

What is a Content Delivery Network (CDN)?

A CDN is a system of servers using advanced software for organizing, storing, and streaming website content for the express purpose of optimizing the flow of the content to end-users. It distributes the content to multiple, geographically diverse nodes and then serves the content from whichever node is closest to the end-user, minimizing packet travel and increasing speed and efficiency. There are two types of CDNs—virtual networks that connect end-users directly to the server and hybrid networks that combine CDNs with peer-to-peer networks.

What are the advantages of using CDNLayer over standard Internet content delivery?

CDNLayer delivers content more efficiently than standard Internet content delivery, letting businesses meet the growing demand for rich, online media that require large bandwidths.

Standard Internet delivery sends content data over general Internet routes from the host server's location to the end-user's location. This takes into account neither the host server's proximity to the end-user, nor possible traffic jams between the two. CDNLayer, however, moves the content from the host server to a node that is geographically closer to the end-user. This avoids potential network congestion and decreases latency, increasing delivery speed and providing consistent and reliable file transfer times.

In addition, as a solution created specifically for content delivery, CDNLayer includes tools that provide more content management and delivery control, helping with content monetization.

What types of content are generally delivered using a CDN?

Content Delivery Networks are most effective in delivering rich media content—focused in three main categories: streaming, progressive downloading and caching. Streaming video benefits from the decreased latency provided with the use of CDNLayer. Video streamed over CDNLayer does not require the excessive buffering or suffer from the jitters experienced with traditional internet content delivery; and end users can access any portion of the video stream without waiting through long load or download times. Media downloads also experience increases in speed and decreases in latency with the use of CDNLayer. CDNLayer load balances the download route to deliver virtually any type of Internet download to the end user, including: game downloads, new software, software upgrades, video, HD video, and audio. CDNLayer is also the optimal solution for delivering cached Internet content that may be static but is frequently accessed; used for companies that provide services such as online shopping, guided tour sites, social networking sites, financial sites, hotel and travel sites and web hosting companies.

Who should use CDNLayer? What kind of content is it best suited for?

Any company or individual that wants to make content available on the Internet should consider CDNLayer, particularly those wanting to deliver content that requires large transfer rates, such as video. This includes a wide variety of industries, as caching, streaming, and downloading services are a regular part of social networking, entertainment, media, gaming, software, broadcast, e-commerce, and e-banking websites alike.

What file formats does CDNLayer support?

SoftLayer's CDN Supports Flash Media and Windows Media for streaming files. SoftLayer's CDN also supports a wide array of encoding formats for downloading or caching media—including Windows Media Player, Flash Media, DivX, H.264, Move Media Player, Microsoft Silverlight, QuickTime, MP3, RealSystem G2, RealPlayer, Real Networks, HTML, TXT, GIF, JPG, and PDF.

How much does CDNLayer cost?

CDNLayer is extremely cost effective because it is built on top of existing IP infrastructure and optimizes already existing bandwidth. Its pricing is based only on the amount of bandwidth actually used without excess expenses for unused services, creating a very efficient cost structure.

CDNLayer is priced with a low monthly charge of \$20 for the first 200GB of data transfer. After that, we charge only \$0.20 per GB transferred. This is a significant discount to current market rates that generally start at \$0.50 per GB and come with large bandwidth commitments or additional charges. We want to stay true to our model of bringing enterprise-class services to all of our customers.

How much faster is CDNLayer compared with standard Internet content delivery?

The difference in delivery speeds between CDNLayer and standard Internet delivery varies based upon network conditions. The strength of CDNLayer lies in its ability to maintain reliable, consistent speed of delivery regardless of external network conditions. When standard Internet delivery is at its slowest, the content delivered over CDNLayer will remain virtually unaffected. CDNLayer also creates levels of redundancy for content distribution. If a single CDNLayer node is out, the content is simply served from another location, thus reducing website outages and improving overall performance.

What is the difference in video performance between streaming media and progressive downloading?

With progressive downloading, video content is delivered chronologically and the end user must wait for content to be delivered before it can be viewed. With video streaming, the end user can skip forward through video content without the need for it to first be downloaded to the user's computer.

What technology is behind CDNLayer? How does it actually work?

CDNLayer is powered on two levels. The underlying level is the network infrastructure—a global Internet backbone connecting various nodes on multiple continents. This allows content to be delivered from an optimal proximity to the end-user. The second level is the operating software which directs content between the nodes and maintains load balancing and content integrity.

How does CDNLayer determine which node to use?

CDNLayer monitors an end-user's location as well as network traffic and chooses which node will deliver the content with the least latency. It begins by analyzing the node with closest geographic proximity to the end-user. If the node's performance will be compromised due to hardware, bandwidth traffic, or other issues, CDNLayer will direct content around the point of failure to maintain ultimate end user experience.

How many nodes does CDNLayer use?

CDNLayer currently delivers content across 21 nodes across the globe: 15 nodes in the Americas, 4 in Asia, and 2 in Europe. This provides geographic diversity and the ability to deliver content from some of the largest Internet peering points in the world. SoftLayer and its partner, Internap, will continue to add new nodes to CDNLayer to expand the reach and capabilities of the service.

How reliable is CDNLayer?

CDNLayer is substantially more reliable for content delivery than standard unmonitored Internet delivery. By reducing stress on the host server and distributing content over a network of nodes, information can be stored securely and delivered consistently. Particularly for large file downloads or streaming media where latency can create interruptions, CDNLayer helps content arrive rapidly and without jitters, excess buffering, or service interruptions.

How will it work with my current hardware and infrastructure?

Adding CDNLayer as a service does not require any changes to your current operations. CDNLayer works with your existing hardware and infrastructure to boost current network conditions.

Why should I pay for the addition of CDNLayer when I have lower cost infrastructure in place?

CDNLayer helps deliver your content consistently and rapidly, leading to more profitable end-user interactions. The Internet was not originally designed to handle today's demanding media rich Internet content, leading to content delivery that suffers from latency, interruptions, and failed downloads. The more reliably and faster your content is delivered, the more time end-users are likely to spend on your particular web site.

Why should my company outsource the use of a CDN and not build its own infrastructure?

Using CDNLayer reduces your internal overhead by relying on SoftLayer's servers designed specifically for the appropriate tasks. Rather than building infrastructure from the ground up, you are able to obtain the same benefits by only purchasing the quantity of service you need at any given time.

Does SoftLayer partner with another company to deliver the CDN? Who is the partner?

SoftLayer partners with Internap for CDNLayer because they are a consistent industry leader in Internet content distribution technologies. They offer Managed Internet Route Optimizer (MIRO) technology, an extensive CDN, and their Performance IP network offers fully redundant connectivity. These services combined provide one of the most extensive and reliable content delivery solutions available.

How do I begin using CDNLayer?

New or existing customers can easily add CDNLayer as a service. Our commitment is to make the entire purchase experience as simple as possible. Once CDNLayer is added as a service, it is billed based upon actual bandwidth used so you have the flexibility to scale up or down as needed without incurring any expense for unused service.

How can I monitor how people are using my online content?

CDNLayer offers extensive reporting and monitoring services. Statistics and performance monitoring are available through the SoftLayer Customer Portal or API.

How can I learn more about CDNLayer?

For more information on CDNLayer or any of our products, contact one of our technically trained sales staff by phone, email, or live chat via our site.

866.398.7638
214.442.0602
sales@softlayer.com
softlayer.com