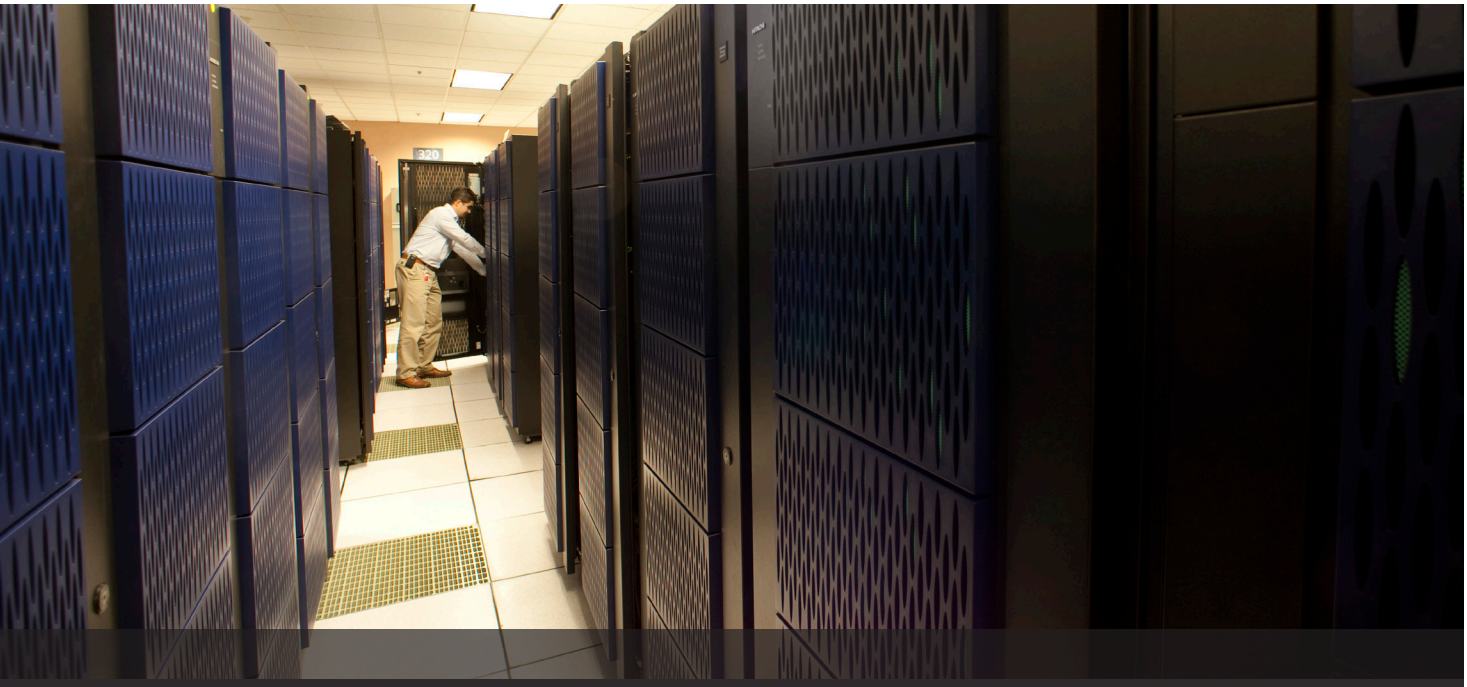
HITACHI



Microsoft | Hyper-V Cloud

Hyper-V Cloud Fast Track

WHAT IS THE PRIVATE CLOUD?

Microsoft® private cloud solutions, built on Windows Server® 2008 R2 Hyper-V™ and Microsoft System Center, are a key element of our approach to cloud computing, helping customers and service providers build dedicated IaaS environments that transform the way they deliver IT services. A Microsoft private cloud pools and dynamically allocates IT resources across business units. This means that IT can deploy services quickly and scale them out to meet critical needs whenever and wherever they occur—all while tracking resource usage with appropriate charges back to line-of-business owners.

