



# Traditional DNS Solutions Limit CDN Choice and Performance

*CDN Manager Sheds Latency and Offers Choice to Customers*

Bringing content to the edge is the most effective way to maximize an end users Web experience --- using the Dynect Platform CDN Manager product is the most effective way for customer's to maximize the performance of their existing CDN (Content Delivery Network) and bring other CDN's into the mix.

From the mid-tier business to the enterprise and up through the largest social networking sites, the use of Content Delivery Network (CDN) services has become a de-facto best practice for optimizing a user's Web experience. CDN providers such as Akamai Technologies, Limelight Networks and Edgecast Networks assist organizations in delivering streaming video, audio, downloads and other rich media to users in the fastest way possible. These providers have done this by architecting and deploying worldwide, distributed computer networks capable of maximizing throughput to users by directing them to local servers rather than to one central server.

## CDN's Bring Content to the Edge

Due to the complexity of these CDNs, many rely on IP routing technologies such as IP anycast as well as the global DNS system to optimize delivery to users, to provide geolocation services and to target users accessing these websites. For the customer (mid-business, enterprise, rich-media, or social media site), the CDN will provide a DNS hostname as the "entry point" into the Content Delivery Network. For example, a large manufacturer known as Company X, may utilize Akamai's CDN to speed up delivery of images for the CompanyX.com web site. The host containing these images is on Akamai's CDN and is duly named "images.CompanyX.com.edgesuite.net."

However, when accessing the CompanyX.com web site, the images are downloaded from "images.CompanyX.com," a hostname which is much less complex, easier for developers to remember and is in the CompanyX.com domain, giving them control of which CDN provider that name points to. As a network operator, providing a highly available service such as DNS is not their core competency. Managed services like DNS are different from network engineering. While network services require their own expertise with routers and switching, this expertise rarely translates to expertise in services like DNS. DNS and other managed services are not only focused on the network availability but also server operating systems, software updates, load-balancing, customer interfaces, and physical server limitations.

While this methodology affords Company X control of which CDN provider they choose to send requests to, it gives them no capability to send traffic to multiple CDN providers simultaneously by weight or in a failover scenario.

At the same time the DNS request for "images.CompanyX.com" must go through Company X's existing DNS infrastructure, which is typically provided by an ISP or the domain registrar used by Company X.

In a recent comparison test between Dyn Inc's Dynect Platform DNS and two other registrar DNS systems, the Dynect Platform clearly outperformed the other DNS systems by delivering DNS requests at half the latency of the other providers in the US and with less than 3 to 5 times the latency of these providers in Europe and Asia Pacific regions. Moreover, customer's utilizing ISP or Registrar DNS are severely limited in how they can route user traffic to various CDN providers, as these systems only permit use of one CDN

## Is CDN Manager right for you?

With the Dynect Platform's CDN Manager, customers can now take advantage of multiple CDN providers simultaneously for failover, load balancing, load shaping and distribution. Customers can use CDN Manager to adjust the amount of traffic each CDN is sent, allowing customers to test new CDN providers with some portions of their traffic and not cutting over 100% of traffic at a given time, risking their stability.

Furthermore, CDN Manager is built upon the Dynect Platform's best of breed global DNS server network. Utilizing IP anycast technology and a global footprint of 12 points of presence (PoPs) worldwide, customers experience decreased DNS latency, faster resolution and therefore a more rich and responsive web experience, heightening reputation and reliability for prospective clients, end users or consumers.

For more information about CDN Manager or the Dynect Platform, please e-mail [sales@dyn.com](mailto:sales@dyn.com).

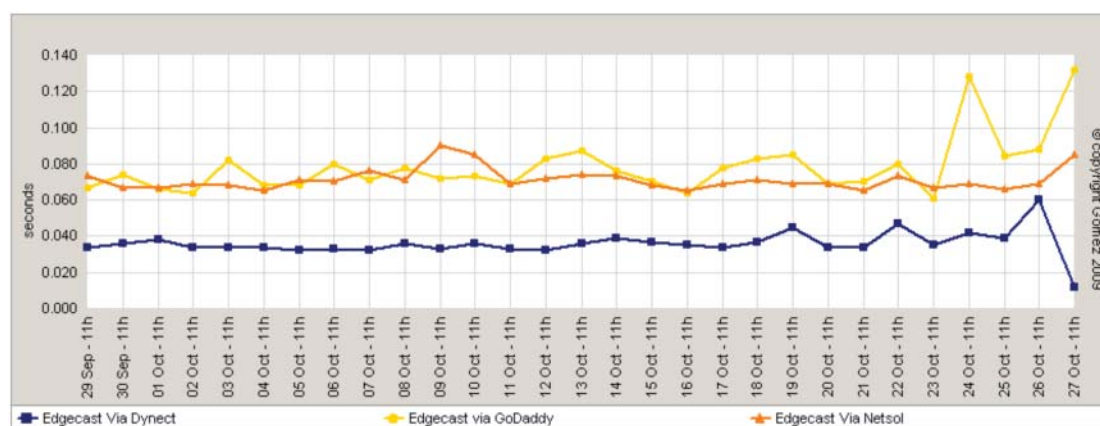


Figure 1- DNS Latency Comparison: Dynect vs. Registrar DNS as measured from Gomez Global Performance Network