

CLOUD COMPUTING ASSIGNMENT.

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1) HYPERVISOR.

Hypervisor is a software layer installed in the physical hardware, which allows the splitting the physical machine into virtual machines.

This allows multiple OS to run in the same physical machine. A hypervisor management console, also called as VMM, is computer software that enables easy management of virtual machines.

TYPES OF HYPERVISOR.

TYPE 1 :- also called a native or bare-metal hypervisor that is installed directly on the hardware which splits the host machine into several virtual machine and allows the instalment of guest OS. VMM is software helps to manage this hypervisor..

Benefits of Type1 hypervisor :-

fault tolerance :- when the physical server fails, the management software migrates the instances to the available server so quickly that we even don't realize the physical hardware failed.

Over / dynamic allocation of RAM capacity

when running multiple instances on a server, the total RAM allocated to the virtual machine can be larger than the total physical memory capacity of the underlying hardware.

TYPE 2 :- called as hosted hypervisor.

This is installed in the host OS with the advantage that there is no need to have a hypervisor management console.

Type 2 hypervisor doesn't support Over/dynamic allocation of RAM, so care is taken when allocating the resources to virtual machines.

2) VIRTUALISATION TOOLS

* VM ware server:-

It is a source free virtualisation tool for Linux as well as windows operating system. VM ware server is based on the full virtualisation i.e. the physical desktop to run more than one VM of varying OS called guest on it.

* Virtual box :-

It is used for implementation of virtual machines on the physical ~~type~~ computer and server. It also does full virtualization in the host computer.

* VM ware.

VM ware is a VM platform which helps in execution of unmodified operating system on the host or was level application hardware.

OS which is being executed with VMware may get crashed, reinstalled, rebooted without any effect on the application running on the host computer.

VM ware gives the separation of physical OS from the virtual OS so that if the guest OS fails then the physical OS does not have any effect from the consequences.