



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
Type	FRR	FRR	FRR	FRR	FRR	FRR	FRR	FRR
Commit ID	36a7e78	30283fd	5dff4ec	7a377a1	85f25d8	c8c2427	5a80b8c	10d4945
Commit Date	2017-11-08	2017-11-08	2018-01-09	2018-03-12	2018-07-05	2018-10-08	2019-02-24	2019-03-01
ANVL-OSPFv3-1.1	RFC 5340, s2.4 p6 Explicit support for multiple instances per link							
MUST	Explicit Support for Multiple Instances per Link OSPF now supports the ability to run multiple OSPF protocol instances on a single link. (This test is for single instance of OSPFv3 daemon on a link)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFv3-2.1	RFC 5340, s2.5 p7 Use of link-local addresses							
MUST	Use of Link-Local Addresses On all OSPF interfaces except virtual links, OSPF packets are sent using the interface's associated link-local unicast address as source							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFv3-2.3	RFC 5340, s2.5 p7 Use of Link-Local Addresses							
MUST	Use of Link-Local Addresses On virtual links, a global scope IPv6 address MUST be used as the source address for OSPF protocol packets.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
MUST ANVL-OSPFV3-2.4	RFC 5340, s2.5 p7 Use of link-local addresses							
	Use of Link-Local Addresses Link-local addresses appear in OSPF Link-LSAs							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
MUST ANVL-OSPFV3-2.5	RFC 5340, s2.5 p7 Use of Link-Local Addresses							
	Use of Link-Local Addresses link-local addresses MUST NOT be advertised in inter-area-prefix-LSAs, AS-external-LSAs or intra-area-prefix-LSAs							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
MUST ANVL-OSPFV3-3.1	RFC 5340, s2.7 p8 Packet format changes							
	Packet Format Changes The OSPF version number has been incremented from 2 to 3							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
MUST ANVL-OSPFV3-3.2	RFC 5340, s2.7 p8 Packet format changes							
	Packet Format Changes The Hello packet now contains no address information at all. Rather, it now includes an Interface ID that the originating router has assigned to uniquely identify (among its own interfaces) its interface to the link							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-3.3	RFC 5340, s2.7 p8 Packet format changes							
MUST	Packet Format Changes This Interface ID will be used as the network-LSA's Link State ID if the router becomes the Designated Router on the link.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-3.4	RFC 5340, s2.7 p8 Packet format changes							
MUST	Packet Format Changes If the R-bit is clear, an OSPF speaker can participate in OSPF topology distribution without being used to forward transit traffic; this can be used in multi-homed hosts that want to participate in the routing protocol							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-3.5	RFC 5340 s2.9 p10 Handling Unknown LSA Types RFC 5340 sA.4.2.1 p72 LS type							
MUST	Packet Format Changes Handling of unknown LSA types has been made more flexible so that, based on LS type, unknown LSA types are either treated as having link-local flooding scope, or are stored and flooded as if they were understood 0 Treat the LSA as if it had link-local flooding scope (Test for Link-local flooding scope)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-3.6	RFC 5340 s2.9 p10 Handling Unknown LSA Types RFC 5340 sA.4.2.1 p72 LS type							
MUST	<p>Packet Format Changes</p> <p>Handling of unknown LSA types has been made more flexible so that, based on LS type, unknown LSA types are either treated as having link-local flooding scope, or are stored and flooded as if they were understood</p> <p>1 Store and flood the LSA, as if type understood (Test for Area-flooding scope)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-4.1	RFC 5340 s3.4 p12 Stub Area Unknown LSA Flooding Restriction Deprecated RFC 5340 sA.4.2.1 p72 LS type							
MUST	<p>Handling Unknown LSA Types</p> <p>an LSA whose LS type is unrecognized may only be flooded into/throughout a stub area if both a) the LSA has area or link-local flooding scope and b) the LSA has U-bit set to 0</p> <p>0 Treat the LSA as if it had link-local flooding scope (Test for Link-local flooding scope)</p>							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-4.2	RFC 5340 s3.4 p12 Stub Area Unknown LSA Flooding Restriction Deprecated RFC 5340, s4.5.2 p42 Sending Link State Update packets RFC 5340 sA.4.2.1 p72 LS type							
MUST	<p>Handling Unknown LSA Types</p> <p>an LSA whose LS type is unrecognized may only be flooded into/throughout a stub area if both a) the LSA has area or link-local flooding scope and b) the LSA has U-bit set to 0</p> <p>Case 2</p> <p>The LS type is unrecognized and the U-bit in the LS Type is set to 0 (treat the LSA as if it had link-local flooding scope). In this case there is a single eligible interface, namely, the interface on which the LSA was received.</p> <p>0 Treat the LSA as if it had link-local flooding scope (This test is for Area-flooding scope)</p>							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-6.1	RFC 5340, s4 p13 Implementation details RFC 2328, s4 p40 Functional Summary							
MUST	Implementation Details The router sends Hello packets to its neighbors, and in turn receives their Hello packets.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-6.2	RFC 5340, s4 p13 Implementation details RFC 2328, s4 p40 Functional Summary							
MUST	Implementation Details On broadcast networks, the router dynamically detects its neighboring routers by sending its Hello packets to the multicast							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-6.4	RFC 5340, s4 p13 Implementation details RFC 2328, s4 p40 Functional Summary							
MUST	Implementation Details Link state is also advertised when a router's state changes.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-6.5	RFC 5340, s4 p13 Implementation details RFC 2328, s4.3 p43 Routing protocol packets							
MUST	Implementation Details Each LSA is tagged with the ID of the originating router and a checksum of its link state contents. (This test is for Link-LSA)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-6.6	RFC 5340, s4 p13 Implementation details RFC 2328, s4.3 p43 Routing protocol packets							
MUST	Implementation Details Each LSA is tagged with the ID of the originating router and a checksum of its link state contents. (This test is for Network-LSA)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-6.7	RFC 5340, s4 p13 Implementation details RFC 2328, s4.3 p43 Routing protocol packets							
MUST	Implementation Details Each LSA is tagged with the ID of the originating router and a checksum of its link state contents. (This test is for Inter-Area-Prefix-LSA)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-6.8	RFC 5340, s4 p13 Implementation details RFC 2328, s7.1 p52 The Hello Protocol							
MUST	Implementation Details Bidirectional communication is indicated when the router sees itself listed in the neighbor's Hello Packet							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-6.9	RFC 5340, s4 p13 Implementation details RFC 2328, s7.1 p52 The Hello Protocol							
MUST	Implementation Details On broadcast netPrefixes, each router advertises itself by multicasting Hello Packets (In IPv6, broadcasting has been incorporated into multicating capability.)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-6.10	RFC 5340, s4 p13 Implementation details RFC 2328, s7.1 p52 The Hello Protocol							
MUST	Implementation Details On broadcast netPrefixes, each router advertises itself by periodically multicasting Hello Packets (In IPv6, broadcasting has been incorporated into multicating capability.)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-6.11	RFC 5340, s4 p13 Implementation details RFC 2328, s7.2 p53 The Synchronization of Databases							
MUST	Implementation Details Each router describes its database by sending a sequence of Database Description packets to its neighbor. (This is an indirect test which verifies that the DUT recognizes the LSA headers contained in the Database Description packets received from ANVL.)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-6.12	RFC 5340, s4 p13 Implementation details RFC 2328, s7.2 p53 The Synchronization of Databases							
MUST	Implementation Details When the neighbor sees an LSA that is more recent than its own database copy, it makes a note that this newer LSA should be requested.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-6.13	RFC 5340, s4 p13 Implementation details RFC 2328, s7.2 p53 The Synchronization of Databases							
MUST	Implementation Details When the neighbor sees an LSA that is more recent than its own database copy, it does make a note that this LSA (which is newer) should be requested. (This is a negative test)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-6.14	RFC 5340, s4 p13 Implementation details RFC 2328, s7.2 p53 The Synchronization of Databases							
MUST	Implementation Details Database Description Packets sent by the master (polls) are acknowledged by the slave through echoing of the sequence number							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
MUST ANVL-OSPFV3-6.15	NEGATIVE RFC 5340, s4 p13 Implementation details RFC 2328, s7.2 p53 The Synchronization of Databases							
	Implementation Details Database Description Packets sent by the master (polls) are acknowledged by the slave through echoing of the sequence number							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
MUST ANVL-OSPFV3-6.16	RFC 5340, s4 p13 Implementation details RFC 2328, s7.2 p54 The Synchronization of Databases							
	Implementation Details The master is the only one allowed to retransmit Database Description Packets							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
MUST ANVL-OSPFV3-6.17	NEGATIVE RFC 5340, s4 p13 Implementation details RFC 2328, s7.2 p54 The Synchronization of Databases							
	Implementation Details The master is the only one allowed to retransmit Database Description Packets							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-6.18	RFC 5340, s4 p13 Implementation details RFC 2328, s7.2 p54 The Synchronization of Databases							
MUST	Implementation Details Each Database Description contains an indication that there are more packets to follow --- the M-bit field.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-6.19	RFC 5340, s4 p13 Implementation details RFC 2328, s7.2 p54 The Synchronization of Databases							
MUST	Implementation Details Database Exchange Process is over when a router has received and sent Database Description Packets with the M-bit off							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-6.20	NEGATIVE RFC 5340, s4 p13 Implementation details RFC 2328, s7.2 p54 The Synchronization of Databases							
MUST	Implementation Details Database Exchange Process is over when a router has received and sent Database Description Packets with the M-bit off							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-6.21	RFC 5340, s4 p13 Implementation details RFC 2328, s7.3 p54 The Designated Router							
MUST	Implementation Details The Designated Router originates a network-LSA on behalf of the network.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-6.22	RFC 5340, s4 p13 Implementation details RFC 2328, s7.3 p54 The Designated Router							
MUST	Implementation Details If a router is the DR, it does generate a network-LSA for the network. (This test is with DUT as BDR.)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-6.23	RFC 5340, s4 p13 Implementation details RFC 2328, s7.3 p54 The Designated Router							
MUST	Implementation Details If a router is the DR, it does generate a network-LSA for the network. (This test is with DUT as DR-Other)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-6.24	RFC 5340, s4 p13 Implementation details RFC 2328, s7.4 p56 The Backup Designated Router							
MUST	Implementation Details Backup Designated Router becomes Designated Router when the previous Designated Router fails.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-6.25	RFC 5340, s4 p13 Implementation details RFC 2328, s7.4 p56 The Backup Designated Router							
MUST	Implementation Details Each Hello Packet has a field that specifies the Backup Designated Router for the network.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-6.28	RFC 5340, s4 p13 Implementation details RFC 2328, s9.1 p69 Interface states							
MUST	Implementation Details In DR Other state, the router itself has not been selected Backup Designated Router either. The router forms adjacencies to both the Designated Router and the Backup Designated Router (if they exist).							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-6.29	RFC 5340, s4 p13 Implementation details RFC 2328, s9.1 p69 Interface states							
MUST	Implementation Details In Backup state the router establishes adjacencies to all other routers attached to the network.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-6.30	RFC 5340, s4 p13 Implementation details RFC 2328, s9.1 p69 Interface states							
MUST	Implementation Details In DR state Adjacencies are established to all other routers attached to the network.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-6.31	RFC 5340, s4 p13 Implementation details RFC 2328, s9.3 p73 The Interface state machine							
MUST	Implementation Details When router is in Waiting state, if BackupSeen event occurs then router calculates the attached network's Backup Designated Router and Designated Router							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-6.32	RFC 5340, s4 p13 Implementation details RFC 2328, s9.3 p73 The Interface state machine							
