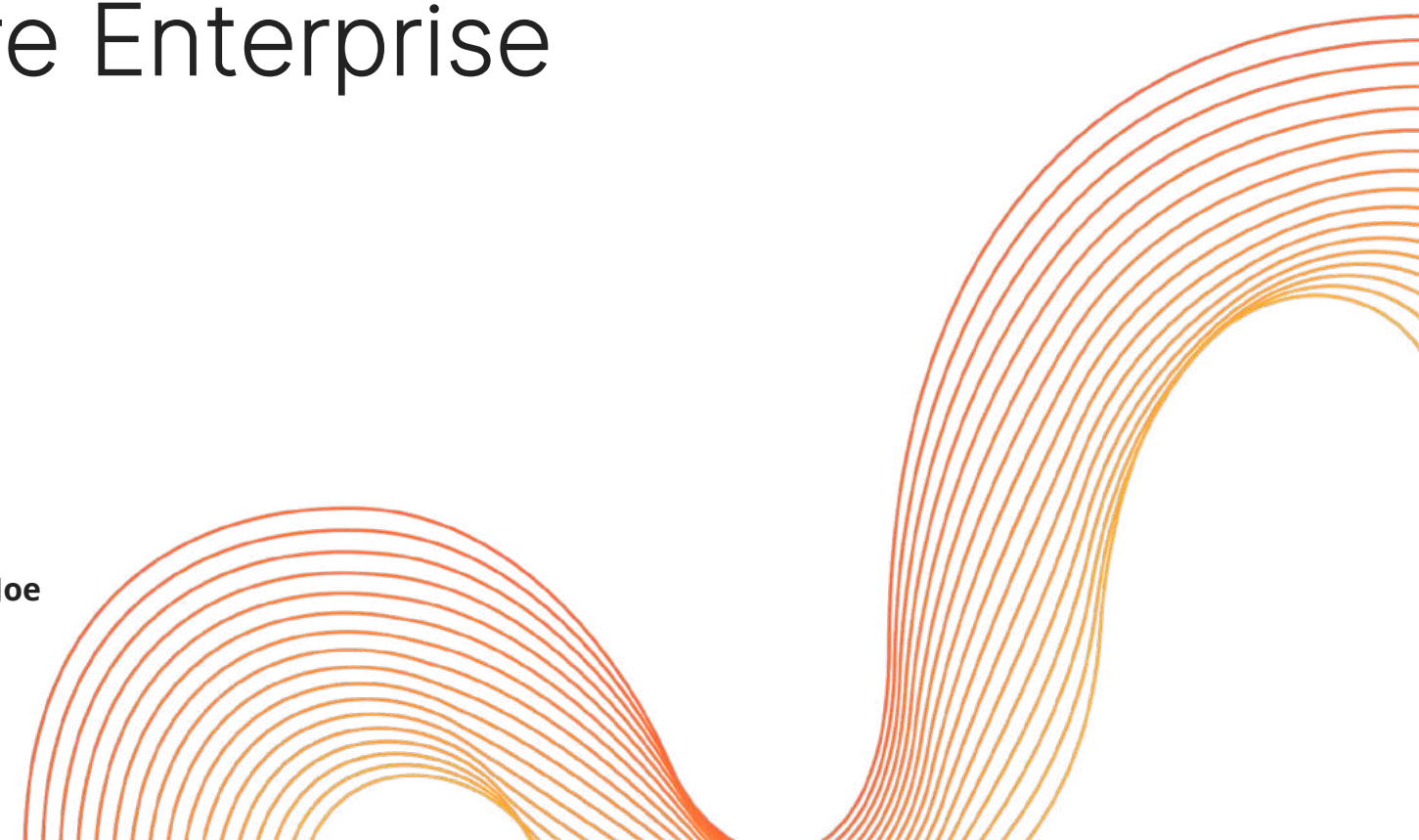
Cloudflare Enterprise



Chairat Sinprasertwong – Joe

Regional Account Executive

M: 0800-676-000

E: chairat@cloudflare.com

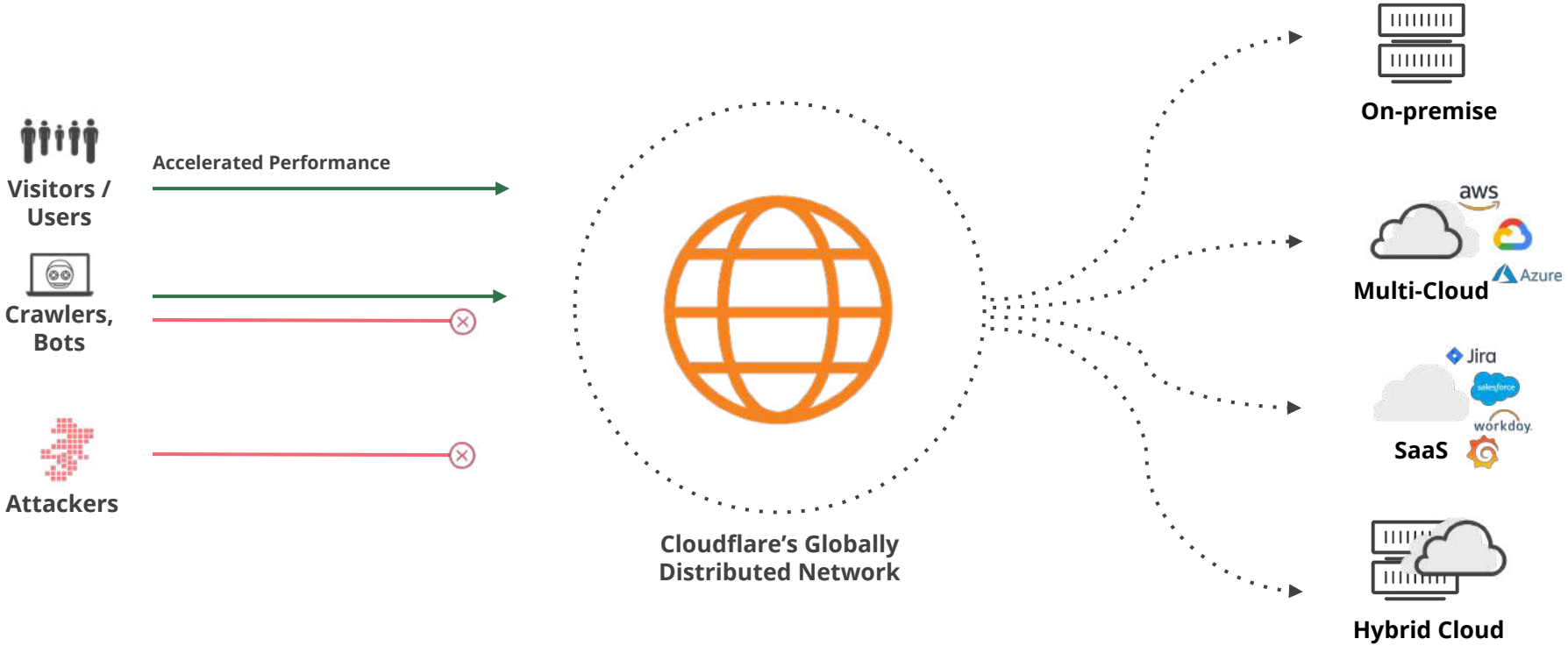
June 2021

CLOUDFLARE

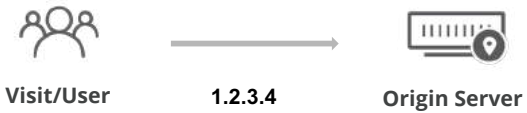
We are building a

Global Cloud Network

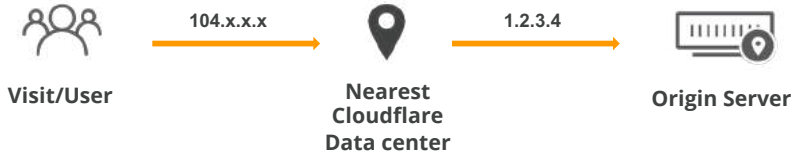
How does Cloudflare work?



With a reverse proxy, setup is a DNS change



Full DNS / CNAME - Setup



With Cloudflare, all requests route to the nearest data center via Anycast and proxy to the origin.

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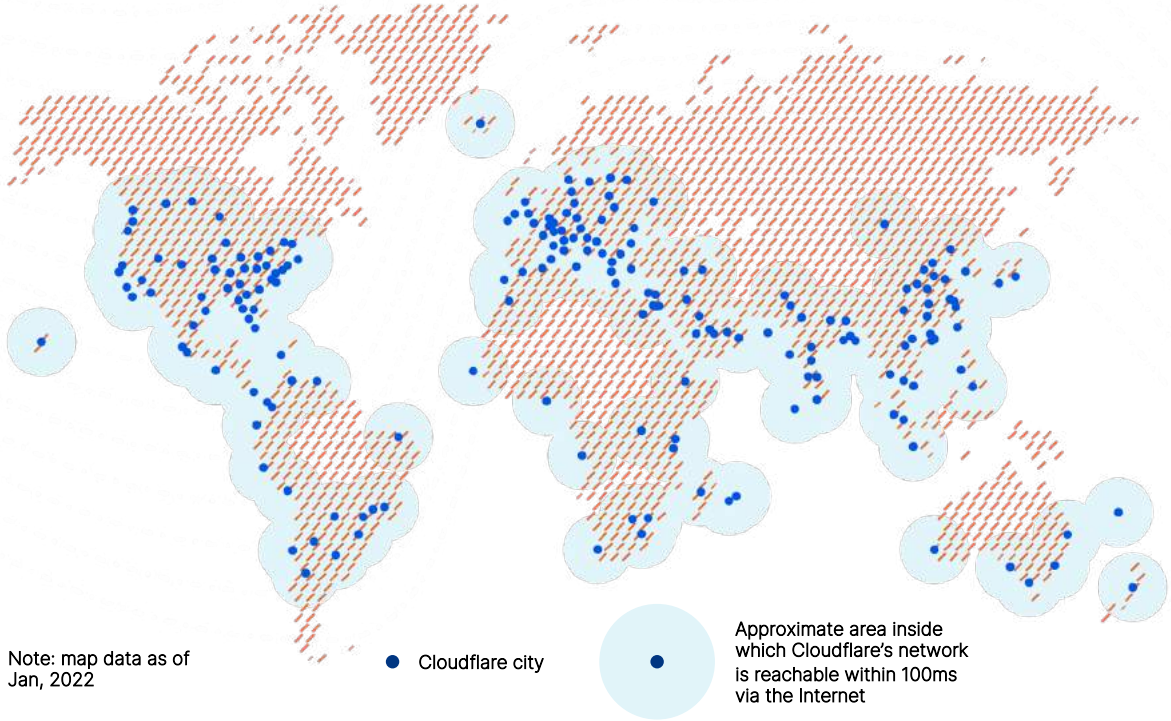
Cloudflare's network operates at massive scale



