Aperi SRM R0.4 & SAN Simulator R0.1 Initial Contribution

Integrated Development Verification Test Exit Document

Background

IDVT for Aperi SRM Stage 4 & SAN Simulator Stage 1, was performed from October 8, 2007 to January 11, 2008.   The **Aperi_R0.4.0_incubation.zip** build for SRM and **Aperi_Simulator_R0.4.0_incubation.zip** build for SAN Simulator are the "Official IDVT Exit Builds". Testing was done on RedHat Linux and various Windows platforms.

This report documents the following:

- Period of testing

- Scenarios tested

- Resulting defects

- Any known workarounds

- The final IDVT status before exit.

Acquiring and Installing the Build

Aperi SRM R0.4 & SAN Simulator R0.1 incubation builds had been uploaded to the Eclipse download sites.
Here is the URL for the SRM bits:
http://www.eclipse.org/downloads/download.php?file=/technology/aperi/Aperi_R0.4.0_incubation.zip
Here is the URL for the SRM install instructions:
http://www.eclipse.org/aperi/documentation/r4/install.php

Here is the URL for the SAN Simulator bits
http://www.eclipse.org/downloads/download.php?file=/technology/aperi/Aperi-Simulator_R0.4.0_incubation.zip
Here is the URL for the SAN Simulator install instructions:
http://www.eclipse.org/aperi/documentation/r4/install_simulator.php

Test cases, defects, and status

The defects and result from the test cases were tracked in Eclipse bugs (Product Aperi) and the "Aperi v1 IDVT TTT" database. For periodic statuses of IDVT, please refer to http://wiki.eclipse.org/index.php/Aperi/Test/Status

The official document for the Aperi IDVT Test cases is located in the Aperi wiki, along with the Approval record for the test plan.

IDVT exit criteria called for 100% exposure of IDVT test scenarios. – **100% of the test cases were exposed, 99% of which were successful.**
Exit criteria also call for all test scenarios to pass "either without severity 1 (Blocker, Critical) or 2 (Major) defects or with viable workarounds provided for any severity 1 or 2 defects." – **No severity 1 or 2 defects at time of exit.**

There were No severity 1 or 2 defects for both Aperi SRM & SAN Simulator code at the time of IDVT exit

Resolved IDVT defects at time of exit:

ID   Sev OS   Status   Summary
205850 cri   Wind   RESO   Unable to create volume for DS8000 & ESS storage subsystems
206517 cri   Linu   RESO   Unable to install Aperi using GUI install for Linux platform
207882 cri   Linu   RESO   The derby.sh file created by Aperi GUI installer for Linux platform had windows notations
208708 cri   Linu   RESO   Agent can't scan SCSI disks on recent Linux version
209397 cri   Wind   RESO   Error running the install, Ant run failed
209574 cri   Linu   RESO   Unable to start servers/agents after installing Aperi on Linux platform
210569 cri   Wind   RESO   SanSimulator code failed to accept any port number for CIMOM configuration
199467 nor   Wind   RESO   Unable to add CIMOM agent accepting 'any' uid/pw
201569 nor   Wind   RESO   Derby DB causes java.lang.StackOverflowError
172223 maj   Wind   RESO   DB2 BigDecimal conversion exception when running probe of storage subsystem
199148 maj   All   RESO   org.mortbay.jetty.servlet.ServletHandler handle SEVERE: /aperi-reports/TreeControl?action=getChildren&data
210165 maj   Linu   RESO   Unable to login report viewing on Linux platform
211286 maj   Wind   RESO   No available extent pools on define the volumes panel when creating DS8000 volume
211618 maj   Wind   RESO   Running Snapshot-based device simulation failed with java.io.FileNotFoundException: conf\remove_override.txt
211917 maj   Wind   RESO   NullPointerException occurred when simulating switch to storage connection - use CIMOM to extract storage port information option
212337 maj   Wind   RESO   No target device returned when simulating switch to storage connection - use Database to extract storage port information option
213070 maj   Wind   RESO   Unable to connect to a snapshot-based simulated Brocade switches CIMOM
214784 maj   Wind   RESO   Switch to Switch or Switch to Storage Connections were not discovered by TPC 3.3
209115 nor   Wind   RESO   SBLIM CIM Client 1.3.3 approved
209850 nor   Wind   RESO   Derby 10.3.1.4 approved
185765 nor   Wind   RESO   aperi-20070506-212356: gui.bat launches legacy GUI not new GUI
201269 nor   Linu   RESO   GUI-Installer: some .sh files are missing in template dirs
207302 nor   Wind RESO   Right Click is not Working in Aperi
211375 nor   Linu   RESO   getHBAPortWWN() doesn't work on 2.6 kernel with recent Qlogic driver
207203 min Wind   RESO org.mortbay.jaas Version: 5.1.10 approved

Workarounds and Qualifications

No workarounds needed for Aperi SRM R0.4 and SAN Simulator R 0.1

Other Known Issues

The following items detail some performance issues that were discovered with Derby for Aperi SRM code:

- Poor performance when generating an Assets report
  Aperi Storage Manager->My Reports->System Reports->Fabrics->Port Connections
  Aperi Storage Manager->My Reports->System Reports->Fabrics->SAN Assets(Connected devices)
  It may take a while to get the report (2 mins for a 20 connected devices)

- The restriction for host port assignment during volume creation:
  Aperi installations support volume creation, but not host port assignment for Derby db.
  Check for this limitation to be addressed in a future release

The following items details some restrictions for Aperi SAN Simulator code

- Extrinsic methods (e.g. CreateOrModifyElementFromStoragePool, CreateZone etc...) are not supported in the snapshot and configuration implementation of the Storage Network Simulator. This feature will be added in the forthcoming versions.

- Zoning configuration for the Brocade Fabric (ZoneSet, Zone, ZoneMember) is not supported in the configuration based implementation of Storage Network Simulator. This feature will be added in the forthcoming versions.

- The current version of the Storage Network Simulator only allows connectivity between ports of the same fabric for Switch to Switch connectivity. Ports across different fabrics can not be connected.