
GemStone®

GemStone/S *Release Notes*

Version 6.5.8.1

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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", 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 may also be covered by one or more pending United States patent applications.

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GemStone/S 6.5.8.1

Release Notes

Overview

GemStone/S 6.5.8.1 is a new version of the GemStone Smalltalk object server. This release fixes a critical performance bug introduced in 6.5.8, and includes a fix for SortedCollection search.

These release notes provide changes between the previous version of GemStone/S, version 6.5.8, and version 6.5.8.1. If you are upgrading from a version prior to 6.5.8, please also review the release notes for each intermediate release to see the full set of changes.

No separate Installation Guide is provided with this release. For installation instructions, use the Installation Guide for version 6.5.7.

Supported Platforms

GemStone/S version 6.5.8.1 is supported on the following platforms:

- ▶ Solaris 8, 9 and 10 on SPARC
- ▶ AIX 5.2, AIX 5.3 and AIX 6.1
- ▶ Red Hat Linux ES 5.0 and 5.5
- ▶ Windows XP, Windows 2003, Windows Vista, and Windows 7

For more information and detailed requirements for each supported platforms, please refer to the GemStone/S v6.5.7 Installation Guide for that platform.

Changes in this release

Gems unnecessarily built private copy of AllSymbols bitmap

As a result of a code error in the fix for #41345, Gems built private copies of the AllSymbols bitmap periodically. This is unnecessary and has a negative effect on performance. (#41610)

This bug was introduced in version 6.5.8.

SortedCollection includes: may have failed if = and <= defined differently

SortedCollection optimized the `includes:` method to by using a binary search based on the `sortBlock`; this assumed that any element that equals the search object would be found at the sorted location for that element.

If the elements in the SortedCollection implement `=`, and the SortedCollection defines a `sortBlock` that uses different criteria (such as a different instance variable than used for the `=` method), `SortedCollection>>includes:` may fail to find an element that is in the collection. (#41013)

To correct this, the `includes:` method now performs a linear search, rather than a binary search. This may result in slower performance for `SortedCollection>>includes:`, particularly on larger, persistent SortedCollections. To get the behavior of previous releases, use the new method `SortedCollection>>binarySearchIncludes:`.