

## Installing Docker Registry :

1. Install Docker from :  
<https://www.digitalocean.com/community/tutorials/how-to-install-and-use-docker-on-ubuntu-18-04>
2. Install docker registry and configure port 443 and add HTTPS certificate to it:
  - a. Install Certbot using :
    - i. <https://certbot.eff.org/lets-encrypt/ubuntubionic-other>
  - b. Create a standalone certificate using :
    - i. `sudo certbot certonly --standalone -d docker-registry.nonton.99array.com`
  - c. This will save the cert files in directory:  
`/etc/letsencrypt/live/docker-registry.nonton.99array.com`
  - d. Change to this directory
  - e. Generate Private Key using : `openssl pkey -in privkey.pem -out docker-registry.key`
  - f. Generate Certificate using : `openssl crl2pkcs7 -nocrl -certfile fullchain.pem | openssl pkcs7 -print_certs -out docker-registry.cert`
  - g. Move Key and Certificate to home directory of current user : `mv docker-registry.* /home/ubuntu/certs/`
  - h. Change permissions to 777 of both files
  - i. Make directory : `/home/ubuntu/auth`
  - j. To generate http authentication username-password, use : `docker run --entrypoint htpasswd registry:2 -Bbn docker-admin 3Zj7btENx9hb > auth/htpasswd`
  - k. Stop and remove the temporary registry container :
    - i. `sudo docker container stop registry`
    - ii. `sudo docker container rm registry`
  - l. Start registry using
    - i. `cd /home/ubuntu`
    - ii. `sudo su`
    - iii. `sudo docker run -d -p 5443:5000 --restart=always --name registry -v `pwd`/auth:/auth -e "REGISTRY_AUTH=htpasswd" -e "REGISTRY_AUTH_HTPASSWD_REALM=Registry Realm" -e REGISTRY_AUTH_HTPASSWD_PATH=/auth/htpasswd -v `pwd`/certs:/certs -e REGISTRY_HTTP_TLS_CERTIFICATE=/certs/docker-registry.cert -e REGISTRY_HTTP_TLS_KEY=/certs/docker-registry.key registry:2`
  - m. Try logging in using
    - i. `sudo docker login docker-registry.nonton.99array.com:5443`
  - n. Login with username and password : `docker-admin/3Zj7btENx9hb`