CLOUDFLARE™

Training for CloudFlare's Certified Hosting Providers

Part I: What is CloudFlare?

Understand the benefits of CloudFlare

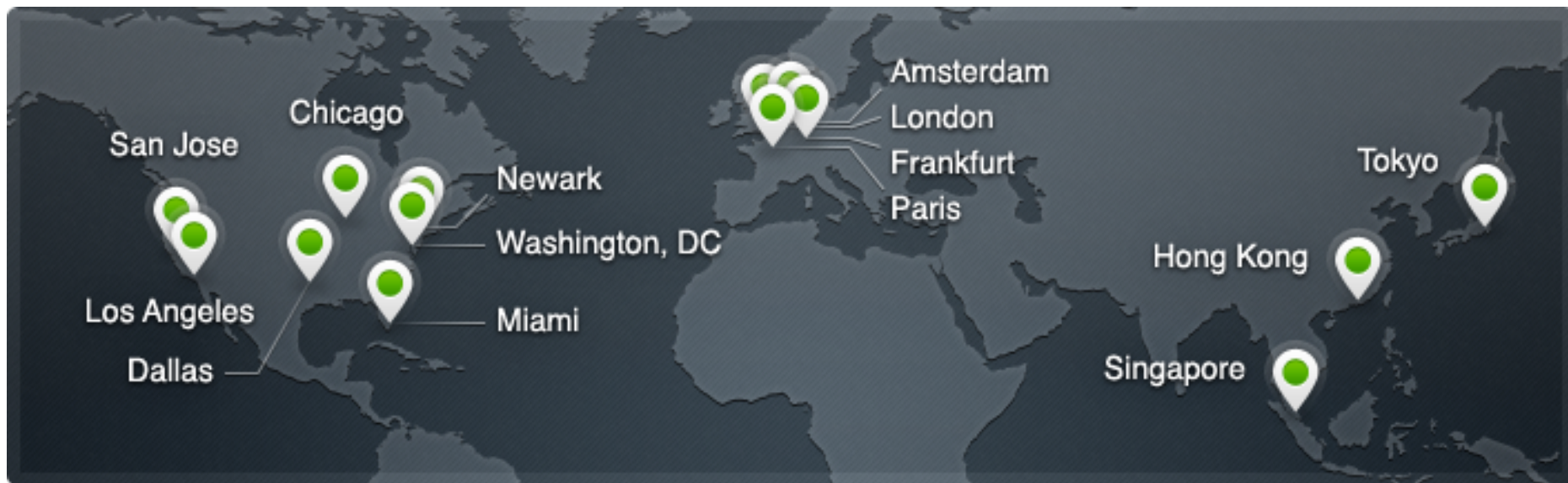# What Is CloudFlare?

CloudFlare makes websites:

Faster

Safer

Smarter

How Does CloudFlare Work?

- CloudFlare works at the network level → CNAME edit
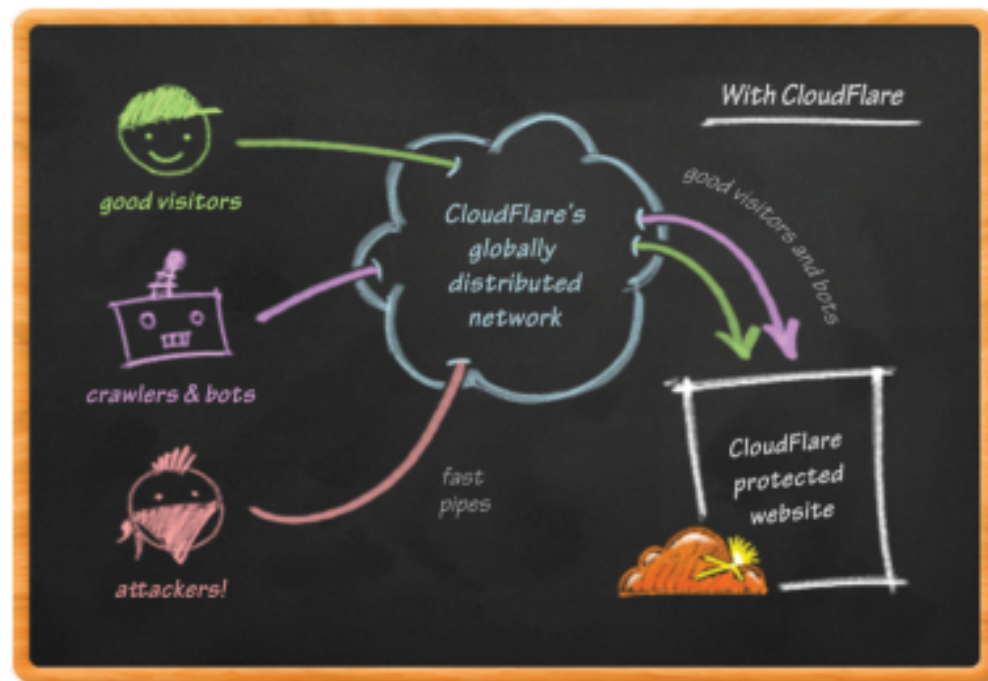- Web traffic is routed through CloudFlare's network of 14 data centers

