

## Hitachi Storage Solutions at Work

### EDB Sweden

**INDUSTRY** Services: Outsourcing

**SOLUTIONS** Tiered Storage/Virtualisation

**Hardware**—Hitachi Universal Storage Platform™ model USP100, Hitachi Adaptable Modular Storage model AMS1000 and Hitachi Workgroup Modular Storage model WMS100

**Hardware**—Hitachi HiCommand® Tuning Manager software, Hitachi HiCommand Tiered Storage Manager software and Hitachi HiCommand Device Manager software

**Services**—Provided by Hitachi Data Systems Global Solution Services



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*Peter Bellman  
Unit Manager, Capacity Services  
EDB Sweden*



# Leading IT Outsourcer Revolutionizes Utility Business Model with Hitachi Policy-based Dynamic Tiered Storage

Eager to address trends in customer demand, leading Nordic IT services company EDB has developed an innovative solution for managing its tiered storage environment. Because traditional models for tiered storage outsourcing created cost and labour inefficiencies for employees and clients, EDB worked with Hitachi Data Systems Global Solution Services to implement a Policy-based Dynamic Tiered Storage (PBDTS) solution with virtualisation to overhaul its storage management and develop a more efficient business model.

One of the Nordic region's largest IT services firms, EDB has over 40 years experience in serving leading organisations in the area. Its focus is on delivering outsourcing solutions covering the whole range of business-critical IT services, adding value for its customers by cutting their IT costs and realising their business potential. In 2006, the company employed nearly 4,000 people and generated revenues of £740 million.

EDB traditionally offered hosted tiered storage to customers as part of its service portfolio, but found that the model on which this service was offered had inherent inefficiencies that needed to be addressed. When customers

purchase storage capacity, they pay on a per terabyte (TB) basis. Demanding high application performance, customers would therefore expect to pay for premium storage tiers to support all their data.

Much of the data EDB hosts are contained within application platforms such as Oracle or Microsoft® SQL Server, often as part of a higher-level application such as SAP or Microsoft Exchange. The company recognised that after agreeing to deliver a certain level of service to a customer (in a service level agreement or SLA), administrators would have to over-engineer the storage infrastructure for the whole application in

order to reach this SLA. The client therefore ran the risk of paying more than they needed to ensure the SLA was met. In cases where the application workload was unknown, EDB could find itself over-engineering the infrastructure at its own expense to satisfy customer requirements.

“Customer feedback is very important to us in developing our own business plan,” explains Unit Manager, Capacity Services at EDB Sweden, Peter Bellman. “We thought about this problem and looked at what our clients were telling us and realised that the top priorities for them were having the most cost-efficient infrastructure but also dependable resilience.”

To address this demand, EDB tasked itself with developing a more flexible tiered storage solution that would give customers the freedom to make unanticipated changes and not need to worry about their storage architecture. “A key requirement was a virtualised environment that would enable administrators to move data from tier to tier without affecting business-critical applications,” comments Bellman.

EDB considered solutions from a range of storage vendors, but selected Hitachi Data Systems based on its proven track record in deploying successful virtualised storage environments.

As a first step, EDB worked with consultants from Hitachi Data Systems Global Solution Services (GSS) to deploy a Policy-based Dynamic Tiered Storage solution. The solution is built on the Hitachi Universal Storage Platform™ model USP100, Hitachi Adaptable Modular Storage model AMS1000 and Hitachi Workgroup Modular Storage model WMS100. It also comprises a number of Hitachi Storage Management and HiCommand® Suite modules, specifically HiCommand Device Manager, HiCommand Tiered Storage Manager and HiCommand Tuning Manager software.

The Policy-based Dynamic Tiered Storage solution allows administrators to migrate data in a live system, in a manner that is invisible to the applications that the data underpins. The software tools also enable both monitoring

and intervention to be automated. This solution is therefore able to reduce costs, improve reliability and avoid downtime, effectively meeting EDB's key objectives. It provides administrators with a simple-to-use dashboard, which gives a clear view of all resources available and in use at any time.

EDB deployed the Hitachi Data Systems solution in a production environment for its client, Molnlycke Health Care, running a data-warehousing module of SAP. "The testing immediately illustrated the difference between holding data on high-end and low-end storage," says Bellman. The solution was configured in order to monitor how the whole system was performing and automatically make

when they need it. With virtualised and on-demand services, customers have the option to buy the lowest tier of storage and server capacity, while retaining the flexibility to upgrade if necessary.

This enables EDB to attain a much higher level of efficiency in the services it offers. "Say one client now buys a high level of storage at a high price for all their data in order to ensure a service level," explains Bellman. "With the Hitachi Data Systems solution I can store their data on a lower tier with the ability to migrate it up when needed. In this way I can offer them a price one third what they previously paid, so they are cutting costs while we're ensuring top performance. Everybody wins."

Bellman and his team look forward to rolling out the solution across the business to support all client data. The chargeback functionality is expected to drive significant efficiency improvements by automating the processes involved in calculating the capacity used by each client and therefore the amount they should be billed.

"We're very excited about the potential of the Hitachi Data Systems solution," concludes Bellman. "It will enable us to revolutionise our business model and introduce a system where customers can pay per gigabyte per day, almost like a commodity. This will enable clients to be much more flexible in their use of storage, driving business agility for them and enhanced customer loyalty and market competitiveness for us."



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recommendations as to whether data should be moved up or down the storage stack.

The storage administration team immediately noted an improvement. "We had always assumed that we would still have to do a fair amount of administration manually, so we were pleasantly surprised at the fully automated environment the Hitachi Data Systems solution enabled," continues Bellman. "Even in the earliest stages of deployment, the solution has outperformed our expectations in terms of functionality and in reducing manual input."

One of the main benefits to the team is the ability to use storage virtualisation in conjunction with other virtualised environments, such as SAP on demand, firewall on demand and server on demand. This creates a fully dynamic business concept to offer to clients as they can purchase exactly what they need,

The company has found its relationship with Hitachi Data Systems to be extremely valuable throughout the process. "It's so important to have relationships with companies like Hitachi Data Systems, as they're the technical enablers," says Bellman. "Our customers helped us identify where we needed to go, but the GSS consultants from Hitachi Data Systems helped us identify how to get there."

The technical solution developed for EDB is currently unique in the Nordic IT services market; it is the only on-demand service that is fully automated and combined with virtualised, tiered storage.

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