Note: map data as of Jan, 2022

25M

Internet properties

121 Tbps

of network capacity

250+

cities and 100+ countries

86 B

cyber threats blocked each day in Q4'20

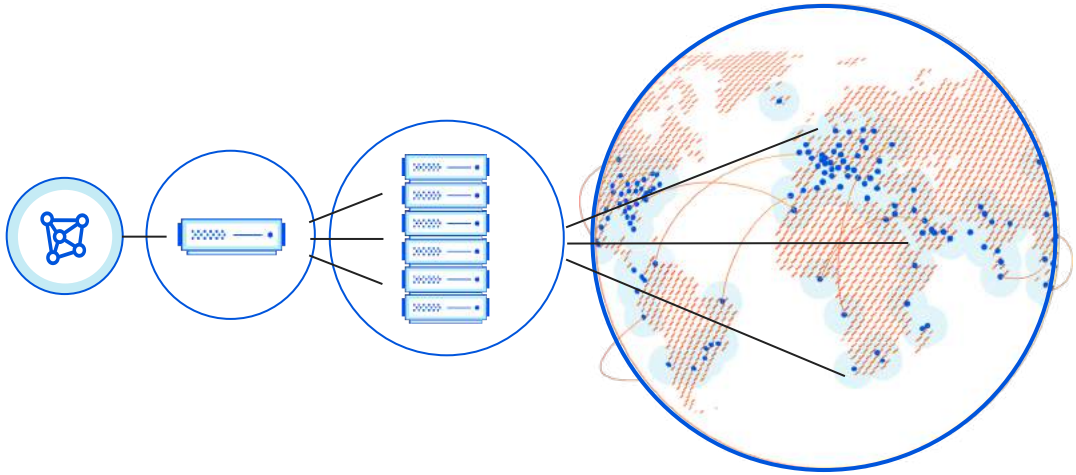
99%

of the Internet-connected population in the developed world is located within 100 milliseconds of our network

© Copyright Cloudflare, Inc.

CLOUDFLARE

Every Cloudflare service runs over every Cloudflare server in every Cloudflare data center across 200 cities in 100+ countries



Cloudflare Global Network

Security

DDoS protection

Network firewall

Zero Trust rules

Secure Web Gateway

IDS/IPS

Performance

Traffic acceleration

Load balancing

Quality of Service

Visibility

Analytics

Logs

Reports

Insights

CLOUDFLARE

Cloudflare - Defining the Edge

Products & Services

Application Services

- Web Application Firewall
- SSL/TLS
- Bot Management
- Rate Limiting
- Layer 7 DDoS Protection CDN
- Load Balancing
- Stream Delivery
- DNS Services
- Logs and Analytics

Network Services

- WANaaS
- FWaaS
- L3 & L4 DDoS Protection
- *IDS/IPS
- Smart Routing
- Network Interconnect

Zero Trust Services

- ZTNA
- SWG
- RBI
- *DLP

Cloudflare Platform

Serverless Developer Platform

Workers | Workers KV | Pages | Durable Objects | Video Streaming

Cloudflare Network Infrastructure

~25 million Internet properties | 67 Tbps capacity | 200+ cities in 100 countries | 99% of population within 100ms
ISO/SOC/PCI/GDPR Compliance Certified | Support for latest web standards | China network

Cloudflare Enterprise - Application Services

CLOUDFLARE

SECURITY

- Firewall
- Dedicated Cert
- Bot Protection
- SSL/TLS
- DDoS Protection
- Secure Origin Connection
- Spectrum *Optional*
- Rate Limiting

PERFORMANCE

- Cache
- Content Delivery Network
- Intelligent Routing
- Image Optimization
- Content Optimization
- Video Streaming *Optional*

RELIABILITY

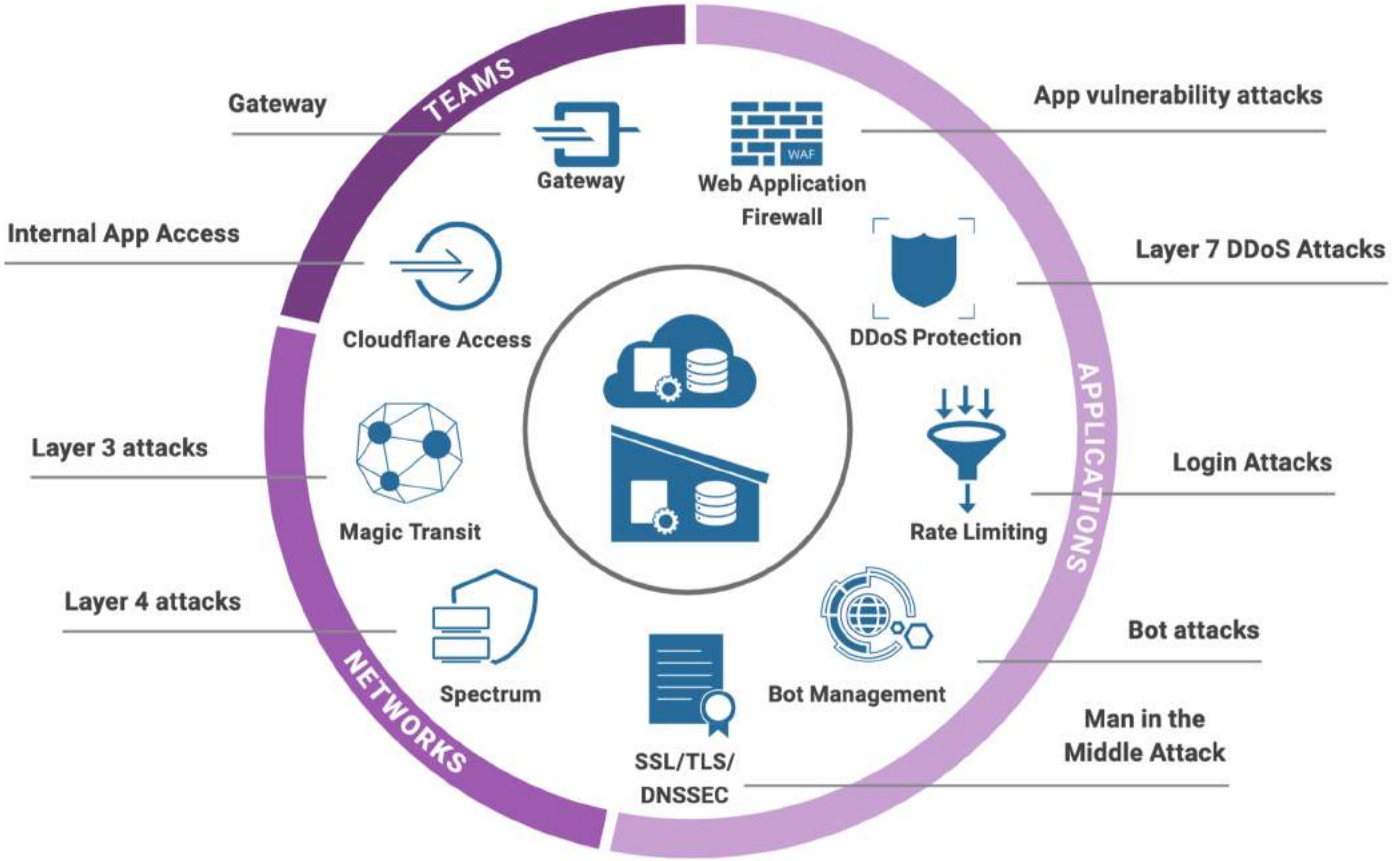
- Load Balancing *Optional*
- Domain Name System (DNS)
- Anycast Network
- DNS Resolver
- Virtual Backbone
- Always Online

PLATFORM

- Serverless Compute *Optional*
- API
- Health Check
- Analytics

CLOUDFLARE

Security


TEAMS
APPLICATIONS
NETWORKS
Gateway
Gateway
Web Application Firewall
WAF
App vulnerability attacks
Internal App Access
Cloudflare Access
DDoS Protection
Layer 7 DDoS Attacks
Layer 3 attacks
Magic Transit
Rate Limiting
Login Attacks
Layer 4 attacks
Spectrum
Bot Management
Bot attacks
SSL/TLS/ DNSSEC
Man in the Middle Attack

CLOUDFLARE

1

Protect my apps from attack and vulnerability

2

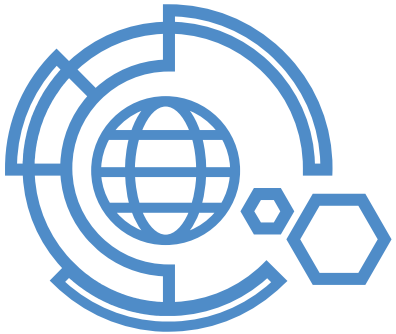
Protect on-premise networks

3

Enable secure access & agility

CLOUDFLARE

Protect all web applications.



