Standard Operating Procedure

*Master Node in NotReady State*

## PURPOSE

The purpose of this standard operating procedure (SOP) is to provide a detailed step-by-step procedure to resolve master node in NotReady state.

## PROCEDURE

1. To verify, check the status of master nodes

oc get nodes | grep master

1. Login to the master node that is in NotReady state

ssh <node name>

Perform a health check on the master node

vgs to check if docker volume is full, if it is, do docker-storage-steup (Also in Docker Storage Setup SOP):

1. Unschedule node with the storage issue from master node

oadm manage-node <node name> --schedulable=false

1. Check the node is in “Ready,SchedulingDisabled” state

oc get node <node name>

1. Disable cronjob CheckServices.ksh to stop docker from starting automatically in **root**

crontab -e

1. Run docker storage set up and restart docker service.
   1. Stop Docker Service

systemctl stop docker

* 1. To see if a process has been stopped

systemctl status docker

* 1. Check docker volume

lvdisplay  
vgdisplay

* 1. Delete docker volume

vgremove docker-vg

* 1. Check the volumes

lsblk

Check which volume has docker-vg:

[svc-aws-ose@node01-dev2-red ~]$ lsblk

NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINT

nvme0n1 259:4 0 25G 0 disk

├─nvme0n1p1 259:3 0 1M 0 part

└─nvme0n1p2 259:6 0 25G 0 part /

nvme1n1 259:0 0 40G 0 disk

└─log\_vg-log\_lv 253:0 0 40G 0 lvm /var/log

nvme2n1 259:1 0 100G 0 disk

└─origin\_vg-origin\_lv 253:1 0 100G 0 lvm /var/lib/o

nvme3n1 259:2 0 100G 0 disk

└─nvme3n1p1 259:5 0 100G 0 part

├─docker--vg-docker--pool\_tmeta 253:2 0 104M 0 lvm

│ └─docker--vg-docker--pool 253:4 0 39.8G 0 lvm

* 1. Delete the respective docker volume

fdisk /dev/<docker volume>

i.e.

fdisk /dev/nvme3n1

To delete:  
d

To save:  
w

* 1. Validate the partition deletion

lsblk

To save:

partprobe

* 1. Perform docker partition clean-up

wipefs -a /dev/<docker volume>

i.e.

wipefs -a /dev/nvme3n1

* 1. Clean-up docker folders

rm -rf /var/lib/docker/\*

* 1. Remove /etc/sysconfig/docker-storage

rm /etc/sysconfig/docker-storage

* 1. Run docker storage setup

docker-storage-setup

* 1. Check the partition

lsblk

Check if docker-vg shows up

vgs

* 1. Start docker

systemctl start docker

* 1. Check docker status  
     systemctl status docker

1. Reenable cronjob CheckServices.ksh
2. Schedule the node.

sudo oadm manage-node <node name> --schedulable

1. Double check if the nodes are ready

oc get nodes

systemctl status docker.service to check docker service and check for error. If the error states “<node name> docker-current[121827]: time="2018-10-09T14:54:11.457158098-04:00" level=warning msg="could not retrieve docker rpm version: exit status 1" then rebuild RPM (Also in RPM Rebuild SOP):

1. Make backup folder under rpm:

mkdir /var/lib/rpm/backup

1. Make backup copies in the backup folder:

cp -a /var/lib/rpm/\_\_db\* /var/lib/rpm/backup/

1. Remove files:

rm -f /var/lib/rpm/\_\_db.[0-9][0-9]\*

1. Let RPM produce as little output as possible:   
   rpm --quiet -qa
2. Rebuild RPM:

rpm --rebuilddb

1. Cleanup everything:

yum clean all

systemctl status atomic-openshift-node.service to check atomic node service status

systemctl status atomic-openshift-master-controllers to check atomic master controllers status

to check openvswitch service status

tailf /var/log/messages to check log messages

uptime to see how long the node has been up and its load average

cat /etc/redhat-release this should return Red Hat Enterprise Linux Server release 7.x (Maipo)

uname -r to print kernel release

df -hT |grep "^/dev" to check disk space

oc get events to check events

1. Check for errors in /var/log/messages
   1. If issue is unrelated to docker:
      1. reboot the node on VMware
   2. If issue is docker related, try to restart docker service and verify the state of the master node
      1. systemctl restart docker
      2. systemctl status docker

## VALIDATION

Follow the validation steps in “Procedure”.

**Document Version Control**

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