MUST	Implementation Details When router is in Waiting state, if WaitTimer event fires then router calculates the attached network's Backup Designated Router and Designated Router							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: unpredict	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-7.1	RFC 5340, s4 p13 Implementation details RFC 2328, s9.3 p74 The Interface state machine							
MUST	More Implementation Details When NbrChange event fires then router recalculates the attached network's Backup Designated Router and Designated Router							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-7.2	RFC 5340, s4 p13 Implementation details RFC 2328, s9.3 p74 The Interface state machine							
MUST	More Implementation Details When NbrChange event fires then router recalculates the attached network's Backup Designated Router and Designated Router							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-7.3	RFC 5340, s4 p13 Implementation details RFC 2328, s9.4 p75 Electing the Designated Router							
MUST	More Implementation Details If more than one routers have declared themselves as Backup designated but not as Designated Router, the one having the highest Router Priority is declared to be Backup Designated Router.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-7.4	RFC 5340, s4 p13 Implementation details RFC 2328, s9.4 p75 Electing the Designated Router							
MUST	More Implementation Details When selecting a Backup Designated Router among more than one Routers declaring themselves as Backup Designated Router, if there is a tie in the Router Priority, the one having highest Router ID is chosen.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-7.5	RFC 5340, s4 p13 Implementation details RFC 2328, s9.4 p76 Electing the Designated Router							
MUST	More Implementation Details If no routers have declared themselves Backup Designated Router, choose the router having highest Router Priority as Backup Designated Router.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-7.6	RFC 5340, s4 p13 Implementation details RFC 2328, s9.4 p76 Electing the Designated Router							
MUST	More Implementation Details If no routers have declared themselves Backup Designated Router, choose the router having highest Router Priority, again use the Router ID to break ties. (Verify that Router ID is used to break Ties).							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-7.7	RFC 5340, s4 p13 Implementation details RFC 2328, s9.4 p76 Electing the Designated Router							
MUST	More Implementation Details If one or more of the routers have declared themselves Designated Router the one having highest Router Priority is declared to be Designated							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-7.8	RFC 5340, s4 p13 Implementation details RFC 2328, s9.4 p76 Electing the Designated Router							
MUST	More Implementation Details In case of a tie in the router priority among routers declaring themselves Designated Router, the one having the highest Router ID is chosen. (DUT loose the DR election)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-7.9	RFC 5340, s4 p13 Implementation details RFC 2328, s9.4 p76 Electing the Designated Router							
MUST	More Implementation Details In case of a tie in the router priority among routers declaring themselves Designated Router, the one having the highest Router ID is chosen. (DUT wins the DR election)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0																								
ANVL-OSPFV3-7.10	RFC 5340, s4 p13 Implementation details RFC 2328, s9.4 p76 Electing the Designated Router																															
MUST	<p>More Implementation Details If no routers have declared themselves Designated Router, assign the Designated Router to be the same as the newly elected Backup Designated Router.</p> <table border="1"> <tr> <td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: untested</td><td>FreeBSD 10.3: untested</td></tr> <tr> <td>Ubuntu 16.04: pass</td><td>Ubuntu 16.04: pass</td></tr> <tr> <td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: pass</td><td>FreeBSD 12.0: pass</td></tr> </table>								FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested	Ubuntu 16.04: pass	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass																	
FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested																									
Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass																									
FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass																									
ANVL-OSPFV3-7.11	RFC 5340, s4 p13 Implementation details RFC 2328, s10.1 p83 neighbor states																															
MUST	<p>More Implementation Details After the two routers discover their master/slave status, the state transitions to Exchange. (This test checks the case when DUT eventually becomes master)</p> <table border="1"> <tr> <td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: untested</td><td>FreeBSD 10.3: untested</td></tr> <tr> <td>Ubuntu 16.04: pass</td><td>Ubuntu 16.04: pass</td></tr> <tr> <td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: pass</td><td>FreeBSD 12.0: pass</td></tr> </table>								FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested	Ubuntu 16.04: pass	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass																	
FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested																									
Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass																									
FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass																									
ANVL-OSPFV3-7.12	RFC 5340, s4 p13 Implementation details RFC 2328, s10.1 p83 neighbor states																															
MUST	<p>More Implementation Details After the two routers discover their master/slave status, the state transitions to Exchange. (This test checks the case when DUT eventually becomes slave)</p> <table border="1"> <tr> <td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: untested</td><td>FreeBSD 10.3: untested</td></tr> <tr> <td>Ubuntu 16.04: pass</td><td>Ubuntu 16.04: pass</td></tr> <tr> <td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: pass</td><td>FreeBSD 12.0: pass</td></tr> </table>								FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested	Ubuntu 16.04: pass	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass																	
FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested																									
Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass																									
FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass																									



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-7.13	RFC 5340, s4 p13 Implementation details RFC 2328, s10.1 p86 neighbor states							
MUST	<p>More Implementation Details Only one Database Description Packet is allowed outstanding at any one time. (So when a router is slave it will always send a Database Description packet with the DD sequence number same as that of the Database Description packet received from master.)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-7.14	RFC 5340, s4 p13 Implementation details RFC 2328, s10.1 p86 neighbor states							
MUST	<p>More Implementation Details Only one Database Description Packet is allowed outstanding at any one time. (So when a router is master it will retransmit a Database Description packet unless slave sends a Database Description packet echoing the DD sequence number of the last sent Database Description packet.)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-7.17	RFC 5340, s4 p13 Implementation details RFC 2328, s10.3 p91 The neighbor state machine							
MUST	<p>More Implementation Details AS-external-LSAs are omitted from the Database summary list if the area has been configured as a stub area.</p>							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
MUST ANVL-OSPFV3-7.18	NEGATIVE RFC 5340, s4 p13 Implementation details RFC 2328, s10.3 p91 The neighbor state machine							
	More Implementation Details AS-external-LSAs are omitted from the Database summary list if the area has been configured as a stub area.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
MUST ANVL-OSPFV3-7.19	RFC 5340, s4 p13 Implementation details RFC 2328, s10.3 p92 The neighbor state machine							
	More Implementation Details When in Exchange state if ExchangeDone event has fired then if the neighbor Link state request list is not empty, router transitions to Loading state and starts (or continues) sending Link State Request packets to the neighbor.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
MUST ANVL-OSPFV3-7.20	RFC 5340, s4 p13 Implementation details RFC 2328, s10.3 p93 The neighbor state machine							
	More Implementation Details If the router is in Exchange or greater state and the neighbor event SeqNumberMismatch has occurred then the router increments the DD sequence number in the neighbor data structure.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-7.21	RFC 5340, s4 p13 Implementation details RFC 2328, s10.3 p93 The neighbor state machine							
MUST	<p>More Implementation Details If the router is in Exchange or greater state and the neighbor event SeqNumberMismatch has occurred then the router increments the DD sequence number in the neighbor data structure. This test is for Loading State.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-7.22	RFC 5340, s4 p13 Implementation details RFC 2328, s10.3 p94 The neighbor state machine							
MUST	<p>More Implementation Details The action for event BadLSReq is exactly the same as for the neighbor event SeqNumberMismatch. The (possibly partially formed) adjacency is torn down, and then an attempt is made at reestablishment. This test is for Exchange State.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-7.23	RFC 5340, s4 p13 Implementation details RFC 2328, s10.3 p94 The neighbor state machine							
MUST	<p>More Implementation Details The action for event BadLSReq is exactly the same as for the neighbor event SeqNumberMismatch. The (possibly partially formed) adjacency is torn down, and then an attempt is made at reestablishment. This test is for Loading State.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-7.24	RFC 5340, s4 p13 Implementation details RFC 2328, s10.4 p95 Whether to become adjacent							
MUST	More Implementation Details On broadcast, all routers become adjacent to both the Designated Router and the Backup Designated Router.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-8.1	RFC 5340, s4.1.2 p15 The Interface Data structure RFC 2328, s9 p66 The Interface Data Structure							
MUST	The Interface Data Structure The Designated Router is initialized to 0.0.0.0, which indicates the lack of a Designated Router.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-8.2	RFC 5340, s4.1.2 p15 The Interface Data structure RFC 2328, s9 p66 The Interface Data Structure							
MUST	The Interface Data Structure The Backup Designated Router is initialized to 0.0.0.0, indicating the lack of a Backup Designated Router							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-8.3	RFC 5340, s4.1.2 p15 The Interface Data structure RFC 2328, s9 p66 The Interface Data Structure							
MUST	<p>The Interface Data Structure RxmtInterval is the number of seconds between Database Description packet retransmissions. This tests for Database Description packet retransmission in ExStart state.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-8.4	RFC 5340, s4.1.2 p15 The Interface Data structure RFC 2328, s9 p66 The Interface Data Structure							
MUST	<p>The Interface Data Structure RxmtInterval is the number of seconds between Link State Request packet retransmissions. This tests for Database Description packet retransmission in Loading state.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-8.5	RFC 5340, s4.1.2 p15 The Interface Data structure RFC 2328, s9 p66 The Interface Data Structure							
MUST	<p>The Interface Data Structure RxmtInterval is the number of seconds between LSA retransmissions, for adjacencies belonging to this interface.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-8.6	RFC 5340, s4.1.2 p15 The Interface Data structure							
MUST	<p>The Interface Data Structure</p> <p>The Interface ID appears in Hello packets sent out the interface, the link-local-LSA originated by router for the attached link</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-8.7	RFC 5340, s4.1.2 p15 The Interface Data structure							
MUST	<p>The Interface Data Structure</p> <p>The Interface ID appears in Hello packets sent out the interface, the router-LSA originated by the router-LSA for the associated area</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-8.8	RFC 5340, s4.1.2 p16 The Interface Data structure							
MUST	<p>The Interface Data Structure</p> <p>A list of IPv6 prefixes can be configured for the attached link. These will be advertised by the router in link-LSAs</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-8.9	RFC 5340, s4.1.2 p16 The Interface Data structure							
MUST	<p>The Interface Data Structure</p> <p>A list of IPv6 prefixes can be configured for the attached link. These will be advertised by the router in link-LSAs, so that they can be advertised by the link's Designated Router in intra-area-prefix-LSAs.</p> <p>(Verify that DR sends intra-area-prefix-LSA).</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-9.2	RFC 5340, s4.1.3 p17 The Neighbor Data Structure							
