GemStone®

GemStone/S
Release Notes

Version 6.5.8

March 2011

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Chapter

1 *GemStone/S 6.5.8 Release Notes*

Overview

GemStone/S 6.5.8 is a new version of the GemStone 32-bit Smalltalk object server. This release provides key performance improvements for remote logins, and a useful update to VSD. The details of these changes are provided in this document.

These release notes provide changes between the previous version of GemStone/S, version 6.5.7.5, and version 6.5.8. If you are upgrading from a version prior to 6.5.7.5, 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 and GBS Versions

Platforms

GemStone/S version 6.5.8 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.

GBS versions

The following versions of GBS are supported with GemStone/S version 6.5.8, with the following client Smalltalk and platforms versions.

GBS version 7.3.3

VisualWorks 7.7.1 with 7.7.1 OE	**VisualWorks 7.7** with 7.7 OE
‣ Windows XP, Windows 2003 Server, Windows Vista, and Windows 7 ‣ Solaris 9 and 10 on SPARC ‣ RedHat Linux ES 5.0 and 5.5	‣ Windows XP, Windows 2003 Server, Windows Vista, and Windows 7 ‣ Solaris 9 and 10 on SPARC ‣ Red Hat Linux ES 5.0 and 5.5

GBS version 7.1.2patch2

VisualWorks 7.5 with 7.5 OE
‣ Windows XP and Windows 2003 Server ‣ Solaris 9 and 10 on SPARC ‣ Red Hat Linux ES 5.0

GBS version 5.2.7

VA Smalltalk 8.0.2	**VA Smalltalk 8.0.1**	**VA Smalltalk 7.5.2**
‣ Windows 7, Windows Vista, Windows 2003 Server, and Windows XP	‣ Windows 7, Windows Vista, Windows 2003 Server, and Windows XP	‣ Windows XP and Windows 2003 Server

For more information and details, see the GemStone/S Installation Guide for 6.5.7, chapter 3, or the GemBuilder for Smalltalk Installation Guide for that version.

Changes in this release

Updated VSD layout

The VSD main window now includes an extra column providing the session ID. This allows you to easily locate sessions referenced by session ID in other statistics, such as OldestCrSession. The session ID is no longer appended to the Name.

Note that the updated VSD is distributed with the server on UNIX and Linux, but is not part of the Windows distribution. To download VSD for Windows, go to:

```
http://community.gemstone.com/display/GSS64/VSD
```

Improved login performance

This release provides several internal changes that improve performance for login.

Fewer round trips to server on remote login

Previously, every time a remote gem logged in, it required many round trips to the stone; including multiple round trips per repository extent file. In version 6.5.8, the number of round trips has been greatly reduced by caching the names of the extent files in the local shared cache, and using a single command to open all extents. (#41344)

Excessive time spent managing AllSymbols

On login, each session gets the current AllSymbols bitmap; when there are a very large number of symbols, data transfer has been correspondingly time consuming. Now, a shared bitmap is passed by reference. (#41345)

In addition. the GcGem previously rebuilt this bitmap after every 500 commits. Now, it will only be rebuilt after 500 commits if there are also any added symbols during that period.

A new cache statistic has been added:

TotalNewSymbolsCommitted (Stone)
    The number of new symbols added to the repository by all sessions.