



# SunVTS™ 5.1 Patch Set 11 Release Notes

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Sun Microsystems, Inc.  
www.sun.com

Part No. 819-4848-11  
January 2006, Revision A

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# Contents

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<b>1. SunVTS 5.1 Patch Set 11 Release Notes</b>	<b>1</b>
Possible Installation Issues	1
Installation Package Dependency Issue for Solaris 8 (RFE ID 4823716)	2
Installation Issue:	
Security and Web Start 2.0 (Bug ID 4362563)	3
Installation Issue:	
Patch ID 119914-07 Must Be Installed Before Performing <code>emlxtest</code>	4
Installation Requirement:	
Install and Uninstall Using the Same Program	4
Possible Runtime Issues	4
Patch ID 119914-07 Must Be Installed Before Performing <code>emlxtest</code>	4
SunVTS Memory or CPU Tests Could Fail Due to Lack of System Resources (Bug ID 6331819)	4
Using <code>usbtest</code> on sun4v Systems (Bug ID 6310384)	5
Using <code>netlbttest</code> on Sun Fire T2000 Servers (Bug ID 6349218)	5
Using <code>netlbttest</code> (Bug ID 6331398)	5
Using <code>qlctest</code> (Bug ID 6306254)	5
Using <code>audiotest</code> Loopback Tests (Bug ID 6344984)	5
Creating Option Files on Enterprise Servers (Bug ID 6345990)	5
Using Memory Tests (Bug ID 6347456)	6

Supporting x86 Clients on a SPARC Server (Bug ID 6344791)	6
Using <code>cddvdrwtest</code> (Bug ID 6333687)	6
Using the SunVTS GUI in CDE (Bug ID 6310673)	6
Using <code>qlctest</code> (Bug ID 6264488)	7
Performing Sequences of Mixed Test Modes (Bug ID 6224235)	7
Using <code>fputest</code> (Bug ID 4994898)	7
Using <code>env4test</code> (Bug ID 6267361)	7
Using <code>atmtest</code> (Bug ID 6235339)	8
Testing CPUs During Dynamic Reconfiguration (RFE ID 5109778)	8
SunVTS Does not Support Processor Sets	8
Using <code>env5test</code> (Bug ID 5066195)	8
Adding Boards With Dynamic Reconfiguration (DR) to Sun Fire 15K Systems (Bug ID 4959606)	8
<code>pfbtest</code> Fails When Used in the GNOME Desktop Environment (Bug ID 4938281)	9
Using <code>ecpptest</code> (Bug ID 4482992)	9
Using <code>sutest</code> and <code>disktest</code> Simultaneously (Bug ID 4858028)	9
Using <code>pkginfo -c sunvts</code> Command	9
Using <code>sutest</code> (Bug ID 4750344)	10

# SunVTS 5.1 Patch Set 11 Release Notes

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## 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 5.1 software is installed in the default `/opt` directory, you cannot install a subsequent SunVTS 5.1 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 5.1 and any subsequent SunVTS 5.1 Patch Set release. When a SunVTS 5.1 Patch Set release is installed in the default `/opt` directory which already has SunVTS 5.1 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 Package Dependency Issue for Solaris 8 (RFE ID 4823716)

From SunVTS 5.1, the SunVTS software depends on XML packages that are not included with the Solaris 8 2/02 distribution. For Solaris 9, all of the prerequisite packages are installed with the End User Solaris Software Group as a minimum.

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**Note** – The additional XML packages are available on the Solaris 8 HW 12/02 through Solaris 8 2/04 Software Supplement CD-ROMs and not on the Solaris 8 2/02 Software Supplement CD-ROM. Although SunVTS 5.1 installation is supported on Solaris 8 2/02, the XML packages are not included in the Solaris 8 2/02 distribution.

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You may install SunVTS 5.1 on Solaris 8 2/02, Solaris 8 HW 12/02, Solaris 8 HW 5/03, Solaris 8 HW 7/03, or Solaris 8 2/04. If you choose to install SunVTS 5.1 or later on any of these releases, you must separately install the required XML packages (SUNWlxml[32-bit] and SUNWlxmlx[64-bit]) from either the Solaris 8 HW 12/02, Solaris 8 HW 5/03, Solaris 8 HW 7/03, or Solaris 8 2/04 Software Supplement CD-ROM.

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**Note** – SunVTS 4.6, which is delivered on the Solaris 8 2/02 Software Supplement CD-ROM, does not have the XML packages dependency and is supported on Solaris 8 2/02. SunVTS 5.1 is also supported on Solaris 8 2/02 if the XML packages are installed from the Solaris 8 HW 12/02 through Solaris 8 2/04 Software Supplement CD-ROM.