MUST	<p>The Neighbor Data Structure</p> <p>The neighbor's choice of Designated Router is now encoded as a Router ID, instead of as an IP address</p> <p>(The test is for Designated Router)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-9.3	RFC 5340, s4.1.3 p17 The Neighbor Data Structure							
MUST	<p>The Neighbor Data Structure</p> <p>The neighbor's choice of Designated Router is now encoded as a Router ID, instead of as an IP address</p> <p>(The test is for Backup Designated Router)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-10.1	RFC 5340, s4.2 p17 Protocol Packet Processing							
MUST	<p>Protocol Packet Processing</p> <p>The Next Header field of the immediately encapsulating IPv6 header set to the value 89.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-11.1	RFC 5340, s4.2.1 p18 Sending protocol packets							
MUST	<p>Sending Protocol Packets</p> <p>Packet length</p> <p>The length of the entire OSPF packet in bytes, including the standard OSPF packet header</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-11.2	NEGATIVE RFC 5340, s4.2.1 p18 Sending protocol packets							
MUST	Sending Protocol Packets Packet length The length of the entire OSPF packet in bytes, including the standard OSPF packet header							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-11.3	RFC 5340, s4.2.1 p18 Sending protocol packets							
MUST	Sending Protocol Packets Instance ID The OSPF instance ID associated with the interface out of which the packet is being sent							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-11.4	RFC 5340, s4.2.1 p18 Sending protocol packets							
MUST	Sending Protocol Packets Checksum The standard IPv6 Upper-Layer checksum covering the entire OSPF packet and prepended IPv6 pseudo-header.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-11.5	NEGATIVE RFC 5340, s4.2.1 p18 Sending protocol packets							
MUST	Sending Protocol Packets Checksum The standard IPv6 Upper-Layer checksum covering the entire OSPF packet and prepended IPv6 pseudo-header.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-11.6	RFC 5340, s4.2.1 p18 Sending protocol packets RFC 2328, s8.1 p59 Sending protocol packets							
MUST	Sending Protocol Packets In OSPF protocol packet headers Router ID is set to the identity of the router itself (who is originating the packet).							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-11.7	RFC 5340, s4.2.1 p18 Sending protocol packets RFC 2328, s8.1 p59 Sending protocol packets							
MUST	Sending Protocol Packets Area ID in the OSPF packet header must be set to the ID of the area that the packet is being sent into. (This test checks Hello packet)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-11.9	RFC 5340, s4.2.1 p18 Sending protocol packets RFC 2328, s8.1 p60 Sending protocol packets							
MUST	Sending Protocol Packets Retransmissions of Link State Update packets are ALWAYS sent directly to the neighbor.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-11.10	RFC 5340, s4.2.1 p18 Sending protocol packets RFC 2328, s10.9 p105 Sending Link State Request Packets							
MUST	Sending Protocol Packets When the neighbor responds to these requests (Link State Request) with the proper Link State Update packet(s), the Link state request list is truncated and a new Link State Request packet is sent. This process continues until the Link state request list becomes empty.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-11.11	RFC 5340, s4.2.1 p18 Sending protocol packets RFC 2328, s10.9 p105 Sending Link State Request Packets							
MUST	Sending Protocol Packets Link state request list that have been requested, but not yet received, are packaged into Link State Request packets for retransmission at intervals of RxmtInterval.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-11.12 MUST	RFC 5340, s4.2.1 p18 Sending protocol packets RFC 2328, s13.5 p152-153 Sending Link State Acknowledgment packets							
	Sending Protocol Packets If the new LSA has been flooded back out receiving interface no acknowledgment is sent.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
ANVL-OSPFV3-11.13 MUST	RFC 5340, s4.2.1 p18 Sending protocol packets RFC 2328, s13.5 p152-153 Sending Link State Acknowledgment packets							
	Sending Protocol Packets If the new LSA is more recent than database copy, but was not flooded back out receiving interface and if the router is in state Backup then delayed acknowledgment is sent if advertisement is received from Designated Router, otherwise nothing is done.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: unpredict	FreeBSD 10.3: untested	FreeBSD 10.3: untested
ANVL-OSPFV3-11.14 MUST	RFC 5340, s4.2.1 p18 Sending protocol packets RFC 2328, s13.5 p152-153 Sending Link State Acknowledgment packets							
	Sending Protocol Packets If the new LSA is more recent than database copy, but was not flooded back out receiving interface and if the receiving router is not in state Backup then delayed acknowledgment is sent. (This test checks the case when router state is DR Other)							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: unpredict	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: unpredict	Ubuntu 16.04: FAIL	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: unpredict	FreeBSD 12.0: unpredict



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-11.15	RFC 5340, s4.2.1 p18 Sending protocol packets RFC 2328, s13.5 p152-153 Sending Link State Acknowledgment packets							
MUST	Sending Protocol Packets If the new LSA is more recent than database copy, but was not flooded back out receiving interface and if the receiving router is not in state Backup then delayed acknowledgment is sent. (This test checks the case when router state is DR)							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: unpredict	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: pass	Ubuntu 16.04: unpredict	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-11.16	RFC 5340, s4.2.1 p18 Sending protocol packets RFC 2328, s13.5 p152-153 Sending Link State Acknowledgment packets							
MUST	Sending Protocol Packets If the new LSA is a duplicate, and was treated as implied acknowledgment and if the receiving router is in state Backup then delayed acknowledgment is sent if advertisement is received from Designated Router, otherwise nothing is done.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-11.17	RFC 5340, s4.2.1 p18 Sending protocol packets RFC 2328, s13.5 p152-153 Sending Link State Acknowledgment packets							
MUST	Sending Protocol Packets If the new LSA is a duplicate, and was treated as implied acknowledgment and if the receiving router is not in state Backup then no acknowledgment is sent. (This test checks the case when router state is DR Other)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-11.18	RFC 5340, s4.2.1 p18 Sending protocol packets RFC 2328, s13.5 p152-153 Sending Link State Acknowledgment packets							
MUST	Sending Protocol Packets If the new LSA is a duplicate, and was treated as implied acknowledgment and if the receiving router is not in state Backup then no acknowledgment is sent. (This test checks the case when router state is DR)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-11.19	RFC 5340, s4.2.1 p18 Sending protocol packets RFC 2328, s13.5 p152-153 Sending Link State Acknowledgment packets							
MUST	Sending Protocol Packets If the new LSA is a duplicate, and was not treated as implied acknowledgment and if the receiving router is in state Backup then direct acknowledgment is sent.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-11.20	RFC 5340, s4.2.1 p18 Sending protocol packets RFC 2328, s13.5 p152-153 Sending Link State Acknowledgment packets							
MUST	Sending Protocol Packets If the new LSA is a duplicate, and was not treated as implied acknowledgment and if the receiving router is not in state Backup then direct acknowledgment is sent.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-12.1	RFC 5340, s4.2.1.1 p18 Sending Hello packets RFC 2328, s9.5 p78 Sending Hello packets							
MUST	Sending Hello Packets The Hello Packet also indicates how often a neighbor must be heard from to remain active (RouterDeadInterval)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-12.2	RFC 5340, s4.2.1.1 p18 Sending Hello packets RFC 2328, s9.5 p78 Sending Hello packets							
SHOULD	Sending Hello Packets While sending a Hello packet into a stub area the E-bit of the Options field should be clear.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-12.3	NEGATIVE RFC 5340, s4.2.1.1 p18 Sending Hello packets RFC 2328, s9.5 p78 Sending Hello packets							
SHOULD	Sending Hello Packets While sending a Hello packet into a stub area the E-bit of the Options field should be clear.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-12.4	RFC 5340, s4.2.1.1 p18 Sending Hello packets RFC 2328, s9.5 p78 Sending Hello packets							
SHOULD	Sending Hello Packets While sending a Hello packet into a non-stub area the E-bit of the Options field should be set.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-12.5	RFC 5340, s4.2.1.1 p18 Sending Hello packets RFC 2328, s9.5 p78 Sending Hello packets							
MUST	<p>Sending Hello Packets</p> <p>In order to ensure two-way communication between adjacent routers, the Hello packet contains the list of all routers on the network from which Hello Packets have been seen recently.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-12.6	RFC 5340, s4.2.1.1 p18 Sending Hello packets RFC 2328, s9.5 p78 Sending Hello packets							
MUST	<p>Sending Hello Packets</p> <p>Hello packet also contains the router's current choice for Designated Router and Backup Designated Router.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-12.7	RFC 5340, s4.2.1.1 p18 Sending Hello packets RFC 2328, s9.5 p78 Sending Hello packets							
MUST	<p>Sending Hello Packets</p> <p>On broadcast networks, Hello packets are sent to the IP multicast address AllSPFRouters.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-12.8	RFC 5340, s4.2.1.1 p18 Sending Hello packets RFC 2328, s9.5 p78 Sending Hello packets							
MUST	Sending Hello Packets On broadcast networks, Hello packets are sent every HelloInterval seconds.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-12.11	RFC 5340, s4.2.1.1 p18 Sending Hello packets RFC 2328, s9.5 p78 Sending Hello packets							
MUST	Sending Hello Packets On virtual links, Hello packets are sent as unicasts (addressed directly) to the other end of the virtual link							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-12.12	RFC 5340, s4.2.1.1 p18 Sending Hello packets RFC 2328, s9.5 p78 Sending Hello packets							
MUST	Sending Hello Packets On virtual links, Hello packets are sent every HelloInterval seconds.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-12.13	NEGATIVE RFC 5340, s4.2.1.1 p19 Sending Hello packets							
MUST	Sending Hello Packets the N-bit is set if and only if the interface attaches to an NSSA area							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-13.1	RFC 5340, s4.2.1.2 p19 Sending Database Description Packets RFC 2328, s10.8 p103 Sending Database Description Packets							
SHOULD	Sending Database Description Packets Interface MTU should be set to 0 in Database Description packets sent over virtual links.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-13.2	RFC 5340, s4.2.1.2 p19 Sending Database Description Packets RFC 2328, s10.8 p103 Sending Database Description Packets							
SHOULD	Sending Database Description Packets In Database Description packet the unrecognized bits in the Options field should be set to zero.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-13.3	RFC 5340, s4.2.1.2 p19 Sending Database Description Packets RFC 2328, s10.8 p103 Sending Database Description Packets							
MUST	Sending Database Description Packets In state ExStart the router sends empty Database Description packets, with the initialize (I), more (M) and master (MS) bits set.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-13.4	RFC 5340, s4.2.1.2 p19 Sending Database Description Packets RFC 2328, s10.8 p103 Sending Database Description Packets							
MUST	Sending Database Description Packets In state ExStart Database Description packets are retransmitted every RxmtInterval seconds.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-13.5	RFC 5340, s4.2.1.2 p19 Sending Database Description Packets RFC 2328, s10.8 p104 Sending Database Description Packets							
MUST	Sending Database Description Packets In state Exchange, if the router is master, Database Description packets are sent when slave acknowledges the previous Database Description packet by echoing the DD sequence number.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-13.6	RFC 5340, s4.2.1.2 p19 Sending Database Description Packets RFC 2328, s10.8 p104 Sending Database Description Packets							
MUST	Sending Database Description Packets In state Exchange, if the router is slave, Database Description packets are sent only in response to Database Description packets received from the master.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-13.7	RFC 5340, s4.2.1.2 p19 Sending Database Description Packets RFC 2328, s10.8 p104 Sending Database Description Packets							
MUST	Sending Database Description Packets In state Exchange, if the router is slave, if the Database Description packet received from the master is new, a new Database Description packet is sent, otherwise the previous Database Description packet is resent.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-13.8	RFC 5340, s4.2.1.2 p19 Sending Database Description Packets RFC 2328, s10.8 p104 Sending Database Description Packets							
