Enterprise overview

Benefits and features of CloudFlare's Enterprise plan

Enterprise overview

This paper summarizes the benefits and features of CloudFlare's Enterprise plan.

State of the web

In today's world, your website is your business. Yet running a website is more complex than ever. The web's very openness is also its weakness: attackers can target many vulnerabilities across several layers and protocols. Yet you can't sacrifice performance in locking down every possible vector of attack. At the same time, you need a solution that is easy, affordable and works across a range of desktop and mobile devices and networks.

CloudFlare can protect your website, make it run faster and improve availability with a simple change in DNS. We have re-thought the entire technology stack through the network, hardware and software layers, building out a reverse proxy service on a highly-available global network. By offering this functionality as a cloud service, we save you time, money and hassle. Your web visitors are safer and happier while you continue to benefit from our continued innovation and the transformative web experiences that our scale can drive.
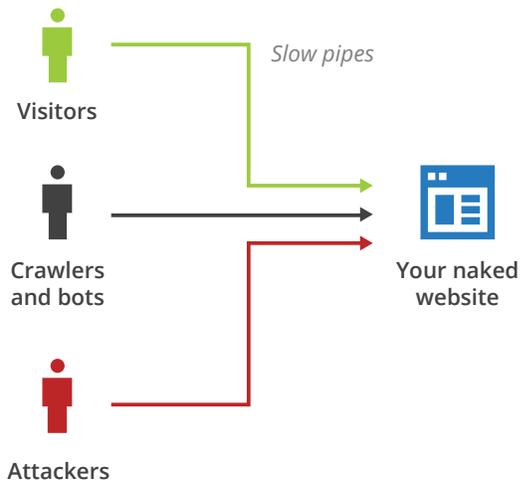

CloudFlare can handle a wide range of functions previously tackled by many different solutions.
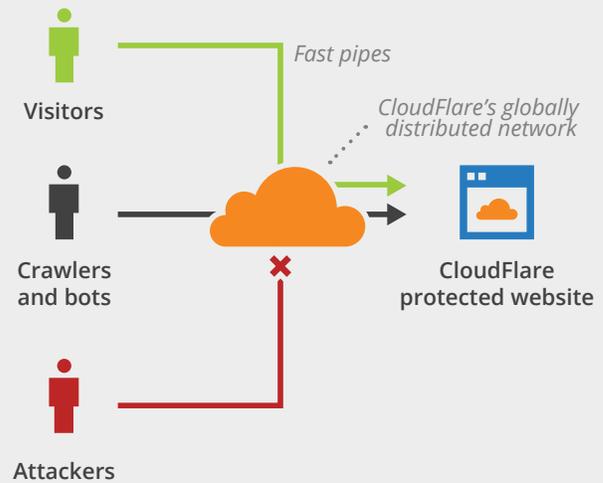
At a glance

- 1 billion+ unique IPs
- 2 million websites and growing
- Global network serving billions of page views per day
- Diverse customer base including major consumer websites, government agencies and enterprises

Benefits and features of CloudFlare

Without CloudFlare

Visitors

Slow pipes

Crawlers
and bots

Attackers

Your naked
website

With CloudFlare

Visitors

Fast pipes

*CloudFlare's globally
distributed network*

Crawlers
and bots

Attackers

CloudFlare
protected website

Security

CloudFlare protects your web properties from Distributed Denial of Service (DDoS) attacks and other web threats before they hit your server. We recently mitigated an attack of 300 Gbps against one of our customers — an attack the New York Times termed "the largest in history."

- **Advanced DDoS mitigation.** Provisioned as a service at the network edge, our service can mitigate DDoS attacks including those that target the UDP and ICMP protocols, SYN/ACK, DNS amplification and Layer 7 attacks.

- **Dynamic Web Application Firewall.** Our Web Application Firewall (WAF) runs the OWASP ModSecurity Core Rule Set and CloudFlare rule sets by default, protecting you against SQL injection, cross-site scripting (XSS) and application-specific attacks. Import or write your own rule sets or add ones developed by industry experts. New rules take effect in less than 30 seconds.

- **Easy SSL.** SSL adds an additional layer of security for your website. CloudFlare works with SSL-enabled sites and handles SSL termination without extra cost or hardware. Additionally, you can add your own SSL certificates or add new ones managed by CloudFlare.

- **Network effect.** With our network of over 2 million websites and dynamic reputation scoring on more than 1 billion IPs per month, we see attacks happen in real-time and can instantly deploy our learnings to protect every customer.

- **Online, real-time reports.** CloudFlare shows you the list of threats that have been stopped from reaching your website, such as search engine crawlers, bots and potentially malicious visitors.

