

## SUSE Enterprise Storage Certification Kit v1.1 Quick Start Guide

### 1. What's New in SESCK 1.1 for SES 4 and 5:

The following enhancement were implemented in this version:

- FATE 323079 - Enhance Bonding test
- FATE 323308 - Allow any NTP server in clients
- FATE 323080 - Test the kernel client

### 2. Certification Bulletin Requirements

A SES Certification bulletin will be issued after the following requirements are met:

- Each SES node has a base System YES Certification.
- Each SES node meets or exceeds minimum SES requirements as per SES documentation.
- SES cluster solution passed SES Certification Kit testing.

### 3. Testing Environment

3.1. Existing or new SES cluster with a minimum of 4 OSDs and 1 Admin node or larger. If a new SES cluster needs to be installed, please follow the SES documentation at:

[https://www.suse.com/documentation/suse-enterprise-storage-5/book\\_storage\\_deployment/data/book\\_storage\\_deployment.html](https://www.suse.com/documentation/suse-enterprise-storage-5/book_storage_deployment/data/book_storage_deployment.html)

3.2. A client machine running SLES KVM hypervisor (same OS and SP as cluster nodes) with 3 SLES 12 VMs running on it is required. The VM's hard disk must be provided by SES cluster. Configure SES to provide block devices and set up the VMs to use librbd to access the block device provided by SES (as its OS and only disk) by following the procedures in the SES documentation at:

[https://www.suse.com/documentation/suse-enterprise-storage-5/book\\_storage\\_admin/data/cha\\_ceph\\_libvirt.html](https://www.suse.com/documentation/suse-enterprise-storage-5/book_storage_admin/data/cha_ceph_libvirt.html)

or

<http://docs.ceph.com/docs/hammer/rbd/libvirt/>

3.3. A machine with Test Console installed from System Certification Kit installation media is needed. (For TC installation instructions see 4 below)

<ftp://sdk.provo.novell.com/ndk/systest/builds/current/suse-systest-7.6-post-GM-2.iso>

3.4. NTP must be configured on all cluster nodes and on each VM. (The NTP server no longer has to be the Test Console machine.)

3.5. Bonding with either 802.3ad, active-backup, or balance-xor mode is required on all OSDs.

3.6. Install Admin keyring on OSD 2 to enable it to run Ceph commands (give adm role to osd2 deepsea or after install copy keyring files, conf. e.g. scp /etc/ceph/\* osd2:/etc/ceph/)

3.7. If SES cluster is configured with a public and an internal/backend network, the public network must be used for SESCK testing. You may specify any existing SES public network address in TestConsole.

### 4. If a new installation of Test Console needs to be done, you may follow these steps.

4.1. Test Console installation summary:

- Install SLES 11 SP4 x86\_64 OS. Ensure the following patterns are installed:
  - Base System
  - 32-Bit Runtime Environment
  - Help and Support Documentation (optional)
  - Minimal System (Appliance)
  - Gnome Desktop Environment
  - X Window System
  - File Server
  - DHCP and DNS Server
  - C/C++ Compiler and Tools
  - Print server

- Download System Certification Kit ISO and mount it on the TC.
- (Optional) Download SLES 12 to your TC so it can be used for PXE/Autoyast install later on.
- Run “sck\_install.sh” from your mount point and choose the option to Install Test Console
- Follow the prompts. The install will prompt you to configure the NIC cards on the TC; asks if you want to install a DHCP/PXE server for which and iso on the TC will be needed.

For complete Test Console installation instructions see System TestKit documentation sections 2.2 Setting Up TC, 2.2.1 Installing SLES 11 SP4 on TC, 2.2.2 Installing the Test Kit on TC, 2.2.3 Setting Up the DHCP/PXE Server on TC, and 2.2.4 Adding ISO Images to the PXE Menu on TC at:

[https://www.suse.com/docrep/documents/kmf54g86yg/SUSE\\_yes\\_certification\\_kit.pdf](https://www.suse.com/docrep/documents/kmf54g86yg/SUSE_yes_certification_kit.pdf)

## 5. Install SESCK onto Test Console

5.1. Get SESCK iso from SUSE YES Certification testkit download page:

<ftp://sdk.provo.novell.com/ndk/systest/builds/current/SUSE-Enterprise-Storage-Cert-Kit-1.1-GM.iso>

5.2. Mount SESCK iso on TC

5.3. From mount point run “sesck\_install.sh” and choose option to Install SES Certification Kit Test Console Plugins.

## 6. Create a SES Project and Run the Tests

6.1. Open Test Console by double clicking on Test Console icon on desktop

6.2. Click on “New” and select “SUSE Enterprise Storage” project type under SES folder

6.3. Save the project (may keep default name or choose any name you’d like)

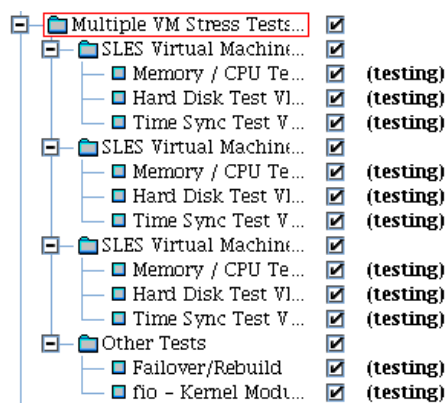
6.4. Select correct IP addresses for Admin, and OSDs (again it can be any subnet as long as TC is on the same subnet)

6.5. Start running tests in order from top to bottom beginning with “**Verify OSD Setup**” and continuing with “**Certification Kit Installs**” and so forth.

6.6. After running “**Solution Info/OS check**” the “**Edit Product/Report**” button in toolbar becomes available. Click on it and fill in all the fields in the ‘Company’, ‘SES System’, and ‘Switch information’ tabs. Then, click the “Save” button in toolbar.

6.7. Under “**VM Tests**” section change KVM Host and VMs IP addresses to correct ones. Continue running the tests in order.

6.8. In “**Multiple VM Stress Tests (12h)**” section. You may double click on this parent folder to start all tests under Stress Tests section at the same time (or right click and select “Run Test Group”). The tests under each VM and under “OSD Node 2 Down” should all run concurrently as shown in the picture below.



- A pop up window will ask to confirm the number, size, and pool where RBD blocks will be created for fio testing. Either select continue or make changes if necessary. If you select continue, the pool “**libvirt-pool**” should have been previously created (manually).

6.9. After 12 hr. Stress Tests are completed, run tests under “**Get Test Logs**” one by one from top to bottom.

7. Once tests under **Get Test Logs** are completed click on “**Edit Product / Report**” on TC’s toolbar and click “**Verify**” button. There should be no exceptions listed here, but if some exceptions are present explain them by selecting them and clicking on “**Edit Explanation**” All exceptions should be explained.
8. Click “**Report**” on TC’s toolbar to create a submission zip file with test logs. The resulting zip file will be on TC at `/opt/suse/testKits/ses/results/`
9. Send zip file to SUSE Partner Engineering for review.