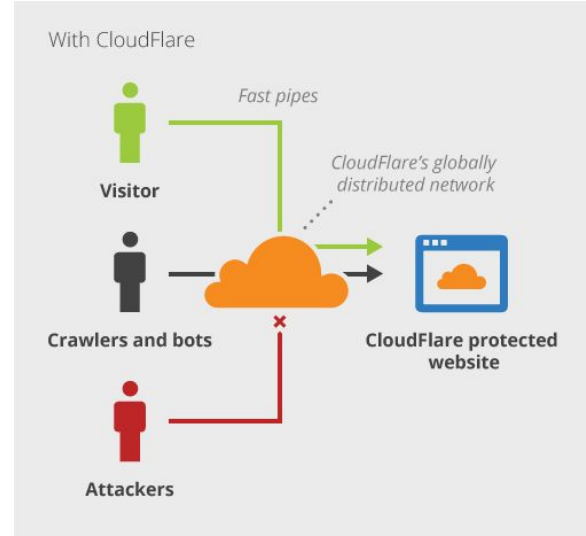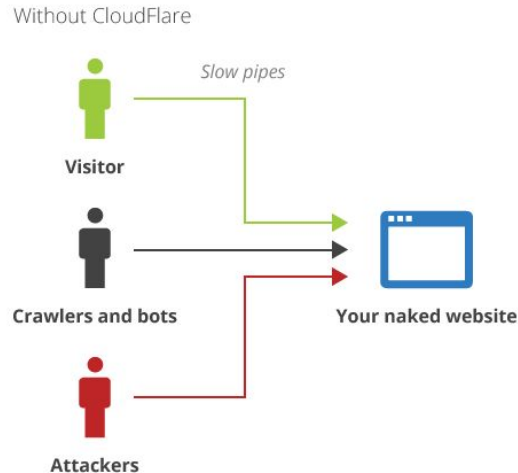# Introduction to Cloudflare

Jérôme Fleury

BNIX meeting, Thursday 29th 2016, Brussels.

What is Cloudflare?

Cloudflare makes websites faster and safer using our globally distributed network to deliver essential services to any website

- Performance
- Content
- Optimisation
- Security
- 3rd party services
- Analytics

CLOUDFLARE

How does Cloudflare work?

Cloudflare works at the network level

- Once a website is part of the Cloudflare platform, its web traffic is routed through our global network of 95+ data centres.

- At each edge node, Cloudflare manages DNS, caching, bot filtering, web content optimisation and third party app installations.
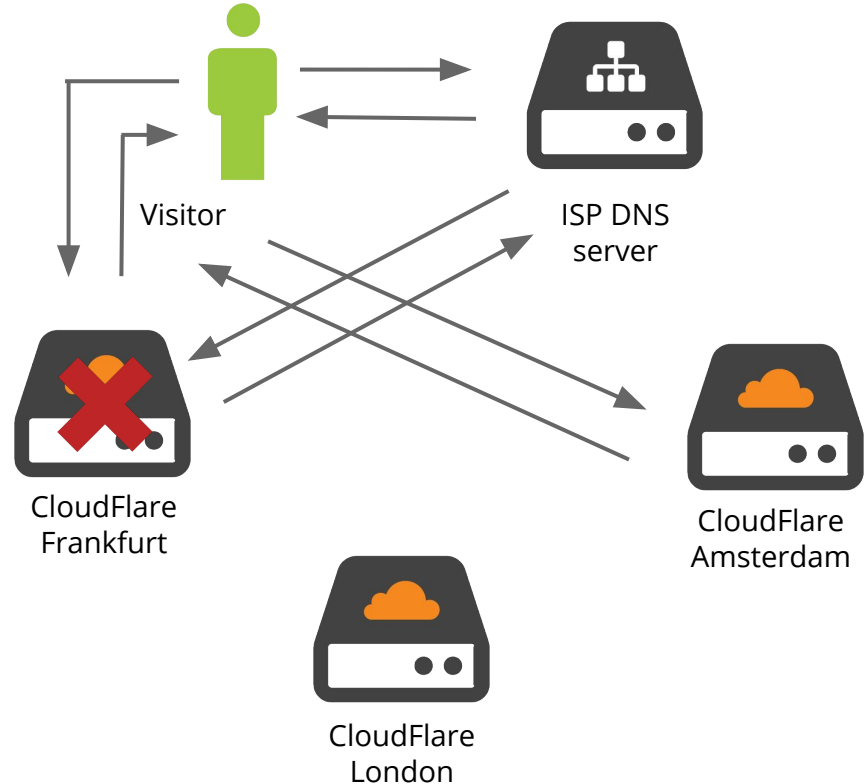

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How does Cloudflare work?

