



What is Virtualization:

- Virtualization is a proven software technology that is rapidly transforming the IT landscape and fundamentally changing the way that people compute.
- With VMware virtualization solutions you can reduce IT costs while increasing the efficiency, utilization and flexibility of their existing computer hardware.
- With Virtualization it is possible to run multiple operating systems and multiple applications on the same SERVER at the same time, increasing the utilization and flexibility of hardware.



Reduce Energy Costs and Go Green with VMware Virtualization

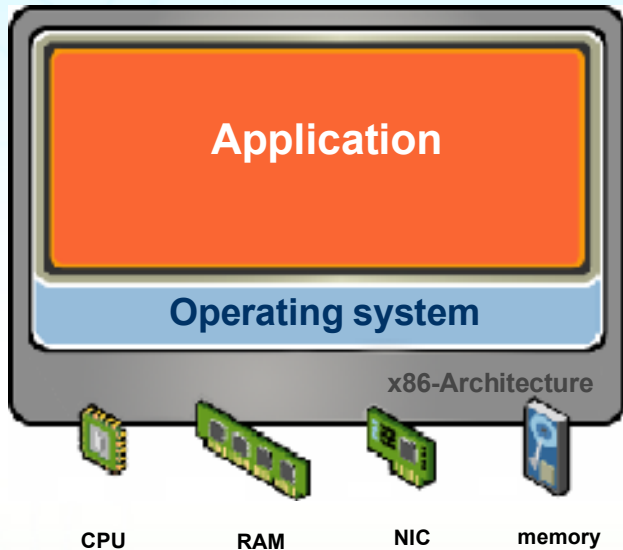
Reduce the energy demands of your datacenter by right-sizing your IT infrastructure through consolidation and dynamic management of computer capacity across a pool of servers.

VMware infrastructure delivers the resources your infrastructure needs and enables you to:

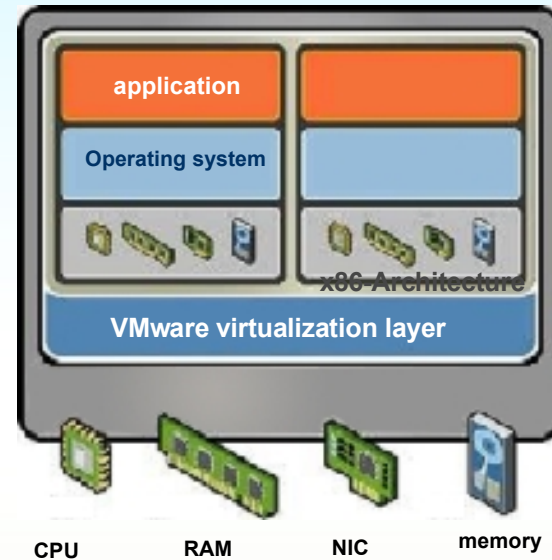
- Reduce energy costs by 80%.
- Power down servers without affecting applications or users.
- Green your datacenter while decreasing costs and improving service levels.



