

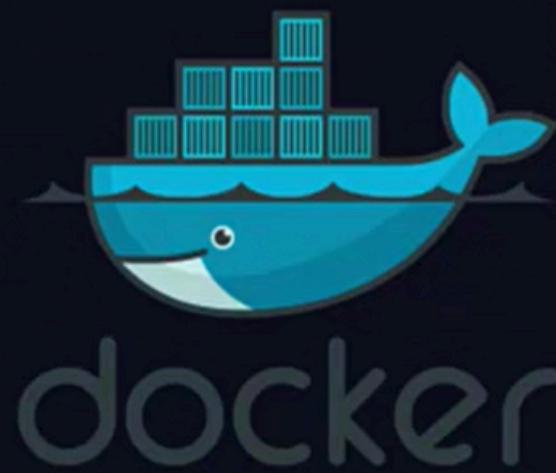
DevOps Connect

in association with



**PVG's COET & M
Department of Computer Engineering**

Why Linux?



2013 - Docker was born
2016 – Docker for Windows was born



Can Ansible run on Windows? ☰

No, Ansible can only manage Windows hosts. Ansible cannot run on a Windows host natively, though it can run under the Windows Subsystem for Linux (WSL).

https://docs.ansible.com/ansible/latest/user_guide/windows_faq.html

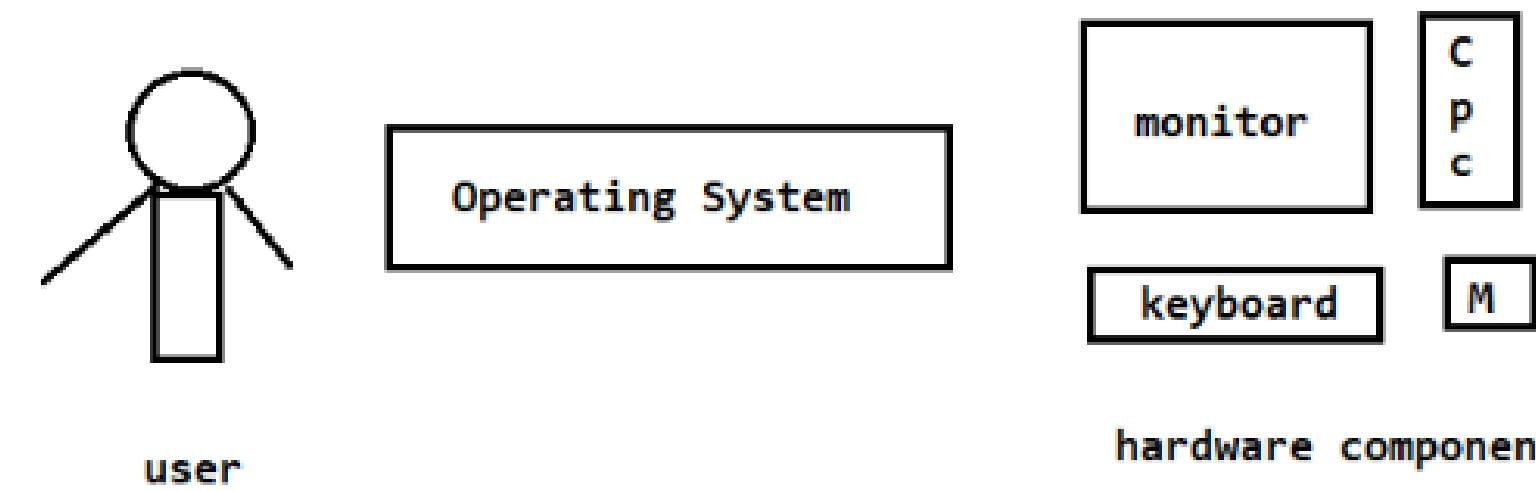


Note: The Kubernetes control plane, including the [master components](#), continues to run on Linux. There are no plans to have a Windows-only Kubernetes cluster.

[Kubernetes Documentation](#)

Operating System

-> Operating System (OS) is a software that acts as an interface between Computer hardware components and user



- > Every computer must have atleast one operating system to run other programs
- > Operating System providing platform/environment to run our applications
Ex: Browsers, Notepad, Ms Paint, Calculator etc...
- > Operating Systems helping us to communicate computer without knowing how to speak computer language.

Note: We can't use a computer without having operating system

Parameters	LINUX	WINDOWS
Inception Year	1991	1985
Standard	Open source operating system which is freely available	Closed Source Operating system
Webserver share	70% share	23% share
Filesystem	ext2-4, FAT, NTFS, NFS, ISO 9660, JFS, KFS	NTFS, FAT, ISO 9660, UDF, HFS
Cost	Low cost Hardware	High cost hardware
Security	Secure	Insecure
Virus	60-100 virus listed	60,000 viruses listed
Developed by	Linus Torvalds	Microsoft
Source Code	There is full access to source code	There is no access to source code

What anti-virus
do you use?

I use Linux

Advantages of Linux

- Open Source
- Free
- Security
- Lightweight
- Multitasking
- Multiuser
- Stability
- Customization:
- Command-Line Interface (CLI)
- Package Management
- Community Support

Shell Types

```
▶ echo $SHELL  
/bin/bash
```

Bourne Shell (Sh Shell)

C Shell (csh or tcsh)

Z Shell (zsh)

Bourne again Shell (bash)

Basic Commands

```
▶ echo Hi  
Hi
```

Print to screen

```
▶ ls  
File.txt my_dir1 file2.conf
```

List files & folders

```
▶ cd my_dir1
```

Change directory

```
▶ pwd  
/home/my_dir1
```

Present Working Directory

```
▶ mkdir new_directory
```

Make Directory

```
▶ cd new_directory; mkdir www; pwd  
/home/my_dir1/new_directory
```

Multiple commands

Commands - Files

```
▶ touch new_file.txt
```

Hi

Create a new file (no contents)

```
▶ cat > new_file.txt
```

This is some sample contents

CTRL + D

Add contents to file

```
▶ cat new_file.txt
```

This is some sample contents

View contents of file

```
▶ cp new_file.txt copy_file.txt
```

Copy File

```
▶ mv new_file.txt sample_file.txt
```

Move (Rename) File

```
▶ rm new_file.txt
```

Remove (Delete) File

Linux Commands

- cp, mv, touch, mkdir, rm
- ping, sudo
- wget, curl
- ssh
- chmod
- grep
- sed
- ifconfig
- os release
- package manager
- head, tail, which
- man



Thik Hai Bhai



Ab Mai Chalta Hoon

THANKS :)