



Akamai Solution

IP Application Accelerator

Improve the Performance
and Reliability of IP-enabled
Applications

IP Application Accelerator

Speed Delivery and Performance of IP Applications, Boost Productivity

As Organizations expand globally, employees, partners and customers need access to critical IP-enabled, applications anywhere, anytime and over a wide range of devices. These include but are not limited to core applications accessed over SSL VPN, real time interactive web conferencing, virtualized applications and desktops, secure large file transfers, remote desktop management or custom client/server applications. While these applications provide users with key business capabilities, poor performance or spotty availability of these applications can lead to decreased productivity, low adoption and high support costs. These applications must perform quickly, securely and reliably every time in order for Enterprises to realize the full benefits of the application and the overall success of the business.

Improve Performance and Assure Availability of IP-enabled Applications

Overcoming performance and availability problems associated with enterprise applications caused by distance of users from centralized application infrastructure, chatty protocols and consolidation of infrastructure presents a major challenge for IT teams catering to a global user base.

A managed service, IP Application Accelerator (IPA) can help deliver a wide array of IP-enabled applications to users on a global scale quickly, securely and reliably without incurring high capital expenditures or deploying private-WAN infrastructure with preset reach and scale. IPA offers the versatility to improve delivery of TCP/IP applications by overcoming the real-time latency, packet loss and transport inefficiencies associated with the Internet itself.

Several use cases suitable for IPA service include but are not limited to remote access of core enterprise applications

delivered by way of SSL VPN, real-time interactive Web conferencing, virtualized applications running over Citrix ICA and Microsoft RDP protocols, virtual desktop initiatives (VDI) and large files transferred thru secure methods such as FTP or SSH. IP Application Accelerator is also suitable for hosting and SaaS providers offering services such as remote desktop management and hosted e-mail plus archiving services.

Enterprises like Waters Corporation, Phase Forward, AppRiver use Akamai's IP Application Accelerator solution to improve performance and availability of their critical IP based applications to their global users, therefore driving greater adoption, increasing productivity, growing revenue and reducing support costs.

Additionally, IP Application Accelerator also solves performance problems associated with delivery of applications to wireless hand-held devices such as smart phones and PDA's.

BENEFITS TO YOUR BUSINESS

Akamai IP Application Accelerator ensures high performance and reliability for business-critical IP applications delivered over the Internet—with no significant IT infrastructure investment.

Improves application performance of any IP-based application, increasing user satisfaction and adoption.

Extends the delivery of business-critical applications globally—with no need for additional client software.

Improves performance and availability of applications delivered to wireless handheld devices.

Assures application availability, eliminating lost productivity due to unplanned down-time.

Provides a secure environment for critical business applications and data.

“Almost immediately after deploying IP Application Accelerator, we saw call center usage drop 90 percent because the information that our customers needed was immediately available. Akamai really does solve the latency and availability problems associated with delivering applications.”

— Tim Rochford, Chief Technology Officer, Phase Forward

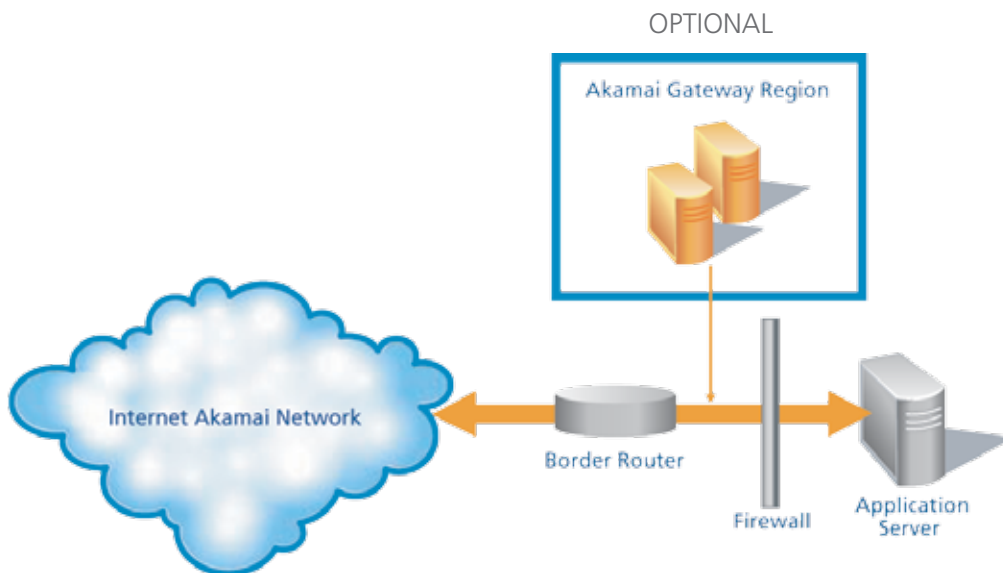
How IP Application Accelerator Works

IP Application Accelerator, a Managed service leverages a subset of Akamai's network of tens of thousands of servers controlled by network intelligence systems that route requests, balance loads, and ensure 100% uptime (as measured by Akamai's standard SLA). Performance improvements are gained through several techniques — dynamic mapping, route optimization, packet redundancy algorithms, and protocol (TCP) optimization.

