

Fine-Tune IT Performance

Introduction

Riverbed IT performance solutions accelerate applications and manage performance across the entire corporate network — at the data center, in the cloud, at branch offices, and for mobile workers. Businesses run faster and more efficiently, saving time and cutting the cost of IT infrastructure.

As distributed businesses grow, they look for ways to manage and allocate their IT resources based on business priorities, to ensure that their critical applications are performing to the level that the business needs. Modern applications that run on most wide-area networks, such as video, VOIP and VDI, consume a large amount of bandwidth and compete for limited resources. In addition, various IT projects around consolidation and virtualization are increasing the load on the WAN, but remote users still expect their applications to work as fast as ever.

There has been much talk in the industry about “aligning IT with the business”, meaning that IT resources are allocated and managed according to business goals. Let’s look at how Riverbed provides a business-oriented way to run your network, with fine-grained control over network resources and visibility from the network engineer all the way to the C-suite.

End-to-End Visibility

Typically, a business will have around 10-20 critical business applications, sometimes called “services”, that support the most important business processes. These services are delivered using a wide range of infrastructure components across the network, including application servers, network equipment and third-party services. But how do you manage performance with the business in mind? Unfortunately, application performance management products monitor business transactions but have no knowledge of the underlying network, while network performance management products don’t know how network traffic maps to business applications. As a result, there’s no easy way to identify, monitor and troubleshoot services down to the infrastructure level.

Riverbed Cascade® bridges this gap with a set of service dashboards that report on application and network status in an easy-to-use format, so you can see how the network is delivering your critical applications. You can select which services to display based on your business needs, and view them by application or by location. For troubleshooting, dashboards provide drill-down capabilities from the high-level status indication into detailed performance information. Setting up your dashboard is easy, thanks to Cascade’s discovery and dependency mapping capabilities that show you the delivery path in a convenient graphical format. Easy-to-understand SLA reports show application performance over time, and can be sent to executives for performance visibility at the highest corporate levels.

With Cascade dashboards and reports, you can finally answer business and technical questions about your network:

- Which services have performance problems, and how long have these problems existed?
- Which components are part of the application delivery path, and which of them is causing the problem?
- When and where did the failure event happen, and what were the root cause and the impact?
- How well did we meet our service-level objectives?

BENEFITS

- Allocate precious network resources based on business priorities, through an advanced QoS engine
- Extend visibility from the network engineer all the way to the C-suite, through executive-level dashboards
- Reduce hardware and software costs by consolidating your network management and optimization appliances

Dramatically Enhanced Control

Once the most business-critical traffic is identified, it's possible to prioritize and optimize it. Unlike some WAN optimization vendors that have separate appliances to deliver WAN optimization and QoS, Riverbed Steelhead® is a single-box solution that delivers both, with simple setup and pre-configured policies to allow you to ramp up quickly.

Riverbed Steelhead delivers the unique combination of an application classification engine (AppFlow®) and an advanced scheduling technique based on Hierarchical Fair Service Curves (HFSC) that not only allocates minimum and maximum bandwidth, but also prioritizes applications based on their latency sensitivity. To simplify and accelerate the setup of QoS policies, Steelhead offers built-in policy templates that deliver plug & play deployment. You can deploy QoS policies across your enterprise in half the time of competing solutions.

Riverbed AppFlow – Application Classification Engine

The Riverbed AppFlow engine utilizes a variety of techniques, often in combination, to maximize the accuracy and efficiency of its real-time network traffic classification. These techniques include port-based classification, application signature matching, protocol dissection, future flow registration, behavioral classification and others, to identify applications that may hop ports or be otherwise hard to detect. The AppFlow engine can identify and classify hundreds of common enterprise applications and is configurable to classify thousands of custom applications. This ensures that critical applications like web, voice and video are protected while recreational applications are contained.

Riverbed Hierarchical Fair Service Curve (HFSC) Scheduling

The Riverbed HFSC scheduler not only addresses the allocation of minimum and maximum bandwidth (as many products do), but also prioritizes and schedules applications based on their latency sensitivity, thus eliminating jitter and starvation of applications. Steelhead appliances can apply these state-of-the-art techniques while remaining compatible with QoS enforcement on routers and other devices.

Guarantee IT Performance

Riverbed Cascade and Steelhead are often used in combination, for a full IT performance process of discovering and mapping the critical services, classifying, prioritizing and optimizing critical traffic, monitoring service levels and reporting performance results to the business.



Figure 1: QoS and executive-level dashboards deliver enhanced control and end-to-end visibility

Riverbed delivers a best of breed IT performance solution with end-to-end visibility, fine-grained classification and control over the applications traversing the network, all from a single, reliable vendor. If you're adding high-bandwidth applications to your network, implementing virtualization or cloud technologies, or even performing routine network or application upgrades, now is a great time to fine-tune IT performance in a way the business can understand and appreciate.

About Riverbed

Riverbed is the IT performance company. WAN optimization solutions from Riverbed liberate 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 trust Riverbed to deliver greater productivity and cost savings by making their IT infrastructure faster, less expensive and more responsive. Riverbed solutions are also available as managed services through select providers. Additional information about Riverbed (NASDAQ: RVBD) is available at www.riverbed.com.



Riverbed Technology, Inc.
 199 Fremont Street
 San Francisco, CA 94105
 Tel: (415) 247-8800
www.riverbed.com

Riverbed Technology Ltd.
 Farley Hall, London Rd., Level 2
 Binfield
 Bracknell, Berks RG42 4EU
 Tel: +44 1344 354910

Riverbed Technology Pte. Ltd.
 391A Orchard Road #22-06/10
 Ngee Ann City Tower A
 Singapore 238873
 Tel: +65 6508-7400

Riverbed Technology K.K.
 Shiba-Koen Plaza, Bldg. 9F
 3-6-9, Shiba, Minato-ku
 Tokyo, Japan 105-0014
 Tel: +81 3 5419 1990