

# MOVE

to a virtualized environment and the cloud

HP VirtualSystem for Microsoft

Brochure

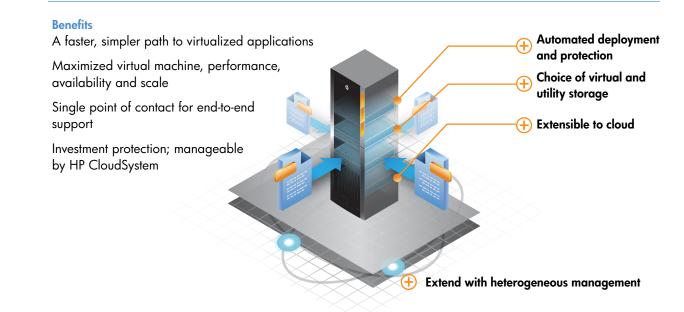
**Microsoft**<sup>®</sup>

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# **HP VirtualSystem for Microsoft**

#### The fastest path to a virtualized environment – and the cloud

Virtualization has been widely adopted in recent years to consolidate servers, increase IT flexibility and improve business continuity. HP VirtualSystem for Microsoft® is a new portfolio of virtualization solutions for your data center that simplifies the selection, purchase and delivery of virtualized infrastructure sized to the capacity and performance requirements of your organization.



# Built on proven technology – integrated, simplified, optimized

Today, virtualization is a defining paradigm in IT. For many organizations, server sprawl remains a major source of cost with resources-applications, data and knowledge-trapped in islands of incompatibility. The complexity and rigidity of "business as usual" costs time and money, preventing change and inhibiting timely response to business opportunities. Virtualization can slash costs, simplify application deployment and management, and improve availability but virtualization is not without its own challenges. Unchecked or improperly planned virtualization can increase management complexity, create unpredictable performance as well as introduce new security vulnerabilities. In fact, complexity has quickly become the number one concern for 76% of IT decision-makers.<sup>1</sup> HP recognizes that choosing the right combination of servers, storage, networking and software is the key to a successful virtualization implementation, and HP VirtualSystem for Microsoft now makes this task simpler than ever.

HP VirtualSystem for Microsoft simplifies and extends HP Converged Infrastructure into optimized solutions for Microsoft Hyper-V-based server virtualization, delivering a complete, high-performance virtualized environment with pre-tuned server, storage, networking and systems management. The combination of HP Insight Control and Microsoft System Center addresses comprehensive system health, configuration management and software deployment across the virtualized environment. With HP Factory Express services for hardware configuration and on-site software installation (available in late 2011), HP VirtualSystem for Microsoft eliminates the need for customers to rack, cable and configure virtualized infrastructure on their own, and ensures compliance with HP and Microsoft virtualization best practices. Installation and start-up services help integrate the solution into the customer's environment, and HP VirtualSystem for Microsoft is fully supported by HP and Authorized Channel Partners.

<sup>1</sup> IDC, Report #223551, June 2010



#### An architecture for success

The new HP VirtualSystem for Microsoft is based on HP Converged Infrastructure and delivers highly optimized, factory integrated virtualization configurations for Microsoft environments. By leveraging these solutions, which include integrated HP management tools, on-site installation services and HP support services, customers can save up to 50% in deployment time<sup>2</sup> and focus on more strategic projects for their organizations. HP VirtualSystem for Microsoft will be available through HP Factory Express later in 2011, but customers can implement HP VirtualSystem for Microsoft configurations today using the core components outlined in this document.

Two configurations have been designed to meet your needs<sup>3</sup>:

- HP VS1 VirtualSystem, offering up to 8 HP ProLiant servers, HP P4500 SAN solution and support for up to 750 virtual machines.
- HP VS2 VirtualSystem, offering up to 26 HP ProLiant servers, HP P4800 SAN for HP BladeSystem and support for up to 2500 virtual machines. VS2 incorporates the only SAN storage converged into an HP BladeSystem architecture, the HP P4800 SAN Solution. This enables a server or client virtualization system with industry-leading density and the smallest rack footprint on the market (66% smaller footprint than competitive offerings). SAN and server networking all stay within the enclosure for simplicity, security, performance and optimized power/cooling. And it's all integrated with HP Insight Control management software.

