SecureSet

HACKING 101

SYSTEMS VIRTUALIZATION

FULL-TIME IMMERSIVE PROGRAMS

CORE: TECHNICAL PROGRAM

Program Overview

- 20 weeks
- 800+ instructional hours
- $20,000

Who Takes This Course?

- Technical individuals who are interested in programming

Example Job Titles

- Tier 1+ SoC Engineers
- Pen Testers
- Security Consultants
- Security Engineers

HUNT: ANALYTICS PROGRAM

Program Overview

- 12 weeks
- 480+ instructional hours
- $12,000

Who Takes This Course?

- Critical thinkers who enjoy analyzing data to identify trends and solutions

Example Job Titles

- Security Analyst
- Threat Analyst
- HUNT Analyst
- Compliance Analyst

PART-TIME IMMERSIVE PROGRAMS

PATH: ENGINEERING

Program Overview

- 36 weeks
- 576+ instructional hours
- $16,000

Who Takes This Course?

- Technical individuals who are interested in programming

Example Job Titles

- Tier 1+ Engineers
- Pen Testers
- Security Consultants

PATH: ANALYTICS

Program Overview

- 36 weeks
- 576+ instructional hours
- $16,000

Who Takes This Course?

- Critical thinkers who enjoy analyzing data to identify trends and solutions

Example Job Titles

- Security Analyst
- Threat Analyst
- HUNT Analyst

Interested in Trying before you buy? -> SecureSet Prep

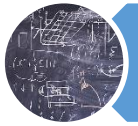
Foundational technical instruction

Intro to Systems, Networking and Python

Prepares you for HUNT or CORE*

Tuition credit toward HUNT or CORE

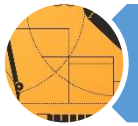
The SecureSet Way



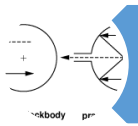
Applicable Theory

Hands on technical

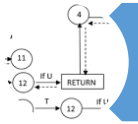
Objectives Driven



Measured Skills



Application of Theory



