**Installing Docker**

All commands as root on CentOs7:

cd /etc/yum.repos.d

vim docker.repo

**[dockerrepo]**

name=Docker Repository

baseurl=https://yum.dockerproject.com/repos/main/centos/7/

enabled=true

gpgcheck=1

gpgkey=https://yum.dockerproject.org/gpg

yum install docker-engin

systemctl enable docker

systemctl start docker

usermod -a -G docker <username>

cat /etc/group | grep docker #should use the <username> as the group for the docker program

Docker command options

$ docker

Usage: docker [OPTIONS] COMMAND [arg...]

docker [ --help | -v | --version ]

A self-sufficient runtime for containers.

Options:

--config=~/.docker Location of client config files

-D, --debug Enable debug mode

-H, --host=[] Daemon socket(s) to connect to

-h, --help Print usage

-l, --log-level=info Set the logging level

--tls Use TLS; implied by --tlsverify

--tlscacert=~/.docker/ca.pem Trust certs signed only by this CA

--tlscert=~/.docker/cert.pem Path to TLS certificate file

--tlskey=~/.docker/key.pem Path to TLS key file

--tlsverify Use TLS and verify the remote

-v, --version Print version information and quit

Commands:

attach Attach to a running container

# […]

**Docker Commands**

List images:

docker images

List running docker processes:

docker ps

List all processes that were ever run:

docker ps -a

List only the container IDs:

docker ps -a -q

Running processes:

docker run <image>

docker run -d <image> = run in disconnected / daemon mode

docker run --name="Some Name" = name the running instance

docker start <name> = will restart a closed / exited instance of the image

docker exec -it <name> <command> = run a command within a running container without changing the state of the running container

docker stop <name> = stop a running container by using the name

Cleaning up Docker:

docker rm containerid = removes an instance of the container that was run

docker rm `docker ps -a -q` = remove all stopped containers

docker rmi image-name = removes the docker image and its dependencies

Redirect port:

docker run -P = will redirect the container's port to a random port on the host machine's user port (port no 32,000+)

docker run -p 8080:80 = will redirect the container's port 80 to a port 8080 on the host machine's user port

docker port <container-name> = will list the port mapping information

Adding volume:

using the "-v" option mounts the local file system. eg to mount for an nginx on centos

-v /home/user/www:/usr/share/nginx/html

Building a Docker file:

docker login --username=<username>

Enter password

docker push username/repo