



UK IPv6 Council Update

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23 January 2018

Story of UK IPv6 Council

- Established in spring 2014
- The UK IPv6 Council is a **non-profit technology user group** focused on promoting and sharing best practices on IPv6 deployment and adoption in the United Kingdom.
- The **mission** of the Council:
 - Create a platform for discussion and information sharing

How we defined success?

- People inspired/encouraged by engaging with UK IPv6 Council, will (re)start IPv6 projects in their own organisations
- Assigned IPv6 prefixes will start to be used
- IPv6 traffic in the UK will grow

Looking back at the last 4 years

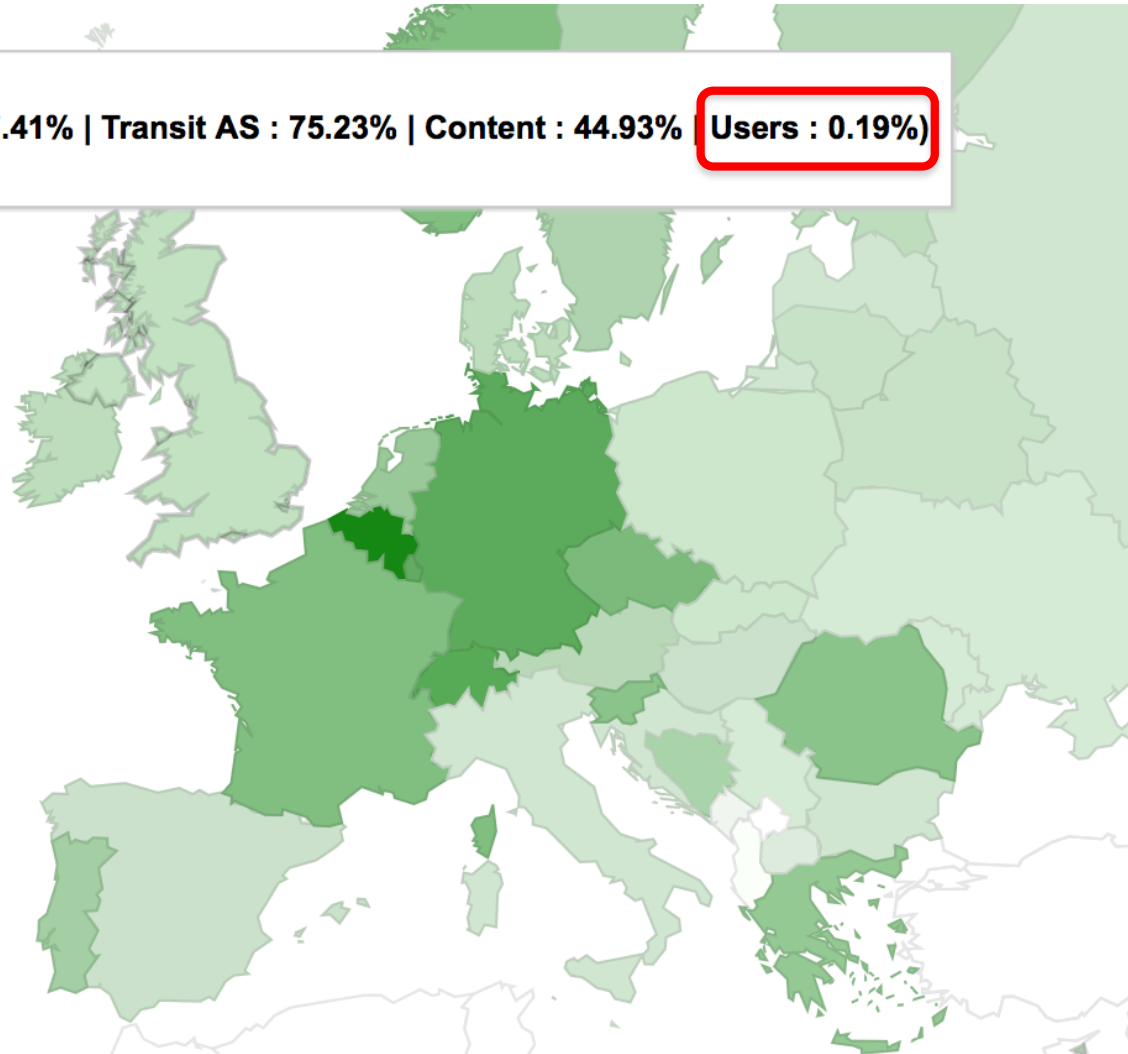
- We have grown to 582 members
- Organised
 - 4 Annual meetings
 - 7 roundtables
 - 2 themed workshops (application development; IPv6 Security)
- Average Annual meeting attendance: 90
 - Roundtables are usually booked out

