Cisco Intelligent WAN (IWAN) with Akamai Connect

Q. Why are Cisco and Akamai partnering?
A. Cisco and Akamai customers increasingly use the Internet to run business-critical applications. In addition, the dramatic increase in business-critical HTTP traffic on networks is forcing customers to make difficult decisions between their WAN budgets and application priorities. Akamai and Cisco share many of the same customers and can address the traffic increase together to enable new applications without increasing the WAN budget. The companies intend to integrate leading routing, WAN optimization, and Akamai caching and acceleration into the leading application delivery platform, the Cisco® Integrated Services Routers (ISR) with Cisco Application Experience (AX), referred to as the Cisco ISR-AX platform. Both companies see the potential performance and cost benefits of an optimized hybrid WAN for enterprises and their branch offices.

Q. What is the benefit for customers?
A. Akamai and Cisco share a common vision of how to improve the speed and reliability of the Internet to help provide enterprises with a cost-effective way to meet the growing bandwidth and performance needs of branch offices. Retail, financial, education, and hospitality customers; managed service providers; and traditional enterprises all share certain needs: scalable, faster performance with a positive return on investment (ROI). These needs also include the capability to enable new digital experiences and meet the requirements of critical business applications. Specifically, Cisco and Akamai together can provide customers with the following benefits:

- Increase the value of existing WAN investment through caching and optimization technologies
- Augment premium WAN bandwidth with cost-efficient Internet transport
- Offload guest and public cloud networks directly to the Internet with secure and efficient transport
- Address critical business factors such as OmniChannel retailing, guest Wi-Fi, and application performance regardless of the WAN circuit
- Provide a high-quality experience on any device, regardless of where the application resides
- Deliver innovative employee and guest services efficiently
- Reduce operation complexity with IT consolidation and smaller branch-office footprints
- Converge multiple network optimization functions in a single solution
- Provide exceptional Cisco Intelligent WAN (IWAN) performance through the integration of best-in-class technology from Cisco and Akamai
Q. **What products are Cisco and Akamai integrating?**
A. To support our joint customers’ needs, Cisco and Akamai are integrating Cisco Wide Area Application Services (WAAS) and Akamai caching and Internet acceleration technologies into the Cisco ISR-AX platform to deliver branch-office and WAN architectures with advanced hybrid cloud network solutions. This initiative integrates the best-in-class technologies from the two industry leaders in networking and cloud services. Customers will be able to use their Cisco ISR-AX router to support full-service branch-office operations. The solution will provide an application-aware router, combining Akamai Connect technology with WAN optimization, application visibility and control, path selection, and branch-office security. The solution is designed to be able to provide end-to-end optimization from the branch office to the data center or the private cloud and also a single-sided optimization for any traffic going out to the Internet.

Q. **What is the Cisco Intelligent WAN?**
A. Cisco IWAN is an existing Cisco solution that enables businesses to deliver an uncompromised experience over any connection. Now IT departments can right-size their branch-office connections using competitively priced WAN transport options without affecting performance, security, or reliability. Using the Cisco ISR-AX platform and the Cisco ASR 1000 Series Aggregation Services Routers with Cisco Application Experience, referred to as the Cisco ASR 1000-AX platform, IT has an operationally scalable solution at an attractive price that includes the networking and application services necessary to make the most of your WAN investment, roll out services more quickly, and reduce costs. With Cisco IWAN, traffic is dynamically routed based on application, endpoint, and network conditions to deliver the best-quality experience.

Q. **What will Cisco IWAN with Akamai Connect provide?**
A. The vision of this integrated solution is to combine the power of Cisco WAAS and Akamai caching and Internet optimization technology, enabling branch offices to offload existing network links and improve in-branch web and application experiences. By caching and delivering most rich media traffic from inside the branch office, customers can dramatically improve performance, while offloading traffic from the WAN and last mile access network. The solution integrates sophisticated caching and optimization within the private WAN to cache, optimize, and accelerate the Internet. Designed to be simple to deploy and cost effective, the solution uses the industry’s leading application delivery platform, the Cisco ISR-AX platform, and is managed through a single pane. The solution is also designed to link to the Akamai Intelligent Platform™, enabling enterprises that invest in their digital web experiences to extend those experiences to the branch office in a fast, cost-efficient manner. The solution is designed to accelerate performance and reduce network costs to enable new digital experiences to engage customers and improve employee productivity.

Q. **What Akamai technologies are included?**
A. Akamai Connect brings Akamai’s world-class caching and acceleration technology behind the firewall into the branch office. It includes:

- **Transparent cache**: Transparently cache web content from the corporate intranet or popular Internet sites, such as video-sharing sites, or other third-party domains not delivered from the Akamai Intelligent Platform.
- **Connected cache**: Cache and deliver content within the branch office from the company’s web and mobile properties on the Akamai Intelligent Platform™. The solution can also cache third-party content delivered by the Akamai, which typically represents between 15 and 30 percent of all web traffic.
- **Content prepositioning**: Define policies to proactively prewarm content in the HTTP cache during non-peak hours to save on the network when it is needed most.
- **Over-the-top (OTT) Caching**: Cache large Internet domains with dynamic URLs, such as YouTube.
Q. Does Akamai Connect require an Akamai subscription?
A. No. The first phase of the solution is a traditional software license sold as a Cisco product through normal Cisco channels. Akamai Connect will be available in many ISR-AX bundles and as an upgrade to some ISR models or WAVE appliances.

Q. What WAN architectures are required, and do I need direct Internet access?
A. The solution is designed to work in any WAN environment and cache content regardless of the transport layer. Future phases of the solution are also expected to be effective regardless of the WAN architecture.

Q. Does the solution store any data in the Akamai cloud?
A. No. The solution receives caching rules from the Akamai Intelligent Platform and as a result can cache a significant percentage of all Internet traffic. No content is populated on the Akamai platform from the branch-office device.

Q. Does the solution work with HTTP and HTTPS traffic?
A. Yes. In the first phase, Cisco WAAS performs SSL acceleration, and after the data reaches the branch-office device, it can be served locally from the local cache. In future phases, SSL traffic will also be supported.

Q. How does Cisco IWAN with Akamai Connect differ from Riverbed Steelhead Cloud Accelerator (SCA)?
A. The existing partnership that Akamai has with Riverbed targets different use cases than the strategic Akamai and Cisco partnership. Riverbed SCA is specifically designed to support acceleration of two software-as-a-service (SaaS) applications - Microsoft Office 365 and Salesforce.com - by using the Akamai Intelligent Platform to optimize the Internet segment when transporting the SaaS application traffic between the SaaS data center and in-branch end users. The new product initiative announced by Akamai and Cisco, which integrates Akamai performance and acceleration technologies into Cisco ISR-AX routers, is designed to optimize the delivery of web applications and content to the branch office, whether delivery is over the private WAN, the Akamai Intelligent Platform, or the open Internet. The content may include [product catalogs, the corporate website, [SaaS and mobile applications], training videos, interactive kiosks, and third-party Internet content accessed through guest Wi-Fi. The solution helps enable enterprises to overcome the myriad application performance challenges associated with the convergence of the Internet, cloud, and private WAN in the branch office, while cost-effectively addressing the ever-increasing bandwidth demands created by the business need for multimedia and interactive user experiences in digitally enhanced branch offices.

Q. Where can I find more information?
A. For more information, see: cisco.com/go/akamai.