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For Solaris 8 releases:

1. Install the minimum End User Solaris Software Group.
2. Install the XML packages SUNWlxml(32 bit) and SUNWlxmlx(64 bit) from either the Solaris 8 HW 12/02, Solaris 8 HW 5/03, Solaris 8 HW 7/03, or Solaris 8 2/04 Software Supplement CD-ROM.

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**Note** – These XML packages are not available in the Solaris 8 2/02 distribution.

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3. Install SUNwzlib(32 bit) and SUNwzlibx(64 bit) packages from the Entire Solaris Software Group from either the Solaris 8 2/02, Solaris 8 HW 12/02, Solaris 8 HW 5/03, Solaris 8 HW 7/03, or Solaris 8 2/04 Software CD-ROM.

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**Note** – The XML packages depend on the `SUNWzlib(32 bit)` and `SUNWzlibx(64 bit)` packages which are not part of the End User Solaris Software Group for Solaris 8 2/02, Solaris 8 HW 12/02, Solaris 8 HW 5/03, Solaris 8 HW 7/03, or Solaris 8 2/04.

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4. Install the optional `SUNWcpc(x)/SUNWcpcu(x)` packages only if you want to enable displaying certain performance counters for certain CPU and memory tests. Otherwise, these packages need not be installed.

The `SUNWcpc(x)/SUNWcpcu(x)` packages are included in the Entire Solaris Software Group for Solaris 8 2/02, Solaris 8 HW 12/02, Solaris 8 HW 5/03, Solaris 8 HW 7/03, and Solaris 8 2/04. These packages are not included in the End User Solaris Software Group for Solaris 8 2/02, Solaris 8 HW 12/02, Solaris 8 HW 5/03, Solaris 8 HW 7/03, nor Solaris 8 2/04.

To install SunVTS for Solaris 9 and later releases:

1. Install the End User Solaris Software Group (or any software group).

The XML packages (`SUNWlxml[32-bit]` and `SUNWlxmlx[64-bit]`) and the `SUNWzlib` packages (`SUNWzlib[32 bit]` and `SUNWzlibx[64 bit]`) are part of the End User Solaris Software Group (and Entire Solaris Software Groups) for Solaris 9 releases.

2. Install the optional `SUNWcpc(x)/SUNWcpcu(x)` packages only if you want to enable displaying certain performance counters for certain CPU and memory tests. Otherwise, these packages need not be installed.

The `SUNWcpc(x)/SUNWcpcu(x)` packages are part of the Entire Solaris Software Group and not the End User Solaris Software Group.

## 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 5.1 User's Guide*.

## Installation Issue:

### Patch ID 119914-07 Must Be Installed Before Performing `emlxtest`

You must install Patch ID 119914-07 (available at [sunsolve.sun.com](http://sunsolve.sun.com)) before performing `emlxtest`. `emlxtest` is not displayed without this patch installed.

## Installation Requirement:

### 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

### Patch ID 119914-07 Must Be Installed Before Performing `emlxtest`

You must install Patch ID 119914-07 (available at [sunsolve.sun.com](http://sunsolve.sun.com)) before performing `emlxtest`. `emlxtest` is not displayed without this patch installed.

### SunVTS Memory or CPU Tests Could Fail Due to Lack of System Resources (Bug ID 6331819)

When too many instances of SunVTS functional tests are run in parallel on UltraSPARC T1 CMT CPU-based (`sun4v`) entry-level servers with low memory configuration, SunVTS tests might fail due to lack of system resources. For example, you could see an error message similar to the following:

```
"System call fork failed; Resource temporarily unavailable"
```

Workaround: Decrease the number of SunVTS test instances or perform SunVTS functional tests separately. In addition, you can increase the delay value for CPU tests or increase the test memory reserve space.



## Using `usbtest` on sun4v Systems (Bug ID 6310384)

The `usbtest` keyboard test might indicate a successful keyboard probe when a keyboard is not present.

Workaround: None.

## Using `netlbttest` on Sun Fire T2000 Servers (Bug ID 6349218)

Performing `netlbttest` on all ipge ports simultaneously in systems with Sun PCI-Express Dual Gigabit MMF/UTP adapters could fail. Performing `netlbttest` on one port per adapter, avoids this failure.

Workaround: Perform `netlbttest` on one port per Sun PCI-Express Dual Gigabit MMF/UTP adapter.