How does it work?

- DNS Query - to anycast DNS address
- DNS result returned with Anycast IP
- Client makes connection to returned IP
- Cloudflare replies, session established

What happens in the event of an outage?

- Anycast prefixes are withdrawn from problematic PoP
- Traffic re-routes to next closest PoP
  - TCP session resets at this point

Visitor

ISP DNS server

CloudFlare Frankfurt

CloudFlare Amsterdam

CloudFlare London

CLOUDFLARE®

4

Cloudflare works globally

Cloudflare protects globally

- DDoS attack traffic is localised and lets other geographic areas continue to operate
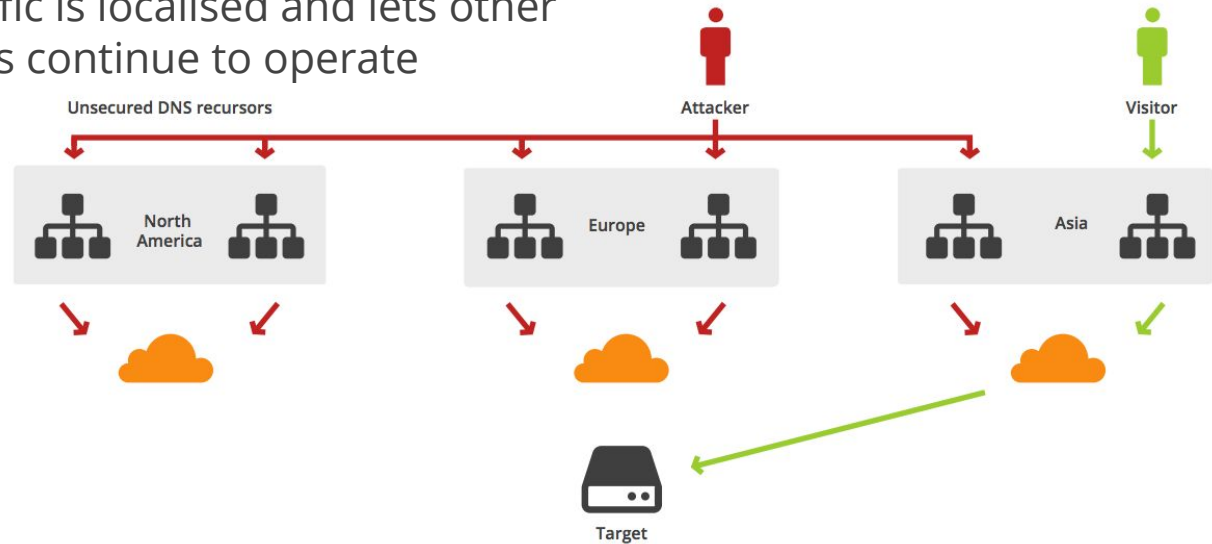
Brussels, Belgium: CloudFlare's 81st Data Center is Live!

13 Jun 2016 by *Nitin Rao*.

Tweet

Our week begins in Brussels, where we announce our newest data center. This is our 23rd data center in Europe alone, and our 81st data center globally - providing additional

