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*GemStone*®



# Visual Statistics Display (VSD) Release Notes

**Version 5.1.2**

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## PATENTS

GemStone software 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 software may also be covered by one or more pending United States patent applications.

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# VSD 5.1.2 Release Notes

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## Overview

Visual Statistics Display (VSD) version 5.1.2 is a new version of the VSD product. This release includes a critical bug fix for AIX and Solaris/SPARC, and another for Windows. The changes in this release have no impact on other platforms.

This version of VSD, like previous versions, supports statmonitor files generated from:

- ▶ All versions of GemStone/S 64 Bit
- ▶ All versions of 32-bit GemStone/S
- ▶ All versions of GBS

## Supported Platforms

VSD version 5.1.2 is supported on the following platforms:

- ▶ Windows 7, Windows 2008 R2, and Windows 8
- ▶ Solaris 10 and 11 on SPARC
- ▶ Solaris 10 on x86
- ▶ AIX 6.1 and AIX 7.1
- ▶ Red Hat Linux ES 6.1, 6.4, and 6.5; Ubuntu 12.04 and 14.04; SUSE Linux Enterprise 11 Service Pack 3, and SUSE Linux Enterprise 12, on x86
- ▶ Mac OS X 10.9.5 (Mavericks), with Darwin 13.4.0 kernel, on x86

## Changes in this Release

### Chart values may be incorrect on big-endian platforms

*AIX and Solaris/SPARC only*

On big-endian platforms, some data points for some statistics displayed incorrect values. The displayed values are not radically different from the correct values (e.g., a value that should be 0 may be 4 or 20), and may not be noticeable.

VSD uses a union data structure to store values, to allow reading the different statistic data types. There were places in which the 64 bit member was stored and the 32-member was read from, which produces incorrect values on big-endian platforms. Small-endian platforms: Linux, Windows, Mac, and Solaris/x86, are not affected. (#46078)

### Some statistics with values $\geq 2^{31}$ wrap to negative on Windows

*Windows only*

On Windows, unsigned statistics are handled in 32-bit fields. When the value is  $\geq 2^{31}$  (2147483648) the high-order bit was treated as a sign bit. The value wraps and displays the value as negative. (#46084)