IPv6 Business Conference

Organized by SWISS IPv6 COUNCIL

2016
June, 16

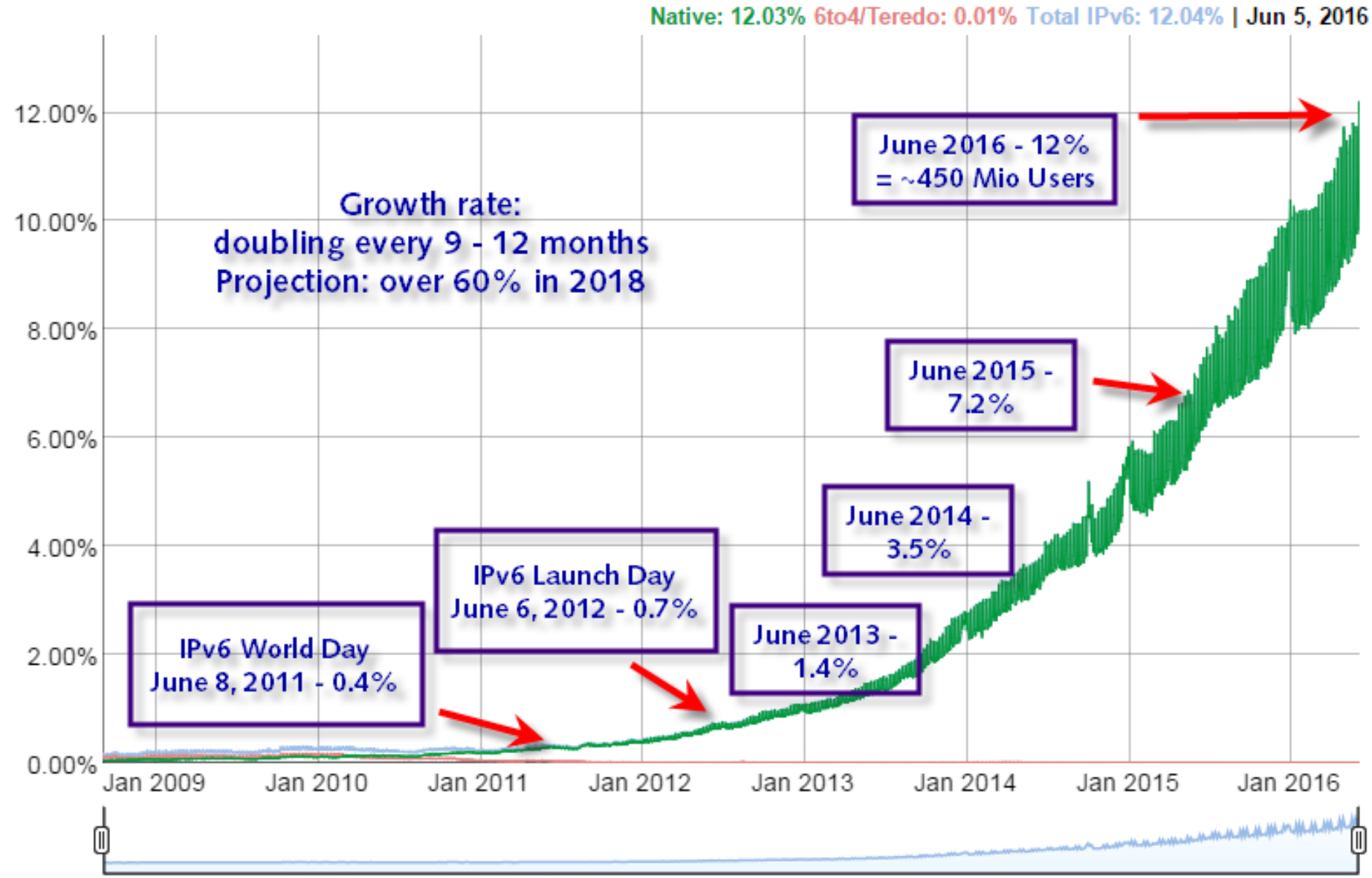
SWISS IPv6 COUNCIL

Taking Off

World IPv6 Day
June 8, 2011