VMware server virtualization



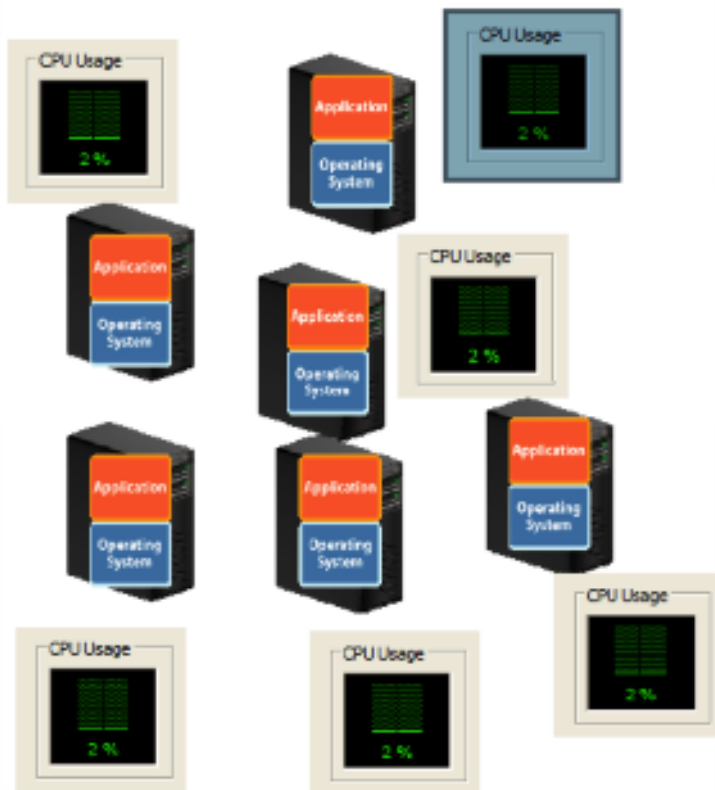
- Software dependant on Hardware
- One single OS per server
- One application workload per OS



- Hardware independent of OS and applications
- Virtual machines can be deployed on any system
- OS and application are treated as one unit



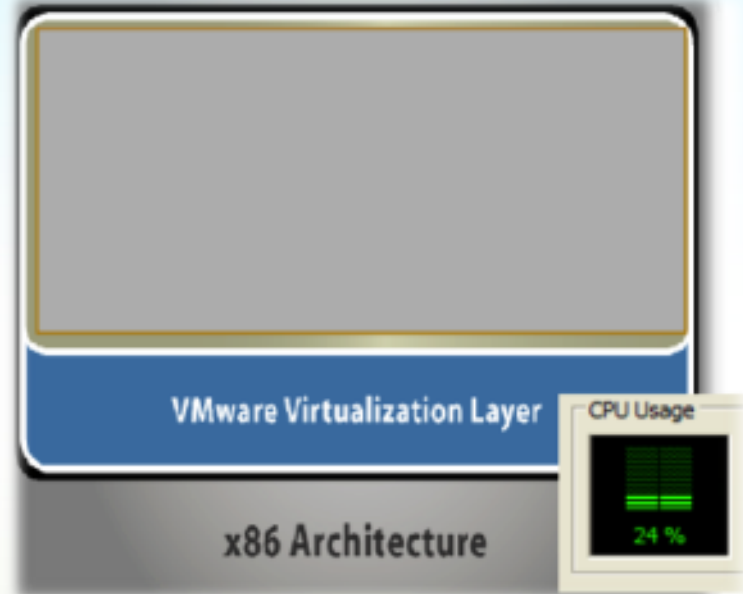
Without VMware



- All require power
- All require cooling
- All require real estate
- Setup, Configuration
- Maintenance, Support



With VMware



- Reduced Cost
- Rapid Provisioning
- Flexibility & Automation



Key features of the VMware server virtualization



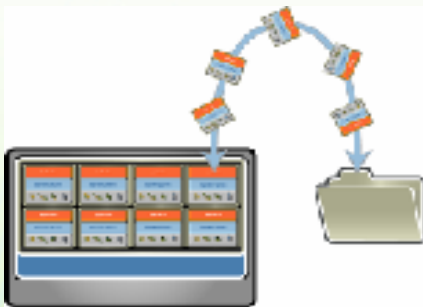
.Partitioning

- .Different OS can run on one physical machine
- .System resources can be divided between virtual machines



•Isolation

- Fault and security isolation on a hardware level
- Extended resource control for constant performance



•Encapsulation

- Complete status of a virtual machine can be stored in a file
- Move and copy of a virtual machine is as easy as it is with files