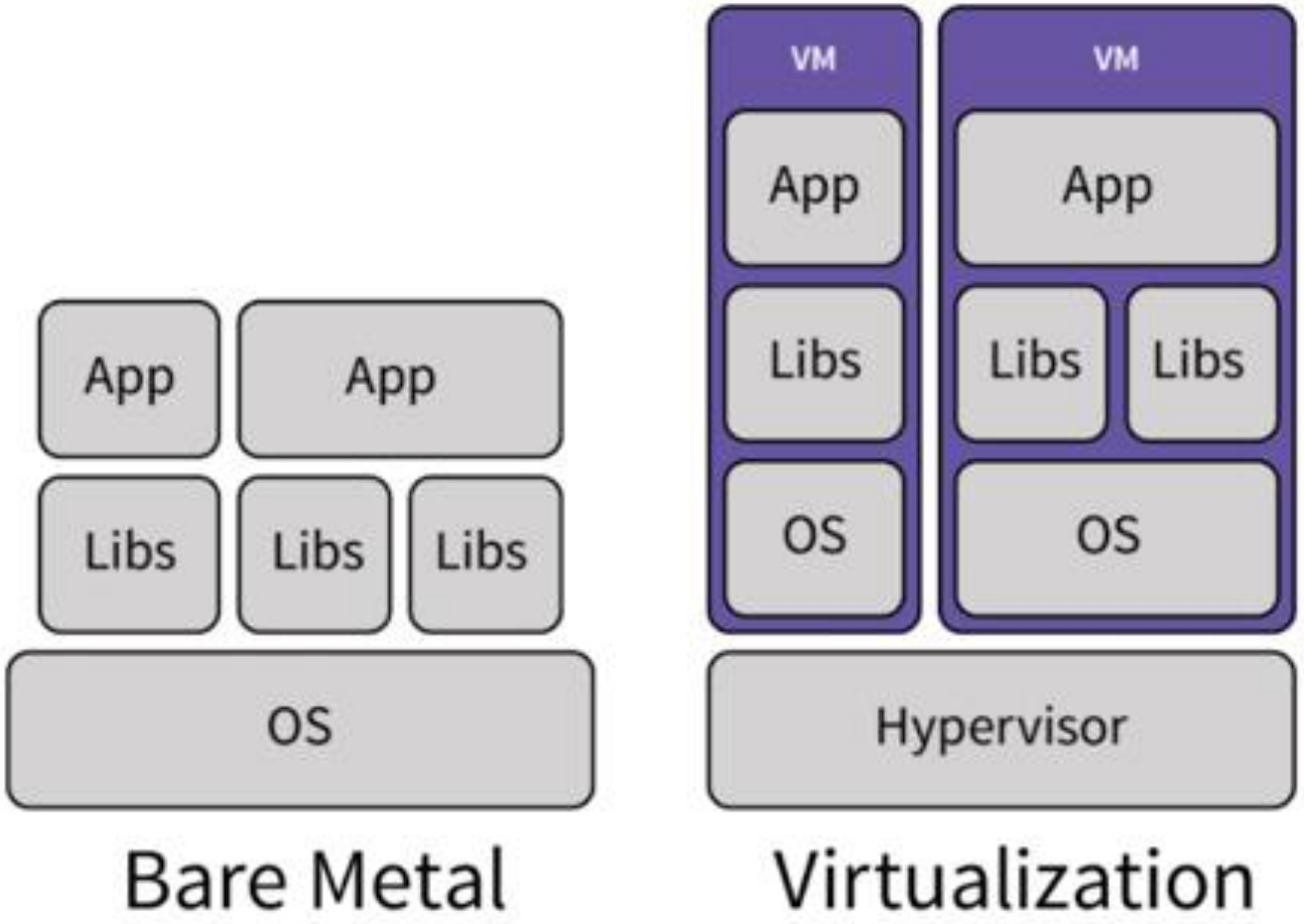
Execution of the Technical

SecureSet

HACKING 101

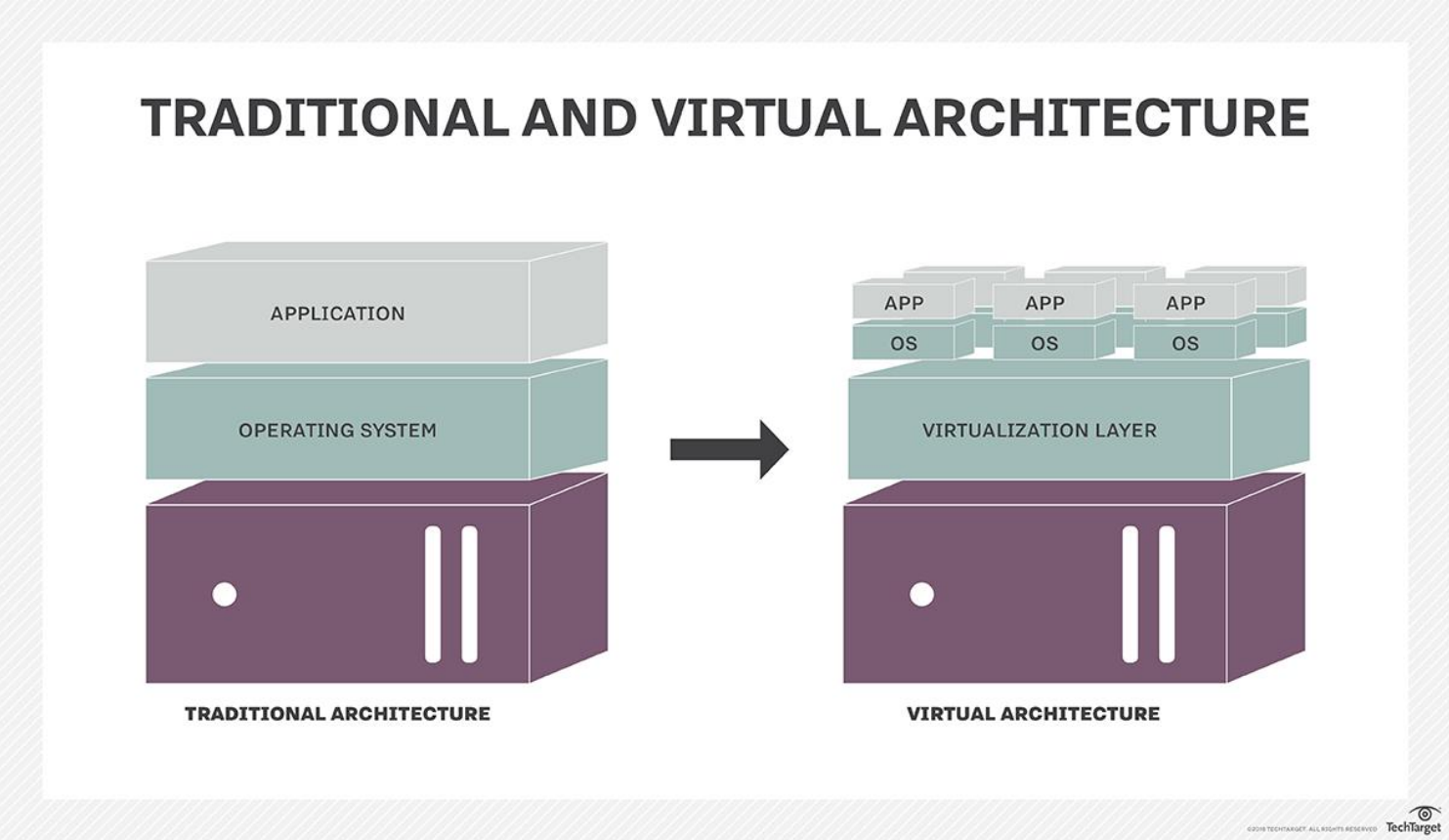
SYSTEMS VIRTUALIZATION

Bare Metal vs. Virtualization



https://about.gitlab.com/2017/11/30/containers-kubernetes-basics/

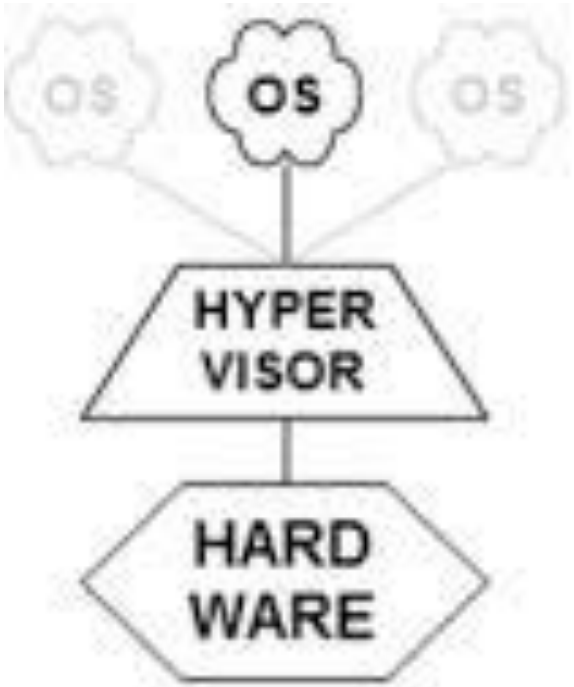
Virtualization

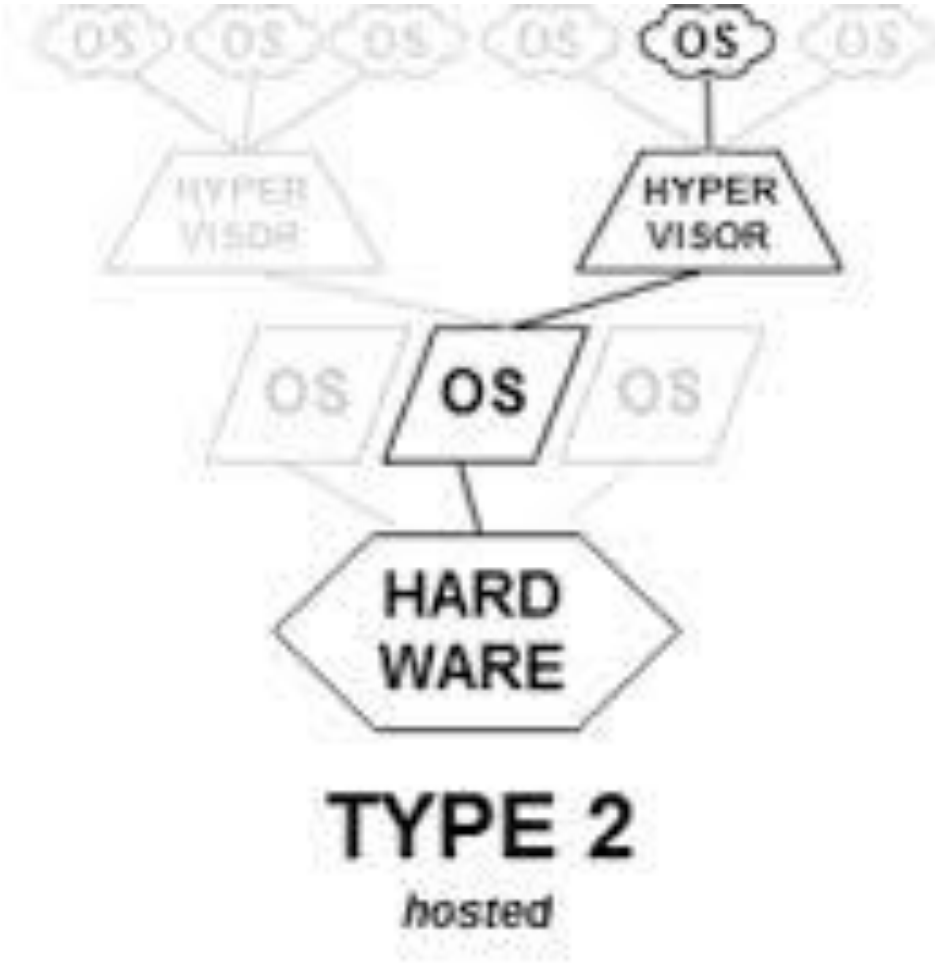


Virtualization is the creation of a virtual -- rather than actual -- version of something, such as an operating system, a server, a storage device or network resources.

https://en.wikipedia.org/wiki/Virtualization

Local - Virtualization Type 1 vs. Type 2

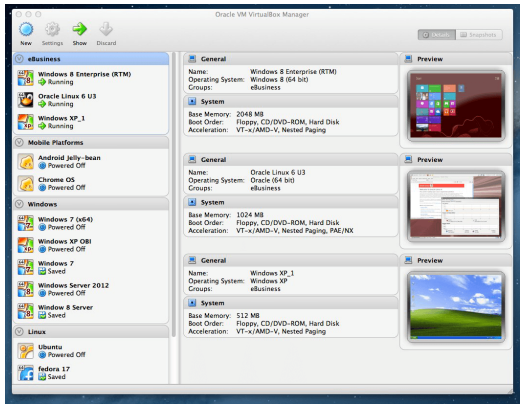




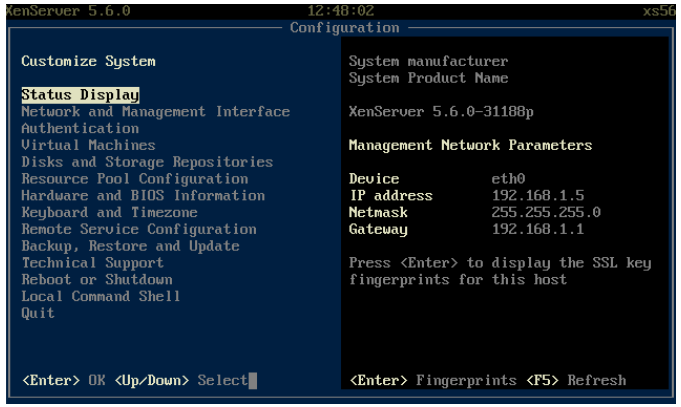
https://searchservervirtualization.techtarget.com/feature/Whats-the-difference-between-Type-1-and-Type-2-hypervisors

