GemStone[®]

GemBuilder for Smalltalk Release Notes

Version 5.2.5

August 2006



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PATENTS

GemStone is covered by U.S. Patent Number 6,256,637 "Transactional virtual machine architecture", Patent Number 6,360,219 "Object queues with concurrent updating", and Patent Number 6,567,905 "Generational Garbage Collector". GemStone may also be covered by one or more pending United States patent applications.

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Preface

These release notes describe the new features and bugs fixed in the GemBuilder for Smalltalk® version 5.2.5 release.

We recommend that everyone using GemBuilder for Smalltalk read these release notes before installing or upgrading. These release notes are also available on the GemStone customer website, as described in the next section.

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

Technical Support

GemStone provides several sources for product information and support. The product-specific manuals and online help provide extensive documentation, and should always be your first source of information. GemStone Technical Support engineers will refer you to these documents when applicable.

GemStone Web Site: http://support.gemstone.com

GemStone's Technical Support website provides a variety of resources to help you use GemStone products. Use of this site requires an account, but registration is free of charge. To get an account, just complete the Registration Form, found in the same location. You'll be able to access the site as soon as you submit the web form.

The following types of information are provided at this web site:

Help Request allows designated support contacts to submit new requests for technical assistance and to review or update previous requests.

Documentation for GemBuilder for Smalltalk is provided in PDF format. This is the same documentation that is included with your GemBuilder for Smalltalk product.

Release Notes and **Install Guides** for your product software are provided in PDF format in the Documentation section.

Downloads and **Patches** provide code fixes and enhancements that have been developed after product release. Most code fixes and enhancements listed on the GemStone Web site are available for direct downloading.

Bugnotes, in the Learning Center section, identify performance issues or error conditions that you may encounter when using a GemStone product. A bugnote describes the cause of the condition, and, when possible, provides an alternative means of accomplishing the task. In addition, bugnotes identify whether or not a fix is available, either by upgrading to another version of the product, or by applying a patch. Bugnotes are updated regularly.

TechTips, also in the Learning Center section, provide information and instructions for topics that usually relate to more effective or efficient use of GemStone products. Some Tips may contain code that can be downloaded for use at your site.

Community Links provide customer forums for discussion of GemStone product issues.

Technical information on the GemStone Web site is reviewed and updated regularly. We recommend that you check this site on a regular basis to obtain the latest technical information for GemStone products. We also welcome suggestions and ideas for improving and expanding our site to better serve you.

You may need to contact Technical Support directly for the following reasons:

- ▶ Your technical question is not answered in the documentation.
- ▶ You receive an error message that directs you to contact GemStone Technical Support.
- ▶ You want to report a bug.
- You want to submit a feature request.

Questions concerning product availability, pricing, keyfiles, or future features should be directed to your GemStone account manager.

When contacting GemStone Technical Support, please be prepared to provide the following information:

- ▶ Your name, company name, and GemStone/S license number
- ▶ The GemStone product and version you are using
- ▶ The hardware platform and operating system you are using
- A description of the problem or request
- ▶ Exact error message(s) received, if any

Your GemStone support agreement may identify specific individuals who are responsible for submitting all support requests to GemStone. If so, please submit your information through those individuals. All responses will be sent to authorized contacts only.

For non-emergency requests, the support website is the preferred way to contact Technical Support. Only designated support contacts may submit help requests via the support website. If you are a designated support contact for your company, or the designated contacts have changed, please contact us to update the appropriate user accounts.

Email: support@gemstone.com

Telephone: (800) 243-4772 or (503) 533-3503

Requests for technical assistance may also be submitted by email or by telephone. We recommend you use telephone contact only for more serious requests that require immediate evaluation, such as a production system that is non-operational. In these cases, please also submit your request via the web or email, including pertinent details such error messages and relevant log files.

If you are reporting an emergency by telephone, select the option to transfer your call to the technical support administrator, who will take down your customer information and immediately contact an engineer.

Non-emergency requests received by telephone will be placed in the normal support queue for evaluation and response.

24x7 Emergency Technical Support

GemStone 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, if they encounter problems that cause their production application to go down, or that have the potential to bring their production application down. For more details, contact your GemStone account manager.

