**Steps for installing tools**

**Installation of Git:**

sudo yum install git –y

git –version

**Installation of Xvfb:**

sudo yum install Xvfb –y

**Installation of Java:**

sudo yum install java-1.8.0-openjdk-devel

java –version

**Issue case:**

sudo yum install java-11-openjdk-devel

java –version

**or**

sudo yum install java-1.8.0-openjdk-devel

sudo yum install java-11-openjdk-devel

java –version

**Installation of Jenkins:**

sudo wget -O /etc/yum.repos.d/jenkins.repo <https://pkg.jenkins.io/redhat-stable/jenkins.repo>

sudo rpm --import <https://pkg.jenkins.io/redhat-stable/jenkins.io.key>

sudo yum install Jenkins

**Starting Jenkins and checking status of Jenkins:**

sudo systemctl start jenkins

sudo systemctl status jenkins

**Password for Jenkins path:**

sudo cat /var/lib/jenkins/secrets/initialAdminPassword

**Artifacts:**

sudo usermod -aG openshiftadmin jenkins

mkdir /home/openshiftadmin/Artifacts

sudo chown jenkins.jenkins /home/openshiftadmin/Artifacts/

sudo chmod -R 700 /home/openshiftadmin/Artifacts/

**Installation for Docker:**

sudo dnf config-manager --add-repo=https://download.docker.com/linux/centos/docker-ce.repo

sudo dnf repolist -v

dnf list docker-ce --showduplicates | sort -r

sudo dnf install docker-ce --allowerasing

sudo docker version

sudo usermod -aG docker openshiftadmin

sudo usermod -aG docker jenkins

**Issue case:**

sudo yum install -y <http://mirror.centos.org/centos/7/extras/x86_64/Packages/container-selinux-2.55-1.el7.noarch.rpm>

subscription-manager repos --enable=rhel-7-server-extras-rpms

sudo yum -y install slirp4netns fuse-overlayfs container-selinux

sudo yum install docker-ce

sudo systemctl start docker

sudo systemctl enable docker

systemctl status docker

docker –v

sudo usermod -aG docker openshiftadmin

sudo usermod -aG docker jenkins

**BaseImage:**

docker login cp.icr.io --username <user-name> --password

**Note:** I didn’t understand why we are using docker login command we can use docker pull directly because we can copy from dev environment to staging environment.

docker pull [cp.icr.io/cp/appc/ace-server-prod@sha256:a51fa639c8235ca1f1af696d7f7616ce31c15f9a4a0991f526c80edff4b0772b](mailto:cp.icr.io/cp/appc/ace-server-prod@sha256:a51fa639c8235ca1f1af696d7f7616ce31c15f9a4a0991f526c80edff4b0772b)

docker tag cp.icr.io/cp/appc/ace-server-prod@sha256:a51fa639c8235ca1f1af696d7f7616ce31c15f9a4a0991f526c80edff4b0772b cp.icr.io/ace-prod:11.0.0.13-r1-eus

**Note** : Now we can build images with this taged base image

**Fix pack:**

The below command will be executed in installer machine

docker image save ace-fix:11.0.0.10-r2 -o ace-fix-110010-r2.tar

from the int installer machine, copy the image from the below path to the stage installer

/home/openshiftadmin/DOCKER/ace-fix:12.0.1.0-r3.tar

execute the below command from the path where the below image has been copied

docker image load -i ace-fix:12.0.1.0-r3.tar

**Installation of ACE:**

cd opt/

mkdir ibm

mv IBM\_ACE\_11.0.0.11\_LNX\_X8664\_INCTK.tar.gz ./ibm/

cd ibm

tar -xvzf IBM\_ACE\_11.0.0.11\_LNX\_X8664\_INCTK.tar.gz

sudo chmod -R 755 /opt/ibm/ace-11.0.0.11

cd ace-11.0.0.11/

pwd

sudo ./ace make registry global accept license silently

sudo usermod -aG mqbrkrs openshiftadmin

sudo usermod -aG mqbrkrs Jenkins

vim ~/.bash\_profile

Note : copy . /opt/ibm/ace-11.0.0.11/server/bin/mqsiprofile path into

vim ~/.bash\_profile

. ~/.bash\_profile

**In Openshift dashboard:**

* Create route in openshift.
* In the namespace field give default route name i.e., default-route.
* Under services field select the respective servicename (image-registry).
* Select target port.
* Check the secure route in the security, select the respective tls termination and select redirect in insecure traffic.

**Commands in cli for openshift:**

oc login –u username –p password

ex +'/BEGIN CERTIFICATE/,/END CERTIFICATE/p' <(echo | openssl s\_client -showcerts -connect default-route-openshift-image-registry.apps.stgcluster.stgocp.deloitte.com:443) -scq > ca.crt

sudo cp ca.crt /etc/docker/certs.d

cd /etc/docker/certs.d

**Note** : create folder with route name

sudo mkdir default-route-openshift-image-registry.apps.stgcluster.stgocp.deloitte.com

sudo mv ca.crt ./default-route-openshift-image-registry.apps.stgcluster.stgocp.deloitte.com/

**Insecure-registries:**

cd /etc/docker/

sudo vi daemon.json

* Add default route image registry in daemon.json file

"insecure-registries": ["default-route-openshift-image-registry.apps.intcluster.intocp.deloitte.com"]

sudo systemctl restart docker

systemctl status docker

**Oc login:**

oc login -u kubeadmin

docker login default-route-openshift-image-registry.apps.stgcluster.stgocp.deloitte.com -u $(oc whoami) -p $(oc whoami -t)

**NOTE:** Install ace software outside the root directory

**Example : /opt** or create any folder and install ace in that folder in **/directory**