

**SAVE 80% OFF
ENERGY COSTS**

With a virtual infrastructure from VMware.

& up to **50% off** hardware and operating costs when you virtualize with **VMware**.

* *All Howard designed bundles provide complete turn-key solutions by experienced VMware certified professionals.*

- Increase utilization of existing hardware from 5-15% up to 80%
- Reduce hardware requirements by a 10:1 ratio or better
- Accelerate provisioning time by 50-70%
- Manage virtual machines from a central location
- Monitor the performance of virtual machines and their hosts
- Avoid planned downtime with live migration of virtual machines
- Enable dynamic policy-based allocation of IT resources with automated load balancing
- Eliminate many repetitive configuration and maintenance tasks

power saved = power earned

VMWARE
SERVER CONSOLIDATION

Howard Technology Solutions VMware Bundles are presented as:



STANDARD



MEDIUM



PREMIUM



Standard Bundle

*Designed especially for IT environments with 6-8 servers that need to be virtualized, the VMware 'Standard Bundle' provides large business features, and a **highly available server infrastructure solution** packaged for small organizations that want to **optimize** and **protect** their IT Assets with minimal upfront investment.*

Small entry virtual solution capable of supporting 6-8 Virtual Machines' in a VMware Cluster.

1. Consolidate and Optimize IT Investments:
Achieve consolidation ratios of 10:1 or higher, and improve hardware utilization from 5 to 15 percent to as much as 80 percent or more, without sacrificing application performance.
2. Simplify Management and Enhance Productivity: Provision new applications in minutes instead of days or weeks, monitor virtual machines performance, and automate patch and update management.

Key Benefits

- Reduce IT hardware and operating cost
- Simplify Management and boost IT Staff Productivity
- Improve Service Levels and application quality
- Strengthen Security and Data Protection

(2) Howard 17108 Servers

- Single 3GHz Dual-Core Processor (no Upgrade)
- 8GB of memory (24GB Max)
- (2) 1GB NICs
- Single Non-Redundant Power Supply

Promise iSCSI Storage

- 16 SATA Disk Capacity Max
- Includes (8) 1TB SATA with 32MB Cache HDD
- 8TB RAW
- 6.5TB Usable in RAID 5 (estimated)
- 4TB Usable in RAID10 (estimated)

VMware vSphere Essentials Bundle

- License for 3 host, 2 Processors per Host (6-core processor)
- VMware ESX hypervisor
- VMware vCenter Server for Essentials
- VMware vStorage Thin Provisioning
- VMware vCenter Update Manager
- VMware vStorage VMFS

Accessories

- (2) Gigabit Managed Switch
- (4) Category 5e Patch Cables (5 foot each)
- MS Windows Server 2008 R2 - (for vCenter)

Add Ons

- Add 3rd Server
- Additional Memory
- MS Windows Standard to Enterprise (enterprise provide license for 4 servers in Virtual environment)



Medium Bundle

Designed especially for IT Environments with **6-12 servers** that need to be virtualized, the VMware 'Medium Bundle' provides large business features, and a highly available server infrastructure solution packaged for medium-sized organizations that want to optimize and protect their IT Assets with minimal upfront investment.

Medium entry virtual solution capable of supporting 6-12 Virtual Machines¹ in a VMware Cluster.

1. Complete Turn Key Solution
2. VMware HA Cluster provided cost-effective, automated restart within minutes for all applications in the event of hardware failure.
3. VMware vMotion provides ("Drag & Drop" live migration) eliminates the need to schedule application downtime due to server scheduled maintenance through live migration of virtual machines across physical servers, with no disruption to users or loss of service.
4. VMware Data Recovery provides simple, cost-effective, agentless backup and recovery for virtual machines, in smaller environments.

(2) Howard 17 2008 Servers

- Single 2.4GHz quad-Core Processor (Upgradable to 2 procs)
- 12GB of memory (96GB Max)
- (4) 1GB NICS
- Single Power Supply (upgradable to redundant)

Promise 16 iSCSI

- 16 SATA Disk Capacity Max
- Includes (16) 1TB SATA with 32MB Cache HDD
 - 16TB RAW
 - 12.5TB Usable in RAID 5 (estimated)
 - 8TB Usable in RAID10 (estimated)
- Dual iSCSI Controller Ports
- Support RAID 0, 1, 5, and 10

VMware vSphere Essentials Plus Bundle

- License for 3 host, 2 Processors per Host (6-core processor)
- VMware ESX hypervisor
- VMware High Availability
- VMware vMotion
- VMware Data Recovery
- VMware vCenter Server for Essentials
- VMware vStorage Thin Provisioning
- VMware vCenter Update Manager
- VMware vStorage VMFS

Accessories

- (2) Gigabit Managed Switch
- (8) Category 5e Patch Cables (5 foot each)
- MS Windows Server 2008 R2 - (for vCenter)

Add Ons

- Add 2nd CPU
- Additional Memory
- Redundant P/S
- Add 3rd Server
- MS Windows Standard to Enterprise (Enterprise provides license for 4 servers in Virtual Environment)
- Additional NIC's



Premium Bundle

Premium bundle allows a mixture of **SAS and SATA drives in a single enclosure for higher performance**. Also includes active/active iSCSI controllers and supports up to 48 HDD's.

Premium SMB virtual solution capable of supporting 10-20 Virtual Machines¹ in a VMware Cluster.

1. Complete Turn Key Solution
2. VMware HA Cluster provided cost-effective, automated restart within minutes for all applications in the event of hardware failure.
3. VMware vMotion provides ("Drag & Drop" live migration) eliminates the need to schedule application downtime due to server scheduled maintenance through live migration of virtual machines across physical servers, with no disruption to users or loss of service.
4. VMware Data Recovery provides simple, cost-effective, agentless backup and recovery for virtual machines, in smaller environments.

(2) Howard IMS Servers

- Single 2.4GHz quad-Core Processor (Upgradable to 2 procs)
- 12GB of memory (96GB Max)
- (4) 1GB NICS (Max is 4)
- Redundant Power Supply Standard

IMS Storage Module

- (14) 2.5" Disk Capacity Max
- Includes (14) 500TB SATA with 16MB Cache HDD
 - 7TB RAW
 - 5.6TB Usable in RAID 5 (estimated)
 - 3.5TB Usable in RAID10 (estimated)
- 3GB SAS Controller Port (upgradable to 2 for redundancy)
- Support RAID 0, 1, 5, and 10

IMS Chassis

- Fully Redundant P/S, Fans, and switches
- Virtual Presence for simple remote management
- 6U density
- Chassis Supports 6 IMS Servers (VMware licensed for 3)

VMware vSphere Essentials Plus Bundle

- License for 3 host, 2 Processors per Host (6-core processor)
- VMware ESX hypervisor
- VMware High Availability
- VMware vMotion
- VMware Data Recovery
- VMware vCenter Server for Essentials
- VMware vStorage Thin Provisioning
- VMware vCenter Update Manager
- VMware vStorage VMFS

Accessories

- (2) Gigabit Managed Switch
- (8) Category 5e Patch Cables (5 foot each)
- MS Windows Server 2008 R2 - (for vCenter)

Add Ons

- Add 2nd CPU
- Additional Memory
- Add 3rd Server
- MS Windows Standard to Enterprise (Enterprise provides license for 4 servers in Virtual Environment)
- Additional Storage
- Additional NIC's

Did you know?

Howard Technology Solutions supports VMware and the movement towards **energy conservation**. With every Digital Virtualization Server sold, **VMware saves a significant amount of energy** by eliminating a dense mass of hardware.