



# IP Application Accelerator

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 through 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 PDAs.

## 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.

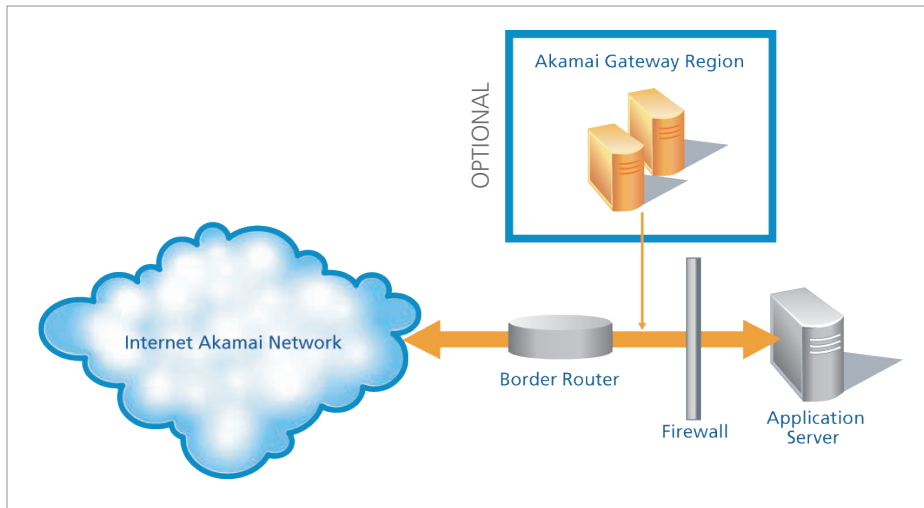
## BUSINESS BENEFITS

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*



### Visibility and Control

**Management:** 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 3,000 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

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. Additionally, 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.

## The Akamai Difference

Akamai® is the leading cloud platform for helping enterprises provide secure, high-performing user experiences on any device, anywhere. At the core of the company's solutions is the Akamai Intelligent Platform™ providing extensive reach, coupled with unmatched reliability, security, visibility and expertise. Akamai removes the complexities of connecting the increasingly mobile world, supporting 24/7 consumer demand, and enabling enterprises to securely leverage the cloud. To learn more about how Akamai is accelerating the pace of innovation in a hyperconnected world, please visit [www.akamai.com](http://www.akamai.com) and follow @Akamai on Twitter.

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