Microsoft private cloud solutions are optimized for service delivery and provide both the flexibility and control to harness the full power of the cloud today. These solutions:

- Provide a familiar and consistent platform across traditional, private, and public cloud environments, so that customers can use the investments and skill sets they already have, while taking advantage of the new value the cloud offers.
- Manage across heterogeneous physical and virtual environments, standardize and automate data center processes, and provide deep insight into key business applications—helping to enable end-to-end services management.
- Leverage a common identity framework, management platform, and development environment across private and public clouds to ensure investments made today in a private cloud can be extended out to public cloud offerings as business demands evolve.

Through just-in-time provisioning of IaaS on dedicated resources, IT can streamline processes on a standardized, reliable, and scalable platform; be more responsive to business needs; and more fully use available hardware.

FEATURES

- Shared pools of resources
- Scalable and elastic
- Continuous availability
- Automated workflow
- Integrated security and identity
- Predictable, multi-tenant platform
- Usage metering and chargeback
- Self-service portal and services catalog

What Is Hyper-V Cloud Fast Track?

MICROSOFT HYPER-V CLOUD FAST TRACK is a reference architecture for building private clouds that combines Microsoft software, consolidated guidance, and validated configurations with Hitachi compute and storage technologies, as well as value-added software components.

Hyper-V Cloud Fast Track solutions provide a turnkey approach to delivering scalable, preconfigured, and validated infrastructure platforms for on-premises private cloud implementations. With local control over data and operations, IT can dynamically pool, allocate, secure, and manage resources for agile Infrastructure as a Service. Likewise, business units can deploy line-of-business applications with speed and consistency using self-provisioning (and decommissioning) and automated data center services in a virtualized environment.

PRIVATE CLOUD ON YOUR TERMS

FASTER DEPLOYMENT:
Rich features and support make private clouds easy to deploy.

- End-to-end architectural and deployment guidance
- Streamlined infrastructure planning due to predefined capacity
- Enhanced functionality and automation through deep knowledge of infrastructure
- Integrated management for virtual machine and infrastructure deployment
- Self-service portal for rapid and simplified provisioning of resources

REDUCED RISK:
Validated configurations mean you can implement with confidence.

- Tested, end-to-end interoperability of compute, storage, and network
- Predefined, out-of-box solutions based on a common cloud architecture
- High degree of service availability through automated load balancing

PREDICTABLE RESULTS:
With Hitachi, you can create an avenue for further automation and orchestration

- Building blocks for private cloud infrastructures with predictable performance and flexibility
- Easy to order and deploy prevalidated reference architectures that combine best-in-class Hitachi storage and servers with networking and Microsoft software
- Quickly implement what you need today for your private cloud

Microsoft and Hitachi deliver on the promise of agile private cloud computing through an interoperable hardware and software platform based on a standardized reference architecture. A Hyper-V Cloud from Hitachi can greatly reduce time-to-value for virtualization infrastructure investments because it unites shared compute, storage, and network resources into a flexible, cost-effective solution based on off-the-shelf components. The reference architecture defines a common set of requirements to help IT consolidate hardware platforms into an environment that is more manageable, better used, and less consumptive..

Why Hitachi?

USING HITACHI SOLUTIONS built on Microsoft Hyper-V Cloud Fast Track, organizations can quickly deploy private cloud infrastructures with predictable results and create an avenue for further automation and orchestration. These solutions provide validated reference architectures for combining Hitachi compute and storage with network infrastructure and Windows Server 2008 R2 with Hyper-V and System Center software. Each solution is tuned to different business needs, so organizations can quickly build and use the benefits of private cloud solutions to improve agility, maximize efficiency, and optimize control of their data centers.

