

Week Report 2

Basics of virtualization

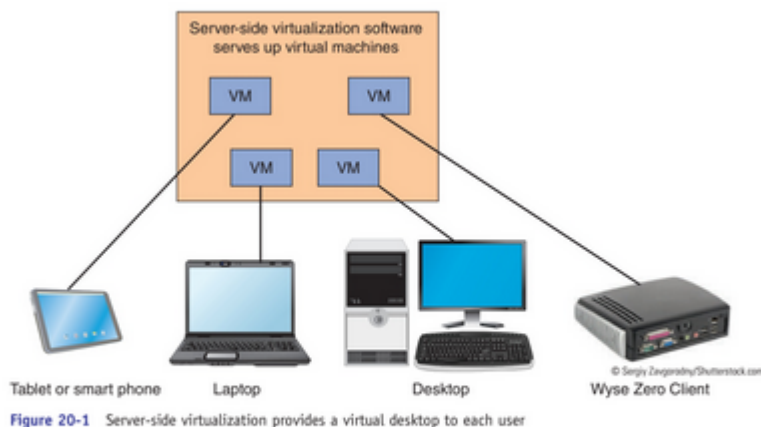
1. What is virtualization

Virtualization is a replication of hardware to stimulate a virtual machine inside a physical machine.

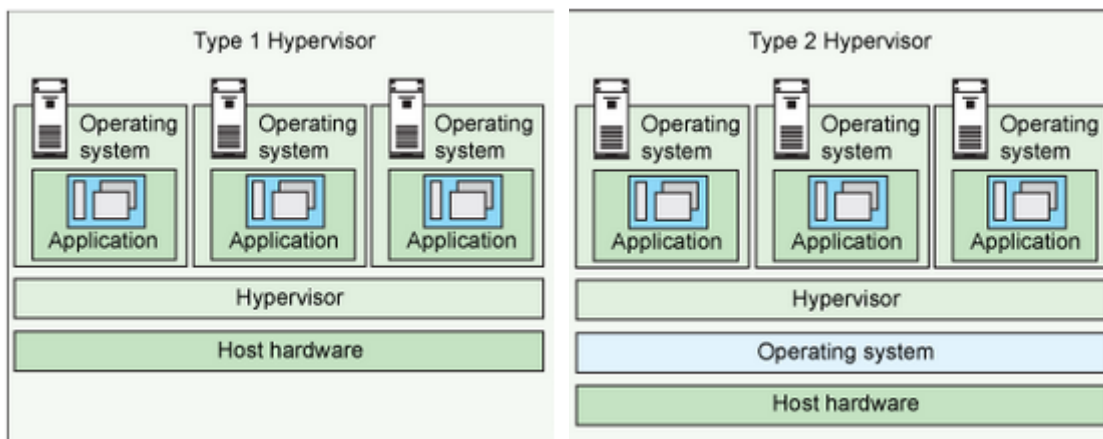
2. Types of virtualization

The two general types of virtualization are server-side virtualization and client-side virtualization. The difference between the two is **where the virtualization takes place**.

Server side virtualization is provides a virtual desktop to each user. It has a virtual desktop infrastructure (VDI). This type runs on hardware such as VMware ESX and ESXi Citrix XenServer.



Client side virtualization is software installed on a computer to manage virtual machines. Each VM has its own operating system installed. The computer needs a hypervisor (software that allows the management of virtual machines) and hardware support (capable CPU, enough ram, enough storage). Some examples of the host operating system it runs on are VMware Workstation Player/Pro Oracle VirtualBox.



Installing Ubuntu in Virtualization

You can name your vm however you want but it is good practice to name it something that indicates what OS is being installed or the purpose of the vm.

This indicates where the virtual machine is located in your host machine.

Name and operating system

Please choose a descriptive name and destination folder for the new virtual machine and select the type of operating system you intend to install on it. The name you choose will be used throughout VirtualBox to identify this machine.

Name: CIS-106-ubuntu-18.04

Machine Folder: /home/adrian/VirtualBox VMs

Type: Linux

Version: Ubuntu (64-bit)

This indicates the type of operating systems and the versions available. If you do not see a 64 bit version of the OS available is probably because virtualization is not enabled in your computer

Ubuntu Desktop requires at least 2GB of RAM but if you have more than 8GB of RAM you can increase the amount of RAM you give the virtual machine without diminishing your host OS performance significantly.

Memory size

Select the amount of memory (RAM) in megabytes to be allocated to the virtual machine.

The recommended memory size is 1024 MB.

2048 MB

4 MB 49152 MB

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Here is a tip.

- If you plan to run only 1 virtual machine at a time and you have 8GB of RAM. You can give your vm 4GB of RAM and your PC will still be fast.
- If you have 4GB of RAM. Do not give your VM more than 2GB of RAM.

