

What's New in Cascade Profiler 9.5 and Cascade Shark / Pilot 3.5

Cascade® provides end-to-end visibility into service performance – from the remote LAN, across the WAN and deep into the data center – in both physical and virtual environments. This announcement extends Cascade visibility into load balanced applications, virtualized computing environments, and VoIP quality, making today's complex data centers more transparent for network monitoring and troubleshooting. The new multi-segment analysis and precision time stamp capabilities in Cascade Shark® and Cascade Pilot® 3.5 enable network manager to quickly determine where in the network problem are occurring.

The Transparent Datacenter

Visibility into application delivery controllers (ADC) – automates the process of discovering and mapping the ADC virtual IP (VIP) address to its backend pool of servers, to enable reporting and monitoring of load balanced applications and services. Cascade Profiler® 9.5 supports F5 Local Traffic Manager (LTM), Riverbed Technology Stingray™ Traffic Manager and manual mechanism for mapping other ADC solutions.

Virtual Cascade Shark – a software version of the Cascade Shark appliance that has been virtualized to run on VMware ESX environments, Virtual Cascade Shark attaches to the virtual switch in the ESX hypervisor to

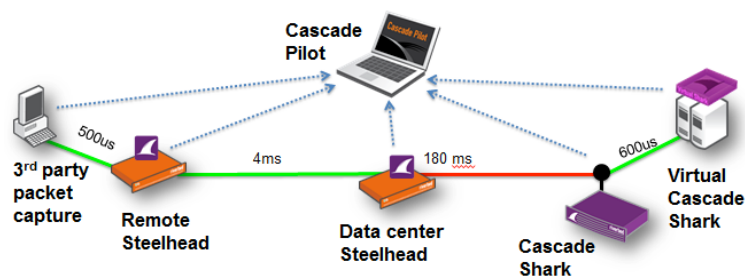
- Monitor the performance of all inter-VM traffic and send data to Cascade Profiler for analysis and reporting
- Continuously capture packets and store them on the local server or on a storage area network (SAN) for back-in-time analysis with Cascade Pilot

Virtual Cascade Shark can also be deployed on a customer-provided server as a low-end packet capture appliance.

Multi-segment analysis (MSA) – Cascade Pilot simplifies the task of correlating and analyzing related traffic streams captured from multiple locations or sources to quickly identify where on the network performance issues are occurring. Packet capture sources can include:

- Cascade Shark appliances
- Steelhead appliances (via Embedded Cascade Shark functionality or TCPdump)
- Third-party packet capture solutions, such as Wireshark, that support the standard pcap format

- Automated discovery F5 LTM and Stingray ADCs for visibility into load balanced environments
- Monitor virtualized computing environments using Virtual Cascade Shark
- VoIP quality reporting
- Support for Cisco SCCP "Skinny" VOIP signaling
- Multi-segment analysis
- Support for precision time stamps from third-party span port aggregators
- Hierarchical device & interface reporting



VoIP quality reporting – while Cascade Shark / Pilot have long monitored VoIP quality, this announcement brings VoIP reporting into Cascade Profiler, further deepening the integration between the two products. Cascade Profiler can report on jitter, packet loss, MOS and R-Factor, as well as QoS category for H.323, SIP and Cisco SCCP (Skinny Call Control Protocol) signaling protocols. Cisco SCCP is a newly supported protocol.

Ease-of-Use Enhancements

High-precision time stamps – Cascade Shark appliances can adopt the precision time stamps from network taps for greater accuracy and for coordinated time stamping across the network and with other monitoring tools in the customer's environment. Precision time stamping is critical for low-latency trading environments or other time-sensitive applications and provides better accuracy for multi-segment analysis. Supported network taps include:

- Gigamon SMT-436 GigaSMART blade for the GigaVue-2404
- cPackets cPacket cVU & cTap families (with Precision Timing module option)
- VSS Monitoring Distributed Traffic Capture Series

Floating / Undocked Windows – Cascade Pilot now can allow View windows to be “undocked” and expand to full screen size or moved to a second monitor. Great for operations that need to display on large monitors while operating additional troubleshooting views.

Hierarchical device and interface grouping and reporting– an alternative to service-based views, the interface dashboard organizes all the devices and interfaces known to Cascade Profiler in a built-in and user-defined tree structure and streamlines access to interface-specific metrics, such as utilization, top 10 interfaces, QoS, etc.

Analytics enhancements – streamlines the process of bulk tuning analytics policies, by enabling all policies for a location to be edited from the same screen. In addition, analytics alert evidence tables for response time now automatically breaks down total response time into network round trip time (NTT) and server delay, allowing users to more quickly isolate where the delay is occurring.

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.



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

Riverbed Technology Ltd.
One Thames Valley
Wokingham Road, Level 2
Bracknell. RG42 1NG
United Kingdom
Tel: +44 1344 401900

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