Our solution:

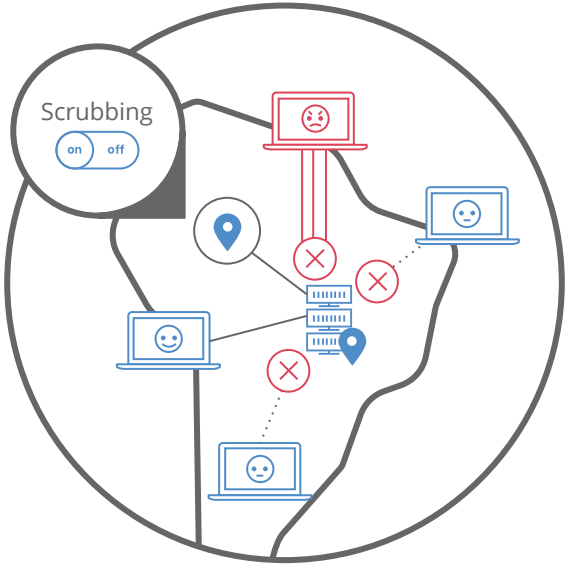
DDoS + Firewall + Bot Management

Cloudflare blocks 57,000,000,000 attacks per day*

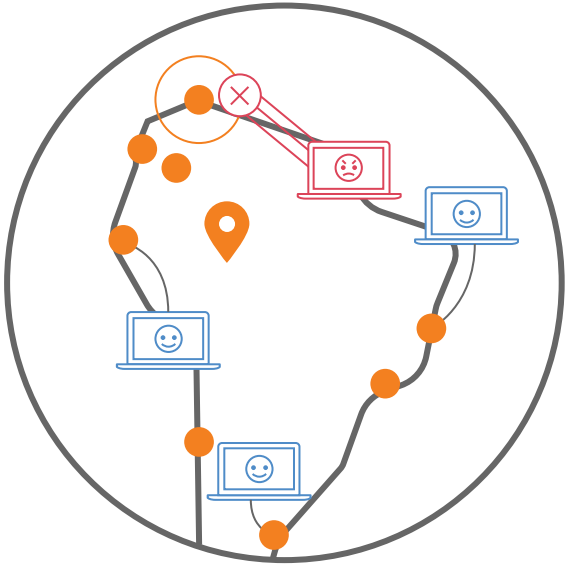
A fully differentiated DDoS solution

Unmetered DDoS Protection = Trust

- **Network Scale** can absorb any DDoS attack.
- **Share Intelligence** constantly learns and applies intel to ID new attacks.
- **Ease of use** -- it's just on!



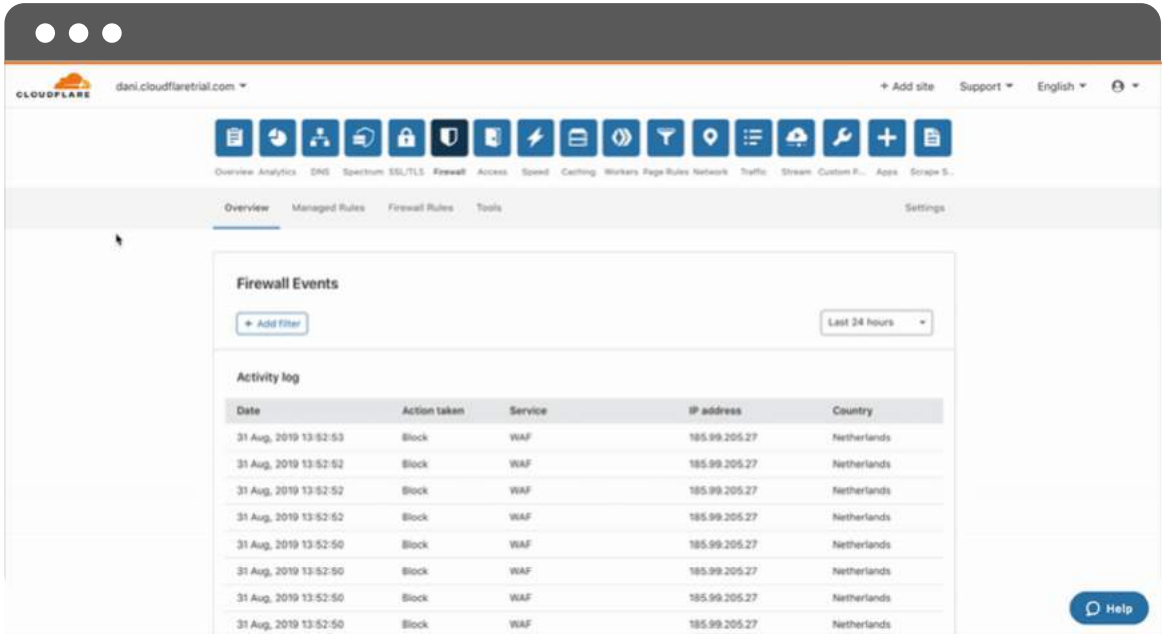
Industry Legacy Scrubbing

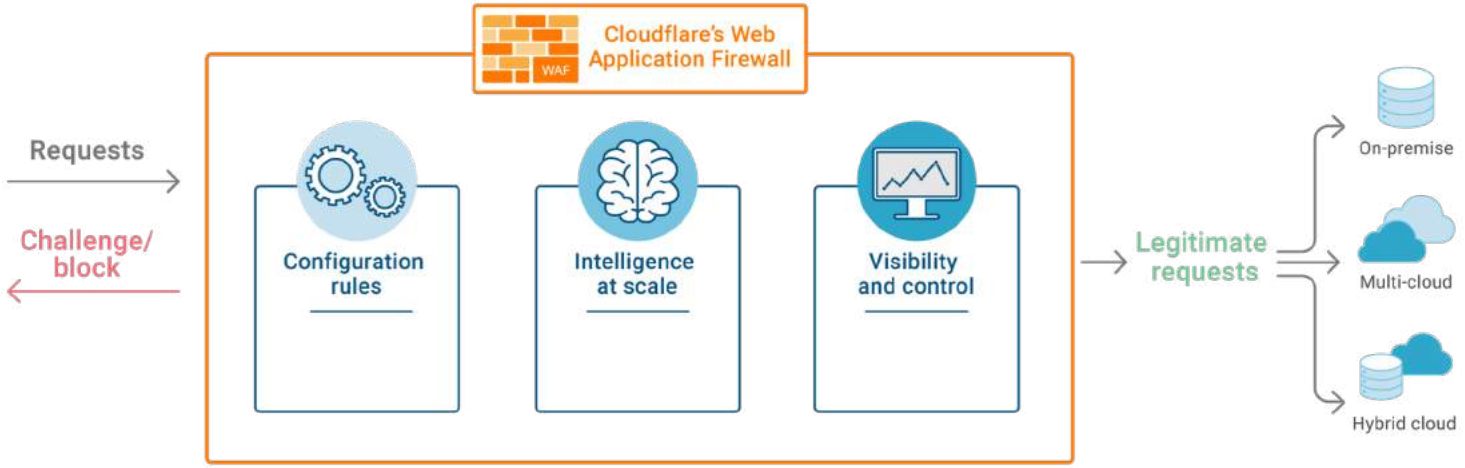


Cloudflare DDoS

Fast and Safe -- No need for specific 'scrubbing centers'

- Network Scale - Allows us to propagate new rules quickly.
- Ease of use - Easy to set and manage fine grain control.
- Shared Intelligence - Robust body of IP reputation from our network.





Advanced Protection

Threat score based on behavioral learning of digital signatures

Patterns of 1 Billion+ IPs everyday used to build IP Reputation table

Better Operational Efficiency

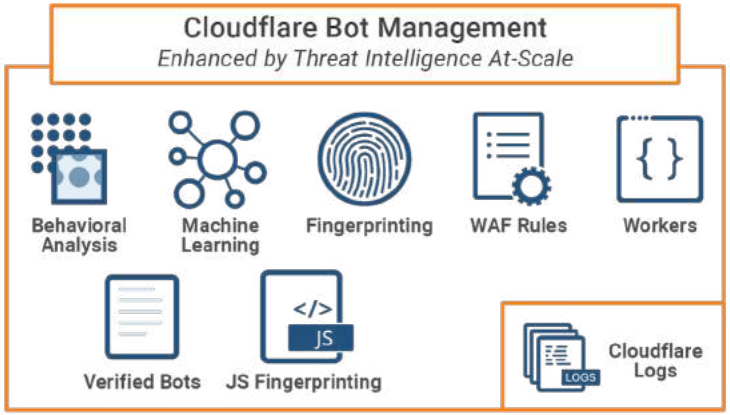
Ease of onboarding and management

Out-of-the-Box API integrations to drive better efficiencies for DevOps
and DevSecOps

Comprehensive Coverage

Mitigate OWASP Top 10 and beyond

Protect across hybrid environments



40%

of web traffic is bots

Credential Stuffing

Stop take-over of user's account from automatically applying previously stolen account credentials.

