

Ranking the best content delivery network (CDN) software of 2021

Content delivery network (CDN) software enables users to accelerate their website with fast content delivery, high performance, and high availability. This software uses a globally distributed proxy server networked deployed in various data centers.

With CDN software, website visitors can get their content served automatically from the closest location to them, effectively increasing website speed. This process is unlike the traditional method that stores data in a central server.

Businesses of all sizes use this software to transfer assets needed for loading Internet content like HTML pages, images, videos, javascript files, and stylesheets.

Ranking

1. Cloudflare content delivery network (CDN) software

Cloudflare enables businesses to secure and ensure the reliability of their applications, APIs, and websites. Users can use this software to develop globally scalable applications, protecting them from malicious bots and DDoS attacks. This software uses DNS and load balancing to keep the websites of organizations reliable.

2. Amazon CloudFront content delivery network (CDN) provider

Amazon CloudFront uses low latency and high transfer speeds to deliver data, APIs, and applications to customers in different parts of the world. This software offers users HTTPS support and field-level encryption to protect against various types of cyberattacks. Businesses can use Amazon CloudFront to customize their content delivery, and it integrates seamlessly with AWS services like Amazon S3, Elastic Load Balancing, AWS Elemental Services, and Amazon Route 53.

3. Imperva Cloud Application Security content delivery network (CDN) provider

Imperva Cloud Application Security helps businesses to secure their cloud environment, databases, APIs, and applications. This software allows users to secure their AWS assets, Azure assets, and Google Cloud Platform assets. Organizations can use this software to stop web application and API attacks, and it ensures that they meet GDPR, PCI, SOX, and other regulatory mandates. Imperva enables users to track all their data activity and discover who can access their applications and data.

4. CDN77 content delivery network (CDN) provider

CDN77 offers users PoPs on six continents, and they can use it to absorb traffic peaks of all sizes. Businesses can use this software to get detailed analytics on their traffic and bandwidth performance. CDN77 enables users to store their content with ease, and they can customize their cache rules to suit their needs. Organizations can also use this software to blacklist and whitelist IP addresses and geographic locations.

5. Fastly content delivery network (CDN) provider

Fastly offers users a programmable and secure edge cloud platform for the delivery of fast applications and websites. This software ensures that businesses deliver the best online experiences to their end-users through fast, safe, and globally accessible content. Users can use Fastly to deliver dynamic content across different devices and locations. This software protects companies from DDoS and bot attacks.

6. Gumlet content delivery network (CDN) provider

Gumlet enables businesses to deliver images with the right quality and size to their users. This software provides organizations with detailed insights on image delivery and advanced image processing functionalities like text overlay and watermark. Users can use Gumlet to improve their SEO ranking and page load time. Plus, businesses do not need any code change to optimize their images.

7. CacheFly content delivery network (CDN) provider

CacheFly enables businesses to scale into any market regardless of their location. Users can use this software to enhance their content streaming and download, and it allows them to integrate with any provider seamlessly. CacheFly provides users with image optimization that leads to faster mobile load times. Besides, organizations can use this software to customize their cache and storage.

8. Varnish Software content delivery network (CDN) provider

Varnish Software allows businesses to accelerate their API or web server using a flexible and configurable HTTP reverse proxy. This software delivers consistent, reliable, and high-performance user experience at different scales. Users can use Varnish software to develop new services that use Multi-access Edge Computing. Additionally, users can have complete control of their content on a global scale.

9. Dexecure content delivery network (CDN) provider

Dexecure helps businesses increase their website load time, enhance website traffic, and optimize their content delivery process. This software enables users to manage and combine multiple CDNs to get the best results. Businesses can integrate Dexecure seamlessly with their website, and they can use their plugins for Magento, Shopify, and WordPress. This software allows users to analyze the performance of their website with ease.

10. BunnyCDN content delivery network (CDN) provider

BunnyCDN offers users a secure, effective, and reliable content delivery. Businesses can use this software to complete control over the delivery of their data, and it uses SSL and other security features to ensure their content stays protected and online. BuddyCDN protects users from DDoS attacks, and it enables them to blacklist any IP address.

Why use a content delivery network (CDN) software?

The most significant reason users use content delivery network (CDN) providers is to prevent service interruptions and improve website performance. A positive user experience is dependent on the content loading speed of a website. CDN providers offer businesses an effective network resource utilization that increases content loading speed.

Content delivery network (CDN) providers distribute content to different globally distributed data centers so end-users in multiple locations can access it rapidly. This software allows users to efficiently get content to their users by using content type as a basis for server optimization.