Servers Consolidation

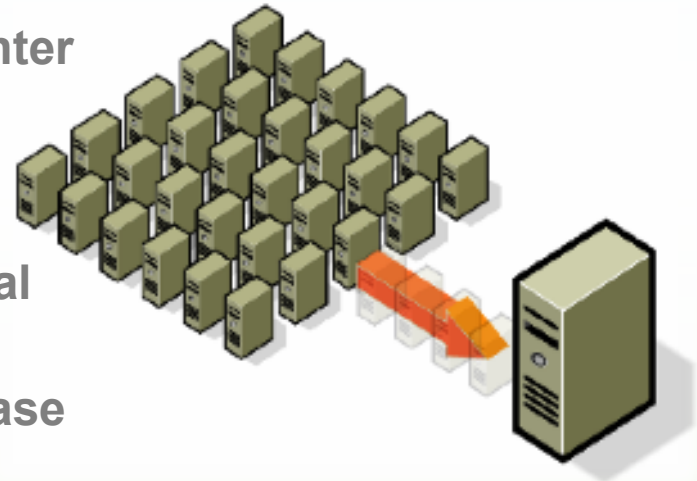
**110 Servers without
VMware software**

**12 Servers, 1 rack with
VMware software**



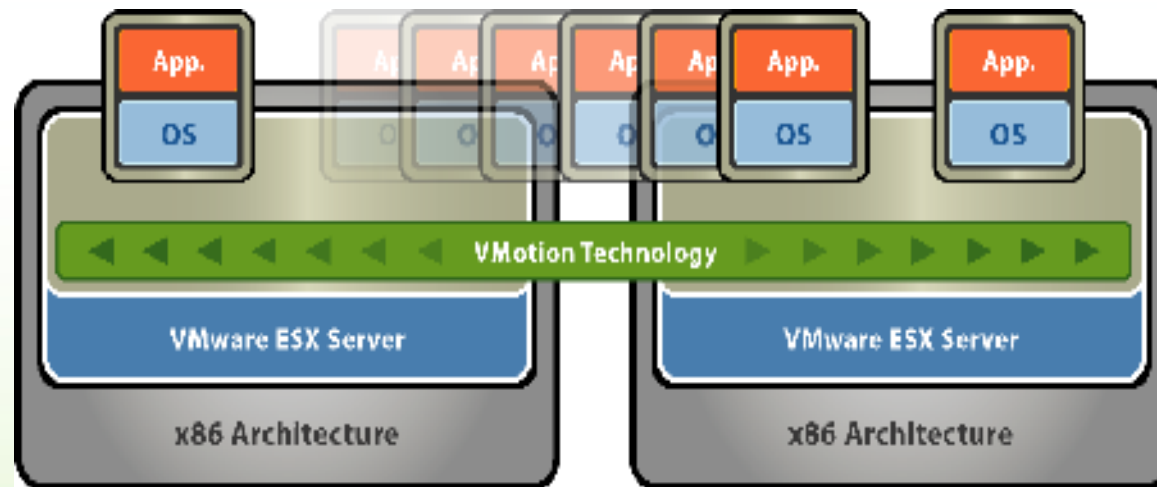
A virtual infrastructure offers the systematic ability to control a complex system consisting of several x86-based servers

- Consolidation
 - **Operate different OS and applications on one single server**
 - **Support existing applications on a new hardware**
 - **Replace the old hardware in the data center**
- Utilize your Existing Servers
 - **Realize instantly new projects with virtual infrastructure**
 - **Postpone new physical hardware purchase**



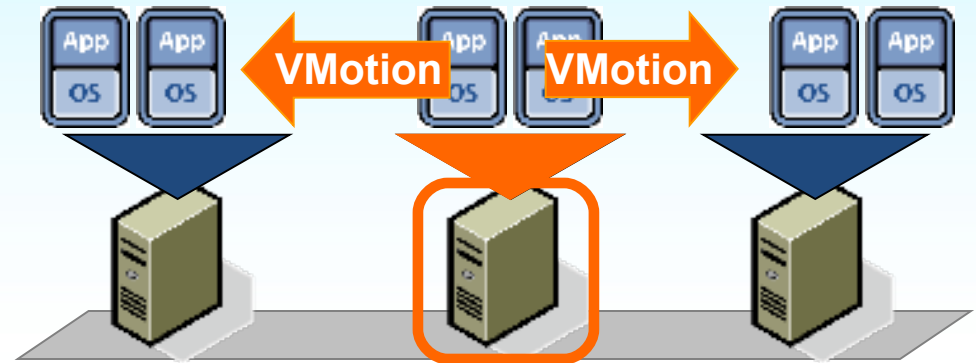
VMware VMotion

- The VMotion technology allows the live migration of virtual machines from one physical server to another and needs therefore no downtime for maintenance activities.



