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IPv4 Address Space Exhaustion Update

UKNOF18

January 2011

Richard Yule

Director, 6UK

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6UK

- Promoting IPv6 uptake
- IPv6 Forum Chapter
- Mutual Company formed in 2010
- Interim Board until 2011 AGM

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IPv4 - what do we have left?

- IANA 7 /8s to go...
- APNIC meet requirements to request 2 /8s now
- Triggers last 5 /8s to be allocated
 - One to each RIR

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RIPE Region

- 5/8 and 37/8 allocated to RIPE in November
- Read updates from ICANN on your favourite ops list
 - Update filters
 - www.ris.ripe.net/debogon
- One more /8 to be allocated

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RIPE-498

- IPv4 allocation and assignment
- Section 5 for allocations to LIRs
- Section 6 for assignments to users



Run Out Fairly

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• RIPE 2009-03

- Incorporated into RIPE-498
- Introduces a sliding timescale for allocations and assignments



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Fair Allocations

- LIRs allocated address space to meet their needs for...
- I July 2010 9 Months
- I January 2011 6 months
- I July 2011 3 months



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Fair Assignments

- End users assigned address space to meet their needs for...
- I July 2010 9 Months
- I January 2011 6 months
- I July 2011 3 months
- Utilisation rate now at 50%

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Allocations from the last /8

• RIPE 2010-02

- To be included in IPv4 policy upon conclusion
- Similar to APNIC policy

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Last /8

- LIRs can only receive one /22 and must meet normal requirements
- LIRs must have received an IPv6 allocation to be eligible for this /22
- A / I6 will be reserved until the rest of the /8 has been allocated



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IANA allocation post-exhaustion

- RIPE 2010-05
- Reclamation Pool to be created
- Contains fragments and returned IPv4 address space
- Distributed evenly to eligible RIRs quarterly

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UK IPv6 Progress...

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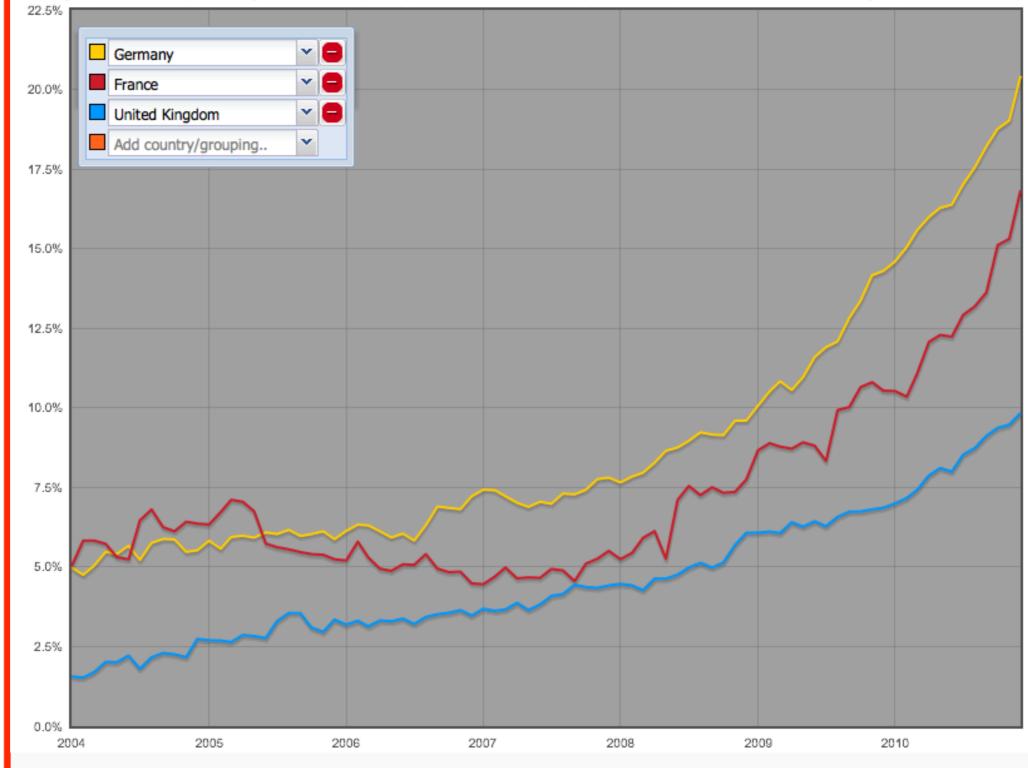
Richard Yule



IPv6 Enabled Networks

permalink: http://v6asns.ripe.net/v/6?s=DE;s=FR;s=GB

This graph shows the percentage of networks (ASes) that announce an IPv6 prefix for a specified list of countries or groups of countries





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What can you do?

• Enable IPv6 on your network

- Join 6UK
- www.6uk.org.uk/join-6uk/
- Promote your network as IPv6 ready

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Questions

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