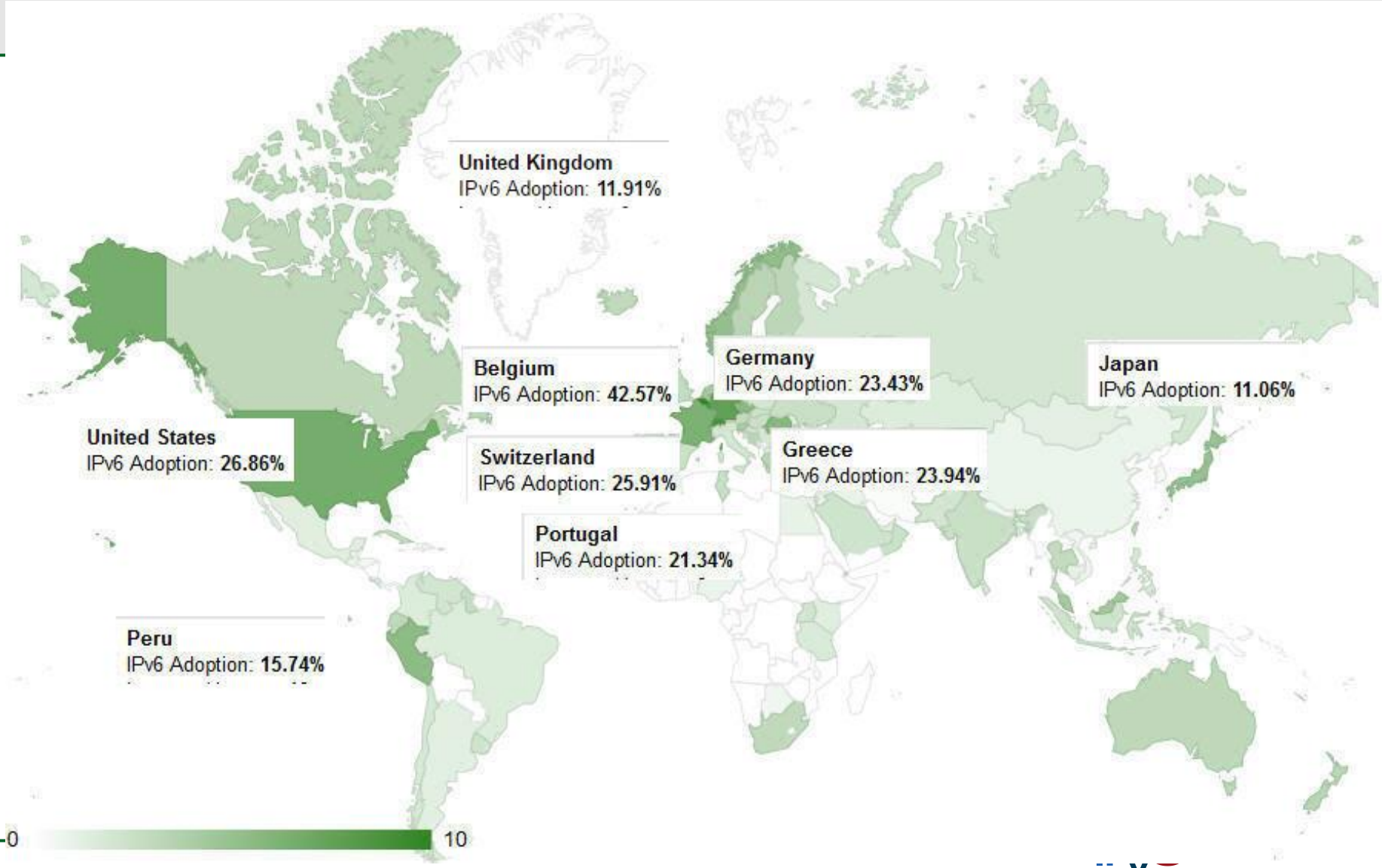
IPv6 Adoption

We are continuously measuring the availability of IPv6 connectivity among Google users. The graph shows the percentage of users that access Google over IPv6.