Content Scraping

Protection from scraping and stealing information from a website

Inventory Holding

Block bad bots that fraudulently purchase goods to deprive legitimate customers or resell for a higher price

Credit Card Stuffing

Shield from attempts to validate stolen credit cards to then make fraudulent purchases

Content Spam

Identify and stop bad bots from adding malicious content to web properties such as forums and registration forms

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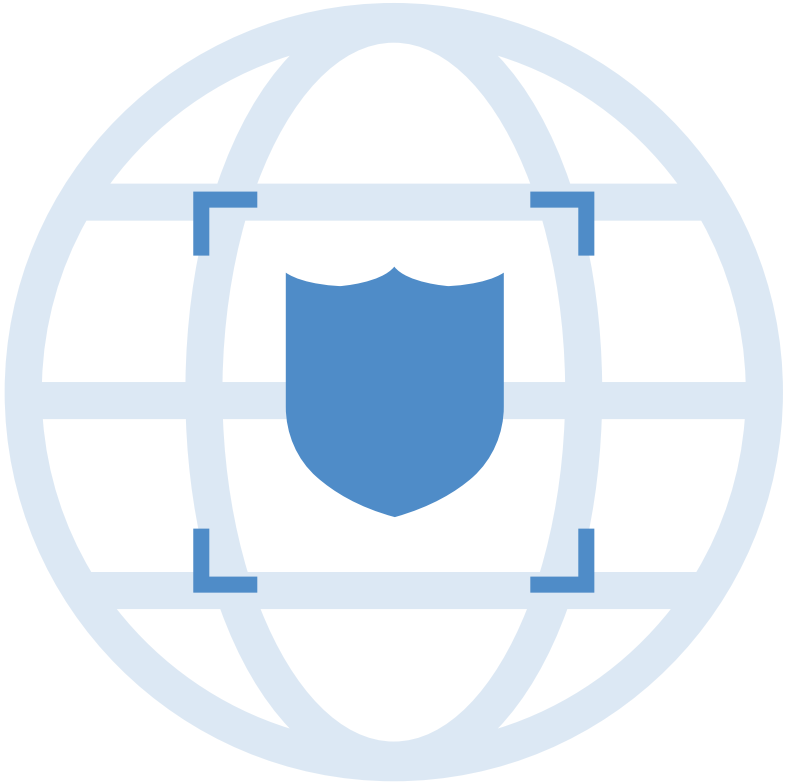
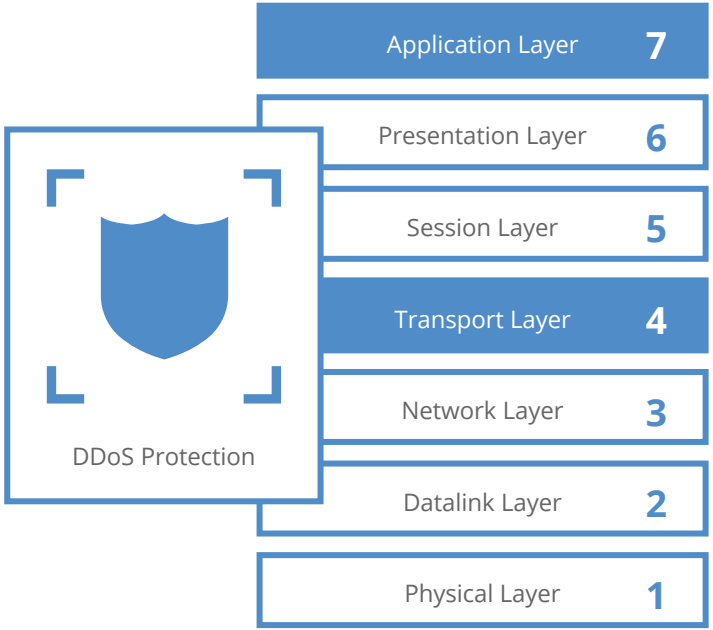
Protect the entire network



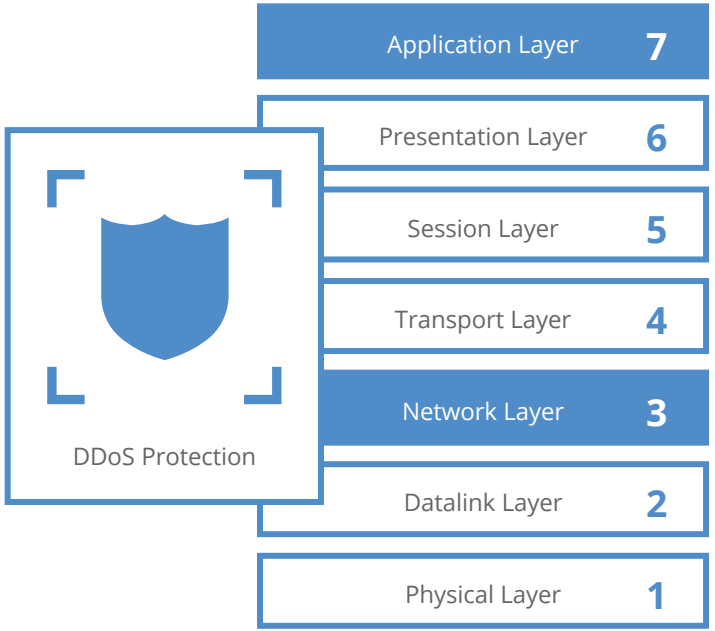
From L7 to L4: Extending protection to TCP/UDP protocols

- **Services** SMTP, FTP, VoIP, game servers
- **Security:** Protect any TCP or UDP application
- **Performance**: Global cloud network ensures fast performance
- **Ease-of-use**: Easy to configure on a per-app basis
- **Protect custom applications,** gaming, industrial IoT, real time media delivery, and other workloads.

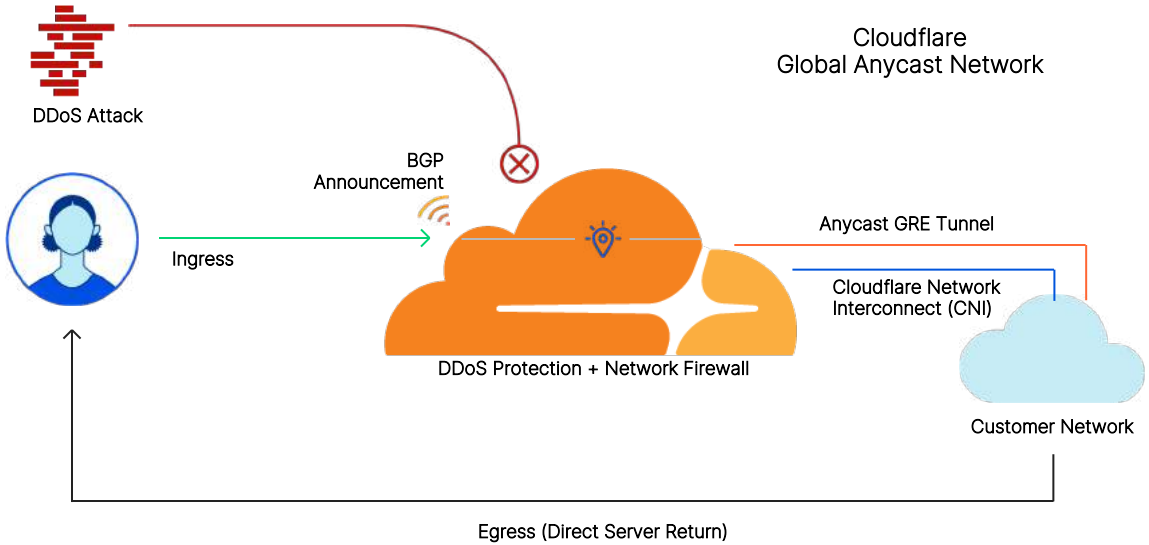


L3: Infrastructure DDoS protection and acceleration

- **Security**: Best in class DDoS mitigation and next generation firewall
- **Performance**: Make your traffic faster than the Internet, not slower
- **Insight & Control:** Full access to our programmable network edge



Any packet. Any protocol.



Flexible Deploy

Always-On and On-Demand, Deployment Options

Connect

Using BGP route announcements, Cloudflare ingests customer network traffic

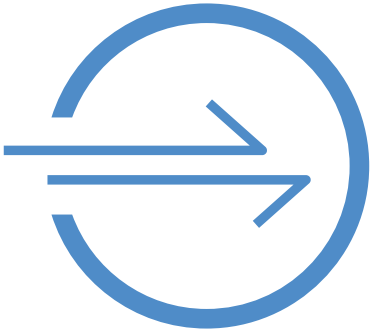
Protect and Process

All traffic inspected for attacks automatically and immediately

Accelerate

Clean traffic is routed back to the customer network over Anycast GRE tunnels or direct connections

CLOUDFLARE



Protect enterprises.

CLOUDFLARE

Do not automatically trust anything inside or outside perimeters.

Verify everything trying to connect to systems before granting access.