UK IPv6 Adoption – 05/09/2014

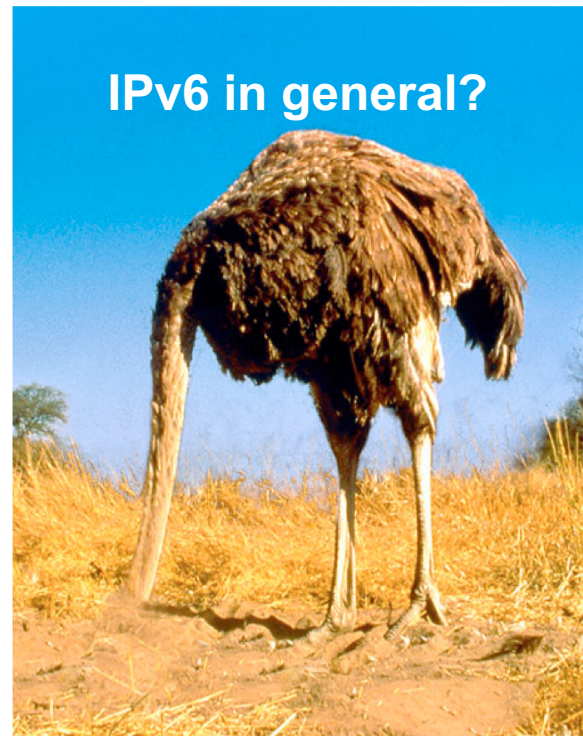
United Kingdom

IPv6 Deployment: **21%** (Prefixes : 37.41% | Transit AS : 75.23% | Content : 44.93% | **Users : 0.19%**)

Relative Index: **2.6** out of 10



Where were We 4 Years ago?



Source: <http://www.dailymail.co.uk/news/article-566719/Why-ostriches-DONT-bury-heads-sand--surprising-truths-great-animal-myths.html>

Why?

- We were missing the deployment in residential networks
 - BT > 9,307,000 subscribers
 - Sky UK > 6,104,000 subscribers
 - Virgin Media > 5,080,000 subscribers
 - TalkTalk > 3,993,000