- At each location, CloudFlare does caching, web content optimization and malicious bot filtering

Before and After CloudFlare

Naked websites

CloudFlare powered websites are:
- Faster
- Safer
- Smarter

CloudFlare is a Next Generation CDN Faster

CloudFlare automatically caches static content:

- CSS
- JavaScript
- Images

- Requires **zero** configuration
- Provides high gzip compression
- Is compatible with other CDN solutions

Result: The average website on CloudFlare loads:

- Twice as fast
- Sees 65% fewer requests
- Saves 60% in bandwidth

What is a CDN?
CDN = Content Delivery Network

How it works:
CDNs serve content stored at servers **closest** to the visitor.

The result → pages load faster

- CDN technology has been around a long time. The web's largest sites use CDNs for performance.
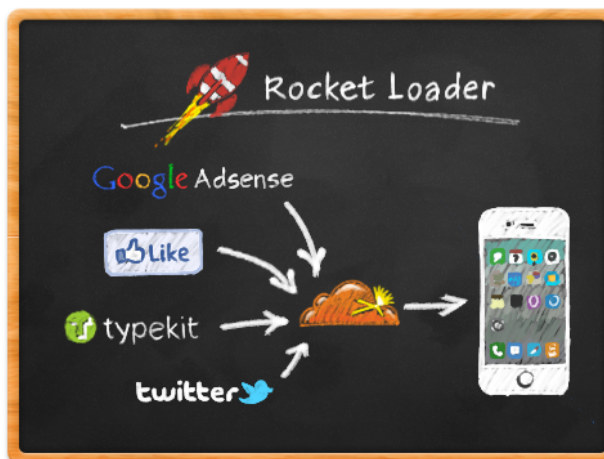- Until now, CDNs have been expensive and hard to configure.

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Easy Web Content Optimization

CloudFlare makes web content load efficiently by:

- Consolidating multiple network requests into one request
- Loading JavaScript asynchronously

The result → pages load snappier

Web Content Optimization
The webpage has evolved. Today websites are made up of:

- Widgets
- Plugins
- Ad servers
- Twitter Share / Facebook Like button

- All of these plug-ins and widgets are JavaScript-based
- Web content optimization makes sure the web page renders as quickly as possible

CloudFlare's Broad Security Protection `Safer`

CloudFlare provides a layer of security against a broad range of attacks including:

- Comment spam
- Content theft
- Email harvesting
- SQL injection
- Cross-site scripting attacks (XSS)
- DDoS attacks

- CloudFlare prevents over 90% of attacks. Your security risk is significantly lower
- Our system *gets smarter* over time

Web Threats Are a Pain
- Many bots doing malicious activities online
  - Comment spam
  - Content theft
  - Email harvesting
  - SQL injection
  - Cross-site scripting attacks (XSS)
  - DDoS attacks
- Until recently, each category required a separate and time-consuming solution
- Most solutions are expensive and difficult to implement

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CloudFlare's Security System Learns

