

Server virtualization for small and medium-sized businesses

Solutions from HP and Microsoft



Virtualization gets real

Consider server virtualization with a perfectly coordinated combination of:

- HP ProLiant and BladeSystem servers
- HP StorageWorks solutions
- HP ProCurve networking solutions
- Microsoft® Windows® Server 2008 R2 with Hyper-V
- Management tools and solutions from HP and Microsoft
- Skilled consultancy and services from HP/Microsoft Frontline Partners

Real challenges

"My data center is bursting at the seams." "Operations are shut down for too long during downtime." "My energy costs are too high." "Managing my IT is much too complex." "Our IT stands more in the way of change rather than supporting it."

All sound too familiar? Then server virtualization may be the answer you have been looking for.

In fact, when it comes to enhancing technology performance, server virtualization has been on the agenda for many IT managers at small and medium-sized companies—and with good reason.

With server virtualization, existing systems can be consolidated quickly and easily to save on costs. At the same time, energy consumption drops due to the smaller number of systems, so operating costs drop as does environmental impact. With a perfectly coordinated solution from HP and Microsoft—delivered by your trusted HP/Microsoft Frontline Partner—server virtualization allows you to take greater advantage of the systems used while increasing availability and flexibility. What's more, in the event of scheduled or unscheduled downtime, the systems can be restored more easily or switched over to other hosts.



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Real benefits

If you are going to virtualize your environment, then do it right. HP and Microsoft now offer you a virtualization platform that brings together award-winning HP ProLiant and BladeSystem servers, HP StorageWorks solutions, and Microsoft Windows Server 2008 R2 Hyper-V technology, plus management software tools from both companies.

This powerful combination of fully tested hardware and proven management software provides you with a complete server virtualization solution, customized for your needs and available today from your local HP/Microsoft Frontline Partner. A server virtualization solution from HP and Microsoft gives you the peace of mind that any small or medium-sized company needs. And the benefits? They really add up quickly:

- Reduced operating costs in terms of hardware, energy and space
- Less downtime
- Increased availability
- Stable emergency restore
- Fewer disruptions due to maintenance
- Simplified management
- Faster provisioning
- More flexible response to new infrastructure requirements
- Less impact on the environment

Server virtualization snapshot

Here is how it works: Microsoft Windows Server 2008 R2 is installed on an HP ProLiant or BladeSystem server. Then Microsoft Hyper-V is easily activated and you're ready to go. Your HP ProLiant or BladeSystem server now acts as the host. Virtual machines can now be installed on that host.

Depending on available hardware resources, a large number of virtual machines can be run on the same server without the virtual machines interfering with one another. One operating system and the desired applications are installed on each virtual machine. Management solutions from HP and Microsoft are available for virtual and physical environments. Your HP/Microsoft Frontline Partner can help you design your infrastructure to take advantage of the efficiencies afforded by virtualization technology.

Real solutions that make perfect sense for your business

HP technologies

HP hardware and software components complete your solution:

- **HP ProLiant** servers and blade servers are designed to optimize your infrastructure while reducing costs.
- **HP StorageWorks storage systems** include flexible, scalable disk arrays like the HP StorageWorks Enterprise Virtual Array and Modular Smart Array series, along with the HP LeftHand P4000 SAN series.
- **HP Software** give you the tools you need to manage the operation of disparate systems across the enterprise—including HP Insight Software to continuously analyze and optimize server infrastructure while making it easier to deploy new Windows and Hyper-V hosts, plus HP Insight Control to enhance and extend Microsoft System Center.
- **HP Virtualization Smart Bundles with Hyper-V** is a set of preconfigured servers and storage to help you achieve faster time to value through our joint channel partners.

Microsoft technologies

Your solution will typically include one or more of the following Microsoft technologies:

- **Windows Server 2008 R2** and support for previous versions of Windows Server
- **Microsoft Windows Server 2008 R2 Hyper-V** server virtualization to support consolidation and rehosting of legacy operating systems and disaster recovery
- **Microsoft System Center Server Management Suite Enterprise (SMSE) and Server Management Suite Datacenter (SMSD)**

Qualified consultancy and services

Whether you want to virtualize applications and desktops, or add high availability and disaster recovery, HP and Microsoft technologies bring it all together—with the help of our HP/Microsoft Frontline Partners, who deliver qualified consultancy and a broad portfolio of services to implement virtualization technologies.



Real simple – with real advantages

License management made easy

You do not need to purchase an additional license from a third-party provider for virtualization software or manage the license. Hyper-V is integrated into Windows Server 2008 R2 Standard, Enterprise and Data Center Editions. License terms, especially with the Enterprise and Data Center editions, make it easy to quickly introduce Hyper-V virtualization into your company because they include licenses for additional operating systems for your virtual machines.

Familiar tools and integrated management

Hyper-V is completely integrated into Microsoft Windows Server 2008 R2. Administrators can leverage your existing Windows skills when using the supplemental management technologies from HP and Microsoft to manage Hyper-V. There is no steep learning curve for new or unfamiliar technology.

Lower total cost of ownership, improve return on investment

Virtualization helps you squeeze every bit of productivity out of your server infrastructure so that every dollar counts. By consolidating servers, reducing power consumption and simplifying management, Microsoft-based virtualization can help you cut costs. Using Hyper-V with HP and Microsoft management solutions is simple and easy to understand, resulting in increased IT efficiency. Extensive training is not required for administrators, which helps to keep initial investment costs low.

Build on the power of the HP/ Microsoft Frontline Partnership

Serving more than 100,000 joint customers, HP and Microsoft have been working closely together for more than 20 years on a wide range of activities, including engineering and integrated services teams working side-by-side to research, develop, test, implement and support solutions that help business of all sizes take advantage of new technologies.

Through one of the most unique alliances in the industry—the HP/Microsoft Frontline Partnership—HP and Microsoft have developed a shared vision aimed at providing integrated solutions, products and services through innovation and synchronization, proven technology expertise, and track record and a customer-driven approach.

“One of our goals was to reduce total cost of ownership. By consolidating the server network with Hyper-V, we did lower ownership costs, including hardware, software and operational expenses.”

– Rick Shibata, Technology Infrastructure Services Manager, American Savings Bank

Rely on HP/Microsoft Frontline Partners

HP and Microsoft's global network of joint channel partners is ready to help design, implement, manage and support HP-based Microsoft virtualization solutions. You can count on us and our local technology partners, together on the frontline, to deliver enhanced solutions that are reliable and ready to meet your unique business needs. These Frontline Partners have the certification, skills and expertise to leverage HP and Microsoft technology to drive solid business results for your organization.

Now is the time to virtualize

HP and Microsoft, together with our Frontline Partners, provide simple, affordable and reliable server virtualization solutions for mid-sized companies like yours.

To learn more about server virtualization solutions from HP and Microsoft, please talk with your local Frontline Partner or visit www.hp.com/go/hyper-v, www.microsoft.com/virtualization and www.hp.com/go/virtkit/hyper-v.

The HP/Microsoft Frontline Partnership brings you frontline innovation for the way you run your business, for the way you experience and use business technology.

"The biggest way we're set apart from our competitors is that we spend so much less on IT than they do. Virtualization enables us to do this."
– Liz de Michele, Manager of Server Technologies/Corporate Applications at Costco Wholesale Corporation

To learn more, visit www.hp.com/go/hyper-v
www.hp.com/go/virtualization
<http://www.hp.com/go/virtkit/hyper-v>

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