> 24.5M out of
~26M broadband
subscribers

Source: <http://www.ispreview.co.uk/review/top10.php>

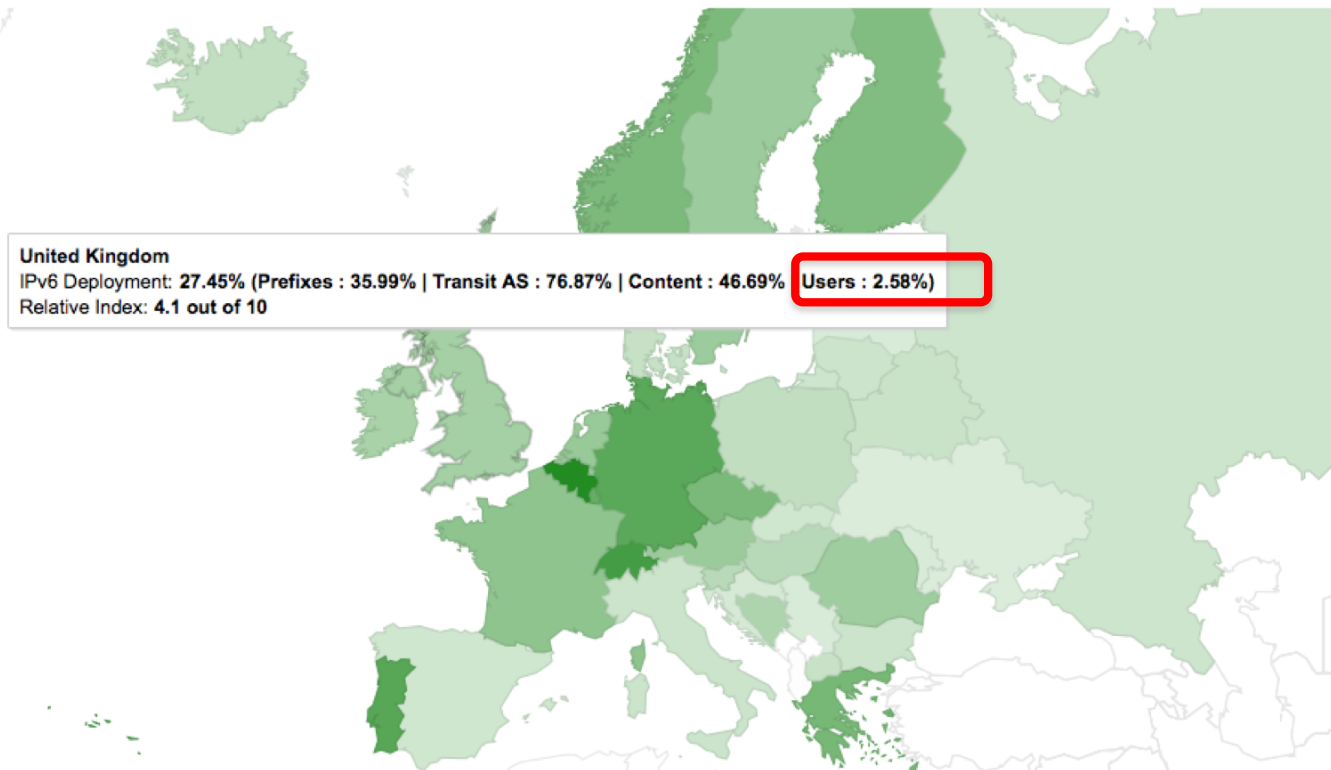
UK IPv6 Adoption – 22/09/2015

Updated on 2015-9-22

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APNIC Labs:
IPv6 User
ratio 3.36%
GB is #27