Amsterdam to Zhuzhou: Cloudflare network expands to 100 cities

26 Sep 2016 by Nitin Rao.

Tweet

We're excited to kick off Cloudflare's sixth birthday celebrations by announcing data center locations in 14 new cities across 5 continents. This expansion makes our global network one of the largest in the world, spanning 100 unique cities across 49 countries. Every new Cloudflare data center improves the performance, security and reliability of millions of websites, as we expand our surface area to fight growing attacks and serve web requests even closer to the Internet user.
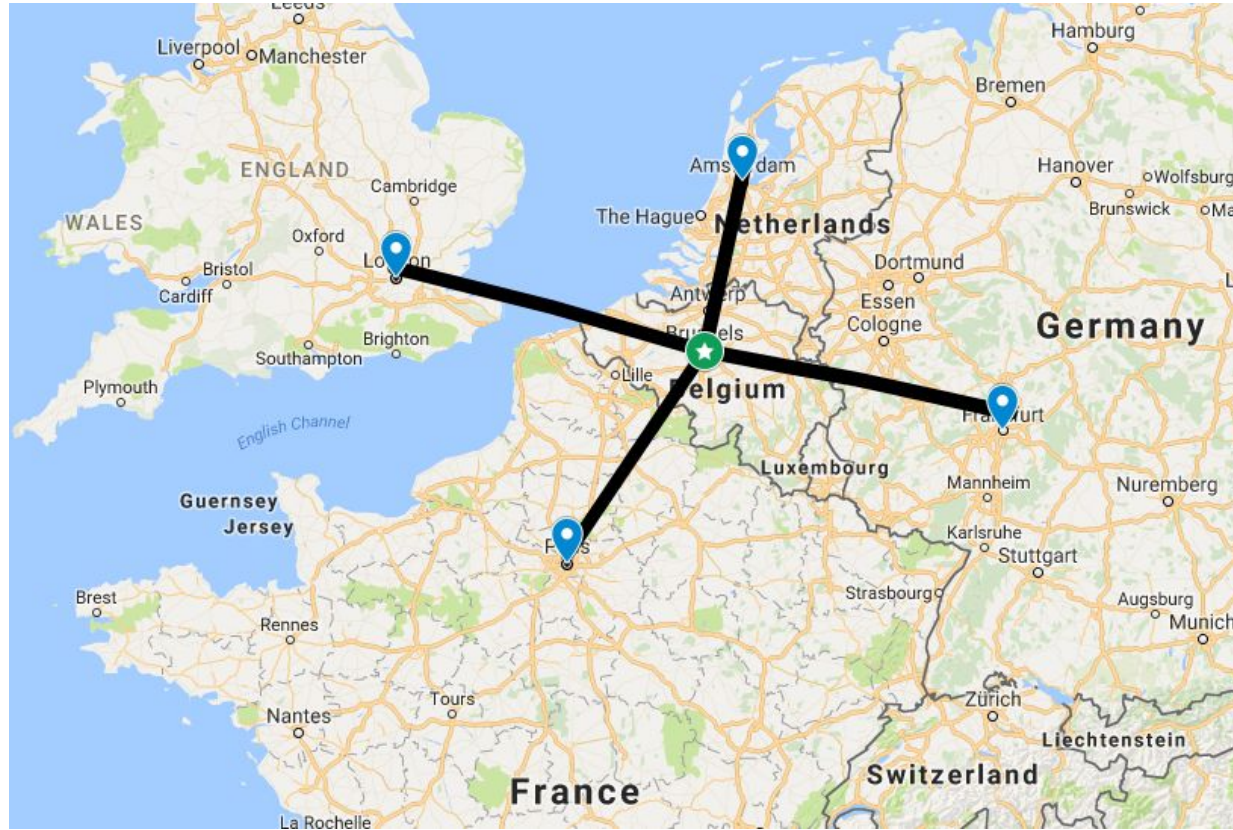
Each birthday has given us the opportunity to thank our customers with new announcements, from our automatic IPv6 Gateway to making SSL free and easy for all to unveiling our China network. Launching 14 new data center locations is one of many gifts to our users we'll reveal this week.
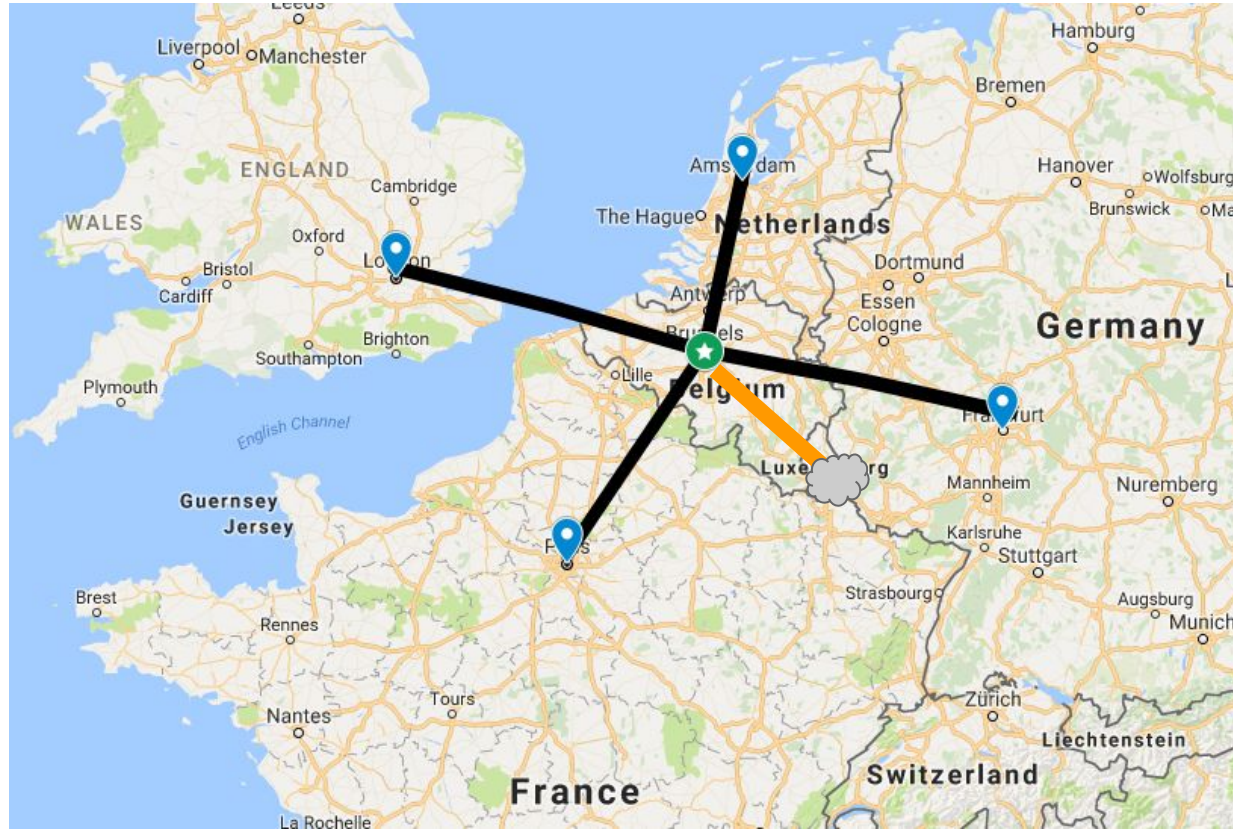
Why Brussels?

