2. Virtualization and vSphere Concepts > How Virtualization Works > Virtualization of Physical Resources > Virtualized Host Resources
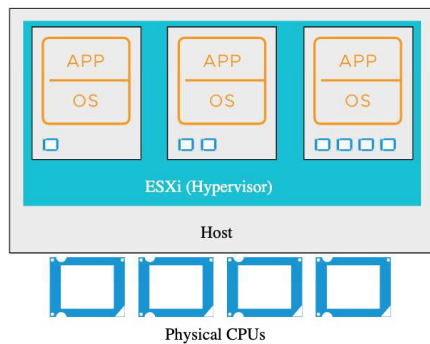
Virtualized Host Resources

The hypervisor allows VMs to share the resources of the host.

It manages the allocation and sharing of virtual resources among VMs:
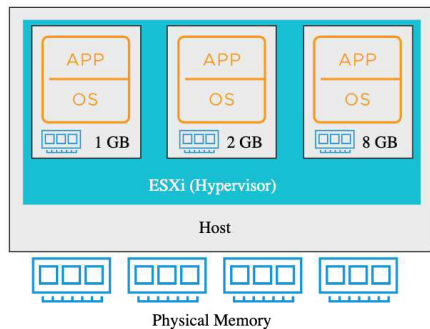- CPU
- Memory
- Networking
- Disks
- GPUs

Virtual CPU

The ESXi host manages how much compute access is available for each VM in the following ways:

- Finds available CPU resources when the guest OS requests CPU for an application
- Manages simultaneous requests from multiple VMs
- Schedules VMs to take turns (share) using the CPU when the demand exceeds the available CPU on the host

2. Virtualization and vSphere Concepts ❯ How Virtualization Works ❯ Virtualization of Physical Resources ❯ **Virtual Memory**

Virtual Memory

The sum of configured memory sizes of all VMs might exceed the amount of available physical memory on the host.

- The memory resource settings for a VM determine how much of the host's memory is allocated to the VM.
- The virtual memory size determines how much memory is available to applications that run in the VM.
- VMs do not always use 100% of the allocated memory.