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*GemStone*®



# Visual Statistics Display (VSD) Release Notes

**Version 5.5**

May 2020



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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 5.5 Release Notes

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## Overview

Visual Statistics Display (VSD) version 5.5 is a new release of the VSD product, including a number of new features and bug fixes.

These release notes describe changes between the previous version of VSD, version 5.4.2, and version 5.5.

In addition to the changes and bug fixes documented in these Release Notes, VSD v5.5 includes several improvements that also require new server statmonitor features, which will be introduced in GemStone/S 64 Bit v3.6. Since these changes will only be visible with the unreleased v3.6, they are not included in these Release Notes.

Statmonitor files generated by the future v3.6 release will not be readable by versions of VSD earlier than 5.5.

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 5.5 is verified and supported on the following platforms:

- ▶ Windows 7, Windows 2008 R2, Windows 8, Windows 10, and Windows 2012
- ▶ Solaris 10 and 11 on SPARC, and Solaris 10 on x86
- ▶ AIX 6.1, AIX 7.1, and AIX 7.2
- ▶ Red Hat Linux ES 6.4, 6.5, 6.7, 6.9, 7.1, and 7.4; Ubuntu 14.04 and 16.04; SUSE Linux Enterprise 12, on x86
- ▶ OS X 10.14.3 (Mojave) with Darwin 18.2.0 kernel, and OSX 10.15.1 (Catalina) with Darwin 19.0.0 kernel, on x86

# Changes in this release

## Revision numbering

GemStone internal development has moved from SVN to Git. Build numbers within the GemStone product that previously showed the 5-digit revision, now include the Git SHA; for completeness the entire 40 characters are included.

For example:

```
unix> vsd -v
Visual Statistics Display (VSD) 5.4.3 build
0cd2ae237292b615d946e9f31e746d13a7f55caf
```

## TCL libraries updated

This version of VSD includes updated TCL libraries. TCL library versions in previous versions were not listed in the release notes; for reference:

- ◆ 5.4.2 included Tcl8.6.8, Tk8.6.8, and Tix8.4
- ◆ 5.4.3 includes Tcl8.6.10, Tk8.6.10, and Tix8.4.

## Selecting processes based on name, PID or SessionId

In the VSD main window, the **Main** and popup menus include a new option, **Select Instances By...** This menu item has three choices, **Name**, **PID** and **SessionId**, each of which brings up a search dialog. Processes that match the search criteria are selected.

The name search allows you to specify case-sensitive and support ? and \* wildcards.

## Setting filter for multiple lines on a chart

When there are multiple lines graphed on a chart window, you can now change some filters for every line on the chart.

The chart window as a new menu, **All Lines**, which give you the option to set every line on the chart to **No Filter**, **Per Second**, **Per Sample**, or **Aggregate**.

## Adjust Integer Type for Line

GemStone statistics are recorded in statmonitor files are read by VSD as a particular data time, 32-bit or 64 bit signed or unsigned. You can now specify the integer type for a particular statistic in the chart windows using the new **Line** menu item **Change Integer Type**.

## Loaded files listed in about VSD window

With the ability to configure the location of the configuration files `.vsdrc`, etc., it may be unclear what your running VSD has loaded. In the Help >> About VSD window, the files section now includes the paths to the specific support files that were loaded when VSD started up.

## Location of newly opened charts

After a VSD restart, a chart window is opened using the cached settings in the `.vsdrc` file. Previously, subsequent chart windows were opened using the dimensions of the series of previously opened chart windows.

Now, second and later chart windows are opened with the same dimensions as the latest-opened existing chart window, slightly below and to the right. (#48517)

## Chart menu item snapshot

The Chart menu item Snapshot allows you to save a graphic containing the given graph.

### Snapshot uses hard-coded file name

The Chart menu item Snapshot previously always wrote the graphic to a file named `chart_snapshot.gif` in the current working directory. Now, this will prompt for a file name and directory. (#48623)

### Attempt to snapshot raises "too many colors" error

An attempt to take a snapshot could have resulted in an error "too many colors". (#48622)

### Chart window hangs on snapshot if current directory not writable

If the current working directory was not writeable, an attempt to snapshot hung the Chart window. (#48423)

## Combined aliased statistics did not display the alias name in the chart

Statistics that have aliases (either customer-defined, or system aliases such as the ReclaimGem's SessionStats) did not display the alias name in the chart window key for a line, when multiple processes are selected and with combine enabled. (#48010)

## Deleting last line in a chart is disallowed

Previously, it was possible delete the last line in a chart, leaving an empty chart with invalid line information. (#48628)