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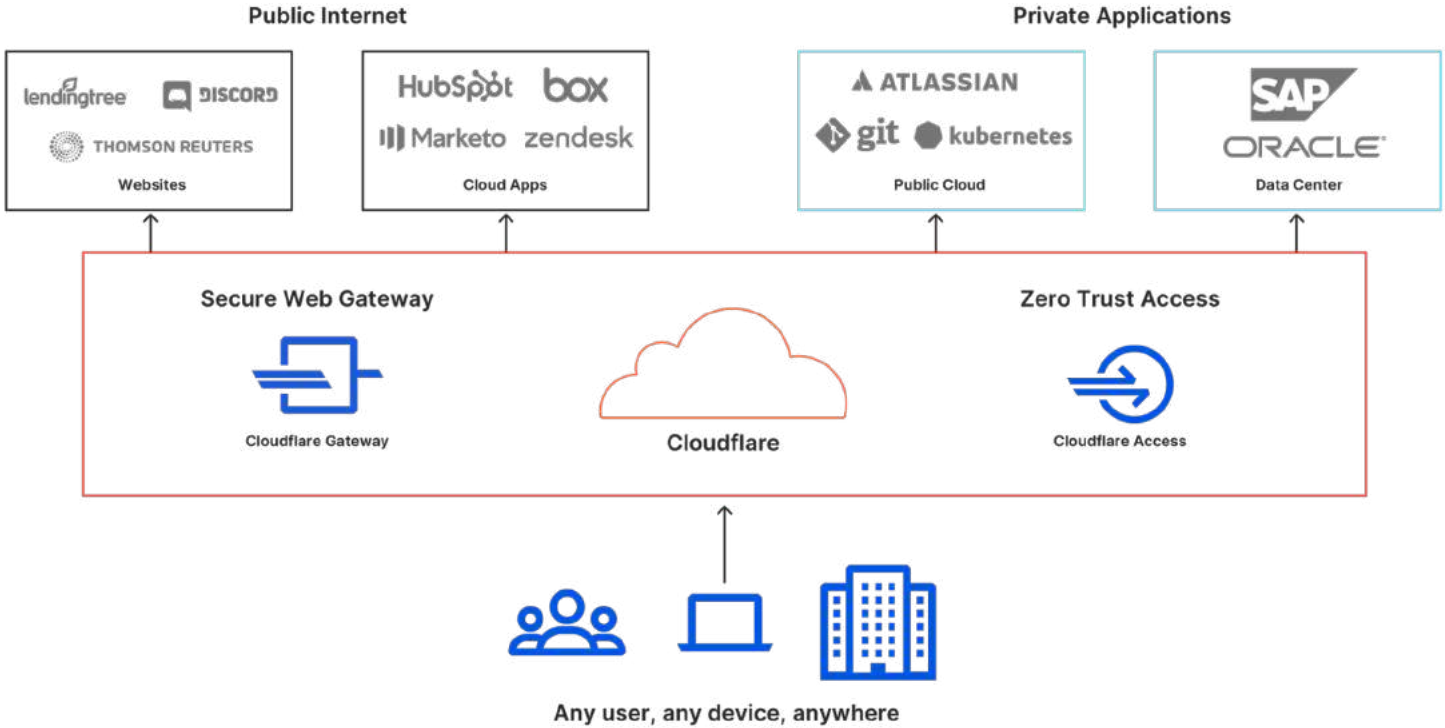
Cloudflare Zero-Trust

Access | Gateway | DNS Security

Remote Browser Isolate

ZTNA | VPN Replacement

CLOUDFLARE FOR TEAMS



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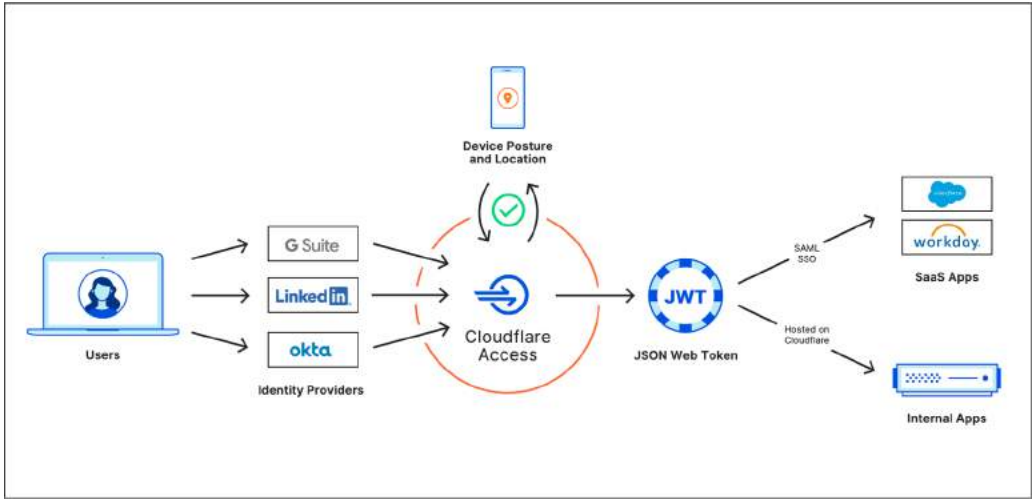
Zero Trust Security Solution



Complete control of access to applications
Enforce Zero Trust access for ALL applications on a per-user basis with easy-to-create and manage rules.

Extend identity based security with more signal
Improve security with context awareness such as device posture. Enforce more granular policies such as hard key requirements for your most sensitive applications.

Deliver fast applications to devices anywhere
Users get secure and seamless access to all applications faster from anywhere thanks to Argo Smart Routing.

Deploys quickly and easy to manage
Leverage existing identity providers and connect applications to Cloudflare with a secure Argo Tunnel.

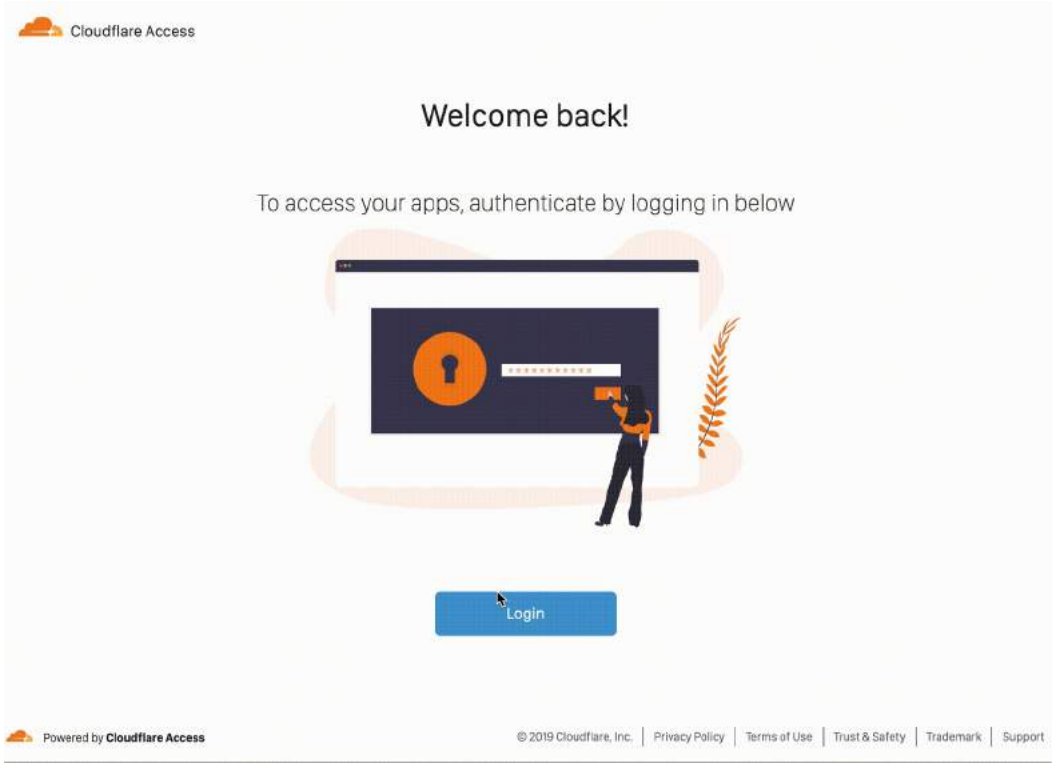
Monitor User Access and Change Logs
View and search real-time access logs in the dashboard or integrate with a third party SIEM.

Integrated with

SAML okta

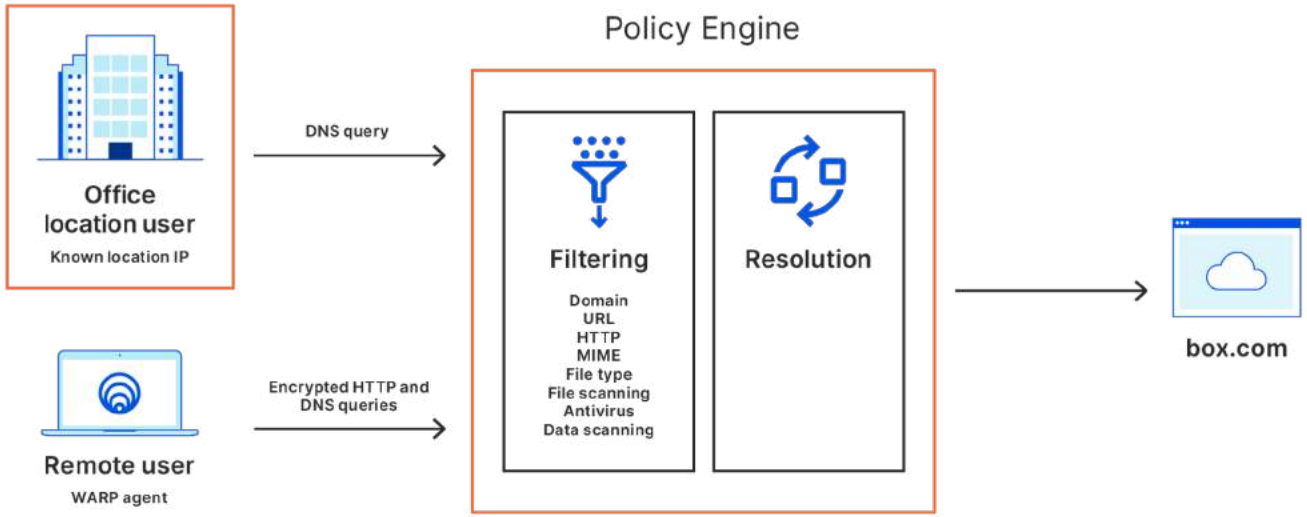
CLOUDFLARE

VPN-less access to workforce applications



Secure web gateway for remote workers

Protect office locations, remote users, and corporate data from threats on the Internet



1. WARP encrypts all Internet-bound traffic
2. Sends HTTP and DNS requests to Gateway
3. Query decrypted
4. Query checked against policy
5. Query blocked, allowed, or overridden
6. Allowed domain resolves
7. Gateway intercepts traffic over port 80 and 443
8. Request checked against policy based on configured enforcement order
9. Request blocked or allowed
10. Site loads for user

