

# PERFORMANCE MANAGEMENT

# APPLICATION PERFORMANCE FROM THE PERSPECTIVE THAT

# YOURS

Applications are now the center of the business world. We rely on them to reach customers, build products, automate back-end business processes, and perform nearly every task critical to business.

For IT, application performance is the most visible indicator of job performance, and that's why organizations around the world rely on the Riverbed

performance management family of Cascade and OPNET products for the insight they need to deliver a consistently top-notch user experience.

With our performance management solutions, you can monitor every critical part of your application delivery chain and troubleshoot any issues that arise — before they become problems.

Whether you are rolling out new applications, consolidating or virtualizing data centers, migrating to the cloud, supporting mobile device users or simply in need of a troubleshooting and visibility solution, Cascade and OPNET products provide you with a holistic view of your environment.

# RIVERBED PERFORMANCE MANAGEMENT: BECAUSE INSIGHT IS BETTER THAN HINDSIGHT

#### **END-TO-END VISIBILITY**

#### Manage the complete performance picture

Leverage cloud, mobile, and virtual environments without compromising visibility and intelligence.

#### **END-USER AWARE**

# Deliver unmatched end-user experience

Understand end-user experience and productivity, shifting focus from infrasturcture to applications and users.

#### **ANALYTICS**

# Increase IT effectiveness and productivity

Automated expert analysis to empower your IT teams, as well as increase application availibility and user productivity.

# STREAMLINED TROUBLESHOOTING

#### Dramatically reduce downtime

Navigate from business-level views to performance metrics to the root-cause of performance problems.

#### **INTELLIGENCE**

# Eliminate blind spots and plan for change

Understand holistic views of your users, their application ecosystem, and the infrastructure it relies on.



# CASCADE AND OPNET PERFORMANCE MANAGEMENT PRODUCTS

Our unique combination of **End-User Experience Monitoring**, **Transaction Tracing & Component Monitoring**, and **Network & Infrastructure Management** maximizes the performance, availability, and productivity of any critical application.

# **End-User Experience Monitoring:** Catch application problems before your users do

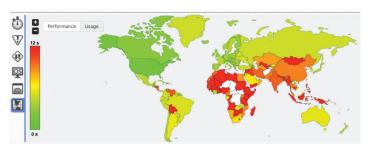
If users expect instant access and a consistent experience with the applications they need, then you should be able to monitor and troubleshoot their unique experience.

Whether users are local, around the world or mobile, you must be able to monitor, troubleshoot, and compare their actual experience to stay ahead of problems.

And it's not enough to just manage the application; you have to know exactly what your end user is experiencing with real visibility into their browser, the network, and the server.

Riverbed OPNET AppResponse Xpert® delivers real-time monitoring, transaction analysis and insight into the performance of traditional and web-based applications, and allows IT to quickly isolate application response time issues for faster troubleshooting. Add-on modules are available for advanced problem solving.

Riverbed OPNET AppResponse Xpert® BrowserMetrix extends enduser experience monitoring to webbased applications, even those hosted in the cloud. And it measures the real end-user experience for web-based applications at the browser level.



RAPIDLY IDENTIFY HOT SPOTS FOR RESPONSE TIME DELAYS AND DRILL DOWN TO SPECIFIC CAUSES SUCH AS SERVER, NETWORKS, AND BROWSER RENDERING.

	Name	Priority	Apdex Score	Page Views	Minor Violations	Major Violations	Response Time
٥	All Page Views		.96	7,354	257	154	3.481 secs
م	Products	Critical	.94	2,625	128	81	3.91 secs
٥	Homepage	Critical	.94	1,514	72	54	3.809 secs
٥	OPNETwork	Critical	.95	271	11	6	2.96 secs
م	News	High	.95	140	8	2	3.041 secs
م	Services	High	.98	610	7	4	1.493 secs
٥	About Us	Medium	.98	185	3	1	2.399 secs
٥	Training	Medium	.98	116	1	1	2.624 secs
٥	Events	Medium	.98	61	0	1	2.72 secs
م	Case Studies	Medium	.93	75	4	3	4.247 secs

GET VISIBILITY INTO ACTUAL USER EXPERIENCE AND SATISFACTION.

# **Transaction Tracing & Component Monitoring:** Track user transactions throughout the application infrastructure

Transaction tracing and component monitoring helps you track, monitor, and troubleshoot the performance of every component of multi-tier applications and the transactions that link them.