Types of Virtualization – Local vs. Off Prem

Host Based



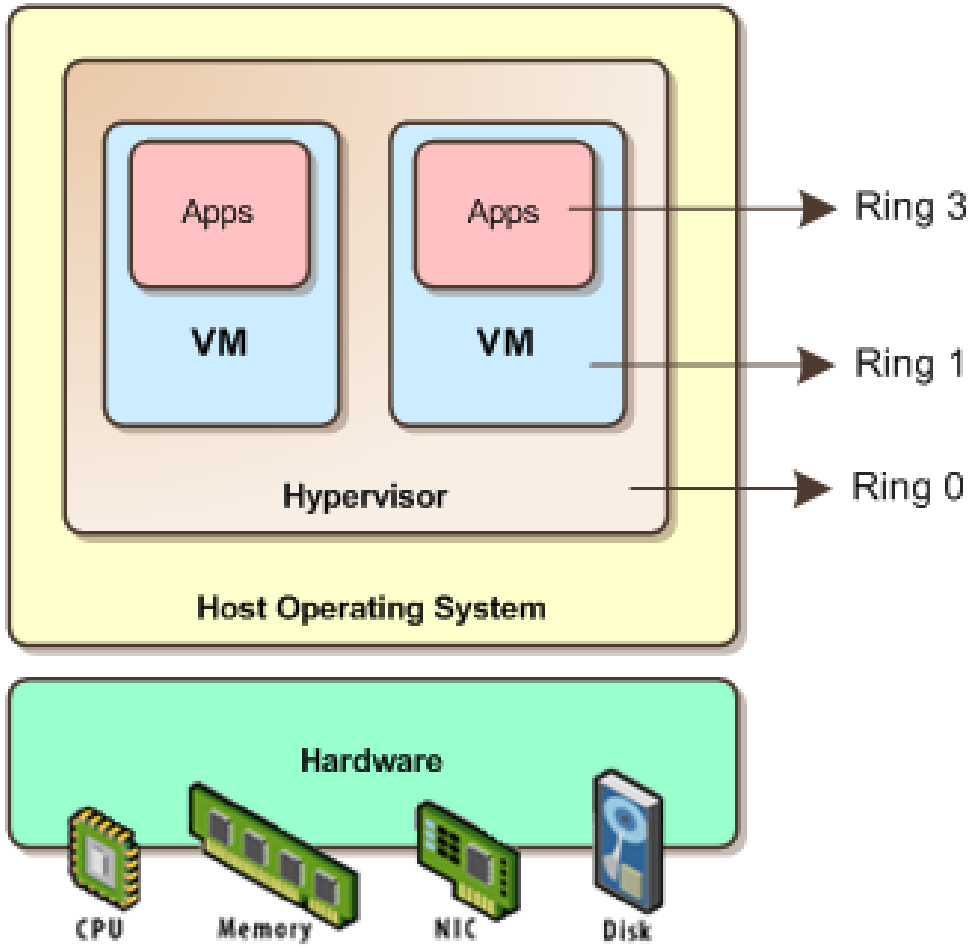
Hypervisor Server Based

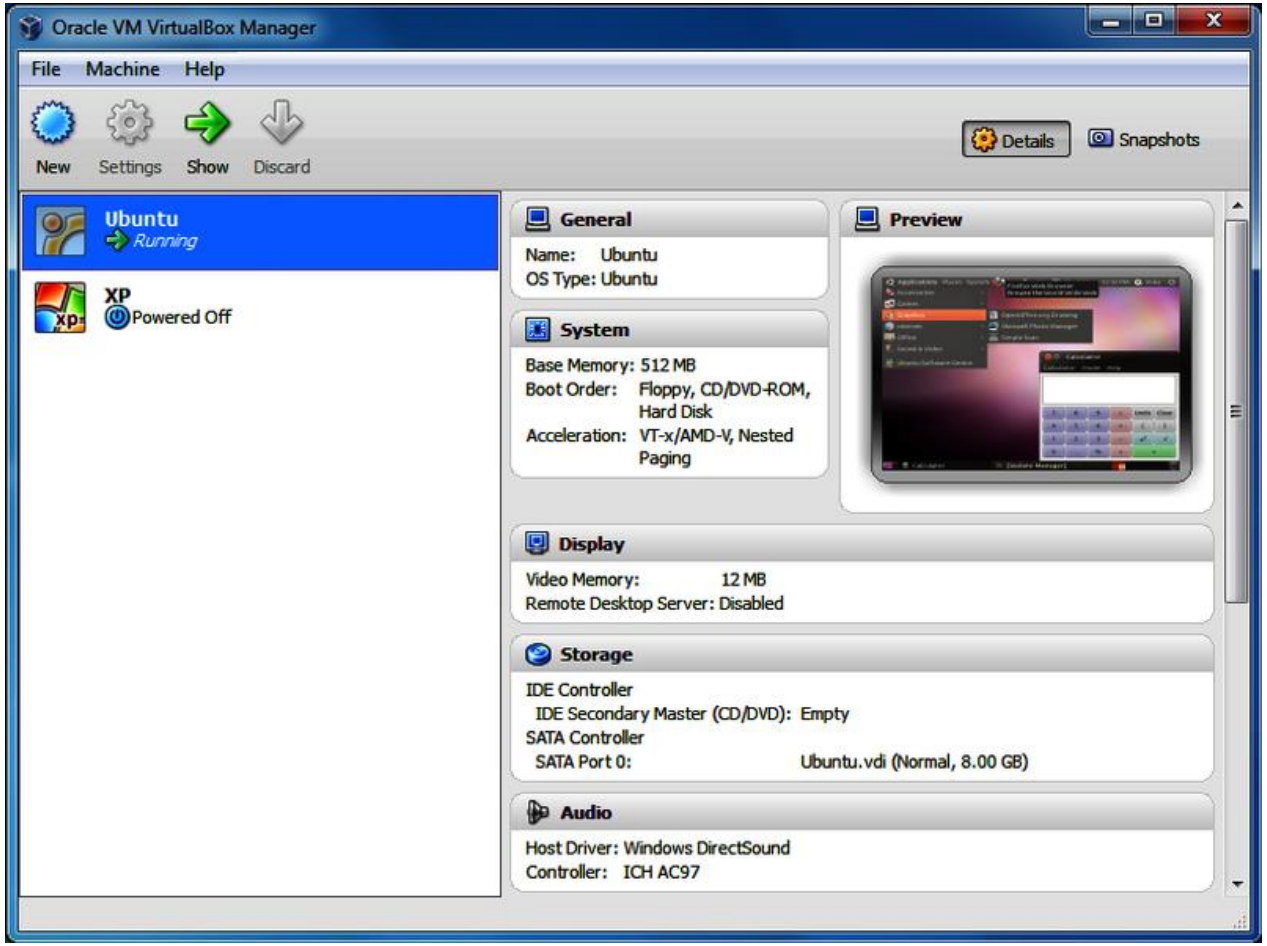


Cloud Based

Containerization

Host based Virtualization

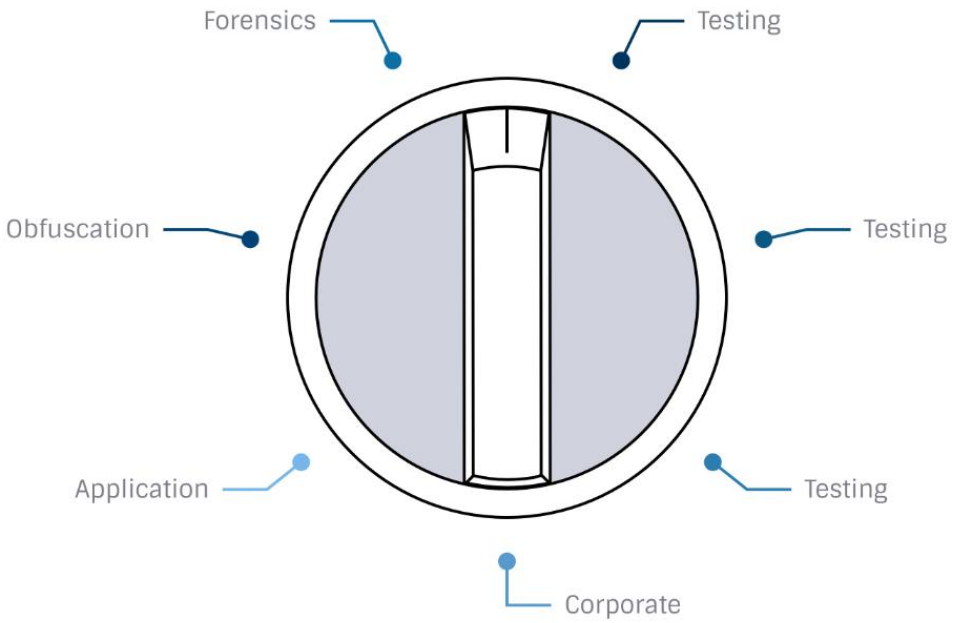




https://en.wikipedia.org/wiki/Virtualization

Host Based Virtualization

Host based Virtualization is critically important because it enables a individual the flexibility of running multiple VMs to achieve a multitude of tasks.