Akamai's global network — coupled with optimized routing and connection technologies — enables organizations to deliver applications globally, while maintaining high levels of performance and availability.

Akamai's connection optimization technology ensures that end users are connected to the optimal entry point on the Akamai network. IP Application Accelerator encapsulates all traffic — and does not need to look at the original packets, thus maintaining the integrity and security of the data. If, for instance, data is encrypted, IP Application Accelerator ensures that it remains encrypted.

In addition, Akamai's servers are placed in secure data centers, in locked cabinets monitored by cameras and protected by intrusion detection and prevention systems. In addition, to ensure continued service, IP Application Accelerator has built-in redundancy and failover procedures.



- 1 Akamai's mapping software** points the user request to the optimal entry point (EdgeServer) on the Akamai network.
- 2 SureRoute route** optimization technology identifies the optimal — fastest and most reliable — path to the origin infrastructure.
- 3 Akamai uses a high-performance transport** protocol to reduce the number of round trips over the optimized path.
- 4 Packet loss reduction** techniques can be optionally applied by combining SureRoute intelligence and other techniques.
- 5 When utilized**, the "Optional" Gateway Region deployed at the customer premise, intercepts the packets and forwards the data to the origin server.
- 6 The Origin server** then sends the response packets back to the Optional Gateway Region, which forwards the data back to the originating Akamai Edge Region.
- 7 The EdgeServer** receives the packets, and sends the requested data to the user.

"Only Akamai's globally distributed network and intelligent routing are able to bypass middle-mile problems to ensure fast and reliable application delivery over SSL VPN."

— Paul Newton, CTO, Waters Corporation

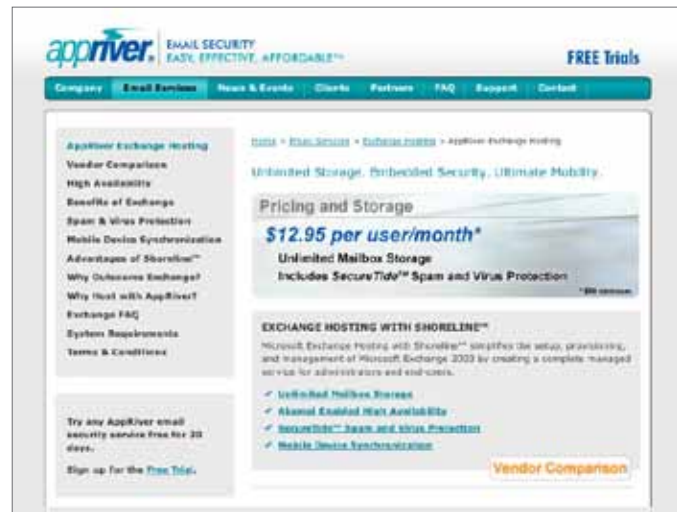
Management

Akamai IP Application Accelerator provides a range of features to monitor and control traffic, applications, and content. Tools and alerts allow IT organizations to manage application and content faults, configuration, and performance — with minimal resources — through the Akamai customer portal or another management application.

Implementation

All of Akamai's offerings are supported by an award-winning Professional Services team for implementation. This highly-experienced team of consultants has integrated more than 2,700 Akamai customers, including large enterprises and advanced services, using a well-established Akamai Enterprise Service Methodology.

“As companies continue globalizing their operations, they need to extend the reach of their business-critical enterprise applications — such as supply chain management, customer relationship management and product lifecycle management — to a broader set of geographically dispersed employees, business partners and customers. The ability to link the extended enterprise with any IP-based application without installing and maintaining more client software reduces administrative overhead and lowers the total cost of ownership.” — George Hamilton, Director, Enterprise Infrastructure, Yankee Group



AppRiver, a software-as-a-service (SaaS) provider with more than 25,500 customers around the world, needed to ensure superior performance levels for its Microsoft® Exchange hosting service without expanding its technology and support infrastructure. At the same time, AppRiver was facing the additional challenge of extending reliable, consistent service to a growing proportion of subscribers using mobile devices — including Blackberries and smart phones — to access email. (In addition to often being oversubscribed, cell networks can lose up to 25% of the data packets that traverse their lines, causing mobile devices to hang or lose connectivity.)

After implementing IP Application Accelerator, AppRiver reduced support calls due to Internet congestion and outages. IP Application Accelerator also minimized the adverse performance effects of cellular networks, providing a dramatic improvement in service to subscribers using mobile, hand-held devices.

“With Akamai in place, customers who couldn’t connect are now experiencing a reliable, stable connection. And while start-up connection and synchronization times vary, on average, we are seeing these times cut in half.”

— Scott Cutler, Executive Vice President, AppRiver

The Akamai Difference

Simply put, Akamai® makes the Internet work for business. By eliminating the challenges of the public Internet, Akamai guarantees its customers security, performance and scalability to make their enterprise cloud strategies, eCommerce, software downloads and HD video successful. At the center of it all is the Akamai Intelligent Internet Platform™, which sits on top of the public Internet and is made up of nearly one hundred thousand, globally distributed Akamai servers spanning most of the networks that make up the Internet. To learn more, please visit www.akamai.com or follow @Akamai on Twitter.

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