# Riverbed OPNET AppInternals Xpert® records and indexes all

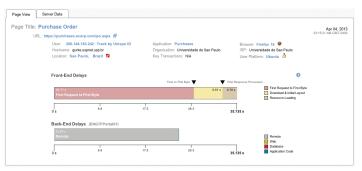
transactions in a unique, highly scalable big data approach to transaction tracing. It performs deep application component monitoring and transaction tracing across the multiple tiers that make up today's complex applications.

#### Riverbed OPNET AppMapper

**Xpert**® utilizes existing performance data from multiple sources to produce run-time application dependency maps for a complete picture of the application and infrastructure components that enable a production application.

## Riverbed OPNET AppTransaction

**Xpert®** enables you to track transactions throughout the application infrastructure, troubleshoot problems in production, and predict response times with "what if" scenarios prior to an infrastructure change.



IDENTIFY POORLY PERFORMING FRONT-END TRANSACTIONS AND INVESTIGATE CORRESPONDING RACK-END DELAYS



# **Network & Infrastructure Performance Management:** End-to-end monitoring, reporting, and analytics

Your infrastructure and network exist to deliver the applications that matter to your business.

Our performance management solutions alert you to issues before business is impacted, help you understand dependencies between your applications and network, and they improve troubleshooting. With this integrated approach you can understand the critical impact the network has on application performance.

Riverbed Cascade® Profiler offers end-to-end network monitoring, reporting, and analytics. It utilizes network flow data and complements it with packet-based performance metrics to proactively monitor and troubleshoot application and network performance.

#### Riverbed Cascade® Shark

provides scalable, high-performance continuous packet capture, rapid indexing, and long-term storage to ensure that packet-level information is always available for troubleshooting and granular, real-time and back-in-time analysis. It not only alerts on issues but can also help diagnose where a problem is and what's causing it.

Riverbed Cascade® Pilot is a robust packet analysis console that enables users to quickly analyze multi-terabyte packet recordings on remote Cascade Shark appliances, Cascade Shark® Virtual Edition, and Steelhead® WAN optimization products without having to transfer large packet captures files across the network.

### Riverbed Cascade® Gateway

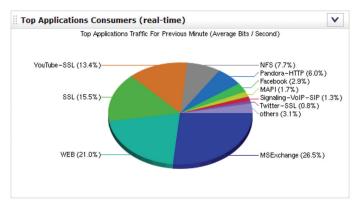
collects flow data (e.g., NetFlow, sFlow, J-Flow, IPFIX and other popular flow statistics) from network devices, deduplicates common information, and then forwards the data to the Cascade® Profiler console for analysis.

**Cascade® Express** gives the small and medium enterprise (SME) as much network troubleshooting power as a solution for the large enterprise.

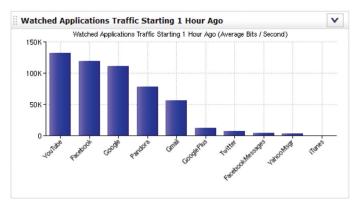
Riverbed OPNET AppSensor Xpert® provides infrastructure (e.g., servers, network routers, and switches) device monitoring by polling data about device health, such as CPU utilization and memory utilization, and by leveraging SNMP,

WMI, and IPSLA.

Riverbed OPNET Unified
Communications Xpert™ allows
continuous monitoring of voice and
video quality so you can catch and fix
problems before they ever become
an issue for your customers and
employees.



GAIN INSIGHT INTO APPLICATION TYPE AND USAGE: WHO USED IT, WHEN THEY USED IT, AND FROM WHERE.



MONITOR COMMON BUSINESS AND ENTERTAINMENT APPLICATIONS.

# RIVERBED: THE APPLICATION PERFORMANCE COMPANY

With products and solutions including WAN optimization, performance management, application delivery, and storage acceleration, Riverbed helps organizations manage and accelerate performance.

To learn more about Riverbed performance management and other Riverbed products and solutions, visit **riverbed.com/rpm**.

## **GARTNER MAGIC QUADRANT RECOGNITION**

 $\label{eq:we're a leader in the Gartner Magic Quadrant for Application Performance Monitoring} We're a leader in the Gartner Magic Quadrant for Application Performance Monitoring and Magic Quadrant for Application Performance Monitoring Magic Mag$