**NOTICE: New Product Names**

The contents of this asset do not reflect our recent product name changes. Here are the new Riverbed® names:

<table>
<thead>
<tr>
<th>Old Names</th>
<th>New Names</th>
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</thead>
<tbody>
<tr>
<td>Steelhead</td>
<td>SteelHead™</td>
</tr>
<tr>
<td>RPM, OPNET, Cascade</td>
<td>SteelCentral™</td>
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<tr>
<td>Stingray</td>
<td>SteelApp™</td>
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<td>Granite</td>
<td>SteelFusion™</td>
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<tr>
<td>Flyscript</td>
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<tr>
<td>Whitewater</td>
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Constangy, Brooks, & Smith, LLP

Riverbed Enables Cloud Computing for Constangy, Brooks & Smith, LLP

Constangy, Brooks & Smith LLP (www.constangy.com) represents Fortune 500 corporations and smaller companies with more than 100 attorneys in 20 offices throughout the United States. Their practice is focused on workplace relations—the “little” employee-relations problems that can escalate into a “big” legal battle. This helps clients avoid the violent storms that can wreak havoc on your company’s productivity, employee morale, and bottom line. They’ll help you predict, prevent, and prevail over all types of workplace challenges.

Constangy attorneys have counseled employers since 1946. Their attorneys understand what it’s like to walk in clients’ shoes—whether in the board room, the courtroom, or the factory. They communicate with their clients in plain English, not “legalese.” As a result, clients view Constangy as strategic partners, not just legal technicians.

Challenge: How to simplify and reduce costs of their branch office infrastructure

Constangy has 20 offices around the country with anywhere from one to 70 people in an office, averaging about 20 people per location. David Grow, the Director of IT, notes that, “Traditionally our model had been very decentralized, where each of our remote offices was a semi-autonomous island of data and applications. As we started to grow maintaining that model became much more expensive.” In this model, Constangy had deployed mid-range servers to each office to act as domain controllers, Exchange servers, Interwoven-SQL servers, file and print, etc. Besides being a nightmare to manage, this got to be very expensive as they added eight offices in the last five years. So several years ago they started moving toward a centralized private cloud computing model, moving the data and critical apps back to their headquarters for economies of scale.

David Grow adds, “To make it worse, on any given day maybe one to five given offices hadn’t done a backup. We were always scared we were going to run out of luck and the backup wouldn’t be available. So we wanted to move all of the data back to Atlanta, where we can manage it ourselves.”

Solution: Riverbed Steelhead Appliances and the RSP deliver effective cloud computing

So Riverbed was a perfect fit to enable the centralized model of a private cloud for all IT services. “With the Steelhead appliances allowing them to get better utilization out of their WAN without having to increase the WAN costs, Constangy is next moving towards virtualizing the entire data center down from 20 servers to just three servers with VMware. They are implementing a Dell Equallogic iSCSI SAN for data protection centrally and will have the same set up ready to go in a shared co-hosting facility as a disaster recovery site. Additionally, the Riverbed Services Platform (RSP) allowed them to replace all of their branch offices’ mid-range servers with 1U appliances, move all of the data to Atlanta and still get better performance.

As for the deployment, they were able to maintain their WAN without having to add any circuits despite adding IP telephony to the WAN. They deployed a Steelhead appliance 1050 in their headquarters, and smaller 250, 550, and 520 series appliances to all of their remote offices depending on size.
Microsoft Windows 2003 Server virtual machine (VM) was created, gets loaded into RSP and configured to be a Domain Controller, DNS, DHCP, WINS, DFS and print server. Steel says, “that allowed me to completely decommission our old servers in favor of the appliances. Performance is phenomenal; the users don’t realize that their data is no longer down the hall but is now hundreds of miles away.”

Benefits: Simplified, centralized, less expensive, and more resilient IT services

This private cloud computing model has allowed them to save some significant money too. They didn’t have to add WAN circuits, so there was no additional operating costs for the network. Also, the remote office servers were already end of life and needed replacing, so the costs for the Riverbed products ended up being far less expensive than replacing the servers. They reused their Windows 2003 server licenses since the old servers were being decommissioned and scrapped.

On the old servers, they were backing them up to tape every day. Plus, they were forced to rely on office secretaries to change the tapes each day, which realistically wasn’t dependable. Now, Steel doesn’t backup the RSP hosted virtual machines. Steel can easily recreate them as everything is replicated from the Atlanta data center. That allows him to save about $7000 per year in OpEx costs for tape backups and support. Constangy is also not burdening its secretarial staff with backup chores.

With this cloud model they were also able to greatly reduce their server licenses. Instead of having numerous Exchange and SQL servers, Constangy now has a central Exchange cluster and a central SQL cluster. They were able to reduce a few other server licenses for legal specific apps as well. So that saves them a lot of money in the long run.

Something Steel hadn’t planned on but discovered along the way was that the appliances pull less power than their old servers. Besides making that a “greener” solution, the Riverbed appliances generate less heat and their HVAC systems are not having to work as hard.

This solution also gives them a much more fault tolerant environment for their remote offices. A failure at a remote office is easier to resolve remotely and less likely to result in lost data. In all, private cloud computing has had a tremendously positive impact on the quality, cost, and manageability of the complete enterprise IT environment.

SUMMARY

Constangy, Brooks & Smith, LLP, found an opportunity to improve the efficiency of their IT infrastructure across their whole enterprise with the adoption of a cloud computing strategy. They were able to consolidate and virtualize many different servers, and eliminate the expense and difficulty of remotely managing the hardware and software. Significant cost savings were achieved in both capital outlay for a planned server replacement and in monthly operating expenditures of their servers and network. This was achieved without any degradation of the end user experience, in fact, it improved collaboration and also enabled them to roll out additional capabilities such as IP telephony without having to upgrade the wide area network (WAN) connections to the many different sites. Additional secondary benefits like improved disaster recovery and a “greener” infrastructure were also realized upon implementation.