

Hypervisor : It is a software or firmware that creates and run Virtual Machine.A hypervisor is sometimes also called as Virtual Machine Manager(VMM).

Types of Hypervisor :

1.Type-1 Hypervisor : Firmware

- Also called as Native Hypervisor or Bare Metal Hypervisor
- These run directly on the system hardware
- A Guest O.S runs on another level above the hypervisor
- VMware ESXI is a Type-1 hypervisor that runs on the host server hardware without an underlying O.S
- Type-1 hypervisor act as their own O.S
- ESXI provides a Virtualisation layer that abstracts the CPU,Storage,Memory and Networking resources of the physical host into multiple virtual machines

2.Type-2 Hypervisor :

- Hypervisor that runs within a conventional O.S environment and the host O.S provides
- ☐ Example of Type-2 Hypervisor are VMware Workstation,Oracle Virtualbox,Microsoft Virtual PC
- ☐ It does not have direct access to the host hardware resources

Differences between Type1 & Type2 Hypervisors

Criteria	Type1	Type2
A.K,A	Bare Metal & Native	Hosted
Virtualization	Hardware	O.S
Operation	Guest and Application run on Hypervisor	Run as an a
Scalability	Better Scalability	Not so much O.s
System Independence	Has Direct access to host hardware	Can not acco
Performance	Higher performance as there is no middle layer	Reduced Pe overhead
Security	More Secure	Less Secure VM's
Examples	VMware ESXI,KVM,Hyper-V,Xen	VMware Wo