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 known 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/pci03c0/pci01/pci00/pci0e/network0: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:

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

Workaround:
Disable the vold or volfs 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 Futjitsu 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.

**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.

**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 commend 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 is 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 DVR-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:


These web sites provide additional resources:

- Support  https://support.oracle.com
- Training  https://education.oracle.com