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SteelCentral AppResponse 11

Faster insights equals better user experience. When it comes to improving network and application performance, it's often a race against time. Every minute spent troubleshooting is a minute your users are unproductive and your customers could be researching the competition.

The Business Challenge

Today's network manager is facing a much different network than a few years ago. There are a whole host of new architectures and technologies that are being adopted within the enterprise that can affect network performance. For example, Voice over Internet Protocol (VoIP) is one of key drivers to upgrade the WAN and real-time video and on-demand streaming can represent up to 75% of network traffic. Hybrid-WAN and software-defined WAN are also seeing significant uptake. Add to that the ongoing trends of virtualization, mobilization, and webification of applications and the network team has their hands full trying to learn these technologies, how they affect network performance, and whether or not their monitoring solution is up to the job.

SteelCentral AppResponse 11

Riverbed® SteelCentral™ AppResponse 11 offers powerful, flexible network and application analytics and workflows to speed problem diagnosis and resolution. Functional immediately out of the box with pre-defined insights and a rich variety of performance metrics, SteelCentral AppResponse 11 helps you get answer fast.

SteelCentral AppResponse 11 combines network forensics and historical analysis, application analytics, and end-user experience monitoring in a single solution so you have everything you need at your fingertips to resolve performance issues quickly. And it supports a diverse group of users—NetOps, security, AppOps, IT management, line of business, and cross-functional "tiger" teams—from novice to experts.

AppResponse 11 passively monitors the network and collects packet data for continuous, real-time and historical monitoring and fast troubleshooting. It indexes, and stores the packets in such a way that there is no need for file transfers when performing forensic analysis. By continuously recording the packets traversing the network, rich troubleshooting details are always available when you need them, saving time and money by minimizing the effect downtime has on business productivity and reducing or avoiding business-stopping slowdowns or outages.

Using simultaneous multi-stage analytic processing, SteelCentral AppResponse 11 delivers powerful capabilities, such as automatic application discovery, rich application insights, response time decomposition and end-user experience monitoring for web applications.

SteelCentral Packet Analyzer Plus is the graphical packet analysis software for SteelCentral™ AppResponse 11. It facilitates the rapid isolation of the specific packets needed to diagnose and troubleshoot complex performance issues and enables you to quickly analyze multi-terabyte packet recordings on remote appliances without having to transfer large packet capture, files across the network.

Highlights of SteelCentral AppResponse 11:

- Out-of-the-box, pre-defined insights based on deep packet inspection (DPI)

- Expert, "pivot and drill down" analysis

- New transactional performance metrics speeds analysis by reducing the need to go to the packet

- Response Time Composition Chart with 8 different metrics showing network versus server time

- Passively monitors browser load time for the page and object level

- One click access to packet analysis

Key Benefits

Minimize Downtime

- Rapidly identify and triage problems

- Ensure optimal network and application problems

Improve Productivity

- Enable operational consistency

- Facilitate collaboration and reduce "finger pointing" among IT teams

Reduce Costs

- Protect user experience and minimize impact of downtime on business

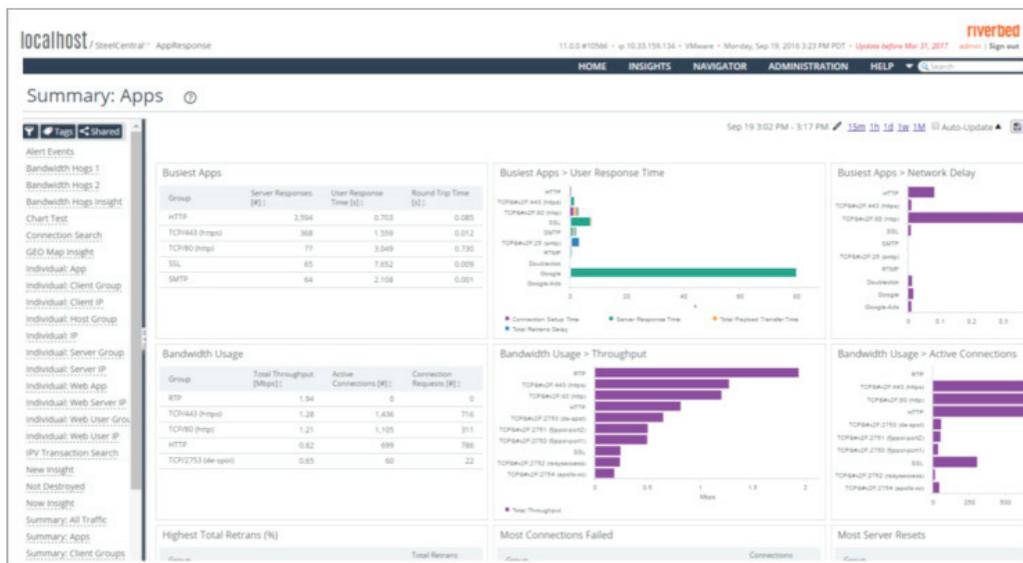- Reduce risks and avoid costs through strategic planning

