* Add image to glance
	+ wget <https://fedorapeople.org/groups/magnum/fedora-21-atomic-5.qcow2>
	+ glance image-create --name fedora-21-atomic-5 --visibility public --disk-format qcow2 --property os\_distro='fedora-atomic' --container-format bare < fedora-21-atomic-5.qcow2 --progress
* source admin-openrc.sh
* create keypair
	+ test -f ~/.ssh/id\_rsa.pub || ssh-keygen -t rsa -N "" -f ~/.ssh/id\_rsa
	+ nova keypair-add --pub-key ~/.ssh/id\_rsa.pub testkey
	+ verify
		- nova keypair-list
* make database for magnum
	+ mysql
	+ CREATE DATABASE magnum;
	+ GRANT ALL PRIVILEGES ON magnum.\* TO 'magnum'@'%' IDENTIFIED BY 'password';
	+ GRANT ALL PRIVILEGES ON magnum.\* TO 'magnum'@'localhost' IDENTIFIED BY 'password';
	+ GRANT ALL PRIVILEGES ON magnum.\* TO 'magnum'@'192.168.32.141' IDENTIFIED BY 'password';
* configure magnum
	+ git clone <https://git.openstack.org/openstack/magnum> --branch stable/liberty
	+ pip install magnum/
	+ mkdir -p /etc/magnum
	+ cp etc/magnum/magnum.conf.sample /etc/magnum/magnum.conf
	+ cp etc/magnum/policy.json /etc/magnum/policy.json
	+ in /etc/magnum/magnum.conf set the following
		- rabbit userid
		- rabbit password
		- mysql connection string
		- keystone account username
		- keystone account password
		- admin identity api endpoint
		- public identity api endpoint
		- notification driver\*
* install magnum python client
	+ git clone <https://git.openstack.org/openstack/python-magnumclient> --branch stable/liberty
	+ cd python-magnumclient
	+ sudo pip install -e .
* populate the magnum database
	+ magnum-db-manage upgrade
* Configure keystone endpoints for magnum
	+ The dev guide uses keystone cli however this is depreciated and does not work. use the following cmds
		- openstack user create --domain default --password-prompt magnum
		- openstack role add --project service --user magnum admin
		- openstack service create --name magnum --description "magnum container service" container
		- openstack endpoint create --region RegionOne container public <http://controller:9511/v1>
		- openstack endpoint create --region RegionOne container internal <http://controller:9511/v1>
		- openstack endpoint create --region RegionOne container public <http://controller:9511/v1>
* start api and conductor
	+ yum -y install screen
	+ screen
	+ magnum-api
	+ CTRL+A
	+ d
	+ screen magnum-conductor
* verify that magnum is properly installed
	+ magnum baymodel-create --name k8sbaymodel \
	 --image-id fedora-21-atomic-5 \
	 --keypair-id testkey \
	 --external-network-id public \
	 --dns-nameserver 8.8.8.8 \
	 --flavor-id m1.small \
	 --docker-volume-size 5 \
	 --network-driver flannel \
	 --coe kubernetes