems, Inc. and a division of VMware, Inc.

Technical Support

Support Website

gemtalksystems.com

GemTalk’s website provides a variety of resources to help you use GemTalk products:

- ▶ **Documentation** for the current and for previous released versions of all GemTalk products, in PDF form.
- ▶ **Product download** for the current and selected recent versions of GemTalk software.
- ▶ **Bugnotes**, identifying performance issues or error conditions that you may encounter when using a GemTalk product.

- ▶ **Supplemental Documentation** and **TechTips**, providing information and instructions that are not in the regular documentation.
- ▶ **Compatibility matrices**, listing supported platforms for GemTalk product versions.

We recommend checking this site on a regular basis for the latest updates.

Help Requests

GemTalk Technical Support is limited to customers with current support contracts. Requests for technical assistance may be submitted online (including by email), or by telephone. We recommend you use telephone contact only for urgent requests that require immediate evaluation, such as a production system down. The support website is the preferred way to contact Technical Support.

Website: techsupport.gemtalksystems.com

Email: techsupport@gemtalksystems.com

Telephone: (800) 243-4772 or (503) 766-4702

Please include the following, in addition to a description of the issue:

- ▶ The versions of GemBuilder for Smalltalk and of all related GemTalk products, and of any other related products, such as client Smalltalk products, and the operating system and version you are using.
- ▶ Exact error message received, if any, including log files and statmonitor data if appropriate.

Technical Support is available from 8am to 5pm Pacific Time, Monday through Friday, excluding GemTalk holidays.

24x7 Emergency Technical Support

GemTalk offers, at an additional charge, 24x7 emergency technical support. This support entitles customers to contact us 24 hours a day, 7 days a week, 365 days a year, for issues impacting a production system. For more details, contact GemTalk Support Renewals.

Training and Consulting

GemTalk Professional Services provide consulting to help you succeed with GemStone products. Training for GemStone/S is available at your location, and training courses are offered periodically at our offices in Beaverton, Oregon. Contact GemTalk Professional Services for more details or to obtain consulting services.



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Release Notes for GemBuilder for Smalltalk 8.7

GemBuilder™ for Smalltalk (GBS) version 8.7 is a new version of the GemBuilder for Smalltalk product, adding support for GemStone/S 64 Bit v3.7 and fixing a number of bugs. Please take time to read through these release notes before installing or upgrading, to acquaint yourself with the changes.

These release notes provide changes between the previous version of GBS, version 8.6, and version 8.7. If you are upgrading from a version prior to 8.6, please also review the release notes for each intermediate release between your version and 8.7, to see the full set of changes.

This release supports GemStone/S 64 Bit only, with VisualWorks 9.1.1. GBS 8.7 does not support 32-bit GemStone/S, nor VAST platform (VA Smalltalk).

To install GemBuilder for Smalltalk 8.7, follow the instructions in the *GemBuilder for Smalltalk Installation Guide* for version 8.7.

Supported Platforms and Versions

The following tables describe the client Smalltalk versions and platforms supported by GBS 8.7, and the GemStone server product shared library versions that can be used with each.

For more details, including the specific required client libraries for each server product and versions, refer to the *GemBuilder for Smalltalk Installation Guide* for version 8.7.

Table 1 Supported GemStone/S 64 Bit Server versions

	VW 9.1.1 32-bit	VW 9.1.1 64 bit
Windows 10	3.7, 3.6.6	3.7, 3.6.6
Ubuntu Linux 22.04	3.7, 3.6.6	3.7, 3.6.6
Ubuntu Linux 20.04	3.7, 3.6.6	3.7, 3.6.6
Red Hat Linux ES 9.2	3.7, 3.6.6	3.7, 3.6.6
Red Hat Linux ES 8.5	3.7, 3.6.6	3.7, 3.6.6
Red Hat Linux ES 7.9	3.7, 3.6.6	3.7, 3.6.6

Changes and New Features

The following changes are in version 8.7:

Support for GemStone/S 64 Bit v3.7

Customer-defined special classes

GBS v8.7 handles the new customer-defined special classes introduced in GemStone/S 64 Bit v3.7. Note that these specials cannot be replicated, but inspectors can display them as server objects.

ReadStream and Stream replication

The class `GbsReadStream` has been added, to support replication of instance of the `ReadStream` class introduced in GemStone/S 64 Bit v3.7.

Note that replication of `PositionableStreamPortable` classes is not supported. Stream classes will be `PositionableStreamLegacy` by default in applications with a long upgrade history, and `PositionalStreamPortable` in applications that started from fresh extents in v3.0 or later.

Bugs Fixed

The following bugs have been fixed in version 8.7.

Resolution of Class names when the Name exists in multiple SymbolDictionaries

The GemStone server may have the multiple classes with the same name, existing in different SymbolDictionaries.

Connector resolution at login did not respect target dictionary

When resolving class connectors, only the class name was used; the dictionary argument was ignored. If there were multiple classes with the same name in the server image, this could result in mapping to the wrong class. (#50536).

Find class could not find a class if a class with the same name is an earlier SymbolDictionary

If different classes with the same name are in different server SymbolDictionaries, only the first one in resolution order could be found using **Find > Find class**. Now, the result of Find Class include the SymbolDictionary if the class name appears more than once. (#47723)

keyboard shortcuts for GS-Print it, GS-Inspect it, and GS-Debug did not operate correctly

The keyboard shortcuts for GemStone operations: GS-Print it (control-shift-P), GS-Inspect it (control-shift-Q) and GS-Debug it (control-shift-B), triggered the operation twice. (#50530)

Risk of image hang when using deprecated server methods

When invoking deprecated server methods with Deprecated set to doErrorOnDeprecated, there is a risk that the image may hang. (#49604)

Replicating a DateTime to a TimeStamp corrupts the client map

When a server DateTime is replicated as a client TimeStamp, it does a one-way become after being added to the identity-keyed clientMap, thus causing the clientMap to be corrupted. This may not cause problems, but can be detected by audit; and some operations will fail. (#49336)