Dudek & Associates

DUDEK

Riverbed Application Performance Platform powers California environmental firm's efficient growth as a peak-performing hybrid enterprise

Dudek is a California-focused environmental firm with more than 300 planners, scientists, civil engineers, contractors, and support staff. Since 1980, the firm has provided its clients with environmental, permitting, planning, engineering, construction, and operational services.

Challenge: Enable interoffice collaboration and support firm's growth

In addition to its headquarters in Encinitas, Dudek has 12 sites located around the state of California. When Abe Esguerra, IT director at Dudek, started working for the firm in 2002, there were just five offices and only 120 employees. There was no wide area network (WAN), so when interoffice collaboration required employees to share large files, they had to do it via file transfer protocol (FTP), messaging application programming interface (MAPI), or mailing CDs from one site to another.

These cumbersome approaches led to serious problems with version control, so Esguerra eventually set up a multiprotocol layer switching (MPLS) network and moved toward centralizing applications and data. However, because of the long distances between locations, bandwidth limitations at some sites, and the large size of the firm's project files, the new network didn't completely solve the problem.

Employees experienced delays accessing business critical-applications such as Outlook, AutoCAD, structured query language (SQL) databases and file-shares. They were also unable to provide clients with onsite, real-time displays of project files. Also, there was some pushback from users who felt they weren't as productive as when their data was stored on local file servers.

"I was looking for ways to speed up the movement of information from various points," recalls Esguerra. He wanted a solution that would provide great application performance over the network, allow for fast transfer of large files, enable effective collaboration between the professionals in the various offices, and deliver these same advantages to employees working at remote jobsites. He also needed a solution that he could easily scale, because Dudek was growing.

In Brief

Challenges

- Create an IT environment that enables interoffice collaboration and easily scales with the firm's growth
- Provide fast access to data and applications regardless of employees' locations
- Meet the terms of an acquisition regarding availability of centralized data storage

Solution

- Riverbed Application Platform™ for optimization, visibility, and control across the hybrid enterprise
- 15 SteelHead™ virtual and physical appliances
- 50 SteelHead Mobile licenses
- 1 SteelFusion™ solution

Benefits

- Fast access to applications and large data files supports collaboration and increases employees' productivity
- Availability of SteelFusion helped with an acquisition
- Great application performance over the network, regardless of employees' locations or their distance from the data center
- 60% to 80% reduction in data traffic across the WAN reduces the need for costly bandwidth upgrades
- Original SteelHead deployment paid for itself two-fold in less than a year

Solution: Riverbed Application Performance Platform—SteelHead, SteelHead Mobile, and SteelFusion

When Esguerra learned about the Riverbed WAN optimization solution he decided to test it out. "The POC was so impressive that we immediately made the investment," he says. "We haven't looked back since."

Esguerra did look into other WAN optimization solutions available at the time, but none had anywhere near the functionality of SteelHead, not only for application optimization but also for improved visibility and control across the network. Since then, he has refreshed the SteelHead appliances a number of times. Each time he does due diligence and evaluates what is available from the competition (Silver Peak, Blue Coat, and Cisco). But each time he has stayed with Riverbed because he continues to find the most relevant capabilities to help his firm efficiently evolve and grow.

For example, as more employees started taking laptops to remote sites, Riverbed introduced support for mobile workers with SteelHead Mobile, something none of the competitors offered at that time.

Several years later, when Dudek was in the process of acquiring another company that wasn't comfortable with its data being centralized in Encinitas, Esguerra found a solution in SteelFusion, the first converged infrastructure solution purpose-built for the branch.

That company's fear was that its data, which included large maps and aerial imagery, wouldn't be as readily accessible as if it were stored locally. "A lot of that was reference information that they might need to access right away, when they couldn't afford the delay," Esguerra explains. "Not only did SteelFusion address their need and reassure them they would have their data locally available, it also met our need of centrally backing up their project work."

Dudek has since implemented the Deltek Vision enterprise resource planning (ERP) solution, several cloud-based applications, and a growing Citrix XenApp farm. "We have all of our servers running out of our data centers. Centralized apps and data are being pushed out not only to all of our offices but also to our mobile workers," Esguerra explains.

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Benefits: Dynamic platform that supports collaboration and growth

The Riverbed Application Performance Platform comprises modular solutions that can be flexibly deployed to meet each company's particular IT needs. Dudek's current Riverbed deployment is designed to power the firm's growth and geographical expansion without the technical constraints and productivity impacts experienced previously. There is a SteelHead 5055 physical appliance in the firm's primary data center in Encinitas and a second one in its disaster recovery (DR) site in Irvine. Along with one SteelHead EX physical appliance (running SteelFusion), there are 13 SteelHead CX virtual appliances (running on VMware ESX on HP ProLiant servers) in the branch offices and approximately 50 licenses of SteelHead Mobile.

"In comparison to the other equipment and software in our IT infrastructure, this is one of the easiest to install and maintain."

Dudek's deployment of the Riverbed Application Performance Platform has streamlined interoffice collaboration and eliminated the earlier problems with version control. Employees now have fast access to large volumes of data over the network, and get great application performance whether they're working in an office or remotely or on the move. "The efficiencies and flexibility our employees have gained from this technology translate to real dollars. Thanks Riverbed. The SteelHead toolkit has definitely contributed to the firm's productivity and profitability," says Esguerra.

Dudek is seeing a 60% to 80% reduction in data traffic across the WAN. The reduction goes as high as 95% for specific data types. Without this data reduction, Dudek would have had to purchase much more network bandwidth, and he still would not have achieved the application performance required because of built-in latency. Esguerra calculated that the original SteelHead deployment "paid for itself two-fold in less than a year."

Most importantly, the Riverbed Application Performance Platform gives Dudek the ability to execute on business decisions without worrying about technical constraints, the agility to expand into new markets, and the flexibility to attract the best talent, regardless of location.

"The use of Riverbed technologies has helped us tap into new markets and new geographic areas," says Esguerra. The consolidation and availability of data from virtually anywhere enables our practice builders to more efficiently pursue new opportunities and resources," said Esguerra. The use of Riverbed technologies greatly enhanced the firm's ability to establish and grow new practice areas such as compliance and cultural resources.

Even with all of this functionality, the Riverbed solution is easy for Esguerra to manage. "In comparison to the other equipment and software in our IT infrastructure, this is one of the easiest to install and maintain," he says.

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Summary

Dudek's IT director needed a solution that would provide great application performance over the network, allow for fast transfer of large files, enable effective collaboration between the professionals in the various offices, and deliver these same advantages to employees working at remote jobsites. He also needed a solution that he could easily scale, because Dudek was growing.

The Riverbed Application Platform, consisting of SteelHead appliances, SteelHead Mobile software, and SteelFusion, has streamlined interoffice collaboration and eliminated earlier problems with version control. Employees now have fast access to large volumes of data over the network, and get great application performance whether they're working in an office, working remotely, or whether they're on the move. More importantly, this solution lets Dudek execute on business decisions without worrying about technical constraints, so they can expand into new markets and attract the best talent, regardless of their location.

About Riverbed
Riverbed, at more than $1 billion in annual revenue, is the leader in application performance infrastructure, delivering the most complete platform for the hybrid enterprise to ensure applications perform as expected, data is always available when needed, and performance issues can be proactively detected and resolved before impacting business performance. Riverbed enables hybrid enterprises to transform application performance into a competitive advantage by maximizing employee productivity and leveraging IT to create new forms of operational agility. Riverbed's 26,000+ customers include 97% of the *Fortune* 100 and 98% of the *Forbes* Global 100. Learn more at riverbed.com.

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