MUST	Sending Database Description Packets In state Loading the slave must resend its last Database Description packet in response to duplicate Database Description packets received from the master.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-13.9	RFC 5340, s4.2.1.2 p19 Sending Database Description Packets RFC 2328, s10.8 p104 Sending Database Description Packets							
MUST	Sending Database Description Packets In state Full the slave must resend its last Database Description packet in response to duplicate Database Description packets received from the master.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-13.10	RFC 5340, s4.2.1.2 p19 Sending Database Description Packets RFC 2328, s10.8 p104 Sending Database Description Packets							
MUST	Sending Database Description Packets In state Loading reception of a Database Description packet from the master after this interval (RouterDeadInterval) will generate a SeqNumberMismatch neighbor event.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-13.11	RFC 5340, s4.2.1.2 p19 Sending Database Description Packets RFC 2328, s10.8 p104 Sending Database Description Packets							
MUST	Sending Database Description Packets In state Full reception of a Database Description packet "from the master after this interval (RouterDeadInterval)" will generate a SeqNumberMismatch neighbor event.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-14.1	RFC 5340, s4.2.2 p20 Receiving protocol packets							
SHOULD	Receiving Protocol Packets The fields specified in the header must match those configured for the receiving OSPFv3 interface. If they do not, the packet should be discarded: o The version number field must specify protocol version 3							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-14.2	RFC 5340, s4.2.2 p20 Receiving protocol packets							
SHOULD	Receiving Protocol Packets The fields specified ... for the receiving interface. If they do not, the packet should be discarded: The IPv6 Upper-Layer checksum, covering the entire OSPF packet and prepended IPv6 pseudo-header, must be verified							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-14.3	RFC 5340, s4.2.2 p20 Receiving Protocol Packets							
SHOULD	Receiving Protocol Packets The fields specified ... for the receiving interface. If they do not, the packet should be discarded: o The Area ID and Instance ID found in the OSPF header must be verified.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-14.4	RFC 5340, s4.2.2 p21 Receiving protocol packets							
SHOULD	Receiving Protocol Packets The fields specified ... for the receiving interface. If they do not, the packet should be discarded: o Packets whose IPv6 destination is AllDRouters should only be accepted if the state of the receiving OSPFv3 interface is DR or Backup							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-14.5	RFC 5340, s4.2.2 p21 Receiving protocol packets RFC 2328, s10.6 p100 Receiving Database Description Packets							
MUST	Receiving Protocol Packets In ExStart state if the received Database Description packet has the I, M and MS-bit fields set, the packet is empty, and the neighbor's Router ID is larger than the router's own then the router is slave, and it sets the neighbor data structure's DD sequence number to that specified by master.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-14.6	RFC 5340, s4.2.2 p21 Receiving protocol packets RFC 2328, s10.6 p100 Receiving Database Description Packets							
MUST	<p>Receiving Protocol Packets</p> <p>In ExStart state if the received Database Description packet has the I and MS-bit fields off, the packet's DD sequence number equals the neighbor data structure's DD sequence number and the neighbor's Router ID is smaller than the router's own then the router is Master.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-14.7	RFC 5340, s4.2.2 p21 Receiving protocol packets RFC 2328, s10.6 p102 Receiving Database Description Packets							
SHOULD	<p>Receiving Protocol Packets</p> <p>When the router accepts a received Database Description Packet as the next in sequence, if the router is master and the accepted packet has more bit (M) set to 1, it should send a new Database Description to the slave.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-14.8	RFC 5340, s4.2.2 p21 Receiving protocol packets RFC 2328, s10.6 p102 Receiving Database Description Packets							
SHOULD	<p>Receiving Protocol Packets</p> <p>When the router accepts a received Database Description Packet as the next in sequence, if the router is master and the router has not sent its entire sequence of Database Description packets, it should send a new Database Description to the slave.(This test is for DUT as Master)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-14.9	RFC 5340, s4.2.2 p21 Receiving protocol packets RFC 2328, s10.6 p102 Receiving Database Description Packets							
MUST	<p>Receiving Protocol Packets</p> <p>When the router accepts a received Database Description Packet as the next in sequence, if the router is master it increments the DD sequence number in the neighbor data structure.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-14.10	RFC 5340, s4.2.2 p21 Receiving protocol packets RFC 2328, s10.6 p102 Receiving Database Description Packets							
MUST	<p>Receiving Protocol Packets</p> <p>When the router accepts a received Database Description Packet as the next in sequence, if the router is slave, it sets the DD sequence number in the neighbor data structure to the DD sequence number appearing in the received packet and also it must send a Database Description packet in response.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-14.11	RFC 5340, s4.2.2 p21 Receiving protocol packets RFC 2328, s10.7 p102 Receiving Link State Request Packets							
SHOULD	<p>Receiving Protocol Packets</p> <p>Link State Request Packets should be accepted when the neighbor is in state Exchange.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-14.12	RFC 5340, s4.2.2 p21 Receiving protocol packets RFC 2328, s10.7 p102 Receiving Link State Request Packets							
SHOULD	Receiving Protocol Packets Link State Request Packets should be accepted when the neighbor is in state Loading.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-14.13	RFC 5340, s4.2.2 p21 Receiving protocol packets RFC 2328, s10.7 p102 Receiving Link State Request Packets							
SHOULD	Receiving Protocol Packets Link State Request Packets should be accepted when the neighbor is in state Full.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-14.14	RFC 5340, s4.2.2 p21 Receiving protocol packets RFC 2328, s10.7 p102 Receiving Link State Request Packets							
SHOULD	Receiving Protocol Packets Link State Request Packets should be ignored when neighbor is in ExStart state.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-14.15	RFC 5340, s4.2.2 p21 Receiving protocol packets RFC 2328, s10.7 p102 Receiving Link State Request Packets							
SHOULD	Receiving Protocol Packets Link State Request Packets should be ignored when neighbor is in Init state.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-14.16	RFC 5340, s4.2.2 p21 Receiving protocol packets RFC 2328, s10.7 p102 Receiving Link State Request Packets							
SHOULD	Receiving Protocol Packets Link State Request Packets should be ignored when neighbor is in Down state.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-14.17	RFC 5340, s4.2.2 p21 Receiving protocol packets RFC 2328, s10.7 p103 Receiving Link State Request Packets							
SHOULD	Receiving Protocol Packets If an LSA specified in the Link State Request packet cannot be found in the database, something has gone wrong with the Database Exchange process, and neighbor event BadLSReq should be generated.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-14.18	RFC 5340, s4.2.2 p21 Receiving protocol packets RFC 2328, s13.7 p156 Receiving link state acknowledgments							
MUST	Receiving Protocol Packets If the acknowledgment is for the same instance that is contained on the Link state retransmission list, remove the item from the list.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-15.1	RFC 5340, s4.2.2.1 p21 Receiving Hello packets RFC 2328, s10.5 p96 Receiving Hello Packets							
MUST	<p>Receiving Hello Packets</p> <p>The values of the HelloInterval field in the received Hello packet must be checked against the values configured for the receiving interface. Any mismatch causes processing to stop and the packet to be dropped.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-15.2	RFC 5340, s4.2.2.1 p21 Receiving Hello packets RFC 2328, s10.5 p96 Receiving Hello Packets							
MUST	<p>Receiving Hello Packets</p> <p>The values of the RouterDeadInterval fields in the received Hello packet must be checked against the values configured for the receiving interface. Any mismatch causes processing to stop and the packet to be dropped.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-15.3	RFC 5340, s4.2.2.1 p21 Receiving Hello packets RFC 2328, s10.5 p96 Receiving Hello Packets							
MUST	<p>Receiving Hello Packets</p> <p>If the receiving interface is attached to a stub area the E-bit must be clear in received Hello Packets and a mismatch causes processing to stop and the packet to be dropped.</p>							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-15.4	RFC 5340, s4.2.2.1 p21 Receiving Hello packets RFC 2328, s10.5 p96 Receiving Hello Packets							
MUST	Receiving Hello Packets If the receiving interface is attached to a non-stub area the E-bit must be set in received Hello Packets and a mismatch causes processing to stop and the packet to be dropped.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-16.1	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.1 p116 LS age							
MUST	The LSA Header LSAs are also aged as they are held in each router's database.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-16.2	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.1 p116 LS age							
MUST	The LSA Header The age of an LSA is never incremented past MaxAge.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-16.3	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.1 p116 LS age							
MUST	The LSA Header When an LSA's age first reaches MaxAge, it is reflooded.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-16.4	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.1 p116 LS age							
MUST	The LSA Header LSA of age MaxAge is finally flushed from the database when it is no longer needed to ensure database synchronization.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-16.5	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.1 p117 LS age							
MUST	The LSA Header If the two instances of a LSA have identical LS sequence number and LS checksum, an instance of age MaxAge is then always accepted as most recent.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-16.6	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.1 p117 LS age							
MUST	The LSA Header If the two instances of a LSA have identical LS sequence number and LS Checksum and none of them is of age MaxAge then if their ages differ by more than MaxAgeDiff, the instance having the smaller age is accepted as most recent.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-16.7	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.5 p119 Advertising Router							
MUST	The LSA Header The Advertising Router field specifies the OSPF Router ID of the LSA's originator.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-16.8	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.6 p120 LS sequence number							
MUST	The LSA Header A router uses InitialSequenceNumber the first time it originates any LSA. (This test checks for Router-LSAs)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-16.9	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.6 p120 LS sequence number							
MUST	The LSA Header A router uses InitialSequenceNumber the first time it originates any LSA. (This test checks for Network-LSAs)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-16.10	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.6 p120 LS sequence number							
MUST	<p>The LSA Header A router uses InitialSequenceNumber the first time it originates any LSA. (This test checks for Inter-Area-Prefix-LSAs)</p>							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-16.11	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.6 p120 LS sequence number							
MUST	<p>The LSA Header A router uses InitialSequenceNumber the first time it originates any LSA. (This test checks for Inter-Area-Router-LSAs)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-16.12	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.6 p120 LS sequence number							
MUST	<p>The LSA Header A router uses InitialSequenceNumber the first time it originates any LSA. Afterwards, the LSA's sequence number is incremented each time the router originates a new instance of the LSA. (This test checks for Router-LSA)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-16.13	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.6 p120 LS sequence number							
MUST	<p>The LSA Header</p> <p>A router uses InitialSequenceNumber the first time it originates any LSA. Afterwards, the LSA's sequence number is incremented each time the router originates a new instance of the LSA. (This test checks for Network-LSA)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-16.14	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.6 p120 LS sequence number							
