



SunVTS 6.0 Release Notes

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SunVTS 6.0 Release Notes

SunVTS 6.0 Open Issues

The following issues apply to the SunVTS™ 6.0 product.

New Features and Tests for This Release

The SunVTS 6.0 software is compatible with the Solaris 10 operating system. The following new features are added to the SunVTS 6.0 release:

x86 Solaris support is new in the Solaris 10 beta 6 release. The SunVTS infrastructure and a few core diagnostics are now available for x86 Solaris platforms. The current x86 support is for the 32-bit operating system only.

You must install the x86 version of the SunVTS packages to be able to perform SunVTS on x86 platforms. The software packages use the same names as in the SPARC environment. The SunVTS packages delivered separately for both x86 and SPARC Solaris platforms are as follows:

- `SUNWvts` – Contains the SunVTS core framework that includes the kernel and user interface.
- `SUNWvtsmn` – Contains the SunVTS online manual pages
- `SUNWvtsr` – Contains the SunVTS framework configuration files in the root partition (Superuser).
- `SUNWvtsts` – Contains the SunVTS test binaries.

The SunVTS components available for x86 Solaris platforms are as follows.

Infrastructure:

- `sunvts`

- vtsk
- vts_cmd
- vtstty
- vtsui
- vtsprobe

Core Diagnostics:

- CPU Test (`cputest`)
- Disk and Floppy Drives Test (`disktest`)
- Network Hardware Test (`nettest`)
- Physical Memory Test (`pmemtest`)
- System Test (`sytest`)
- Virtual Memory Test (`vmemtest`)

In a future release of SunVTS, some of the existing SunVTS diagnostics might be consolidated into a single test binary. The existing test binaries for such consolidated tests will be removed and a new consolidated binary will be delivered. The likely candidates for consolidation include the following:

Optical media tests: `cdtest`, `dvdtest`, `cddvdrwtest`

USB port tests: `usbdiotest`, `usbkbtest`, `usbppptest`

Serial port tests: `sptest`, `sutest`

Parallel port tests: `bpptest`, `ecppptest`

The following tests will be discontinued in the next major release of SunVTS:

- Advanced Frame Buffer Test (`afbtest`)
- Alarm Card Test for Netra CT Systems (`alarm2test`)
- Alarm Card Test (`alarmtest`)
- Color Graphics Frame Buffer Test (`cg14test`)
- Frame Buffer, GX, GXplus, and TurboGX Options Test (`cg6test`)
- Sun StorEdge A5x00 Test (`enatest`)
- Sun StorEdge 1000 Enclosure Test (`enctest`)
- Environmental Test (`env4test`)
- Frame Buffer Test (`fbtest`)
- Fast Frame Buffer Test (`ffbtest`)
- Graphics Frame Buffer Test (`gfbtest`)
- PGX32 Frame Buffer Test (`gfxtest`)
- Sun Enterprise Cluster 2.0 Network Hardware Test (`scitest`)
- Environmental Sensing Card Test (`sentest`)
- Soc+ Host Adapter Card Test (`socaltest`)
- Sun Fire Link Interconnect Test (`wrsmtest`)
- Sun™ XVR-4000 Graphics Accelerator Test (`zulutest`)

Note – The SunPCi™ II Test (`sunpci2test`) tests both the SunPCi II and SunPCi III cards as of SunVTS 5.1 PS2.

Note – All new features, tests, and test enhancements that are released in SunVTS 6.0 are documented in the *SunVTS 6.0 Test Reference Manual (817-7166-05)*, and *SunVTS 6.0 User's Guide, (817-7167-05)*. This document is included on the Solaris Documentation CD in the extra value (EV) directory, and is available at: <http://docs.sun.com>

Note – The name of the Remote System Control test (`rsctest`) has been changed to System Service Processor test (`ssptest`) as of SunVTS 5.1 PS1. The reason for this change is that `ssptest` tests the Advanced Lights-Out Management (ALOM) hardware in addition to both Remote System Control 1.0 and 2.0 hardware.

Online Help Documentation

The online help documentation available with the SunVTS 5.1 software includes a chapter describing the RAM test (`ramtest`). This test is supported only in SunVTS 5.1 Patch Set 4 (PS4) onward.

Possible Installation Issues

You might encounter an installation problem when you attempt to install SunVTS with an installation program other than the `pkgadd` command as described in the following subsections.

