GfK analysis spans millions of websites with help from IBM

IBM Business Partner Qosmos leverages eX5 with Intel processing power to deliver scalability

Overview

The need

GfK Group delivers market research services, including monitoring of mobile Internet usage. Huge volumes of data are gathered in this process, requiring tremendous processing power.

The solution

GfK has partnered with IBM Business Partner Qosmos, a network intelligence company, and has chosen for its processing needs an IBM System x3850 X5 powered by the Intel® Xeon® processor 7500 series.

The benefit

The IBM solution delivers the high-performance processing required for massive data analysis, provides the scalability to analyze up to one billion packets per second, and saves space and energy costs.

Since its founding in 1934, GfK Group, headquartered in Nuremberg, Germany, has grown to become the fourth largest market research organization worldwide, operating in more than 100 countries and employing over 10,000 staff. GfK offers a comprehensive range of information and consultancy services in the three business sectors of Custom Research, Media, and Retail and Technology, which has recently introduced a new research methodology to monitor mobile Internet usage and mobile Internet advertising exposure.

This new Internet monitoring service requires advanced technology to gather, measure and analyze data from mobile media. As Jacques Combet, strategy and business development director for GfK m2, notes, “Technology is the cornerstone of our proposition.”

Four years ago, GfK joined forces with IBM Business Partner Qosmos, a network intelligence company in Paris, to help meet its enormous processing needs in the mobile Internet services sector. Qosmos recently stepped up its IT capabilities with the implementation of the IBM System x3850 X5 platform, powered by the Intel Xeon processor 7500 series.

The combination of IBM and Intel technology has played a key role in enabling GfK to build a distinct competitive advantage. “Today, most of the information gathered on Internet usage is delivered on a monthly or weekly basis,” explains Combet. “We want to deliver on a daily basis, close to real time. To do that, it has to be a seamless, end-to-end process without any hiccups.”

Processing and analyzing huge volumes of data

Technology has long been key to market research, and today high-performance servers and high-capacity databases are important both for data processing and for reporting. Central to these operations is monitoring Internet traffic, including traffic from Internet-enabled mobile devices. GfK’s mobile media metrics reports are comprehensive, Combet explains. “The data we extract includes the website and

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—Jacques Combet, strategy and business development director, GfK m2

page that was visited, the advertising banner that was seen, the ad that was clicked, the duration of the visit, the type of terminal—handset, PC tablet, iPad, 3G key—used for the access, and much more."

The volumes of information gathered in the process can be huge—terabytes per day for each capture point. Irrelevant information is removed, as is personal data. "Everything is anonymized in a very secure manner at the very early data extraction stage," says Combet, "in order to comply with consumer privacy laws." Reports are then provided to clients via an online portal with views customized according to clients' needs.

Helping marketers get the most from advertising

GfK's goal is to provide accurate, reliable and detailed measurements of mobile Internet use and subscriber behavior, along with mobile Internet advertising exposure analyses. Its clients primarily are telecom and media companies, including media planners for advertising agencies. In buying and selling advertising space, media clients need to know whether advertising investments are properly made. Brands moving from traditional broadcast and print media to online media are in special need of research as they alter and adjust their spending patterns.

"The dream of all brands," says Combet, "is to understand the transactional journey of the consumers from the time they see the ad to the time of purchasing. We can now do this, combining purchasing information from consumer panels and the Network Intelligence Solution based upon technology from Qosmos and the IBM System x3850 X5 with Intel Xeon processor 7500 series."

Understanding buying behaviors on the Internet

For its part, Qosmos offers network intelligence technology that delivers a real-time understanding of network activity along with data use and value by identifying and analyzing data as it crosses networks.

Erik Larsson, marketing director at Qosmos, explains. "We specialize in very unique intelligence technology that goes beyond deep packet inspection or DPI. What we do is actually understand every 0 and 1 that goes over an IP network. This could be used for market research purposes, like in the case of GfK, but it could also be used for cyber security, or to optimize networks, or to optimize bandwidth."

Solution components

- IBM System x® 3850 X5
- Intel® Xeon® processor 7500 series
- Red Hat Linux®

Getting more processing power in a smaller footprint

Qosmos has historically relied on IBM solutions, including IBM System x® and IBM BladeCenter® solutions, to handle its demanding infrastructure requirements. For its network intelligence services, the company recently replaced an IBM System x3950 with the x3850 X5. "The x3850 X5 gave us much more horsepower and a smaller footprint," says Larsson. "For us it was an obvious decision. Here in Europe it is especially important to have a small footprint because space in a downtown data center can be expensive. The smaller and more compact we can get it, the better."

Because the real-time demands of Qosmos technology ruled out stacking a number of small servers, achieving high power in a compact footprint was a definite advantage. The single-server solution also saves on energy costs. And to accelerate deployment, the hardware was pre-configured by IBM, so all Qosmos needed to do was install its own software on the Red Hat Linux® operating system.

But performance remained Qosmos' core need. The Intel Xeon processor 7500 series provides the necessary scalability to achieve the processing power Qosmos requires, and helps ensure exceptional performance that is both scalable and reliable.

"With GfK," says Larsson, "we need to analyze hundreds of millions of website URLs each day. That means in any point in time we are analyzing up to one billion packets per second in a carrier network. The x3850 X5 allows us to do real-time processing on the fly directly from the network, with no post-processing needed. That means faster reporting, and better privacy for user data."

From GfK's perspective, Combet describes the IBM System x3850 X5 as robust and future-proof. "It has the power we need to cope with the 10 Gigabits-per-second flow we want to capture. Using the network intelligence technology from Qosmos on the System x3850 X5 with Intel Xeon processor is going to create a revolution in the industry."

Larsson agrees, saying, "We would not be where we are today without technology like the System x3850 X5 and the Intel Xeon processor 7500 series."

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