

Cluster System Administrator Class
Bloominglabs
Setting up a Resource Manager

I. TORQUE

1. Server

1. Install server rpms
2. rpm -ivh torque-5.1.3-1.adaptive.el6.x86_64.rpm torque-server-5.1.3-1.adaptive.el6.x86_64.rpm torque-scheduler-5.1.3-1.adaptive.el6.x86_64.rpm
3. Configure mgmt to use LDAP for user information
 - I. /etc/nsswitch.conf
passwd files ldap
shadow files ldap
group files ldap
4. Start trqauthd, pbs_server, pbs_sched and set to start at boot time

2. Client

1. Install client rpms
2. rpm -ivh torque-5.1.3-1.adaptive.el6.x86_64.rpm torque-client-5.1.3-1.adaptive.el6.x86_64.rpm
3. Configure client
4. /var/spool/torque/server_name
5. /var/spool/torque/mom_priv/config
6. Start trqauthd, pbs_mom and set to start at boot time

3. Add nodes to server

1. qmgr
 - > create node n1.cluster
 - > set node n1.cluster state = free
 - > print node n1.cluster
 - > print server

4. Setup mgmt.cluster as a submit host

1. qmgr
 - > set server submit_hosts = mgmt.cluster

5. Useful TORQUE commands

1. qmgr
2. pbsnodes
3. qsub {job script}
4. qsub -I
5. qstat