## Using `netlbttest` (Bug ID 6331398)

The `netlbttest` external loopback test could incorrectly report that the test passed when no loopback packets were transmitted or received by the ipge driver.

Workaround: None.

## Using `qlctest` (Bug ID 6306254)

On dual-port host bus adapters (HBAs), testing both ports simultaneously could cause intermittent test failures.

Workaround: Test only one port of dual-port HBAs at a time.

## Using `audiotest` Loopback Tests (Bug ID 6344984)

`audiotest` on Sun Ultra 45 workstations currently supports the line-in/line-out external loopback test only.

Workaround: None.

## Creating Option Files on Enterprise Servers (Bug ID 6345990)

Creating option files on Enterprise and Sun Fire 15K servers (UltraSPARC III) with the SunVTS GUI could cause a core dump.

Workaround: Use the TTY user interface to create option files.

## Using Memory Tests (Bug ID 6347456)

SunVTS memory tests might log a warning message similar to the following in rare cases when the ECC Error Monitor (`errmon`) option is enabled.

```
WARNING: software error encountered while processing
/var/fm/fmd/errlog
Additional-Information: end-of-file reached
Workaround: Do not enable the errmon option. The errmon option is
disabled by default.
```

Workaround: Disable the `errmon` option. The `errmon` option is disabled by default.

## Supporting x86 Clients on a SPARC Server (Bug ID 6344791)

Installing SunVTS x86 packages on a SPARC server to serve x86 clients with SunVTS images is not supported. Installing SunVTS SPARC packages on an x86/x64 server to serve SPARC clients is supported.

Workaround: None.

## Using `cddvdrwtest` (Bug ID 6333687)

In rare cases, repeated reuse of DVD+RW optical media on Sun Ultra 45 workstations could cause failures when performing high stress DVD+RW SunVTS tests.

Workaround: Replace the DVD+RW media upon failure, or use other types of media such as CD-RW.

## Using the SunVTS GUI in CDE (Bug ID 6310673)

On systems with a large number of devices, applying the Comprehensive option of the Auto Config feature causes the `vtsui` to lose connection to the SunVTS kernel (`vtsk`).

Workaround: Do not apply this option on systems with a large number of devices.

## Using qlctest (Bug ID 6264488)

For qlctest to perform properly, you must have Version 4.4.5 or later of the Sun Foundation Kit (SFK) installed which allows HBAAPI support. To install the latest SFK, go to <http://sunsolve.sun.com> and download and install the software (SAN\_4.4.5\_install\_it.tar.gz).

You must reboot the system for driver changes to take effect.

Older 1 GB Fiber Channel Host Bus Adapters (FC HBAs) typically do not use the latest SFK. If you wish to test HBAs without the latest SFK installed, use the previous version of SunVTS (5.1 PS9). 2 GB FC HBAs are not displayed in qlctest without the latest SFK installed.

Workaround: Install the latest SFK.

## Performing Sequences of Mixed Test Modes (Bug ID 6224235)

When performing a certain sequence of tasks of mixed test modes, failures causing error messages similar to the following could occur:

```
ALERT: Found 1 Errors; 0 Warnings in loading option file
/tmp/sunvts/curreEAA6_aOw1
ERROR: Option file format error. Option File Name: /tmp/sunvts/curreEAA6_aOw1
Probable causes: 1) Invalid option file format; 2) Empty option file;
3) XML option file does not have <vts_options> tag defined at top level;
4) XML option file is not well formed.
```

Workaround: None.

## Using fputest (Bug ID 4994898)

fputest does not appear on sun4m machines due to conflicting shared probe libraries.

Workaround: None.

## Using env4test (Bug ID 6267361)

Do not perform env4test on 32-bit machines. Doing so causes env4test to fail.

Workaround: Use a 64-bit Solaris Operating System to perform env4test.

## Using `atmtest` (Bug ID 6235339)

`atmtest` might improperly fail with the maximum option values selected.

Workaround: None.

## Testing CPUs During Dynamic Reconfiguration (RFE ID 5109778)

If a CPU is taken offline for dynamic reconfiguration after SunVTS is invoked, the SunVTS kernel (`vtstk`) receives out of date information about the online CPUs. This incorrect information causes the GUI to show "RED" and no message is printed. The run on error option (`-r`) does not work if this occurs.

Workaround: None.

## SunVTS Does not Support Processor Sets

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

Workaround: None.

## 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.

## 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`, `mptest`, and `fputest`.

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
```

## 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.

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

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## 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.