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- Training courses are offered periodically at GemStone's offices in Beaverton, Oregon, or you can arrange for onsite training at your desired location.
- Customized consulting services can help you make the best use of GemStone products in your business environment.

Contact your GemStone account representative for more details or to obtain consulting services.

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Chapter

1

Release Notes for GemBuilder for Smalltalk 5.2.5

GemBuilder for Smalltalk (GBS) version 5.2.5 is a new release of the GemBuilder for Smalltalk product. These release notes provide details of the new features and bugs fixed in this release. Please take time to read through them before installing the product, to acquaint yourself with the changes.

This release does not support VisualWorks; VisualWorks is supported by a separate release of the GBS product.

To install GemBuilder for Smalltalk 5.2.5, follow the instructions in the *GemBuilder for Smalltalk 5.2.5 Installation Guide*.

If you have any questions regarding this release, please contact your GemStone account manager or GemStone Technical Support.

Supported Platforms and Versions

The following table describes the client Smalltalk versions and platforms supported by GBS 5.2.5 and the GemStone/S server product shared library versions that can be used with each.

GemBuilder for Smalltalk supports both GemStone/S, the original GemStone object server, and GemStone/S 64 Bit, the redesigned 64-bit GemStone/S-based object server.

Table 1 GemStone/S shared library versions compatible with GBS 5.2.5 on each platform and client Smalltalk

| | Windows 2000, Service pack 1 or later | Windows XP, Service pack 1 or later | Windows 2003 |
|------------------------------------|---|---|---|
| IBM VisualAge Smalltalk 6.0.2 | GemStone/S 6.1.4, 6.1.5 | GemStone/S 6.1.4, 6.1.5 | GemStone/S 6.1.5 GemStone/S 64 Bit |
| | GemStone/S 64 Bit 1.1.5 (RPC logins only) | GemStone/S 64 Bit 1.1.5 (RPC logins only) | 1.1.5 (RPC logins only) |
| Instantiations VA Smalltalk 7.0 | GemStone/S 6.1.4, 6.1.5 | GemStone/S 6.1.4, 6.1.5 | GemStone/S 6.1.5 GemStone/S 64 Bit 1.1.5 (RPC logins only) |
| | GemStone/S 64 Bit 1.1.5 (RPC logins only) | GemStone/S 64 Bit 1.1.5 (RPC logins only) | |

New Features

The following new features and modifications have been made in GemBuilder for Smalltalk 5.2.5.

Option to migrate instances following class changes now requires commit

When the instance variables of a class are modified, a dialog provides the option to migrate all instance to the new class version. This option now requires that you commit the class modification prior to migrating all instances, and the button text has changed to indicate this.

Bugs Fixed

The following bugs have been fixed since GemBuilder for Smalltalk 5.2.4.

Editing GemStone server code resulted in error

Attempting to accept modifications to GemStone server code from GBS resulted in a walkback. (#34954)

Walkback during packaging

Packaging support methods had not been updated with the change to ANSI Exceptions. The method GbsRuntime >> packagerKnownSymbols called a method that was no longer implemented, and the default build process stripped the new Exception classes from the runtime image. (#34864)

Replicating Collections may have resulted in GbsGciErrTravCompleted

The affected classes are SortedCollection, and hashed collections which includes Bag, Set, Dictionary, and any of their subclasses with the exception of IdentityDictionary, IdentitySet, and any of their subclasses.

When replicating a SortedCollection or a hashed collection, if the collection did not fit within a single traversal buffer, and if the SortedCollection's sortBlock, or the hashed collection's hash, message sends went to stubs that therefore were unstubbed, it resulted in a GbsGciErrTravCompleted error. (#34760, 34868)

continueTransaction disallowed against GemStone/S 64 Bit

continueTransaction was disallowed against any version of the GemStone/S 64 Bit server, in spite of this operation being supported in GemStone/S 64 Bit 1.1 and later. (#34059)

When doesNotUnderstand is reused, debugger opened on incorrect frame

When the debugger opens, code selects which frame has initial focus. If the stack includes a customized reuse of doesNotUnderstand, the incorrect frame may have been selected to have focus on debugger open. (#33849)

Obsolete references to "Object errorSignal"

There were references to Object Class >> errorSignal, although that method was no longer in the image. (#33850)