<http://labs.apnic.net/dists/v6dcc.html>

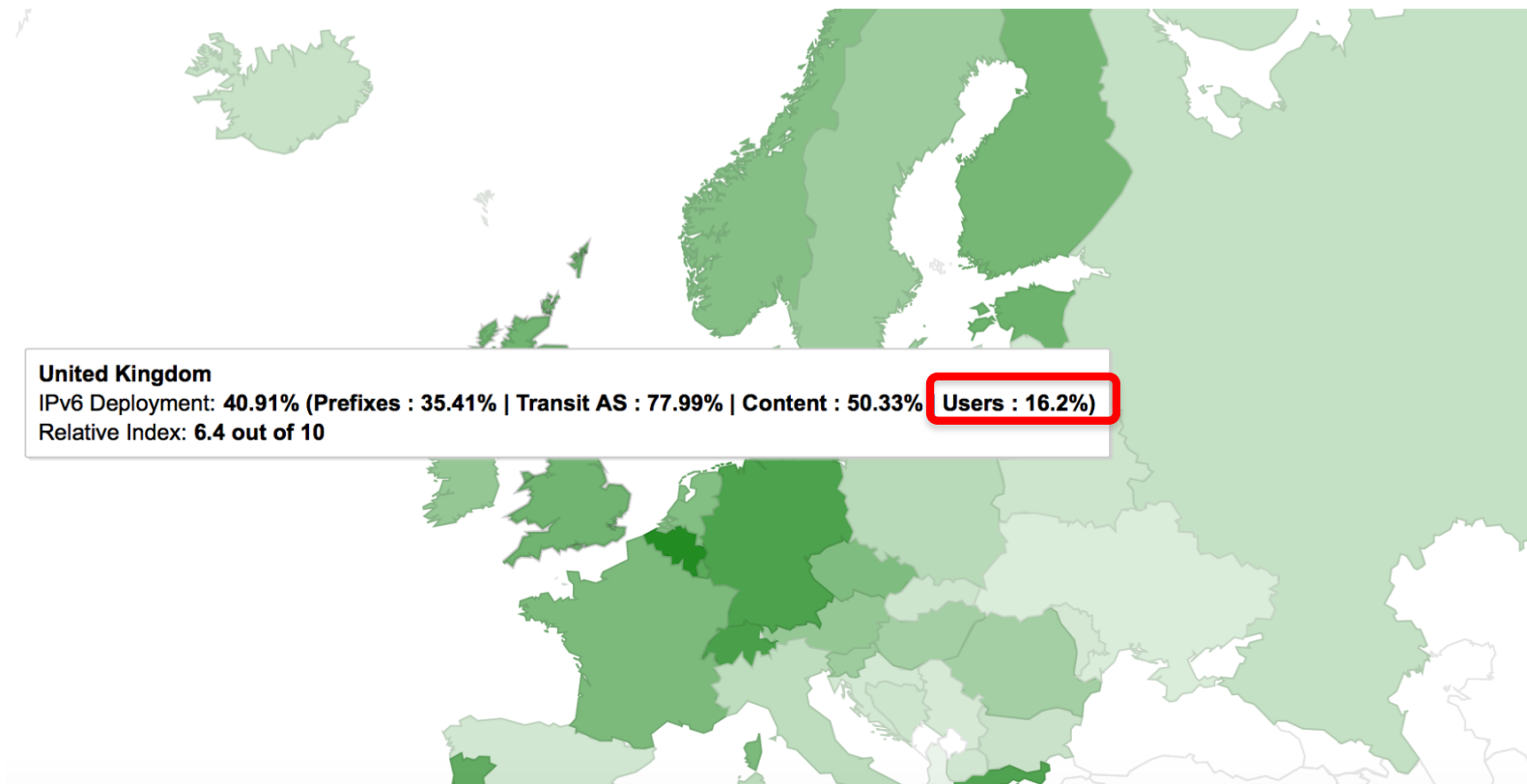
UK IPv6 Adoption – 30/10/2016

Updated on 2016-10-30

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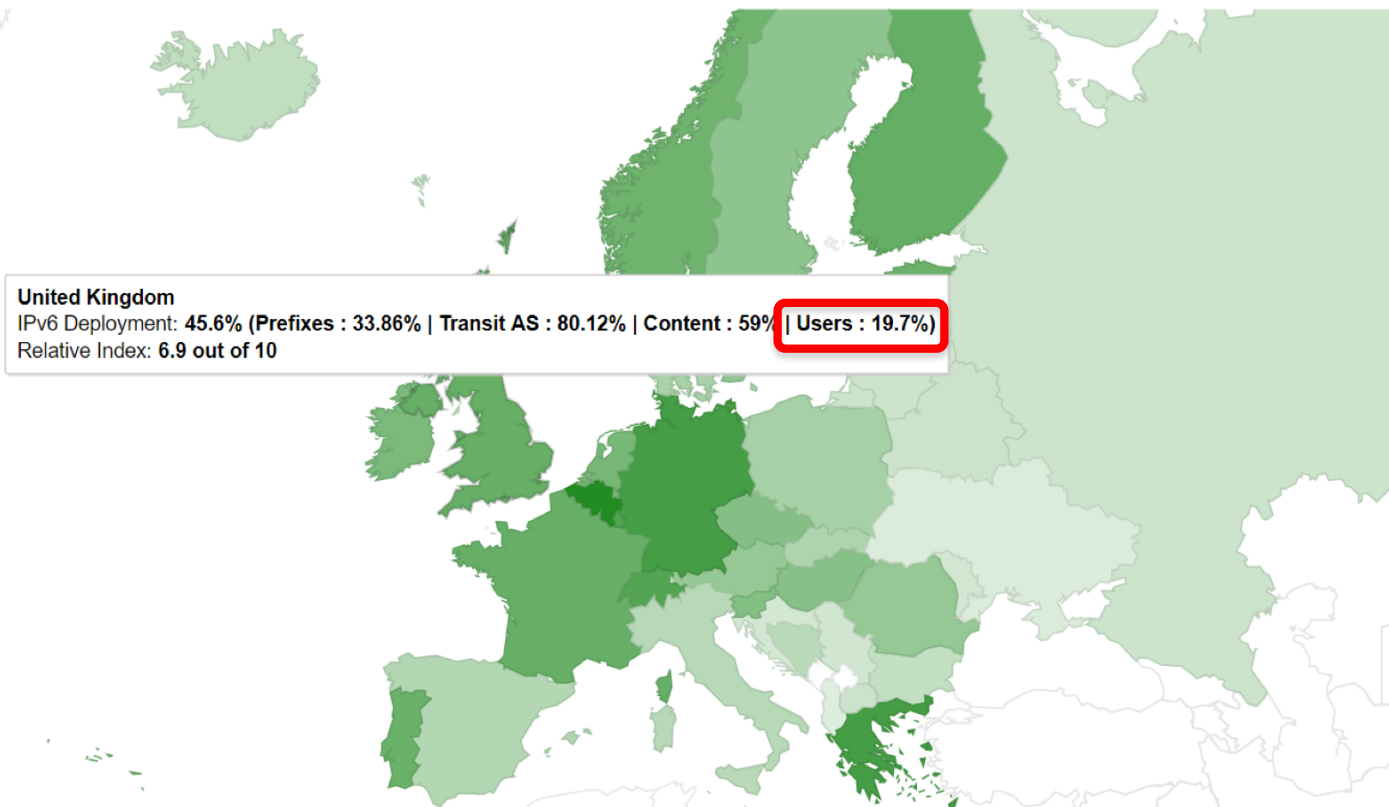
UK IPv6 Adoption – 22/01/2018

