Increasingly the need for IPv6 ND Proxy [RFC4389]) to be a Standards Track document is growing. During the specification of the IPv6 CE Router in the IETF v6ops Working Group, the IPv6 CE Router has use for ND Proxy to bridge disparate MAC layers LAN ports. There is also the use of ND Proxy in cable broadband NBMA network for DAD and ND address resolution on a cable access concentrator. Another case where ND Proxy is required is when one does not have enough IPv6 address space to route. This short note recommends that the ND Proxy RFC be changed to a Standards Track document.

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1. Introduction

The reason IPV6 ND Proxy RFC as specified in [RFC4389] still exists in Experimental form is because when the RFC was completed the RFC still required work for SEND [RFC3971] extensions. SEND came into being before the ND Proxy document, so it became a requirement for the new work in ND Proxy to support security extensions for SEND. The IETF CSI Working Group, amongst other things, was chartered to complete the SEND extensions for ND Proxy. However, the work has still not be undertaken whereas ND Proxy is to be used in environments where SEND is not used.

2. Move ND Proxy to Standards Track

The IPv6 CE Router document in draft-wbeebee-v6ops-ipv6-cpe-router-bis [I-D.wbeebee-v6ops-ipv6-cpe-router-bis] has recommended support for ND Proxy on the IPv6 CE Router. A typical IPv6 CE Router is expected to support LAN hardware ports with disparate MAC layers and ND Proxy is recommended for communicating between the ports. However, a v6ops document prefers not to recommend technology that is in Experimental form. Further, the cable broadband IPv6 standards also recommend use of ND Proxy on the cable NBMA access concentrator and the same standards do not specify use of SEND. As of 2007 at least two cable access concentrator vendors support ND Proxy. In light of such facts, this document recommends that IETF move [RFC4389] from Experimental to Standards Track status.

3. Security Considerations

If a deployment chooses to use IPv6 ND Proxy without the use of SEND, then a deployment should be allowed to do so with security at their own risks. A cable access concentrator is under the control of the Service Provider and if such a router supports ND Proxy, the security risk is limited due to an RF segment between the Service Provider and the cable modem and also the link is covered through the use of Baseline Privacy Interface security in cable standards.

4. IANA Considerations

None.
5. Acknowledgements

Thanks (in alphabetical order) to Fred Baker for his suggestion for this note.

6. References

6.1. Normative References


6.2. Informative References


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