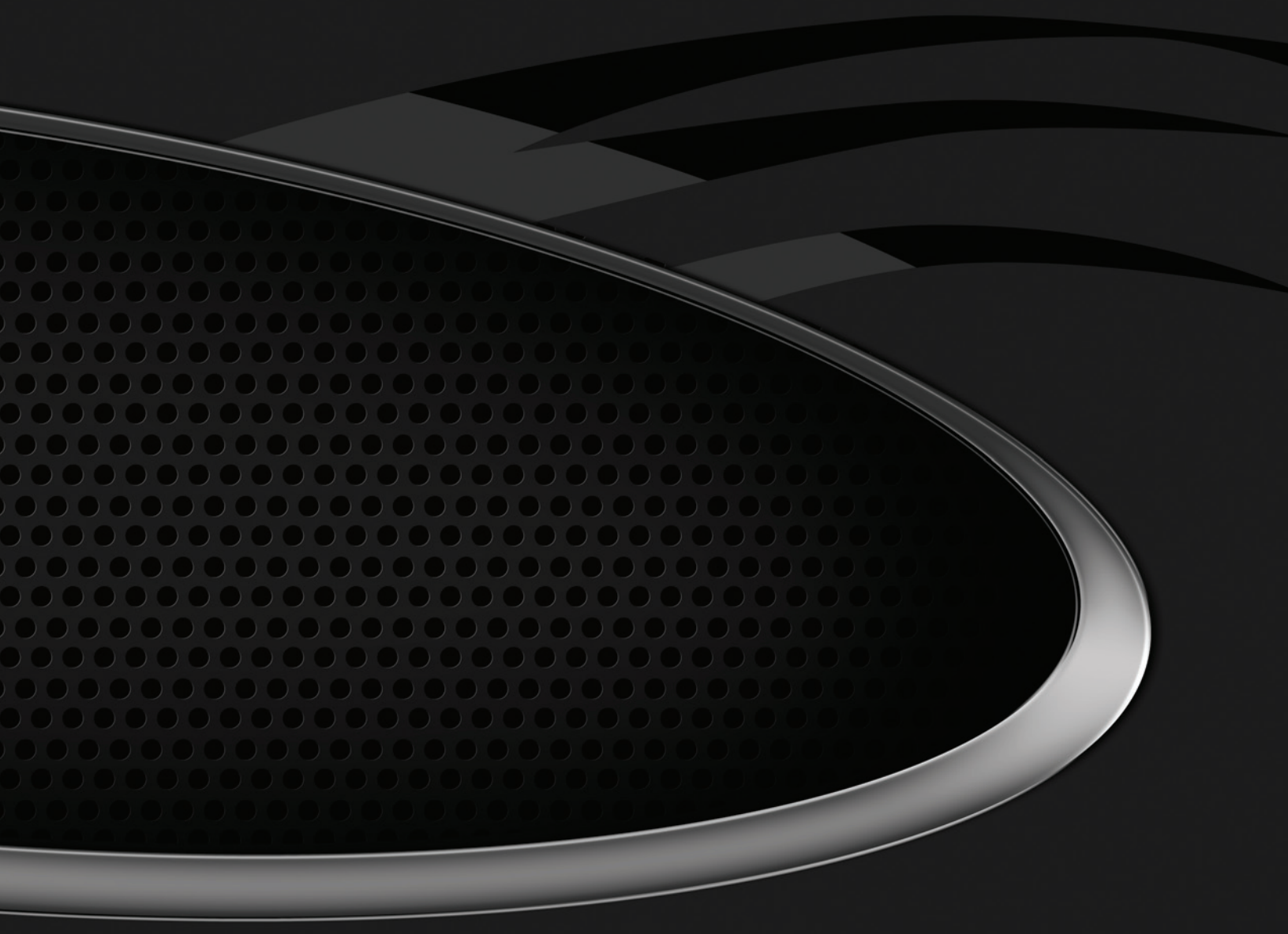# Riverbed Stingray Traffic Manager

riverbed®

Overview

Online applications are expected to deliver consistently excellent service levels, despite today's increasing traffic loads, rapid change, and complex deployment infrastructures. Riverbed® Stingray™ traffic manage-ment solutions provide complete control over user traffic, allowing administrator to accelerate, optimize, secure, and control key business applications. With Stingray, now these services can be delivered more quickly and ensure the best possible performance across any deployment platform.