Data Source: Google Statistics

World Picture with some countries



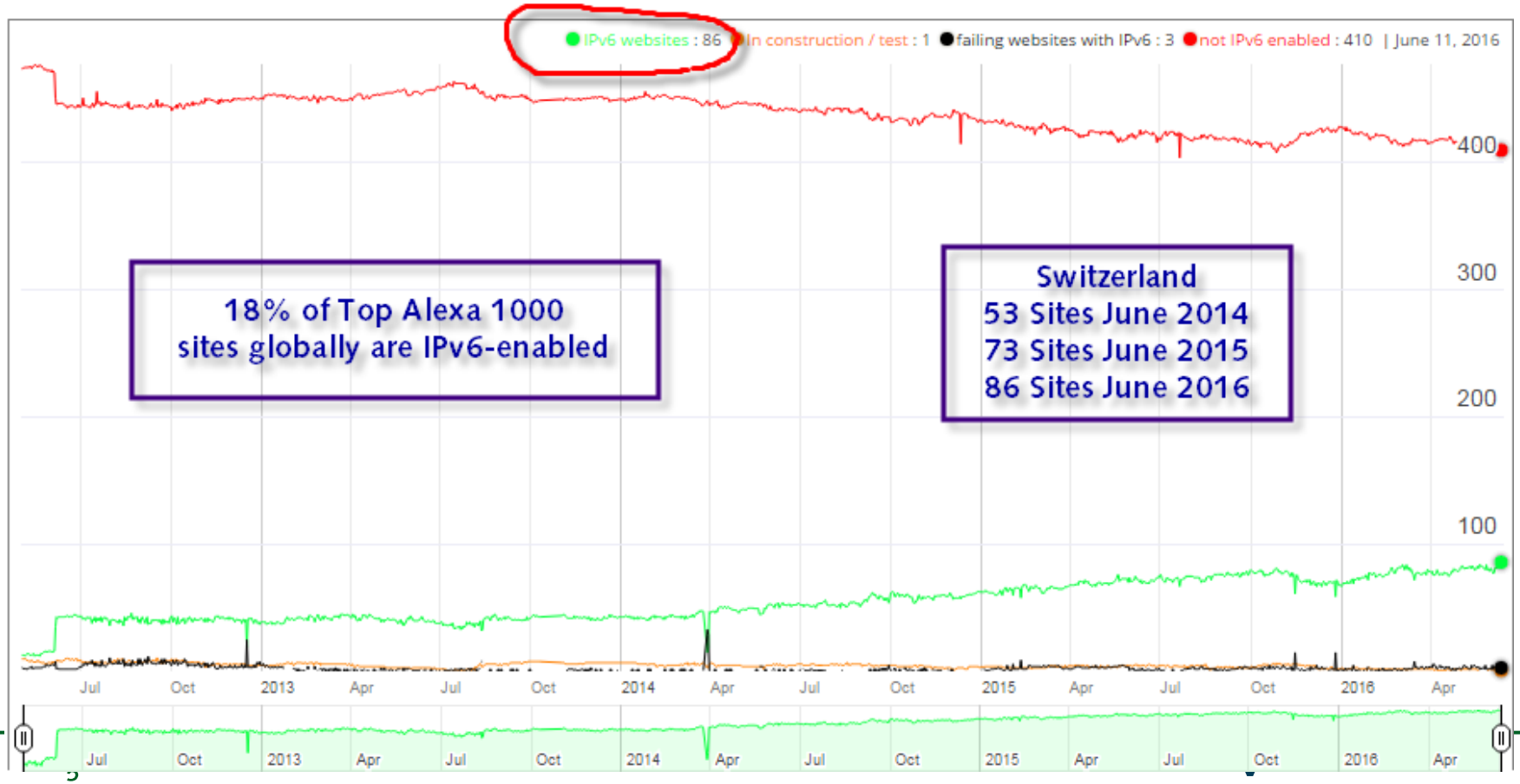
COUNCIL

Switzerland Content – where are you?

