GemStone®

Visual Statistics Display (VSD)
Release Notes

Version 5.6.5

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GEMTALK™
S Y S T E M S

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PATENTS

GemStone software has been 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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Chapter

1 VSD 5.6.5 Release Notes

Overview

Visual Statistics Display (VSD) version 5.6.5 is a new release of the VSD product, improving support for viewing very large statmonitor data sets.

These release notes describe changes between the previous version of VSD, version 5.6.4, and version 5.6.5.

This version of VSD supports statmonitor files generated from:

▶ All versions of GemStone/S 64 Bit™
▶ All versions of 32-bit GemStone/S
▶ All versions of GemBuilder™ for Smalltalk (GBS)

Supported Platforms

VSD version 5.6.5 is verified and supported on the following platforms:

▶ (64-bit) Windows 11
▶ Red Hat Enterprise Server/CentOS/Rocky Linux 7.x, 8.x, 9.x, and 10.x; Ubuntu 22.04 and 24.04 on x86; Ubuntu 24.04 on Raspberry Pi 5 (arm64); Debian 12 and 13.
▶ macOS 15.x (Sequoia) and 13.x (Ventura), on x86 and Apple silicon (arm64).

VSD is expected to work on older versions of these platforms, but have not been tested and are not certified.

Changes in this Release

Limit display by the number of samples

Some applications may have many short-lived sessions. When analyzing statmonitor data containing a very large number of sessions, these short-lived sessions make it cumbersome to locate processes and identify sessions creating bottlenecks.

Now, you can hide processes (sessions, process threads or other entities) with only a small number of samples, from the list in the Main window process list. The Main Window menu bar **Main**, and the popup menu, include the menu item **Hide Instances By Samples...**, which has submenu items **Clear All Hidden By Samples** and **Select Sample Threshold...**.

Select Sample Threshold... opens a dialog allowing you to enter a number up to 5000. Samples with this many or fewer samples are hidden in the list of sessions in the main window.

Clear All Hidden By Samples clears any previous setting using **Select Sample Threshold...**.

Line-trimmed process no longer displayed in main window

The Chart menu options **Trim Left** and **Trim Right** allow you to restrict VSD's display to only the period within the untrimmed range. Previously, sessions who were not alive at any point within the trimmed period remained visible in the Main window process list, with a sample count of 0. Now, these processes are not displayed.

Show PIDs in Chart Legend

The legend in a Chart Window identifies Gems by name and sessionId. While sessionIds are unique at a given time, they are reused once that session logs out, and thus on a larger system or a system with many short-lived sessions that do not set unique cache names in the application, there may be many sessions with identical *name-sessionId* identifiers in the legend. Now, the PID of the session can be included in the legend, so the legend identifier is *name-sessionId(PID)*.

This applies to all GemStone processes, will make the Legend use more space, so this option can be enabled/disabled. It is configured using the Main Window and Chart Window added option **Chart > Show PID in Legend**. The state is saved to .vsdrc and will be the default on vsd restart.