Meeting date / Time 2024-07-25 09:30-11:30 PDT

Note Takers: Cheng LI, Eric Vyncke, Eduard Vasilenko (Please write your name here, if you make some contributions to the minutes)

**Chair’s opening**

Note Well & WG status, Xipeng Xiao / Nick Buraglio and Ron Bonica, 10 minutes

WG status introduction: WG activity (number of new and adopted drafts) is stable, call for contributions to important work, e.g., the deliverables listed in the milestone, request to help with the free IPv6 ebook led by Brain Carpenter, and others.

**Working Group Drafts**

1. 464 Customer-side Translator (CLAT): Node Recommendations, Jen Linkova / Tommy Jensen, 15 minutes

   [Tommy] The draft has been adopted. Some terms modifications were made after IETF 119. Some open issues and PR in the GitHub repository, we need more discussions and close the issues.

   [Soni Tereanse] a little bit confused about the workflow: is option 108 sent by a client? Assume that option 108 should be configurable on the router.

   [Tommy Jensen] Option 108 on the diagram is on the receiver side

   [Jen] Client should request then DHCP may respond or not. This draft is about CLAT, even if DHCP would not answer

   [Jen] Please send your comments to the list, and we will provide the answer.

   [Jen] promised the update the draft to avoid fragmentation (lower MTU for 20 bytes).

   ICMP machinery would be inherited from Bill Fenner’s draft in intarea.

   [Masanobu Kawashima] 1) Another pronunciation “C-LAC”. 2) Masanobu would share the implementation that does not need an ICMP extension

**Active Individual Drafts**

1. IPv6 CE Router (7084bis), Tim Winters, 15 minutes

   Asking for adoption

   [Jen] Happy to see the work. SLAAC renum should be mentioned.

   [Lorenzo Colitti] About “SHOULD be able to disable the firewall”: Could we change it to “MUST be possible to enable”?

[Suresh Krishnan] Ingress filtering is about anti-spoofing BCP – it is not a regular firewall.

[Ted Lemon] Against UPnP or do we need to specify what exactly to add? Asking about PCP. [Timothy Winters] but I have hundreds of CPEs in the lab – no one supports it.

[Ted Lemon] It is because they are absent in RFC 7084. [Timothy Winters] MUST would be too much.

[Ted Lemon] It is not our problem to implement it.

[Lorenzo Colitti] Bad UPnP implementations would create a problem. Asking for PCP. Not agree that filtering in the document is restricted to anti-spoofing.

[Warren Kumary] looks like we already promised PCP in many documents, asking for it too.

[Jordi Palet Martinez] asking for PCP to SHOULD (motivation is lost here)

[Tommy Jensen] UPnP is very useful and needed. PCP is a big requirement – it would cascade to other documents.

[Lorenzo Colitti] RA timeouts in mobile are huge – could we ask to keep it lower?

[Chongfeng] Asking for DHCP-PD for downstream ports. There may be 2 tiers of routers in some homes. [Timothy Winters] we already asking in the document to propagate.

[Masanobu Kawashima] As one of the CE router vendors, we refer to RFC 7084 and Broadband Forum TR-124.

2.IPv6-Mostly Networks: Deployment and Operations Considerations, Jen Linkova, 15 minutes

If Option 108 + local CLAT -> then no need for DNS64. Asking for adoption.

[Warren] supports the draft. Asking for “Globally-Unique Link-Local” to the separate document

[Eric Vyncke] +1 (on gulla), people may not read IPv6-only document

[Lorenzo Colitti] Rule 5.5 in Linux is complicated to implement. PIO change is very expensive to process. And many other deep technical details

3.SLAAC fixed /64 boundary problem statement, Gyan Mishra, 15 minutes

[Bob Hinden] SLAAC does not define the slash (how long the prefix is), it is defined somewhere else. The problem is an implementation, not a protocol. Any protocol change would not change implementation automatically. What is the advantage of “All new devices on the link”? The proposal seems pointless, I do not support this work.

{Eric Vyncke} It is a wrong priority: we could not change provision systems but we could change the protocol.

[Bill Fenner] It would not address the “cache exhaustion problem”.

[Lorenzo Colitti] It is a “race to the bottom”. The problem is not true. Changing the minimum size would not solve everything

[Tobias Fiebig] “Neighbor cache exhaustion” is an artificial problem for the ISP.
[Warren Kumari] @Billo: I mean, it does help with Neighbor cache exhaustion -- instead of 4PB of RAM for neighbor cache I'll only need 1PB of RAM...

[Nick Buraglio] Just a data point - no hat: I have run an open perimeter network (i.e. no middleboxes, public addressing) for 20+ years and I have only seen ND exhaustion as a problem once, and it was a vendor bug that simply did not time out the ND cache

4.RA lifetime Metric in the wild, Patrick Rohr

Collected detailed RA data on Android. 1800sec is typical.

[Lorenzo Colitti] Balance is needed to permit changes, the IPv4 static approach is not good. Short timeout is very expensive. We need marketing to position these values properly.

[Jen] 300 is very low. 300 PIO is more often than 300 RA lifetime – it is interesting

[Tim Chown] Thanks for the data. Assumed RFC (??) where to put recommendations.

[Suresh Krishnan] Wireless had an issue, we already recommended a bigger value. Propose filtering on the host. [Patrick Rohr] Filtering may be a problem to implement.

Timothy Winters: CPE is not always under ISP control. Support recommendation because of battery wastage.

[Warren Kumari] Old Prague meeting has shown that the battery may down very fast (because of IPv4 ARP). Support the activity.

[Tobias Fiebig] Is it possible to have a dynamic/smart timer?

[David Farmer] I have a massive WiFi community – we understand the importance.

[Lorenzo Colitti] We need to publish a guidance, but it would not affect the situation. It is difficult to filter packets on Android but possible. It would be impossible to block XX% of RAs. The market initiative would help more to push CPE vendors.

[Jen] RFC7774 was very useful

**Chairs' Summary**

* There are a lot of expired drafts and we would like the announce them to be dead drafts. Some of them were created in 2003. If you think your draft is useful, please resubmit it. If you need someone to review the draft, you are welcome to send it to the list and ask the chairs to help find reviewers.

* Join the side meeting “IPv6 deployment in CERN” presented by Tim Chown.