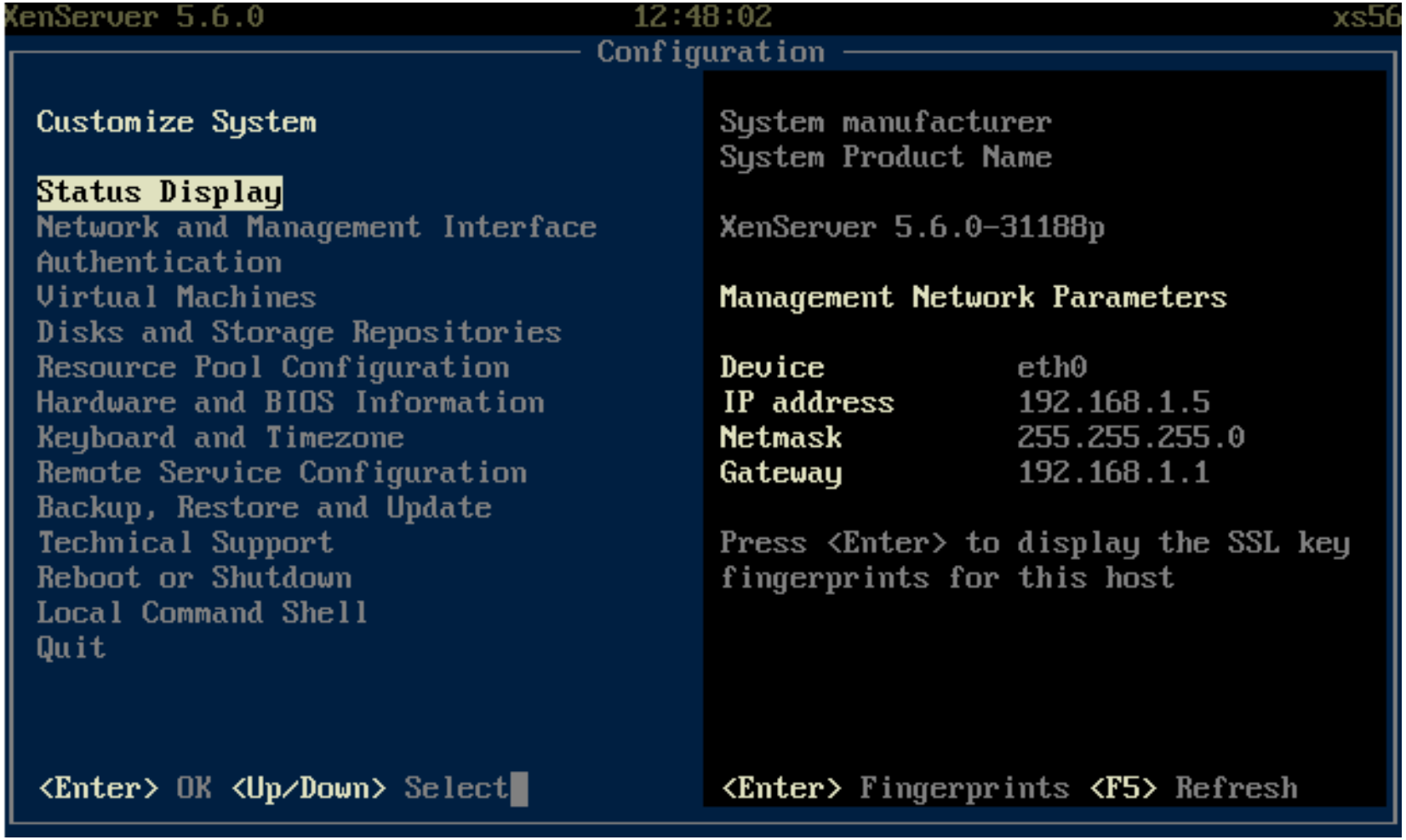


Flexibility

Server based Hypervisors

Hypervisor based Virtualization is critically important because it enables a server to host many VM's utilizing very little resources for the HOST OS (Hypervisor itself).

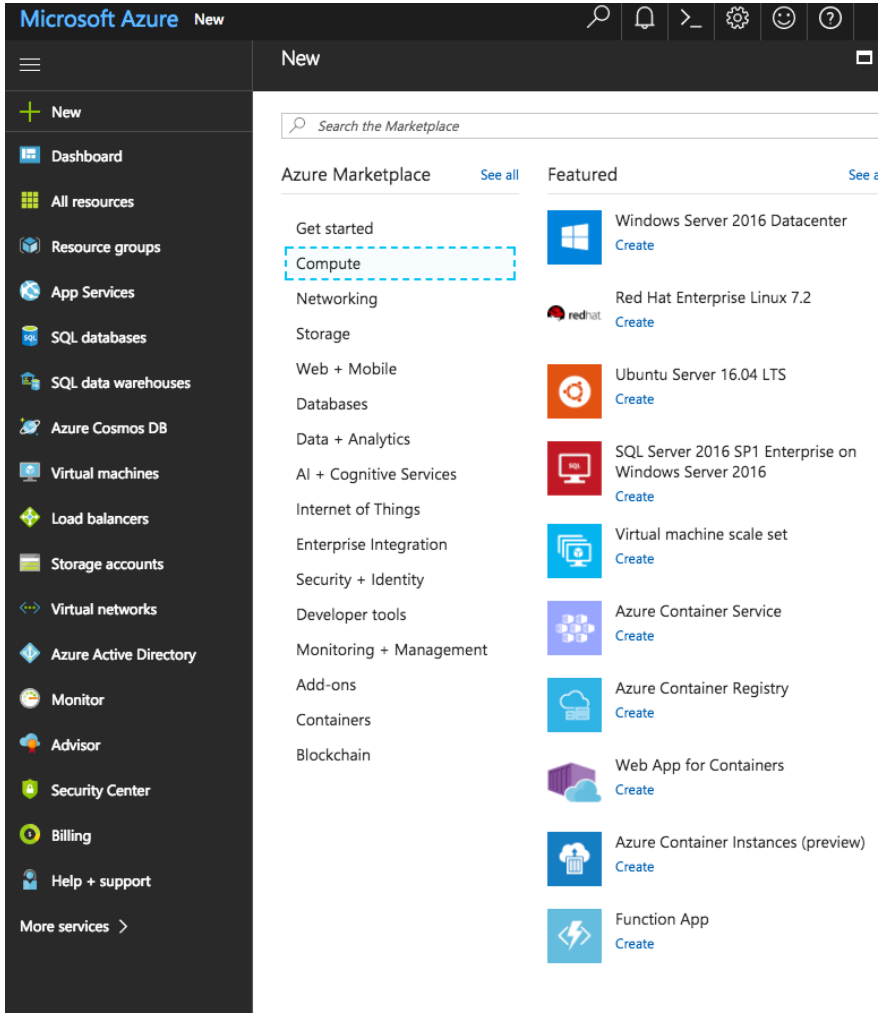
This allows that server to utilize most of its resources (CPU, RAM, Disk) for the VM's itself.