MUST	<p>The LSA Header</p> <p>A router uses InitialSequenceNumber the first time it originates any LSA. Afterwards, the LSA's sequence number is incremented each time the router originates a new instance of the LSA. (This test checks for Inter-Area-Prefix-LSA)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-16.15	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.6 p120 LS sequence number							
MUST	<p>The LSA Header</p> <p>A router uses InitialSequenceNumber the first time it originates any LSA. Afterwards, the LSA's sequence number is incremented each time the router originates a new instance of the LSA. (This test checks for Inter-Area-Router-LSA)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-16.16	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.6 p120 LS sequence number							
MUST	<p>The LSA Header When an attempt is made to increment the sequence number past the maximum value of N - 1 (0x7fffffff; also referred to as MaxSequenceNumber), the current instance of the LSA must first be flushed from the routing domain.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-16.17	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.6 p120 LS sequence number							
MUST	<p>The LSA Header As soon as this flooding of a LSA with LS sequence number MaxSequenceNumber has been acknowledged by all adjacent neighbors, new instance can be originated with sequence number of InitialSequenceNumber.</p>							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-16.18	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.7 p121 LS checksum							
MUST	<p>The LSA Header The LSA header also contains the length of the LSA in bytes; subtracting the size of the LS age field (two bytes) yields the amount of data to checksum. (This test checks for Router-LSA)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFv3-16.19	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.7 p121 LS checksum							
MUST	<p>The LSA Header</p> <p>The LSA header also contains the length of the LSA in bytes; subtracting the size of the LS age field (two bytes) yields the amount of data to checksum.</p> <p>(This test checks for Network-LSA)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFv3-16.20	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.7 p121 LS checksum							
MUST	<p>The LSA Header</p> <p>The LSA header also contains the length of the LSA in bytes; subtracting the size of the LS age field (two bytes) yields the amount of data to checksum.</p> <p>(This test checks for Inter-Area-Prefix-LSA)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFv3-16.21	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.7 p121 LS checksum							
MUST	<p>The LSA Header</p> <p>The LSA header also contains the length of the LSA in bytes; subtracting the size of the LS age field (two bytes) yields the amount of data to checksum.</p> <p>(This test checks for Inter-Area-Router-LSA)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-16.22	RFC 5340, s4.4.1 p23 The LSA Header RFC 2328, s12.1.7 p121 LS checksum							
SHOULD	<p>The LSA Header The LS checksum field cannot take on the value of zero; the occurrence of such a value should be considered a checksum failure.</p>							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-16.23	RFC 5340, s4.4.1 p24 The LSA Header							
MUST	<p>The LSA Header Instead of the IPv4 behavior of encoding the network number within the AS-external-LSA's Link State ID, the IPv6 Link State ID simply serves as a way to differentiate multiple LSAs originated by the same router</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-16.24	RFC 5340, s4.4.1 p24 The LSA Header							
MUST	<p>The LSA Header When a router originates a Link-LSA for a given link, its Link State ID is set equal to the router's Interface ID on the link.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-17.1	RFC 5340, s4.4.2 p24 The link-state database RFC 2328, s13.1 p145 Determining which LSA is newer							
MUST	<p>The Link-State Database The LSA having the newer LS sequence number is more recent.</p>							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-18.1	RFC 5340, s4.4.3 p25 Originating LSAs RFC 2328, s12.4 p123 Originating LSAs							
MUST	<p>Originating LSAs Destinations are advertised one at a time so that the change in any single route can be flooded without reflooding the entire collection of routes. This test is for Inter-Area-Prefix-LSA.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-18.2	RFC 5340, s4.4.3 p25 Originating LSAs RFC 2328, s12.4 p123 Originating LSAs							
MUST	<p>Originating LSAs During the flooding procedure, many LSAs can be carried by a single Link State Update packet. This test verifies whether the DUT recognizes multiple LSAs residing in a single Link State Update packet.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-18.3	RFC 5340, s4.4.3 p25 Originating LSAs RFC 2328, s12.4 p124 Originating LSAs							
MUST	<p>Originating LSAs Whenever a new instance of an LSA is originated, its LS sequence number is incremented, its LS age is set to 0.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-18.4	RFC 5340, s4.4.3 p25 Originating LSAs RFC 2328, s12.4 p125 Originating LSAs							
MAY	Originating LSAs A change in an interface's state may mean that it is necessary to produce a new instance of the router-LSA.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-18.5	RFC 5340, s4.4.3 p25 Originating LSAs RFC 2328, s12.4 p125 Originating LSAs							
SHOULD	Originating LSAs If an attached network's Designated Router gets changed a new router-LSA should be originated.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-18.6	RFC 5340, s4.4.3 p25 Originating LSAs RFC 2328, s12.4 p125 Originating LSAs							
SHOULD	Originating LSAs When Designated Router changes and if the router itself is now the Designated Router, a new network-LSA should be produced.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-18.7	RFC 5340, s4.4.3 p25 Originating LSAs RFC 2328, s12.4 p125 Originating LSAs							
SHOULD	Originating LSAs If the router itself is no longer the Designated Router, any network-LSA that it might have originated for the network should be flushed from the routing domain.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-18.8	RFC 5340, s4.4.3 p25 Originating LSAs RFC 2328, s12.4 p125 Originating LSAs							
MAY	Originating LSAs If one of the neighboring routers changes to the FULL state then this may mean that it is necessary to produce a new instance of the router-LSA.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-18.9	RFC 5340, s4.4.3 p25 Originating LSAs RFC 2328, s12.4 p125 Originating LSAs							
MAY	Originating LSAs If one of the neighboring routers changes from the FULL state then this may mean that it is necessary to produce a new instance of the router-LSA.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-18.11	RFC 5340, s4.4.3 p25 Originating LSAs							
MAY	Originating LSAs The state or interface ID of one of the router's interfaces changes. The router may need to (re)originate or flush its Link-LSA and one or more router-LSAs and/or intra-area-prefix-LSAs. (This test is for (re)origination or flush of Router-LSA during State change)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFv3-18.12	RFC 5340, s4.4.3 p25 Originating LSAs							
MAY	<p>Originating LSAs The state or interface ID of one of the router's interfaces changes. The router may need to (re)originate or flush its Link-LSA and one or more router-LSAs and/or intra-area-prefix-LSAs. (This test is for (re)origination of Intra-Area-Prefix-LSA during the state change.)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFv3-18.13	RFC 5340, s4.4.3 p25 Originating LSAs							
MAY	<p>Originating LSAs The state or interface ID of one of the router's interfaces changes. The router may need to (re)originate or flush its Link-LSA and one or more router-LSAs and/or intra-area-prefix-LSAs. (This test is for flushing of Intra-Area-Prefix-LSA during the state change.)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFv3-18.14	RFC 5340, s4.4.3 p25 Originating LSAs							
MAY	<p>Originating LSAs The identity of a link's Designated Router changes. The router may need to (re)originate or flush the link's network-LSA and one or more router-LSAs and/or intra-area-prefix-LSAs. (This test is for "(re)originate".)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-18.15	RFC 5340, s4.4.3 p25 Originating LSAs							
MAY	Originating LSAs The identity of a link's Designated Router changes. The router may need to (re)originate or flush the link's network-LSA and one or more router-LSAs and/or intra-area-prefix-LSAs. (This test is for "flush".)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-18.16	RFC 5340, s4.4.3 p25 Originating LSAs							
MAY	Originating LSAs A neighbor transitions to/from "Full" state. The router may need to (re)originate or flush the link's network-LSA and one or more router-LSAs and/or intra-area-prefix-LSAs. This test is for "to Full state".							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-18.17	RFC 5340, s4.4.3 p25 Originating LSAs							
MAY	Originating LSAs A neighbor transitions to/from "Full" state. The router may need to (re)originate or flush the link's network-LSA and one or more router-LSAs and/or intra-area-prefix-LSAs. (This test is for "from Full state".)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-18.18	RFC 5340, s4.4.3 p25 Originating LSAs							
MAY	Originating LSAs The Interface ID of a neighbor changes. This may cause a new instance of a router-LSA to be originated for the associated area.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-18.19	RFC 5340, s4.4.3 p25 Originating LSAs							
MUST	Originating LSAs A new prefix is added to an attached link (both through configuration). This causes the router to reoriginate its link-LSA for the link							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-18.20	RFC 5340, s4.4.3 p25 Originating LSAs							
MUST	Originating LSAs A new prefix is added to an attached link. If the router is the only router attached to the link, causes the router to reoriginate an intra-area-prefix-LSA.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-18.21	RFC 5340, s4.4.3 p25 Originating LSAs							
MUST	Originating LSAs A prefix is deleted (both through configuration). This causes the router to reoriginate its link-LSA for the link.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-18.22 MUST	RFC 5340, s4.4.3 p25 Originating LSAs							
	Originating LSAs A prefix is deleted (both through configuration). If it is the only router attached to the link, causes the router to reoriginate an intra-area-prefix-LSA.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-18.23 MUST	RFC 5340, s4.4.3 p25 Originating LSAs							
	Originating LSAs A new link-LSA is received, causing the link's collection of prefixes to change. If the router is the Designated Router for the link, it originates a new intra-area-prefix-LSA.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-18.24 MAY	RFC 5340, s4.4.3 p25 Originating LSAs							
	Originating LSAs The state or interface ID of one of the router's interfaces changes. The router may need to (re)originate or flush its Link-LSA and one or more router-LSAs and/or intra-area-prefix-LSAs. (This test is for (re)origination or flush of Link-LSA during State change)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-19.1 MUST	RFC 5340, s4.4.3.2 p27 Router-LSAs							
	Router-LSAs Router-LSAs have area flooding scope.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-19.2	RFC 5340, s4.4.3.1 p27 LSA Options							
SHOULD	Router-LSAs The V6-bit should be set unless the router will not participate in transit IPv6 routing. The E-bit should be clear if and only if the attached area is an OSPF stub or OSPF NSSA area. (This is to test Router-LSA for stub area)							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-19.4	RFC 5340, s4.4.3.2 p27 Router-LSAs RFC 2328, s12.4.1 p127 Router-LSAs							
MUST	Router-LSAs A router also indicates whether it is an area border router, by setting the appropriate bits (bit B, respectively) in its router-LSAs.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-19.5	NEGATIVE RFC 5340, s4.4.3.2 p27 Router-LSAs RFC 2328, s12.4.1 p127 Router-LSAs							
MUST	Router-LSAs A router also indicates whether it is an area border router, by setting the appropriate bits (bit B, respectively) in its router-LSAs.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-19.6	RFC 5340, s4.4.3.2 p27 Router-LSAs RFC 2328, s12.4.1 p127 Router-LSAs							
SHOULD	<p>Router-LSAs</p> <p>Bit B should be set whenever the router is actively attached to two or more areas, even if the router is not currently attached to the OSPF backbone area.</p> <p>(This is for DUT attached to two non-backbone areas)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-19.7	RFC 5340, s4.4.3.2 p27 Router-LSAs RFC 2328, s12.4.1 p128 Router-LSAs							
MUST	<p>Router-LSAs</p> <p>The router sets bit V in its router-LSA for Area A if and only if the router is the endpoint of one or more fully adjacent virtual links having Area A as their Transit area.</p>							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-19.8	RFC 5340, s4.4.3.2 p27 Router-LSAs RFC 2328, s12.4.1 p129 Router-LSAs,							
MUST	<p>Router-LSAs</p> <p>If the router wishes to build a router-LSA for Area A then for each interface if the attached network does not belong to Area A, no links are added to the LSA.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-19.11	RFC 5340, s4.4.3.2 p27 Router-LSAs							
