

Oracle VTS 7.0 Patch Set 15 Software

Release Notes



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Oracle VTS 7.0 Patch Set 15 Software Release Notes

These sections describe new features and issues related to Oracle VTS 7.0, Patch Set 15 software:

- [“Late-Breaking Information” on page 2](#)
- [“Known Issues in PS15 Release \(February 2013\)” on page 3](#)
- [“Known Issues in PS15 Release \(October 2012\)” on page 5](#)
- [“Documentation, Feedback and Support” on page 10](#)

Currently, a newer version Oracle VTS 7.0 PS15 is available, and it is highly recommended for users running the previous version of PS15 release. Oracle Solaris 10 users can use the patch ID 149395-02 to update to this newer version. Whereas, for Oracle Solaris 11 users, the package to update to this new release is available from S11.1 SRU4.

You can use the following command line entries to identify which version of Oracle VTS 7.0 PS15 you are using:

- `.version file`
- `./testname -v`
- `pkgparam -v SUNWvts | grep PROVERS`

For example, the output of `.version file` command can be, 7.0 PS15.1 or 7.0PS15 depending on the PS 15 release being used.

Late-Breaking Information

Patch Set 15 Changes

The following changes were made to the harness and CPU diagnostics:

- Improved quality and performance of VTS libraries.
- Support added for retrieving package versioning information on an installed system.
- Harness enhance to support mapping of multiple tests to SYSTEM BUS for interconnect LT option
- New subtests (march, hammer, and stress) made available for X86.

The following changes were made to the input/output diagnostics:

- networktest enhanced to log kstat data.
- Support to allow `sunvts` the capability to run an extended inquiry, greater than 36bytes against SAS SSD.
- VTS tests for Qlogic and Emulex enhanced to support Ganymede HBAs.
- Specialized SunVTS SSD profiles added which could maximize Reads or Write.
- `diskmediatest` enhanced to read inquiry details of the disks connected behind raid controller card and Multi-path automate write-read paths for all the channels.

Documentation Changes

- Two new procedures added explaining how to run `hlgraphics` test and check presence of `ast` driver on T4 systems.
- Added a new section explaining the user patterns support for `diskmedia` test.
- Added new configuration parameters to VTS harness, disk test, and network test configuration files.

Note – This is a summary of some changes to the *Oracle VTS 7.0 User Guide for Patch Set 8 and Subsequent Compatible Releases*. This is not a complete list of all changes.

Known Issues in PS15 Release (February 2013)

This section describes the know issues in Oracle VTS 7.0 PS15 released in February:

IB-CX2 Failing for sunvts networktest (Bug 16068487)

IB-CX2 fails for sunvts networktest on SPARC T4-1B and next generation SPARC blade platforms.

Workaround:

Plumb the IB ports before running Network test. You may verify if all IB ports are plumbed up by running `ifconfig -a`. When all IB ports are listed with IP addresses, then `nettest` will start on them rather than `networktest`.

Running Internal Loopback (stress) for 18 Hours on 8 Niantic Cards saw 8 Errors (Bug 16041792)

When Oracle VTS `networktest` internal loopback testing is run on "Sun Dual Port 10GbE PCIe 2.0 Networking Cards with Intel 82599 10GbE Controller" for longer duration, it might fail intermittently with following error. This failure does not affect normal usage of the networking card.

```
01/28/13 14:44:22 sca-t5-8-0.us.oracle.com SunVTS7.0ps15: VTSID
6001 Network.networktest.ERROR ixgbe6
(/devices/pci@3c0/pci@1/pci@0/pci@e/network@0:ixgbe6): "Failed to
read the data in loopback mode Internal on ixgbe (Intel 10Gb
Ethernet 1.1..Packets dropped : 101, Total Packet Transmitted :
101"
01/28/13 14:44:24 sca-t5-8-0.us.oracle.com SunVTS7.0ps15: VTSID
6427 vtsk.ERROR : Network.networktest.0[ixgbe6] (pid=6063) exited
with exit code: -1
```

Workaround:

None.

VTS Network Test Fatal due to DLPI Calls for Physical Address Fails on igb port (Bug 16215995)

When `VTS.networktest` runs loopback test multiple times on multiple `igb` ports in Component Stress mode, the `igb` device goes into an unknown state and stops responding to basic DLPI calls for physical address.

Workaround:

None.

vtsk Probes and Runs networktest on Interfaces Part of Plumbed Aggregated Link (Bug 16092803)

The `networktest` is designed to run only on unplumbed interfaces on the system, but `vtsk` probes and starts `networktest` on the interfaces which are part of the Aggregated-Interface(plumbed). The `networktest` fails with the following error message.

```
01/09/13 02:02:11 sca-t5-2-2.us.oracle.com SunVTS7.0ps15build14:
VTSID 6000 Network.networktest.ERROR ixgbe2
(/devices/pci@3c0/pci@1/pci@0/pci@1/network@0:ixgbe2): "Cannot
set loopback mode : Auto on device ixgbe2.Probable_Cause(s):<No
loopback plug or cable> <Bad loopback plug or
cable>Recommended_Action(s):<If test fails, check loopback plug or
cable.>"
01/09/13 02:02:12 sca-t5-2-2.us.oracle.com SunVTS7.0ps15build14:
VTSID 6427 vtsk.ERROR : Network.networktest.0[ixgbe2] (pid=3469)
exited with exit code: -1
```

Workaround:

None.