If SunVTS 6.0 software is installed in the default `/opt` directory, you cannot install a subsequent SunVTS 6.0 Patch Set release in a different directory on the same system. When this duplicate installation is attempted with `pkgadd`, the following error message occurs:

```
pkgadd: ERROR: SUNWvts is already installed at /opt. Cannot create
a duplicate installation.
```

The reason for this error is that the base package revision is the same for both SunVTS 6.0 and any subsequent SunVTS 6.0 Patch Set release. When a SunVTS 6.0 Patch Set release is installed in the default `/opt` directory which already has SunVTS 6.0 software installed, the installation completes successfully with the following warning message:

```
This appears to be an attempt to install the same architecture and
version of a package which is already installed.  This
installation will attempt to overwrite this package.
```

Installation Issue: 32-bit Only Systems and Web Start 2.0 (Bug ID 4257539)

Web Start 2.0 might not install SunVTS on systems that do not have the Solaris 64-bit environment installed. Web Start 2.0 removes the SunVTS 32-bit packages when the SunVTS 64-bit packages cause the installation to suspend.

Workaround: Use the `pkgadd` command to install the 32-bit SunVTS packages as described in the *SunVTS User's Guide*.

Installation Issue: Security and Web Start 2.0 (Bug ID 4362563)

When you install SunVTS using Web Start 2.0, you are not prompted to enable the Sun Enterprise Authentication Mechanism™ (SEAM) Kerberos v5, SunVTS security feature. The installation defaults in a way that installs SunVTS without this high level of security. If you do not want the high-level security, there is no problem.

Workaround: To enable the high-level SEAM security, use the `pkgadd` command to install SunVTS packages as described in the *SunVTS User's Guide*.

Installation Issue: The Installation Directory With Web Start 2.0 Is Not User-Definable (Bug ID 4243921)

When you attempt to install SunVTS using Web Start 2.0, you are unable to change the directory where SunVTS is installed. SunVTS will be installed in `/opt`.

Workaround: Use the `pkgadd -a none` command to install SunVTS in the directory of your choice as described in the *SunVTS User's Guide*.

Installation Recommendation: Install and Uninstall Using the Same Program

Use the same tool or utility for installation and removal of the SunVTS software. If you use `pkgadd` for installation, use `pkgrm` to uninstall; if you use Web Start for installation, use the Product Registry to uninstall.

Possible Runtime Issues

Upgrading SunVTS from 5.1 Beta 6 (Bug ID 6178267)

SunVTS cannot be upgraded to 5.1 Beta 7 from 5.1 Beta 6.

Workaround: Uninstall SunVTS 5.1 Beta 6 with the same method you installed it, and reinstall SunVTS 5.1 Beta 7.

Using `pptest` (Bug ID 6180140)

`pptest` could hang when performed in the Functional test mode with the Printer subtest enabled in the Test Parameter Options dialog box.

Workaround: None.

Starting SunVTS (Bug ID 6180812)

A segmentation violation could occur when starting SunVTS with an error message similar to the following.

```
ERROR: Test probe testprobe_disk() Failed with segmentation
violation (signal: 11)
```

If this error occurs, `disktest` will not be accessible.

Workaround: None.

Using nipmitest (Bug ID 6175336)

When applying selected options from the nipmitest Test Parameter Options dialog box, the options cannot be applied correctly and error messages similar to the following occur.

When selecting Apply.

```
"ERROR"
```

When selecting Apply to Group or Apply to All.

```
"ERROR: Failed to apply some options. Check error logs for details"
```

Workaround: None.

Using i2ctest on Sun Fire V880 Platforms (Bug ID

i2ctest might fail when performed on Sun Fire V880 platforms.

Workaround: None.

Using env5test on Sun Fire V880 Platforms (Bug ID 6176527)

env5test might fail when performed on Sun Fire V880 platforms.

Workaround: None.

Using serialtest on x86 Platforms (Bug ID 5097049)

serialtest might fail when performed on x86 Platforms.

Workaround: None.

Using the SunVTS Scheduler (Bug ID 6176355)

When saving schedules with the SunVTS Scheduler, the following characters cannot be used in the schedule name: t, d, p, and h. If these characters are used when saving a schedule, an error message similar to the following is displayed.

```
"ERROR:Invalid Character "t" in Schedule Name.
```

Workaround: None.

Using netlbttest (Bug ID 5054858)

When SunVTS is stopped, netlbttest might not exit properly when it is running in external loopback mode on a Gigabit Ethernet network interface.

Workaround: Deselect netlbttest from SunVTS GUI and kill the netlbttest process manually.

SunVTS Does not Support Processor Sets

If processor sets are defined, you must first delete the processor sets before running SunVTS.

Workaround: None.

Using saiptest (Bug ID 5066731)

saiptest could fail immediately if the test for the message ID is not found. This error occurs when the message file is missing from the `../lib/local/C LC_MESSAGES` directory.

Workaround: None.

Using ssptest (Bug ID 5087421)

ssptest might hang during testing on platforms with Remote System Controller (RSC) hardware.

Workaround : None.

