

# Setting Nvidia Docker in Ubuntu system

1. Operation System
2. NVIDIA Driver
3. NVIDIA CUDA Toolkit
4. Docker Version
5. NVIDIA GPU Memory

**Mandatory: Ubuntu 18.04**

**Mandatory: NVIDIA CUDA Toolkit 10.2**

**NVIDIA Driver: DGX (418), Non-DGX (440)**

**Docker Version (Optional): 18.06/18.09/19.03-ce**

**NVIDIA GPU Memory (Minimum Requirement 4GB), Recommended (12GB+)**

## NVIDIA Driver 440 & CUDA Toolkit Installation Guide (Non-DGX User)

We expect you to install Ubuntu 18.04 based on your machine.

## NVIDIA Driver 440 & CUDA Toolkit Installation Guide (Non-DGX User)

Kindly check the right options before downloading and installing!!

**Official:** <https://developer.nvidia.com/cuda-downloads>

Unofficial: <https://linuxconfig.org/how-to-install-the-nvidia-drivers-on-ubuntu-20-04-focal-fossa-linux>

**Installation required,**

**Mandatory: Ubuntu 18.04 OS**

**Nvidia driver-** (418 for DGX and 440 for non DGX users(Laptop, PC workstation and cloud instances))

Follow cmds in the bellow link for driver:

<https://linuxconfig.org/how-to-install-the-nvidia-drivers-on-ubuntu-20-04-focal-fossa-linux>

## **Nvidia Cuda toolkit 10.2**

follow cmds in link below

[https://developer.nvidia.com/cuda-10.2-download-archive?  
target\\_os=Linux&target\\_arch=x86\\_64&target\\_distro=Ubuntu&target\\_version=1804&target  
\\_type=deblocal](https://developer.nvidia.com/cuda-10.2-download-archive?target_os=Linux&target_arch=x86_64&target_distro=Ubuntu&target_version=1804&target_type=deblocal)

## **Docker**

follow cmds in below link for docker installation.

<https://docs.docker.com/engine/install/ubuntu/>

**Create account in NVIDIA NGC** (a repository for all deep learning framework docker images, Pre-trained models and model scripts etc.,)

Register yourself at NGC

<https://ngc.nvidia.com/>

## **Get your API Key**

On the top right side there will be your account name.

Under that select Setup >> Get API Key >> Generate API Key

Copy the key.

```
>> $docker login nvcr.io
```

```
>> username: $oauthtoken
```

```
>> password: API Key
```

do all below cmds one by one

```
>> docker pull nvcr.io/nvidia/tensorflow:20.03-tf2-py3
```

```
>> docker pull nvcr.io/nvidia/tensorflow:20.03-tf1-py3
```

```
>> docker pull nvcr.io/nvidia/pytorch:20.03-py3
```