



Summary

- kubeconfig file contains two things
 - URL of the cluster IP address & port number
 - Username & password of the user
- Admin. config file gives unlimited power to the user

```
C:\Users\Vimal Daga>minikube ssh
```

```
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```

```
$ cd /etc/kubernetes/  
$ ls  
addons          controller-manager.conf  manifests  
admin.conf      kubelet.conf             scheduler.conf  
$ vi admin.conf  
$ cat admin.conf  
cat: admin.conf: Permission denied  
$ whoami  
docker  
$ sudo su - root  
# whoami  
root  
# cd /etc/kubernetes/  
# vi admin.conf  
#
```

- Cryptography has two types of key
 - Symmetric key:- Same key is used for locking & unlocking
 - Asymmetric key:- Different keys are used for locking & unlocking
- The public key & private key are used for encryption & authentication
- In encryption public key is used for encryption & private key is used for decryption
- In authentication private key is used for encryption & public key is used for decryption

- Creating a private key in the minikube server

```

# pwd
/root
# cd /etc/kubernetes/
# ls
addons      controller-manager.conf  manifests
admin.conf  kubelet.conf             scheduler.conf
# openssl getrsa 128
Invalid command 'getrsa'; type "help" for a list.
# openssl genrsa 128
Generating RSA private key, 128 bit long modulus (2 primes)
139967377610560:error:04081078:rsa routines:rsa_builtin_keygen:key size too sm
# openssl genrsa -out vimal.key 1024
-bash: openssl: command not found
# openssl genrsa -out vimal.key 1024
Generating RSA private key, 1024 bit long modulus (2 primes)
.....+++++
.....+++++
e is 65537 (0x010001)
#

```

- For validation certificate signing request (CSR) is sent to CA for signature known as CRT

```

# openssl req -new -key vimal.key -out vimal.csr
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
-----
Country Name (2 letter code) [AU]:IN
State or Province Name (full name) [Some-State]:raj
Locality Name (eg, city) []:jaipur
Organization Name (eg, company) [Internet Widgits Pty Ltd]:LW
Organizational Unit Name (eg, section) []:tech
Common Name (e.g. server FQDN or YOUR name) []:vimal
Email Address []:

Please enter the following 'extra' attributes
to be sent with your certificate request
A challenge password []:
An optional company name []:
#

```

- A common name is used to uniquely identify the certificate