By leveraging Hitachi Unified Compute Platform, we seamlessly integrated our virtual and physical infrastructure, allowing us to centrally provision, monitor and manage servers, storage, networking components and virtual machines to cater to the ever-increasing demand on computing and storage resources in a timely manner.

Eric Ho
Chief Information Officer and Co-Owner
Hong Kong Broadband Network

Hong Kong Broadband Network Deploys Hitachi Unified Compute Platform to Accelerate Service Time to Market

To speed up its roll-out of key business initiatives, Hong Kong Broadband Network Limited (HKBN) decided to improve its IT infrastructure. The company had legacy systems that were incompatible with the latest hardware, resulting in difficulties. By deploying Hitachi Unified Compute Platform (UCP) for VMware vSphere, it was able to scale up to meet business needs. The solution also made Hong Kong Broadband Network Limited’s infrastructure more flexible, while increasing storage capacity, easing management and speeding up service roll-out time.

Hong Kong Broadband Network Limited (HKBN), a local telecommunications and Internet service provider (ISP), is one of the largest broadband services providers in Hong Kong. Employing over 2,500 staff across Hong Kong and mainland China, the company operates with the vision to “Make Our Hong Kong a Better Place to Live.”

HKBN changed the way Hong Kong residents dialed long distance and revolutionized the Hong Kong broadband ISP industry. Providing both residential and enterprise services, the company serves 1.4 million subscribers, covers 1,800 commercial buildings, and provides 11,000 Wi-Fi hotspots. It has also invested HK$4 billion in building a fiber optic network to provide world-class Internet connectivity performance. According to Akamai Technologies Q3 2013 “State of the Internet” report, HKBN offers an average peak connection speed of 84.6Mb/sec, which is much higher than the Hong Kong average peak connection speed of 64.4Mb/sec. On the residential side, HKBN focuses on 3 service pillars: access, for broadband and Wi-Fi services; communication, for telecommunications and IDD; and entertainment, for network television services. For enterprise users, it provides a series of voice, data center and cloud services.

Benefits at a Glance
- 40% savings in electricity costs and space.
- System standardization.
- Flexibility and ease of management.
Challenges
HKBN required an infrastructure that was very responsive to business needs. Previously, the IT infrastructure was made up of 200 physical servers. The servers were from different vendors, were built using different hardware, ran different operating systems and versions. This made the infrastructure both complex and difficult to manage. Although the infrastructure was functional, upgrading and maintaining it was a daunting task.

To remain competitive, HKBN needed to roll out new services and projects quickly. However, the complex infrastructure used up large amounts of time to deploy new projects and services. Additional overhead and manpower were required for the updates, translating into relatively high business operating cost.

Solution
To ensure a smooth program roll-out, HKBN decided to improve its IT infrastructure. It searched for an infrastructure solution that can be quickly deployed and is affordable. HKBN also recognized the risks of migrating to the cloud, as this required the migration of all of its existing mission-critical services to another platform. So HKBN looked for a reliable and low-risk answer.

“After thoughtful consideration, we chose Hitachi Unified Compute Platform. With the same price, other vendors could only offer mid-tier storage while HDS offers enterprise-class storage with a 99.999% service level agreement (SLA) and commitment to completing the implementation and migration in 90 days,” said Senior IT Manager and Co-Owner of Hong Kong Broadband Network, WL Fok. “This is a crucial factor for us when we considered HDS. Any delay in the implementation would jeopardize our Cloud strategy. With the successful implementation, we were able to migrate 60 systems to this new platform within a week, much faster than our expectations.”

Hitachi UCP for VMware vSphere is currently hosting HKBN’s internal customer relationship management (CRM) system, with about 1,500 internal users across Hong Kong and Guangzhou. HKBN’s CRM system currently provides services that are used by various business functions, including call centers and sales teams.

HKBN utilizes Hitachi Unified Compute Platform Director software to quickly bring infrastructure on board by using preconfigured settings. UCP Director improves troubleshooting with integrated physical and virtual infrastructure monitoring and alerts within VMware vCenter, while simplifying the management of both physical and virtual resources.

Benefits
The deployment of UCP for VMware vSphere grants HKBN access to the cloud, and will eventually replace its fleet of physical servers completely. The solution also provides the flexibility, standardization and ease of management that HKBN was looking for in its latest IT infrastructure refresh.

Flexibility
HKBN’s previous legacy-based infrastructure was plagued with inefficiencies. In addition, HKBN launched a new service program, “Free-To-Go-Anytime.” This service package offered 100Mb/sec broadband and Wi-Fi at a competitive price for the company’s large customer base in Hong Kong. To ensure success, collaboration across teams was required for server configuration and setup, but implementation took as long as 4 weeks. Having a solution with high performance and speed that was flexible and compatible with HKBN’s newest

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programs was critical to its success. With the deployment of Hitachi UCP for VMware vSphere as the new cloud setup, deploying a new service or project only takes a few hours or up to 1 day.

“We are pleased with the outcomes that HDS provided. With this automated platform, we can shorten the system provision time drastically,” said Fok.

“Taking ‘Free-To-Go-Anywhere’ as an example, we spent only 1 day to provision the system from scratch. Before, we wouldn’t even have enough time to purchase hardware within such a timeframe. With the UCP in place, we can deploy our applications to customers faster than ever, beating our competitors by speed and efficiency,” he added.

System Standardization

“We have 200 servers in our data centers, from different vendors and running different operating systems. Standardization and management of these servers have always been difficult tasks. We had to regularly customize the systems to adapt to new changes and for integration,” Fok explained.

With UCP, HKBN is now able to standardize the configurations across platforms. More importantly, the company has already replaced the majority of its physical servers and greatly reduced the number of racks from 10 to 2, saving 40% in electricity costs. This reduced operating costs, and made HKBN a Green Company.

Ease of Management

“UCP Director provides us a unified console to control and monitor our operations, which streamlines the process, and provisions resources quickly and responses promptly,” said Fok.

With Hitachi UCP for VMware vSphere and UCP Director deployed, HKBN is able to drastically improve the efficiency of system administrators in the IT department. Before the new platform was deployed, one administrator could only manage 30-50 servers, but now each of them is able to manage up to 100-150 servers. “The virtualized machines on the new platform come with HA (high availability) and DR (disaster recovery) capabilities preconfigured, which I really appreciated. The preconfigured templates save us precious time, especially when we are trying to roll a new project out quickly,” added Fok. The reduction in the need for maintenance manpower allowed HKBN to redistribute its IT resources to support future projects, as well as to cater other platforms operating on-site, such as UNIX servers and database servers.