

Virtualization Vroom: Converged Infrastructures for VMware Environments

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Satisfied with your virtualization efforts? You could be.

How to get more out of infrastructure resources? That's a question many CIOs ask themselves. With hundreds or even thousands of virtual machines, increasing complexity and massive data growth, you need new, reliable ways to deliver IT services in an on-demand, flexible and scalable fashion. Then there are requests for faster delivery of business services, competition for resources and trade-offs between IT agility and vendor lock-in.

To meet the demands of the business, you've probably adopted some level of virtualization, implemented private or hybrid clouds to improve IT services, increased efficiency, improved flexibility and reduced the cost of delivering services. If so, you're in good company. It's expected that server virtualization rates will increase from approximately 50% to more than 80% over the next 3 years.

However, migrating business-critical applications to virtualized environments and to private or hybrid clouds has risks, with concerns around service level agreements, performance, availability and scalability. You need predictable platform reliability to move your business-critical workloads with confidence. To get the full benefits of virtualization while minimizing risks, some CIOs are turning to converged infrastructures from a single vendor as a turnkey solution.

Reality check: Server sprawl and other virtualization spinouts

VMware has become a vital component of private or hybrid cloud environments. But several infrastructure challenges in VMware environments can create headaches for your IT staff—and prevent you from reaping the full benefits of virtualization.

Server sprawl

Virtual server sprawl impacts applications and SLAs for performance, backup and replication. And it can make deploying, monitoring and maintaining a complete infrastructure more difficult. With more virtual machines, there is more complexity and there may be a

lack of visibility across IT functional teams covering servers, storage, networks and applications.

Long deployment time

A converged infrastructure takes the 4 basic components of server, storage, network and software, and packages them together as one pretested stack. The main objective behind this solution is to take the complexity, time and cost out of the current approaches to deployment. And it provides a much easier and faster approach to implementing and managing compute solutions within a VMware vSphere environment. You can then consolidate maintenance and support and have a single vendor to call for your service and support needs. The converged infrastructure reduces your implementation risk and costs, and collapses your deployment time from months to days.

Overloading or overprovisioning

When server, network or storage capacity becomes overloaded, bottlenecks appear across multiple servers and performance suffers. Managing the infrastructure is a time-consuming operation across numerous administrative teams. To avoid the risk of overloading or servicing frequent requests for hardware, some organizations overprovision hardware to ensure adequate capacity. However, that approach is costly because you're deploying and supporting additional infrastructure you may not need.

Underutilization

To avoid service disruption, fast growing IT environments usually acquire hardware to support new initiatives before previous investments are fully utilized. This approach also increases the data center footprint and power and cooling costs.

Virtualizing business-critical applications

You have every right to be hesitant about this one. Prior to virtualization, organizations would typically have a single business-critical application running on a single server. However, when servers are virtualized, resources are shared and business-critical application performance may suffer and the required SLAs might not be realized.

Recovery of business-critical data

Here again, it's understandable to have concerns about recovering business-critical data in virtualized environments in a timely fashion. Virtualization may prevent you from meeting the recovery time objectives that your business requires.

Since overcoming these challenges is critical for a successful cloud strategy, you may want to look at other options to support VMware environments—so your organization can reap the benefits while managing the risk. That's where fully integrated, converged infrastructures should be considered.

Reality check: Converged infrastructures deliver the full value of virtualization

To relieve the virtualization headaches that come with homegrown environments for VMware, see what converged infrastructures offer with flexible and robust platforms for quickly capitalizing on cloud benefits. Converged infrastructures for VMware ensure the consistency and level of control required for business-critical workload environments. Converged infrastructures are integrated solutions composed of servers, storage, networking components, hypervisor and unified orchestration software. They're pretested to optimize performance and then preconfigured to your organization's requirements, which can dramatically reduce deployment time.

Converged infrastructures save you the time, expense and complexity around architecting, building, testing and deploying virtualized infrastructures. Choosing a converged infrastructure transfers those challenges, along with their associated risks, cost and time, to the certified vendor. So, the selection of hardware, software and integration work is already completed, and your solution can be up and running quickly.

The shift to converged infrastructures is happening fast. In the next 4 years, over half of data center hardware will be purchased as a converged infrastructure. You can bring the most critical workloads to a cloud environment with a converged

infrastructure that provides predictable reliability, quick time to value, and the ability to rapidly expand your private cloud environment as your requirements evolve. A converged infrastructure improves the utilization of IT resources while streamlining management within VMware environments.

If you rely on VMware as your virtualization environment, a converged infrastructure from Hitachi Data Systems can give you the performance, scalability and reliability you need. But more important, it provides unified orchestration to simplify management, monitoring and provisioning.

Hitachi Data Systems and VMware put the vroom in virtualization

Hitachi Unified Compute Platform (UCP) Pro for VMware vSphere is a turnkey solution that's pre-configured at the factory and delivered to your site racked, cabled and configured, with all the software pre-loaded. It can be up and running in 5 days or less after it hits the data center floor.

Unified orchestration via Hitachi UCP Director software provides comprehensive and simplified management. The innovative software is uniquely integrated with VMware vSphere and

significantly reduces time to value and operational costs for even the most demanding applications. UCP Director enables faster deployment of cloud infrastructure and efficient resource allocation which prevents over-provisioning, optimizes your utilization and its automation reduces current time and cost spent on routine administrative processes.

UCP Pro for VMware vSphere simplifies and accelerates the build-out of robust private cloud infrastructures. It assures that the underlying server, storage and networking resources are in place and aligned to the appropriate business service levels. The innovative software efficiently and reliably coordinates the management of all components and operating software as collective resources.

If you're contemplating a converged infrastructure that provides everything from servers to storage, Hitachi UCP Pro is the perfect platform for your VMware environments.

Hitachi Data Systems can help

Hitachi Data Systems and VMware can help you improve IT agility, lower infrastructure costs and move to the cloud with predictable reliability, accelerated value and exceptional flexibility.

Contact Us

To learn more about how Hitachi Data Systems can help your organization move to a converged infrastructure, please contact your authorized Hitachi sales representative.

Together, we achieve these results by creating a streamlined, tightly integrated turnkey platform that provides the infrastructure you need and the reliability and speed your enterprise demands.

UCP Pro for VMware vSphere provides a robust option to fit your environment and the changing landscape of business and information technologies. It supports your business needs today and lets you establish a flexible foundation for the data center of the future. Interested in learning more? Make the call today to understand how quickly you can start seeing the benefits of HDS converged infrastructures.

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