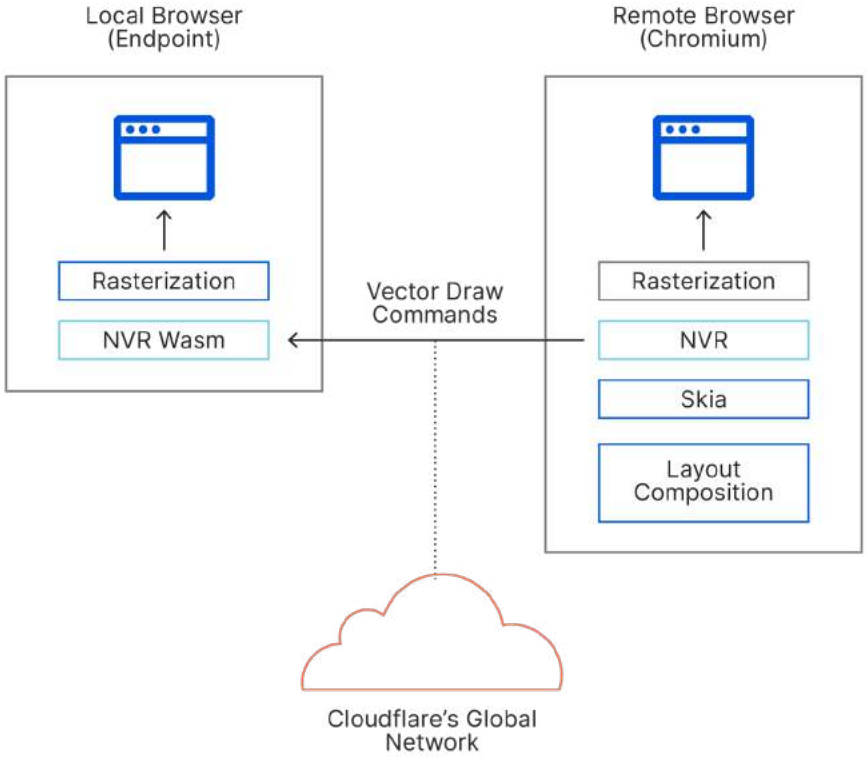
Next Generation Approach

Patented NVR technology

- Stream vector draw commands
- Works on any webpage, any browser
- Scalable, cost-effective technology

A better user experience than local browsing

- Any device
- Low bandwidth (0.3x)
- Low latency on global network



CLOUDFLARE

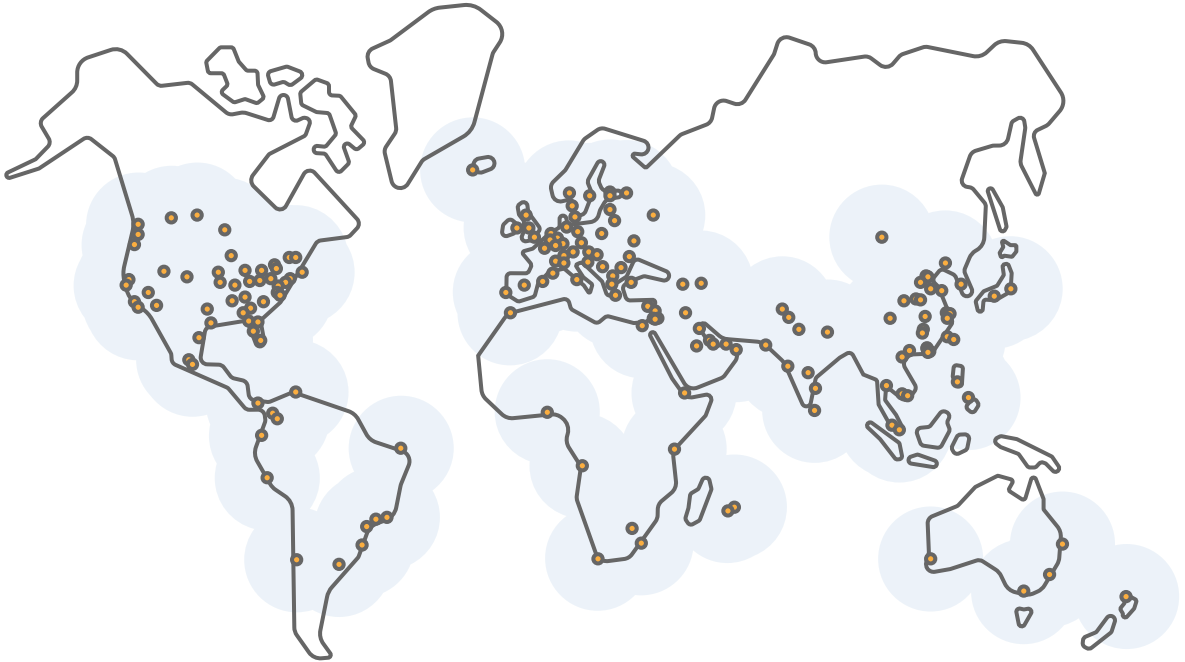
Performance

Make it fast.
Don’t sacrifice security.

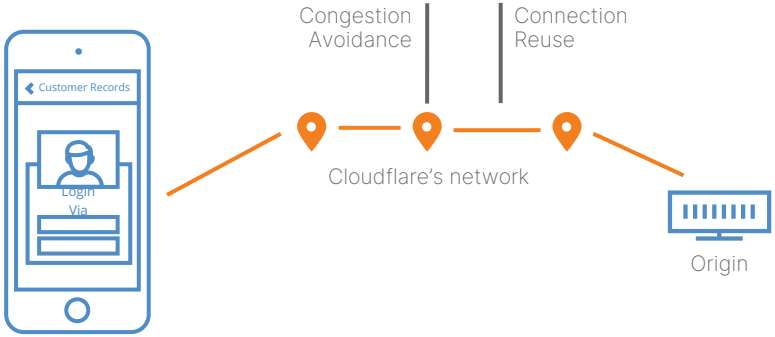
CLOUDFLARE

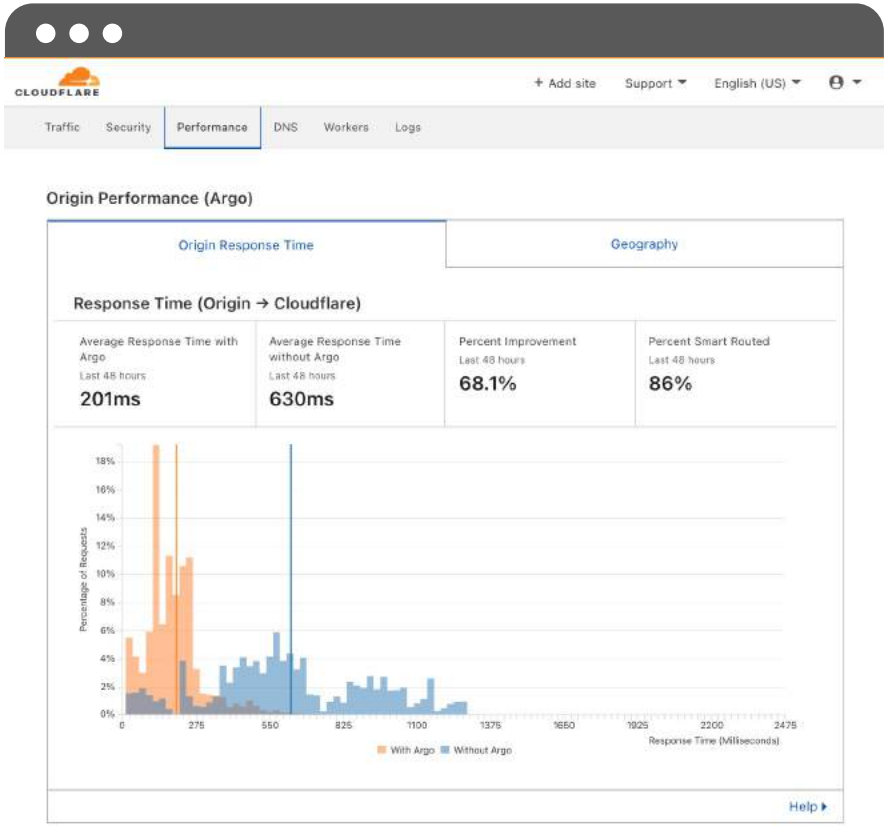
Getting as close to your customers eyeballs all over the world

We are no more than 100ms from 99% of the world's Internet population.



Intelligent Routing for Dynamic Content

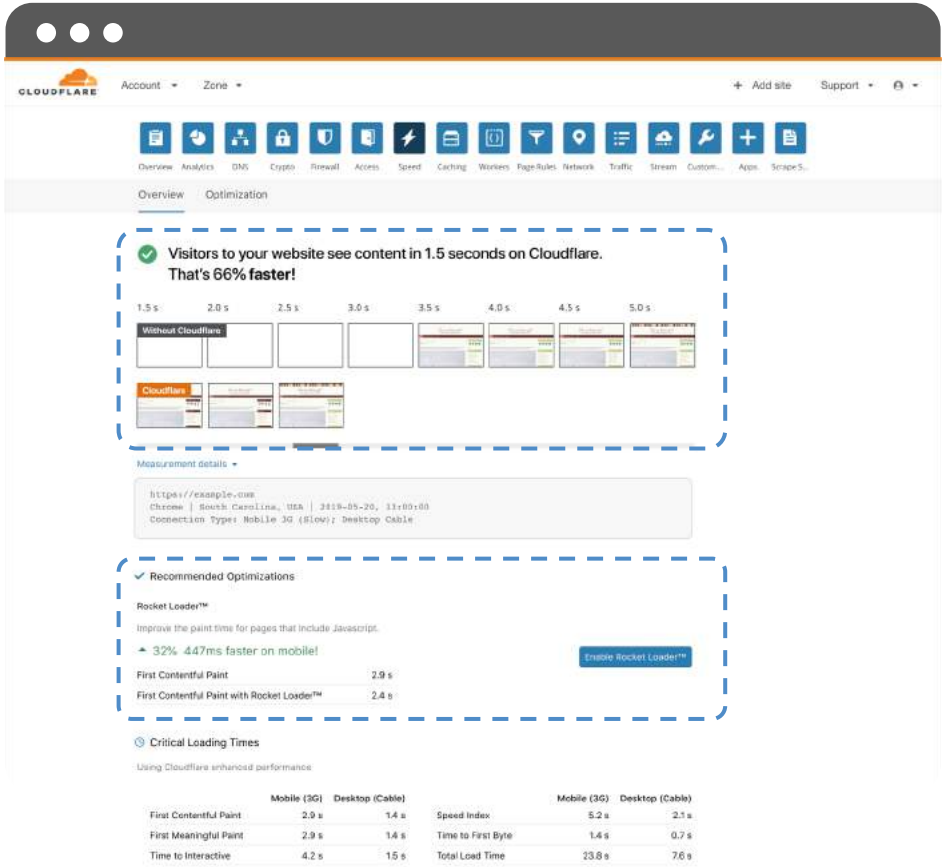




Cloudflare sees 20MM requests per second providing Argo with real world intelligence on the fastest network paths.

