RIVERBED
APPLICATION DELIVERY

THE FIRST APPLICATION DELIVERY CONTROLLER (ADC) DESIGNED FOR ANY CLOUD OR VIRTUALIZED ENVIRONMENT

- Greater flexibility
- Layer 7 intelligence
- Improved user experience
- Cloud readiness
- Developer support

GARTNER MAGIC QUADRANT RECOGNITION
We’re a “Visionary” in the 2012 Magic Quadrant for application performance controllers.
RIVERBED STEELAPP
BETTER FOR DEVELOPMENT, BETTER FOR DEPLOYMENT, AND BETTER FOR DELIVERY

Application delivery controllers (ADCs) are an important part of the modern application platform. They provide key functionality to support applications and valuable tools to support operations. Their monitoring and debugging capabilities also help deliver reliable applications with predictable performance.

Software-based ADCs that are located close to – or even directly on – servers provide the best application awareness. Designed with this in mind, Riverbed® SteelApp™ is a virtual and software-based Layer 7 ADC with integrated web content optimization (WCO) capability designed to deliver application services in the face of these challenges.

SteelApp is a new breed of ADC that is natively designed for virtualization and cloud portability. As a pure software solution intended for the widest variety of deployments, the SteelApp family enables a more flexible application delivery strategy and provides a common delivery and control platform that can grow with your business.

SteelApp software is designed to load balance traffic globally among servers, manage bandwidth, shape traffic, and monitor service levels.

As compared to traditional hardware load balancers, it delivers a faster user experience with more reliable access to public websites and enterprise applications, regardless if they run in a public or private cloud, or a virtualized environment.

THE SOFTWARE ADC ADVANTAGE

Traditional load balancers and application delivery controllers (ADCs) simply hand off connections among a few servers to improve uptime. Cloud-ready, software ADCs provide the required availability, scalability, security, and user experience expected for today’s website and business applications.

Flexibility:
Application owners look at ADCs as a key control point for a distributed application because they see every single user request and response. However, if the ADC isn’t dynamic and flexible like the application itself, the app owner is essentially developing with one hand tied behind his back.

Layer 7 intelligence:
A Layer 7 ADC allows for application level operations and optimizations. It can make decisions based on the application, the user, a given page, a particular kind of response, and much more. It can even change the behavior of the application if necessary. With deep application level intelligence, ADCs can protect advanced threats to security, including SQL injection attacks, cross-site scripting (XSS) attacks, and denial-of-service threats.

Improved user experience:
Software ADCs do more than boost data center efficiency: they go further to ensure that users have a fast, reliable experience. They tap into the application content and, through automated web content optimization (WCO), deliver it fast and consistently every time. This allows ADCs to give users a better experience by reacting to browser platform, user requirements, and even user location and other characteristics.

Cloud-readiness:
Traditional load balancers and legacy application delivery controllers can’t provide the type of diversity, portability, programmability and granular application-level control readily available with software ADCs. Software ADCs are designed to work across any public or private cloud.

Developer support:
Imagine your developers running a software ADC in their own development environments. At their fingertips, they’d have Layer 7 functionality, scale, offload, content optimization, and security components all built into one toolset. They’d be able integrate and test apps while running the ADC has part of the application stack. Your developers can easily use the ADC when it’s best suited for the job. And best of all, they can do it for free with SteelApp Developer Edition.
SteelApp is designed to make applications faster, reliable, and secure. It works within cloud environments and is easily integrated into an application stack. It is the industry’s only complete virtual or software-based Layer 7 application delivery controller (ADC) with integrated web content optimization (WCO) capability, freeing applications from the constraints of traditional hardware-based load balancers.

While traditional ADCs deliver scalability and reliability for enterprise and web applications within the data center, SteelApp software goes further to deliver high performance and availability and accelerating applications, including those based in virtual and cloud platforms.

The SteelApp product family includes four tools to automate, optimize, secure, and accelerate the performance of online applications:

1. **SteelApp Traffic Manager**
2. **SteelApp Web Accelerator**
3. **SteelApp Web App Firewall**
4. **SteelCentral Services Controller for SteelApp**

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**1. SteelApp Traffic Manager**

SteelApp Traffic Manager 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. It can increase server efficiency by up to 3x and boost the throughput of application servers by up to 50%, while at the same time reducing response times through dynamic caching, and both local and global load balancing. It reduces the strain placed on application infrastructure with network-level buffering, protocol optimizations, and application-specific measures such as dynamic compression and caching.

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**Figure 1:** SteelApp Traffic Manager inspects and processes application traffic, with full payload inspection and streaming, and applies a range of optimization techniques to ensure that incoming requests are presented in the most appropriate manner to the web and application servers. Responses from the application can be compressed, cached, and returned to the client at optimum speed, while freeing up resources on the server.
STEELAPP TRAFFIC MANAGER DELIVERS:

Improved reliability and scalability
Health and performance monitors balance client requests across the fastest servers. Seamless application scaling protects against compound failures at all levels.

Application performance
Offload compute-intensive tasks while integrating HTTP content caching for reduced load on your infrastructure. TCP offload, traffic buffering, and concurrency control let applications run at peak performance.

