SteelCentral NetProfiler

Centralized network performance analysis and reporting

The Business Challenge

Today, network operations engineers are expected to be application-fluent. They need a deeper understanding of the applications running on the network and what end users are actually experiencing. So when applications are slow or fail, network managers must go beyond simply proving that the network is not at fault and start looking at the problem through the lens of the application.

When users complain about performance problems you should have no trouble identifying what they are experiencing and giving business owners a good picture of the actual response time and how that relates to the network. More, and more, varied people within companies are interested in application performance. The time has come to convey network performance details to them in a way that they'll understand.

The Riverbed Solution

Riverbed® SteelCentral™ NetProfiler is a centralized reporting and analysis console that you can use to quickly view network and application performance and troubleshoot issues before your end users ever know there's a problem. SteelCentral NetProfiler combines network flow data with packet-based flow metrics to provide proactive monitoring, analysis, and reporting.

Use NetProfiler to answer questions such as how much traffic do I have, who is using it, where is it going, and how is it prioritized?

SteelCentral NetProfiler collects information from:

- Riverbed® SteelCentral™ AppResponse 11 network-based application performance management
- Riverbed® SteelCentral™ NetShark high-speed packet collection
- Riverbed® SteelCentral™ Flow Gateway flow collectors
- Riverbed® SteelHead™ WAN optimization
- Riverbed® SteelFusion™, a platform for edge IT
- Flow-enabled devices such as routers, switches, firewalls, and proxys

NetProfiler uses automated discovery and dependency mapping to understand the application services in your environment and automated behavior analytics to baseline normal performance and alert you to changes as soon as they occur—typically before users are even aware that performance is degrading.

In addition to providing rich insights on network usage, NetProfiler also provides deep application visibility that enables you to effectively monitor performance and ensure service levels for applications.

SteelCentral NetProfiler integrates with several other SteelCentral solutions to enrich your every day IT operations functions.

These one-click integrations include:

- Riverbed® SteelCentral™ AppResponse: network forensics and application analysis

- Riverbed® SteelCentral™ Aternity: end-user experience monitoring from the device perspective

- Riverbed® SteelCentral™ NetIM: infrastructure management

- Riverbed® SteelCentral™ SteelHead™: WAN optimization and functions as remote data source for NetProfiler

- Riverbed® SteelCentral™ Portal: single source of truth for network, application, infrastructure performance and end-user experience monitoring

Key Benefits

- Improve user experience and productivity

- Enhance IT collaboration and operational efficiency

- Speed problem identification and resolution

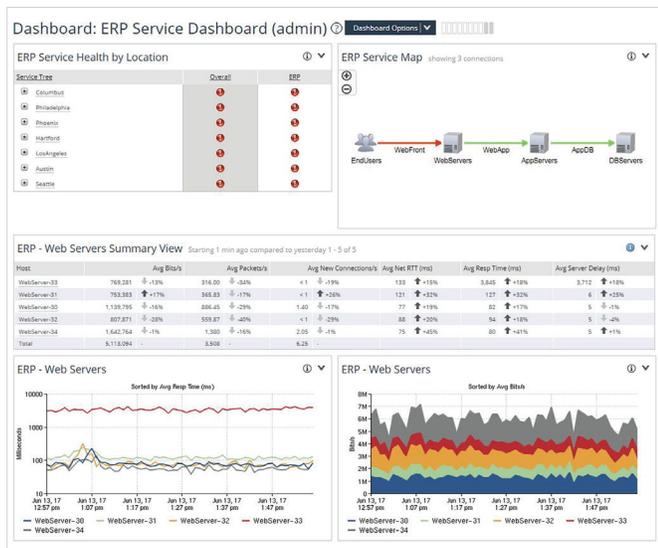- Increase application visibility and improve app performance

Figure 1
SteelCentral NetProfiler dashboards include everything you need to know from the highest level to the most granular detail with one-click drilldown for root cause and problem isolation and deep application visibility.

Key Features

Application recognition and monitoring

- NetProfiler offers three ways to create a custom application definition. You can map:

  - Hosts, host groups, protocols, ports to an application name

  - Auto-recognized applications to an application name

  - URLs to an application name

- Deep packet inspection of application traffic from SteelCentral AppResponse 11, SteelCentral NetShark and SteelHead for easy viewing and analysis in the SteelCentral NetProfiler dashboard to help you quickly and accurately distinguish business-critical from recreational applications that are running across your network including the optimized WAN

Automated analytics

- Uses baseline statistics and proactive monitoring to trigger an alert once a deviation is detected, without prior knowledge of specific applications, path dependencies, and number of users or even router changes

SD-WAN visibility

- Ensure the success of your SteelConnect SD-WAN environment by validating policies are working as expected, troubleshooting problems quickly, and enabling better planning

- Requires SteelCentral Insights for SteelConnect

Discovery and dependency mapping

- Includes a discovery wizard that creates application dashboards to automate the process of mapping transactions to their underlying infrastructure so that application definitions and interdependencies are accurate—including discovering through F5, Riverbed® SteelApp™ Traffic Manager and other application delivery controllers (ADCs)

- Creates service maps for accelerating troubleshooting across complex application ecosystems, and planning for data center consolidation or cloud, disaster recovery, and virtualization initiatives

WAN optimization analysis

- Robust analysis of optimized WAN environments enable you to easily plan your optimization deployments, assess the impact, and quantify benefits

- Cost-effective troubleshooting of branch issues using a single product for visibility, control and optimization

- Centralized reporting and monitoring of SteelHead quality of service (QoS) site and classes

- Rich application visibility/monitoring through deep packet inspection (DPI)

Streamlined workflows

- One-click dashboard creation creates NetOps-centric, application-specific, SteelHead WAN optimization-specific, and VoIP-related dashboards that quickly surface relevant data and streamline troubleshooting workflows

NetProfiler 10.10 is IPv6 and USGv6 certified, and can support both IPv6 and IPv4 addresses simultaneously.