Swiss Top Alexa 500 Sites

Switzerland

Display Content Data



18% of Top Alexa 1000 sites globally are IPv6-enabled

Switzerland
53 Sites June 2014
73 Sites June 2015
86 Sites June 2016

www.worldipv6launch.org/measurements and 6lab.cisco.com

Dashboard Swiss Sites – here they come!

- Top Alexa – http://dashboard.swissipv6council.ch/#alexa

22	**Portal der Schweizer Regierung** (www.admin.ch)	FAIL	FAIL	OK
26	**Swisscom Directories AG** (local.ch)	OK	FAIL	OK
27	**Tagesanzeiger** (tagesanzeiger.ch)	FAIL	OK	OK
28	**Swisscom** (www.swisscom.ch)	OK	FAIL	OK
33	**Blogspot** (www.blogspot.ch)	OK	UNKNOWN	FAIL
39	**Apple** (www.apple.com)	OK	FAIL	FAIL
46	**Blogger.com**	OK	OK	FAIL
51	**Microsoft** (www.microsoft.com)	OK	FAIL	OK
61	**Post CH AG** (post.ch)	OK	OK	OK
78	**Comparis** (comparis.ch)	OK	OK	OK
115	**Swisslos** (swisslos.ch)	OK	FAIL	OK
130	**Infomaniak** (infomaniak.ch)	OK	OK	OK
139	**TIO – Portale del Ticino** (tio.ch)	OK	OK	OK

SWISS IPv6 COUNCIL

ip6.nl – 5 Stars for post.ch and comparis.ch

results for post.ch

	IPv4	IPv6
DNS servers	194.41.152.135 194.41.152.136 194.41.216.136 194.41.216.137	2a00:17c8::200 2a00:17c8::201 2a00:17c8:0:8000::200 2a00:17c8:0:8000::201
IPv6-only DNS		Works
Mail exchangers	194.41.152.240 194.41.152.137 194.41.216.135	2a00:17c8::211 2a00:17c8::20a 2a00:17c8:0:8000::206
post.ch	194.41.184.148	2a00:17c8:0:103::20a
www.post.ch	194.41.184.148	2a00:17c8:0:103::20a

post.ch is ready for IPv6.

5 out of 5 stars.

Link to these results: https://ip6.nl/#!post.ch Share

results for comparis.ch

	IPv4	IPv6
DNS servers	91.202.121.5 91.202.121.6 217.192.168.52 217.192.168.53	2001:67c:2e38:100::17 2001:67c:2e38:100::18 2001:918:ff8f:200::88 2001:918:ff8f:200::89
IPv6-only DNS		Works
Mail exchangers	217.192.168.6	2001:918:ff8f:100::200
comparis.ch	91.202.121.20	2001:67c:2e38:100::40
www.comparis.ch	91.202.121.20	2001:67c:2e38:100::40

comparis.ch is ready for IPv6.

5 out of 5 stars.

Link to these results: https://ip6.nl/#!comparis.ch Share

SWISS IPv6 COUNCIL

ip6.nl – 4 stars for local.ch – since June 11!

results for local.ch

	IPv4	IPv6
DNS servers	185.101.119.196 185.101.119.198 213.156.224.141 213.156.232.130	2a06:1d80:1:2::196 2a06:1d80:1:2::198
IPv6-only DNS		Works
Mail exchangers	194.169.219.200 194.169.219.199	No AAAA records for any MX
local.ch	185.101.119.163	2a06:1d80:1:3::1:163
www.local.ch	185.101.119.133	2a06:1d80:1:3::1:133 2a06:1d80:1:3::1:163

local.ch is almost IPv6 ready.

4 out of 5 stars.

Link to these results: https://ip6.nl/#!www.local.ch Share

You did it!

