

# Docker - Container Installation & Practices

Dr Mukti Padhya

Assistant Professor

SCSDF, NFSU

# Prerequisite

- First install The Windows Subsystem for Linux (WSL)
- Open Powershell on windows
- Execute command : `wsl -install`
  
- The Windows Subsystem for Linux (WSL) lets developers install a Linux distribution (such as Ubuntu, OpenSUSE, Kali, Debian, Arch Linux, etc) and use Linux applications, utilities, and Bash command-line tools directly on Windows, unmodified, without the overhead of a traditional virtual machine or dualboot setup.

# Docker for Ubuntu

- `sudo apt-get install linux-image-extra-$(uname -r) linux-image-extra-virtual`
- `sudo apt-get install docker-engine`

# Docker for Ubuntu

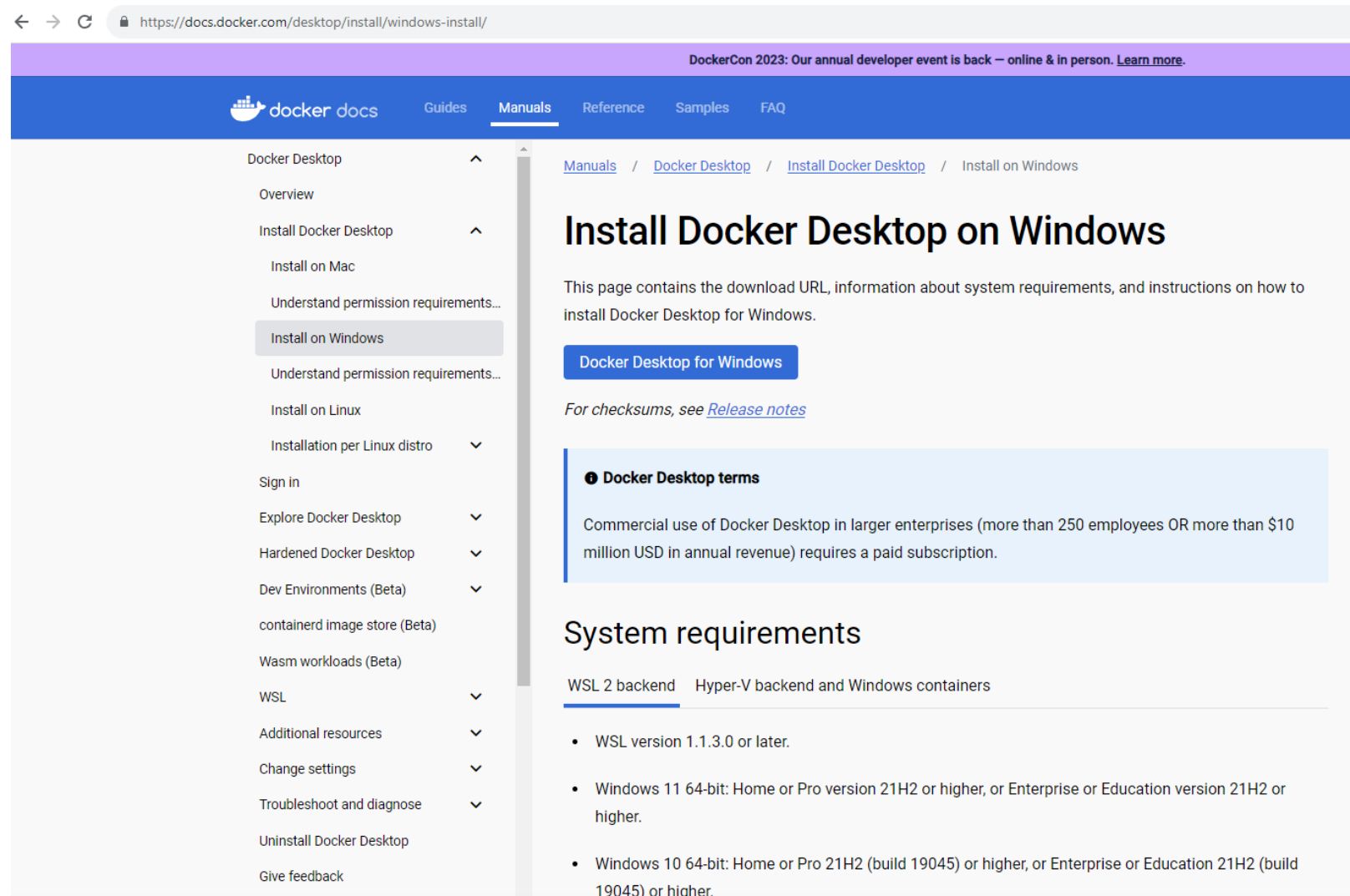
- Sudo service docker start

# Docker for Ubuntu

- Sudo docker pull centos
- Sudo docker run -it centos

# Docker for Windows

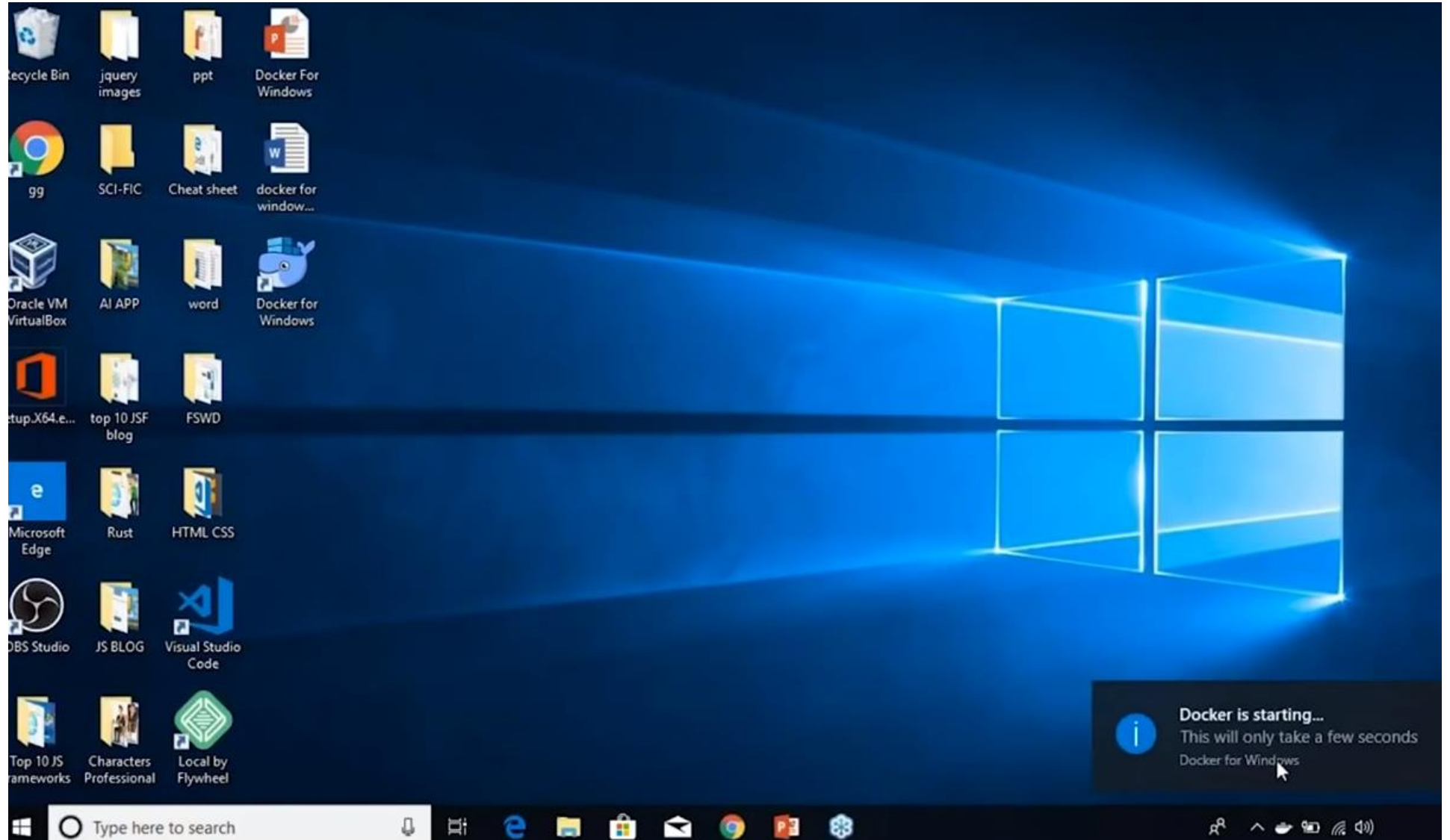
- <https://docs.docker.com/desktop/install/windows-install/>



The screenshot shows the Docker documentation website for installing Docker Desktop on Windows. The page has a purple header with a navigation bar containing 'docker docs', 'Guides', 'Manuals' (selected), 'Reference', 'Samples', and 'FAQ'. A sidebar on the left lists various topics, with 'Install on Windows' highlighted. The main content area features the title 'Install Docker Desktop on Windows' and a brief introduction. A blue button labeled 'Docker Desktop for Windows' is prominent. Below it, a link to 'Release notes' is provided. A light blue box contains 'Docker Desktop terms' regarding commercial use. The 'System requirements' section lists two options: 'WSL 2 backend' (selected) and 'Hyper-V backend and Windows containers'. The WSL 2 backend requirements are listed as follows:

- WSL version 1.1.3.0 or later.
- Windows 11 64-bit: Home or Pro version 21H2 or higher, or Enterprise or Education version 21H2 or higher.
- Windows 10 64-bit: Home or Pro 21H2 (build 19045) or higher, or Enterprise or Education 21H2 (build 19045) or higher.