Offload our biggest neighboring POPs

Our next Data platform

What are our requirements ?

✔ a neutral datacenter **interxion**

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What are our requirements ?

✔ a neutral datacenter   **interxion**

✔ Diversity of partners to interconnect to: transits, eyeballs networks, customers

gtt   **cogent**

Telia Carrier   **TATA** COMMUNICATIONS

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What are our requirements ?

✓ a neutral datacenter   **interxion**

✓ Diversity of partners to interconnect to: transits, eyeballs networks, customers   **gtt** **cogent** **Telia Carrier** **TATA COMMUNICATIONS**
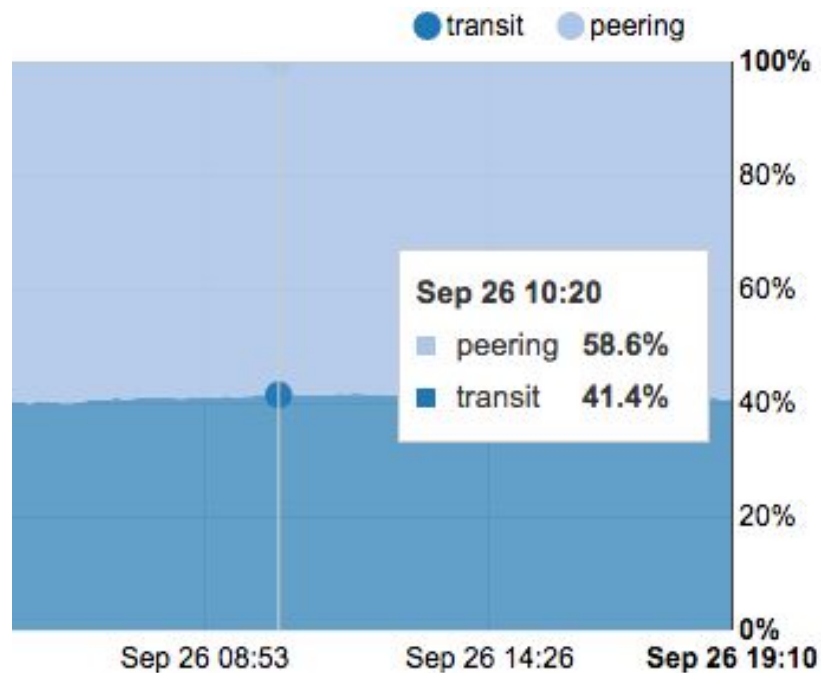
✓ A recognized peering platform   **bnix**

