

6bone planning issues BOF

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6bone background

- The 6bone was created in March 1996 by the IETF community as a way to test its IPv6 standards and implementations
- Its current address authority comes from RFC 2471, via the original IANA, Jon Postel
- Its focus has moved on to:
 - a place for early experimentation with routing and operational procedures;
 - a place to evolve practices useful for production IPv6 prefix allocation;
 - a place to provide bootstrap qualification for production IPv6 address prefix allocation;
 - a place to develop IPv6 applications;
 - a place for early users to try using IPv6 in their hosts and networks.

Primary 6bone issues – 2002/2003

- Making it a robust testbed
 - Discussions underway, draft in progress
 - Focuses mostly on keeping the backbone cleaned up and unsnarled from long tunneling transit times
- Transitioning the registry under the RIRs
 - Discussions started last year with RIRs
 - Currently unclear what is next
- Planning for the phaseout of the 6bone
 - We need to have a solid plan for a phaseout that is openly discussed and decided by the IETF community
 - This is necessary to avoid confusion over what the future of the 6bone is...

Transitioning the registry under the RIRs

- In early 2002 discussions were started with the RIRs driven by two issues
 - Clarifying the role the 6bone address registry has with respect to the RIRs IPv6 address registry
 - Gaining access to the ip6.arpa reverse registry
- Not at issue, contrary to common perception, is that it was being done because Bob Fink was retiring
 - Bob always intended to stay involved to assist in any appropriate way
- ...or that the IETF ngtrans wg was closed thus a new home was needed
 - The IETF still feels responsible for the 6bone

Other issues related to RIR involvement

- During the course of early discussions, the RIRs' management made it clear that they could not speak to the issue of how long the 6bone allocation authority would last
 - Rather, it was an issue that the IETF and/or the IANA would have to deal with
 - To this end, a discussion was opened within the IETF on 6bone phaseout planning
- Who would oversee operations?
 - Even though the 6bone came under the IETF ngtrans wg, it really had almost nothing to do with its operational policies
 - The 6bone community itself controls its policies and everyone expects that it will continue to do so

Comments from the 6bone community

- Many comments came from the 6bone community, but most relevant ones focus on:
 - Having to pay for testbed addressing when they haven't been in the past
 - Note that many 6bone participants (at all levels) do so to get experience and in the process convince their organizations that there is something worth paying for, i.e., the price is an issue, no matter how small it is
 - Having to go through more complexity
 - It isn't clear if this is a real issue as we don't know what a pTLA-level request process might be
 - Also, this may be a holdover of dislike of necessary procedures for scarce IPv4 address space
 - What is pay for service when the 6bone is a volunteer effort... RIR services aren't needed
 - Unwillingness to pay for service and then be expected to hand our free address services to downstream users

Comments from the RIR community

- Many comments have come from the RIR community as well
 - I would paraphrase the single largest concern as “...why should the 6bone community get cheaper services than the dues paying members...?”
 - Also, the RIRs are supposed to recover costs for providing their services. Giving away any service would seem to go against this.
 - And a corollary to the above is, if the RIRs are just covering costs for a special service to the 6bone, what are the RIRs doing to their regular customers
 - Why should RIR members care about the 6bone?
Let 6bone do their thing, and the RIRs theirs
- The above are Bob’s readings of the concerns and comments, not any RIR presentation of them

Well then, what's next?

- It isn't clear this proposal should proceed, given:
 - The opinions expressed on both sides
 - A soon to be in place 6bone phaseout plan
 - A decline in the request rate for 6bone prefixes
 - A steady increase in allocated production prefixes
 - The ability of the RIRs to temporarily allocate IPv6 addresses for Internet experiments

ip6.arpa

- The 6bone community thinks the 6bone should have access to ip6.arpa for reverse registry
- But first we need a way to move the 6bone to ip6.arpa
 - keeping the cost to the RIRs to administer it low
 - and allowing the RIRs to retain control of it
- We propose the 6bone operate the eff3.ip6.arpa server(s)
 - the 6bone community would thus sustain the cost of entering and maintaining the pTLA data in the eff3.ip6.arpa server
 - when phaseout is complete, the RIRs simply pull the eff3.ip6.arpa delegation and they have reclaimed it

Thus

- The RIRs have agreed that in light of the foregoing
 - There is no need to continue planning for a 6bone RIR integration...
 - the 6bone would thus continue to manage its own allocations throughout the life of the phaseout plan
 - The RIRs will delegate eff3.ip6.arpa to name servers that the 6bone community provides

- Questions?