HA test results

Test scenario	Result
OpenStack HA testing during the hardware failovers	**All tests passed**
Test scenario I (Graceful shutdown): 1. Gracefully shutdown one of the controller nodes. (Controller 1) a. (target controller): poweroff 2. Boot 5 VMs and verify that they all are up and running. a. (other controller): nova boot --flavor 1 --image c3e392bb-1575-43bf-85fe-5ab9bb896caa --availability-zone nova --security-groups 3c1e8c5c-a84a-47ab-8c50-ccbff6fff2fb --nic net-id=22932033-e89e-477e-972f-4948c28672f9 --min-count 5 ha-test 3. Turn on controller and wait until all services are up (Time limit 30 min) a. (IPMI): power on b. (other controller): pcs status 4. Boot 5 VMs and verify that they all are up and running. a. (other controller): nova boot --flavor 1 --image TestVM --min-count 5 --nic net-id=<net04 ID> ha-test 5. Return the cluster to initial state. a. (other controller): for uuid in `nova list|grep ha-test|awk '{print $2}'`; do nova delete $uuid; done	uklon5-osc01cntl04 shutdown -h now uklon5-osc01cntl02 nova boot all controllers are online uklon5-osc01cntl03 nova boot uklon5-osc01cntl01 successfully deleted
Test scenario II (Hard power off): 1. Hard power off one of the controller nodes. (Controller 2) a. (IPMI): power off 2. Boot 5 VMs and verify that they all are up and running. a. (other controller): nova boot --flavor 1 --image TestVM --min-count 5 --nic net-id=<net04 ID> ha-test 3. Turn on controller and wait until all services are up, but not longer than 30 min. a. (IPMI): power on b. (other controller): pcs status 4. Boot 5 VMs and verify that they all are up and running. a. (other controller): nova boot --flavor 1 --image TestVM --min-count 5 --nic net-id=<net04 ID> ha-test 5. Return the cluster to initial state. a. (other controller): for uuid in `nova list|grep ha-test|awk '{print $2}'`; do nova delete $uuid; done	uklon5-osc01cntl03 uklon5-osc01cntl01 nova boot all controllers are online uklon5-osc01cntl04 nova boot uklon5-osc01cntl02 successfully deleted

Test scenario III (Network cut): 1. Cut network communication on one of the controller nodes. (Controller 3) a. (IPMI console): ip link set down <NIC> #For every physical NIC 2. Boot 5 VMs and verify that they all are up and running. a. (other controller): nova boot --flavor 1 --image TestVM --min-count 5 --nic net-id=<net04 ID> ha-test 3. Reboot controller a. (IPMI): power reset for i in {1..10}; do crm status| head; sleep 5; done 4. Boot 5 VMs and verify that they all are up and running. a. (other controller): nova boot --flavor 1 --image TestVM --min-count 5 --nic net-id=<net04 ID> ha-test 5. Return the cluster to initial state. a. (other controller): for uuid in `nova list|grep ha-test|awk '{print $2}'`; do nova delete $uuid; done	uklon5-osc01cntl02 ip l | grep "en[os]" | cut -d":" -f2 | xargs -I{} ip link set down {} uklon5-osc01cntl04 nova boot uklon5-osc01cntl03 nova boot uklon5-osc01cntl02 successfully deleted