Updated on 2018-1-22

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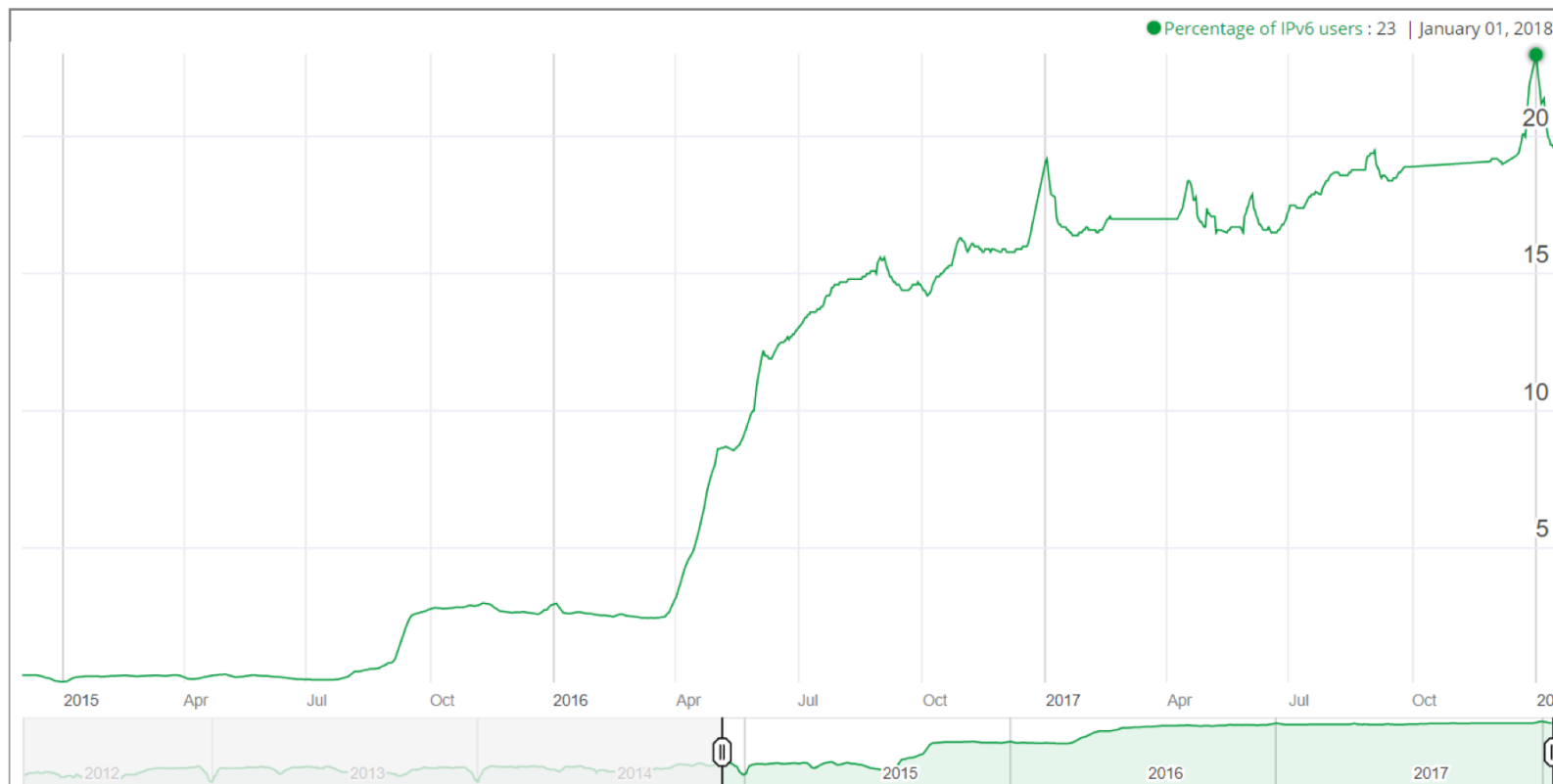


