SUCCESS STORY

Hitachi Storage Solutions at Work

Nielsen//NetRatings

INDUSTRY Services: Internet Media and Market Research

SOLUTIONS Modular Platform/Storage Management/Virtualization

Hardware — Hitachi Adaptable Modular Storage 1000, Hitachi Network Storage Controller 55

Software — Hitachi Resource Manager™ utility package, Hitachi NAS Manager suite of software and Hitachi Device Manager, Hitachi Tuning Manager, Hitachi Dynamic Link Manager, Hitachi ShadowImage® Heterogeneous Replication and Hitachi Universal Volume Manager software

Services — Provided by Hitachi Data Systems and partner AR Systems

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Eric Celeyrette
Director of Technical Operations
Nielsen//NetRatings

AR SYSTEMES
Nielsen//NetRatings Sweeps Away Storage Inefficiencies with Hitachi Controller-based Virtualization and SAN/NAS Platform

Internet ratings giant Nielsen//NetRatings needed to propel its consumer driven data onto a higher performing, always on storage platform to ensure continuous delivery of client data analytics. With a new solution, comprising Hitachi Network Storage Controller for storage virtualization and Hitachi Adaptable Modular Storage for unification of network attached storage (NAS) and storage area networks (SANs), Nielsen//NetRatings now measures high ratings in storage performance and security.

While television has been a mainstream communications workhorse for many decades, the ubiquity of the Internet has amassed significant importance in the business world. Who better to capture Internet consumer information than the sister company to well known TV ratings and market research conglomerate Nielsen Media Research? Collecting and benchmarking data based on more than 70 percent of global Internet activity, Nielsen//NetRatings measures audience numbers and online advertising intelligence to help clients make informed business decisions regarding Internet and digital strategies.

The Business of Internet Know-Who

The Internet's regular business hours are always. For this reason, Nielsen//NetRatings must respond to a very high data availability standard in order to effectively manage its continuously changing database environment. Total uptime and nondisruptive operations are essential to the company's success in tracking, analyzing and packaging consumer data. Nielsen//NetRatings recently focused on development of its MegaPanel® product to derive detailed information about online consumer demographics and behaviors that accurately reflect a general population of home and work Internet usage. By tracking more than a million representative Internet users, MegaPanel data offers clients factual, in-depth knowledge on how people react and respond to client products, services and promotions. “Our information system consists of evolving and dynamic databases. The volumes increase continuously, and, through the panels, our clients can define increasingly sophisticated analyses. We have seen many more requests for very refined data over the past year. In fact, we are inundated,” says Eric Celeyrette, director of technical operations for Nielsen//NetRatings. To stay ahead of the digital commerce landslide, Celeyrette knew that Nielsen//NetRatings would need a way to truly optimize, protect and manage its global data. And the company was always looking for ways to operate more efficiently, reliably and cost effectively.

The Surge of Data Storage Requirements

Celeyrette had several prerequisites for meticulously evolving the current IT infrastructure to support increasing volumes of business data throughout every stage of Nielsen//NetRatings’ information lifecycle. Those requirements could fit across a Web search engine bar: performance, availability and service quality.

The company’s mammoth quantity of data records are housed across a heterogeneous storage architecture comprising 1TB of Oracle databases running client and raw data analytics, plus Sun Fire V1280 servers running Sun Solaris, and a combination of NAS and SAN configurations. Many millions of records are brought into the system, analyzed and accessed constantly throughout the course of any given day. To aptly manage these intricate and evolving analytics, Celeyrette wanted to ensure that a new storage design would be able to offer virtualization and logical partitioning functionalities, along with a common NAS/SAN platform to operate as a single system. “Compared to other solutions in the market that we considered, the Hitachi platform is really the starting point of storage management optimization, and thanks to its
virtualization functionality, we expect a reduction in the costs of administration,” says Celeyrette.

Nielsen/NetRatings selected Hitachi Network Storage Controller 55 as the foundation of its data storage renovation. The Hitachi Adaptable Modular Storage 1000 would also be integral to Nielsen/NetRatings’ solution, unifying and securing the IT environment.

The Superhighway of Storage Virtualization

Nielsen/NetRatings implemented one Network Storage Controller 55 as the central platform to drive all storage traffic seamlessly through its virtualization vortex. The controller-based virtualization gathers and federates both internal storage and externally attached Hitachi and third party storage into a single pool that can be transparently managed — in real time — with a common set of software tools. Celeyrette was able to take full advantage of Network Storage Controller 55 logical partitioning as well, to allocate the right balance of ports and capacity for application quality of service.

Nielsen/NetRatings storage is now clustered in an active-active model — allowing all servers to remain available through the Network Storage Controller 55 network — to provision for highest availability and utilization of hardware resources without degrading performance. All three Sun servers are connected directly to the Network Storage Controller 55, as is the Adaptable Modular Storage 1000, an intelligent modular system configured to supervise both SAN and NAS traffic within one storage system, using a NAS gateway solution.

The storage composition of the Adaptable Modular Storage 1000 allows Nielsen/NetRatings to consolidate file servers, build centralized storage pools and automate backup functionality through a uniform administration layer. A Hitachi midrange system was put in place to handle 10TB of externalized storage for the Network Storage Controller 55, operating as an on/off ramp for longer term storage.

Migration and consolidation of Nielsen/NetRatings data onto Hitachi storage was carried out jointly by Hitachi Data Systems and partner AR Systems.

A Significant Sweep in Performance Ratings

The refurbished storage architecture has been running for one year at Nielsen/NetRatings. The results are seeing rave reviews. Since deploying the Network Storage Controller 55 and Adaptable Modular Storage 1000, Celeyrette has been able to realize a much more user friendly storage environment.

“We’ve left behind storage complexity for a simpler, more economic way to manage and support the volume and needs of our data. The integrated virtualization of the Network Storage Controller 55 platform has turned out to be of crucial importance, allowing us to advance our services as well as provide a foundation for future applications,” he says.

Another advantage Celeyrette cites as crucial to Nielsen/NetRatings’ momentum is the security that the Hitachi storage environment delivers. Using storage virtualization capabilities of the Network Storage Controller 55, Nielsen/NetRatings is able to manage the availability of storage to servers, contributing to a higher protection and service level. “Finally, our storage architecture now delivers a significant gain in performance,” says Celeyrette. “The flexibility and velocity of the Network Storage Controller 55, in particular, helps us to manage all the servers, the connections and the failover in a completely transparent manner.”

About AR Systems

AR Systems provides strategic enterprise business solutions and systems integration, working “way ahead of time” to justify client needs with the “right attitude” to generate “more value for money.” The AR Systems vision is to be a global Premier Provider of innovative, value-based technology solutions and an integral part of customers’ success.

For more information, visit http://www.arsystemes.fr/