Figure 1
AppResponse 11 insights provides pre-defined, intelligent analysis and workflows that are functional right out of the box .

Key Features

Network Forensics

The Shark Packet Analysis (SPA) module delivers near real-time traffic analysis of packet events with 1-second granular displays with microsecond resolution.

Deep packet inspection (DPI)
- Auto-recognizes more than 1300 popular business and recreational applications

Multi-capture jobs
- Perform multiple, separate capture jobs on a SteelCentral AppResponse 11 appliance and dedicate different amounts of storage or filtering

Selective recording
- Record and store just the right amount of packet data and also extend the amount of packet data and length of time that it can be stored. Capture and store just the header, the header and the first xx bits, or the whole packet. You decide

Smart packet indexing
- Real-time indexing of packet data means you can quickly and easily search terabytes of data—without having to drag the packets across the network

Network-layer analysis
- Provides support for network-layer analysis, such as ARP, CIFS, microburst, broadcast and multicast issues

Address management protocols
- Troubleshoot DHCP and DNS issues

Application-specific analysis
- All variations of FIX
- Market Data Feed protocols: ITCH, PITCH (Chi-X, BATS), Euronext, Aquis
- Market Data Gap Detection views
- VDI: VMware PCoIP, Citrix ICA and CGP

Network Analytics

The Application Steam Analysis (ASA) module offers layer 4 TCP and UDP metrics with historical summary information.

Real-time and historical data analysis
- Monitor live performance for all users all the time, and alert against SLAs

- Roll-up metrics at 1 min., 5 min., 1 hour, 6 hour, and 1 day granularity
- Store data up to 3 years
- Stores aggregate data and individual flows and pages so you can get to the answer faster without having to go to the packets as often
- Analyze historical information for trending and capacity planning

Flexible data analysis
- Continuously automated calculation of 60+ TCP and UDP metrics
- Aggregate traffic by applications, users, servers, clients, conversations, and host groups. Define a hierarchy of host groups
- Understand network bandwidth utilization by remote offices

Response time analysis
- Measure responsiveness and performance for internal and external users of your enterprise applications
- Response Time Composition Chart graphically shows network versus server delay to quickly pinpoint where to focus your troubleshooting efforts. Displayed metrics include: connection set up, server response, payload transfer, retransmission delay, network round trip time (out), network round trip time (in), user response

Web Application Analysis

The Web Transaction Analysis (WTA) module provides real-time web application performance for monitoring business transactions.

Web page time analysis
- Auto-discovers all URLs, page families and end-user activity
- View metrics by Slow Pages, Page Views, Page Time, Network Busy Time (per page), Server Busy Time (per page)

End-user experience monitoring (EUM)
- View response time for web pages for a true end-user perspective of performance. Passively monitors browser load time for the page level and object level of a web page or group of web pages as monitored as a single transaction

Web transaction performance
- Detects abnormal web transaction performance and directly alerts on common web application problems such as page errors, response/page, page rate, # of slow pages, slow page times, etc

Group and monitor related pages or users
- Easily monitor a group of related web pages in a common way. Customize monitoring to flexibly map your web pages to an application. Group page views together or separate pages that are monitored together by default
- Group originating IPs of users who are using/downloading the pages