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Europe

transit   **peering**

Sep 26 10:20
peering   58.6%
transit   41.4%

Sep 26 08:53   Sep 26 14:26   **Sep 26 19:10**

Belgium

transit   **peering**

Sep 20 10:20
peering   46.7%
transit   53.3%

19 21:20   Sep 20 02:53   Sep 20 08:26   **Sep 20 12:20**

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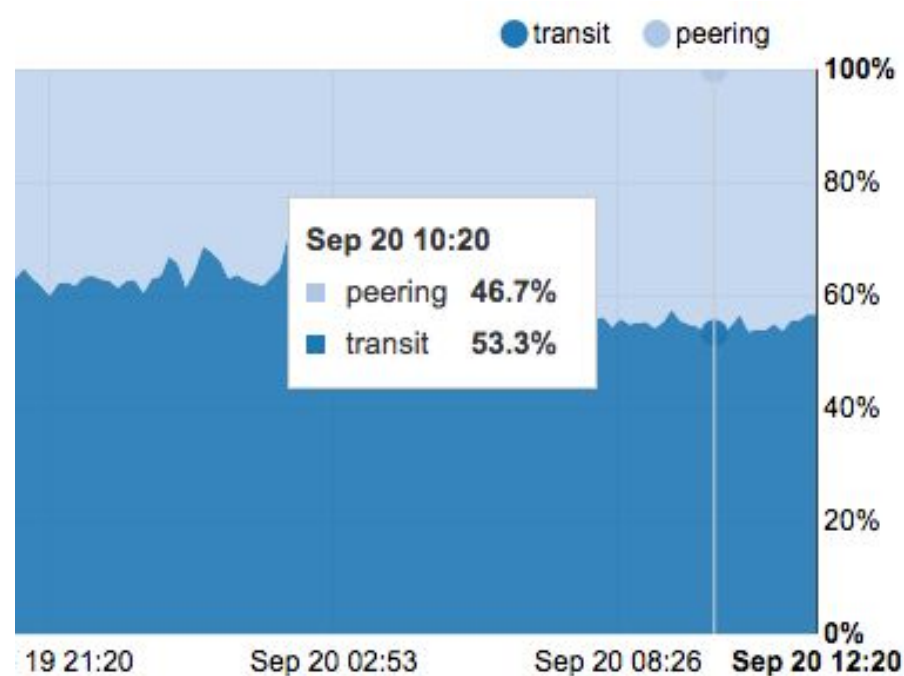
Proximus Group

Belgacom switches to IPv6

17/09/2013

New Internet protocol already deployed for 12,000 residential custom

THE FUTURE IS FOREVER
• WORLD IPv6 LAUNCH •

WORLD IPv6 LAUNCH

MONTHLY IPV6 MEASUREMENTS: BELGIUM'S TELENET JOINS THE IPV6 CLUB!

Posted on February 19, 2014 by Mat Ford

World IPv6 Launch network operator measurements for February 2014 have just been published and we're delighted entrant in the form of Belgium's T impressive deploy

t a brand new
ready achieved an
wing continued
f cable

Cisco moving VOO to IPv6

FEBRUARY 13, 2012 09.46 EUROPE/LONDON BY JULIAN CLOVER

Cisco has announced plans to migrate the Belgian cablenet VOO IPv6 Internet Protocol.

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Seen from Google

Per-Country IPv6 adoption

IPv6 in Belgium

From CloudFlare point of view,
Belgium is #1 in IPv6 traffic

IPv6 percents per country		⊘ Last 1 year
Metric	**Avg ▾**	
BE	29.05%	
IE	26.03%	
HK	8.38%	
PT	8.37%	
DE	7.67%	
LR	6.43%	
EC	6.38%	
CH	6.29%	
LU	6.27%	
GR	5.59%	
EE	5.38%	
PE	4.67%	
FI	4.28%	
AI	3.52%	
US	3.31%	
FR	3.20%	
BR	3.11%	
IR	2.72%	

1 2 3

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Introducing CloudFlare's Automatic IPv6 Gateway

27 Sep 2011 by Matthew Prince.

Tweet

CloudFlare launched publicly exactly one year ago today. In that year, we have grown from virtually no traffic to powering more than 15 billion page views for 350 million unique visitors in the last month. Today, to celebrate CloudFlare's birthday, we thought we'd give our users a present in the form of a new feature.

Questions?

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