Stingray Traffic Manager

Deliver fast, secure, and available applications

Application delivery controllers (ADCs) are a key component of business-critical applications because they accelerate transactions, maximize availability, manage security policies, and provide a point of control to monitor and manage application traffic. Stingray Traffic Manager is a software-based ADC that provides unprecedented scale and flexibility to deliver applications across the widest range of environments, from physical and virtual data centers to public and hybrid clouds.

The benefits are clear

Stingray Traffic Manager benefits include:

Speed: Accelerate services, increase capacity, and reduce costs by offloading performance-draining tasks such as SSL and compression onto Stingray's optimized implementations. Administrators can also cache commonly requested content and optimize traffic delivery to your applications so they'll run as fast as they would in a perfect benchmark environment.

Reliability: Improve application avail-ability by intelligently distributing traffic, avoiding failed or degraded servers, monitoring performance problems, and shaping traffic spikes.

Improved security: Stingray Traffic Manager operates as a deny-all gateway, only admitting traffic types it has been configured to admit. This gives full control over how traffic is internally routed. High-performance inspection can interrogate any part of a request or response to apply global filtering or scrubbing policies. The Stingray Application Firewall option also protects against a broad range of web application attacks.

Ease of management: Stingray Traffic Manager makes it easy to manage how users interact with the applications, and the infrastructure those applications depend on. Administrators can also use it to shape, prioritize, and route traffic, to drain infrastructure resources prior to maintenance, and to upgrade user sessions across application instances, all while preserving the user experience that business demands
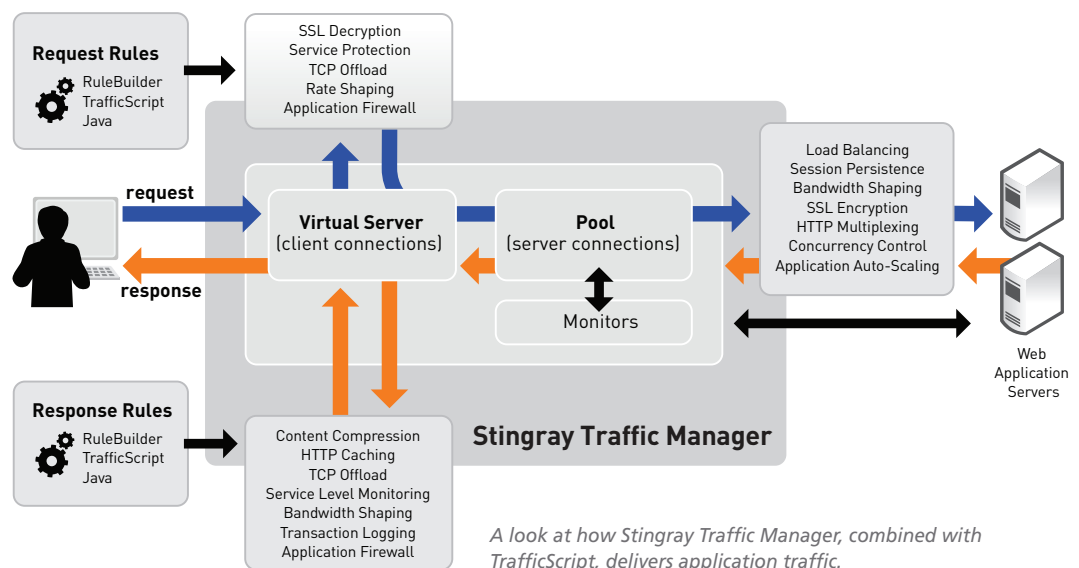
"We made Stingray Traffic Manager the standard web traffic management solution across all our premier websites because it allows us to handle high-demand situations during media and market-ing campaigns and also provides full control and flexibility to manage the customer experience, without major software changes."

