



Akamai IP Application Accelerator for Applications Delivered Over SSL VPN

Enterprises need to ensure their employees, suppliers, customers and partners have real-time access to corporate resources and applications from remote, globally dispersed locations. Want to know whether Akamai's IP Application Accelerator (IPA) solution can help you guarantee superior performance and availability of applications for your remote users, simplify management, and reduce support costs?

Discover how you can realize the full value of SSL VPN implementations, increase application adoption, dramatically increase productivity and ultimately drive achievement of your overall business goals with minimum effort.

Ask yourself the following questions:

- Are remote users accessing critical, dynamic applications over SSL VPN, complaining of poor application performance rendering them unusable? Is loss of productivity hurting your business?
- Are users in distant locations experiencing inconsistent application availability causing user frustration and resulting in low application adoption?
- Is there a centralized, scalable alternative to deploying VPN gateways in multiple regions and tunneling traffic over the private WAN?
- Is there a way to avoid deploying costly MPLS circuits to distant locations with preset reach and scale to connect with remote partner sites?
- Are we reaping the full benefits and return on our SSL VPN investment currently?
- Is there a fully managed, simple solution available to address performance and availability concerns for remote users currently that requires no client software and is completely transparent to the end user?

Learn how Akamai can help you deliver consistent application response times, preserve business continuity and keep support costs in check with a simple yet effective, scalable solution and no additional hardware.

Performance and Availability Improvements for Applications delivered over SSL VPN using Akamai's IP Application Accelerator (IPA)

While specific configuration and use conditions can vary greatly, the following examples are provided to show real examples of how Akamai can help businesses improve performance and availability of critical applications delivered over SSL VPN. The tests reported within this document have been performed using real world Internet conditions to characterize real business transactions, as opposed to an environment where conditions can be simplified to demonstrate artificial gains. In the following examples, the performance results cited are only for these specific customers based on test conducted and may vary for other customers.

Want to learn more about Akamai's IPA Solution?

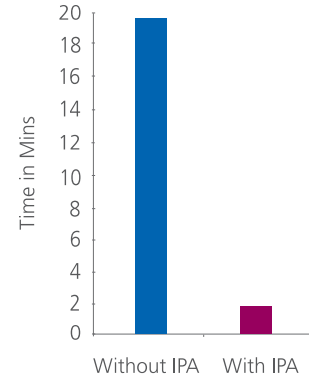
Product specifications, customer case studies, white papers and more can be found at: <http://www.akamai.com/ipa>



Global Semiconductor Company (Aventail SSL VPN and XenDesktop™)

Challenge – Improve performance and increase productivity and adoption of critical applications delivered over SSL VPN to users globally

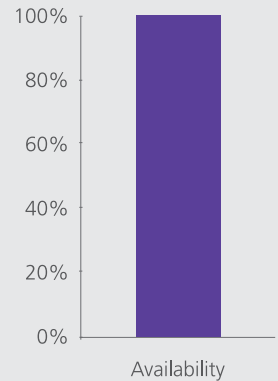
In a highly competitive market replete with price wars, semiconductor companies are focusing on IT initiatives that have a quick, direct impact on both top-line and bottom-line. Among them, garnering larger market share by expanding into new regions, acquiring new customers, promoting better collaboration with manufacturing partners, branch offices and driving productivity are taking precedence. To facilitate these, the IT team from this company needed to ensure all stakeholders had secure access to critical business applications and communications-anywhere, anytime. In fact, they chose to deliver all their key applications including their ERP application, employee portal for the global workforce, videoconferencing and some virtualized desktop applications between HQ and branch offices/manufacturing sites over SSL VPN. While this enhanced security, users particularly in China and Europe complained of poor performance resulting in user abandonment and low productivity. To overcome this problem, they considered rolling out an MPLS circuit but felt it would be cost prohibitive for multiple locations over the long haul. Tests conducted with Akamai's IPA solution showed a 4x-5x improvement in performance and increased throughput for this customer, particularly for its virtualized desktop ERP application and employee portals. Knowing it could achieve these results without adding any additional infrastructure and also effortlessly scale on-demand was a huge bonus. The IT team was also able to facilitate efficient video conferencing, saving them enormous costs on travel and time. All this contributed to better adoption of critical applications and increased productivity. This customer is now in a position to efficiently support its global enterprise systems and successfully meet its overarching business objectives.



