



## VMWARE® ESX SERVER

VMware® ESX Server is the foundation for the dynamic, self optimising IT infrastructure. VMware ESX Server is a robust, production-proven virtualisation layer that abstracts processor, memory, storage and networking resources into multiple virtual machines.

ESX Server allows organisations to:

- Increase hardware utilisation and dramatically decrease capital and operating costs by sharing hardware resources across a large number of virtual machines that run side-by-side on the same server.
- Improve service levels even to the most resource-intensive applications with advanced resource management, high availability, and security features ESX Server delivers the highest levels of performance, scalability and robustness required for enterprise IT environments.

### WHAT CAN VMWARE ESX SERVER DO?



- Implement production server consolidation and containment
- Provide advanced business continuity protection at lower cost
- Streamline software testing and development
- Secure and manage enterprise desktops
- Re-host legacy applications

### HOW DOES VMWARE ESX SERVER WORK?

ESX Server installs directly on the server hardware, or "bare metal", and inserts a robust virtualisation layer between the hardware and the operating system.

ESX Server partitions a physical server into multiple secure and portable virtual machines that can run side by side on the same physical server. Each virtual machine represents a complete system - with processors, memory, networking, storage and BIOS - so that Windows, Linux, Solaris and NetWare operating systems and software applications run in a virtualised environment without any modification.

Sharing the physical server resources among a number of virtual machines increases hardware utilisation and dramatically decreases capital cost.

The bare metal architecture gives ESX Server complete control over the server resources allocated to each virtual machine and provides for near-native virtual machine performance and enterprise-class scalability.

Virtual machines have built-in high availability, resource management and security features that provide better service levels to software applications than static physical environments.

## KEY FEATURES

### Architecture

- Bare-metal architecture. ESX Server inserts a robust virtualisation layer directly on the server hardware for near-native virtual machine performance, reliability and scalability.
- CPU virtualisation.
- Virtualisation for storage.
- Virtualisation for networking. Network virtual machines like physical machines.

### Performance and Scalability

- Advanced memory management.
- 4-Way Virtual SMP.
- 16GB RAM for virtual machines.
- Support for powerful physical server systems.
- Support for up to 128 powered-on virtual machines.
- Flexible virtual switches. Virtual switches can be created with any number of ports from 8 to 1016, and the maximum number of virtual switches has been raised from 128 to 248.
- Wake-on LAN. Enable higher consolidation ratios by allowing virtual machines to go on stand-by mode when not used.

### Interoperability

- Hardware - Certified with rack, tower and blade servers from Dell, HP, IBM, Fujitsu Siemens, NEC, Sun Microsystems and Unisys.
- Storage - Certified with a wide range of storage systems from EMC, Dell, HP, IBM, and Network Appliance.
- Operating systems - The only virtualisation platform that supports a wide range of unmodified operating systems including Windows, Linux, Solaris and Novel NetWare.
- Software applications - Runs software applications from over 250 software vendors.
- Support for other virtual machine formats - Runs virtual machines created in non-VMware formats.

### Manageability

- SMI-S-compliant management interfaces.
- Virtual infrastructure client.
- Virtual infrastructure web access.
- Virtual machine shortcuts.
- Remote devices.

### Distributed Resource Optimisations

- Resource management for virtual machines.
  - CPU capacity prioritisation.
  - Storage I/O traffic prioritisation.
  - Network Traffic Shaper.
- Resource Pools.

### High Availability

- Shared storage.
- SAN transparency.
- Built-in storage access multi-pathing.
- Enhanced NIC teaming.
- Support for Microsoft® clustering Services.

### Security

- Compatibility with SAN security practices.
- VLAN tagging.
- Layer 2 network security policies.

## FOCUS

**ESX Server delivers the highest levels of performance, scalability and robustness.**



### Central Networks and Technologies Ltd

Rowan House, Sandbrook Way, Rochdale, OL11 1LQ  
t: +44 (0)1706 747474 f: +44 (0)1706 712222  
e: info@cnt.co.uk  
www.cnt.co.uk