Simon Howe, platform specialist for BT's market facing websites
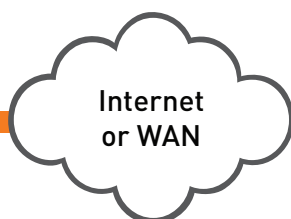
How Stingray Traffic Manager works

Stingray Traffic Manager manages a wide range of network-delivered applications. Core load balancing, session persistence, and SSL decryp-tion technology enable administrators to rapidly scale applications for improved capacity and availability. Advanced traffic optimization technol-ogy further improves performance and the end-user experience. All of the capabilities may be controlled by the Stingray TrafficScript language, which enables the application delivery that is in compliance with business and regulatory policies.

Stingray TrafficScript also addresses a wide range of application performance, security, and functionality concerns.

Request Rules
RuleBuilder
TrafficScript
Java

SSL Decryption
Service Protection
TCP Offload
Rate Shaping
Application Firewall

request

Virtual Server
(client connections)

response

Pool
(server connections)

Monitors

Load Balancing
Session Persistence
Bandwidth Shaping
SSL Encryption
HTTP Multiplexing
Concurrency Control
Application Auto-Scaling

Web Application Servers

Response Rules
RuleBuilder
TrafficScript
Java

Content Compression
HTTP Caching
TCP Offload
Service Level Monitoring
Bandwidth Shaping
Transaction Logging
Application Firewall

Stingray Traffic Manager

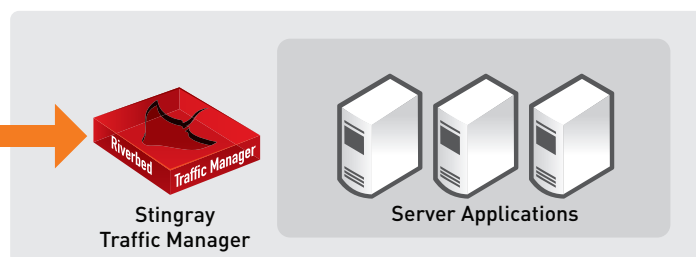*A look at how Stingray Traffic Manager, combined with TrafficScript, delivers application traffic.*

The highest possible performance

Stingray Traffic Manager runs on a wide range of hardware and virtual platforms, scaling to use all the available compute resources, and to deliver services with the highest possible performance. Horizontally scalable both within and across data centers, a Stingray Traffic Manager cluster can deliver applications on a global scale to a global audience.

"Since Riverbed was deployed, there has been a major improvement to the performance and response times of the site."

David Turner, systems architect, PLAY.COM

DATA CENTER OR CLOUD

Internet or WAN

Stingray Traffic Manager

Server Applications

Stingray Traffic Manager is an asymmetric solution that is deployed within the data center on physical, virtual, or cloud infrastructures. It allows you to control all traffic to and from your applications so that you can optimize the level of service you deliver to your users.

Deployment options

Stingray Traffic Manager can be deployed:

* As software on the hardware or hypervisor
* As a virtual appliance on VMware, Xen, and OracleVM
* In any supported cloud infrastructure such as Amazon EC2, Joyent, and Rackspace

Deliver the best possible service levels

Web traffic is rarely constant. It has peaks and valleys that can make it difficult to plan for future business growth. Stingray Traffic Manager gives a unique, high-performance software solution that's mobile, flexible, and scalable, thereby allowing cost-effectively scale capacity and move between hardware and deployment platforms as required.

Stingray Traffic Manager reduces the strain placed on your application infrastructure with network-level buffering, protocol optimizations, and application-specific measures such as dynamic compression and caching. The result is reduced latency, increased capacity, improved availability, and optimized service levels for each end user.

"Riverbed software is critical to ensuring that our web performance is consistently stable and reliable. By preventing web traffic-related problems, we're working to ensure that our customers have the best possible experience."

