

IN BRIEF

Industry

- » Construction

Challenge

- » Giving temporary construction sites high-speed application performance
- » Fast rollout of temporary sites
- » Heavy network load due to very large files

Solution

- » 20 Steelhead appliances deployed across the region

Benefits

- » No local servers are required
- » LAN-like application access at remote offices and temporary sites
- » Significant reduction in the number of manual tasks, and consequently the number of mistakes



BAM Civiel

Riverbed® Steelhead® Appliances Give Temporary Construction Sites LAN-like Performance for Civil Engineering Firm.

BAM Civiel (www.bam.nl/baminternet/baminternet/portalen/BAM_Civiel/index.jsp) is a division of the BAM Group, which ranks among the top 10 of European construction companies and has a turnover of approximately 8.5 billion euros. The home markets of the BAM Group comprise the Netherlands, the United Kingdom, Ireland, Belgium and Germany. BAM also operates in the Middle-East, Africa and the United States. BAM Civiel is the Dutch subsidiary of the BAM Group, which focuses on projects such as bridges, tunnels and dykes. Its portfolio includes prestigious projects such as the Betuwelijn and the HSL (High Speed Line).

Challenge: High-speed WAN Connections for Temporary Locations

Everything is temporary

Throughout the BAM Civiel organization and its IT department, flexibility is a key requirement. The projects call for qualitatively high-grade project teams with access to excellent facilities that can guarantee the level of quality that BAM has become synonymous with. However, each project site, irrespective of its size, is always temporary.

For each project, a construction site is set up at the destined location. These sites will have one or more site huts equipped with automated workplaces that must be connected with BAM Civiel's data centre. The size of site huts may vary between two and over a 100 automated workplaces. "We provide our main office, five regional offices and an average of 15 of these temporary project sites with facilities on a continuous basis," comments Wilbert Bots, head of IT at BAM Civiel.

The site huts' standard set up involved a significant amount of effort. IBM took care of the automated workplaces on an outsourcing basis. By default, one or more servers were deployed, depending on the project scope. This resulted in serious drawbacks. "To start with, this involved a lot of hassle," explains Bots. "We needed to purchase a server and set it up. And arranging things like backups at the site hut was often problematic. All sorts of manual tasks were involved, so obviously a lot of things could go wrong. All in all, it was a time consuming process."

Information management as a core task

The IT department of BAM Civiel has six employees, comments Bots. "This means our principal task is co-ordinating things. We don't have any in-depth specialists, and neither do we want to. Our core task is information management. The technical infrastructure has to be transparent to everybody."

As the central component of its information management, BAM Civiel uses the document management system Filenet. The system is used as a central archive for all projects. "The system is very sensitive to latency," comments Gerrit Huurman, workplace manager responsible for all the technology and installations at BAM Civiel. "Previously, it was not always possible to make optimal use of the system because of how distributed our workforce is."

"Riverbed's approach was so fitting to our situation that we didn't hesitate for long."

Solution: Immediately Visible Results Through Use of Steelhead Appliances

In 2006, BAM Civiel discovered Riverbed. "Riverbed's approach sounded so fitting to our situation that we didn't hesitate for long," comments Bots. "We just had to see it." At a project site in Rot-

terdam, the server at the site hut was removed and replaced by a Riverbed Steelhead appliance. Bots recalled, "The results were amazing. The team worked two weeks without noticing any difference. As a result, we quickly deployed the Riverbed solutions for all small and mid-sized project locations.

The data traffic now takes place as if our employees were working on a local server, but it's all actually centralized. The data, which chiefly consists of email messages with Word and Excel attachments and AutoCAD drawings in particular, is transferred at high speed across the wide area network (WAN). AutoCAD drawings quickly take up a couple of hundred of megabytes, but with Steelhead appliances they can be transferred in seconds or minutes across the network.

"The solution is virtually plug-and-play. The simplicity has led to a great reduction in the number of manual tasks, and consequently the number of mistakes."

"Now we are in the process of expanding the deployment by acquiring more Steelhead appliances. Currently we deploy on to any site that has up to 40 employees."

functions very efficiently. "This is new technology, and is something that can make a big impact. The product development continues in full flow – Riverbed even incorporates our input into future software releases."

The collaboration with Riverbed has worked out fine, says Bots. Their support organization

Benefits: No Local Server Required, Fast Implementation of Temporary Locations, Plug and Play, Reduction Manual Tasks

Simplicity as key decision criterion

"To us, the main thing is simplicity. In many cases, we are now able to set up a new site within half a day. This is a huge advantage to us; the Riverbed solution is virtually plug-and-play. The simplicity has led to a great reduction in the number of manual tasks, and consequently the number of mistakes. "Currently BAM Civiel has deployed 20 Riverbed Steelhead appliances, and considers the appliance part of its future strategy. Needless to say, the solution will become more cost-efficient with every expansion, but to us that is not the most important rationale (AD1), "Our strategy is centralization," comments Bots. "Because it offers improved management and security capabilities and allows us to deliver solid solutions. The cost aspect is of secondary importance. Until recently, we lacked the technology to implement a centralized system within our organisation, but now we have the facilities. Consequently, we have new plans for the centralization of storage and backup activities at the regional offices as well as the centralization of our Exchange servers. Thanks to the Riverbed solution, this is all within our reach."

About Riverbed

Riverbed Technology is the IT infrastructure performance company. The Riverbed family of wide area network (WAN) optimization solutions liberates businesses from common IT constraints by increasing application performance, enabling consolidation, and providing enterprise-wide network and application visibility – all while eliminating the need to increase bandwidth, storage or servers. Thousands of companies with distributed operations use Riverbed to make their IT infrastructure faster, less expensive and more responsive. Additional information about Riverbed (NASDAQ: RVBD) is available at www.riverbed.com



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SUMMARY

BAM Civiel is the Dutch subsidiary of the BAM Group, which focuses on projects related to concrete and hydraulic engineering. For each project the firm sets up a construction site with one or more huts equipped with automated workplaces. The company was looking for a flexible solution to connect their temporary locations to the data center. The network load to and from remote sites was previously very heavy due to large design files, but thanks to the use of Riverbed's Steelhead appliances, remote users receive LAN-like performance for applications and there are no servers required at temporary sites.