# KVM trouble shooting list:

1. Check if nontpmrpcore, libvirtd, and rp\_listner are running

a. pgrep nontpmrpcore

2. Verifier binary and mount\_vm\_image.sh present at the right directory? $INSTALL\_DIR/rpcore/bin/debug/verifier and $INSTALL\_DIR/rpcore/scripts/mount\_vm\_image.sh

# Nova check list:

1. Nova-compute & nova-network up and running?

a. sudo /root/services.sh status

2. /etc/nova/nova-compute.conf

a. libvirt\_type=kvm

3. /etc/nova/nova.conf

a. metadata\_host, rabbit\_host, glance\_host, glance\_api\_servers, and [database] connection all point to Controller IP

b. glance\_api\_servers points to ControllerIP:9292

c. nova\_url=http:// ControllerIP:8774/v1.1/

d. my\_ip, vncserver\_proxyclient\_address, and network\_host all point to this KVM machine IP

e. novncproxy\_base\_url=http://ControllerIP:6080/vnc\_auto.html

f. flat\_network\_bridge=xenbr0

g. public\_interface=eth0

# Log files to look into:

1. /var/log/upstart/nova-compute.log (if nova-compute fails to start)
2. /var/log/upstart/nova-network.log (if nova-network fails to start)
3. /var/log/nova/nova-compute.log
4. /var/log/rp\_proxy.log
5. $INSTALL\_DIR/rpcore/bin/debug/log\_rpcoresvc.log
6. For rpcore, $INSTALL\_DIR/rpcore/bin/debug/nohup.out
7. IMVM (verifier): /tmp/imvm-result.out
8. /var/log/mhagent.log

# Sequence of events when launching a Virtual Machine on KVM:

nova-compute - gets a request to launch and creates nova-compute.log

nova-compute - calls libvirt - any error here also goes in the log

libvirt - calls kvm which then calls qemu-system\_x86\_64 (rp\_proxy)

rp\_proxy - creates /var/log/rp\_proxy.log

rp\_proxy - calls rpcore (nontpmrpcore, rpcoresvc, or tcsd-rpcoresvc) - creates $INSTALL\_DIR/rpcore/bin/debug/log\_rpcoresvc.log (rpcore is a daemon)

rpcore - calls verifier - creates /tmp/imvm-result.out

verifier - calls mount\_vm\_image.sh script - script logs are in /tmp/imvm-result.out

rpcore - reads verifier log file - source for this is in modtcService.cpp

rp\_proxy - if verifier and rpcore are successful, calls qemu-system\_x86\_64\_orig (Original qemu-system\_x86\_64)

# Tips on resolving errors in the log files

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| --- | --- | --- |
| **Log file name** | **Error message** | **Solution to fix the error** |
| nova-compute.log | IP injection fails with error "Ignoring error injecting key into image (aug\_get: no matching node)" | This is a known issue with qcow2 images. Following steps need to be done on qcow2 image before uploading to glance  **guestfish -a cirros-0.3.2-x86\_64-disk.img -i touch /etc/hostname echo "cirros" > /etc/hostname exit** |
| nova-compute.log | Something like  Permission denied: '/var/lib/nova/instances/locks/nova-\_var\_lib\_nova\_instances\_\_base\_62f6e66f72d8bc863f4d03958ac51056e410fd41' | One probable reason is imvm verification failure.  inspect /tmp/imvm-result.out for failure , since some files are generated after reboot those need to be excluded while manifest generation. |
| rp\_proxy.log | get\_rpcore\_response(): Opening device driver ..  get\_rpcore\_response(): error opening socket: Connection refused  Launch denied by RPCore | Check if rpcore is running |
| nova-compute.log | libvirtError: internal error: process exited while connecting to monitor | Check if libvirtd is running  Check if the image is compatible with KVM. Only AMI, qcow2 and raw images (that is converted to raw from qcow2 using qemu) are supported. |