Andy Chakraborty, head of IT operations, toptable.com

"Riverbed is an integral part of our architecture and an extension of our application."

Phong Nguyen, VP research & development and founder, Gilt Groupe

Delivering better ROI through consolidation and virtualization projects

Consolidation and virtualization projects aim to reduce costs and to improve flexibility and responsiveness. But when services depend on sophisticated components that are not deployed within the virtual platform, virtualization's benefits will never be completely realized.

The Stingray virtual ADC can be run natively within the virtual infrastructure for greater choice and flexibility when deploying application resources. It also provides improved performance and reduced latency compared to external ADC devices. Stingray can also leverage public and private compute cloud technologies to extend to hybrid cloud architectures as required.

Bring new services to market more quickly

ADCs are an important part of the modern application platform. They provide key functionality to support applications (e.g., security, centralized authentication, rate shaping and queuing, and content modification) and valuable tools to support operations (e.g., the gradual introduction of new servers, session upgrades between application generations, and A/B testing). Their monitoring and debugging capabilities also help deliver reliable applications with predictable performance.

Capabilities such as geotargeting, edge authentication, and session failover, which require a global view of the application cluster, can be deployed on the Stingray Traffic Manager. Geolocation may be used to target content, insert localized ad content, and even restrict access by geography. Edge authentication protects application servers from unauthorized access and takes access control burdens away from the application itself. Content manipulation allows rapid web content changes (e.g., the insertion of marketing tags, branding changes, and dynamic watermaking) that may be difficult to achieve on the application itself.
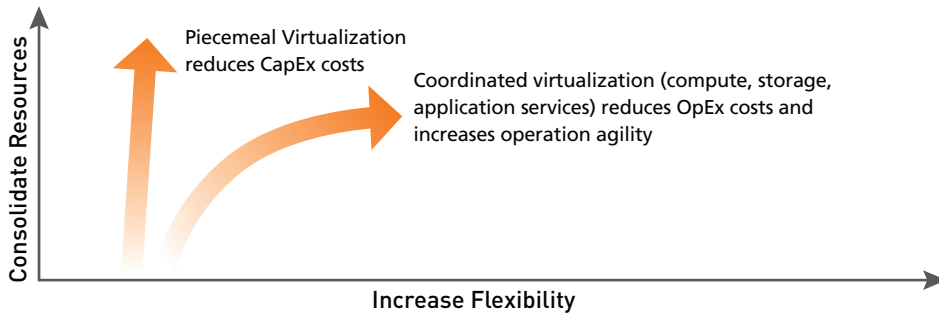
The Stingray virtual ADC can be run natively within the virtual infrastructure for greater choice and flexibility when deploying application resources.

Stingray TrafficScript

The Stingray TrafficScript language enables application teams and operational staff to quickly deploy policies that inspect, transform, prioritize, and route traffic to address application delivery challenges and meet business goals. For example, when a traffic spike begins to degrade service levels, Stingray can selectively employ prioritization to ensure that high-value transactions aren't impeded.

"The metrics and logging capabilities that Riverbed offers are also now a fundamental part of managing our campaigns moving forward."

Adam Simon, co-founder and CCO, Socialbomb

Discover Stingray Application Firewall

Stingray Application Firewall employs business rules to protect applications, mask data, and help achieve compliance (including PCI-DSS). It also makes it easy to manage cookie privacy and authentication at a level above application.

Achieve seamless service upgrades by migrating user sessions across generations of an application. This can reduce application development, test, and release cycles to support continuous delivery.

The Stingray development license makes the technology available to every application developer in an organization, enabling them to utilize Stingray's capabilities to develop applications faster, test them in a production-identical environment, and bring them to market more quickly.

Learn more

Contact Riverbed, the IT performance company, for more information on the products and solutions that are right for you. Thousands of companies worldwide trust Riverbed to achieve cost savings and deliver strategic advantage over the competition. Visit www.riverbed.com for more information.

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**.

2005, 2006, 2007, 2008, 2009, 2011

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