

# 7

## KEY CRITERIA

### for Choosing the Right CDN for Today and Tomorrow

The Internet is changing more quickly than ever, offering tremendous growth and opportunity for businesses poised to take advantage. To succeed, organizations need a CDN partner that can support their needs with ease and agility – but how do you select the right one, given that technical and business requirements are constantly changing? Choosing a CDN with a flexible platform – and one that stays ahead of the continual advances in web and mobile technologies as well as the evolving threat landscape – will enable you to consistently offer your customers the best possible online experiences while minimizing operational complexity and overhead.

Use the following seven criteria to assess how well a CDN can help you fully leverage the potential of the Internet, both today and into the future.

#### 1. Does the CDN employ a highly distributed architecture that extends into mobile networks?

Proximity to the end-user device has always been the most critical factor in delivering superior performance. This is even more critical for cellular mobile users, who face lower network speeds and higher congestion variability. A CDN with the ability to extend its network not only near mobile gateways, but also into mobile cores and eventually mobile radio access networks, is best able to help its customers consistently deliver fast, engaging experiences to all users, on all devices and networks, all around the world.

#### 2. What innovative web and mobile optimization capabilities does the CDN provide?

CDNs need to continually advance their platform capabilities in order to ensure their customers can fully realize the potential of the Internet. Current services should include:

- **Advanced caching capabilities** with flexible rules and the ability to key-off any combination of HTTP request features such as cookies, query strings, and geo-location
- **Dynamic site acceleration**, leveraging route and protocol optimization to speed delivery of uncacheable content
- **Front-end optimization** techniques that provide the best possible experience for each device, browser, OS, and network situation
- **Image management services** that handle the resource-intensive task of manipulating, storing, and managing image derivations for the fast-growing range of browsers and devices
- **API and mobile app acceleration** including caching, dynamic acceleration, edge authentication, and metering / prioritization of API traffic
- **Predictive acceleration** using real-time analysis of site traffic to enhance the end-user experience through preemptive pushing of content into the browser

#### 3. Does the CDN support enhanced UDP streaming protocols?

As viewer expectations for video quality continue to rise, the performance limitations of today's TCP-based streaming protocols will become increasingly apparent, particularly over congested or high-latency connections. Forward-looking CDNs are already implementing more efficient, resilient UDP-based protocols that enable high-definition live and on-demand HD video to be streamed across the Internet without having to buffer or reduce bitrates when congestion hits. Other innovative technologies, such as network-assisted multicast, controlled P2P, and pre-positioned content, will further improve the quality and scale of video delivery while helping to facilitate the economics of broadcast video.

## 7 Key Criteria for Choosing the Right CDN for Today and Tomorrow

### 4. Does the CDN offer a Web Application Firewall (WAF) using anomaly scoring and behavioral heuristics for high accuracy?

Traditional WAFs suffer from a difficult trade-off between false positives (blocking legitimate users) and false negatives (allowing attack traffic through) – a situation exacerbated by the constant need to update rigid WAF rules. Anomaly scoring offers a more flexible and effective approach, identifying threats more accurately even as attack vectors evolve. For the most robust defense, look for a WAF using an anomaly scoring model that “learns” – improving itself through closed-loop testing on large sets of real-world data.

### 5. What big-data driven security intelligence services does the CDN offer?

Patterns and trends hidden in the vast amounts of global traffic that large CDNs see every day contain uniquely valuable insights that can be unlocked through big-data analysis. One of the biggest benefits a CDN can provide its customers is the ability to leverage these insights — for example, to forecast user intent and manage risk through real-time client reputation and bot-management services, or to strengthen security defenses and improve real-time attack mitigation through improved WAF models.

### 6. How much flexibility does the CDN allow me in managing my content, and how quickly are changes propagated?

CDN platforms that offer flexible and sophisticated capabilities are able to meet a broader range of business requirements more quickly and easily. Look for a CDN that offers granular control over all aspects of content handling including caching rules, cache keys, header and cookie handling, performance optimizations, failover behavior, access control, and edge logic. CDNs should be able to propagate content control rules across their network within a few minutes – and content purge requests within a few seconds – safely and securely, ensuring no content provider’s actions can adversely affect another. They should also provide API access to all management and reporting capabilities. Finally, look for CDNs that support agile business, facilitating continuous delivery methodologies through staging and test networks, real-time configuration checking, and support for phased releases/canary deployments.

### 7. What level of expertise does the CDN offer in its support and managed services?

The quality of a CDN’s support and services staff directly reflects the quality of the CDN. The right CDN offers teams with a depth of expertise and breadth of experience – teams who have helped design the Internet’s most innovative sites, deliver its biggest events, and mitigate its largest attacks. They should be able to provide expertly managed delivery, broadcast, and security services with 24/7, proactive, round-the-globe monitoring and support – giving their customers access to top-flight specialists in web, mobile, streaming, and security whenever and wherever they need it.

Make sure your CDN is moving your business forward, not holding you back. The right CDN is flexible, innovative, and forward-looking – helping its customers redefine what’s possible on the Internet. Learn more about the current state-of-the-art trends in content delivery by reading the whitepaper **Content Delivery for an Evolving Internet: Choosing the Right CDN for Today and Tomorrow** at [akamai.com/choosingtherightCDN](http://akamai.com/choosingtherightCDN)



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