



SunVTS™ 6.4 Release Notes

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SunVTS 6.4 Release Notes

The SunVTS™ 6.4 software is designed for the Solaris™ 10 8/07 Operating System (OS) and is compatible with the Solaris 10 3/05 or later OS.

Note – All new features, tests, and test enhancements that are released in SunVTS 6.4 are documented in the *SunVTS 6.4 Test Reference* manuals, and *SunVTS 6.4 User's Guide*. These documents are included on Solaris on the Sun Hardware collection on the Solaris Documentation DVD, in the extra value (EV) directory. These documents are also available at: <http://docs.sun.com>

For the latest version of this document (820-1673-11), go to:
<http://www.sun.com/documentation>

SunVTS Support for the Solaris OS on x86-Based Systems

Note – In this document these x86 related terms mean the following:
“x86” refers to the larger family of 64-bit and 32-bit x86 compatible products.
“x64” points out specific 64-bit information about AMD64 or EM64T systems.

Starting with the Solaris 10 OS, the SunVTS infrastructure and core diagnostics are available for x86 platforms. Starting with Solaris 10 3/05 HW1, SunVTS diagnostics for x86 platforms are supported in the AMD 64-bit environment for the SunVTS kernel (*vtstk*). All diagnostics except the System Test (*sytest*) are ported to 64-bit.

SunVTS is supported and tested on the following Sun x86 platforms:

- Sun Fire V20z
- Sun Fire V40z
- Sun Fire B100
- Sun Fire B200
- Sun Fire x4100
- Sun Fire x4100 M2
- Sun Fire x4200
- Sun Fire x4200 M2
- Sun Fire x4500
- Sun Fire x4600
- Sun Fire x4600 M2
- Sun Fire x6220
- Sun Blade x8400
- Netra CP3020

Note – If you perform SunVTS on an unsupported platform, a warning message appears and SunVTS stops.

You must install the x86 version of the SunVTS packages 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`

SunVTS tests:

- BMC Environment Test (`bmcenvironment`)
- CD DVD Test (`cddvdtest`)
- CPU Test (`cputest`)
- Cryptographics Test (`cryptotest`)
- Disk and Diskette Drives Test (`disktest`)
- Data Translation Look-aside Buffer (`dtlbtest`)
- Emulex HBA Test (`emlxtest`)
- Floating Point Unit Test (`fputest`)
- InfiniBand Host Channel Adapter (`ibhcatest`)
- IO Bus Test (`iobustest`)
- Level 1 Data Cache Test (`l1dcachetest`)
- Level 2 SRAM Test (`l2sramtest`)
- Ethernet Loopback Test (`net1btest`)
- Ethernet Loopback Test (`xnet1btest`)
- Network Hardware Test (`nettest`)
- Physical Memory Test (`pmemtest`)
- Qlogic Host Bus Adapter Test (`qlctest`)
- RAM test (`ramtest`)
- Serial Port Test (`serialtest`)
- System Test (`systemtest`)
- Tape Drive Test (`tapetest`)
- Universal Serial Board Test (`usbtest`)
- Virtual Memory Test (`vmemtest`)

Displaying SunVTS Package and Version Information

Use the following command to display SunVTS package information:

```
# pkginfo -l SUNWvts SUNWvtsr SUNWvtsts SUNWvtsmn
```

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

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

Use either of the following commands to display SunVTS version information:

- # sunvts -v
- # cat /opt/SUNWvts/bin/.version

Open Issues

Possible Installation Issue: 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 for Both x86 and SPARC Platforms

CR 6521703 SunVTS internally treats specific characters as delimiters

SunVTS internally treats the following characters specifically as delimiters: comma(,), colon(:) and tilde(~). Do *not* use these specific delimiters in any test probe routines (such as device specific names). An example of a device name entered with an unacceptable device name would be SCSI card "disk,c0t0d0". In this example, the SunVTS user interface indicates that this device is *not* selected for testing (that is, no check mark appears in the check box in the group column).

Workaround: Select the test (that is, check the box) after expanding the group column.

CR 6572985 cryptotest produces intermittent failure in generating SUNW_RANDOM

SunVTS cryptotest might fail intermittently displaying the following error during long test runs.

```
cryptotest.FATAL n2rng0: SUNW_RANDOM generate failed: values
generated fall outside statistical tolerance
```

Workaround: Install SunVTS 6.4ps1, SPARC patch 127294-01, or X86 patch 127295-01.

CR 6580568 iobustest failure

SunVTS iobustest might fail displaying the following output:

```
iobustest.net fails with data mismatch
```

Workaround: Install SunVTS 6.4ps1, SPARC patch 127294-01, or X86 patch 127295-01.

CR 6581675 SunVTS virtual channel loopback test produces intermittent failures

SunVTS `hslcbtest` might fail intermittently displaying the following error during long test runs.

```
hslcbtest.FATAL hslcb: Error during 'libpcp' send/rcv messages
(pcp_send_rcv()). ret=-3, errno=133
```

Work Around: Install SunVTS patch 127294-01.

CR 6583116 `l3sramtest` produces SIGSEGV faults

SunVTS `l3sramtest` produces SIGSEGV faults on the Sun Fire 15000 system and UltraSPARC IV+ 2-core processor.

Work Around: Install SunVTS 6.4ps1 SPARC patch 127294-01.

Documentation Issues

SunVTS 6.4 User's Guide

This document (820-1669-10) requires the following corrections:

Page 1-12, Section 1.5.1

SPARC platforms only support 64-bit versions of the SunVTS kernel. The correct path for the location of the 64-bit version of the SunVTS kernel is:
`/opt/SUNWvts/bin/sparcv9/vtsk`

The User's Guide currently is incorrect indicating this path as:
`/opt/SUNWvts/bin/SPARC/vtsk`

Page 2-3, Section 2.1.1

Use the following command to display SunVTS 6.4 package information:

```
# pkginfo -l SUNWvts SUNWvtser SUNWvtsts SUNWvtsmn
```

The command option is `-l`, not `-c`.

The User's Guide currently is incorrect indicating `-c`.

SunVTS Quick Reference Card

This document (820-1673-11) requires the following correction:

Page 8, Figure 3

The Test Execution Option dialog box in this figure is incorrect. SunVTS 6.4 no longer displays the Stress option (button and enable-disable indicators).

