

HP Virtualization Smart Bundles with VMware

Simple, cost-effective virtualization solutions

Data sheet

HP Virtualization Smart Bundles include everything you need to get started with virtualization—from VMware vSphere virtualization software to the next generation of HP ProLiant servers, HP BladeSystem, HP Insight software, HP StorageWorks SANs, HP Virtual Connect technology, and HP Networking solutions.

How to get started with virtualization for your business

Virtualization can help reduce costs, improve application availability, and simplify IT management. Getting started can be challenging. You need to find the appropriate software, network, server, and storage configurations, but some marketplace solutions billed as “simple” may actually reduce availability and limit scalability—leaving you to figure out how to put it all together. With HP, virtualization is better than ever. We can help you jump-start your project with simplified virtualization solutions that are pre-defined and validated, yet flexible enough for you to choose a solution that meets your application availability and capacity needs. And, even better, we can deliver a high-availability solution without complex external storage that does not compromise on performance.

Features and benefits

VMware vSphere: With significant feature and throughput enhancements, VMware vSphere is the next major version of VMware software and the industry’s first virtual data center operating system. With enhanced features, vSphere increases consolidation ratios and improves application availability, helping your customers significantly reduce costs while enabling business continuity.

HP ProLiant: With new ProLiant servers, you get up to 27x improvement in performance per watt which means you can get the same work done with up to 97 percent less power.¹ Intel® Next-Generation Virtualization Technology enables superior virtualization performance, superb scalability, enhanced flexibility, and simplified server management. You can achieve up to a 20:1 consolidation ratio, compared to G4 technology, which means up to a 95 percent reduction in the software licenses and physical servers to buy and manage.¹ As the top-selling industry-standard server brand, new generation HP ProLiant servers let you deploy virtual machines with confidence.

HP BladeSystem: A smarter way to build an infrastructure to support vital applications. In an all-in-one design, you have the essentials to build and maintain your infrastructure from start to finish. We built in the networking to help you reduce cables up to 94 percent.² We added smarter power and cooling systems to save more than 33 percent on power versus other choices.² Our extensive management capabilities help you deploy and manage virtual machines to increase server utilization, application availability, and maintain high service levels to keep your business running smoothly.

¹ Based on HP internal testing comparing hardware on DL380 G4 to DL380 G7.

² Based on HP internal testing of HP ProLiant BL490c G6. G6 launch data based on HP Engineering estimates using the HP blades power calculator.



HP StorageWorks P2000 G3 SAS: Affordable, direct attach, external shared storage solution that provides a more efficient balance of scalability, reliability, and cost efficiency for small to midsize environments. It is designed to be easy-to-deploy, to be secure, along with low management costs while driving rapid return on investment (ROI) through efficient storage consolidation. All P2000 G3 SAS arrays ship standard with 64 Snapshots and Volume Copy enabled for increased data protection.

HP StorageWorks P4000 G2 SAN Solutions: Clustered storage architecture gives you the performance needed to support the highly concurrent and rapidly changing workloads that virtualized servers impose on storage. As your virtualized infrastructure grows, your SAN grows with it, scaling capacity and performance without disruption. You can defer 25-50 percent of your capital expenditures for storage and can experience up to US\$50,000 annual costs savings due to increased availability and reduced data recovery times.³ The HP StorageWorks P4000 Virtual SAN Appliance Software (VSA) transforms server disk drives into shared storage, removing the need for external storage—reducing storage costs by up to 40 percent.⁴ HP P4000 VSA is the only Storage Virtual Appliance certified by VMware.⁵

HP Networking: Reliable networking for a virtualized environment. HP Networking managed L2–L4 Ethernet switching products provide superior reliability and proven performance, reduce complexity, and total cost of ownership (TCO), and feature an industry-leading lifetime warranty.

HP Virtual Connect Flex-10 technology: Change-ready connectivity for servers and virtual machines. To further expand your virtualization

capabilities, HP Virtual Connect offers cost-effective and flexible ways to connect virtual machines to your network. HP Virtual Connect Flex-10 technology is the world's first technology to fine-tune network bandwidth and quadruple network interface card (NIC) capacity at the server. Each FlexNIC can be adjusted from 100 Mbps to 10 Gbps—assigning higher bandwidth for more critical applications and lower bandwidth for others.

When business results count, count on HP

You can benefit from the HP advantage in the following areas:

- **Unique capabilities:** Reduce costs and keep applications and storage online, even during site failures, with virtual server high availability that does not require external storage.
- **One contact for support:** HP sells and supports all the hardware and software products, so your authorized HP reseller can deploy and support the entire solution.
- **Deploy with confidence:** Get the benefit of our carefully crafted and validated configurations so that your solution performs as expected.

³ Enterprise Strategy Group White Paper "Business and Operational Benefits Achieved with P4000 SANs" <http://h20195.www2.hp.com/v2/GetPDF.aspx/4AA27788ENW.pdf>

⁴ Based on list price comparison between a 4 TB dual-controller Dell EqualLogic PS6000 and HP P4000 VSA Software plus 24 250 GB HDDs used to create the virtual iSCSI SAN in a VMware deployment.

⁵ For VMware Compatibility Guide (certified in Fall 2009 and still the only certified product as of 2/24/10) visit: <http://www.vmware.com/resources/compatibility/search.php?action=search&deviceCategory=san&isVSA=1>


Technical specifications

Standalone Smart Bundles

Simple, cost effective solutions for running multiple applications on a single server.