Source: <http://6lab.cisco.com/stats/index.php?option=all>

UK IPv6 Adoption – January 2018

United Kingdom

Display Users Data ⓘ



Source: <http://6lab.cisco.com/stats/cible.php?country=GB&option=all>

APNIC Labs view of the UK & IPv6

IPv6 Users by Country

Date: 02 jan 2018

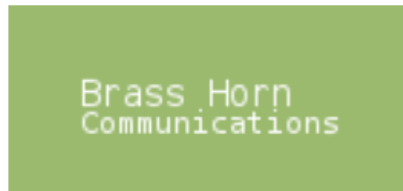
Index	ISO-3166 Code	Internet Users	V6 Use ratio	V6 Users (Est)	Population	Country
1	BE	10114962	57.61	5827451	11429336	Belgium
2	IN	466034684	48.77	227271142	1339180127	India
3	DE	72260517	42.99	31061760	82114224	Germany
4	US	287146624	38.29	109943488	324459463	United States of America
5	GR	7231532	36.22	2619480	11159773	Greece
6	CH	7391076	35.16	2598896	8476005	Switzerland
7	LU	555449	33.43	185712	583455	Luxembourg
8	GB	61284147	26.04	15961177	66181585	United Kingdom of Great Britain and Northern Ireland
9	UY	2246887	25.70	577342	3456750	Uruguay
10	PT	6951757	25.49	1771982	10329506	Portugal



