
GemStone®

GemStone/S *Release Notes*

Version 6.5.7

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GEMSTONE ™
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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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GemStone/S 6.5.7

Release Notes

Overview

GemStone/S 6.5.7 is a new version of the GemStone Smalltalk object server. This release updates support for Red Hat Linux v.5.0, and fixes several significant bugs. We recommend all customers using GemStone/S upgrade to version 6.5.7.

These release notes provide changes between the previous version of GemStone/S, version 6.5.6, and version 6.5.7. If you are upgrading from a version prior to 6.5.6, please also review the release notes for each intermediate release to see the full set of changes.

For details about installing GemStone/S 6.5.7 or upgrading from earlier versions of GemStone/S or other GemStone server products, see the *GemStone/S Installation Guide* for version 6.5.7 for the appropriate platform.

Supported Platforms and GBS Versions

Platforms

GemStone/S version 6.5.7 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
- ▶ Windows 2000, Windows XP, Windows 2003, and Windows Vista

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 6.5.7, with the following client Smalltalk and platforms versions.

GBS version 7.3

VisualWorks 7.7 with 7.7 OE	VisualWorks 7.6 with 7.6c OE
<ul style="list-style-type: none"> ▶ Windows XP, Windows 2003 Server, Windows Vista, and Windows 7 ▶ Solaris 9 and 10 on SPARC ▶ RedHat Linux ES 5.0 	<ul style="list-style-type: none"> ▶ Windows XP and Windows 2003 Server ▶ Solaris 9 and 10 on SPARC ▶ Red Hat Linux ES 5.0

GBS version 7.1.2patch2

VisualWorks 7.5 with 7.5 OE	VisualWorks 7.4.1 with 7.4d OE
<ul style="list-style-type: none"> ▶ Windows XP and Windows 2003 Server ▶ Solaris 9 and 10 on SPARC ▶ Red Hat Linux ES 5.0 	<ul style="list-style-type: none"> ▶ Windows XP ▶ Solaris 9 and 10 on SPARC ▶ Red Hat Linux ES 5.0

GBS version 5.2.6

GemBuilder for Smalltalk version 5.2.6 is supported with GemStone/S version 6.5.7, on the following VA Smalltalk and OS platform:

VA Smalltalk 7.5.2
<ul style="list-style-type: none"> ▶ 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.

Install and Upgrade Changes

Change in supported versions for Red Hat Linux

GemStone/S v6.5.7 does not support, and cannot be run on, Linux Red Hat ES 3.0 or 4.0. GemStone has been recompiled and relinked using compiler versions for Linux Red Hat ES 5.0. This allows user actions compiled and linked with more recent compilers to be loaded into GemStone.

Consult the *GemStone/S Installation Guide for Linux* for system requirements. In particular, the `openldap` package must be updated; the version installed by default for Red Hat 5.0 has problems that are exposed with GemStone 6.5.7. Ensure your Red Hat 5.0 installation has the following version installed:

```
openldap-2.3.43-12.el5.i386.rpm
```

Compilation command lines for Linux

The compilation command lines for Linux, as provided in the GemBuilder for C manual, have been updated to include `-fPIC`.

The updated command lines are:

```
$ g++ -march=pentium -fno-strict-aliasing -D_LARGEFILE64_SOURCE
-D_REENTRANT -D_GNU_SOURCE -Wformat -Wshadow -fPIC
-I$GEMSTONE/include -c appl.c -o appl.o
```

```
$ g++ -march=pentium -fno-strict-aliasing -D_LARGEFILE64_SOURCE
-D_REENTRANT -D_GNU_SOURCE -Wformat -Wshadow -fPIC
-I$GEMSTONE/include -c useract.c -o useract.o
```

Link instructions are unchanged.

Upgrade from 6.5.6 does not require upgradeImage

Changes between version 6.5.6. and 6.5.7 are entirely in the executables; there are no image level changes. If you are upgrading from version 6.5.6, you do not need to run the `upgradeImage` step of the upgrade process.

Bugs Fixed

PageManager SEGV on remote cache problems

When a remote cache is in an unusual state, and not entirely shut down, a gem logging in from that remote server may trigger a SEGV in the page manager gem. (#40658)

Logins disabled for remote Gem in later time zone

For remote logins, if the Gem is in a later timezone than the Stone, and `staleAccountAgeLimit` is set, a non-administrative account that attempts to log in will fail with an error saying that the login is incorrect or expired, and the `reasonForDisabledAccount` set to "Stale Account". (#40620)

Stone shutdown failures on Windows

Windows only

When the Stone was started as a Window service, the stone shutdown command resulted in an OS error and unclean shutdown of the stone. (#40590)