

OVERVIEW

Based on high-performance 1GbE and 10GbE capture cards, Cascade Shark is capable of sustained line-rate, multi-gigabit per second recording of network traffic without packet drops.

Cascade Shark appliances provide an effective and indispensable tool for the manipulation and in-depth analysis of multi-terabyte network traffic recordings.

Fully integrated with Wireshark, Cascade Shark appliances support packet filtering based on Wireshark BPF and Wireshark Display filters.

Cascade Shark seamlessly integrates with Cascade Pilot supporting an intuitive drag-and-drop multi-level drill down for local and remote analysis and troubleshooting.



Cascade Shark

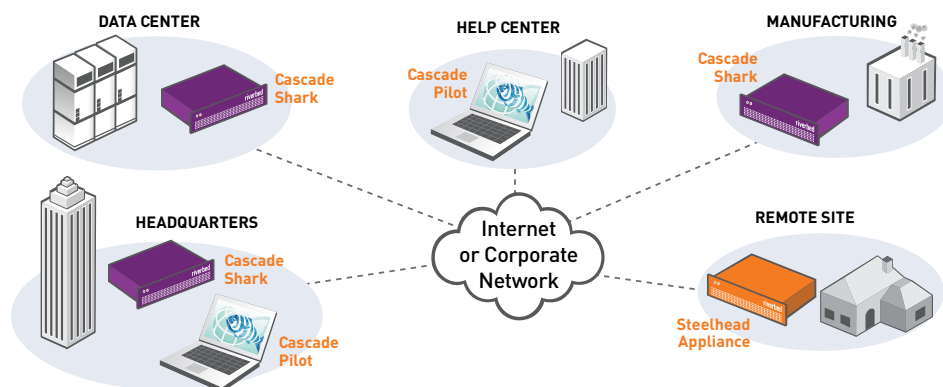
Riverbed® Cascade® Shark appliance, formerly known as the CACE Shark appliance, is a turnkey hardware and software solution providing high-performance, multi-gigabit per second, network traffic analysis, recording, monitoring, and reporting.

Wireshark Within

Cascade Shark includes the only network analysis software fully integrated with Wireshark, the world's most popular network protocol analyzer. This integration makes the prodigious collection of Wireshark Display Filters available for use within the network analysis software engine. Using the visual selection and drill-down features of Cascade Pilot, the "Send to Wireshark" feature is used to export only the selected subset of the traffic to Cascade Pilot for detailed packet protocol inspection with Wireshark.

Global Network Visibility

By placing Cascade Shark appliances at strategic vantage points in your network you will significantly improve your network visibility in geographically distributed network locations. The number and placement of Cascade Shark appliances will be determined by factors such as your distributed network architecture, mission-critical applications, traffic recording needs, and security design.



Example deployment of Cascade Pilot, Cascade Shark and Steelhead appliances

Multi-Gigabit Per Second Ethernet Traffic Capture

Cascade Shark includes Shark Packet Recorder which is capable of continuous recording of multi-gigabit per second network traffic to disk without packet drops. Shark Packet Recorder is a customized dump-to-disk utility based on the 1GbE and 10GbE capture cards and a RAID-enhanced and specially designed packet storage system.

Enhanced Retrospective Analysis with Multi-Terabyte Packet Recordings

No more awkward file rotation schemes resulting in thousands of files and file boundaries representing a single recording. A multi-terabyte packet recording is represented as a single "virtual file" in Cascade Pilot and, through the use of a powerful and intuitive drag-and-drop graphical user interface, the user can quickly isolate arbitrary time intervals of interest within a recording and perform in-depth analysis and traffic visualization. Trending/Indexing data is also available for high-speed analysis of terabyte traffic recordings.

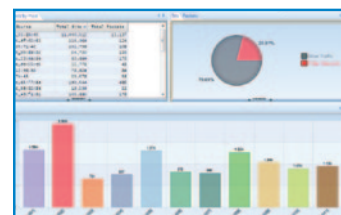
“It was taking us hours and hours to capture, decode and get to bottom line information for particular customers. With Cascade, we’re now able to do it in less than 20 minutes.”

— Avi Lonstein, CEO, Airespring

Remote Live and Off-Line Troubleshooting

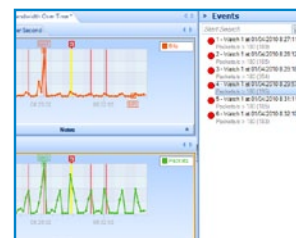
Cascade Shark supports a wide variety of network protocols and traffic analysis metrics (called Views) to meet all of your monitoring, reporting, and troubleshooting needs. Views can be applied to live traffic on Cascade Shark’s local network interfaces or to off-line network traces stored in Cascade Shark’s storage system. Typical Views include:

- LAN and Network troubleshooting (MAC, VLAN, ARP, ICMP, DHCP, DNS)
- Bandwidth usage (including micro-bursts, IP, TCP, WEB, VoIP)
- Talkers and conversations (IP, subnets, countries, TCP, WEB, VoIP)
- Performance and errors (IP, TCP, Web, VoIP)
- User activity (Web, VoIP)



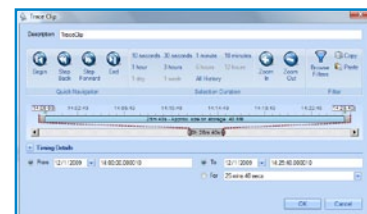
Performance Monitoring Using Triggers and Alerts on Network Metrics

Cascade Shark supports “Watches,” a sophisticated triggering and alerting technology. A Watch consists of a trigger condition on a View metric and a set of actions to be carried out whenever the trigger condition is met. You can, for example, be alerted on high bandwidth usage, slow server response time, high TCP round trip time, and much more. When a Watch running on a Cascade Shark detects that a threshold has been crossed, Cascade Shark will execute one or more actions. The available actions include sending an email/Twitter message and starting/stopping a capture job.



