# riverbed



### **NOTICE: New Product Names**

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

Old Names	New Names
Steelhead	SteelHead™
RPM, OPNET, Cascade	SteelCentral™
Stingray	SteelApp™
Granite	SteelFusion™
Flyscript	SteelScript™
Whitewater	SteelStore™

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#### **IN BRIEF**

#### Industry

>> Transportation

#### Challenges

- Inability to quickly troubleshoot performance problems
- Inability to baseline, manage rollout, and prove benefits of upcoming MPLS upgrade
- >>> Too much time fire-fighting, no time for new business-critical IT projects

#### Solution

- » A distributed AppResponse Xpert solution
- Monitor performance and utilization for all critical applications and links before, during, and after MPLS rollout.
- AppResponse Xpert Insights encapsulate best practices for wide range of management tasks

#### **Benefits**

- Much faster problem localization and resolution
- Ability to optimize application performance before and after MPLS rollout
- Insights empower help-desk to solve problems, spare high-level engineers
- More time for business-critical IT projects, improved IT support for business

## NETJETS <sup>®</sup>

## **NetJets**

### **A Private Aviation Pioneer**

The world leader in private aviation, NetJets invented fractional jet ownership in 1986 and today operates the world's largest and most diversified fleet of business jets, which includes fourteen of the most popular business jets in the world. NetJets' fractional aircraft ownership allows individuals and companies to buy a piece of a private business jet at a fraction of the cost of whole aircraft ownership, and guarantees availability 365 days a year with just a few hours' notice.

This guarantee, and the concomitant need for ensuring proper maintenance and rapid turnaround of its jets wherever they are, naturally makes NetJets' corporate network a critical resource. The company's data center in Columbus, Ohio, communicates via IPsec VPN to thirty remote locations including critical overseas offices in London and Lisbon.

#### **Challenge: Getting Ready for MPLS**

Since network quality of service (QoS) is so critical for NetJets' operations, the company has decided to upgrade to MPLS. However, Eric Bishop, a Senior Network Engineer responsible for network planning and oversight of dayto-day troubleshooting, worried that they'd lose track of network performance during the transition. Further, lacking an accurate baseline for existing performance, they wouldn't be able to prove that the implementation had delivered the benefits promised.

"I definitely don't want to go backwards in terms of application performance," says Bishop, "especially when it comes to the London and Lisbon sites. And I need to ensure that the top priority applications get the lion's share of network resources and bandwidth, so I was looking for in-depth diagnostics to help us baseline the "Using Insights, which make the rich [AppResponse Xpert] metric set available to all skill levels, my less technically-sophisticated help-desk personnel can resolve a much higher percentage of network problems without kicking them upstairs. That leaves my high-level network engineers free to focus on 'meatier' projects that advance our bottom line."

network, manage the transition, and optimize application performance going forward."

#### Solution: A Clear Choice

Eric was considering solutions from both NetScout and NetQoS when a colleague introduced him to the Riverbed® AppResponse Xpert® Appliance. After conducting a "bake-off," he says "the choice of tool was clear."

The company installed two AppResponse Xpert Plus appliances and an AppResponse Xpert Director in the Ohio data center, and AppResponse Xpert appliances at five of the most important remote sites.

#### **Benefits:**

Eric notes several factors that clinched the deal for NetJets.

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#### A Richer Set of Network and Application Metrics

"I'd never seen so much information from a single tool," he says. "Performance, utilization, route quality, ISP performance, even packet capture when I need it. Like most experienced network engineers, I've developed an intuitive feel for performance issues, sort of like a doctor gets about his patients. But without all the metrics supplied by [AppResponse Xpert], it was difficult to 'peer beneath the skin' and confirm my hypothesis about the root cause."

#### **Real-Time Data**

"Unlike other products we looked at, [AppResponse Xpert] gives us one-minute averages, which means we can see transient problems that may indicate trouble down the road."

#### Visibility into the "Cloud"

In contrast to probe-based solutions, AppResponse Xpert can deliver application performance metrics even for networks that can't be instrumented. "I can see ISP network and Internet performance," Eric notes. "And it's a lot easier and less expensive to manage when you don't have dozens of probes to maintain."

#### Leveraging Performance Insight

AppResponse Xpert packages all of its rich metrics and data into point-and-click action guides called Insights, which encapsulate best practices for auditing, baselining, troubleshooting, securing, and optimizing your applications infrastructure. "The Insights are probably the top feature of [AppResponse Xpert]," says Eric. "Using them, my less technically-sophisticated help-desk personnel can resolve a much higher percentage of network problems without 'kicking them upstairs.' That leaves my high-level network engineers free to focus on meatier projects that advance our bottom line."

He adds that the standard Baseline and Optimize Insights are turning out to be a big help for the MPLS rollout. "They're helping us understand how to optimize application performance on the network, as currently configured, in preparation for architecting the upgrade to MPLS," he says. "And, once the network upgrade is in place, Insights will be a critical part of our ability to fine-tune and maintain the new configuration."

#### **Passing the Good Word**

"To put it in a nutshell," says Eric, "if I were asked by a peer what makes [AppResponse Xpert] worth looking at, I'd say that the rich metrics, combined with unmatched ease of use to make them accessible to the help-desk team, are what made [AppResponse Xpert] the winner for NetJets."



The AppResponse Xpert Response Time Composition Chart breaks down end-to-end application response (User Response Time) into its component parts: TCP connection setup time, server response time, payload transfer time, retransmission delay (time lost to packet loss), and latency inbound and outbound, enabling network managers to very quickly distinguish between server, network, and application problems.

"With features like the RTCC, I can avoid network performance "witch hunts' after phantom problems," says Eric Bishop. "We can immediately see where a problem lies and put the right people to work on it right away."

#### About Riverbed

Riverbed delivers performance for the globally connected enterprise. With Riverbed, enterprises can successfully and intelligently implement strategic initiatives such as virtualization, consolidation, cloud computing, and disaster recovery without fear of compromising performance. By giving enterprises the platform they need to understand, optimize and consolidate their IT, Riverbed helps enterprises to build a fast, fluid and dynamic IT architecture that aligns with the business needs of the organization. Additional information about Riverbed (NASDAQ: RVBD) is available at www.riverbed.com.







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