CDN providers help businesses to save hosting costs as it offloads directly served traffic from their infrastructure. The extensive, distributed server infrastructure of this software helps to secure sites against DDoS attacks.

Hardware failures and increasing traffic can affect the functionality of a website. But, CDN providers reduce server load, which makes them suited to handle more traffic and survive hardware failure. Plus, this software helps users to secure their site using TLS/SSL certificates.

Besides delivering cached content, content delivery network (CDN) providers also enhance the serving of uncacheable content. This software helps businesses to overcome media delivery challenges like content adjustment for multiple device types, data security, and different content type delivery.

Organizations can use CDN providers to make their content globally accessible and available. This software provides users with data analytics that help them improve their business model.

CDN data centers' strategic locations in different parts of the world enable them to optimize standard client/server data transfers, increase security, and withstand different types of failures. Besides, content delivery network (CDN) providers reduce file sizes to decrease the amount of data transferred and increase load times.

Who uses content delivery network (CDN) providers?

Poor web performance affects many businesses from different industries. They use content delivery network (CDN) providers to enhance their website's content delivery.

E-commerce businesses are major users of this software as it helps them secure their customer data and their e-commerce site performance. CDN providers enable retailers to personalize their e-commerce platforms and showcase their products with rich media without negatively impacting their page load time. They also don't have to worry about fraudulent activities affecting their profit as this software helps prevent them.

Software companies use content delivery network (CDN) providers to distribute their software to end-users globally. This software helps them accelerate their downloads, enhance responsiveness, and deliver content to users with ease. Plus, SaaS providers can use CDN providers to defend against DDoS attacks and cyber threats, impacting their app's performance and reliability.

Online gaming companies use this software to deliver fast and reliable gaming experiences to players around the world. Content delivery network (CDN) providers accelerate game downloads and enhance in-game performances, improving customer experience.

They can use this software to protect the performance, integrity, and uptime of their game servers. Content delivery network (CDN) providers allow gaming companies to deliver large files and push in-game content to their users. Plus, CDN providers enables them to build bespoke matchmaking architecture with ease.

Businesses in the media and entertainment industry can use this software to deliver fast and secure media experiences. Content delivery network (CDN) providers help them seamlessly and rapidly deliver rich media content to their online viewers in different parts of the world. They rely on this software to improve the uptime and availability of their digital infrastructure.

Content delivery network (CDN) providers ensure media companies deliver uninterrupted video experiences to their users. This software absorbs unexpected peaks to increase their scalability.

Users in the public sector like educational institutions, state departments, libraries, and museums use content delivery network (CDN) providers to protect and enhance their critical internet assets. This software provides them with fast and reliable web optimization, page load time acceleration, and smart routing across different devices.

Publishers rely on content delivery network (CDN) providers to build accelerated mobile pages and deliver fast mobile experiences to global users. This software helps them to improve their web performance and mobile SEO.

Features

The best content delivery network (CDN) providers help users to offer superior online experiences. Businesses should choose software that optimizes the order of page delivery for fast page visibility and usability.

Some CDN providers allow users to measure the performance and user experience of their website. They can measure DNS response time, page load time, TCP connection time, and Time to First Byte to improve user experiences.

Often, large-sized images slow down webpages even though they improve webpages. Content delivery network (CDN) providers ensure seamless image delivery, and users can use it to create and manage different image variants for desktop and mobile.

Content delivery network(CDN) providers offer users HTTP/2 optimization for their webpages. Businesses can use this software to eliminate latency, which lowers their page load time and improve website performance. With HTTP/2, users can reduce protocol overhead and optimize resource prioritization.

Businesses rely on content delivery network (CDN) providers for DDoS and cyber-attack protection. They can use this software to secure applications, websites, and networks while ensuring no threat to legitimate traffic performance. Some CDN providers collect data to detect and filter abnormal and malicious traffic.

Businesses can use this software to analyze DDoS attack logs to enhance the protection process. Content delivery network (CDN) providers help users protect their content and keep it accessible to legitimate users.

Some content delivery network (CDN) providers enable users to build serverless applications. This software helps businesses to route traffic and balance load across multiple servers automatically. Users can use CDN providers to develop their applications, write an API, or create a function with ease.

Businesses do not need to manage any servers, containers, or VM with this software. Content delivery network (CDN) providers enable users to generate PDFs, SVGs, and images whenever they need them.