Known Issues in PS15 Release (October 2012)

This section describes the known issues.

Sunvts 7.0PS15 Binary run Problem in X4440 With RM_Disk_Ignore_Target (Bug 15821322)

If there is an entry, `RM_Disk_Ignore_Target All=Ignore`, set in the `/etc/sunvts/conf/sunvts.conf` file then `Diskmediatest` fails with the following message:

```
VTSID 8009 diskmediatestmfg.FATAL : "Failed to open the device
node, Error Message : (Device busy)
```

Workaround:

Disable the `vold` or `vofls` process, if running.

Interconnect.ramtest Fails on OPL System (Bug 15818252)

The `ramtest` fails on an OPL system, because the `memloops` option for `ramtest` is removed from the binary but not from the profiles.

Workaround:

Run `Interconnect LT` with `IO Bus` option only.

fputest Fails With SIGILL on Fujitsu M10 Processors (Bug 15989998)

The test tries to execute an instruction that is not supported by the Fujitsu M10 processors. It uses `getisax(2)` and checks for a specific bit-mask in the result to check if the instruction is supported. The instruction was supported in an earlier UltraSPARC processor but is not present in the recent ones. The bit-mask

representing this instruction has been re-used to represent a different set of instructions on Fujitsu M10 systems. Seeing it in the result of `getisax(2)`, `fputest` assumes that the original UltraSPARC instruction is available in the system and tries to execute it, which leads to the `SIGILL`.

Workaround:

Update to the latest version of Oracle VTS 7.0 PS15 release.

`dtlbtest` Fails With a FATAL Message on Fujitsu M10 Processors (Bug 16008435)

The `dtlbtest` fails with a fatal message on the new Fujitsu M10 processors.

```
Page size 64KB not supported on this OS version or unavailable for
given TLB (TLB-ALL) for CPU model (SPARC64-X)
```

Workaround:

Update to the latest version of Oracle VTS 7.0 PS15 release.

Test Probe `testprobe_ramtest()` Failed With Segmentation Violation on Fujitsu M10 Systems (Bug 15955560)

The `libvtssysinfo` does not recognize Fujitsu M10 processors and hence returns -1 for all APIs. `l3sramtest_probe` does not handle the `libvtssysinfo` failures and continues to run even after the `libvtssysinfo` API fails.

```
VTS sysinfo Library function vts_tlib_get_onln_cpus failed; Return
value is -1; vtssysinfo: some problem encountered while caching
the info errno=6,errstr=No such device or address
ERROR: Test probe testprobe_l3sramtest() Failed with segmentation
violation (signal: 10)
```

Workaround:

Update to the latest version of Oracle VTS 7.0 PS15 release.

Oracle VTS 7.0 ps15 Core due to SIGSEGV Signal at Execution on Fujitsu M10 Systems (Bug 15887244)

Oracle VTS 7.0 PS15 does not recognize `ORCL.SPARC64-X` token name and fails to compare platform name. When the `vts` command tries to compare `ORCL, SPARC64-X` by `strncpy(3C)` in `__1cEUtilTcreateDumpOfProfile6M_i_()`, it accesses `NULL` pointer.

Workaround:

Update to the latest version of Oracle VTS 7.0 PS15 release.

Processor LT may Hang (Bug 15826050)

Processor LT might get stopped during cleanup waiting for mutex lock.

Workaround:

Update to the latest version of Oracle VTS 7.0 PS15 release.

Network.networktest.ERROR net2 Failed to Create the Directory /var/sunvts/logs/networktest.kstat/ (Bug 15823896)

The `networktest` fails `net2`, and hence the `/var/sunvts/logs/networktest.kstat/` directory is not created.

Workaround:

Remove the `networktest.kstat` directory under `/var/sunvts/logs` and create a new directory with the same name and restart `vtsk`.

Interconnect.networktest.ERROR. Failed to Read the Data in Loopback Mode Auto on ixgbe (Bug 15823894)

networktest fails to read data in Auto(External) loopback mode on ixgbe port, and displays the following error message.

```
Interconnect.networktest.ERROR. Failed to Read the Data in
Loopback Mode Auto on ixgbe
```

Workaround:

Update to the latest version of Oracle VTS 7.0 PS15 release.

Networktest Probe Takes Long Time on Systems Having Higher Number of Ports (Bug 15889513)

This issue is seen on systems containing more than 100 network ports, and the networktest probe takes more time and appears to have stopped.

Workaround:

Update to the latest version of Oracle VTS 7.0 PS15 release.

T5-8 Sunvts cddvdtest fails on USB3.0 DVD drive testing DVD-R media (Bug 15939411)

By default, the cddvdtest fails on USB3.0 drive testing on DVD-R media.

Workaround:

Update to the latest version of Oracle VTS 7.0 PS15 release.

Networktest probe core dumps on system (Bug 16021896)

The networktest probe core dumps on systems having a higher number of ports.

Workaround:

Update to the latest version of Oracle VTS 7.0 PS15 release.

Documentation, Feedback and Support

For the latest versions of all of Oracle VTS documents, go to:

<http://www.oracle.com/pls/topic/lookup?ctx=OracleVTS7.0>

These web sites provide additional resources:

- Documentation <http://www.oracle.com/technetwork/indexes/documentation/index.html>
- Support <https://support.oracle.com>
- Training <https://education.oracle.com>