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OSPFv3 Instance ID Registry Update
draft-ietf-ospf-ospfv3-iid-registry-update-03

Abstract

This document modifies the "Unassigned" number space in the IANA "OSPFv3 Instance ID Address Family Values" registry.

Status of This Memo

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[1. Introduction](#)

[RFC5838] defined the "OSPFv3 Instance ID Address Family Values" registry for the purpose of mapping OSPFv3 Instance IDs to different address families. The following table lists the value ranges as currently allocated.

| Instance ID Range | Description | Assignment Policy |
|---------------------------|-------------------|-------------------|
| Instance ID # 0 - # 31 | IPv6 unicast AF | Already Assigned |
| Instance ID # 32 - # 63 | IPv6 multicast AF | Already Assigned |
| Instance ID # 64 - # 95 | IPv4 unicast AF | Already Assigned |
| Instance ID # 96 - # 127 | IPv4 multicast AF | Already Assigned |
| Instance ID # 128 - # 255 | Unassigned | Standards Action |

In some networks additional OSPFv3 instances may be required to operationally identify specific applications. For example, [[I-D.ietf-ospf-ipv4-embedded-ipv6-routing](#)] describes an application in which IPv4-embedded IPv6 addresses are used to transport IPv4 packets over an IPv6 network. While the IPv4-embedded IPv6 addresses do in fact represent IPv6 destinations, it would be operationally beneficial to be able to easily identify the the specific application by having a separate space to do so.

[2. OSPFv3 Instance ID Address Family Values Registry Update](#)

The IANA "OSPFv3 Instance ID Address Family Values" registry must be updated as follows:

| Instance ID Range | Description | Assignment Policy |
|---------------------------|-------------|---------------------------------------|
| Instance ID # 128 - # 191 | Unassigned | Standards Action |
| Instance ID # 192 - # 255 | Reserved | Private Use [RFC5226] |

3. IANA Considerations

This document requests the modification of the "OSPFv3 Instance ID Address Family Values" registry as described in [Section 2](#). The reference to [\[RFC5838\]](#) should be removed from the registry for the modified ranges.

4. Security Considerations

This document modifies the assignment policy of an IANA registry defined in [\[RFC5838\]](#). It does not introduce any new security issues.

5. Acknowledgements

Many thanks to Acee Lindem, Stewart Bryant, Nevil Brownlee, Pearl Liang and Ben Campbell for their review and input.

6. References

6.1. Normative References

- [RFC5226] Narten, T. and H. Alvestrand, "Guidelines for Writing an IANA Considerations Section in RFCs", [BCP 26](#), [RFC 5226](#), May 2008.

6.2. Informative References

- [I-D.ietf-ospf-ipv4-embedded-ipv6-routing]

Cheng, D., Boucadair, M., and A. Retana, "Routing for IPv4-embedded IPv6 Packets", [draft-ietf-ospf-ipv4-embedded-ipv6-routing-10](#) (work in progress), April 2013.

[RFC5838] Lindem, A., Mirtorabi, S., Roy, A., Barnes, M., and R. Aggarwal, "Support of Address Families in OSPFv3", [RFC 5838](#), April 2010.

[Appendix A](#). Change Log

[A.1](#). Changes between the -00 and -01 versions.

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OSPFv3 Instance ID Registry Update

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- o Eliminated [rfc2119](#) keywords, section about Requirements Language and corresponding reference.
- o Updated acks.

[A.2](#). Changes between the -01 and -02 versions.

- o Added indicated that this draft updates [rfc5838](#).
- o Clarified the description of the 'Private Use' range to 'Reserved'.
- o Added the need to remove the reference to [rfc5838](#) from the updated registry fields.
- o Updated acks.

[A.3](#). Changes between the -02 and -03 versions.

- o Inserted example of the motivation.
- o Updated acks.

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