MUST	Router-LSAs Each of the router's interfaces to the area are then described by appending "link descriptions" to the router-LSA. Each link description is 16 bytes long, consisting of five fields: (link) Type, Metric, Interface ID, Neighbor Interface ID and Neighbor Router ID							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-19.12	RFC 5340, s4.4.3.2 p28 Router-LSAs							
MUST	Router-LSAs Interfaces in state "Down" or "Loopback" are not described (This test is for Down state)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-19.14	RFC 5340, s4.4.3.2 p28 Router-LSAs							
MUST	Router-LSAs Within each link description, the Metric field is always set to the interface's output cost, and the Interface ID field is set to the interface's OSPF Interface ID.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-19.16	RFC 5340, s4.4.3.2 p28 Router-LSAs							
MUST	Router-LSAs If the router is fully adjacent to the link's Designated Router, or if the router itself is Designated Router and is fully adjacent to at least one other router, add a single Type 2 link description (transit network).							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-19.17 MUST	RFC 5340, s4.4.3.2 p28 Router-LSAs							
	Router-LSAs If the neighboring router is fully adjacent, add a Type 4 link description (virtual). The Neighbor Interface ID field is set to the Interface ID advertised by the neighbor in its Hello packets, and the Neighbor Router ID field is set to the neighbor's Router ID							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
ANVL-OSPFV3-20.1 MUST	RFC 5340, s4.4.3.3 p29 Network-LSAs							
	Network-LSAs Network-LSAs have area flooding scope.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-20.2 MUST	RFC 5340, s4.4.3.3 p29 Network-LSAs							
	Network-LSAs A network-LSA is originated for every broadcast or NBMA link with an elected Designated Router that is fully adjacent with at least one other router on the link. The network-LSA is originated by the link's Designated Router and lists all routers on the link with which it is fully adjacent.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-20.3	RFC 5340, s4.4.3.3 p29 Network-LSAs RFC 2328, s12.4.2 p134 Network-LSAs							
SHOULD	Network-LSAs A router that has formerly been the Designated Router for a network, but is no longer, should flush the network-LSA that it had previously originated.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-20.4	RFC 5340, s4.4.3.3 p29 Network-LSAs RFC 2328, s12.4.2 p134 Network-LSAs (see also s13.4 p151 Receiving self-originated LSAs),							
MUST	Network-LSAs When a router's Router ID has changed, any network-LSAs that were originated with the router's previous Router ID must be flushed.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-20.5	RFC 5340, s4.4.3.3 p29 Network-LSAs							
MUST	Network-LSAs An IPv6 network-LSA's Link State ID is set to the Interface ID of the Designated Router on the link.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-21.1	RFC 5340, s4.4.3.4 p30 Inter-Area-Prefix-LSAs							
MUST	Inter-Area-Prefix-LSAs Inter-area-prefix-LSAs have area flooding scope.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-21.2	RFC 5340, s4.4.3.4 p30 Inter-Area-Prefix-LSAs RFC 2328, s12.4.3. p136 Summary-LSAs							
MUST	Inter-Area-Prefix-LSAs If for a route the area associated with this set of paths is the Area A itself, do not generate a summary-LSA for the route for advertising into Area A. (Type 3 Summary LSA has been renamed as Inter-Area-Prefix-LSA)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-21.3	RFC 5340, s4.4.3.4 p30 Inter-Area-Prefix-LSAs RFC 2328, s12.4.3. p136 Summary-LSAs							
MUST	Inter-Area-Prefix-LSAs If for a route the area associated with the set of paths is not Area A but the next hops associated with this set of paths belong to Area A itself, do not generate a summary-LSA for the route for advertising into Area A. (Type 3 Summary LSA has been renamed as Inter-Area-Prefix-LSA)							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-21.4	RFC 5340, s4.4.3.4 p30 Inter-Area-Prefix-LSAs RFC 2328, s12.4.3 p136 Summary-LSAs							
MUST	Inter-Area-Prefix-LSAs If the destination of a route is an AS boundary router, a summary-LSA should be originated if and only if the routing table entry describes the preferred path to the AS boundary router. If so, a Type 4 summary-LSA is originated for the destination. (Type 4 Summary-LSA has been renamed as Inter-Area-Router-LSA.)							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-21.5	RFC 5340, s4.4.3.4 p30 Inter-Area-Prefix-LSAs RFC 2328, s12.4.3. p136 Summary-LSAs							
MUST	<p>Inter-Area-Prefix-LSAs</p> <p>While originating summary-LSAs for networks reachable by inter-area routes at most a single Type 3 summary-LSA is originated for each area address range.</p> <p>(Type 3 Summary-LSA has been renamed as Inter-Area-Prefix-LSA.)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-21.6	RFC 5340, s4.4.3.4 p30 Inter-Area-Prefix-LSAs							
MUST	<p>Inter-Area-Prefix-LSAs</p> <p>The Link State ID of an inter-area-prefix-LSA has lost all of its addressing semantics, and simply serves to distinguish multiple inter-area-prefix-LSAs that are originated by the same router.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-22.1	RFC 5340, s4.4.3.5 p31 Inter-Area-Router-LSAs							
MUST	<p>Inter-Area-Router-LSAs</p> <p>Inter-area-router-LSAs have area flooding scope.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-22.2	RFC 5340, s4.4.3.5 p32 Inter-Area-Router-LSAs							
SHOULD	<p>Inter-Area-Router-LSAs</p> <p>The Options field in an inter-area-router-LSA should be set equal 1to the Options field contained in the destination router's own router-LSA.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-23.1	RFC 5340, s4.4.3.6 p32 AS-External-LSAs							
MUST	AS-External-LSAs AS-external-LSAs have AS flooding scope.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-23.2	RFC 5340, s4.4.3.6 p32 AS-External-LSAs							
MUST	AS-External-LSAs The Link State ID of an AS-external-LSA has lost all of its addressing semantics, and simply serves to distinguish multiple AS-external-LSAs that are originated by the same router.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-23.4	RFC 5340, s4.4.3.6 p32 AS-External-LSAs							
MUST	AS-External-LSAs The forwarding address is present in the AS-external-LSA if and only if the AS-external-LSA's bit F is set.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-23.5	RFC 5340, s4.4.3.6 p33 AS-External-LSAs							
SHOULD	AS-External-LSAs Received non-zero values for Reference LS Type field should be ignored.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-24.1 MUST	RFC 5340, s4.4.3.8 p34 Link-LSAs							
	Link-LSAs Link-LSAs have link-local flooding scope.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-24.2 MUST	RFC 5340, s4.4.3.8 p35 Link-LSAs							
	Link-LSAs The Link State ID is set to the router's Interface ID on Link L.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-24.3 MUST	RFC 5340, s4.4.3.8 p35 Link-LSAs							
	Link-LSAs The Router Priority of the router's interface to Link L is inserted into the Link-LSA.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-24.4 MUST	RFC 5340, s4.4.3.8 p35 Link-LSAs							
	Link-LSAs The link-LSA's Options field is set to reflect the router's capabilities. On multi-access links, the Designated Router will logically OR the link-LSA Options fields for all fully adjacent neighbors in Link L's network-LSA.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-24.5	RFC 5340, s4.4.3.8 p35 Link-LSAs							
MUST	Link-LSAs The router inserts its link-local address on Link L into the Link-LSA.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-24.6	RFC 5340, s4.4.3.8 p35 Link-LSAs							
MUST	Link-LSAs Each IPv6 address prefix that has been configured on Link L is added to the Link-LSA, by specifying values for the PrefixLength, PrefixOptions, and Address Prefix fields.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-25.1	RFC 5340, s4.4.3.9 p36 Intra-Area-Prefix-LSAs							
MUST	Intra-Area-Prefix-LSAs Intra-area-prefix-LSAs have area flooding scope.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-25.2	RFC 5340, s4.4.3.9 p36 Intra-Area-Prefix-LSAs							
MUST	Intra-Area-Prefix-LSAs It either associates a list of IPv6 address prefixes with a transit network link by referencing a network- LSA, or associates a list of IPv6 address prefixes with a router by referencing a router-LSA.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-25.3	RFC 5340, s4.4.3.9 p32, p37 Intra-Area-Prefix-LSAs							
MUST	Intra-Area-Prefix-LSAs If the link-LSA's Advertising Router is fully adjacent to the Designated Router and the Link State ID matches the neighbor's interface ID, the list of prefixes in the link-LSA is copied into the intra-area-prefix-LSA that is being built.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-25.4	RFC 5340, s4.4.3.9 p37 Intra-Area-Prefix-LSAs							
MUST	Intra-Area-Prefix-LSAs Multiple prefixes having the same PrefixLength and Address Prefix are considered to be duplicates; and a single instance of the duplicate prefix should be included in the intra-area-prefix-LSA. The Metric field for all prefixes is set to 0.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-25.5	RFC 5340, s4.4.3.9 p37 Intra-Area-Prefix-LSAs							
MUST	Intra-Area-Prefix-LSAs A router builds an intra-area-prefix-LSA to advertise prefixes for its attached stub links.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-25.6	RFC 5340, s4.4.3.9 p38 Intra-Area-Prefix-LSAs							
MUST	Intra-Area-Prefix-LSAs If RTX has one or more virtual links configured through the area, it includes one of its global scope IPv6 interface addresses in the LSA (if it hasn't already), setting the LA-bit in the PrefixOptions field, the PrefixLength to 128 and the Metric to 0.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-25.7	RFC 5340, s4.4.3.9 p39 Intra-Area-Prefix-LSAs							
MAY	Intra-Area-Prefix-LSAs When network conditions change, it may be necessary for a router to move prefixes from one intra-area-prefix-LSA to another.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-26.1	RFC 5340, s4.5 p40 Flooding RFC 2328, s13 p143 The Flooding Procedure							
MUST	Flooding To make the flooding procedure reliable, each LSA must be acknowledged separately. Acknowledgments are transmitted in Link State Acknowledgment packets.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-26.2	RFC 5340, s4.5 p40 Flooding RFC 2328, s13 p143 The Flooding Procedure							
MUST	Flooding For each LSA contained in a Link State Update packet, validate the LSA's LS checksum. If the checksum turns out to be invalid, discard the LSA.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-26.3	RFC 5340, s4.5 p40 Flooding RFC 2328, s13 p144 The Flooding Procedure,							
MUST	Flooding If the LSA's LS age is equal to MaxAge, and there is currently no instance of the LSA in router's link state database, and none of router's neighbors are in state Exchange or Loading send direct Acknowledgment packet to the sending neighbor and discard the LSA.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-26.4	RFC 5340, s4.5 p40 Flooding RFC 2328, s13 p144 The Flooding Procedure							
MUST	Flooding If there is already a database copy, and if the database copy was received via flooding and installed less than MinLSArrival seconds ago, discard the new LSA (without acknowledging it).							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFv3-26.5	RFC 5340, s4.5 p40 Flooding RFC 2328, s13 p144 The Flooding Procedure							
MUST	Flooding If there is no database copy or the received LSA is more recent than the database copy and the database copy was installed more than MinLSArrival seconds ago, immediately flood the new LSA out some subset of the router's interfaces.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFv3-26.6	RFC 5340, s4.5 p40 Flooding RFC 2328, s13 p144 The Flooding Procedure							
MUST	Flooding When a new instance of a LSA is installed in database, a router possibly acknowledges the receipt of the LSA by sending a Link State Acknowledgment packet on the receiving interface.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: unpredict
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFv3-26.7	RFC 5340, s4.5 p40 Flooding RFC 2328, s13 p145 The Flooding Procedure							
MUST	Flooding When the received LSA is at most as recent as the database copy of that LSA then if there is an instance of the LSA on the sending neighbor's Link State Request list, generate the neighbor event BadLSReq.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-26.8	RFC 5340, s4.5 p40 Flooding RFC 2328, s13 p145 The Flooding Procedure							
SHOULD	Flooding If the received LSA is the same instance as the database copy and is listed in the Link state retransmission list for the receiving adjacency, the router itself is expecting an acknowledgment for this LSA. The router should remove the LSA from the Link state retransmission list.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-26.9	RFC 5340, s4.5 p40 Flooding RFC 2328, s13 p145 The Flooding Procedure							
MUST	Flooding If the database copy has LS age equal to MaxAge and LS sequence number equal to MaxSequenceNumber, simply discard the received LSA without acknowledging it.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-26.10	RFC 5340, s4.5 p40 Flooding RFC 2328, s13.4 p151 Receiving self-originated LSAs							
