Scandinavia’s largest toy distributor enchants consumers with choice

the company
TOP-TOY A/S is the leading toy distributor in Scandinavia. Holder of the region’s Toys “R” Us franchise, TOP-TOY runs 25 Toys “R” Us megastores in Denmark, Sweden and Norway.

Another TOP-TOY holding is BR-Legetøj (BR Toys), Scandinavia’s largest chain of toyshops. Today serving Denmark and Sweden with 138 shops and two Internet stores, the company began 50 years ago at a newsstand in Roskilde, a Danish seaport famous for the medieval Nordic ships excavated in its harbor.

TOP-TOY offers its customers a spectrum of toys and shopping venues, from local shops and megastores to Web sites and direct mail.

Serving these diverse channels is the TOP-TOY distribution center in Greve, near Copenhagen. The 460,000-square-foot facility fulfills customer orders and automatically replenishes retailers’ shelves by collecting data on daily product turns from in-store POS terminals.

Working with Hewlett-Packard (HP) and Oracle, TOP-TOY consolidated and upgraded the platform that drives this daily flow of information and transactions. An Oracle9i Real Application Clusters (RAC) database running on clustered HP-UX servers replaces two standalone databases and servers. The single clustered solution enables TOP-TOY to enhance the efficiency of distribution and improve services to retailers and consumers.

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As a distributor, TOP-TOY moves information as well as toys. TOP-TOY can use the clustered database solution from HP and Oracle to mine data on product movements, pricing and sales channels. Such information will help TOP-TOY to anticipate and satisfy customer preferences and increase the productivity of its local and global supply chains.

the fascination business

TOP-TOY combines its decades of toy-business acumen with innovative technologies to bring consumers and retailers the strengths of its size – choice and pricing.

“Our main business is to offer a large choice of toys,” says TOP-TOY IT Manager Michael Christiansen. “We want our stores to fascinate customers. Offering lots of choice helps to create a sense of adventure for the children.”

But such magic requires behind-the-scenes rigors. Each of TOP-TOY’s 163 retailers has its own patterns of product turnover and each counts on TOP-TOY for next-day delivery of the mix of toys that satisfies local consumers’ preferences.

“We must provide our customers with excellent service,” Christiansen says. “Daily consolidation of data on what has been sold and next-day replenishment of popular toys are key processes in our business. TOP-TOY operates continuously and so must our systems.”

more availability—less IT complexity and cost

When the distribution center employed two standalone HP-UX servers, each running a separate application and Oracle database, spikes in transaction flows caused time-consuming bottlenecks.

By upgrading to Oracle9i RAC on a clustered HP-UX configuration, TOP-TOY gained a single highly available and high-performance database engine. The clustered solution runs administrative and business systems, including the inventory system used by retailers and the Web store system.

The server platform comprises an HP MC/Serviceguard cluster of HP Server A500 Enterprise servers running the HP-UX operating system. Rated the number-one UNIX system by D.H. Brown Associates, Inc., HP-UX is the platform that Oracle uses to run its own Oracle9i RAC databases.

“Now, we have a complete business system that can run continuously even in the event of hardware or software failure,” says Christiansen. “With Oracle9i RAC and HP Serviceguard, if we lose a server we will still be up and running. And we can maintain the system without disturbing users or disrupting ongoing production. We shift workload to one server while performing maintenance on the other.”

The clustered solution improves performance as well as availability. In the HP-UX environment, all nodes are active and the system automatically balances workloads across the servers. While delivering immediate and substantial gains in both response time and batch-processing speed, these advantages also boost performance scalability.

TOP-TOY can easily adapt or upgrade the cluster, a modular environment with the plug-and-play flexibility of a LEGO model. “The entire system is expandable,” says Christiansen, “as our business grows, we can increase capacity by simply adding servers to the cluster.”
Services from HP and Oracle helped TOP-TOY to transfer smoothly and quickly to the cluster. First, TOP-TOY ported its applications and databases from an Oracle7 platform to Oracle8i. Then HP and Oracle consultants moved the systems onto the HP cluster running Oracle9i RAC, a process that took just two weeks.

The joint team in Denmark pre-configured and shipped an upgraded server to TOP-TOY’s merchandising headquarters in Hong Kong, where consultants from HP Hong Kong installed the system on site.

**advancing with trusted technologies and partners**

TOP-TOY is using its clustered database to provide customers with a world of choice in toys and to bring employees a host of tools that increase their productivity.

“In the future, we can exploit Oracle’s data warehousing capabilities,” says Christiansen, “and provide better business reporting to CEOs, sales managers, purchase managers and financial controllers.”

TOP-TOY is evaluating use of its clustered solution to consolidate Linux-based mail servers and enhance messaging-based collaboration between Hong Kong and Denmark offices. HP and Oracle offer a proven blueprint for such an initiative: Oracle replaced 97 e-mail servers in 56 countries with a single HP-UX cluster running Oracle9i RAC.

“TOP-TOY has been working with HP and Oracle for more than 15 years,” concludes Christiansen. “We appreciate the stability of HP-UX servers and Oracle databases. We also value these companies for fast, top-quality service and support.”
business results

• Fast, 24x7 clustered solution enhances quality and efficiency of distribution
• Single database integrates critical data on turns and channels for decision support
• Cluster scales to suit evolving business needs and spikes in transactions and data
• Platform streamlines execution of IT innovations that increase staff productivity

what makes it work

• Oracle9i RAC
• HP-UX-based MC Serviceguard cluster with RAC Extensions comprising two HP A500 Enterprise servers, each with dual PA8500 processors (440 MHz); and HP StorageWorks Virtual Array 7100 with redundant controllers and cache arrays
• HP consulting to configure cluster
• Oracle consulting to migrate applications from Oracle8i to Oracle9i.

learn more

For more information, please email: OracleEMEA@hp.com