# Docker for Windows



# Docker for Windows





Windows PowerShell

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PS C:\WINDOWS\system32> docker --version

Docker version 18.06.1-ce, build e68fc7a

PS C:\WINDOWS\system32>

# Docker for Windows

Administrator: Windows PowerShell

```
PS C:\WINDOWS\system32> docker run hello-world
```



# Docker Commands

```
PS C:\WINDOWS\system32> docker images
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
hello-world	latest	4ab4c602aa5e	2 months ago	1.84kB

```
PS C:\WINDOWS\system32>
```

# Docker Commands

```
PS C:\WINDOWS\system32> docker images
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
hello-world	latest	4ab4c602aa5e	2 months ago	1.84kB

```
PS C:\WINDOWS\system32>
```

# Docker Commands

```
PS C:\WINDOWS\system32> docker pull ubuntu
Using default tag: latest
latest: Pulling from library/ubuntu
473ede7ed136: Pull complete
c46b5fa4d940: Pull complete
93ae3df89c92: Pull complete
6b1eed27cade: Pull complete
Digest: sha256:29934af957c53004d7fb6340139880d23fb1952505a15d69a03af0d1418878cb
Status: Downloaded newer image for ubuntu:latest
PS C:\WINDOWS\system32> docker run -it -d ubuntu
```

# Docker Commands

```
PS C:\WINDOWS\system32> docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS
		NAMES		
b115372d18bd	ubuntu	"/bin/bash"	23 seconds ago	Up 22 seconds
		kind_benz		
0426ecb12ff0	hello-world	"/hello"	2 minutes ago	Exited (0) 2 min
		stupefied wing		

# Docker Commands

```
PS C:\WINDOWS\system32> docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS
b115372d18bd	ubuntu	"/bin/bash"	About a minute ago	Up About a minu
0426ecb12ff0	hello-world	"/hello"	3 minutes ago	Exited (0) 3 mi

```
PS C:\WINDOWS\system32> docker exec -it b115372d18bd bash
root@b115372d18bd:/# echo hello
hello
root@b115372d18bd:/#
```

# Docker Commands

- `docker version` #Get version of docker client, API, engine, containerd, runc, docker-init
- `docker info` #Get more information about docker settings
- `docker pull registry:5000/alpine` #Download the image
- `docker inspect <containerid>` #Get info of the container
- `docker network ls` #List network info
- `docker exec -it <containerid> /bin/sh` #Get shell inside a container



# Docker Commands

- `docker commit <containerid> registry:5000/name-container` #Update container
- `docker export -o alpine.tar <containerid>` #Export container as tar file
- `docker save -o ubuntu.tar <image>` #Export an image
- `docker ps -a` #List running and stopped containers
- `docker stop <containedID>` #Stop running container

# Docker Commands


- `docker rm <containerID>` #Remove container ID
- `docker image ls` #List images
- `docker rmi <imgelD>` #Remove image
- `docker system prune -a` # This will remove: - all stopped containers - all networks not used by at least one container - all images without at least one container associated to them - all build cache


# Docker Image – Create and Push

- FROM ubuntu:12.04
- RUN apt-get update && apt-get install -y apache2 && apt-get clean && rm -rf /var/lib/apt/lists/\*
- ENV APACHE\_RUN\_USER www-data
- ENV APACHE\_RUN\_GROUP www-data
- ENV APACHE\_LOG\_DIR /var/log/apache2
- EXPOSE 80
- CMD ["/usr/sbin/apache2", "-D", "FOREGROUND"]

- Sudo docker build -t myapacheimage .
- Sudo docker run -p 80:80 --name=App1 myapacheimage

# Tutorial

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



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 master  4 branches  0 tags

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 vishnudxb	Update README.md	✓ 02dcb96 on Jul 13	🕒 20 commits
	.github	update image, cmds and add github action	3 years ago
	.gitignore	automated test	4 years ago
	Dockerfile	fix github actions	3 years ago
	LICENSE	automated test	4 years ago
	README.md	Update README.md	3 months ago
	pentest.sh	update image, cmds and add github action	3 years ago
	volume.sh	automated test	4 years ago

☰ README.md

## automated-pentest

Creating a minimal docker container of Parrot OS for running an automated scan report.

This docker container can be used for auditing all standard security assessment for you.







There are more than 20 Modules has been Integrated with in the container which can be used for automated pentest.

### Number Of Modules

- Whois domain analyzer

## About

Minimal docker container of Parrot OS for running an automated scan & pentest report.

-  Readme
  -  Apache-2.0 license
  -  Activity
  -  181 stars
  -  11 watching
  -  42 forks
- Report repository



## Releases

No releases published

## Packages

No packages published

## Contributors 2

-  vishnudxb Vishnu Nair
-  pianomanx pianomanx