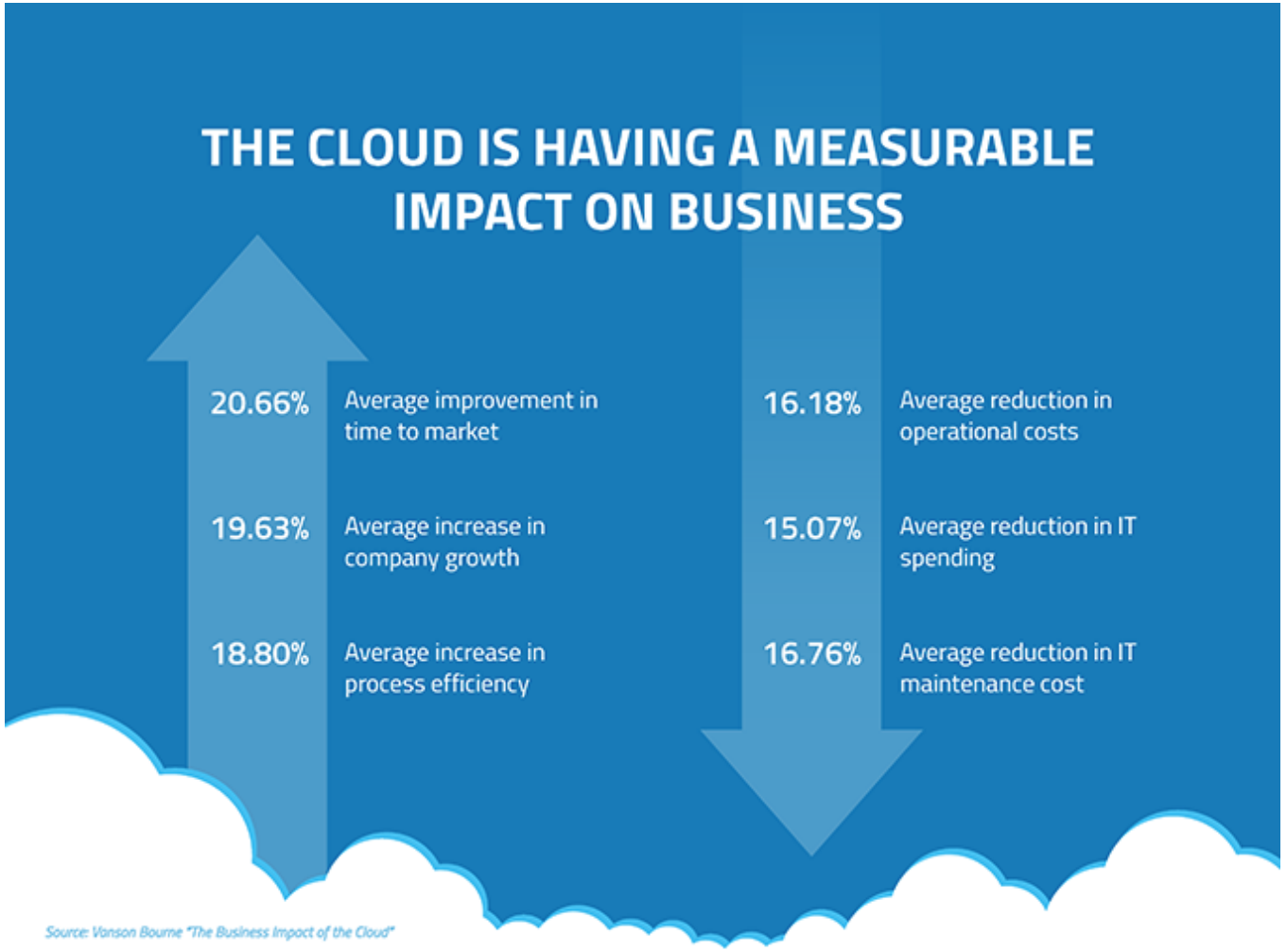
Virtualization Resource Optimization

Cloud Benefits

Cloud Advantages



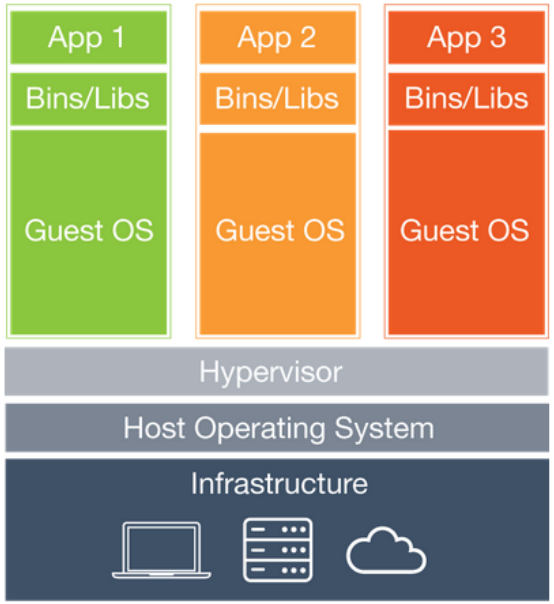
Cloud impact on business



Containers

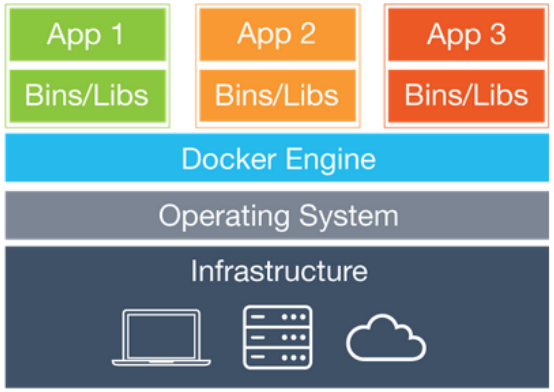
How is this different from virtual machines?

