



IETF Activities Update

Cathy Aronson

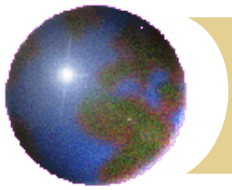
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ARIN XXVII

October 2011

Philadelphia, PA

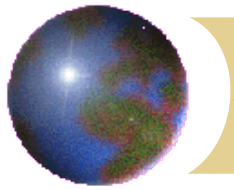
A large, multi-tiered fountain is illuminated with bright green lights at night. The water jets are captured in motion, creating a dynamic and colorful display. The background is dark, with some distant lights visible.



Note

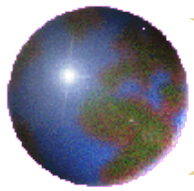
This presentation is not an official IETF report

- ❏ There is no official IETF Liaison to ARIN or any RIR
- ❏ This is all my opinion and my view and I am not covering everything just highlights
- ❏ You should know I like funny quotes
- ❏ I hope you enjoy it
- ❏ Your feedback is greatly appreciated
- ❏ If you were there and have an interesting item I missed please speak up



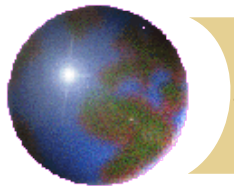
Highlights

- ✚ draft-gashinsky-v6nd-enhance-00
 - ✚ Interesting draft with old problem enhanced by IPv6 large subnet sizes.
- ✚ Shared Transition Space
- ✚ WHOIS-based Extensible Internet Registration Data Service (WEIRDS)
 - ✚ <http://tools.ietf.org/html/draft-kucherawy-weirds-requirements-01>
- ✚ Most unusual speaker
 - ✚ Blue Cross Blue Shield (wanted IPv6 IP Identification Field change)



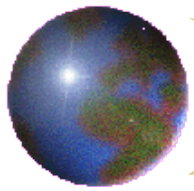
IEPG – World IPv6 Day updates

- ✚ AAA records for major sites: were about 250 before, peaked during v6 day and then dropped but higher around 300
- ✚ TCP connection tests - hardly any difference in delays.
- ✚ It's hard to tell if a client does IPv6 because a lot of them will default to v4 if v4 is available.
- ✚ 6 to 4 is a lot slower unless relays are close



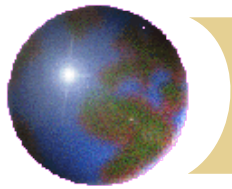
ISOC IPv6 Workshop

- ✚ This was a non-IETF event put on by ISOC.
- ✚ This time topic was “How do we get there from here?”
- ✚ Geoff Huston was the optimist



ISOC IPv6 Workshop Quotes

- ✚ "Installed base has so much inertia that it shrugs off innovation"
- ✚ "There is no enemy besides us".
- ✚ "Carriage providers have always wanted to blackmail content"
- ✚ "we are suffering a success disaster"
- ✚ Seriously though it seems like a chicken and egg problem.
 - ▣ Providers say customers aren't asking for it
 - ▣ Customers say that providers don't have it.



Internet Area

- ✦ Didn't meet in Quebec City

- ✦ Active drafts

 - ☒ [draft-ietf-intarea-ipv4-id-update-02](#)

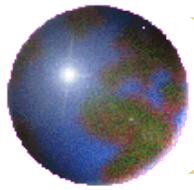
 - Updated Specification of the IPv4 ID Field

 - ☒ [draft-ietf-intarea-ipv6-required-01](#)

 - IPv6 Support Required for all IP-capable nodes

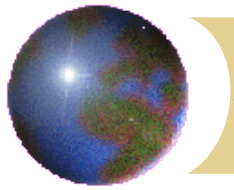
 - ☒ [draft-ietf-intarea-router-alert-considerations-10](#)

 - IP Router Alert Considerations and Usage



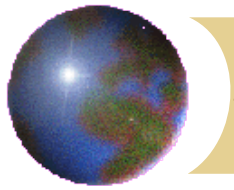
Multicast Transition (multitrans)

- ✚ IPv4-IPv6 Multicast Scenarios-CJ
 - ☒ IPvX to IpvY
 - ☒ IPvX to IPvY then back to IPvX
 - ☒ Scenario where you have a lot of v6 receivers but you're still streaming v4
 - ☒ Mechanisms need to be transparent to senders and receivers



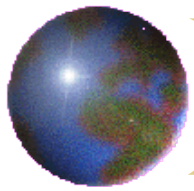
RENUM WG

- ✦ RENUM is now a working group
- ✦ The problem is being broken down into smaller chunks
 - ✦ Enterprise Network Renumbering Scenarios
 - [draft-jiang-6renum-enterprise-00](#)
 - ✦ IPv6 Site Renumbering Gap Analysis
 - [draft-liu-6renum-gap-analysis-01](#)
- ✦ I would like to encourage folks in this community to participate.



