
GemStone®



Visual Statistics Display (VSD) Release Notes

Version 5.2

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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 5.2 Release Notes

Overview

Visual Statistics Display (VSD) version 5.2 is a new release of the VSD product, with a number of feature enhancements and bug fixes, especially in the support for working with multiple data files.

This release includes an updated *VSD User's Guide* with documentation for the new features.

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 5.2 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 and Bug fixes

End Time now displayed

When diagnosing a problem, it can be useful to know the time each process ended, as well as the time it started. This is now provided in the main window process list.

Improved support for working with multiple files

Changes in the file list

The file list, at the top of the main window, contains a drop-down list of loaded files. The way this list is managed has changed.

- ▶ Previously opened files are no longer saved to the list.

Previously, when VSD shut down, it added any open files to a the list of file paths that was saved in .vsdrc. On restart, the file list displayed these file paths. As this list grew, it created visual clutter when working with multiple open files.

- ▶ File list no longer limits the number of files displayed

Previously, this list only displayed up to 5 open or previously opened files, requiring scrolling to view any further files. Now, all open files are listed.

- ▶ File list is now sorted numerically

When multiple files are open, each one is numbered in the order it was opened. The file list previously moved a selected file to the top of the file list. Now, the file list remains sorted in numerical order; the current file is highlighted and the list scrolls as needed to display the current file.

- ▶ The displayed name in the file list is more readable.

Previously, the information included in the file list included machine information as provided by the OS, which particularly on Linux, included excessive detail. This information has been cleaned up. To see full detail on the file, use the **File** menu item **Info...**

- ▶ The full path is now always included in the filename.

Previously only up to two directory levels was included in the path.

- ▶ Appended file names are now indicated

When several files are appended, the File list shows the name of the first file of the set of files. To indicate that this file does not just contain data in that file, this now includes [Appended] after the filename in the File list.

Chart Window legend now references file number

The Chart Window legend maps the process and statistic to a line on the chart. When more than one file is loaded, the process and statistic name now include a [N], indicating which file this particular data set comes from.

Statistics that come from the first file to be opened, file 1, do not have this number attached.

Chart Window current values now includes last value

When a line is selected, a line is displayed with current values for this line, provided that the Chart Window's **Chart** menu item **Show Current Values** is checked.

This text now includes the final value of the line, which is the current value when monitoring a running system. In addition, the location of the text has been adjusted so it is less likely to be obscured by the graph of the line.

Log delta output includes per hour as well as per second deltas

When using the Chart Windows's **Line** menu item **Log Delta**, the logged information now includes the value/time delta calculated in per hour, as well as per second.

Changes in display of decimal places

In the Current Values line, and in the Log Info, Log Delta, and other dialogs, VSD calculates per-second, average, and standard deviation values. Previously, these were provided with as many as 13 decimal places of detail, or in exponential notation, which made the significant information difficult to read.

- ▶ Fractional values are now rounded to not more than 4 decimal places.
- ▶ Values that would round to 0 are provided as 0.0001, to make it clear that they are not zero.
- ▶ Trailing .0 for values that are otherwise integral are no longer displayed.
- ▶ Exponential notation is no longer used

Support for lz4 compressed files

VSD can now read data files compressed with lz4, as well as gzip. Future versions of GemStone/S 64 Bit will have an option to generate lz4 statmonitor data.

File Info dialog now includes file format

The dialog displayed by the Main window **File** menu item **File Info...** now include the format of the file.

End button causes error

Pushing the end or other control buttons raised a TCL error. (#46112)

Column sort could change file selection

With multiple files loaded, sorting the processes by clicking on the column head could change which file or files' processes were included in the view. (#41903)

-u command line option de-supported

When using VSD from the command line, the -u option did not operated correctly for multiple-file loads on Unix, and raised an error on Windows. This option has been removed from the help text and is no longer supported. The option has not be disallowed, and so may still be used in the simple cases that do work. (#45211)