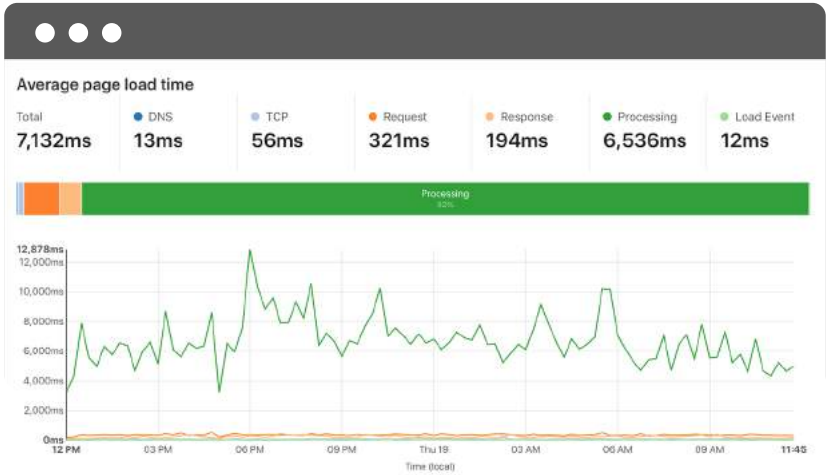
Snapshots show how your website loads and the benefits of using Cloudflare

Recommended optimizations to make your website faster

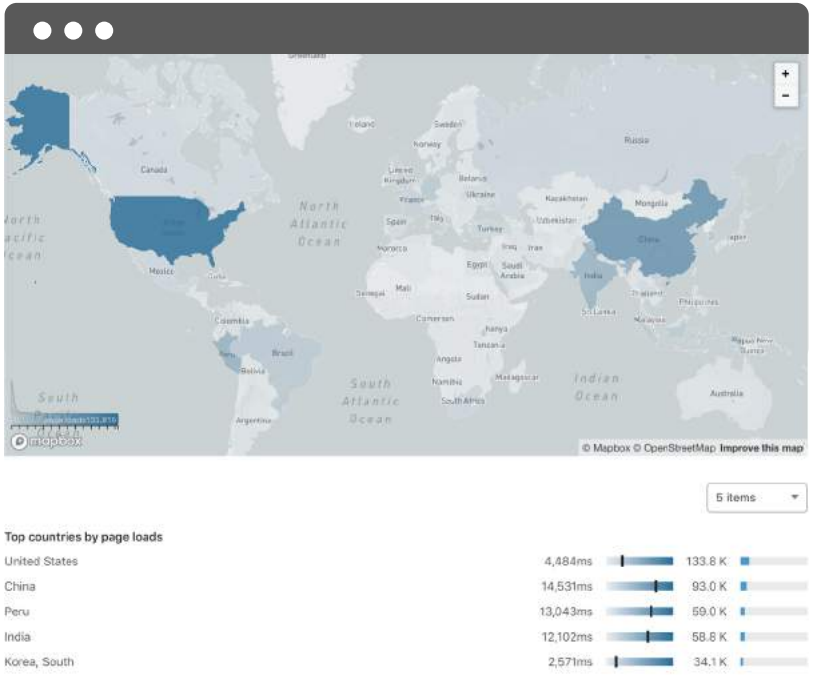


CLOUDFLARE

Get request and page level metrics of your website...



... as seen by real users across the globe

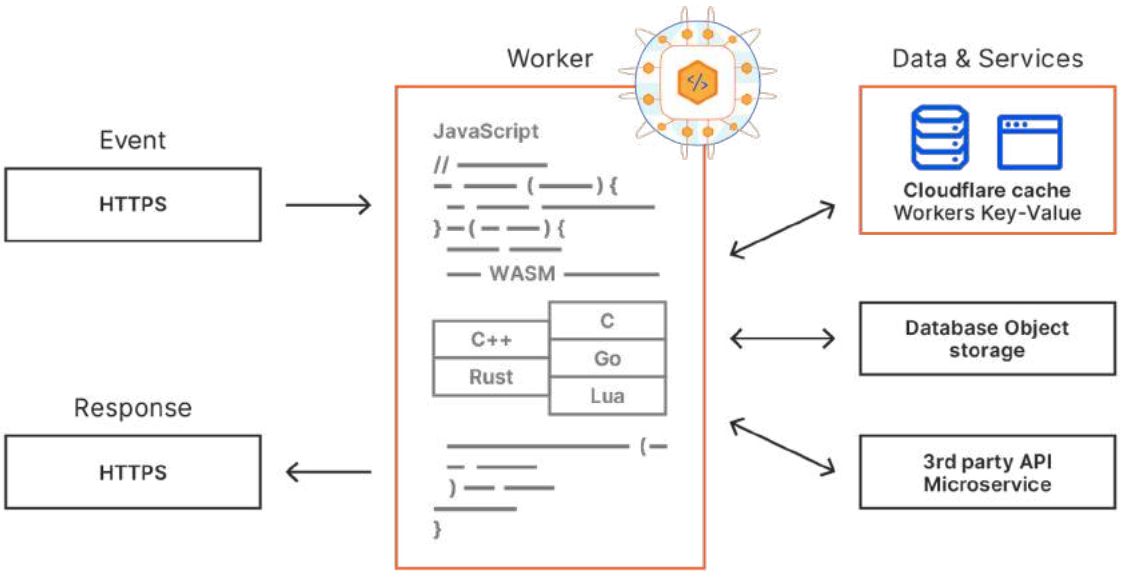


CLOUDFLARE

Serverless Application Platform

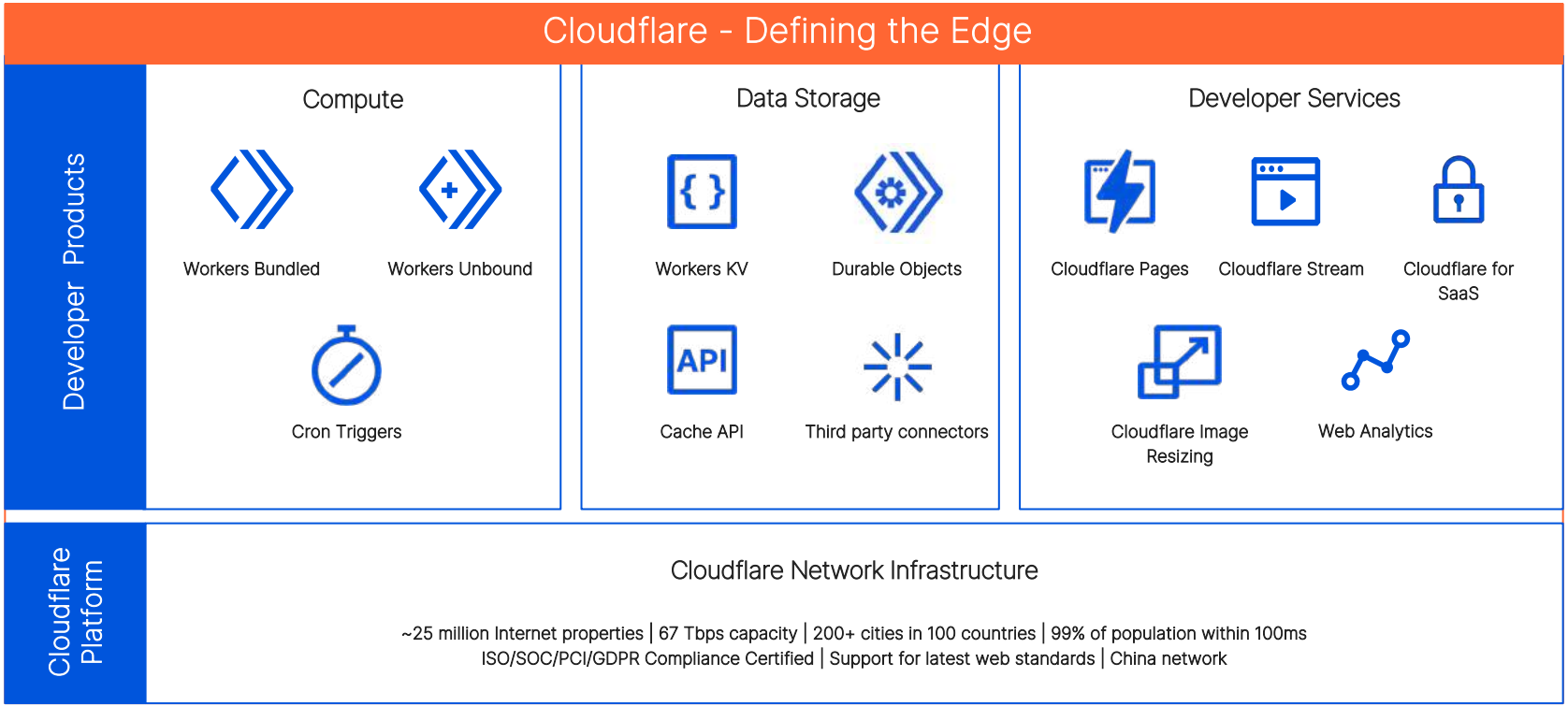
Our Vision

A world where there is no distinction between writing code for 1 user and deploying code for 1 million users across the world.