MUST	Flooding A self-originated LSA is detected when the LSA's Advertising Router is equal to the router's own Router ID and in most cases (...), the router must then advance the LSA's LS sequence number one past the received LS sequence number, and originate a new instance of the LSA.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-26.11	RFC 5340, s4.5 p40 Flooding RFC 2328, s13.4 p151 Receiving self-originated LSAs							
SHOULD	<p>Flooding</p> <p>If the received self-originated LSA is a summary-LSA and the router no longer has an (advertisable) route to the destination instead of updating the LSA, the LSA should be flushed from the routing domain by incrementing the received LSA's LS age to MaxAge and reflooding.</p> <p>(Summary-LSA has been renamed as Inter-Area-Prefix/Router LSA.)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-26.12	RFC 5340, s4.5 p40 Flooding RFC 2328, s13.4 p151 Receiving self-originated LSAs							
SHOULD	<p>Flooding</p> <p>If the received self-originated LSA is an AS-external-LSA and the router no longer has an (advertisable) route to the destination instead of updating the LSA, the LSA should be flushed from the routing domain by incrementing the received LSA's LS age to MaxAge and reflooding.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-26.13	RFC 5340, s4.5 p40 Flooding RFC 2328, s13.4 p151 Receiving self-originated LSAs							
SHOULD	<p>Flooding</p> <p>If the received self-originated LSA is a network-LSA but the router is no longer Designated Router for the network, instead of updating the LSA, the LSA should be flushed from the routing domain by incrementing the received LSA's LS age to MaxAge and reflooding.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-27.1	RFC 5340, s4.5.1 p41 Receiving Link State Update packets							
MUST	<p>Receiving Link State Update Packets</p> <p>Discard the LSA and get the next one from the Link State Update packet if the interface area has been configured as a stub or NSSA area and the LS type indicates "AS flooding scope" (This is to test stub area)</p>							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-27.2	RFC 5340, s4.5.1 p41 Receiving Link State Update packets							
MUST	<p>Receiving Link State Update Packets</p> <p>if the flooding scope of the LSA's LS type is set to "reserved", discard the LSA</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-28.1	<p>RFC 5340, s4.5.2 p41 Sending Link State Update packets</p> <p>RFC 2328, s13.3 p149 Next step in the Flooding Procedure</p>							
MUST	<p>Sending Link State Update Packets</p> <p>If the adjacency is not yet full and there is an instance of new LSA in Link State request list and if the new LSA is more recent delete the LSA from the Link state request list.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-28.2	RFC 5340, s4.5.2 p41 Sending Link State Update packets RFC 2328, s13.3 p150 Sending protocol packets							
MUST	<p>Sending Link State Update Packets On broadcast network, the Link State Update packets are multicast but Link State Update packets carrying retransmissions are always sent directly to the neighbor.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-28.3	RFC 5340, s4.5.2 p42 Sending Link State Update packets							
MUST	<p>Sending Link State Update Packets If the flooding scope is "AS flooding scope", the eligible interfaces are all router interfaces excepting virtual links.</p>							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-28.4	RFC 5340, s4.5.2 p42 Sending Link State Update packets							
MUST	<p>Sending Link State Update Packets If the flooding scope is "area flooding scope", the eligible interfaces are those interfaces connecting to the LSA's associated area.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-28.5	NEGATIVE RFC 5340, s4.5.2 p42 Sending Link State Update packets							
MUST	Sending Link State Update Packets If the flooding scope is "area flooding scope", the eligible interfaces are those interfaces connecting to the LSA's associated area.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-28.6	RFC 5340, s4.5.2 p42 Sending Link State Update packets							
MUST	Sending Link State Update Packets If the flooding scope is "link-local flooding scope", then there is a single eligible interface, the one connecting to the LSA's associated link							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-28.7	NEGATIVE RFC 5340, s4.5.2 p42 Sending Link State Update packets							
MUST	Sending Link State Update Packets If the flooding scope is "link-local flooding scope", then there is a single eligible interface, the one connecting to the LSA's associated link							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-28.8	RFC 5340, s4.5.2 p42 Sending Link State Update packets							
MUST	Sending Link State Update Packets The LS type is unrecognized, and the U-bit in the LS Type is set to 1 (store and flood the LSA, as if type understood).....							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-28.9	RFC 5340, s4.5.2 p42 Sending Link State Update packets							
MUST	Sending Link State Update Packets The LS type is unrecognized, and the U-bit in the LS Type is set to 1 (store and flood the LSA, as if type understood).....							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-30.1	RFC 5340, s4.7 p44 Virtual links RFC 2328, s15 p158 Virtual Links							
MUST	Virtual Links When an adjacency is established over a virtual link, then OSPF packets pertaining to the backbone area will flow over the adjacency.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-30.2	RFC 5340, s4.7 p44 Virtual links RFC 2328, s15 p158 Virtual Links							
MUST	Virtual Links AS-external-LSAs are NEVER flooded over virtual adjacencies.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-30.3	RFC 5340, s4.7 p44 Virtual links RFC 2328, s15 p159 Virtual Links							
MUST	Virtual Links The cost of a virtual link is NOT configured. It is defined to be the cost of the intra-area path between the two defining area border routers.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-30.4	RFC 5340, s4.7 p44 Virtual links RFC 2328, s15 p159 Virtual Links							
SHOULD	Virtual Links When the cost of a virtual link changes, a new router-LSA should be originated for the backbone area.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-30.5	RFC 5340, s4.7 p44 Virtual links RFC 2328, s15 p159 Virtual Links							
MUST	Virtual Links The time between link state retransmissions, RxmtInterval, is configured for a virtual link.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-30.6	RFC 5340, s4.7 p44 Virtual links							
MUST	Virtual Links LSAs having AS flooding scope are never flooded over virtual adjacencies, nor are LSAs with AS flooding scope summarized over virtual adjacencies during the Database Exchange process. This is a generalization of the IPv4 treatment of AS-external-LSAs.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-30.7	RFC 5340, s4.7 p44 Virtual links							
MUST	<p>Virtual Links Like all other IPv6 OSPF interfaces, virtual links are assigned unique (within the router) Interface IDs. These are advertised in Hellos sent over the virtual link and in the router's router-LSAs.</p>							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-31.1	<p>RFC 5340, s4.8.3 p47 Calculating the Inter-Area Routes RFC 2328, s16.2 p168 Calculating the inter-area routes</p>							
MUST	<p>Calculating the Inter-Area Routes If the router has active attachments to multiple areas, only backbone summary-LSAs are examined. (Type 3 Summary LSA has been renamed as Inter-Area-Prefix-LSA)</p>							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-31.2	RFC 5340, s4.8.3 p47 Calculating the Inter-Area Routes							
SHOULD	<p>Calculating the Inter-Area Routes Prefixes having the NU-bit set in their Prefix Options field should be ignored by the inter-area route calculation.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-32.1	RFC 5340, s4.8.5 p48 Calculating AS External and NSSA Routes							
MUST	<p>Calculating AS External Routes The default route in AS-external-LSAs or NSSA-LSAs is advertised by a zero-length prefix. (This is to test AS-external-LSA)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-33.1 SHOULD	RFC 5340, sA.1 p57 Encapsulation of OSPF Packets							
	Encapsulation of OSPF Packets As such, the multicast addresses have been chosen with link-local scope, and packets sent to these addresses should have their IPv6 Hop Limit set to 1.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-33.2 SHOULD	RFC 5340, sA.1 p57 Encapsulation of OSPF Packets							
	Encapsulation of OSPF Packets As such, the multicast addresses have been chosen with link-local scope, and packets sent to these addresses should have their IPv6 Hop Limit set to 1. (This test is for OSPF-DD> packet)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-33.3 SHOULD	NEGATIVE RFC 5340, sA.1 p57 Encapsulation of OSPF Packets							
	Encapsulation of OSPF Packets As such, the multicast addresses have been chosen with link-local scope, and packets sent to these addresses should have their IPv6 Hop Limit set to 1. (This test is for OSPF-LSR> packet)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-33.4	RFC 5340, sA.1 p57 Encapsulation of OSPF Packets							
SHOULD	Encapsulation of OSPF Packets As such, the multicast addresses have been chosen with link-local scope, and packets sent to these addresses should have their IPv6 Hop Limit set to 1. (This test is for OSPF-LSU> packet)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-33.5	NEGATIVE RFC 5340, sA.1 p57 Encapsulation of OSPF Packets							
SHOULD	Encapsulation of OSPF Packets As such, the multicast addresses have been chosen with link-local scope, and packets sent to these addresses should have their IPv6 Hop Limit set to 1. (This test is for OSPF-LSA> packet)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-33.12	RFC 5340, sA.1 p58 Encapsulation of OSPF Packets							
SHOULD	Encapsulation of OSPF Packets This multicast address has been assigned the value FF02::5. All routers running OSPF should be prepared to receive packets sent to this address.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-33.13	RFC 5340, sA.1 p58 Encapsulation of OSPF Packets							
MUST	Encapsulation of OSPF Packets Hello packets are always sent to this destination (AllSPFRouters).							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-33.14	RFC 5340, sA.1 p58 Encapsulation of OSPF Packets							
MUST	Encapsulation of OSPF Packets This multicast address has been assigned the value FF02::6. Both the Designated Router and Backup Designated Router must be prepared to receive packets destined to this address. (This test is for Designated Router.)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: unpredict
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-33.15	NEGATIVE RFC 5340, sA.1 p58 Encapsulation of OSPF Packets							
MUST	Encapsulation of OSPF Packets This multicast address has been assigned the value FF02::6. Both the Designated Router and Backup Designated Router must be prepared to receive packets destined to this address. (DUT is in state DROther)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-33.16	RFC 5340, sA.1 p58 Encapsulation of OSPF Packets							
MUST	Encapsulation of OSPF Packets This multicast address has been assigned the value FF02::6. Both the Designated Router and Backup Designated Router must be prepared to receive packets destined to this address. (This test is for Backup Designated Router.)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-34.1	RFC 5340, sA.2 p59 The Options Field							
SHOULD	The Options Field V6-bit If this bit is clear, the router/link should be excluded from IPv6 routing calculations.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-34.2	RFC 5340, sA.2 p59 The Options Field RFC 2328, s12.1.2 p117 Options							
SHOULD	The Options Field The E-bit represents OSPF's ExternalRoutingCapability. This bit should be set in all LSAs associated with the backbone.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-34.3	RFC 5340, sA.2 p59 The Options Field RFC 2328, s12.1.2 p117 Options							
SHOULD	<p>The Options Field</p> <p>The E-bit represents OSPF's ExternalRoutingCapability. This bit should be set in all LSAs associated with (non-backbone) non-stub areas.</p> <p>(This test checks for Network-LSA)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-34.4	RFC 5340, sA.2 p59 The Options Field RFC 2328, s12.1.2 p117 Options							
SHOULD	<p>The Options Field</p> <p>The E-bit represents OSPF's ExternalRoutingCapability. This bit should be set in all LSAs associated with (non-backbone) non-stub areas.</p> <p>(This test checks for Inter-Area-Router-LSA)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-34.5	RFC 5340, sA.2 p59 The Options Field RFC 2328, s12.1.2 p117 Options							
SHOULD	<p>The Options Field</p> <p>E-bit should be reset (set to 0) in all router-LSAs associated with a stub area.</p>							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-34.6	RFC 5340, sA.2 p59 The Options Field RFC 2328, s12.1.2 p117 Options							
SHOULD	The Options Field E-bit should be reset (set to 0) in all router-LSAs associated with a stub area.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-34.7	RFC 5340, sA.2 p59 The Options Field RFC 2328, s12.1.2 p117 Options							
SHOULD	The Options Field E-bit should be reset (set to 0) in all network-LSAs associated with a stub area.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-34.8	RFC 5340, sA.2 p59 The Options Field							
MUST	The Options Field R-bit This bit (the 'Router' bit) indicates whether the originator is an active router. Clearing the router bit would be appropriate for a multi-homed host that wants to participate in routing, but does not want to forward non-locally addressed packets.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-35.1	RFC 5340, sA.3.1 p61 The OSPF packet header							
