ALTA, THE CLOUD-BASED APPLICATION DELIVERY PLATFORM
Enterprises today aspire to grow revenue by expanding globally and acquiring new customers, while also cutting costs and finding ways to become more agile. To realize their goals, every enterprise has a core set of applications that they rely on to run their business operations.

Current Application Delivery Landscape
In recent years, the user requirements for accessing and using these business applications has changed dramatically, and therefore enterprises must support more applications across a broader user base – including customers, suppliers, partners, and employees. In order to leverage their applications to achieve their business goals, enterprises must optimize the delivery of their applications to support fast, reliable, and secure access to ensure all users, both inside and outside of their organization, have the best possible experience.

In the past, enterprises would resort to optimizing their application delivery using a physical hardware box or a virtual appliance that was deployed within a data center and any offices where users were located. While costly to deploy and manage, this approach did a good job of optimizing application delivery between the data center and branch office locations that were connected via a private network. Today, this approach is no longer effective due to several factors including:

- The complexity of having more users outside the organization’s private network
- Applications distributed across multiple data centers and in the cloud
- End-users located all over the world using all sorts of different devices and networks, and
- A growing list of critical business applications such as CRM, collaboration, product lifecycle management, and support portals that users rely on every day.

It’s not realistic for IT organizations to establish private network connections between all their users and all the data centers where their applications are hosted, or implement an application delivery box or virtual appliance in every data center, cloud environment, and every location where their end-users are located today.

In order to leverage their applications to achieve their business goals, organizations today cannot only rely exclusively on their private WAN to deliver their applications, but they must also leverage the ubiquity and scale of the Internet in order to embrace the trends of globalization and consumerization within their organizations.

The Requirements for Application Delivery are Rapidly Evolving
Application Delivery is in a state of rapid and ongoing evolution, and the requirements for application delivery solutions are also progressing rapidly.

There are two mega-trends that are driving the evolution of the application delivery space: Globalization of enterprise and Consumerization of IT. These are not new trends – we’ve been hearing about these trends for a few years now, however, we’ve reached a tipping point in terms of the impact that these trends are now having and the implications these trends have on how enterprises deploy and deliver their business applications to their global end-users.

Enterprises must now support more applications being delivered to more users who are not employed by the organization itself, including customers, suppliers, and partners. Applications are also being accessed from a myriad of different devices, which are connecting to the enterprises via several different potential network technologies. Additionally, the type of applications that users need access to has also expanded and encompasses those hosted across the corporate data center, 3rd party hosting platforms, and cloud environments.

In order to overcome the challenges of optimizing application delivery in the world of globalization and consumerization, enterprises need to leverage the Internet as an extension of their corporate network and broaden the scope of their application delivery solutions to ensure optimization capabilities located everywhere their applications and users are located, enabling them to automatically adapt to the ever-changing location, device, and network-types of their users.

Just as enterprises experienced challenges in the early days of delivering applications over the private WAN, those same challenges of performance, reliability, and security are present when using the Internet for application delivery – but at a massively increased scale. The requirement for all business users to have fast, reliable, and secure access to all applications is a mandate that has become even more important now that enterprises are leveraging the Internet for application delivery, given the increased scope of delivery and end-user audience relying on access to the applications.

The private IP WAN is not going away anytime soon. Organizations will likely still need to leverage a limited WAN infrastructure for the foreseeable future where it makes sense, such as for VoIP and email. And organizations still need application delivery solutions such as ADCs and WOCs to optimize delivery over their WAN environments. However, ADC and WOC solutions are now a smaller piece of a much larger enterprise network fabric. The new enterprise network fabric consists of the private WAN combined with the public Internet.
There are serious limitations that will prevent existing application delivery solutions from evolving and adapting to the business challenges and opportunities presented by enterprises’ use of the public Internet. Today, the old approach of using ADCs and WOCs to optimize application delivery is no longer effective for Internet-based application delivery. As we know, in order for application delivery solutions to work well, they must be deployed symmetrically (control both ends by having one appliance where the application is hosted and another appliance in all locations where the users are located). However, globalization and consumerization create new challenges and expose the limitations of these types of solutions. It’s not realistic for organizations to establish private network connections between all their users and the data centers where their applications are hosted; deploy a box or virtual appliance in every data center and every location where their end-users and applications are located today; or install client-side software on all their end-user’s devices. Therefore, enterprises are left deploying their old application delivery solutions asymmetrically (only control one end because restricted to an appliance deployed where the application is hosted but nothing on the other end where the users are located). In this scenario, only one end of the application delivery connection is being optimized, leaving end-users frustrated and often resulting in a negative impact on end-user productivity.

Additionally, as we know, enterprises are under pressure to reduce costs and become more agile. The old approaches to application delivery require that the organization purchase, deploy, and maintain their ADCs and WOCs on their own. Whether consumed as a physical hardware box, a virtual appliance, or even a ADC deployed within the cloud, the onus is always on the enterprise to deploy, manage, support, and fine-tune the optimizations for these critical capabilities. When you add up the acquisition cost of the solution, the ongoing licensing support costs, and the cost of having a team of IT resources to manage these solutions, the total cost of ownership becomes inefficient. Bottom line: the old approaches to application delivery no longer fit.

Considering Akamai’s Cloud-based Application Delivery Platform

Akamai’s Alta solution is a cloud-based Application Delivery Platform that enables enterprises to leverage the Internet to deliver all their web-based applications in a fast, reliable, secure, and cost-effective way. Alta is a managed service that empowers enterprises to overcome the challenges related to delivering their applications over the Internet by placing all of the application delivery capabilities within Akamai’s cloud-based Intelligent Platform, instead of requiring IT organizations to take on the burden of deploying and managing these critical capabilities on their own in the form of hardware boxes or virtual appliances. With Akamai, application optimizations are distributed globally across Akamai Intelligent Platform™, not constrained within the four walls of a few data centers, or restricted only to those users on a private network connection.

Akamai’s Intelligent Platform is deployed on over 150,000+ servers which are embedded deeply into thousands of networks worldwide, which means we are very close to nearly all of the world’s Internet users and datacenters. This means that users can benefit from fast, reliable, and secure business applications regardless of where they are located in the world! In addition to being a cloud-based platform, Akamai is device agnostic and does not require any application changes, which means it’s quick and easy to implement and allows organizations to lower their IT costs and reduce complexity as compared to alternative application delivery optimization solutions. Akamai’s unique cloud-based architecture also means that applications can be seamlessly migrated across data centers or cloud providers at will, and the application delivery optimizations will automatically move with the application. Alta empowers enterprises to embrace their cloud, mobile, and big data initiatives without the fear of increased costs or low application adoption.

Conclusion

By overcoming the new realm of global application delivery challenges, Akamai’s cloud-based Application Delivery Platform empowers organizations to meet the demands of globalization and consumerization and instantly enter new markets, acquire new customers, improve customer interactions, do business via lower-cost online channels, enable end-users to get more done in less time, and achieve their goal of increasing revenue and reducing costs.
Representative Customers

Akamai helps the world's leading enterprise customers move their business faster forward by removing complexity and enabling them to deliver a secure, high performing user experience on any device, anywhere. Representative customers include:

©2014 Akamai Technologies, Inc. All Rights Reserved. Reproduction in whole or in part in any form or medium without express written permission is prohibited. Akamai and the Akamai wave logo are registered trademarks. Other trademarks contained herein are the property of their respective owners. Akamai believes that the information in this publication is accurate as of its publication date; such information is subject to change without notice. Published 09/14.