Service monitoring

- Monitor all network and infrastructure components involved in delivering an application service such as users, Web servers, load balancers, application servers, authentication and DNS servers, databases, and the links between them

- Advanced analytics changes in performance, providing proactive notification of brewing issues

- Service dashboards provide a quick view into the end-to-end health of a business service that is visually shown by red-yellow-green health status indicators

- Guided drill down reveals details of the most critical applications and essential data for fast troubleshooting

Server virtualization and VMware NSX SDN

- NSX-aware IPFIX format enables SteelCentral products to provide detailed information about what NSX virtual overlay networks are running on the physical network, what applications are involved, and which hosts and virtual tunnel endpoints are generating the traffic

Related Products

SteelCentral Flow Gateway

NetProfiler requires one or more Flow Gateways to collect flow from across the network

SteelCentral Portal

NetProfiler provides SteelCentral Portal with network-centric information such as Top Interfaces, Top Talkers, etc. to contribute toward a true end-to-end view of application performance

NetProfiler can accept packet-based flow data from the following sources:

SteelCentral AppResponse 11

Network-based application performance management that integrates network forensics and historical analysis, application analytics and end-user experience monitoring

SteelCentral NetShark

Continuous, high-speed packet capture, indexing, and storage

SteelCentral AppResponse with NetShark Module

Network-based application performance management that integrates historical network analysis, application analytics and end-user experience monitoring

SteelCentral NetIM

Seamlessly marries network data with SNMP information so you can access device metrics directly from the NetProfiler interface

SteelHead with NetShark Virtual

The industry's #1 WAN Optimization solution

SteelFusion Edge with NetShark Virtual

Software-defined edge with a hands-off, Zero Branch IT approach

Product Models

SteelCentral NetProfiler supports from 2 million to 200 million raw flows per minute.

SteelCentral NetProfiler Standard Edition

Models	SCNP-02270 Series				
Configuration	F1	F2	F3	F4	F5
Flow Capacity	200,000	400,000	600,000	800,000	1 million
Raw Flow Capacity	2 million	4 million	6 million	8 million	10 million

SteelCentral NetProfiler Enterprise Edition

Models	SCNP-04270 Series			SCNP-04270 Expansion	
Configuration	UI	DB	AN	EX	DP
Flow Capacity	N / A	N / A	1 million	1 million	N / A
Raw Flow Capacity	N / A	N / A	10 million	10 million	N / A
Max Flow Capacity	N / A	N / A	1 million	20 million	N / A

SteelCentral NetProfiler Virtual Edition supports from 150,000 to 30 million raw flows per minute.

SteelCentral NetProfiler Virtual Edition Series

Models	SCFG-VE Series										
Configuration	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11
Flow Capacity	15,000	30,000	60,000	90,000	200,000	400,000	600,000	800,000	1 million	2 million	3 million
Raw Flow Capacity	150,000	300,000	600,000	900,000	2 million	4 million	6 million	8 million	10 million	20 million	30 million
Hypervisor	VMWare ESXi 6.0 and 6.5										

SteelCentral NetProfiler Virtual Edition runs on VMware vSphere to provide you with added deployment flexibility for virtualized data centers and software-defined networks.

SteelCentral NetExpress is an all-in-one solution that combines the best of flow and packet capture plus monitoring into a single product. It is best suited for smaller organizations or a small subsection of a larger network. SteelCentral NetExpress accommodates flow rates ranging from 150,000 to 1.2 million raw flows per minute.

SteelCentral NetExpress

Models	SCNE-00470 Series				
Configuration	F1	F2	F3	F4	F5
Flow Capacity	15,000	30,000	60,000	90,000	120,000
Raw Flow Capacity	150,000	300,000	600,000	900,000	1.2 million

The SteelCentral NetExpress 470 Virtual Edition is a virtualized version of SteelCentral Express 470 that runs on VMware vSphere and can be deployed by companies that have fully embraced virtualization or within software-defined data centers.

SteelCentral NetExpress Virtual Edition Series

Models	SCNE-VE Series				
Configuration	F1	F2	F3	F4	F5
Flow Capacity	15,000	30,000	60,000	90,000	120,000
Raw Flow Capacity	150,000	300,000	600,000	900,000	1.2 million
Hypervisor	VMWare ESXi 6.0 and 6.5				

For complete configuration details and product models, please visit www.riverbed.com to download the SteelCentral specification sheet.

Gartner Magic Quadrant Recognition

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

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