Containers have similar resource isolation and allocation benefits as virtual machines but a different architectural approach allows them to be much more portable and efficient.



Virtual Machines

Each virtual machine includes the application, the necessary binaries and libraries and an entire guest operating system - all of which may be tens of GBs in size.

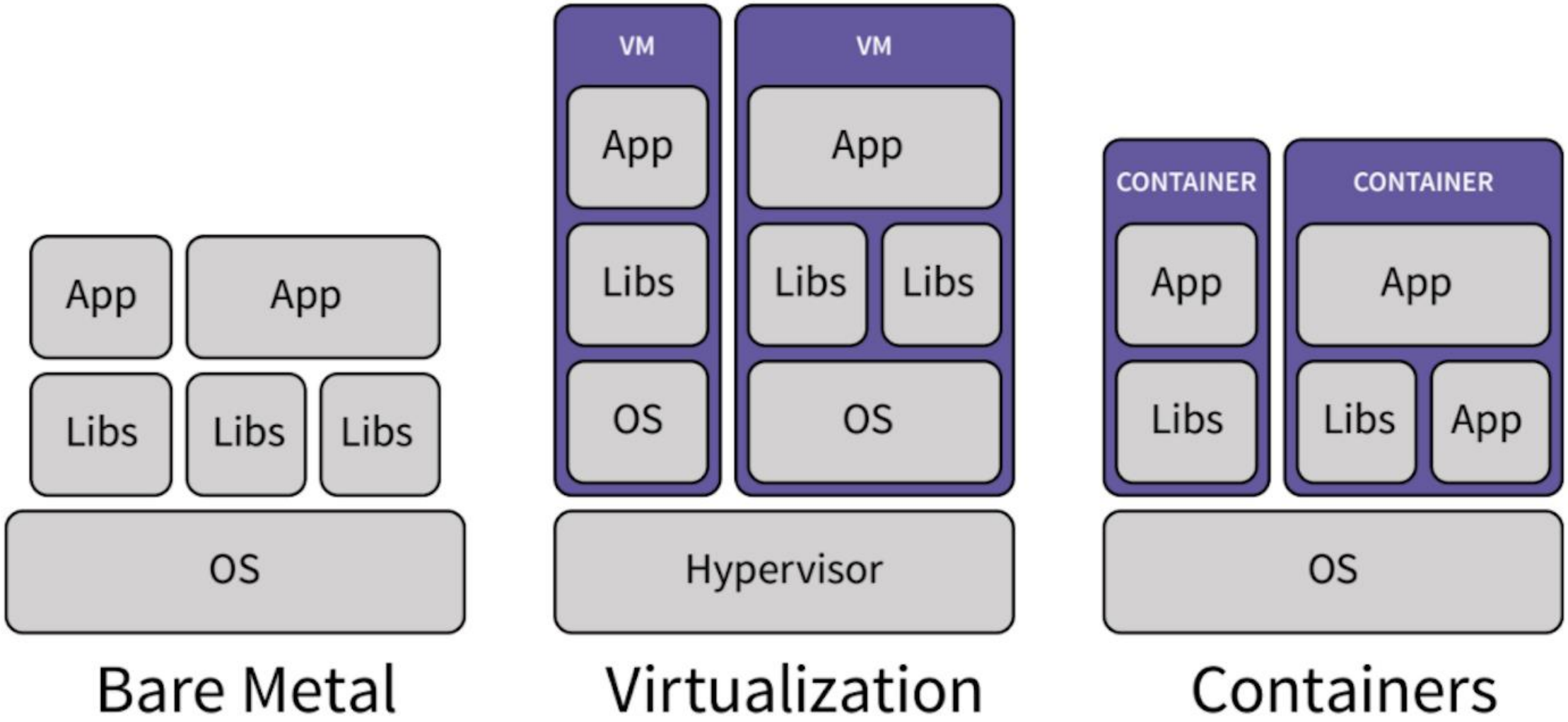


Containers

Containers include the application and all of its dependencies, but share the kernel with other containers. They run as an isolated process in userspace on the host operating system. They're also not tied to any specific infrastructure – Docker containers run on any computer, on any infrastructure and in any cloud.

Containers are a way to package software in a format that can run isolated on a shared operating system. Unlike VMs, containers do not bundle a full operating system - only libraries and settings required to make the software work are needed. This makes for efficient, lightweight, self-contained systems and guarantees that software will always run the same, regardless of where it's deployed.

Bare Metal vs. Virtualization (



https://about.gitlab.com/2017/11/30/containers-kubernetes-basics/

What are the objectives covered in this Hacking 101

Why SecureSet Prep

- Pre-Qualification
- Tuition Credit
- The SecureSet Way

Bare Metal Vs VM

Hypervisor

- Why Virtualize:
- Resource Optimization
- OS Flexibility
- Forensics
- Training
- Security

Types of Virtualization:

- Host based VM
- Hypervisor based VM
- Cloud based VM
- Containers