Global Travel Products and Services Company

Challenge – Improve productivity for remote teams to speed products and services to market

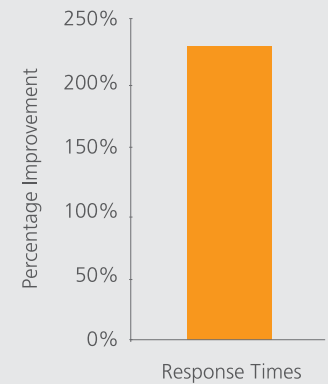
Improving business agility is essential for enterprises that are expanding their global footprint. The ability to constantly conceptualize and provide new, innovative, custom products and services to attract and retain customers helps them gain a competitive advantage. More importantly, this approach allows them to be nimble and adapt quickly to the changing needs of the market. This company launched a strategic initiative to leverage the vast talent pool and IT infrastructure in China to help them develop, maintain and speed delivery of new products and services while keeping costs in check. One of the challenges it faced was slow performance and inconsistent availability of applications over SSL VPN for developers in China. This not only prevented the company from maximizing its ROI but also threatened the continuity of the off-shore development model. The company considered investing in an expensive international MPLS circuit until it discovered that Akamai offered a fully managed service that can be quickly and easily deployed. Using Akamai represented savings of up to \$6000/month. Tests with Akamai's IPA showed a dramatic increase in performance and provided users with 100% availability for this customer without any additional IT infrastructure. The cost-effective, Akamai IPA solution was the logical choice. Ultimately, the solution increased productivity for its product development team in remote offices by ensuring shorter development times and faster time to market its products and services globally.



Global Laboratory Analytical Instruments and Software Company

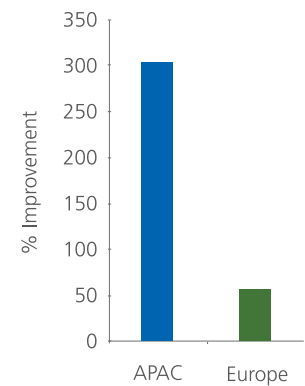
Challenge – Ensure business continuity and enhance performance for SAP applications delivered over SSL VPN

Business continuity is fundamental to the success of any business. In a highly competitive environment, outages and downtime for hours can spell disaster, particularly when you are looking to cement your position as a market leader. Over a third of its employees and business partners worldwide accessed critical SAP applications through the Netweaver portal over SSL VPN. The company recognized how issues beyond its control such as poor Internet performance in some areas of the world or outages caused by natural disasters can adversely affect its business if users had no access to these applications. This would result in lost productivity, inability to capitalize on new business opportunities and inability to support customers in a timely fashion. This would mean a body blow to its global business operation strategy - worse still, cede ground to competition. This company not only wanted to ensure 100% availability of its applications but also consistent response times regardless of location or Internet conditions. Tests with Akamai's IPA showed applications were delivered more quickly and performed consistently for users in distant locations such as India and China. The IPA solution was ideal because it required no additional infrastructure to be deployed and yet provided users with reliable and consistent performance by using sophisticated TCP optimization techniques and routing around internet bottlenecks unlike other hardware solutions. This customer could now conduct business efficiently and maintain high productivity at all times.



Validation for Compatibility and Performance Gains for Applications Accessed over SSL VPN

An internal testing project was conducted by Akamai to demonstrate compatibility and performance gains for applications accessed over SSL VPN. Tests conducted using a cross section of prominent SSL VPN providers including Avenail, Array Networks, F5, Juniper, Cisco, Citrix and Nortel for a dynamic application hosted in the United States yielded impressive results. Users in APAC experienced up to 325% performance improvement and users in Europe saw an 80% improvement for this test. Users globally saw consistency improve manifold.



