

## Taking a Bite Out of Network Performance Problems ...with Cascade Shark and Cascade Pilot

As the leading provider of IT performance solutions, Riverbed® understands the need for broad and deep visibility into application performance across the network. Visibility allows you to proactively monitor the performance of key business applications and troubleshoot problems. Today, Riverbed Cascade® is saving customers thousands, and in some cases, millions of dollars by improving the day-to-day operations and management of their IT infrastructure.

Riverbed believes that customers achieve the greatest value and return on investment from deploying the entire Cascade network visibility suite, which combines sophisticated end-to-end monitoring with high-speed, high-fidelity packet capture and analysis for both broad and deep network performance monitoring and analysis. However, for customers who only want continuous deep packet capture and analysis, Cascade Shark with Cascade Pilot can be deployed as a standalone troubleshooting solution.

Cascade Shark appliances provide always-on, high-speed packet capture for granular, real-time and post-event analysis. Cascade Shark is capable of sustained, multi-gigabit per second recording of network traffic on 1Gb and 10GbE interfaces. Having packet-level information readily available means data is always on hand to troubleshoot performance and security-related issues.

Cascade Shark also supports:

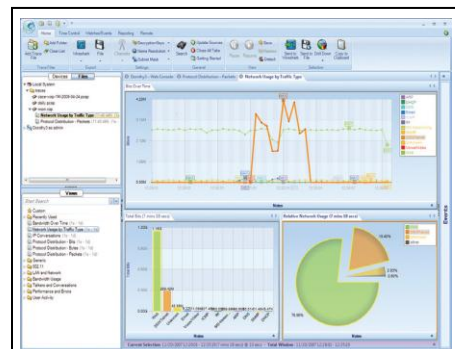
- Mixing 1GbE and 10GbE interfaces on the same appliance for convenience and flexibility
- Modular, extensive storage options to meet a variety of capture and storage needs
- Multiple concurrent capture jobs, each capable of sustained line-rate recording, to flexibly extend the storage time of critical applications
- Truly distributed analysis, which eliminates the need to export large trace files across the network for local analysis.
- Smart file indexing that accelerates packet analysis by up to 10000x
- Custom file system optimized for time-based queries

Cascade Pilot is a robust analysis console that enables users quickly analyze multi-terabyte packet recordings on remote Cascade Shark appliances and Steelhead products without having to transfer large packet captures files across the network. Its extremely intuitive graphical user interface maximizes user productivity by enabling drag-and-drop, multi-level drill down for local and remote analysis. Fully integrated with Wireshark, the de facto standard for network analyzers, Cascade Pilot enables network managers and engineers to

- Quickly open and analyze remote or local, live and off-line multi-gigabyte trace files
- Easily isolate traffic of interest through an extensive collection of network analysis metrics
- Define flexible triggers and alerts to detect abnormal traffic
- Create professional reports directly from Views

### BENEFITS

- Always-on, high-speed packet capture means the data is available for post-event analysis when you need it
- Efficient real-time indexing enables quick drill down and reduces MTTR
- Truly distributed analysis eliminates the need to export large trace files across the network for local analysis
- Seamless integration with Wireshark accelerates fault resolution and reduces application down time



Cascade Pilot provides an interactive and visually oriented user interface

## Why Cascade Accelerates Troubleshooting

Riverbed understands packet capture and analysis better than any other company. Riverbed brings together the three leading innovators in this field – Steve McCanne, co-creator of TCPDUMP, Loris Degioanni, creator of WinPcap, and Gerald Combs, creator of Wireshark – to continue the advancement of network performance management solutions that enable complete end-to-end visibility and analysis for network and application performance. Below are some of the advantages that Riverbed Cascade already provides:

- **Smart packet indexing**
  - Efficient indexing of packets in real time, allowing you to search terabytes of data faster, reducing the time it takes to identify the root cause of problems
  - Quick and seamless transition between flow-based information and packet-level information streamlines and accelerates the troubleshooting workflow, when Cascade Shark is used in conjunction with Cascade Profiler
- **Flexible storage options**
  - Selective recording of all or a portion of the packets extends the amount of data that can be recorded and the length of time it is available for analysis
  - Multiple capture jobs on Cascade Shark appliances enable you to dedicate differing amounts of storage to each job to flexibly extend storage time for critical applications
- **Truly distributed analysis**
  - Remote analysis of multi-terabyte packet recordings directly on the packet capture device removes strain on the network caused by transferring large packet captures files for local analysis
  - Robust analysis Views simplify investigations. Views include LAN and Network troubleshooting (MAC, VLAN, ARP, ICMP, DHCP, DNS), bandwidth usage (micro-bursts, IP, TCP, WEB, VoIP), talkers and conversations (IP, subnets, countries, TCP, WEB, VoIP, database, financial), performance and errors (IP, TCP, Web, VoIP, database, financial) and user activity (Web, VoIP, database, financial)
- **Wireshark integration**
  - Tight integration and seamless hand off to Wireshark streamlines troubleshooting and leverages your network staff's expertise with Wireshark
- **Steelhead integration**
  - Leverage of Steelhead WAN optimization products for packet capture and monitoring extends cost-effective visibility into remote sites without having to deploy standalone capture devices

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*"I've used Wireshark all my life; I love Pilot. It has helped me reduce the time it takes to sift through terabytes of data. Justifying additional expenditure on Cascade Shark and more Pilot software became a no brainer to our management"* — Senior Network Operations Engineer, Global Financial Institution

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The seamless integration between Cascade Shark, Cascade Pilot and Wireshark provides a powerful, efficient, and cost-effective solution for troubleshooting complex or intermittent performance and security-related problems without having to transfer large files across the network. By continuously recording the packets traversing the network, rich troubleshooting details are always available when needed, avoiding lost time waiting for problems to reoccur, accelerating problem isolation and resolution, and minimizing the effect on business productivity.

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## 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](http://www.riverbed.com).



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