CloudFlare's system automatically starts to block attack BEFORE it hits the origin server

- surge in traffic due to DDoS attack
- CloudFlare identifies the new traffic as an attack and blocks it at our edge nodes

CloudFlare's Default Security is "Medium" Safer

CloudFlare security setting	✓ High Medium Low I'm under attack!	ⓘ
Development Mode is currently	Click here to enable	ⓘ
Cache Purge	Click here to purge	ⓘ
Always Online	Off ⇕	ⓘ
Automatic IPv6	Off ⇕	ⓘ
CloudFlare caching level	✓ Aggressive Basic	ⓘ

- Users can select the desired level of protection directly from their control panel
- Partners integrated via cPanel also have access to the "I'm Under Attack" mode

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Stop Heavy Attacks From the Control Panel Safer

Cloudflare Settings for gxxx.com

CloudFlare Account Type	Free ▼		ℹ
CloudFlare security setting	I'm under attack! ▼		ℹ
Development Mode is currently	off	Click here to enable	ℹ
Cache Purge		Click here to purge	ℹ
Always Online	Off ▼		ℹ
Automatic IPv6	Off ▼		ℹ
CloudFlare caching level	Aggressive ▼		ℹ

- Sites under attack can choose "I'm Under Attack Mode" directly from their control panel
- Works by adding an additional set of protections to stop malicious HTTP traffic from being passed to the origin server
- Reduces bandwidth to the origin server

Free IPv4 / IPv6 Gateway

## Your customers can continue to host on IPv4 and be available on IPv6
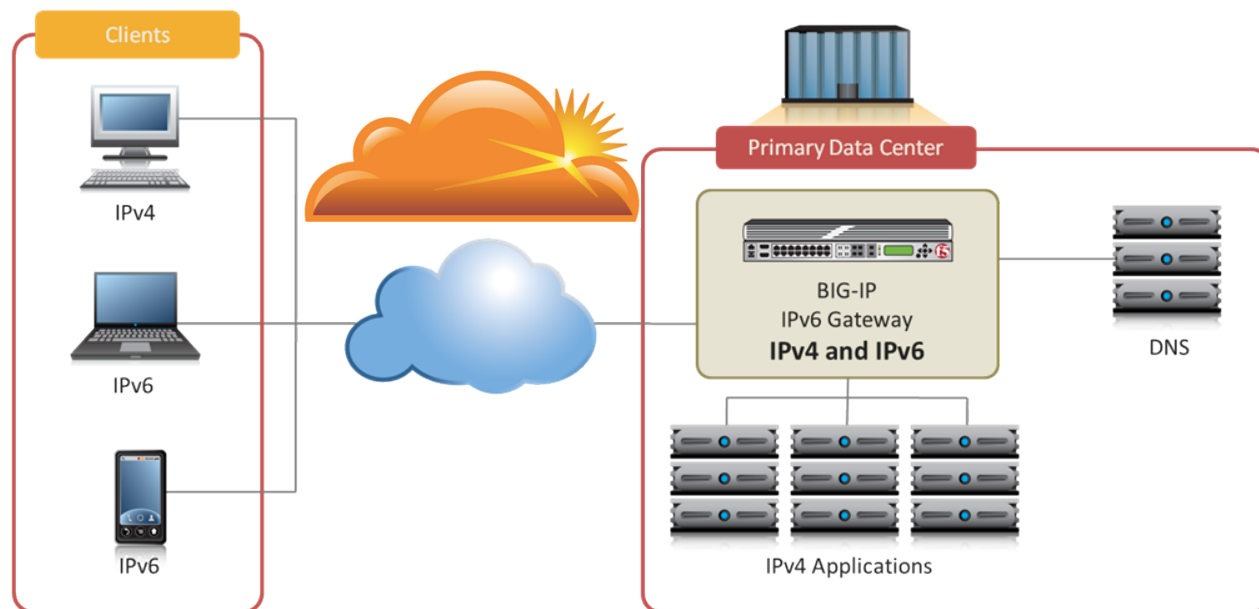
Why is IPv6 Compatibility Important?