Geographic heat map
- Geographic display of performance and usage for Web applications and page views to focus triage efforts on the most critically affected users and sites
- View by web application, region, platform, and browser type

Real-time SSL decryption
- Able to decode HTTPS when the customer has the key

Web UI

Insights
- Pre-defined, intelligent analysis and workflows that are functional right out of the box. Enables novice users to use AppResponse 11 and gain expertise over time. Create, save and share your own insights

Navigator
- Expert analysis with multi-dimensional drill down and pivots. Allows you to explore all dimensions of your analysis

Alerting
- Detailed, flexible alerting engine with advanced filters to minimize false positives

Search
- Flexibly search for anything that is stored in the database, such as host groups, applications, IPs, IP conversations, pages, etc

Reporting
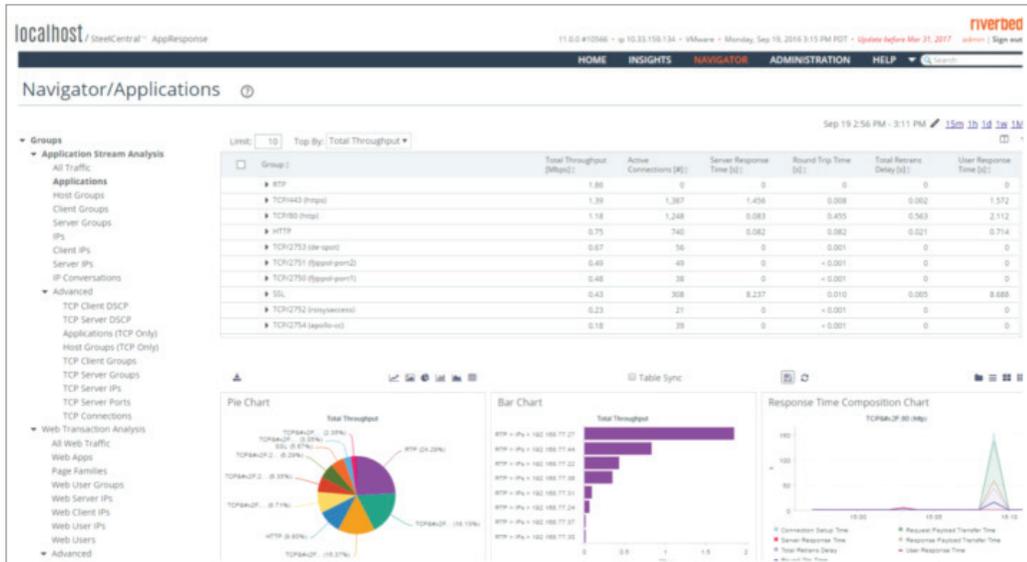- Share analysis with colleagues and executives

Supported Product Models

SteelCentral AppResponse 11			
Model	SCAN-02170	SCAN-04170	SCAN-06170
Size	1U	2U	2U
Storage	8TB	32TB	–
Supported Storage Units	N/A	N/A	8
Max Storage Capacity	8TB	32TB	576TB
NIC Slots	1	2	2
NIC Cards	4x1GE Cu or Fiber or 2x10GE Fiber	4x1GE Cu or Fiber or 2x10GE Fiber or 4x10GE Fiber	4x1GE Cu or Fiber or 2x10GE Fiber or 4x10GE Fiber

SteelCentral AppResponse 11 6170 Storage Units		
Model	SCAN-SU-48TB	SCAN-SU-72TB
Size	2U	2U
Storage	48TB	72TB

SteelCentral NetShark 2170, 4170 and 6170 users with active maintenance contracts can upgrade to AppResponse 11 free of charge.

Gartner Magic Quadrant Recognition

Riverbed is a three-time leader in the Gartner Network Performance Monitoring and Diagnostics (NPMD) magic quadrant.*

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About Riverbed
Riverbed Technology, the leader in application performance infrastructure, provides the most complete platform for the hybrid enterprise to ensure applications perform as expected, data is always available when needed, and performance issues can be proactively detected and resolved before impacting business performance. Learn more at riverbed.com/SteelCentral.

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