SWISS IPv6 COUNCIL

Even we can do it, Council and Arena Sihlcity ☺

results for **ipv6conference.ch**

	IPv4	IPv6
DNS servers	72.14.185.13 194.246.118.119 212.25.28.54	2001:8e0:40:304::119 2001:8e0:80::54 2600:3c00::f03c:91ff:fe96:f81b
IPv6-only DNS		Works
Mail exchangers	212.25.24.40 212.25.24.41	2001:8e0:40:325::40 2001:8e0:40:325::41
ipv6conference.ch	212.25.25.60	2001:8e0:0:3::60
www.ipv6conference.ch	212.25.25.60	2001:8e0:0:3::60

ipv6conference.ch is ready for IPv6.

5 out of 5 stars.

Link to these results: https://ip6.nl/#!www.ipv6conference.ch Share

results for **arena.ch**

	IPv4	IPv6
DNS servers	72.14.185.13 194.246.118.119 212.25.28.54	2001:8e0:40:304::119 2001:8e0:80::54 2600:3c00::f03c:91ff:fe96:f81b
IPv6-only DNS		Works
Mail exchangers	83.150.12.128	No AAAA records for any MX
arena.ch	194.246.119.47	2001:8e0:40:309::47
www.arena.ch	194.246.119.47	2001:8e0:40:309::47

arena.ch is almost IPv6 ready.

4 out of 5 stars.

Link to these results: https://ip6.nl/#!www.arena.ch Share

SWISS IPv6 COUNCIL

Why dual-stack content is important!

- It is important for everyone to deploy as many dual-stack sites as possible. It shifts traffic to the IPv6 Internet.
- For an ISP, providing CGN-IPv4 access can be four times more expensive than to provide IPv6-native access.
  - Numbers by Swisscom, presented by Martin Gysi at his last year presentation:

Cost for 1 Gb/s throughput:	
6rd:	CHF 1'650.00
CG-NAT:	CHF 8'000.00 (without cost for logging)

Is this a business case or not?

SWISS IPv6 COUNCIL

Customer Responsibility

- Make clear IPv6 requirements for all new projects and services!
- If you don't take your responsibility now, it may hit you in a couple of years
- **Your vendors will not move if you don't require IPv6!**
- Many vendors have Pseudo Implementations to make their marketing brochures look good, but the code is not usable in production. This obviously doesn't apply to our sponsors! ☺

Most underestimated areas:

- Applications (3rd party and self-developed)
- Cloud services
- IoT
- Ecommerce and Egovernment

Referals to other sessions

Application Development Sessions – bridge the gap!
not just for developers (AM – 2pm to 3.30pm)

Cloud overview – this picture will not change if customers don't require, so arm yourself with arguments at this conference and then act! (B – 14.45 – 15.30)

Cloud Case Study (learn what's happening when you do it) (AM – 10.00 – 10.45)

Become Agile otherwise you will not master the complexity of future organisations and networks

SWISS IPv6 COUNCIL

Stuff

- Coffee breaks 2 x 30 minutes, get great coffee, lunch and networking drink downstairs
- Meet our sponsors at their booths in the coffee/lunch zone.
- Speakers please spend your breaks downstairs at "Meet the Experts" Table so people can connect with you.
- Tom will sign books at the Infoblox booth, Silvia will sign books at the "Meet the experts" table.

- **Please help us optimize our events by filling out the questionnaire before leaving**. You can drop it at the reception desk.

