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Delegation of E.F.F.3.IP6.ARPA

Status of this Memo

Copyright Notice

Abstract

This document discusses the need for delegation of the E.F.F.3.IP6.ARPA DNS zone in order to enable reverse lookups for 6bone addresses, and makes specific recommendations for the process needed to accomplish this.

1. 6bone and DNS

The 6bone, whose address space was allocated by [RFC2471], has provided a network for IPv6 experimentation for numerous purposes for seven years. Up to the present time, reverse lookups for 6bone addresses have been accomplished through IP6.INT. It is now important that the thousands of 6bone users be able to update their IPv6 software to use IP6.ARPA [RFC3152].

Although the 6bone has a limited life, as a phaseout plan is being discussed at the IETF at this time [I-D.fink-6bone-phaseout], there is likely to be 2.5 to 3.5 more years of operation. During this remaining 6bone lifetime IP6.ARPA reverse lookup services for the 3ffe::/16 address space are required.

Discussions have been underway between the 6bone and RIR communities, about having the RIRs perform this service. It was agreed at the San Francisco IETF meeting in March 2003 that it was more practical for the 6bone to provide this service for itself. This would relieve the RIRs of the costs of providing this service, yet still provide the IP6.ARPA authority the ability to terminate the service when the planned 6bone termination date is reached (currently anticipated to be June 6, 2006).

The current planning within the 6bone operational community is to provide new inet6num attributes in the 6bone registry database for top level 6bone address space holders to request delegation to their reverse path servers.

2. IANA Considerations

This memo requests that the IANA delegate the E.F.F.3.IP6.ARPA domain to the 6bone, as will be described in instructions to be provided by the IAB. Names within this zone are to be further delegated within the top level 6bone ISPs (known as pTLAs) in accordance with the delegation of 6bone 3FFE::/16 address space.

3. Security Considerations

While DNS spoofing of address to name mapping has been exploited in IPv4, delegation of the E.F.F.3.IP6.ARPA zone creates no new threats to the security of the internet.

4. References

4.1. Normative References

[RFC2471] Hinden, R., Fink, R. and J. Postel, "IPv6 Testing Address Allocation", RFC 2471, December 1998.

4.2. Informative References

[I-D.fink-6bone-phaseout] Fink, R. and R. Hinden, "6bone (IPv6 Testing Address Allocation) Phaseout", Work in Progress.

[RFC3152] Bush, R., "Delegation of IP6.ARPA", BCP 49, RFC 3152, August 2001.

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