

CASE STUDY: Packard Bell

IN BRIEF

Industry

- Manufacturing (Consumer Electronics)

Challenges

- Reduce maintenance and operating costs
- Reduce the number of servers used by the group's sales offices through implementation of a centralized IT mode of operation.
- Centralize the group's messaging system in a way that is transparent for all of Packard Bell's sites

Solution

- 15 Steelhead appliances installed at fourteen sites

Benefits

- WAN traffic optimization increases application performance by up to 85%
- Bandwidth utilization reduced by 50%
- All sales office employees have transparent access to their remote applications, as well as all sites using a centralized Exchange 2003 messaging system.
- Server consolidation and IT centralisation have led to significant savings in terms of hardware and operating and maintenance costs.

Packard Bell.



Riverbed Steelhead® Appliances Enable a Consolidation Strategy for Consumer Electronics Manufacturer

Packard Bell (www.packardbell.com) is one of the leading suppliers of not only PCs and notebooks for the consumer market, but also MP3 players, portable GPSs, and home multimedia solutions. Formed in 1991, Packard Bell has become one of Europe's most popular consumer brands. According to the GFK research firm Packard Bell is the favorite PC brand of French consumers. The manufacturer's strategy aims to develop "home digital entertainment" with a view to combining the best in IT with the best in consumer electronics, by leveraging innovative technologies, bold designs, and solid partnerships.

Packard Bell is present in Europe, the Far East, and South America, with fourteen international sites. Geographically decentralized, the manufacturer primarily uses its site located in the Netherlands (corporate headquarters) and its offices in Puteaux and Angers, both in France, to ensure its proper operations. The Dutch site serves as the location of the company's call centers, financial department, datacenter, IT teams, in addition to other divisions. Meanwhile, the French sites house the sales management department, marketing/procurement/customer service departments, a call center, supply chain, corporate engineering departments, and other IT teams. All of these sites are supported by sales offices located elsewhere in the world, including Norway, Germany, Belgium, UK, Spain, Italy, China, Taiwan, etc.

Challenge

Packard Bell launched its European operations in the Netherlands, where the datacenter still hosts all the company's corporate applications (sales management, marketing, procurement, finance, production, data warehouse, EDI, etc.). These historically centralized IT operations, however, have not kept Packard Bell from developing a distributed architecture in step with its geographic expansion during the 1990s. Thus, although the datacenter hosts most of the group's servers (application, database, file and service servers, etc.), 34 additional servers have been set up at the company's 14 geographically-distributed sites (file, print, e-mail, domain controller and local application servers). All servers communicate using an Infonet MPLS-based WAN.

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explained Pascal Chotard, MIS – IT Operations Director at Packard Bell. "We've noticed that, so far, that type of decentralized mode of operation entailed relatively high maintenance and support costs. Remote interventions were sometimes complex, and we had to travel regularly to solve problems onsite. Furthermore, while the Active Directory was being deployed on every site, we wanted to avoid deploying local domain controllers on small sites." The switch to equipment centralization was all the more appealing since, during the same period, Packard Bell was planning to centralize the group's messaging system by migrating from Exchange 5.5 to the 2003 version.

The ability to simplify IT support and maintenance and reduce the number of servers on remote sites are some of the advantages that justified the use of centralization. Packard Bell's MIS teams hence decided to examine the market's available solutions. "Nevertheless, we couldn't sacrifice our level of service to our users' for the sake of this centralization process," Chotard continued. "These users needed to have transparent access to all the resources and applications they need, along with a high standard of performance, regardless of each user's location."

That is when one of Packard Bell's partners talked to the IT Team in The Netherlands about Riverbed and its Steelhead WDS solutions. "As the Shanghai office had to open in July 2005, the occasion offered the perfect conditions for testing Riverbed's solutions," noted Chotard.

Solution

One Steelhead appliance was deployed at the Shanghai office, and another at the Dutch datacenter, with a 1 Mbps link connecting the sites. Packard Bell then ran a series of tests concerning FTP transfers, as well as access to the Exchange 5.5 messaging system and corporate, collaborative, and product data management applications. "The domain controllers, Exchange, Sharepoint, file and print servers, from that point on, everything was in the Netherlands," Chotard added. "With Riverbed's appliances, we have observed some performance improvements, notably for FTP transfer between Europe and Asia, where there is a reduction in WAN traffic by 98%. Also, bandwidth consumption decreased by 50% even after the site was loaded."

