A combined cloud offering from Hitachi Data Systems and Microsoft enables telecom businesses to quickly deploy a cloud infrastructure. It supports advanced capabilities, such as managed hosting, on-demand virtual servers, clustering and network services.

**Hitachi Telecom Partners Host Software as a Service on Hitachi Unified Compute Platform Select for Microsoft® Private Cloud**

**A Cloud Platform for Today’s Telecommunications Firms**

The telecommunications industry is in a state of continuous technological and economic flux, driven by rapid growth, intense competition, evolving government regulations and new technologies. Globally, telecommunications was a US$4.7 trillion sector in 2012¹, with wireless service subscriptions alone increasing from 4 billion worldwide at the end of 2008 to 5.9 billion in 2011². The industry’s exponential growth stems in part from changes in customer demands. In just the past few years, customers have grown to depend on tablets and smartphones as their business tools of choice. Video conferencing, audio conferencing and online collaboration have become mainstream expectations.

Rapid change inevitably leads to business opportunities. In the telecom industry, the opportunity now exists to leverage a private cloud and hosting model to augment customer communications at lower cost and with greater flexibility than ever before. The following 2 success stories illustrate how Hitachi Data Systems and Microsoft deliver a powerful, reliable cloud environment. This environment significantly improves efficiency and greatly expands scalability to meet the needs of the rapidly growing telecom industry.

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¹Telecommunications Industry Association
²International Telecommunications Union
Global Telecom Boosts Efficiency, Scalability With Private Cloud

To host communications solutions for its large enterprise customers, a global telecommunications company would build out individual, standalone deployments on a customer-by-customer basis. From specifying the service, to design and deployment, the process was slow, inefficient and costly.

The company recognized that it could reduce operating and capital expenses. It saw that it could develop a significant competitive edge by taking advantage of new hosting technologies to serve all enterprise customers with a single infrastructure. Current and prospective customers could use the same platform, which was expected to lead to higher levels of efficiency, larger sales and easier installations.

The telecom company had an established relationship with Microsoft and was interested in the Microsoft Private Cloud solution. Microsoft suggested Hitachi Data Systems as a strategic partner because the 2 companies have developed a joint cloud infrastructure that can deliver high levels of security, availability and reliability. It can also offer the rapid scaling capabilities that telecom companies require. The joint offering combines Microsoft cloud technologies, including Microsoft software, consolidated guidance and validated configuration with Hitachi servers, storage and network infrastructure.

The telecom company agreed to a proof of concept in which Microsoft and Hitachi customized and implemented the private cloud solution. In just 1 week the entire infrastructure with all applications was up and running. The infrastructure featured Microsoft Lync Server and Microsoft Exchange Server with System Center Operations Manager (SCOM), 40 virtual machines (VMs), and an Active Directory. It relied on Microsoft’s Private Cloud Fast Track program, with a configuration validated by Microsoft and a converged, preconfigured hardware platform implemented by Hitachi, which also provided service and support.

Before implementing the new solution, the telecom company could service 5,000 to 30,000 users on a single platform. The new platform will support 1.2 million users at a minimum scaling level, and can handle multiple customers on the same deployment due to the multitenant capability. Microsoft Exchange delivers the industry standard for business email, and with Hitachi infrastructure as a service (IaaS), the company can offer “five-nines” service level agreements (SLAs), compared to other hosted email offerings that offer “three-nines” SLAs.

The Hitachi team provided an initial configuration of the Microsoft Lync deployment, using Hitachi Unified Compute Platform (UCP) Select for Microsoft Private Cloud to meet the expected resource consumption. (Hitachi UCP Select for Microsoft Private Cloud is the Hitachi Data Systems global brand for solutions for Microsoft Private Cloud Fast Track.) By eliminating upfront integration work, those efforts gave the project a 6-week jump start. They were just 1 example of how Hitachi Data Systems and Microsoft were able to accelerate deployment and time to value. The company’s management team responsible for the Lync deployment indicated that implementation and follow-up services provided the best experience in working with vendors on a large technology project.

The company plans to scale in an automated fashion using the inherent flexibility of UCP Select for Microsoft Private Cloud. Based on the initial proof of concept, the company will have the agility to repurpose its infrastructure as necessary, and can plan and budget its expansions months in advance. And, when new business opportunities arise, the company will have the resources in place to accommodate its emerging needs.
Regional Telecom Firm Uses Private Cloud From Hitachi Data Systems and Microsoft to Gain Competitive Advantage

A regional telecom firm that supports millions of customers, as well as a number of group companies recognized that their IT environments needed to improve on many levels. They needed to improve both internal and external services, reduce downtime, simplify maintenance and updates, and integrate management for lower operational and capital expenses. The goal was to deploy a single, secure infrastructure solution, so internal and external customers could request IT resources at a defined price and service level, leading to predictable and sustainable growth.

After evaluating numerous vendor options, the company selected the joint cloud offering from Hitachi Data Systems and Microsoft. The solution provided a useful life of 5 to 10 years, capacity to support 15,000 VMs at maturity, and options to include hybrid cloud solutions in the future. Together, Hitachi Data Systems and Microsoft customized the solution to meet the company’s requirements for multitenancy, security and uptime. Hitachi Data Systems provided the hardware, migration services and server-specific deployment services to support Microsoft’s private cloud technologies.
The solution featured Microsoft SharePoint® Server and Microsoft Distributed Connectivity Services, due to their ability to scale to tens of thousands of VMs. The solution also followed the Microsoft Private Cloud Fast Track program and relied on Microsoft System Center Orchestrator as a workflow management solution.

The private cloud on-premise solution was deployed in 10 months, with an initial internal launch, followed by deployment to affiliated companies, and then released to enterprise customers.

All of the company's applications from disparate systems were migrated to the new platform without any downtime, with more than 1,000 initial VMs built to host the applications. The infrastructure also provides a five-nines SLA that is stronger than any public cloud offering in the region.

The Microsoft Fast Track Program validates that the Hitachi Data Systems reference architectures deliver the promised service, support and compatibility. Microsoft has validated UCP Select for Microsoft Private Cloud offerings. The preconfigured solutions were deployed on the company's data center floor, enabling faster time to market and increased resiliency at a lower cost of ownership.

Using Hitachi Data Systems servers, network and storage with Microsoft Private Cloud technologies, the telecom company was able to achieve predictable results. It was also able to create an avenue for further automation and orchestration. In fact, the consolidated platform proved to be highly reliable and successful both internally and with the telecom's affiliated groups. As a result, the company recently made its IaaS offerings available to small and medium enterprises across the continent.

**Benefits of the Hitachi Data Systems and Microsoft Partner Alliance**

Hitachi Data Systems is a Microsoft Gold Certified Partner and prioritizes Microsoft as a key alliance partner. Hitachi Data Systems offers a complete array of engineered and integrated solutions optimized for Microsoft application environments. These solutions enable telecom customers of all sizes to implement scalable, available and reliable architectures in a cost-effective way.

The combined cloud offering from Hitachi Data Systems and Microsoft enables telecom businesses to quickly deploy a cloud infrastructure with advanced capabilities. These capabilities range from managed hosting, on-demand virtual servers and clustering to network services. The cloud solution provides predictable results today. It also creates an avenue for accelerated automation, orchestration and growth to host Microsoft software-as-a-service offerings on Hitachi UCP Select for Microsoft Private Cloud platforms.