Akamai IP Application Accelerator Solution

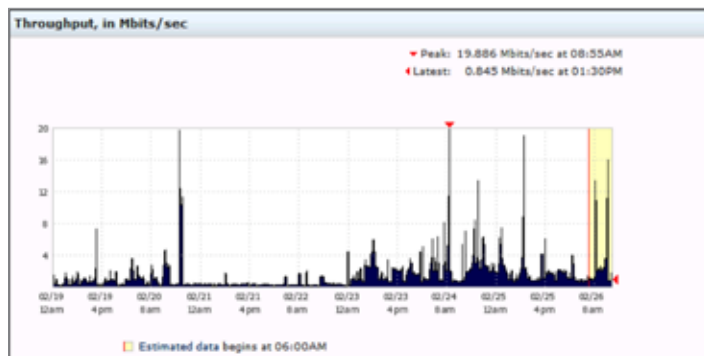
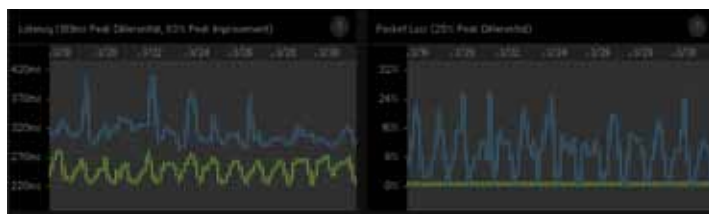
Akamai's IPA Solution is a fully managed service that helps enterprises with employees, partners and suppliers in globally distributed, remote locations access applications over SSL VPN in a reliable, fast and secure manner. The solution is designed to solve distance problems, network inadequacies and provide enterprises the ability to centrally manage secure delivery of applications with the cost benefits of a managed service.

The IPA solution leverages Akamai's network of 40,000+ servers located in more than 900 networks in 70 countries. This network is controlled by an intelligent system that routes requests based on real time Internet conditions. Performance improvements are gained through several techniques such as dynamic mapping, route optimization, packet replication, and protocol optimizations.

Akamai's easy to deploy IPA solution requires no additional hardware or client side software. The solution seamlessly integrates with a company's current environment, supporting multiple protocols and standards within its workflow.

The IPA solution dynamically maps user requests to an optimal server close to them. The data is then replicated and routed through alternate optimized "SureRoute IP" paths to overcome the "middle mile" reliability and performance bottlenecks caused by Internet congestion and service provider peering issues. Having identified a superior path, Akamai's IPA uses TCP optimization techniques to significantly reduce retransmits of data, minimize round trips and increase throughput, thereby enabling a high-quality experience and allowing users to collaborate efficiently from anywhere, anytime.

The following graphs illustrate how Akamai routes around Internet bottlenecks to reduce latency and packet loss.



Akamai’s IPA service is backed by a service level agreement (SLA) for network availability along with 24 x 7 x 365 technical support.

Akamai’s EdgeControl Management Center provides a convenient Web-based portal interface with advanced reporting capabilities for customers to monitor performance of their applications delivered over SSL VPN. These reports provide insight into performance incidents that can help customers proactively troubleshoot errors.

The Akamai Difference

Akamai® provides market-leading managed services for powering rich media, dynamic transactions, and enterprise applications online. Having pioneered the content delivery market one decade ago, Akamai’s services have been adopted by the world’s most recognized brands across diverse industries. The alternative to centralized Web infrastructure, Akamai’s global network of tens of thousands of distributed servers provides the scale, reliability, insight and performance for businesses to succeed online. Akamai has transformed the Internet into a more viable place to inform, entertain, interact, and collaborate. To experience The Akamai Difference, visit www.akamai.com.

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