HP VirtualSystem for Microsoft integrates HP Store360 scale-out software with HP BladeSystem and ProLiant hardware to reduce storage administration, speed time to service delivery, increase energy efficiency, and improve access for any data type or application workload.

Each HP VirtualSystem for Microsoft is also designed with systems management optimized for virtualized environments. HP Insight Control provides in-depth management for HP Converged Infrastructure integrated with Microsoft System Center. This enables Windows® administrators to deploy, monitor, update, and back-up and restore Hyper-V virtualized infrastructure through the System Center solution set.

 $^{\rm 2}\,{\rm Based}$  on HP calculations and analysis

 $^{\rm 3}\,{\rm HP}$  will also deliver HP VS3 VirtualSystem for Microsoft in 2012 based on HP BladeSystem and 3PAR storage.



Customers can also optionally select extensions to HP VirtualSystem that deliver enhanced systems management and back-up functionality, as well as flexible financing and consulting offerings:

- HP IT Performance Suite software, which monitors and measures every aspect of IT networks, infrastructure, applications, devices and human resources, and can consolidate management if you implement multiple or even mixed HP VirtualSystem configurations.
- HP StoreOnce Backup Systems for efficient, high performance backup and recovery of virtual and physical server environments
- HP Financial and Leasing services
- HP Technical, Consulting and Hosting services

Regardless of which HP VirtualSystem for Microsoft you choose, your organization benefits from:

- Easy-to-order, consolidated delivery and on-site integration
- Maximized virtual machine performance, availability and scalability at reduced costs
- Application availability through storage optimized for high availability; take advantage of our P4500 and P4800 HA capabilities
- Greater control and productivity through integrated HP Insight Control and Microsoft System Center management
- End-to-end support with single point of contact

Each HP VirtualSystem for Microsoft provides configuration choices so you can scale up. Since the initial system purchased may not have been maximally configured, each solution has room to expand BEFORE you need to replicate it in order to grow. Once you've determined the configuration for your specific needs, you can use the initial configuration and scale out as your needs grow—and HP Consulting can help!

Finally, services from HP are available so that when you are ready to expand to a fully automated, private or hybrid cloud environment, you can leverage your investment in HP VirtualSystem for Microsoft.

# The right fit today

Complete factory-assembled systems and service offerings will be available later in 2011. If you can't wait, you can still move ahead today.

Reference architectures are available today for the client and mission-critical solutions. See www.hp.com/go/ virtualsystem for details. For server solutions, you can order components from HP and build your virtualization platform. See below for information on suggested configurations and associated services and support.

### HP VirtualSystem for Microsoft configuration options

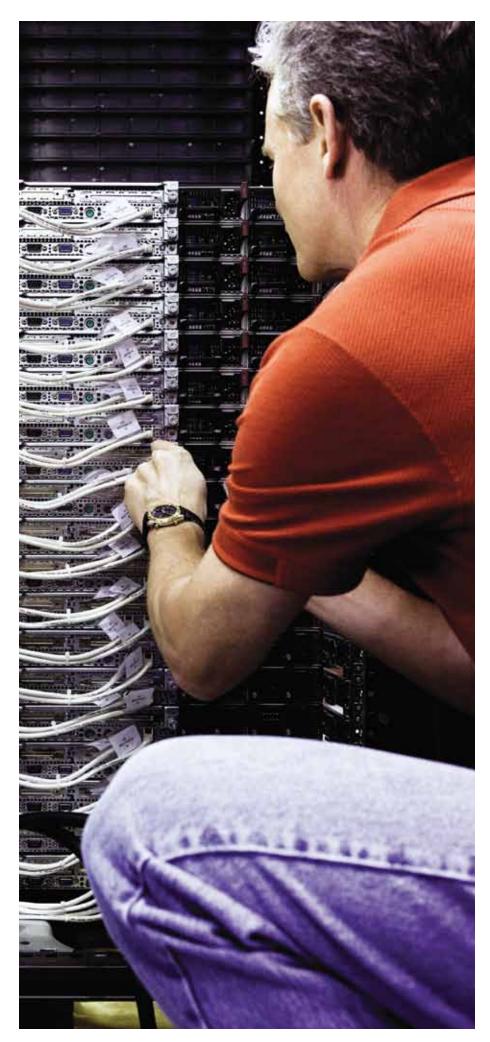
Recommended HP components for "build your own" server virtualization solutions; your sales team can work with you to best meet your individual needs.