Entry Tower Smart Bundle

Move your existing servers, such as Microsoft® Small Business Server, a file server, an email server, or even all of them, onto one machine—all without reinstalling any applications. You can save space, simplify data backup and server management, and lower your electric bill at the same time.

	Base bundle hardware	HP ProLiant ML350 G6 tower server <ul style="list-style-type: none"> • (2) Intel® Xeon® quad-core 5600 Series Processors • 12 GB Registered DDR3 RAM • HP Smart Array P410i Controller with 256 MB BBWC • (6) 500 GB 3G SATA SFF drives • (4) Gigabit server network adapters • Redundant power supplies • HP Integrated Lights-Out 2 (iLO 2) Advanced
	Software	VMware vSphere Essentials w/3yr 9x5 SW Support
	Optional services	3-year 24x7 Hardware Support 3-year 24x7 Software Support Startup Services


HP Virtualization Smart Bundles are available from your authorized HP reseller. Specifications and availability may vary by region.

High availability Smart Bundles

When your business can't afford for your applications to be offline, a high-availability (HA) virtualization Smart Bundle gives you peace of mind. With shared storage and automatic failover, your applications remain available in the event of a server failure, or even failure of an entire site.

Entry Rack HA Smart Bundle


For high availability on a tight budget, save money by using the server's internal drives to create a highly available shared storage solution using the HP StorageWorks P4000 Virtual SAN Appliance.

	Base bundle hardware	(2) HP ProLiant DL180 G6 rack servers, each with: <ul style="list-style-type: none"> • (2) Intel Xeon quad-core 5600 Series Processors • 16 GB Registered DDR3 RAM • HP Smart Array P212i Controller with 256 MB BBWC • (6) 300 GB 6G SAS LFF drives • (4) Gigabit server network adapters • Redundant power supplies • HP Lights-Out 100i (LO100i) Advanced (2) HP StorageWorks P4000 Virtual SAN Appliance
	Software	VMware vSphere Essentials Plus w/3yr 9x5 SW Support
	Optional networking	(2) HP Networking E2910al-24G managed switches
	Optional services	3-year 24x7 Hardware Support 3-year 24x7 Software Support Startup Services

Receive a trial version of the HP P4000 Virtual SAN Appliance Software by visiting: www.hp.com/go/TryVSA
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Midrange Rack HA Smart Bundle


Combine the latest generation of the proven, industry-standard server, the HP ProLiant DL380 G7, with the affordable HP StorageWorks P2000 G3 MSA Array System and you get a high availability solution that keeps your applications

	Base bundle hardware	(2) HP ProLiant DL380 G7 rack servers, each with: <ul style="list-style-type: none"> • (2) Intel Xeon quad-core 5600 Series Processors • 12 GB Registered DDR3 RAM • HP Smart Array P410i/256 • (2) 146 GB 6G 15k rpm SAS SFF drives • (4) Gigabit server network adapters • Redundant power supplies • HP SC08e 6Gb SAS HBA (2 per server) • HP Insight Control, HP Integrated Lights-Out 3 (iLO 3) Advanced HP StorageWorks P2000 G3 SAS MSA Array System <ul style="list-style-type: none"> • (12) 300 GB 6G SAS SFF drives
	Software	(4) VMware vSphere STD 1P Licenses w/3yr 9x5 SW Support (1) VMware vCenter Foundation w/3yr 9x5 SW Support
	Optional networking	(2) HP Networking E2910al-24G managed switches
	Optional services	3-year 24x7 Hardware Support 3-year 24x7 Software Support Startup Services

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Scalable Blades HA Smart Bundle

When HP BladeSystem and Virtual Connect technology are combined with P4000 G2 SANs, you truly realize the benefits of HP Converged Infrastructure—cutting-edge design, integration, and manageability that come together in a single, powerful virtualized solution.

	Base bundle hardware	HP c7000 BladeSystem Enclosure (2) HP Virtual Connect Flex-10 10Gb Ethernet Modules (3) HP ProLiant BL460c G7 blade servers, each with: <ul style="list-style-type: none"> • (2) Intel Xeon six-core 5600 Series Processors • 12 GB Registered DDR3 RAM • HP Smart Array P410i • (2) 146 GB 6G 15k rpm SAS SFF drives • (2) Flex-10 10GbE Adapters—up to (8) 1Gb + NICs • Fully redundant power • HP Onboard Administrator • HP Insight Control, including HP Integrated Lights-Out 3 (iLO 3) Advanced HP StorageWorks P4300 G2 7.2TB SAS Starter SAN Solution <ul style="list-style-type: none"> • (2) Storage Nodes • (16) 450 GB 15k rpm SAS LFF drives
	Software	(6) VMware vSphere Enterprise Plus 1P Licenses w/3yr 9x5 SW Support (1) VMware vCenter Standard w/3yr 9x5 SW Support
	Optional networking	(2) HP Networking E6600-24G-4XG managed switches (2) HP Networking 10GbE SFP+ cables
	Optional services	3-year 24x7 Hardware Support 3-year 24x7 Software Support Startup Services

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To discover more about how HP Virtualization Smart bundles can help you get started with virtualization, visit: www.hp.com/go/virtkit

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