

USGv6 Test Selection Tables

Authentication Trailer OSPF for IPv6

I9-Interoperability: Routing Protocol R1v1.2

Applicable Profile: NIST SP 500-267B Revision 1 USGv6 Profile – November 2020.

Test Specification Id:

- [[OSPFv3-Interoperability](#)] OSPFv3 Interoperability Test Plan, [editor: [UNH InterOperability Laboratory](#)].

Interoperability Partner Requirements:

- Any host or router claiming compliance with the USGv6 profile MUST demonstrate evidence of interoperability with one **or more** independent implementations of IPv6. Three implementations are recommended to be used when support for RFC 7166 is more widely adopted.
- Target nodes must not change once testing has begun.

Interoperability Partners:

- DUT = TR1 for all tests.
- TAR-Router1 = Independent Implementation Device B
- TAR-Router2 = Independent Implementation Device C
- TAR-Router3 = Independent Implementation Device D
- H1 and H2 = Any devices which can execute ping6 function

OSPF for IPv6 Test Check List			
Reference	Test Specification Id	Test Number	Device Type
RFC 5340 RFC 7166	OSPFv3- Interoperability	OSPFv3.IO.6.1 Authentication Trailer with HMAC-SHA-256 (A)	Router
RFC 5340 RFC 7166	OSPFv3- Interoperability	OSPFv3.IO.6.2 Key Changes (A)(D)(G)(J)	Router
RFC 5340 RFC 7166	OSPFv3- Interoperability	OSPFv3.IO.6.3 Sequence Number Across Reboot (A)	Router

References:

- [RFC 5340] Coltun, R., Ferguson, D., Moy, J., and A. Lindem, "OSPF for IPv6", RFC 5340, DOI 10.17487/RFC5340, July 2008.
- [RFC 7166] Bhatia M., Manral V., Lindem A., "Supporting Authentication Trailer for OSPFv3", RFC 7166, DOI 10.17487/RFC7166, March 2014.

The objective of this test selection sheet is to provide a reference for available test specifications that identifies tests applicable to the USGv6 Profile.