	Midrange	Enterprise
Host server	HP ProLiant DL380 G7 (min 2)	HP ProLiant BL460c G7 with HP c7000 Enclosure (min 8)
Management server	HP ProLiant DL360 G7 (1-2)	2 HP ProLiant DL360 G7
Storage	HP P4500 G2 14.4TB SAS Virtualization SAN	HP P4800 G2 31.5TB SAS SAN Solution for BladeSystem
Networking	2 HP A5820-24XG-SFP switches	2 HP A5820X-24XG-SFP+ Switch and 2 HP A5800-24G Switch
		HP Virtual Connect Flex-10 10Gb Enterprise Edition for HP BladeSystem c7000 Enclosure
Rack	HP 10642 G2 Shock Universal Rack	HP 10642 G2 Shock Universal Rack
Power/PDU	2 HP Intelligent Modular Power Distribution Units	4 HP Intelligent Modular Power Distribution Units
HP Management Software	HP Insight Control server and storage modules for Microsoft System Center	HP Insight Control server and storage modules for Microsoft System Center
Operating system	Microsoft Windows Server 2008 R2 Data Center <sup>4</sup>	Microsoft Windows Server 2008 R2 Data Center
Microsoft Management Software	System Center Server Management Suite Data Center <sup>5</sup>	Microsoft System Center Server Management Suite Data Center
Recommended support	3-year HP Support Plus 24	3-year HP Support Plus 24

<sup>4</sup> Customers may purchase an OEM version of Windows Server 2008 R2 Data Center or elect to use their own licenses.

<sup>5</sup> Customers must purchase Microsoft System Center licenses from Microsoft or a Microsoft authorized reseller.

NOTE: The configurations described here are offered as a convenience to customers, not as a definitive descriptor of actual product offerings. Actual factory-assembled products, when they become available, may differ.



## Services and support information

#### **HP Factory Customization Services**

When available, HP VirtualSystem for Microsoft will ship prebuilt and include on-site installation and start-up services. If you want a virtualization solution today, there are many choices. You can order the individual components from HP, assemble an appropriate solution based on reference architecture guidelines, or have HP Factory Express do the work. The effort would likely span racking, cabling, server/blade configuration, storage and network configuration, and software load and configuration. By utilizing HP Factory Express services to build the solution, you will save time. HP Factory Express is a robust portfolio of flexible, pre-priced, configured, customized and integrated factory solutions and deployment services—supporting HP products from the desktop to the data center. Work with your sales rep if you would like to have the HP factory rack and/or customize your components prior to shipment.

#### **HP** Consulting

HP Technology Services provide a comprehensive portfolio of consulting services today from strategy, assessment, design, test, implementation, training, as well as transition to HP Support. We meet customers at the point of need, and can engage with modular, easy to consume workshops and assessments.

Additional services include virtualization assessment, migration to HP VirtualSystem for Microsoft, deeper integration into data center management systems, disaster recovery planning and implementation, as well as performance, security and capacity planning. Storage consulting is a complementary offering that provides the ability to modernize the data center's storage architecture for the new virtual infrastructure.

Start now with a low-risk, one-day strategy workshop to gain executive consensus, frame the issues and define a strategy; or if you are embarking on a defined project, our virtualization assessment provides a data-driven basis for a plan to virtualize. Contact your HP sales rep or your HP Technology Services Sales specialist. For more information see www.hp.com/services/virtualization.