Planned Downtime: Zero-downtime maintenance using VMware technology

- Use VMware VMotion to evacuate hosts
 - Move running applications to other servers without disruption
 - Perform maintenance at any time of day
 - Zero downtime for hardware maintenance
- Automate with DRS maintenance mode
 - Automates moving virtual machines to other hosts
 - Automates re-balancing after maintenance complete



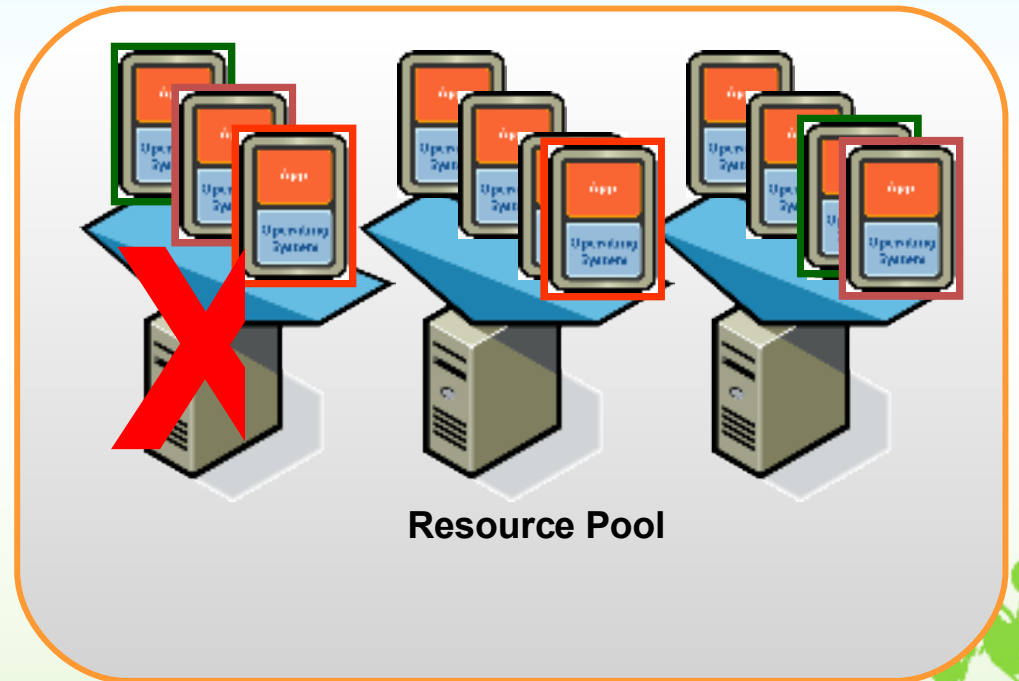
1. Activate Maintenance Mode for physical host
4. DRS migrates running virtual machines to other hosts
4. Shut down idle host and perform maintenance
4. Restart host; DRS automatically rebalances workloads



Unplanned Downtime: Server Failure - VMware HA

Simple, Cost effective high availability for all servers

- Automatic restart of virtual machines in case of server failure
- No need for dedicated stand-by hardware
- None of the cost and complexity of clustering



Benefits of VMware Virtualization

- Save money and streamline operations with server consolidation and containment by running software applications on fewer servers
- Provide high availability and disaster recovery to all your applications at a fraction of the complexity and cost of existing solutions



THANK YOU



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COMPUTERS**

Professionals at work