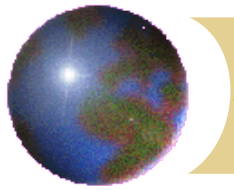
Routing Area Working Group

- ✚ GreenTE: Power-Aware Traffic Engineering
- ✚ Routing Area WG up to date information can be found here
 - ☐ <http://tools.ietf.org/area/rtg>



V6 Operations (V6OPS)

- ✚ Detailed update on World IPv6 Day
 - ☒ A number of drafts on the day
 - draft-jjmb-v6ops-comcast-ipv6-experiences-01.txt
- ✚ IPv6 Day at Microsoft
 - ☒ Their gaming sites are still on v6 (xbox, etc)
 - ☒ 8% are successful on 6to4 (historic status not useful)
 - ☒ Biggest issue is access not fear
 - ☒ MS quote "that would be more towards no than a yes"



V6 Operations (V6OPS) Cont

✚ V6 Day notes

- ✚ Hurricane Electric – significant 6to4 traffic

- ✚ Comcast

 - 50% left AAAA record in place

 - 6to4 doubled, native was 6x, 6rd doubled

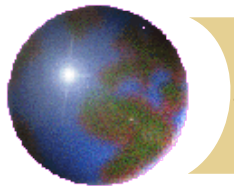
✚ IPv6 IP Identification Field

- ✚ Request from BCBS of Michigan

- ✚ IPID used for diagnostics

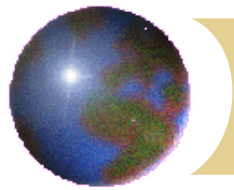
- ✚ 40 different docs in this WG now

- ✚ 30 Updated since last IETF



Secure Inter-Domain Routing (sidr)

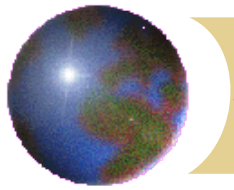
- ✦ There are many drafts under discussion
- ✦ BGPSEC draft is almost complete
- ✦ Several drafts relating to RPKI
- ✦ Several drafts relating to securing BGP
- ✦ <http://tools.ietf.org/wg/sidr/>



IPv6 Maintenance WG (6man)

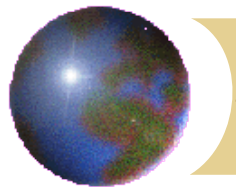
- ✦ RFC3484 is revised – all about how a host picks its default and which address to use v4 or v6
- ✦ Neighbor Un-reachability Detection is too impatient - working group document?
- ✦ IPv6 Router Solicitation Driven Access considered Harmful
- ✦ IPv6 ND Optimization for Energy Aware Devices
- ✦ 6Man Docs available here.

✦ <http://tools.ietf.org/wg/6man/>



Ops Area WG

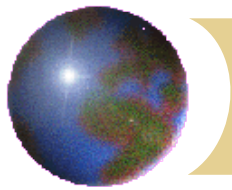
- ✚ Discussion of shared transition space draft. Consensus was to move it to WGLC after lengthy discussion.
 - ✚ There was a good concern about hosts assuming this block was global and using 6to4. No real answer from crowd
 - ✚ Discussion has continued on the mailing list. Drafts have been updated.



DNS Operations (DNSOP)

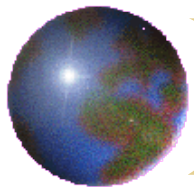
- ✚ This draft draft-michaelson-as112-ipv6-00.txt discusses another interesting scaling problem in IPv6. The IAB asked the IANA to delegate a list of reverse dns zones to keep them local in scope.
- ✚ <http://tools.ietf.org/wg/dnsop/>

"there's a difference between being incomplete and being wrong"



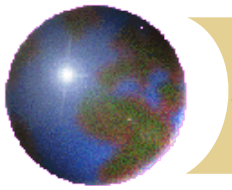
BEHAVE WG

- ✦ *This group is all about address translation.*
- ✦ *Large Scale NAT Requirements*
- ✦ *NAT64 Discovery Heuristic*
- ✦ *Stateless Source Address Mapping for ICMPv6 Packets*
- ✦ *Revealing hosts sharing an IP addressing using TCP option*
- ✦ *Current info is available here*
 - ✦ <http://tools.ietf.org/wg/behave/>



Questions?





References

- ⊕ General WG Info:

- ⊞ <http://datatracker.ietf.org/wg/> (**Easiest to use**)

- ⊕ Internet Drafts:

- ⊞ <http://tools.ietf.org/html>

- ⊕ IETF Daily Dose (**quick tool to get an update**):

- ⊞ <http://tools.ietf.org/dailydose/>

- ⊕ Upcoming meeting agenda:

- ⊞ <http://tools.ietf.org/agenda>

- ⊕ Upcoming BOFs Wiki:

- ⊞ <http://tools.ietf.org/bof/trac/wiki>

- ⊕ Also IETF drafts now available as ebooks

- ⊞ <http://www.fenron.net/~fenner/ietf/ietf-ebooks>