Using the Auto Config CDE GUI Feature on x86 Solaris Platforms (Bug ID 5054203)

The Auto Config feature provided through the CDE GUI does not work on x86 Solaris platforms. Selecting the Auto Config option results in an error message similar to the following: "Auto Config is not supported on this platform." Accepting this message causes the GUI to be set back to the original test mode selected before Auto Config selection.

Workaround: None.

Error and Warning Messages on Sun Fire 280R Internal Disks (Bug ID 5064664)

Incorrect error and warning messages might be reported on internal Sun Fire 280R disks. These messages do not warrant hardware swaps. These messages look similar to the following: .WARNING c1t0d0(/pci@8,60

```
0000/SUNW,qlc@4/fp@0,0/ssd@w500000e0106dca31,0: ): "Read link
soft errors detected
during the test

SunVTS5.1ps5: VTSID 6019 disktest.1.ERROR c1t1d0(/pci@8,6000
00/SUNW,qlc@4/fp@0,0/ssd@w500000e01068d881,0: ): "Disk Internal
Self Test Failed on de
vice /dev/rdisk/c1t1d0s0
"Probable_Cause(s): <Faulty disk> <system
error>Recommended_Action(s):
<Replace the faulty disk.>
```

Using fwcamtest (Bug ID 5062974)

fwcamtest could hang with the following error message: "Termination of tests could be hung. Deselect tests to bring sunvts to an idle status." If dcamtest is deselected, all records regarding the test are removed. Display of the video does not go away after deselecting and quitting SunVTS. Black video output is seen from the video window.

Using env5test (Bug ID 5066195)

In rare occasions, env5test might hang when SunVTS is stopping. This causes SunVTS to not exit properly.

Workaround: There are two workarounds for this problem: 1.) From the SunVTS GUI, deselect the test by unchecking the box next to the test entry. 2.) Choose a fixed number of passes for `env5test` to run.

Version Information Missing in Some Verbose Messages (Bug ID 5048886)

When a test is made to run from the SunVTS GUI with verbose mode enabled, some of the verbose messages might not print the SunVTS version information.

Using `sutest` (Bug ID 5069490)

The SunVTS user interfaces (`vtsui` and `vtstty`) could fail to come up and hang at probe on Netra T1 servers.

Adding Boards With Dynamic Reconfiguration (DR) to Sun Fire 15K Systems (Bug ID 4959606)

On Sun Fire 15K systems, adding new boards with DR might cause some of the processor and memory related tests to perform ineffectively. Specifically, `cmttest` might fail to recognize the CMT processors on the new board. Similar failures might also occur in `l2sramtest`, `l1dcachetest`, `dtlbttest`, `ramtest`, `bustest`, `mpptest`, and `fptest`.

Workaround: Reboot the system after adding a new board with DR.

`pfbtest` Fails When Used in the Gnome Desktop Environment (Bug ID 4938281)

`pfbtest` might fail when performed in the Gnome desktop environment on a Sun XVR-100 graphics accelerator if the test is performed in the default console window.

This failure does not occur in the Solaris 8 2/02 and Solaris 8 HW 3/03 operating environments. If this failure occurs, you see an error message similar to the following:

```
pfb3(pfbtest)                passes: 26 errors: 12
```

Workaround: Most graphics tests fail when running under Gnome; enter the `xscreensaver-command -exit` command before performing graphics test under the Gnome desktop environment to avoid these failures.

Using `ecpptest` (Bug ID 4482992)

An `ecpp`/parallel port driver issue might cause `ecpptest` to fail. The failure rate is three out of 130 machines; the time to fail is about 10 hours.

Note – This driver issue exists only in Solaris 8 software.

Using `sutest` and `disktest` Simultaneously (Bug ID 4858028)

Sun Blade 100 and 150 systems with SunVTS can produce errors when the serial port controller (southbridge) is also handling other traffic as data access from and to the IDE hard disk. With SunVTS simultaneously running `sutest` and `disktest` on Sun Blade 100 and 150 systems, you might see `sutest` report failures.

Workaround: Do not perform `sutest` and `disktest` simultaneously.

Using `pkginfo -c sunvts` Command

The command `pkginfo -c sunvts` does not produce any output in SunVTS 5.1. This situation correctly implements the `-c` option of the `pkginfo` command.

Workaround: Use the following command to receive SunVTS 5.1 package information:

```
# pkginfo -l SUNWvts SUNWvtsx SUNWvtsmn
```

You can also use either of the following commands to receive additional SunVTS 5.1 package information:

```
# pkginfo | grep vts
# showrev -p | grep vts
```

Using `sutest` (Bug ID 4750344)

Performing `sutest` on a port that is being used as console causes `sutest` to fail.

Workaround: Do not perform `sutest` on a port that is being used as a console.

