Infosys pioneers implementation of VMware virtualization for SAP HANA on the Hitachi Unified Compute Platform to offer customers new SAP HANA based services running on VMware.

Infosys needed to augment its physical infrastructure supporting its SAP HANA RDBMS and applications running at the Infosys HANA Center of Excellence in India. Infosys collaborated with VMware and Hitachi to make this a reality. By deploying VMware vSphere on Hitachi Unified Compute Platform (UCP) for the SAP HANA platform and leveraging Hitachi's SAP HANA VM templates, Infosys has gained the ability to rapidly provision new SAP HANA virtual machines and SAP Applications powered by SAP HANA, in a few minutes as opposed to days, while reducing the total cost of delivery by 85 percent.

**Customer Profile**

Infosys is a global leader in consulting, technology, outsourcing, and next-generation services. The company enable clients, in more than 50 countries, to stay a step ahead of emerging business trends and outperform the competition. Infosys helps them transform and thrive in a changing world by co-creating breakthrough solutions that combine strategic insights and execution excellence.

Infosys (NYSE: INFY), with US$8.7 billion in annual revenues and 176,000+ employees, is helping enterprises renew themselves while also creating new avenues to generate value.

The Challenge

Infosys provides SAP services to customers across the globe. The company operates an SAP HANA relational database management system (RDBMS) – that processes a high volume of transactions and complex queries – at their Centre of Excellence (CoE) located in India. The CoE is used to demonstrate how SAP systems can improve the efficiency of customers’ businesses.

In order to continue to meet the growing volume of requests for demos from customers and prospects, Infosys had to significantly accelerate the time taken to deploy SAP applications running with SAP HANA instances. The time taken to deploy a new machine was one week, which was deemed inefficient and the cost was prohibitive. Infosys decided to look for a more rapid and cost-efficient solution.

Infosys needed to upgrade the IT infrastructure running in the CoE to meet the rising demand. “We thought of scaling up the hardware used to run our SAP HANA RDBMS, but it was ageing and couldn’t offer the performance, scalability, and robustness of newer best-in-class equipment,” says Mr Devesh Dadhich, Principal Technology Architect, Infosys. “We also wanted to purchase hardware that could be virtualized so we could maximize the utilization of its resources and minimize our costs. Had we chosen to continue deploying SAP HANA instances in a non-virtualized environment, we would have needed many more appliances.”

The Solution

Infosys upgraded the infrastructure to include the Hitachi Unified Compute Platform (UCP) and virtualization from VMware. “VMware vSphere was the only product certified by SAP to deliver virtualization featuring capabilities such as dynamic scalability and rapid provisioning...”
"Our overall experience working with VMware has been deeply enriching and enabled us to achieve some significant economies. The customer care and account managers have offered their support to us anytime we need it."

Mr Devesh Dadhich, Principal Technology Architect, Infosys

**BUSINESS BENEFITS**

- New SAP HANA virtual machines deployed in few minutes using Hitachi’s SAP HANA VM templates
- SAP Applications powered by HANA can be rapidly provisioned in few minutes by templates created by Infosys HANA CoE
- Reduction in the total cost of delivery by 85%
- Cut SAP HANA infrastructure costs by 2.5 times with consolidation offered by Hitachi UCP
- Reduction in power requirements by 96%

**VMWARE FOOTPRINT**

- VMware vSphere 5.5

**APPLICATIONS VIRTUALIZED**

- SAP Suite on HANA
- SAP BW on HANA
- Other SAP Netweaver products powered by HANA

**PLATFORM**

- Hitachi Compute Blade 500
- Hitachi Unified Storage VM

"Selecting the Hitachi UCP converged platform to run the virtualization layer that would deliver SAP HANA enables us to take advantage of a ‘common building block’ approach," explains Mr Sharad Pandey, Senior Consultant, Infosys. “This would enable us to grow from 512 GB appliances to 6 TB appliances in the scale up model and up to 32 TB on the scale out model just by adding Hitachi enterprise-grade infrastructure components into the same stack, and help us maximize the returns our investments.”

Hitachi was responsible to create an SAP HANA VM template and a SUSE Linux Enterprise operating system to streamline any SAP HANA deployment.

“We chose Hitachi as we had worked with them in the past and were pleased with the product and support from their team,” says Mr Pandey. “Further, they have a great partnership with VMware which helped ensure that the solution design and implementation was hassle-free.”

**The Benefits**

The solution deployed has provided Infosys with scalable, cost effective and efficient infrastructure for their CoE. SAP HANA on VMware virtualization running on Hitachi UCP delivers high availability and rapid response times.

The Infosys CoE team is now building customized templates with SAP applications powered by HANA. Using SAP HANA VM templates, Infosys can deliver a new SAP HANA virtual machine in just 20 minutes, while an application built on top of SAP HANA can be templatized, stored in a repository and deployed in just 120 minutes. Through this solution, Infosys has been able to reduce man power costs – encompassing technology migration and maintenance – by about 85 percent.

By running VMware, Infosys has reduced its costs by two and a half times and lowered its power requirements by 96 percent. In addition, its SAP HANA rack space requirements have fallen by 45 percent.

Infosys is able to leverage the new Hitachi UCP for SAP HANA infrastructure to meet the growing volume of demos required. As a result, this improves the company’s ability to showcase the benefits that prospects and clients can expect from working with them.
Looking Forward

Infosys plans to upgrade their Hitachi UCP for SAP HANA from VMware vSphere 5.5 to vSphere 6.0 once the new release is certified by SAP. This would allow them to take advantage of better performance and the reduced use of RAM and storage for operations. “This upgrade will enable us to create monster virtual machine configurations incorporating 4TB RAM per instance, providing a much needed boost for applications that require more resources and provides an efficient way of scaling up workloads,” says Mr. Dadich.

“Our overall experience with VMware and Hitachi has been very positive and has enabled us to achieve some significant savings. The customer care and account managers at VMware and Hitachi have offered their support to us anytime we need it,” he concludes.