Jim Bound IPv6 Awards

UK IPv6 Leaders 2016 & 2017

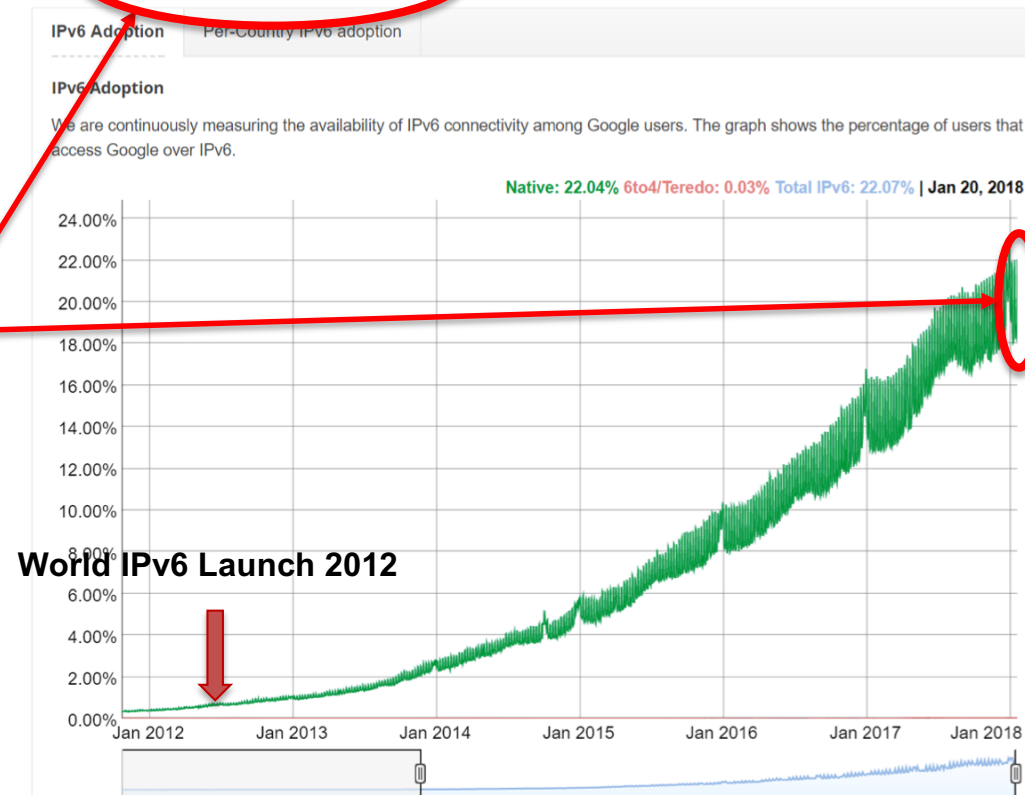
Companies recognized by IPv6 Forum



Global IPv6 Traffic

- 6 June 2012 – 0.64% World IPv6 Launch
 - 5th Anniversary - <https://www.nro.net/happy-5th-world-ipv6-launch-anniversary/>
- 22 July 2017 – Google 20.10%
- 22 January 2018 – 18.4% – 22%

“The Enterprise Effect”



APNIC Top 10 IPv6 Countries

IPv6 Users by Country


Top 10 average **36.97%** V6 Use Ratio
 Top 25 average **25.08%** V6 Use Ratio

Date: 02 jan 2018

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IPv4 Price Evolution 2011 – 2017

← → ↻ ⓘ ipv4marketgroup.com/ipv4-pricing-in-a-post-arin-runout-world/

 **IPv4 MARKET GROUP**
Setting the Standard for IPv4 Transfers

Broker Services Transfer Processes About IPv4

Block Size	2011	2012	2013	2014	2015 YTD
/16	10.0	10.58	\$9.42	\$7.28	\$6.99
/17			\$10.17	\$8.89	\$7.98
/18		9.95	\$9.90	\$9.09	\$8.79
/19			\$11.00	\$10.58	\$9.03
/20		15.00	\$15.30	\$13.63	\$12.18


Figure 1. Prices Observed by IPv4 Market Group

2011 - 2015

Source: <http://ipv4marketgroup.com/ipv4-pricing-in-a-post-arin-runout-world/>

2017

→ ↻ 🔒 Secure | <https://ipv4marketgroup.com/broker-services/buy/>

 **IPv4 MARKET GROUP**
Setting the Standard for IPv4 Transfers

Broker Services Transfer Processes About IPv4 Why IPv4 Blog

MOST RECENT TRANSFERS COMPLETED

Individual buyers and sellers will agree to a specific nominated currency such as USD, EUR, GBP, etc. in the following table, prices per IP are illustrated in USD for comparative regional purposes.

Block Size*	/24	/23	/22	/21	/20	/19	/18	/17	/16
Price/IP (USD)	24.00	21.00	18.00	16.00	13.00	13.00	13.00	13.00	14.50

*Prices in this table are based on the most recent transfer agreed upon by a previous seller and buyer. Each price by block size is indicative of current seller expectation, and buyers can reference these prices to support internal planning and budgeting.

Source: <https://ipv4marketgroup.com/broker-services/buy/>

IPv4-as-a-Service is reality

- Do you operate globally?
- It is coming to the UK
- How do you control something that you don't have under control?
 - Deploy IPv6 😊

The IETF 101

- London 18 – 23 March, 2018
- Fred Baker

Thank you.