In 2005, when new offices were being opened in Asia, the issue of replacing part of the company's sales office infrastructure was brought up. Along with it was the issue of switching to a more centralized IT mode of operation. "We didn't want to have to manage a local server infrastructure in Asia,"

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SUMMARY

Packard Bell wanted to reduce maintenance and operating costs in its remote sites by consolidating and centralizing their IT infrastructure. However, it was important to them to provide their remote users with a high standard of performance and transparent access to applications.

After reviewing the competition for WAN optimization, Packard Bell installed 15 Riverbed Steelhead appliances to 14 of their sites.

Steelhead appliances have enabled them to consolidate and centralize their IT infrastructure. Packard Bell now benefits from improved application performance and a reduction in bandwidth consumption along with significant savings in terms of hardware, operating and maintenance costs.

Since the solution was running perfectly, its use was expanded to all Packard Bell's sales offices between January and March 2006. For each office, it took only one week to switch it from a distributed mode of operation to a new, centralized mode using a Steelhead appliance. "We'd considered Swan Lab and Cisco's optimization solutions, but Riverbed offered a more mature type of technology that fit our needs perfectly. The prospects for development were appealing, particularly with regard to our development plans for Exchange and QoS. We found that the competition just hadn't caught up with Riverbed's offering," Chotard recollected.

"This solution has allowed us to cut additional costs while boosting security."

Convinced, Packard Bell even decided to subsequently run Riverbed appliances at its largest sites (Angers, Puteaux, and Livingston, Scotland). At that time, the company was working on full Exchange centralization by April 2006 in order to save on maintenance costs. Assisted by Riverbed's support teams, the operation was a success. "The operation

in Angers was particularly tricky because it involved more than 1,000 mailboxes and required well-calibrated optimization solutions, as well as continuous application availability," Chotard explained.

"The successful implementation of the Steelhead appliances is due to Frank Van Egmond, our Senior Systems Integration Engineer and Harry Richards, IT Architect, who were able to talk directly to Riverbed engineers at a very senior level to enable the smooth implementation. With Riverbed there is no learning on the appliance itself. If anything, we were the ones who observed and learned. Riverbed gave us a lot of close support, including early patch releases," reported Chotard.

Benefits

In all, fifteen Steelhead appliances have been deployed at Packard Bell's fourteen geographically-distributed entities. "Every launch was carried out successfully," Chotard commented. "And if time was needed for the migrations, which took place from June 2005 until April 2006, this had nothing to do with Steelheads, but rather, with the centralization project itself and with the deployment of the centralized messaging system. Installing the appliances actually involved nothing more than setting up a simple connection. At the start, the appliance just monitored traffic. Then, gradually, we activated various functions, like FTP or MAPI for e-mail, for instance, and the positive effects of the Steelhead appliances became evident."

Thus, Packard Bell has regularly observed application performance increases in excess of 70% when compared to operations without WAN traffic optimization solutions. But these increases could climb all the way to 85%. "And Riverbed has done more than simply relying on caching," Chotard recollected enthusiastically. "While competitors' pieces of equipment were limited to synchronization and caching, Steelhead appliances have accelerated our traffic." Furthermore, in addition to improving the operating conditions of the group's IT resources, running Riverbed's appliances have offered Packard Bell the chance to enjoy considerable cost savings in their IT infrastructure, maintenance and support. It has enabled them to remove 38 servers to date and they are still consolidating additional infrastructure in the datacenter.

"It has become easier for us, for instance, to deploy security patches on remote desktops/notebooks at our different sites. We also centralized our Internet access on a single line in the Netherlands, and this solution has allowed us to cut additional costs while boosting security. Thanks to Riverbed, we were really able to implement a centralization and consolidation strategy that could provide us with greater responsiveness within the context of plans to open another site, since the local infrastructure is limited to a LAN and a Steelhead appliance," said Chotard.

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"We have also seen a dramatic improvement in an old application whereby the performance has been increased; this is due to a reduction of SQL traffic and has increased by a factor of 3. I have understood that the word 'miracle' has been used by the users", added Chotard. "With all of these benefits ascribed to the Riverbed Steelhead appliance project, it has undoubtedly been a success for our organization."

About Riverbed

Riverbed Technology is the performance leader in wide-area data services (WDS) solutions for companies worldwide. By enabling application performance over the wide area network (WAN) that is orders of magnitude faster than what users experience today, Riverbed is changing the way people work, and enabling a distributed workforce that can collaborate as if they were local. Additional information about Riverbed (Nasdaq: RVBD) is available at www.riverbed.com.

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