Increased security
Protect applications with server isolation, request and response scrubbing, request validation, and protective traffic shaping. Also defend against direct attacks, invalid or malformed requests, and malicious or incidental flash floods.

Integration and control
Implement traffic management policies with SteelApp RuleBuilder™ and SteelApp TrafficScript™ language, or create Java™ extensions for complex business rules. Integrate SteelApp Traffic Manager within existing application management and orchestration infrastructure with REST APIs or Riverbed SteelScript™.

2. SteelApp Web Accelerator
SteelApp™ Web Accelerator software extends ADC scalability and reliability for enterprise and web applications to end users. It accelerates page load times up to 4x for public websites and applications, and improves the business results from a huge range of web-based services including Microsoft SharePoint, public websites, intranet portals, and cloud applications. It dynamically groups activities for fewer long distance round trips, compresses images to reduce bandwidth required, increases caching for faster repeat visits, and prioritizes actions to give the best possible response time for loading a web page on any browser.

SteelApp Web Accelerator can be deployed as a standalone software proxy appliance, as a licensed add-on to SteelApp Traffic Manager, or as a web-server extension on Microsoft SharePoint or IIS/ASP.NET.

Figure 3: How SteelApp Web Accelerator works.
3. SteelApp Web App Firewall

SteelApp™ Web App Firewall is scalable and application-aware, offering the highest protection and performance in Web and cloud application security. You can protect against known and unknown attacks at the application layer (e.g., OWASP Top10), secure your applications, and meet PCI-DSS compliance requirements with confidence.

Available as a licensed add-on to SteelApp Traffic Manager or as virtual or web server extension, it is the only full-featured application firewall to be supported in public cloud environments such as Amazon AWS.

![SteelApp Web App Firewall](image)

Figure 2: SteelApp Web App Firewall is available as a component of SteelApp Traffic Manager.

4. SteelApp Services Controller for SteelApp

Why pay for ADC capacity you don’t need or use? SteelCentral™ Services Controller for SteelApp™ automates the deployment, licensing, and metering of your application delivery services. It gives each of your applications a dedicated ADC instance, in a high-density multi-tenanted platform. With this elastic deployment architecture, you can scale individual ADC instances up and down to match changes in workload. And with a new services enabling business model, you are in control of your costs. In fact, you can allocate the charges to each client application based on hourly metering to offer ADC-as-a-service to your customers and applications.

![SteelCentral Services Controller](image)

Figure 4: SteelCentral Services Controller for SteelApp application delivery-as-a-service.
DEPLOYMENT OPTIONS

**Fully integrated or stand-alone**

As a pure software solution, SteelApp Traffic Manager can be installed on any commodity hardware platform, or as a virtual appliance on VMware, Xen, Microsoft Hyper-V, or OracleVM. You can also deploy it on any supported cloud infrastructure such as Amazon Marketplace, Joyent, and Rackspace. For maximum deployment flexibility, you can use a simple license key to enable SteelApp Web Accelerator, SteelApp Web App Firewall, and SteelApp Traffic Manager capabilities within a single integrated platform. You can install SteelApp Web Accelerator in front of existing ADC solutions to bring industry-leading WCO to existing web applications, without needing to change either the network or the application itself.

**ADC-as-a-service**

SteelCentral Services Controller for SteelApp can help enterprises and cloud service providers deploy large numbers of ADC services quickly, either within a traditional data center architecture, or in evolving virtual and private cloud platforms. It automates the deployment, licensing and metering of your application delivery services, and gives each application a dedicated ADC instance in a multi-tenanted platform with a new style of lightweight “micro” ADCs, capable of very high density and throughput. This translates into extreme elasticity, instant adaptability, and high-density multi-tenancy.

**Content delivery cloud (CDC)**

SteelApp content delivery cloud (CDC) is a fast and efficient content delivery platform for end users. However, unlike a content delivery network (CDN), which leverages a global network of servers to deliver content for all CDN customers, the SteelApp CDC utilizes public or private infrastructure to provide the points of presence that offer a private CDN-like experience for the delivery of a customer’s content. A CDC is able to support these services without the need for large initial capital investment or a complex infrastructure.

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**STEELAPP TRAFFIC MANAGER CAN BE DEPLOYED IN THREE WAYS**

1. **Stand-alone software**
2. **Virtual appliance**
3. **Lightweight “micro” instance**

Figure 5: How to deploy SteelApp Traffic Manager.
“Riverbed's virtual ADC is the only solution we could deploy in a fully-virtualized IT environment to meet our application development, traffic management, and load balancing needs. Bottom line, we found that physical appliances do not work well in a virtualized environment.”

William Moore
Executive Vice President and Chief Technology Officer
CareCore National

DOWNLOAD FOR FREE

SteelApp Developer Edition, available either as pure software, or as a virtual appliance, makes the complete ADC technology platform available to every application developer in your organization to develop applications faster, test them in a production-identical environment, and bring them to market more quickly.

Download the SteelApp Developer Edition today and test all of the available capabilities in the product family.

JUST VISIT riverbed.com/steelapp.

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

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