5. Install Config 및 Ignition 파일 생성

References

- https://lilo.tistory.com/126

※ Install Config, Ignition 파일 이란

- install-config.yaml : 사용자가 정의하는 단 하나의 원본 설정 파일입니다. 클러스터의 이름, 네트워크 대역, 접속 정보 등을 사람이 읽을 수 있는 YAML 형식으로 작성

- Ignition 파일 (*ign) : `install-config.yaml` 을 기반으로 생성되는 **기계용 설정 파일**입니다. JSON 형식이며, RHCOS 노드가 처음 부팅될 때 이 파일을 읽어서 스스로를 구성

- **install config 생성시 필요한 SSH 키는 생성 후 하루 이내에 모든 설치가 마무리 되어야 함. (만료일 문제)**

※ Install Config & Ignition 파일 생성

```
## RHCOS core 계정으로 접속하기 위한 SSH 키 생성
# Bastion 에서 실행 (Bastion 1 또는 2)

echo │ ssh-keygen -t rsa -b 4096 -N ''

echo │ ssh-keygen -t rsa -b 4096 -N ''
Generating public/private rsa key pair.
```

Enter file in which to save the key (/root/.ssh/id_rsa): Your identification has been saved in /root/.ssh/id_rsa
Your public key has been saved in /root/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:H0SFkcvVdq9AWNpepZ8OqmHVgmM6JOnbMXyIxPpod6M root@bastion1.ocp4.example.com
The key...

생성 된 ssh-rsa 키값 확인 및 저장
cat ~/.ssh/id_rsa.pub
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAACAQDBIoludu675pRCaEbrzzD9SvJhhkCdjn+wSjq
xkRAZ9eAuAmeRHVwGYJzHf5W2a4Ewa9i0bTn+c7DZaNDts+3QDs7Z854HLQiF6ZgIf1eQ8Gw4
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w05ehyyatD1+Ov+HnPkLS905g5yD87Qkq2FwXwNKbfO7bomojFqYdpHfa3kxQ== root@bastio
n1.ocp4.example.com

기존에 만들어 두었던 pull-secret-merged 파일 확인
cat pull-secret/pull-secret-merged.json

pull-secret 값 저장

{"auths":{"cloud.openshift.com":{"auth":"b3BlbnNoaWZ0LXJlbGVhc2UtZGV2K29jbV9hY2Nlc3
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mkdir -p /root/ocp/config

저장된 값들을 사용하여 install-config.yaml 파일 생성

```
cat << EOF >  /root/ocp/config/install-config.yaml
apiVersion: v1
baseDomain: example.com
compute:
- hyperthreading: Enabled
  name: worker
  replicas: 2
controlPlane:
  hyperthreading: Enabled
  name: master
  replicas: 3
metadata:
  name: ocp4
networking:
  clusterNetwork:
  - cidr: 10.128.0.0/14
    hostPrefix: 23
  networkType: OVNKubernetes
  serviceNetwork:
  - 172.30.0.0/16
platform:
  none: {}
fips: false
pullSecret: '{"auths":{"cloud.openshift.com":{"auth":"b3BlbnNoaWZ0LXJlbGVhc2UtZGV2K29jb
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```

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imageContentSources:

```
- mirrors:
  - harbor.example.com:443/ocp4/openshift4
  source: quay.io/openshift-release-dev/ocp-release
- mirrors:
  - harbor.example.com:443/ocp4/openshift4
  source: quay.io/openshift-release-dev/ocp-v4.0-art-dev

additionalTrustBundle: |
EOF

## 파일 생성 후 harbor CA 인증서 내용 추가
sed -e 's/^/  /' /etc/pki/ca-trust/source/anchors/ca.crt >> /root/ocp/config/install-config.yaml

## openshift-install 명령어 사용시 install config 파일 삭제 되므로 install-config 파일 백업
cp -a  /root/ocp/config  /root/ocp/config_bak

## ignition 파일 생성
openshift-install create ignition-configs --dir  /root/ocp/config

## httpd 설치 및 구성 포트 80 -> 8080
dnf install -y httpd
sed -i "s/Listen\ 80/Listen\ 8080/g"  /etc/httpd/conf/httpd.conf
systemctl enable --now httpd


## 권한 설정 및 HTTP 웹서버 구성
openshift-install create ignition-configs --dir  /root/ocp/config
chmod 755  /root/ocp/config/*.ign

mkdir -p /var/www/html/ign
cp -a  /root/ocp/config/*.ign /var/www/html/ign
systemctl restart httpd

## Bastion 2 로도 파일 이동시켜 httpd 기동
scp /var/www/html/ign/* root@{Bastion 2 IP}:/var/www/html/ign/
systemctl restart httpd

## 브라우저로 테스트 http://{Bastion IP}:8080/ign/

## ignition 파일, auth 파일 bastion2로 scp
scp -R /root/ocp/config/* root@1{bastion2}:/root/ocp/config/
scp -R /root/ocp/config/auth/* root@{bastion2}:/root/ocp/config/auth/
```