- IPv4 addresses are running out around the world. As a result, there is a transition to IPv6 IP addresses
- IPv4 and IPv6 are not compatible with one another
- Today, 1% of web surfers are on IPv6 and can't reach websites on IPv4. Their number is growing fast in Asia & Europe.
- To make website servers IPv6-compatible requires an expensive hardware investment
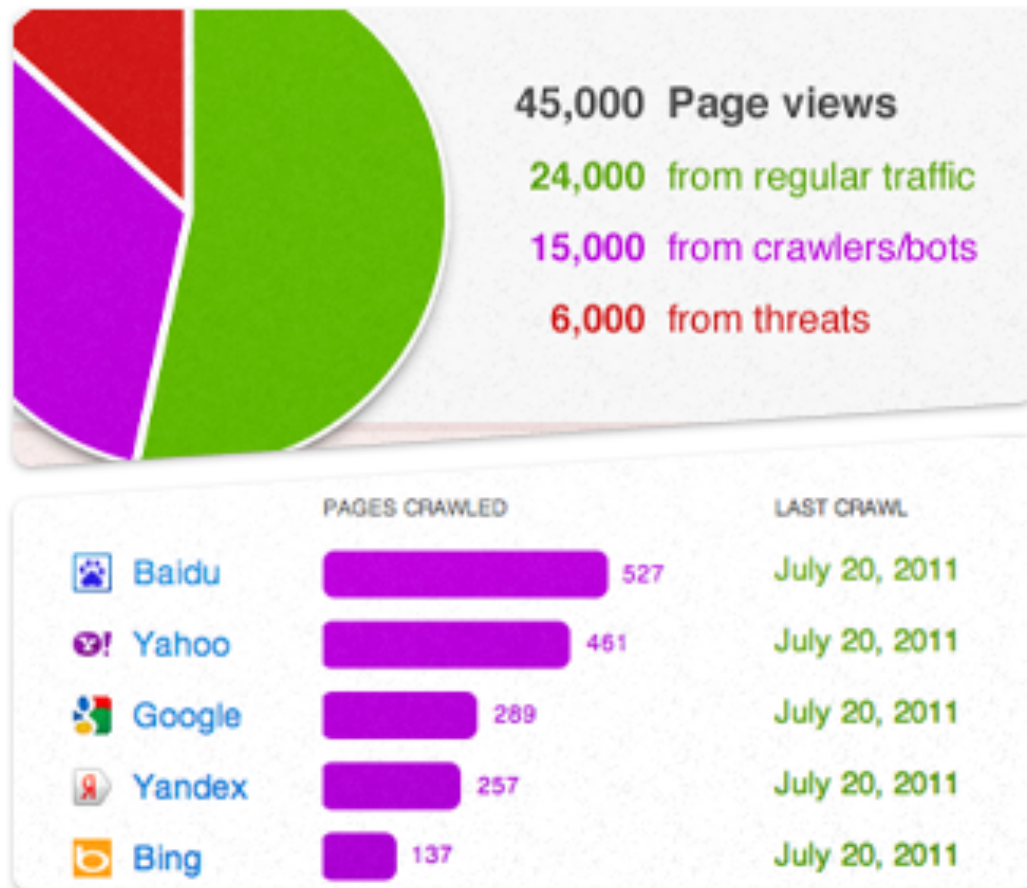
Always Online (Forget 503 Errors)

