Sunset4 WG
Internet Area

IETF 84, Vancouver, BC

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Note Well

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Administrivia

• Blue Sheet: please sign. This helps get us a properly-sized room and timeslot.
• Call for volunteers for scribing on the etherpad, jabber

• Meeting notes (Etherpad):
  http://tools.ietf.org/wg/sunset4/minutes
• WG charter:
  http://datatracker.ietf.org/wg/sunset4/charter/
• Mailing list: sunset4@ietf.org
• Jabber room: sunset4@jabber.ietf.org
Agenda 1/2

- Note well, administrivia, scribes, minutes
  - Chairs, 5 minutes
- Agenda Bashing
  - Chairs, 5 minutes
- **WG Charter** and Scope discussion
  - Chairs, 20 minutes

**Drafts related to current charter Milestones**

- IPv6 Support within IETF work
  - [draft-george-ipv6-support](#)
  - presenter Lee Howard, 10 minutes

**IPv4 Sunset related drafts**

- Turning off IPv4 using DHCPv6
  - [draft-perreault-sunset4-noipv4](#)
  - presenter TBD, 10 minutes
- 464XLAT: Combination of Stateful & Stateless Translation
  - [draft-ietf-v6ops-464xlat](#)
  - presenter Cameron Byrne, 10 minutes

- Gap Analysis for IPv4 Sunset
  - [draft-dionne-sunset4-v4gapanalysis](#)
  - presenter TBD, 10 minutes
- Scenarios of IPv4 Sunsetting
  - [draft-zhou-sunset4-scenarios](#)
  - presenter TBD, 10 minutes
Agenda 2/2

CGN/NAT related drafts
• Managed Objects for Carrier Grade NAT
  – draft-perreault-sunset4-cgn-mib
  – presenter TBD, 10 minutes
• Deterministic Address Mapping to Reduce Logging in CGN Deployments
  – draft-donley-behave-deterministic-cgn
  – presenter TBD, 10 minutes
• NAT Behavioral Requirements Updates
  – draft-penno-behave-rfc4787-5382-5508-bis
  – presenter TBD, 10 minutes

Stateless IPv4 NAT
• Experience from NAT44 Translation Testing
  – draft-li-behave-n444-test
  – presenter, Will Liu, 10 minutes
• Mitigating Aggregated Traffic of DHCP Discover Messages
  – draft-yang-dhc-ipv4-dis
  – Presenter Lianyuan Li, if time allows

• Summary/Wrap-up/next steps
  – Chairs, 15 minutes
Disclaimer

• The next two slides are editorial, not normative
  – Charter is normative, this is interpretation

• An attempt by your humble chairs to provide additional info gained during meetings about charter and scope, intent

• WG/IETF consensus trumps the chairs’ opinions, this is merely a starting point
What is Sunset4?

• Central place to discuss IPv4-specific IETF work, ensure it’s justified before proceeding
  – What is the minimum work that IETF needs to finish so that standards work on IPv4 is “done”?
• A WG to consider how to turn IPv4 OFF
  – Focus on changes to IPv4 protocols, processes, implementations, best practices
  – Can identify issues in IPv6 that make disabling IPv4 difficult, but not fix them
    • Missing features for parity, broken stuff gets handed to the appropriate IPv6 WG (v6ops, 6man, others)
What Sunset4 ISN’T

• The IPv4 life support group
• IPv6 Deployment Deniers Anonymous
• The IPv4-specific Internet Draft orphanage
• CGNs R US
• BEHAVE 2.0/Softwire Annex
• v4Ops
• Creating solutions to all permutations of all IPv4 transition problems
  – Define need for a solution based on actual demand, not the mere existence of the problem
Current Charter

• Initial charter written by IESG and to-be Sunset4 chairs, no WG-formation BoF
  – Feedback from WG formation announcement did not result in substantive changes

• Has some problems:
  – Overlaps with other WGs’ charter items
  – Contradicts itself
  – Excludes almost all potential work
New Charter

• Product of several discussions between ADs, WG Chairs from all of the groups Sunset4 might work with (e.g. Behave, Softwire, v6ops, Intarea, etc)
  – Determine separation of work, fix wording
• Still not perfect, but gives the chairs and WG flexibility to adopt work we think is useful without asking IESG’s approval each time
• Awaiting WG consensus before going back to IESG for final approval
Charter changes 1/3

- The Working Group works only focuses primarily on IPv4 protocols to facilitate IPv4 sunsetting.
- before the working group adopts any technology, it must:
  1) describe the problem to be solved and show that there is widespread demand for a solution
  2) demonstrate that the problem can not be solved with existing technologies
  3) provide a description of the proposed solution along with its impact on current IPv4-only use and its ability to promote justification that it does not harm or delay the deployment of IPv6
Charter changes 2/3

• Any work on IPv4 to IPv6 transition methods is out of scope. This working group focuses IPv4-specific work within the IETF into a single group in order to minimize IETF work on creating and standardizing new IPv4-specific features, IPv4 life extension technologies, and IPv4 to IPv6 transition methods mechanisms whose primary focus is on IPv4. The scope of work on these items is out limited to the minimal amount necessary to support continued operation of the Internet until IPv6 is fully deployed.
The initial work items are:

- Review current Carrier-Grade NAT (CGN) documents and related issues, including requirements for standardization, and determine if CGN is a suitable sunsetting technology to become a work item:
  - draft-ietf-behave-lsn-requirements
draft-ietf-behave-nat-mib CGN port allocation and address sharing methods

- Gap analysis of IPv4 features to facilitate IPv4 sunsetting

- Provisioning methods to signal a dual-stack host to disable the use of IPv4

Goals and Milestones:

Dec 2012 - CGN port allocation and address sharing methods
Jun 2013 - Send gap analysis on IPv4 sunsetting to IESG
Sep 2013 - Provisioning methods to signal a dual-stack host to disable the use of IPv4
Summary and Next Steps

• Call consensus on WG Charter (today)
• Verify consensus on list
• Begin discussing WG draft adoption
  – Shouldn’t really adopt drafts until charter is approved
  – Solicit volunteers for substantive reviews of drafts to be adopted