#### **HP Support**

HP supports all HP VirtualSystem for Microsoft components including HP hardware and software, as well as the software from Microsoft. You benefit from a single point of contact and accountability for the end-to-end support of your total solution. You gain access to solution experts located throughout the world in 35 global Support Centers and need make only a single call for problem resolution. Our experts are trained in problem management and resolution, and are able to apply that knowledge for rapid repair and incident prevention.

With our recommended 3-year HP Support Plus 24, you receive around-the-clock support with 4-hour onsite response for hardware, 2-hour telephone response for software, and ongoing monitoring of operations through the latest remote tools.

Customers may upgrade from HP Support Plus 24 to higher service levels, including HP Critical Advantage.

#### HP VirtualSystem for Microsoft – there's no time like now

HP has been in the data center, virtualization and application infrastructure business for decades. We have an outstanding reputation for quality, reliability and leadership. And, by offering the option to build your own solution today, we are giving you additional flexibility and a chance to benefit immediately from HP VirtualSystem for Microsoft leadership and HP Converged Infrastructure.

HP Technology Services are available and provide a full lifecycle of strategy, consulting, integration and support services for virtualization around the globe. HP Support provides a single point of accountability for your entire solution. A robust portfolio of support services—from reactive to mission-critical—allows you to choose the offering that best meets your needs. Customers who want HP VirtualSystem for Microsoft today can build a solution with confidence. When business results count, count on HP!

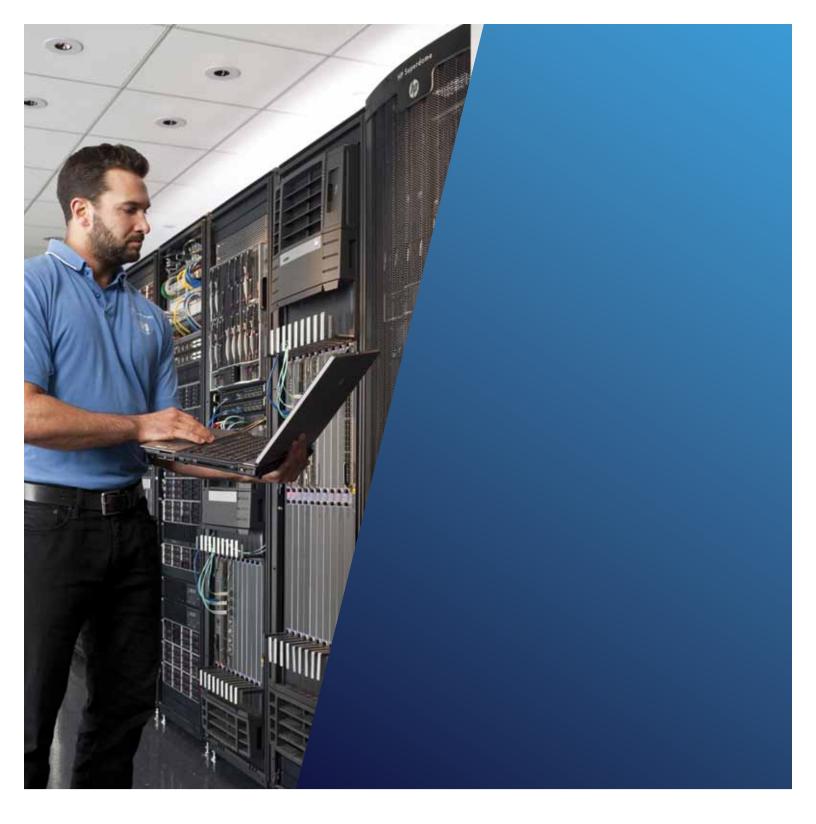
#### Achieve greater agility

To compete in the age of the Instant-On Enterprise, your business has to have an agile IT foundation. Because ultimately, an organization can move no faster than its IT infrastructure.

HP VirtualSystem gives you this must-have agility—in a single, easyto-deploy solution. This is, quite simply, the fastest, simplest path to virtualized environments.

To explore HP VirtualSystem in more detail, visit www.hp.com/go/virtualsystem.





# **Microsoft**<sup>•</sup>



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