Challenge: Current solution did not have headroom or a plan to cope with unforeseen systemic errors.

Solution: Facilitate Infosys with an in-memory database solution.

Outcome: Improved speed enabled additional audit checks, and accommodated unplanned systemic issues.

The Challenge
Infosys is a global leader in consulting, technology, outsourcing and next-generation services. We enable clients, in more than 50 countries, to stay a step ahead of emerging business trends and outperform the competition. We help 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$9.2 billion in LTM revenues and 193,000+ employees, is helping enterprises renew themselves while also creating new avenues to generate value.

Existing systems, programs and processes at Infosys were designed to meet timelines but lacked headroom to conduct additional audits. Also, there was no plan to cope with unplanned systemic errors. Infosys wanted to adopt an in-memory database solution for faster performance. The company sought a solution that could enable additional audit checks and accommodate unplanned systemic issues.

Infosys uses SAP extensively and is a leader in providing SAP services to customers around the world. However, to keep up with the increasing demand and requests for demonstrations from customers and prospects, Infosys needed to accelerate the deployment of SAP applications running with SAP HANA instances. Typical time to deploy a new HANA instance stood at one week, with the provisioning of the dedicated appliance taking additional time. This was not an economical model upon which to scale. In addition to this, the dynamic allocation and de-allocation of resources, which ensured elasticity, was also a requirement. Infosys realized that it needed to upgrade the IT infrastructure of the HANA Center of Excellence (CoE) and started looking for a prompt and cost-effective solution.

Outcomes
- LPAR ensured fast provisioning of resources in less than 20 minutes compared to deploying the physical instance.
- Power cooling and space savings.
- Reduced time to deploy.
- Reduced time to reprovision.
- SAP HANA Tailored Data Center Integration (TDI).
The Solution

To overcome these challenges, Infosys decided to adopt SAP HANA to host SAP Business Suite and Business Warehouse systems and other modules, including the non-HANA instances of SAP. For the hardware, Infosys initiated the implementation of logical partitioning (LPAR) virtualization for SAP HANA on Hitachi Unified Compute Platform for the SAP HANA Platform.

LPAR feature from Hitachi provided Infosys with server virtualization at the firmware level with very low performance overheads. Server hardware resources are divided into multiple partitions, which appear as independent “bare metal” servers that result in improved utilization and reduced costs. With the ability to logically partition the server, multiple SAP HANA-based workloads can run on a single system with minimal impact to the application’s performance.

The CPUs, memory and I/O devices can be assigned in dedicated mode to LPARs to create fully isolated server environments for SAP HANA single-node installations within each LPAR. They run on the same physical host, without any noisy neighbor effects between the different server environments.

The solution for this deployment consisted of Hitachi Compute Blade 500 (CB 500) server with two CB520X B1 blades in a 1.75TB memory configuration, and Hitachi Unified Storage 130 (HUS 130). “We knew that the hardware upscale was in line, as there was an increasing demand for demonstrations from clients. We were also clear that we only wanted to purchase hardware that could be virtualized. We did not want to invest in a non-virtualized environment that would require further investment in the near future. We are happy that Hitachi provided us with a hand-in-glove solution,” says Senior Technology Architect at Infosys, Manjunatha Prasada. The solution combines dedicated host bus adapter (HBA) cards for each LPAR, separated controller ports, and RAID groups within Hitachi storage. The LPAR manager enables the consolidation of multiple productive SAP HANA instances on the same physical server using a single Hitachi storage system.

Benefits

The superior heterogeneous environment from Hitachi, with its own logical partitions running various SAP products and SAP HANA with dedicated resources, has helped the technology leader with speedy performance, business agility, cost-savings and efficiency. Hitachi’s solution has empowered Infosys to respond rapidly to the increasing demands and requests from its customers. The UCP solution from HDS offered Infosys the advantage of a using the common building blocks of CB 500, HUS 130 and the use of LPAR for partitioning and running multiple instances of HANA on the same infrastructure. The solution from HDS also helped Infosys save costs as it enabled utilization of existing hardware to a great extent. The high-performance solution provided by Hitachi opened up avenues for further application utilization. Senior Consultant from Infosys, Sharad Pandey explained, “We were looking for a hardware solution that would empower us with hardware that would satisfy the requisites of SAP HANA Tailored Datacenter Integration (TDI). We are glad that Hitachi not only implemented SAP HANA TDI for nonproductive environments, but also for the LPARs. We are confident that the solution will excite our customers and will reiterate our position as the industry leader.”

Hitachi Solutions for SAP HANA

HP

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