Users opt for content delivery network (CDN) providers that enable them to upload their files. This software allows users to deliver their content worldwide, and they can use it to reduce the number of load requests and usage costs of having a server. Some

CDN providers allow businesses to upload large files to the CDN storage, like images, software updates, videos, PDF documents, and installation packs. Users can use SFTP, FTP, and rsync to set up their CDN storage and upload their files.

The best content delivery network (CDN) providers use scalable threat intelligence to stop malicious bots. Undetected bad bots can steal sensitive information, damage brands, and impact the revenue of businesses. This software helps users to manage all types of bots in real-time with accuracy and speed.

Some content delivery network (CDN) providers enable organizations to identify bots accurately by performing behavioral analysis and detecting anomalies in their traffic. While preventing malicious traffic, this software allows good bots to reach the sites of users. Businesses can use this software to protect their mobile applications from emulation attacks and impersonation.

Companies should opt for content delivery network (CDN) providers that offer SSL/TLS encryption. Some CDN providers provide users with an SSL Certificate using Let's Encrypt, while others allow them to purchase custom SSL from a certified SAN provider. Also, businesses can install their existing SSL Certificate.

Organizations can use content delivery network (CDN) providers to manage content access and protection. Users can use secure tokens to create secured links locked onto a particular IP address. This software offers complete control over who can view their content, and they can use a unique password to generate signed URLs.

Businesses can use this software to whitelist and blacklist specific IP addresses and geo-locations. Content delivery network (CDN) providers allow users to lock their content to their domain alone to avoid content theft. Users can use CDN providers to protect their origin server by reducing their load.

Content delivery network (CDN) providers enhance application availability affected by unavailable or overloaded infrastructure. Traffic spikes, server outages, and high network latency at the origin usually cause application downtime and outages. CDN providers monitor the server's health and the network latency at the source to improve applications' availability.

Users can use this software to accelerate the delivery of dynamic and static content to increase engagement and conversions. Regardless of end-user distance to the origin server, content delivery network (CDN) providers deliver fast and reliable experiences by caching static web content. Plus, this software optimizes image files to improve load times and compresses dynamic content for fast delivery.

Some content delivery network (CDN) providers offer video encoding, delivery, storage, and playback. Businesses can use this software to protect their end-users and data safe from online threats. CDN providers allow users to use file type controls to implement data loss prevention.

Organizations can block their end-users from downloading specific file types to prevent malicious downloads. Content delivery network (CDN) providers reduce users' reliance on centralized security hardware. Besides, users can control the flow of data in and out of their organization.

Users should choose content delivery network (CDN) providers that support public, hybrid, multi-cloud, and on-premise environments. This software enables businesses to get visibility across their network infrastructure. Additionally, they can use it to balance their workloads across private and public clouds.

FAQ

Q: What are content delivery network (CDN) providers?

A: A content delivery network is a geographically distributed server network or Points of Presence that work together to ensure fast delivery of content over the internet. This software enables the quick transfer of assets needed for loading Internet content like images, javascript files, HTML pages, videos, and stylesheets. Businesses can use DNS providers to protect their websites against DDoS and other cyber attacks.

This software stores and replicates user content throughout the different locations to enable end-users to access data stored at a place close to them. Content delivery network (CDN) providers help avoid server bottlenecks and increase content loading speed. Users make use of CDN providers while watching YouTube videos, reading articles online, or perusing social media platforms.

The major purpose of a CDN is to enhance user experience and utilize network resources effectively. This software uses content type as a basis for server optimization, enabling them to get content to end-users effectively.

Q: How do content delivery network (CDN) providers work?

A: For a CDN to deliver content to users quickly, reliably, and securely, they minimize the distance between their website server and their visitors. This software stores a cached version of users' content in different Points of Presence and delivers it to visitors within the server locations' proximity.

Content delivery network (CDN) providers connect to Internet exchange points to reduce data transit time in high-speed delivery. This software optimizes standard client/server data transfers and enhances data security. Plus, CDN providers ensure there are no downtimes or congestions on user websites.

Q: Can content delivery network (CDN) providers replace virtual private networks (VPN)?

A: A virtual private network allows users to create secure connections over a less-secure network between their computer and the internet. Users can use this network to protect their privacy, and they can use it to access local network resources like they are present at the VPN location.

On the other hand, CDN providers store and cache content to enable end-users to access content regardless of the location quickly. Businesses choose CDN providers over VPNs because VPNs are usually vulnerable to attacks and breaches, and increasing remote work can strain them. The flexibility and user experience CDN providers offer us another reason users choose them over VPNs.

