CLOUDFLARE

Solution Brief

Say Bye to the Box

Replace legacy appliances with intelligent, scalable application services

The problem with legacy hardware appliances

Hardware appliances are ill-matched to meet the needs of modern online businesses. While these appliances can be very expensive to acquire in the first place, sophisticated, modern cyber attacks, including DDoS attacks, can easily overwhelm them and render them useless.

Unfortunately, the expenses do not stop with just acquiring a hardware appliance. Since hardware appliances have a hard performance cap and cannot scale beyond a certain limit, businesses are forced to keep on investing into bigger, better appliances to keep up with their business needs. Appliances are also expensive to maintain and manage, enforce downtime during maintenance windows, and are unequipped to deal with traffic spikes stemming from attacks or high demand. Businesses are also cornered into purchasing new hardware every 3-7 years to keep pace with technology advances, software updates, and business requirements. With most hardware solutions, teams often need to purchase additional hardware components or appliances to add functionality to their deployment. Add this to the cost of running these hardware appliances and maintaining a datacenter, and the total cost of ownership for hardware appliance-based solutions can easily go through the roof.

Finally, consolidating solutions and functionality on hardware appliances can be a challenge since these appliances are inflexible, made up of many disparate components, complex to use, and often designed to enforce vendor lock-in.

Switching to an edge cloud platform like Cloudflare for your application security and performance needs not only helps organizations streamline their infrastructure and operations, but can lead to significant cost savings by eliminating unnecessary hardware refreshes, reducing vendor sprawl, and cutting down on data center overhead.

The Cloudflare difference

Cloudflare's application services products help businesses consolidate their application performance and security needs with ease.

The Cloudflare global network of edge servers reduces latency and improves website performance. With industry-leading solutions like Cloudflare CDN, DNS, Load Balancing (for global and local traffic management), and more, Cloudflare ensures that web applications and APIs are always available and performant.

Cloudflare also offers a range of security features to help protect against a variety of web-based attacks, regardless of the size of the attack, including DDoS protection, a web application firewall (WAF), and bot protection. Our cloud-native architecture helps businesses keep up with emerging threats, ensuring protection against even never before seen, zero-day attacks is in place in 10-15 seconds.

Cloudflare is a one-stop shop for consolidated security and performance. Our unified application services solution helps identify and respond to incidents quickly while ensuring business continuity and scaling with ease.

Scalability and easy to use

Cloudflare lets organizations consume resources on an as-needed basis, and enables faster, automatic threat investigations and incident responses, minimizing manual configuration and management.

Our network can easily absorb traffic surges, whether they're caused by DDoS attacks or high demand, and load balance traffic across multiple locations and origin servers to ensure your applications are always available to your end users.

Protection against emerging attacks

Backed by threat intelligence from a vast global network, Cloudflare's cloud-native security stack helps organizations meet emerging and ever-growing cyber attacks head-on, without the need to wait for security patches or expensive and cumbersome appliance upgrades.

Cost effective consolidation

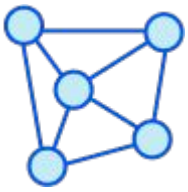
Cloudflare reduces valuable engineering hours spent on configuration and management so you can focus on your highest-priority initiatives.

We enable efficient growth so you only pay for the resources you need, when you need them, instead of paying high hardware costs upfront that you may not even fully utilize.

Why scalability is important

Cloudflare allows users to draw on resources automatically and as needed to respond to traffic spikes, during peak times such as a high-demand product launch or holiday shopping season, or as a result of cyber attacks, for example a large-scale, multi-vector DDoS attack trying to incapacitate applications.

During such traffic spikes, Cloudflare Load Balancing can easily route traffic to origin servers in other regions, or divert traffic away from overwhelmed servers within a specific region or deployment. In case of a regional outage, Load Balancing can also divert traffic to other origins without delay.



Cloudflare's unmetered DDoS protection and Rate Limiting solutions also ensure that you don't have to worry about being hit with surge prices or struggle to allocate resources to defend your applications against large-scale attacks. Our network has consistently absorbed some of the largest DDoS attacks so businesses can stay online.

	Legacy hardware appliances	Cloudflare application services
Hardware costs	Hardware costs, including refreshes, upgrades and data center overhead costs.	No hardware costs.
Professional Services costs	Legacy and hardware solutions require help from Professional Services, which is an additional cost that can be high with many hours spent on complex scripting and maintenance overhead.	An easy-to-use product means less engineering hours spent managing one vendor, which can free engineers up for higher-impact projects.
Consolidation of services	Consolidating application services on legacy hardware appliances can be expensive and complicated: • Security can be robust and customizable, but not very agile • Downtime for maintenance means applications are left unprotected with sub-par performance • DDoS attacks or traffic spikes can create choke points, rendering downstream security solutions and applications useless	Consolidating application services on Cloudflare is easy and cost efficient. With Cloudflare, businesses can: • Reduce the mean time to detect attacks by over 50% • Improve application performance and web page load times by 4x • Reduce the mean time to detect and mitigate intrusion attempts by 90% • Absorb large-scale DDoS attacks and divert traffic from overwhelmed servers
Accounting impacts	Legacy appliances are sold based on a CapEx model. This means: • Solutions require upfront acquisition investments that depreciate over the years • Enterprises need to acquire hardware to service peak requirements, but they will be under utilized during all other times	Cloudflare's OpEx model eliminates upfront capital expenditures and depreciation concerns: • Cloudflare's accounting benefits return on investment are more immediate • Businesses can easily scale their environment to meet their specific needs without the upfront costs of investing in hardware
Implementation time	• Hardware lead times (lengthened by supply chain issues) • Lengthy, professional services dependant setup processes • Often require central management to be scripted so configurations can be deployed consistently across all devices	• Easy to centrally manage your performance and security across all domains • Cloudflare provides at least a 10X faster time to value compared to appliance vendors, even once the hardware is delivered and in place

To learn more about how, with Cloudflare application services, you can protect your web applications against modern cyber attacks, ensure business continuity, and take your business to the next level, visit https://www.cloudflare.com/lp/appliances-to-cloudflare/