The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

Final Copy of Case Study

LOCATION:
Woburn, MA, US

YEAR:
2011

STATUS:
Laureate

CATEGORY:
Business Responsiveness

ORGANIZATION:
Qualcomm Inc.

ORGANIZATION URL:
http://www.qualcomm.com

PROJECT NAME:
Qualcomm Evolves Data Centers with Hitachi Virtualized Tiered Storage

PROJECT OVERVIEW

The IT department at Qualcomm needed to free up floor space in its two US-based data centers and effectively manage data growth while keeping consistent levels of performance and without adding to their current IT team. This was realized by implementing a tiered storage environment with controller-based virtualization, thin provisioning and Remote Storage Management services based on solutions from Hitachi Data Systems (HDS), including the Hitachi Universal Storage Platform V. Through this project Qualcomm was able to implement a sustainable approach to growing the business without requiring an increase in internal staff or floor space. The implementation of HDS storage solutions also brought greater performance and availability of Qualcomm's critical applications – benefiting a range of Qualcomm business units and employees. With a storage team consisting of only two employees, another key to this project was the use of remote storage management services from HDS. Enabling Qualcomm to focus their storage management team on more value added activities, these services have allowed two employees to manage up to three petabytes of storage without needing to hire additional team members. The move to dynamic "thin" provisioning has also been a boon for Qualcomm. "Dynamic Provisioning may be the biggest win in our tiered environment. The whole process is simplified, taking less of our time, thought, energy…and minimizing any performance issues. We used to invest a lot of thought into how to provision, what spindles were available and what RAID groups and LUSEs we had to consider. Those are all things of the past," explained Scott Whitson, Senior Staff IT Engineer for Qualcomm. Finally, Qualcomm has benefited from cost savings of 30% since using HDS to tier its storage environment. The company has also reclaimed space across its data centers in San Diego and Las Vegas.

SOCIETAL BENEFITS

This project allows Qualcomm to continue to grow the business and innovate around wireless technologies. This allows Qualcomm to continue innovating

around 4G wireless capabilities, further bringing emerging technology to market. This project also enabled a reduction in power consumption in Qualcomm's two data centers.

PROJECT BENEFIT EXAMPLE

Qualcomm's IT team has benefited greatly in terms of convenience, time and energy spent and cost savings since using HDS solutions to implement their new storage infrastructure. Dynamic provision capabilities, in particular, have been highly beneficial to the team. By increasing their virtualized storage capacity, Qualcomm has also been able to avoid the need to procure more floor space or take on higher energy costs. Furthermore, through its newly tiered storage environment Qualcomm has reclaimed space across their data centers. Coupled with the decreased time the IT team must spend managing their storage infrastructure, valuable time and resources have been freed up for the team to focus on more value added and business critical activities. In clearing floor space, the Qualcomm team was also able to optimize power consumption and lower power usage, thus reducing the carbon footprint of their San Diego and Las Vegas data centers.

IS THIS PROJECT AN INNOVATION, BEST PRACTICE? Yes