SWISS IPv6 COUNCIL

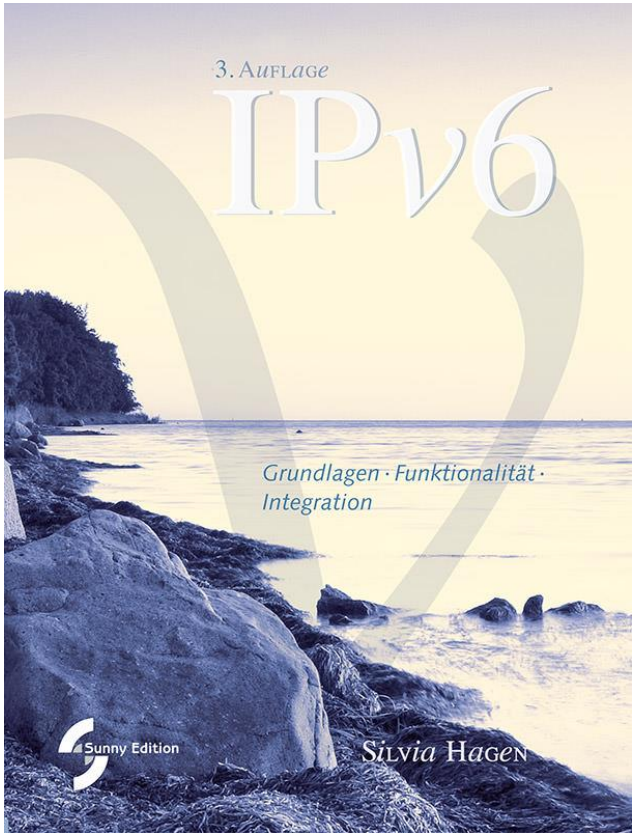
And last but not least….

- Our host Arena Sihlcity has a dual-stack website, our last year events have been contagious (www.arena.ch)
- Arena has a conference WiFi with SSID "Arena-Event"
  User: Event, Password: sunny.ch

- This is an IPv6-only WiFi. It works with NAT64, so you have IPv6 native connectivity to dual-stack websites and translated connectivity to IPv4-only websites. Play with it.
  More on this in the demo after lunch.
- Thank you Markus Braun for this! Powered by Fortinet.

This is my sponsor slide – 3rd Edition German

- **IPv6 Grundlagen, Funktionalität, Integration**
  - von Silvia Hagen, Deutsch
  - 3. Auflage, Sunny Edition, 2016
  - Print ISBN 978-3-9522942-3-9
  - eBook ISBN 978-3-9522942-8-4



SWISS IPv6 COUNCIL

Infoblox®
CONTROL YOUR NETWORK

Actionable Network Intelligence

- **IPv6 Center of Excellence**
- **Network Control and Security from the Core** – Available. Secure. Smart.
- **Gartner recommends Infoblox** – Market Leader in DDI

Meet the Expert – Tom Coffeen, Chief IPv6 Evangelist, Infoblox, for a book signing session at our booth!

Kontakt

Thomas Gerch

tgerch@infoblox.com

Account Manager CH

SWISS IPv6 COUNCIL

IPv6 - Seamless Migration...

- Leader ADC
- Full Proxy
- Carrier Grade NAT
- Complete IPv6 Gateway
- DNS64
- NAT64
- Riskless / Smooth / Now

Kontakt

Patrick Schindler

switzerlandinfo@f5.com

SWISS IPv6 COUNCIL

Kurs: IPv6 Hands-on

Understanding IPv6

3 Tage

7. bis 9. Sept. 2016

Alle Kursdetails am Stand in der Kaffeezone.

Kontakt

Oliver Müller

oliver.mueller@digicomp.ch

Easy and soft Migration to IPv6

A10 Networks for IPv6 Migration/IPv4 Preservation

Infoblox your DNS for IPv6 and IPv6 Center of Excellence

Kontakt

Daniel Pfenninger

daniel.pfenninger@eb-qual.ch

Solving the Challenges of IPv6

- Scalability
- IPv6 Readiness
- Easy Deployment
- IPv6 Resources (Multimedia, Documents, Articles, Services & Tools)

Kontakt

Daniel Pfenninger

daniel.pfenninger@eb-qual.ch

IPv6 Business Conference

Organized by SWISS IPv6 COUNCIL

2016 June, 16

Thanks to all our Sponsors

Infoblox
CONTROL YOUR NETWORK

f5

SWITCH

DIGICOMP

eb-Qual

itrain
THE ESSENCE OF IT

Sunny Connection

BLUECAT

asecus
securing your business

flowdays
achieving more together