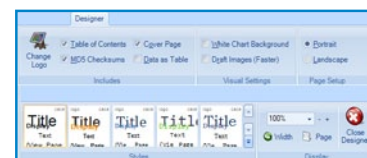
Navigation Through Vast Amounts of Data with a Few Mouse Clicks

The seamless interaction between Cascade Pilot and Cascade Shark appliances support the innovative Time Control technology, whereby a user can move through View metrics calculated over extended periods of time with just a few mouse clicks. Based on the selected time interval, advanced subsampling and data aggregation techniques are used to optimize the granularity of the visual presentation and minimize the bandwidth usage between the remote Cascade Shark and Cascade Pilot.



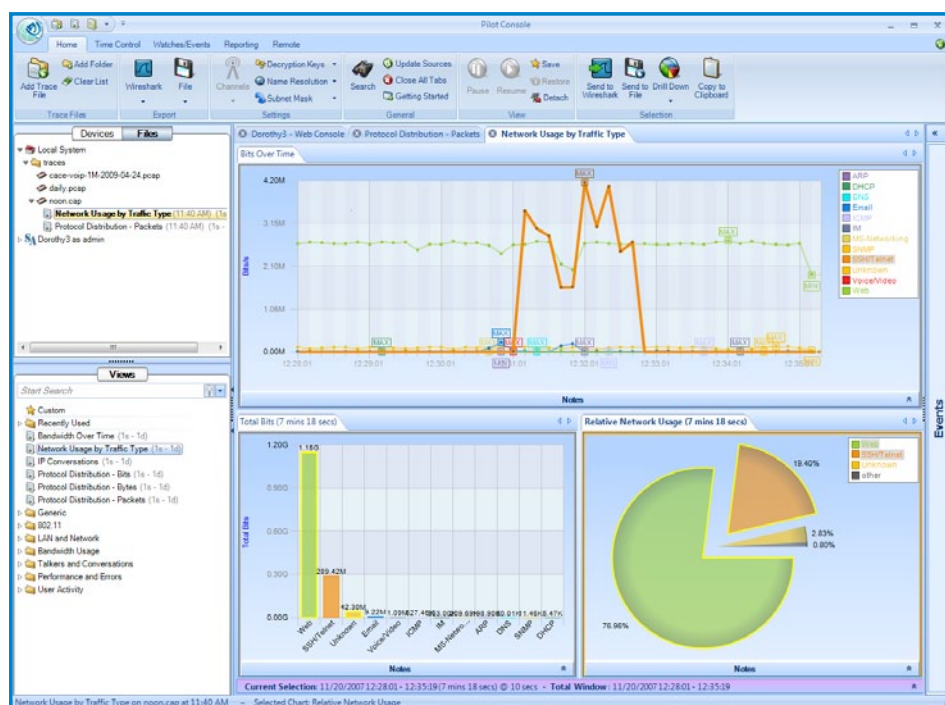
Professional Reports Generated On Demand

Cascade Shark appliances support enhanced report generation from displayed Views. Upon request from Cascade Pilot, Cascade Shark generates the data for a report based on one or more Views. The report data is then sent to Cascade Pilot for rendering and immediate presentation.



Seamless Integration with Cascade Pilot

Cascade Pilot is designed to seamlessly and securely connect with one or more remote Cascade Shark appliances. All of the features of Cascade Pilot are available in the distributed environment, including an extensive collection of Views, drill-down analysis, retrospective visualization and analysis of long-duration traffic statistics, a flexible trigger-alerting mechanism, and simplified professional report generation. Once connected, the interaction between Cascade Pilot and Cascade Shark appears as if it were local, and remote traffic sources appear as local sources to which Views can be applied.



Cascade Pilot's Interactive and Intuitive User Interface

“The first thing we noticed was the amazing ability of the Cascade platform to capture all subpackets and RTPs coming over multiple Gigs of full bandwidth--with-out dropping any packets.”

— Avi Lonstein, CEO, Airespring

“Cascade has enabled us to meet our customer needs and provide them with what I believe to be a faster and more satisfactory resolution to their issues. That changes our reputation in the marketplace. Our competitors simply can't do what we do.”

— Avi Lonstein, CEO, Airespring



Think fast.®

About Riverbed

Riverbed Technology is the IT performance company. The Riverbed family of wide area network (WAN) optimization solutions liberates 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 with distributed operations use Riverbed to make their IT infrastructure faster, less expensive and more responsive. Additional information about Riverbed (NASDAQ: RVBD) is available at www.riverbed.com.



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