Global Technology Solutions Provider Consolidates Distributed Desktops in a Centrally Managed Hitachi Environment

iGATE is a global provider of integrated technology and operations-based solutions, with headquarters in Bridgewater, New Jersey. As a trusted partner to corporations in North America, Europe and Asia Pacific, iGATE solves clients’ business challenges by leveraging its technology and process capabilities, as well as its domain and industry expertise.

iGATE found its IT resources stretched as users operated multiple desktop systems that were distributed across the company. It sought to consolidate these under a centrally managed IT environment in order to facilitate their management and monitoring while still ensuring a reliable user experience. Hitachi Data Systems answered this challenge with a solution based on Hitachi Compute Blade 500 and Hitachi Unified Storage VM.

The Challenge
With employees spread across 3 locations in India, iGATE’s IT team was hard-pressed to service multiple users operating dispersed desktop units. It needed a way to integrate these desktops into a centrally managed IT environment to facilitate easier management and monitoring of the individual systems. Such an environment would enable iGATE to better manage, monitor and provision IT resources, as well as to keep an eye on compliance and security risks.

This kind of centralized management was possible under a virtual desktop infrastructure (VDI) solution. A VDI would allow users to access desktop services from central IT resources without the need for a PC to run locally provisioned applications. The solution would allow iGATE not only to track, monitor and manage usage but also to roll out new updates and patches quickly and efficiently. Performing these tasks on every desktop was proving both time-consuming and challenging, particularly as the numbers of users and desktops grew within the organization.

Benefits at a Glance
- Lower total cost of ownership.
- More flexibility, agility and scalability.
- Easier migration to new operating systems.
- Enhanced security.
- Compliance facilitation.
IT resources and employee productivity were considerably strained under this scenario. In addition to troubleshooting, data protection was a leading IT concern. The data and applications stored on individual desktops were critical to business operations and needed to be backed up. Thus, iGATE had to ensure that regular backup procedures, as well as processes to protect everything from corruption or loss, were in place. VDI would solve these problems, plus ensure that the company was in line with regulatory and compliance requirements governing data protection.

iGATE felt that a VDI implementation also would enable it to keep its overall capital expenses down and thereby lower the solution's total cost of ownership (TCO).

The Solution

The VDI solution that Hitachi delivered for iGATE meets the needs of a wide spectrum of VDI users (see Figure 1). The solution securely delivers individual Microsoft® Windows® operating systems and applications to desktops that are distributed across the company. It simultaneously ensures a high-definition user experience and meets critical availability, scalability and data protection mandates.

Storage is an important factor in VDI deployment success. VDI operations require an enormous amount of I/O transactions, which severely tax traditional storage architectures. In fact, storage can be the limiting factor in achieving the desired VDI performance, scalability and efficiency. Thus, iGATE’s solution uses Hitachi Unified Storage VM, which offers high-performance, reliable and cost-effective access to users.

Since iGATE’s users had set expectations for acceptable desktop application performance, the VDI requirements were fairly stringent. The HDS team had to demonstrate that a reliable level of performance was possible at all times, peak and non-peak. It also was important to ensure that there were no availability issues and that the system had the capacity to support a growing user base within iGATE. An integrated and high-performance solution that was completely optimized, right from the storage architecture to the compute blade and VDI delivery platform, was key to meeting these user requirements.

Hitachi Compute Blade 500 is part of the solution because it combines high-end features with the high compute density and adaptable architecture needed to keep iGATE’s costs low and to protect its investment. It delivers a combination of virtualization support, massive I/O bandwidth, large memory capacity, and configuration flexibility that iGATE can leverage for any virtualized application.

Citrix software delivers the final user experience and is another critical element of the solution. It has helped transform iGATE’s Windows-based desktops and applications into an on-demand service available to any user within iGATE. With built-in efficient provisioning features, it requires less storage compared to other methods of creating virtual desktops.

In short, the VDI package that the HDS team put together for iGATE proved the ideal solution for a computing environment with an expanding user base, extensive data growth and highly transactional, input/output-intensive applications.

iGATE has deployed 1,200 end-points in current phase and the VDI footprint is expected to expand to 3,000 users within a 10-12 month time frame.

Benefits

Some of the primary benefits realized or expected from the VDI implementation include:

1) Lower TCO. By keeping a lid on both capital expenses and IT operating costs through virtualized and centralized management, the VDI implementation will lower iGATE’s total cost of ownership for the solution.
2) **More flexibility and agility.** Since VDI is run from the data center, making changes to its configuration is relatively easy.

3) **Facilitates migration to new operating systems.** VDI can make the process of moving to a new operating system much easier while also keeping the cost of migration low.

4) **Scalability.** It is now easy for iGATE to add more virtualized desktops to the system as the company grows. New users can be up and running in a relatively short period of time.

5) **Less demand on IT resources.** VDI will enable iGATE’s IT team to keep its support and maintenance costs down by enabling compliance and uniformity of delivery from a centralized point in the data center.

6) **Reduced downtime.** iGATE can perform patches and software upgrades in the data center quickly, reducing desktop downtime and increasing availability.

7) **Enhanced security.** Through the VDI solution, iGATE’s IT administrators can deliver the right levels of application access to the right users. Apart from quickly applying software patches as these are available, they can also deliver the latest in virus and malware protection as needed. This makes the IT environment less vulnerable to hacking or corruption.

8) **Compliance facilitation.** Ensuring compliance with regulatory requirements regarding data storage and protection will be much easier with the centrally controlled infrastructure now in place at iGATE.