CDNetworks

Dynamic Web Acceleration

Data Sheet

Introduction

The Internet was not designed to support the fast delivery of the many mission critical, dynamically generated applications found on today's websites. And technologies designed to improve Internet performance – including caching, content delivery, and intelligent routing – do not adequately address the performance requirements of dynamic, web-based applications because much of the content is non-cacheable.

Dynamic Web Acceleration

CDNetworks' Dynamic Web Acceleration solution solves this problem by combining the benefits of a bi-nodal global network architecture with advanced techniques – including optimally tuned TCP links and connection pooling – that enhance basic caching and compression to optimize the Internet's middle mile. Because our proven technology reduces the number of data round-trips necessary to complete a web request, application performance improves dramatically.

How It Works

CDNetworks addresses HTTP/TCP inefficiencies in a different, more direct way than other application acceleration solutions. Instead of enabling the application server to process information faster, CDNetworks' technology speeds up and optimizes the way the server interacts with the network.

The CDNetworks solution uses a state-of-the-art optimally tuned TCP stack across the middle mile to transparently reduce response time and increase application availability. This standards-compliant solution is designed to address high-latency networks and the request/response nature of web-based applications while maintaining all the beneficial features of standard transfer protocols. By increasing the TCP throughput and maintaining a pool of open connections, Dynamic Web Acceleration significantly reduces the number of round-trips between the end user and application server, thereby accelerating application response time to provide a LAN-like experience.

Key Features and Benefits

Feature	Description	Benefit
Application Layer Acceleration	Optimizations include caching, compression, load balancing, SSL offload, and the complete suite of HTTP(S) acceleration technologies.	Improves performance at application layer.
Connection Management	Proactive management of the connections between the CDNetworks Dynamic Web acceleration solution and a customer's web application servers.	Ensures a more efficient use of server resources and great end-user performance.
State-of-the-Art Protocol Stack	Standards-compliant transport protocol that uses the latest advances in TCP research and implementation	Provides optimal performance over the long haul segments of the Internet.
Network Loss Protection	Advanced TCP techniques that reduce the impact of packet loss and congestion problems.	Enables predictable application performance for end users.
Origin Connection Load Reduction	Aggregates connections through CDNetworks' Origin Onnection PoPs.	Decreases the load of customers' expensive application server database assets.
SSL Offload	Acts as an efficient front-end processor to manage SSL connections and requests.	Offloads customers' servers, freeing them to execute high-value application processing.
Transparent Turn Reduction	Reduces the unnecessary number of back-and-forth transfers between the end user and the web server.	Eliminates protocol overhead caused by the properties of TCP and HTTP.

About CDNetworks

CDNetworks is a global content delivery network (CDN) with fully integrated Cloud Security DDoS protection and web application firewall. Our mission is to transform the Internet into a secure, reliable, scalable, and high-performing Application Delivery Network. CDNetworks accelerates more than 40,000 websites and cloud services over a network of 1500+ global PoPs in established and emerging markets including China and Russia. We have been serving enterprise customers for 15 years across industries such as gaming, finance, ecommerce, high tech, manufacturing, and media. CDNetworks offices are located in the U.S., UK, South Korea, China, Japan, and Singapore. For more information, please visit: www.cdnetworks.com.