

Lab Four

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1 PROBLEM ONE

Q) What is the relationship between a guest operating system and a host operating system in a system like VMware? What factors need to be considered in choosing the host operating system?

A) A host operating system is the actual operating system installed on the physical machine. A guest operating system is a virtual operating system which can be run and managed by the host operating system. VMware is a virtual machine that can emulate the guest operating system. The host operating system provides resources to the guest operating system, such as CPU, memory, disk space, hardware devices handles, etc. The guest operating system uses virtual resources for emulation, which are wrappers around physical resources for the host operating system. If the VM needs to access the virtual disk, the host has to provide physical disk space for the virtual machine. Each guest OS runs isolated from other guest operating systems and the host OS. The processes run on the VM are only running on the VM, but it uses the host operating system's resources to run. The host OS also can allow and deny the guest operating system from using certain resources. If you don't want the VM having access to the network, you can just deny permissions to access the network controller.