

Docker:

Installation: <https://docs.docker.com/engine/installation/linux/ubuntu/>

Commands:

- 1) `docker search "image name"` // to search all public images on docker
- 2) `docker pull "image name"` // to pull images to local
- 3) `docker images` // listing all images available on local
- 4) `Docker run -it -p 80:80 "image_name"` // you will get login to your image
// after login, you can install softwares to your image
- 5) `docker run -it -p 80:80 centos:rails2 /bin/bash` // to run docker image by
//binding port and all running image are called containers
- 6) `docker ps` // to list all running containers
- 7) `docker stop "container_id"` // to gracefully stop container Note: get container id from `docker ps`
- 8) `Docker commit "container_id" name:tag` // to save container changes into a image
// if you kill without saving, then u will lost all changes inside of your image
- 9) `Docker kill "container_id"` // to forcefully kill container process

Using with Docker file

- 1) Create a docker file named as Dockerfile with required configuration. Below is an example of Dockerfile
 - a) `FROM ubuntu14:rails` // with FROM we need to specify the image name available on local
 - b) `WORKDIR /root/docker_test` // specify the path used inside the image where we need run commands like bundle etc
 - c) `run /bin/bash -l -c "bundle"` // commands specified with run are executed while building an image
 - d) `docker run -p 3000:80 "image_name"` //this would run application on port 3000 which is running on port 80 inside container
 - e) `docker run -d -p 3000:80 "image_name"` // run image in background
 - f) `cmd /bin/bash -l -c "rails s -b 0.0.0.0 -p 80"` // commands specified with cmd are executed while running an image
- 2) `docker build -t "image_name" .` // this would create an image using the commands specified inside the Dockerfile

Push image on docker

To push image we need to sign up at docker "<https://cloud.docker.com/>"

- 1) `docker login` // this would prompt for username and password for docker
- 2) `docker tag "image_name" "username/image_name:tag_name"` // we need to provide username before image name to push an image on docker so give tag name to local image
- 3) `docker push username/image_name:tag_name` //this would publish image on docker publically

- 4) `docker run -p 4000:80 username/image_name:tag_name` // this would run image directly if not available on local then pull it from cloud then run the app server directly
- 5) Docker attach *container-id* //open running container with given ID