CloudFlare Always Online service keeps a cached copy of your customer's website so it is always available, even if the server goes offline
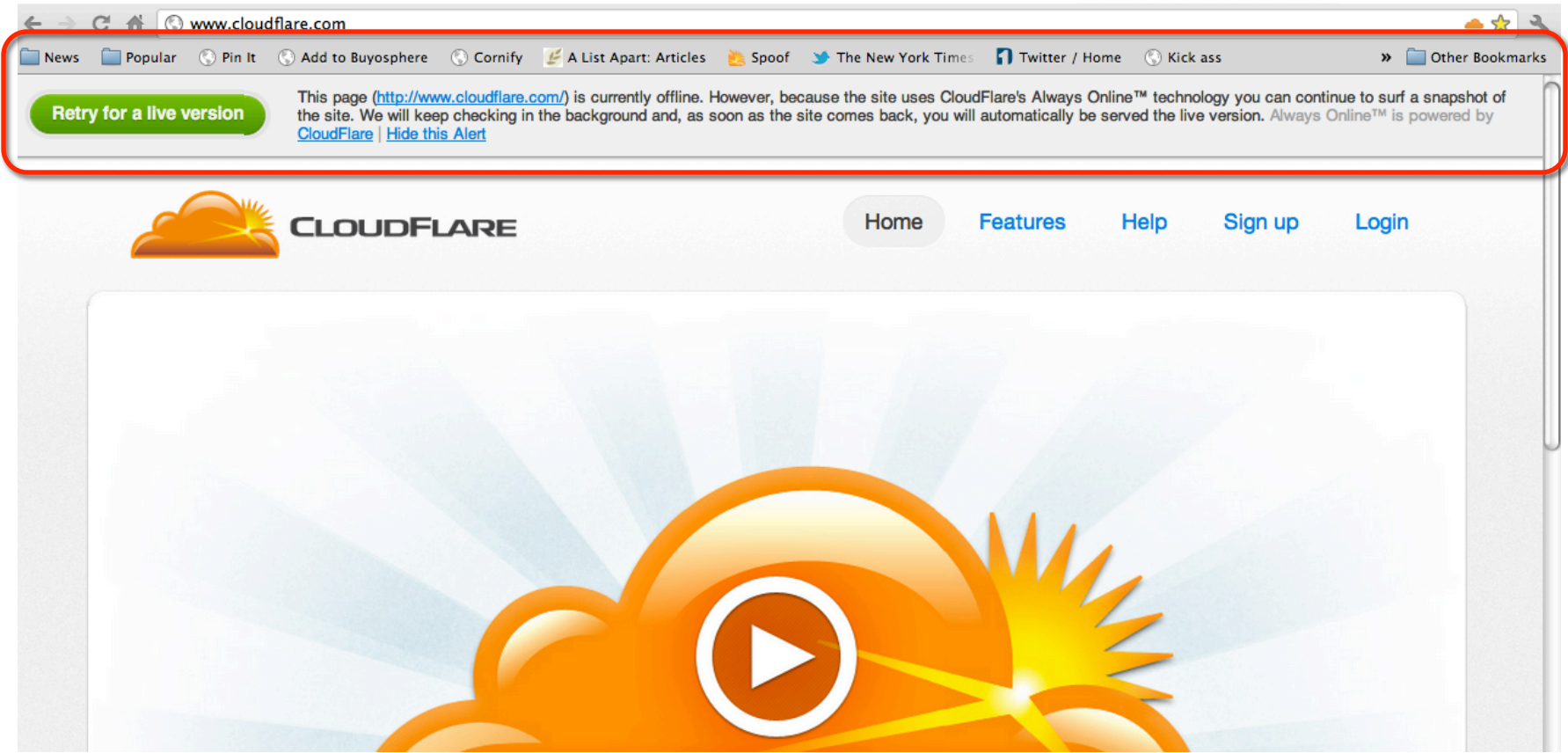
More Insight into Visitors

CloudFlare analytics shows statistics on **all** of the visitors: humans, threats and search engine crawlers

45,000   Page views
24,000   from regular traffic
15,000   from crawlers/bots
6,000   from threats

	PAGES CRAWLED		LAST CRAWL
Baidu		527	July 20, 2011
Yahoo		461	July 20, 2011
Google		289	July 20, 2011
Yandex		257	July 20, 2011
Bing		137	July 20, 2011

Resources for our Certified Partners

Additional Resources	
FAQ	*www.cloudflare.com/wiki/Hosting_Partners:_Frequently_Asked_Questions*
Troubleshooting	*www.cloudflare.com/wiki/Hosting_Partners:_Troubleshooting_Help*
Technical Support	*http://support.cloudflare.com/cgi/discussion/new* *(select the Hosting Partner Support category)*
General questions	*partners@cloudflare.com*
System Status	*@cloudflaresys*
Follow us	*@cloudflare*

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