Compute

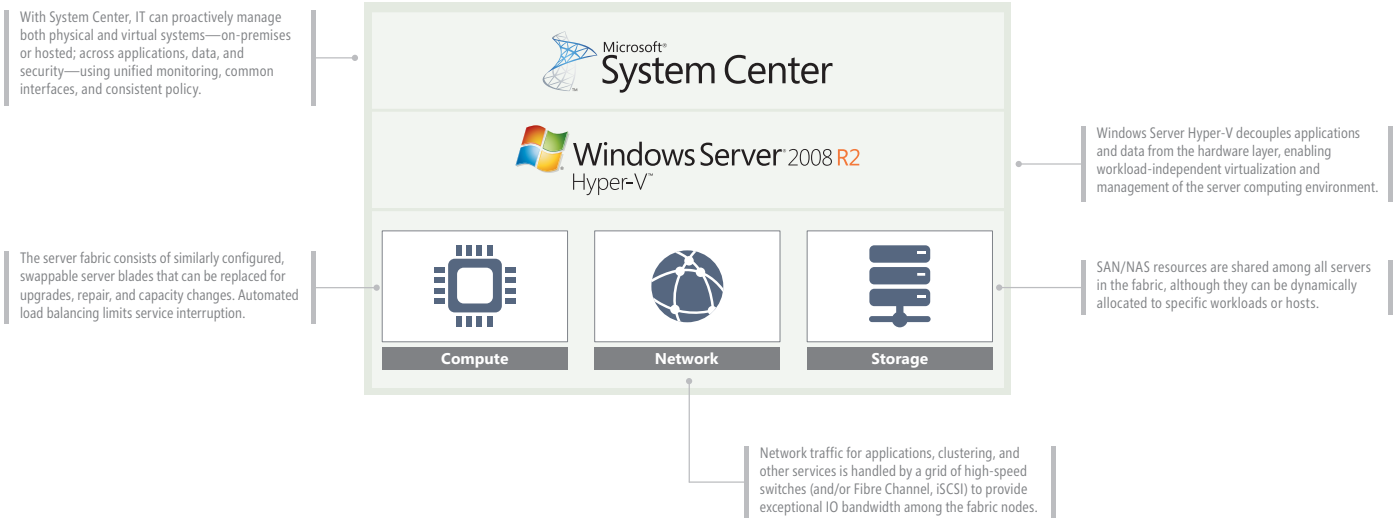
- Hitachi blade servers optimized to work with Hyper-V and designed to provide a cloud computing environment that is reliable, scalable, multi-tenant, and multi-tiered
- Massive throughput and unprecedented configuration flexibility
- Exceptional flexibility due to choice of technology and industry-standard components

Storage

- Outstanding performance and flexibility with 3D scaling provided by Hitachi Virtual Storage Platform with virtual storage pools and intelligent tiering
- Extreme reliability with Hitachi Adaptable Modular Storage and its Hitachi Dynamic Load Balancing Controller (Active–active)
- Simplified and centralized storage management with Hitachi Command Suite software

Hyper-V Cloud Reference Architecture

The solution includes Hitachi hardware designed to support the comprehensive operating system, virtualization, and management capabilities offered by Windows Server 2008 R2, Hyper-V, and System Center.



Windows Server 2008 R2 Hyper-V

Windows Server 2008 R2 Hyper-V™

Take advantage of the cost savings of virtualization through Windows Server 2008 R2. Consolidate multiple server roles as separate virtual machines on a single physical machine that runs different operating systems in parallel and uses the power of x64 computing.

Microsoft® System Center

System Center offers a comprehensive set of management tools that can help an enterprise reduce training costs, apply uniform policies, and simplify maintenance by using existing software, resources, and IT management processes.

HITACHI

Hitachi Solution

- Prevalidated reference architecture for predictable, repeatable, and reliable results
- Faster deployment and increased ability to meet changing needs with a single source for components and prescriptive guides
- Coordinated management using System Center Virtual Machine Manager

Hitachi Compute

- Blade Server 2000, the enterprise-class powerhouse of this 10U, 8-blade system with Intel Xeon 5600 and 7500 Series processors
- Support for up to 256 GB memory and 162 Gbps of I/O throughput on each 7500 Series blade
- Blade-symmetric multi-processor interconnect technology to scale compute resources out and up

Hitachi Storage

- Options for the Virtual Storage Platform and Adaptable Modular Storage 2500
- Ability to manage up to 5 million logical objects and 255 PB of virtualized capacity
- Agentless technologies to manage large storage resources and deployments
- Integrated, automated, and hardware-based front-to-back I/O load balancing

FOR MORE INFORMATION:

- http://www.microsoft.com/privatecloud
- http://www.hds.com/solutions/infrastructure/microsoft-cloud-deployments/index.html