"Our primary requirements going into this overhaul of our storage infrastructure were ease of data management and better data availability. The Hitachi solution enabled us to meet these and many of our secondary storage needs within a secure service-oriented architecture."

Milind Rajhans  
Sr. Manager, IT  
Mahesh Bank

Mahesh Bank

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<thead>
<tr>
<th>INDUSTRY</th>
<th>Banking and Finance</th>
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| SOLUTION       | Enterprise Platform, Virtualization, Storage Management  
| Hardware       | Hitachi Virtual Storage Platform  
| Software       | Hitachi Dynamic Provisioning, Hitachi ShadowImage®  
|                | Heterogeneous Replication, Hitachi Thin Image (formerly Hitachi Copy-on-Write Snapshot), Hitachi IT Operations Analyzer  
| Services       | Consulting, Design and Implementation Services provided by Hitachi Data Systems Global Solution Services |
Mahesh Bank Seeks to Move from Legacy to Virtualization in Data Storage

As one of the first co-operative banks in the Indian state of Andhra Pradesh to implement a computerized system, Mahesh Bank could be considered a pioneer. However, several cracks were showing up in its long-running legacy system, not the least of which were its daily limitations in handling reporting, regulatory and customer needs. In addition, the interfaces currently in place required older IT skills that were increasingly hard to come by. To upgrade its infrastructure and associated software from legacy to virtualized storage, Mahesh Bank chose a Hitachi solution. Hitachi Virtual Storage Platform with Hitachi software supported the transition with negligible impact on operations, and allows the bank to easily access and manage its growing volume of data.

About Mahesh Bank

The A P Mahesh Co-operative Urban Bank, Ltd., popularly known as Mahesh Bank, was first registered as a Primary Co-operative Society in 1977. It began operations soon after, in 1978. In 1996, the Reserve Bank of India (RBI) awarded it Scheduled Status. This form of recognition is given to banks that meet criteria specified under the Reserve Bank of India Act, 1934. In the process, the bank became the only co-operative bank in Southern India to achieve this status.

Mahesh Bank presently has 38 branches across India. Most branches are located in the twin cities of Hyderabad and Secunderabad, but the bank also has a branch in each of the cities of Jaipur and Mumbai. Its future growth goals include plans to broaden its presence in these and other states.

Significant Upgrade in Storage Functionality and Performance

Before the Hitachi implementation, Mahesh Bank’s IT infrastructure was largely supported by HP technology. Its core banking application along with 5 supporting applications were run on HP servers. HP tapes, networks and VMware formed the other parts of the primary IT system. Hitachi Virtual Storage Platform (VSP) working with Hitachi Dynamic Provisioning software provides Mahesh Bank with a single, centralized and unified platform for automated data placement. As a result, the bank was able to eliminate data silos residing on disparate servers and align its applications to operate in the newly integrated architecture. The 3-D scaling capabilities of VSP resulted in optimal handling of data growth as well as greater efficiency in managing a wide variety of data types.

Data Availability and Reliability

Hitachi ShadowImage® Heterogeneous Replication software provided reliable data replication within the centralized primary source without affecting host applications; this feature was valuable to the bank. The high-speed mirroring technology with quick restore capabilities gave Mahesh Bank the critical protection it sought from instances of data loss or corruption. Additionally, the ongoing access to data during the copying allowed the bank to continue its reporting and other operational activities in a seamless fashion.

Nondisruptive Data Migration

The migration to VSP architecture from the bank’s legacy system was performed with minimal impact on its operations. The host-transparent data migration process took just 40 minutes and did not create any issues with downtime for Mahesh Bank.

“We have a great deal of confidence in the quality of the solution, especially since its components are all made in-house by Hitachi as opposed to being outsourced.”

Milind Rajhans,
Sr. Manager, IT
Mahesh Bank
Key Criteria: Data Availability, Flexibility, Compatibility, Performance

Mahesh Bank considered 2 other vendors before making its purchase decision, and evaluated the HP P9500, HP 3PAR and the IBM® V7000. The Hitachi solution scored over the others on the key criteria of ease of implementation, data availability, flexibility, compatibility and performance. In addition, it supported various leading-edge technologies, including the latest disk drives and SAS back-end connectivity. The 100% uptime guarantee with VSP architecture was attractive for the bank given its hectic pace of operations and sustained application usage.

In addition, Hitachi IT Operations Analyzer (ITOA) software provided visibility for Mahesh Bank’s entire IT infrastructure, spanning servers, storage devices and switches. ITOA software allows administrators to monitor these heterogeneous components through a single window and gain valuable insight into performance and availability metrics. Competing solutions lacked the wide-ranging monitoring capabilities and value that ITOA offered.

Hitachi also had a strong track record in banking systems implementation and had a thorough understanding of the value of data and its integrity in a bank. This knowledge base proved to be another key factor in Mahesh Bank’s decision to go with Hitachi for its new storage implementation.

Benefits Include Cost Savings, Greater Efficiency

The primary benefits resulting from the implementation include:

Cost savings: The nondisruptive migration that Hitachi Data Systems (HDS) is recognized for involves 80% less effort and cost as compared to the industry average. So the cost savings from just the initial migration were significant for the bank. Ongoing cost savings were largely realized through automated and dynamic data placement and reduced power consumption in the data center.

Greater efficiency: The HDS implementation resulted in a more agile storage infrastructure designed for all data types. By flexibly scaling for performance, connectivity and capacity, the implementation allowed Mahesh Bank to optimize the return on its storage assets.

Enhanced sustainability: Improved power efficiency in the new data center made it a far more sustainable operation than under the legacy system previously in place. The implementation also made it easier to scale for growth and greater complexity while using fewer resources.

Improved performance: 3-D scaling, Dynamic Provisioning and other features of the virtualization platform delivered a storage environment that is highly reliable. At the same time, it performs well on data protection and availability, which are all critical attributes for the customer-centric activities at Mahesh Bank.

Future Plans: Upgrades, Disaster Recovery

Based on this experience with Hitachi and its solutions, Mahesh Bank is likely to turn to HDS again for scaling or upgrading its storage infrastructure. In the future, the bank may employ Hitachi business continuity expertise when it is ready to implement a proposed disaster recovery site for its banking network.

Mahesh Bank has cemented its status as an IT trendsetter in co-operative banking circles with this implementation. Its experience with the Hitachi solution is likely to prompt other co-operative banks to look at enterprise-class storage systems to consolidate, manage and secure their data.
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