Performance

We cache static content, accelerate dynamic content and make it easy to optimize outbound content. CloudFlare goes beyond a traditional content delivery network (CDN) both locating your content closer to your site's visitors but optimizing it for their device, browser and bandwidth needs.

- **Static content caching.** CloudFlare's technology builds the cache for you based on your traffic and what objects on your site are safe to serve. Use Page Rules to customize on a page-by-page basis and single file purge when you need to refresh your content quickly.

- **Dynamic content acceleration — Railgun.** Railgun is a WAN optimization service that ensures the connection between your origin server and the CloudFlare network is lightning fast. It achieves up to a 99.6% compression ratio by only sending the differences between subsequent dynamic requests. No content markup, configuration or code changes required!
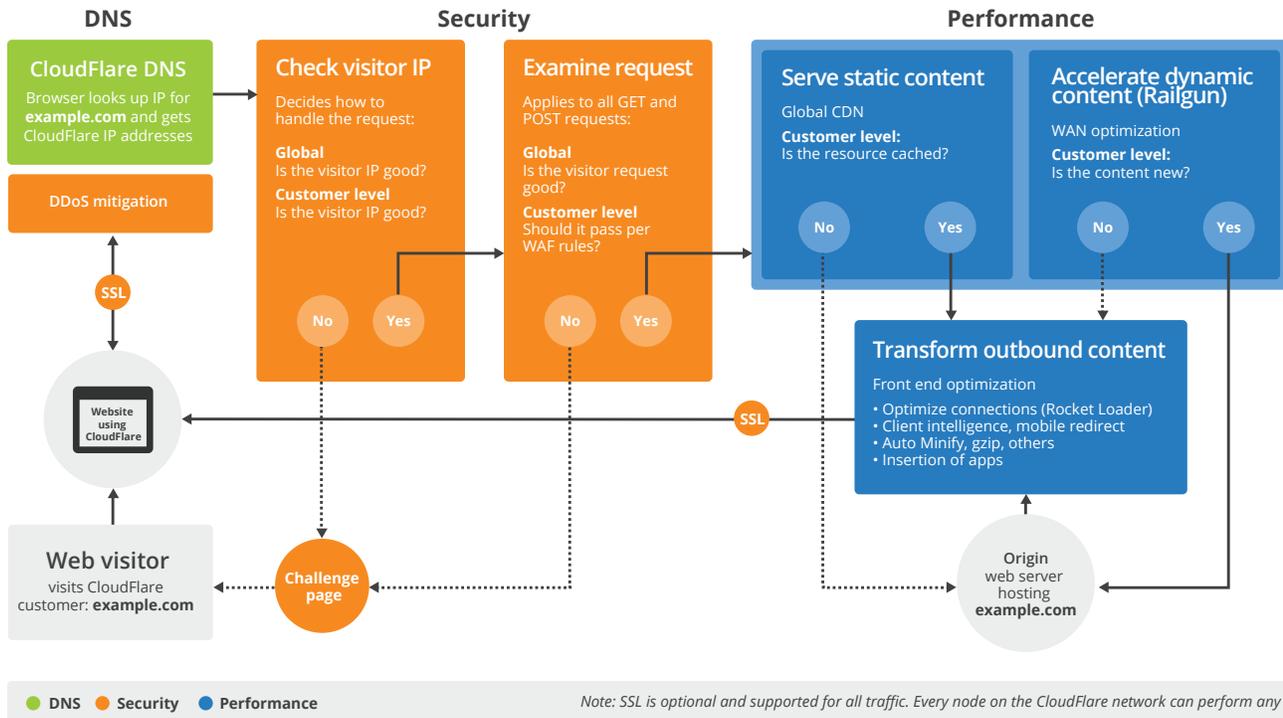
Without Railgun

Visitor — Visitor connects to nearest data center transparently. — **CloudFlare data center** — Requests uncached items using standard TCP/IP and HTTP — **Origin server**

With Railgun

Visitor — Visitor connects to nearest data center transparently. — **CloudFlare data center** — Permanent fast connection. Only serves changes. Highly compressed. — **Origin server with Railgun**

- **Wide range of front-end optimizations.** CloudFlare customers can use our one-click features to perform a wide range of content optimizations from removing unnecessary characters from HTML, CSS, and JavaScript to reducing the number of connections needed to serve 3rd party widgets (e.g. Facebook, Twitter, ad servers, etc).

- **Client intelligence.** CloudFlare automatically detects the type of browser and connection a visitor is using and delivers your content the fastest way possible. Your pages look the same as they did before, including any mobile version, but they are optimized for the web visitors' desktop or mobile environment.