Q: What are the benefits of content delivery network (CDN) providers?

A: Content delivery network (CDN) providers are essential since most online vendors need to improve their web pages' user experience. With this software's multiple points of presence, users can make their content globally accessible seamlessly. Also, these different geographically distributed server points help users to speed up their content delivery.

Some content delivery network (CDN) providers offer users data analytics, enabling them to enhance their business model and increase productivity. Because this software replicates content to PoPs, it reduces the risk of content delivery delay, which aids business reliability.

CDN providers help organizations to reduce their network congestion rates and enhance their website performance by redirecting users to different replicated content. DDoS attacks cause website unavailability, which diminishes trust and reliability. Users can use this software to protect their site against DDoS and other cyber attacks.

With the geographically distributed server network, users do not need to pay for multiple foreign servers. This software helps businesses to lower their overhead costs and increase revenue.

Q: What is the best content delivery network (CDN) provider?

A: Businesses need to opt for CDN providers that will support their needs with ease. There are different business and technical factors that improve the reliability of this software. Users need to choose content delivery network (CDN) providers that continuously advance their web and mobile technologies.

However, the best CDN provider depends on the varying needs of the organization. The kind of website they have will determine the software they should choose. Also, users need to consider their budget.

Their audience's location is essential as this will enable them to choose a CDN provider which PoPs in areas close to their audience. Businesses that cater only to a local audience do not need to get a global CDN.

Users need to consider the software's speed and reliability by measuring their response time, latency, and throughput. Security is a major factor, and businesses need to ensure that the content delivery network (CDN) provider they choose offers DDoS mitigation, compliance, and encryption.

Q: When do I need a content delivery network (CDN) provider?

A: Businesses should consider a CDN provider if they care about their end-user experience and if their website audience is growing rapidly. This software helps users that are struggling with page load time and image loading speeds. Content delivery network (CDN) providers back some of the world's top websites as they address user experience, load time, and content delivery speed.

Q: What limitations of content delivery network (CDN) providers should I know about?

A: Compared to regular hosting, content delivery network (CDN) providers cost more because users spend according to their data. Storing sensitive information on some CDN providers can make them vulnerable to potential security threats. Plus, users cannot easily integrate their custom applications with this software.

Content delivery network (CDN) providers need extra DNS lookup because they serve static content from other sources. If a CDN provider goes down, businesses may lose the visibility of their website.

Q: How does a content delivery network (CDN) provider improve website load times?

A: Content delivery network (CDN) providers reduce the distance between users and website resources. This software eliminates the need to connect to wherever the origin server of a website lives. Instead, it enables end-users to connect to a data center that is geographically closer to them, which leads to less travel time and faster content delivery.

This software helps businesses to optimize their hardware and software by load balancing effectively as this will increase the data delivery speed. Users rely on content delivery network (CDN) providers to reduce their file size via file compression and minification for faster load times. Besides, CDN providers enable TLS false start and optimize connection reuse to speed up sites that use TLS.SSL certificates.

Q: What is the difference between a CDN and a web host?

A: A content delivery network (CDN) provider helps users increase their page load time and content delivery speed via a multiple geographically connected server network. In comparison, a web hosting provider dedicates space on a web server for users to store their website files and host their site.

While this software cannot replace a web host or even host content, it helps businesses to cache their content at the network edge. This process reduces hosting bandwidth, which improves security, prevents interruptions, and enhances website performance. Companies replace web hosting with CDNs because they relieve some major pain points.

Q: Do content delivery network (CDN) providers protect data?

A: Data security is an integral part of a content delivery network (CDN) provider. This software secures sites with fresh TLS.SSL certificates that ensure high encryption, integrity, and

authentication standard. Businesses can also rely on CDN providers to mitigate DDoS and other types of cyber-attacks.

Q: How can I test the performance of my content delivery network (CDN) provider?

A: Businesses should benchmark their CDN provider by comparing their resources' delivery speed from the origin URL with that from the CDN server they want. Testing for different file types and sizes is essential. This software enables users to carry out load testing from multiple locations, and they can track and optimize their CDN provider over time.

Recap

Content delivery network (CDN) providers help businesses enhance their global availability and reduce latency and bandwidth. This software delivers web content to organizations based on their geographical locations to increase load time and content delivery speed.

Businesses can use content delivery network (CDN) providers to transfer assets need to load internet content quickly. This software's primary purpose is to enhance the user experience, mitigate cyberattacks, and utilize network resources effectively. Users can rely on CDN providers to offload direct traffic gotten from their origin to reduce cost.