Write Code. Deploy. Done.

Cloudflare Developer Platform



CLOUDFLARE

Thank You!

Cloudflare Enterprise improve your....

- Improve **Security** – Enterprise Grade: Firewall, WAF, Managed WAF & Bot Management
- Improve **Performance** - Maximize with CDN & Smart Routing
- Improve **Reliability** - Global Load Balance as a service
- **Unlimited DDoS** Mitigation with **100 Tbps** Capacity. Always-On Protection for L3, L4 & L7
- **7 PoPs** in Thailand – AIS, True, Jastel, DTAC, CSL, TOT. Cover 250+ cities, Largest against all vendors
- **Managed DNS** - Fastest DNS in the world
- **100% SLA** Uptime with 7x24 Enterprise Support
- Unified All-in-One **Ease of Use Platform**. Simple and Fast On-board time
- Flat Rate **Monthly Payment** without Overage Charge

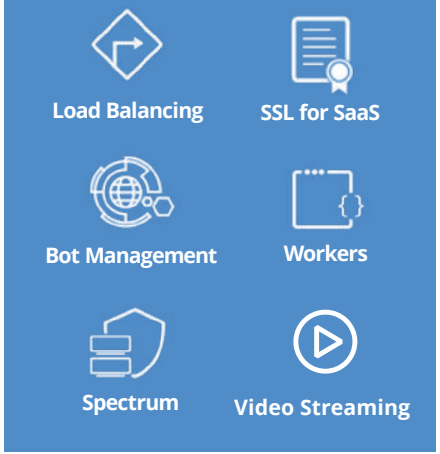
Cloudflare Pricing Model

CLOUDFLARE

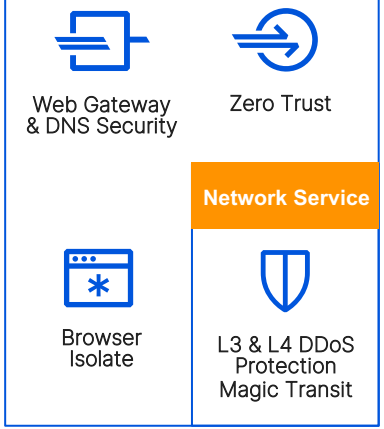
1. **Number of Root Domain:** **1 or 5 Domain** *(Unlimited subdomains)*
2. **Data Transfer per Month:** **10 or 50 TB** per month *(12-months minimum term)*
3. **Additional Features:**
   - **WAF/CDN:** Load Balance, Spectrum, Bot Management, SSL for SaaS, Workers, Stream VOD
   - **Zero Trust:** Access, Web Gateway, DNS Security, Brower Isolate - No. of User ?
   - **Magic Transit:** L3 & L4 DDoS Protection for Infrastructure - No. of Router, IP Prefix, Bandwidth 500Mbps or 10Gbps?

Standard Enterprise - Package

Additional - Feature



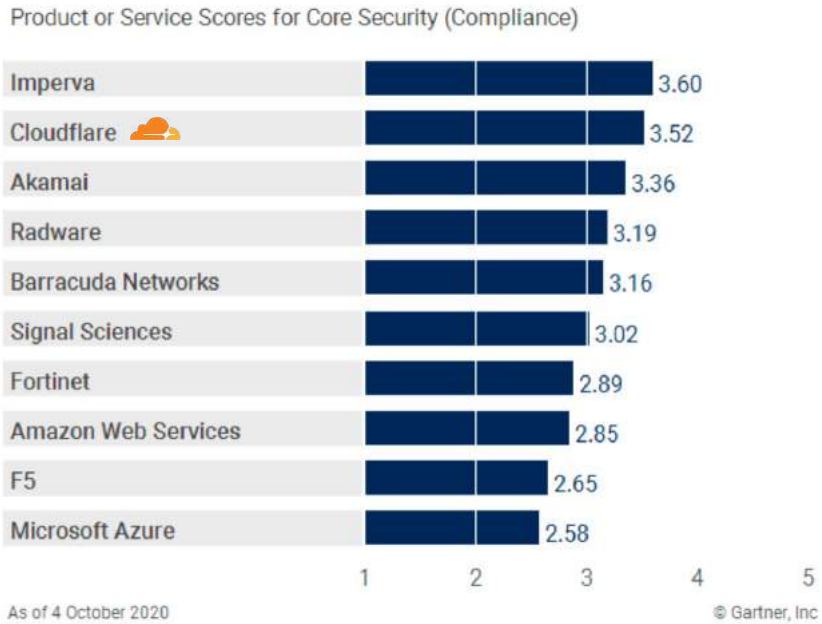
Zero Trust



2020 - Gartner Critical Capabilities for Cloud Web Application Firewalls Services

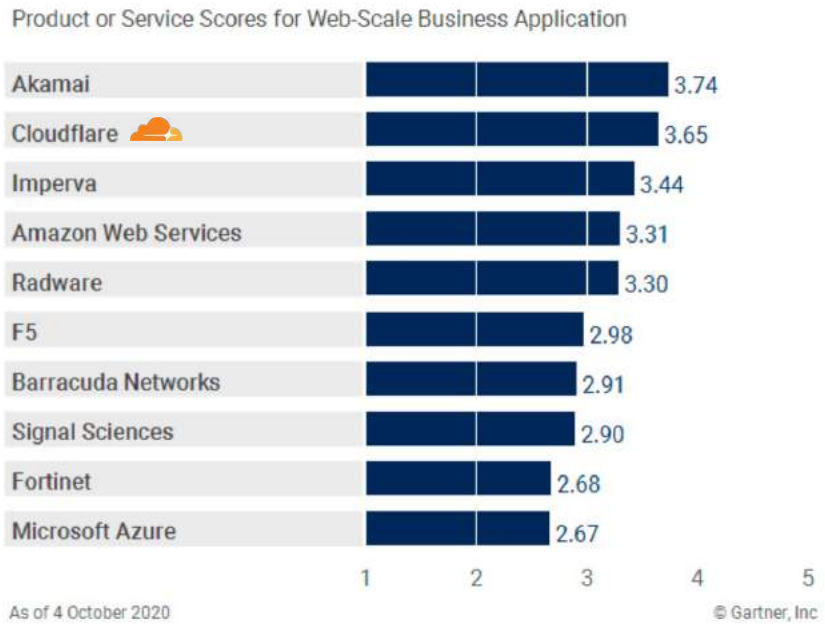
CLOUDFLARE

Vendors' Product Scores for the Core Security (Compliance) Use Case



Source: Gartner (November 2020)

Vendors' Product Scores for the Web-Scale Business Application Use Case



Source: Gartner (November 2020)

Cloudflare is in the top 2 in two primary use cases for Core Security Use Case & Web-Scale Critical Business Applications

Forrester Wave & Gartner - DDoS Reports

Solution Comparison for DDoS Cloud Scrubbing Centers

Assessment Criterion	Akamai	Cloudflare	F5	Imperva	Link11	Neustar	Radware
Feature and Capabilities							
Deployment modes	H	H	H	H	H	H	H
Deployment technology	H	H	M	H	H	H	H
Network setup	H	M	M	H	H	M	H
Aggregate CSC scrubbing throughput	H	H	L	H	L	H	M
Aggregate CDN throughput	H	H	N	M	H	N	N
Integration — hardware	M	M	M	M	H	L	M
Compliance	M	H	H	H	M	M	M
Technical operation	M	H	M	H	H	M	M
Services	H	H	L	M	H	L	M
Largest attack mitigated (packet per second)	H	H	L	H	H	H	H
Largest attack mitigated (gigabits per second)	H	H	M	M	M	M	M
Operational mitigation	H	L	H	H	H	H	H
SLA for mitigation	H	M	M	H	H	L	L
Cloud Scrubbing Center							
Geodistribution	M	H	L	H	L	M	M
Scrubbing centers	H	H	L	H	M	M	M
Operational administration	M	M	L	M	H	H	H
Management Capabilities							
User interface	M	M	M	M	L	L	M
Identity and access management (IAM)	M	H	L	H	L	N	L
Reporting							
Logging and retention	N	M	H	L	H	L	H
Alerting	L	M	M	M	M	M	L
Reporting flexibility	M	L	L	M	L	M	H
Integration	M	H	H	H	L	M	M
Support							
SLA for support services	M	H	H	M	H	L	H

H = High M = Medium L = Low N = None

Source: Gartner (April 2020)
ID: 467346

Customers realizing value in every industry, every vertical, every country

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HEALTHCARE / LIFE SCIENCES

23andMe · LabCorp · Flo · karma insurance.ca · bidu.com.br · GetInsured

SOFTWARE

zendesk · Marketo · box · Upwork · HubSpot · moz://a

EDUCATION

BAYLOR UNIVERSITY · Quizlet · open access COLLEGE · BrainCert education simplified · UDACITY

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GARMIN · DOORDASH · Mahindra · AutoTrader · Lime · IATA

MEDIA / ENTERTAINMENT

SonyMusic · AXIOS · THOMSON REUTERS · Handelsblatt MEDIA GROUP · ZIFF DAVIS

FINANCIAL SERVICES

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HARDWARE / MANUFACTURING

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