- **Reporting.** You'll be able to see the exact speed benefits and savings with your personalized CloudFlare analytics report.

DNS

CloudFlare DNS
Browser looks up IP for **example.com** and gets CloudFlare IP addresses

DDoS mitigation

SSL

Website using CloudFlare

Web visitor
visits CloudFlare customer: **example.com**

Security

Check visitor IP
Decides how to handle the request:

Global
Is the visitor IP good?

Customer level
Is the visitor IP good?

No   Yes

Examine request
Applies to all GET and POST requests:

Global
Is the visitor request good?

Customer level
Should it pass per WAF rules?

No   Yes

Challenge page

Performance

Serve static content
Global CDN
Customer level:
Is the resource cached?

No   Yes

Accelerate dynamic content (Railgun)
WAN optimization
Customer level:
Is the content new?

No   Yes

Transform outbound content
Front end optimization
• Optimize connections (Rocket Loader)
• Client intelligence, mobile redirect
• Auto Minify, gzip, others
• Insertion of apps

SSL

Origin
web server hosting
example.com

● DNS ● Security ● Performance

Note: SSL is optional and supported for all traffic. Every node on the CloudFlare network can perform any task.

Availability

We own and operate all our own equipment, with direct relationships to our multiple upstream bandwidth providers. Running our own service gives us greater oversight over network design and functionality resulting in efficient flow control at every level.

- **Built-in redundancy and disaster recovery at all layers.** There is no single point of failure, from datacenters to servers and network providers.

- **Automatic load balancing.** We automatically send traffic to the next available server if the first one is down or overloaded.

- **Online safeguard.** With our Always Online feature, we keep a simple, static copy of your website up even if your servers are down.

- **100% uptime SLA.** CloudFlare's Enterprise services are backed by a 100% uptime SLA. In addition, the Enterprise SLA includes additional penalties for interruption of service.

DNS

Authoritative DNS is included in the service. Powering 30% of managed DNS domains, our global DNS is fast, powerful and secure.

- **Global and growing.** Our DNS service powers 30% of the top 1 million Alexa websites[1]. We use Anycast to direct DNS requests, automatically routing requests to the datacenter best located to serve it.

- **Fast.** Consistently ranked in the Top 3 fastest providers, on average we respond to requests in about .005 seconds. Updates take under a minute.

- **Powerful.** We don't set query limits and can support millions of records in a single account. You get wildcard support and custom name servers and can choose how to manage your DNS with APIs or using our easy, centralized management dashboard.

- **Secure.** Our DNS service can resist the largest DDoS attacks and common web threats. We automatically scan for potential attacks and can then determine the best course of response—from rate-limiting to blocking or filtering.

Pricing and savings

Predictable and affordable pricing. CloudFlare offers a wide range of security, performance and availability features for one simple, all-inclusive price. You decide which services you want to turn on or off.

- **No overages, no bandwidth charges ever.** CloudFlare's pricing provides customers with the peace of mind of a predictable and affordable monthly fee. We do not charge on bandwidth and you'll never be charged overages.

- **No set-up or integration expenses, no hidden fees.** There are no additional expenses beyond the subscription fee for the CloudFlare service. Setting up and maintaining CloudFlare can also be done without any professional services help.

- **Infrastructure and bandwidth savings.** There is no hardware or software to set-up, maintain or tune, plus you save bandwidth from all the bad traffic prevented from reaching your server.

Enterprise-class service and support

Enterprise customers enjoy 24x7 support, dedicated account management and access to CloudFlare's team of experts.

- **24x7x365 support.** CloudFlare's enterprise service includes 24/7/365 phone and email support, and access to a shared ticketing system.

- **Dedicated account management and customized set-up consultation.** Every Enterprise customer receives a dedicated account manager for onboarding and ongoing service management.

- **Escalation path including CloudFlare experts on your team.** CloudFlare's team of network, systems and security experts are on hand to diagnose and resolve your most serious issues.

- **Access to raw logs.** Enterprise customers have access to raw logs to conduct further data analysis of traffic.

CloudFlare's network

CloudFlare's network rivals that of the largest internet companies. We operate data centers around the world to help our make our customers' websites safer, faster and smarter. We've built the network from the ground up, incorporating technologies that ensure it can withstand the largest DDoS attacks, traffic spikes and other challenges that come from running a website in today's world.

Network map current as of January 2016. Visit www.cloudflare.com/network-map for our most up-to -date map.

Our services are delivered in the cloud so there is no software or hardware to install or manage. Our team takes pride in being a smart, reliable and trusted partner to our customers.

To learn more about CloudFlare, please contact us.

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