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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 effectively manage SLOs on nationwide MPLS network**

» **Difficulty troubleshooting and determining the source of application performance problems**

» **Unable to effectively monitor and evaluate network latency and application performance nationwide**

Solution

» **An AppResponse Xpert Appliance installed at the Denver data center**

» **Extensive real-time and historical reporting of over 60 critical metrics**

» **Easy drill down to problem cause**

» **Reports network and application performance metrics in terms of business impact**

Benefits

» **Better communication with CFO and business managers**

» **A faster and more efficient network team**

» **Better management of WAN vendor**

» **Improved ability to meet Service Level Objectives**

Frontier Airlines & INS

"A Whole Different Animal"

Frontier Airlines is a low fare airline that provides service from its Denver hub to 47 destinations in 29 states, spanning the nation from coast to coast and to seven cities in Mexico and one in Canada. As the second largest jet carrier of Denver International Airport (DIA), Frontier's fleet of Airbus jets averages 250 daily system-wide departures and arrivals, serving 24 out of the top 25 destinations out of Denver. The company employs about 4,800 people in cities throughout North America.

Challenge: Moving Bits to Move Airplanes

Frontier's MPLS WAN is a critical resource for the airline. It connects the company's data center in Denver to offices and airports throughout North America. It supports both important customer-facing applications, such as seat assignment, electronic ticketing, curbside and online check-in, as well as all the logistical and management applications necessary for running a major airline.

But even as the network was rapidly expanding to support Frontier's business objectives, performance was slowly degrading, and the company's traditional SNMP device-based management system couldn't give the IT staff the visibility they needed to meet their Service Level Objectives (SLOs).

"It was like looking at our network through a straw," says Geri Carolan, Director of IT Infrastructure for the airline. "Our jets may fly at 30,000 feet, but our network management system could barely lift us above the runway in terms of delivering a network-wide overview of performance and utilization."

Solution: Managing SLOs Across the Network

For assistance, Frontier turned to INS, one of the world's leading providers of IT consulting and software solutions. After a thorough audit of the airline's network and objectives, INS recommended and spearheaded the installation of a Riverbed® AppResponse Xpert® Appliance at Frontier's data center in Denver.

"In our performance engineering practice, we use [AppResponse Xpert] to establish a network and application performance baseline so we can make the right recommendations to our customers about their IT infrastructure. [AppResponse Xpert] not only deploys quickly-often in less than an hour-but delivers far more data than the MIB2 collectors that most baselines are done with. Our customers really appreciate the in-depth analysis we can deliver with [AppResponse Xpert]."

"In essence, the ROI on the [AppResponse Xpert] appliance was immediate," says Geri. "We gained insight into the source of application performance problems that was basically impossible with the old solution, since the SNMP system couldn't see into the MPLS network and give us traffic details by application and location. We were able to start solving problems right away."

"Most of all, [AppResponse Xpert] enabled us to quickly establish a baseline for performance on all critical applications-we knew all we needed to know about network health within a month. This

has made it much easier to manager our Service Level Objectives. We can see at a glance where we're not meeting those objectives and address the problems right away, often before there are complaints."

Benefits: Managing the WAN Vendor

"In addition, we were able to start using [AppResponse Xpert] data right away to better manage the WAN vendor, since we could see real details of problems that had been invisible to us before. This was invaluable in helping us extract the maximum value from our contract with the MPLS provider."

The IT staff was able to correlate slight changes in load on the MPLS network with significant increases in latency and packet loss. The appliance's extensive reporting capabilities not only helped the WAN vendor resolve the problems, but also served to help Frontier assess the success of the vendor's efforts.

Managing Upwards

The reports furnished by the AppResponse Xpert appliance also helped Geri convince the CFO and other non-technical managers of the need for a network upgrade.

"What [AppResponse Xpert] quickly showed us was that the network as then provisioned wasn't capable of meeting our SLOs in the long run. And with the reports I was able to create, I could show the CFO and line-of-business managers exactly why, and why we had to spend the money I was asking for to fix the problem."

She explains that the ability of AppResponse Xpert to present performance and utilization metrics in terms of their impact on the business and critical resources was what really clinched the deal. "The CFO and other managers were very impressed with the clarity of my presentation, thanks to [AppResponse Xpert] reports."

Troubleshooting Day-to-Day

Even as Frontier goes forward with its network upgrade, relying on AppResponse Xpert to gauge the success of their efforts, the appliance plays a central role in day-to-day troubleshooting as well.

"Early on, [AppResponse Xpert] alerted us to virus-like activity at one airport that was impacting the entire network. We were able to quickly pinpoint the cause and put an end to it, something that would have been nearly impossible with the old management system."

"**Buy it now! With [AppResponse Xpert] my staff is far more productive and spends far less time fire-fighting, so they have more time for the projects that advance our corporate objectives. We've got a better handle on our SLOs, can better demonstrate our contribution to the business, and just generally have better control over the network.**"

Asked what she would say to a peer considering the AppResponse Xpert solution, she replies, "Buy it now! With [AppResponse Xpert] my staff is far more productive and spends far less time fire-fighting, so they have more time for the projects that advance our corporate objectives. We've got a better handle on our SLOs, can better demonstrate our contribution to the business, and just generally have better control over the network."

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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