MUST	The OSPF Packet Header Packets traversing a virtual link are labeled with the backbone Area ID of 0.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL



RFC Compliance Test Report
OSPFV3 Results

www.OpenSourceRouting.org

OpenSourceRouting
a project by the Network Device Education Foundation, Inc (www.NetDEF.org)



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0																								
ANVL-OSPFV3-35.2	NEGATIVE RFC 5340, sA.3.1 p61 The OSPF packet header																															
MUST	<p>The OSPF Packet Header Packets traversing a virtual link are labeled with the backbone Area ID of 0.</p> <table> <tr> <td>FreeBSD 10.3: FAIL</td><td>FreeBSD 10.3: FAIL</td><td>FreeBSD 10.3: FAIL</td><td>FreeBSD 10.3: FAIL</td><td>FreeBSD 10.3: FAIL</td><td>FreeBSD 10.3: FAIL</td><td>FreeBSD 10.3: untested</td><td>FreeBSD 10.3: untested</td></tr> <tr> <td>Ubuntu 16.04: FAIL</td><td>Ubuntu 16.04: FAIL</td></tr> <tr> <td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: FAIL</td><td>FreeBSD 12.0: FAIL</td></tr> </table>								FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested	Ubuntu 16.04: FAIL	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL																	
FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested																									
Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL																									
FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL																									
ANVL-OSPFV3-35.3	<p>RFC 5340, sA.3.1 p62 The OSPF packet header</p> <p>The OSPF Packet Header +-----+-----+-----+-----+-----+-----+-----+-----+-----+ Checksum Instance ID 0 +-----+-----+-----+-----+-----+-----+-----+-----+ 0 These fields are reserved. They must be 0. (NOTE: Here we are testing that the field following the Instance ID field is set to 0 in the OSPFv3 Packet Header)</p> <table> <tr> <td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: untested</td><td>FreeBSD 10.3: untested</td></tr> <tr> <td>Ubuntu 16.04: pass</td><td>Ubuntu 16.04: pass</td></tr> <tr> <td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: pass</td><td>FreeBSD 12.0: pass</td></tr> </table>								FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested	Ubuntu 16.04: pass	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass																	
FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested																									
Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass																									
FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass																									
ANVL-OSPFV3-36.1	<p>RFC 5340, sA.3.2 p62 The Hello Packet</p> <p>The Hello Packet All routers connected to a common link must agree on certain parameters (HelloInterval and RouterDeadInterval). These parameters are included in Hello packets allowing differences can inhibit the forming of neighbor relationships. (This test is for HelloInterval.)</p> <table> <tr> <td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: pass</td><td>FreeBSD 10.3: untested</td><td>FreeBSD 10.3: untested</td></tr> <tr> <td>Ubuntu 16.04: pass</td><td>Ubuntu 16.04: pass</td></tr> <tr> <td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: untested</td><td>FreeBSD 12.0: pass</td><td>FreeBSD 12.0: pass</td></tr> </table>								FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested	Ubuntu 16.04: pass	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass																	
FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested																									
Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass																									
FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass																									



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-36.2 MUST	RFC 5340, sA.3.2 p62 The Hello Packet							
	The Hello Packet All routers connected to a common link must agree on certain parameters (HelloInterval and RouterDeadInterval). These parameters are included in Hello packets allowing differences can inhibit the forming of neighbor relationships. (This test is for RouterDeadInterval.)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-37.1 SHOULD	RFC 5340, sA.4.1.1 p70 Prefix Options							
	Prefix Options NU-bit The "no unicast" capability bit. If set, the prefix should be excluded from IPv6 unicast calculations							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-38.1 MUST	RFC 5340, sA.4.3 p75 Router-LSAs							
	Router-LSAs bit V When set, the router is an endpoint of one or more fully adjacent virtual links having the described area as Transit area (V is for virtual link endpoint).							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-39.1	RFC 5340, sA.4.5 p77 Inter-Area-Prefix-LSAs							
MUST	<p>Inter-Area-Prefix-LSAs</p> <p>Default summary routes are used in stub areas instead of flooding a complete set of external routes. When describing a default summary route, the inter-area-prefix-LSA's PrefixLength is set to 0.</p>							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL
ANVL-OSPFV3-39.2	RFC 5340, sA.4.5 p78 Inter-Area-Prefix-LSAs							
MUST	<p>Inter-Area-Prefix-LSAs</p> <p>When the Inter-Area-Prefix-LSA is describing a route to a range of addresses (see Section C.2) the cost is set to the maximum cost to any reachable component of the address range.</p> <p>(Note: we are testing that the metric of Inter-Area-Prefix-LSA from DUT will be greater than the Advertised Value)</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-40.1	RFC 5340, sA.4.10 p85 Intra-Area-Prefix-LSAs							
SHOULD	<p>Intra-Area-Prefix-LSAs</p> <p>If Referenced LS type is 0x2001, the prefixes are associated with a router-LSA, Referenced Link State ID should be 0 and Referenced Advertising Router should be the originating router's Router ID.</p>							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-40.2 SHOULD	RFC 5340, sA.4.10 p85 Intra-Area-Prefix-LSAs							
	Intra-Area-Prefix-LSAs If Referenced LS type is 0x2002, the prefixes are associated with a network-LSA, Referenced Link State ID should be the Interface ID of the link's Designated Router and Referenced Advertising Router should be the Designated Router's Router ID.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-41.2 MUST	RFC 5340, sB p86 Architectural Constants RFC 2328, sB p218 Architectural Constants							
	Architectural Constants LSInfinity is the metric value indicating that the destination described by an LSA is unreachable. Used in summary-LSAs as an alternative to premature aging. It is defined to be the 24-bit binary value of all ones: 0xffffffff. (Type 3 Summary-LSA has been renamed as Inter-Area-Prefix-LSA)							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-41.3 MUST	RFC 5340, sB p86 Architectural Constants RFC 2328, sB p218 Architectural Constants							
	Architectural Constants LSInfinity is the metric value indicating that the destination described by an LSA is unreachable. Used in AS-external-LSAs as an alternative to premature aging. It is defined to be the 24-bit binary value of all ones: 0xffffffff.							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-42.1 MUST	RFC 5340, sC.3 p89 Router Interface Parameters							
	Router Interface Parameters Instance ID The OSPF protocol instance associated with this OSPF interface. Defaults to 0.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-43.1 MUST	RFC 2328, s2.3 p23 Use of external routing information							
	RFC 2328 Compatibility External routing information is flooded unaltered throughout the AS.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-43.2 MUST	RFC 2328, s10 p81 The neighbor Data Structure							
	RFC 2328 Compatibility The initialize(I), more (M) and master(MS) bits, Options field, and DD sequence number contained in the last Database Description packet received from the neighbor are used to determine whether the next Database Description packet received from the neighbor is a duplicate.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-43.3	NEGATIVE RFC 2328, s10 p81 The neighbor Data Structure							
MUST	RFC 2328 Compatibility The initialize(I), more (M) and master(MS) bits, Options field, and DD sequence number contained in the last Database Description packet received from the neighbor are used to determine whether the next Database Description packet received from the neighbor is a duplicate.							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-43.4	RFC 2328, s12.2 p122 The link state database							
MUST	RFC 2328 Compatibility An LSA is deleted from a router's database when the router originates a newer instance of one of its self-originated LSAs. (This test checks for Router-LSA)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-43.5	RFC 2328, s12.2 p122 The link state database							
MUST	RFC 2328 Compatibility An LSA is deleted from a router's database when the router originates a newer instance of one of its self-originated LSAs. (This test checks for Network-LSA)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-43.6 MUST	RFC 2328, s12.2 p122 The link state database							
	RFC 2328 Compatibility An LSA is deleted from a router's database when the router originates a newer instance of one of its self-originated LSAs. (This test checks for Inter-Area-Prefix-LSA)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-43.7 MUST	RFC 2328, s12.2 p122 The link state database							
	RFC 2328 Compatibility An LSA is deleted from a router's database when the router originates a newer instance of one of its self-originated LSAs. (This test checks for Inter-Area-Router-LSA)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-43.8 MUST	RFC 2328, s12.2 p122 The link state database							
	RFC 2328 Compatibility An LSA is deleted from a router's database when the LSA ages out and is flushed from the routing domain. (This test is for Router-LSA)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-43.9 MUST	RFC 2328, s12.2 p122 The link state database							
	RFC 2328 Compatibility An LSA is deleted from a router's database when the LSA ages out and is flushed from the routing domain. (This test is for Network-LSA)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-43.10 MUST	RFC 2328, s12.2 p122 The link state database							
	RFC 2328 Compatibility An LSA is deleted from a router's database when the LSA ages out and is flushed from the routing domain. (This test is for Inter-Area-Prefix-LSA)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-43.11 MUST	RFC 2328, s12.2 p122 The link state database							
	RFC 2328 Compatibility An LSA is deleted from a router's database when the LSA ages out and is flushed from the routing domain. (This test is for Inter-Area-Router-LSA)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-43.12 MUST	RFC 2328, s12.2 p122 The link state database							
	RFC 2328 Compatibility An LSA is deleted from a router's database when the LSA ages out and is flushed from the routing domain. (This test is for AS-External-LSA)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-43.13 MUST	RFC 2328, sA.3.2 p194 The Hello packet							
	RFC 2328 Compatibility If Router Priority set to 0, the router will be ineligible to become Backup Designated Router. (This test checks the case when router itself has Router Priority 0)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-43.14 MUST	RFC 2328, sA.3.2 p194 The Hello packet							
	RFC 2328 Compatibility If Router Priority set to 0, the router will be ineligible to become Backup Designated Router (This test checks the case when a neighbor has Router Priority 0)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-43.15 MUST	RFC 2328, sA.3.2 p194 The Hello packet							
	RFC 2328 Compatibility If Router Priority set to 0, the router will be ineligible to become Designated Router (This test checks the case when router itself has Router Priority 0)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-43.16 MUST	RFC 2328, sA.3.2 p194 The Hello packet							
	RFC 2328 Compatibility If Router Priority set to 0, the router will be ineligible to become Designated Router. (This test checks the case when a neighbor has Router Priority 0)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
ANVL-OSPFV3-43.17 MUST	RFC 2328, sA.3.2 p194 The Hello packet							
	RFC 2328 Compatibility If Router Priority set to 0, the router will be ineligible to become Designated Router. (This test checks the case when two router has Router Priority 0)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass



	Release 2.0.2	Release 3.0.2	Release 3.0.3	Release 4.0	Release 5.0.1	Release 6.0	Master 2019-02-24	Release 7.0
ANVL-OSPFV3-43.18	RFC 2328, sA.3.6 p201 The Link State Acknowledgment packet							
MUST	RFC 2328 Compatibility A Link State Acknowledgment packet is sent either to the multicast address AllSPFRouters, to the multicast address AllDRouters, or as a unicast (NOTE: This test is for multicast address AllSPFRouters)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-43.19	RFC 2328, sA.3.6 p201 The Link State Acknowledgment packet							
MUST	RFC 2328 Compatibility A Link State Acknowledgment packet is sent either to the multicast address AllSPFRouters, to the multicast address AllDRouters, or as a unicast (NOTE: This test is for multicast address AllDRouters)							
	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: pass	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass	Ubuntu 16.04: pass
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: pass	FreeBSD 12.0: pass
ANVL-OSPFV3-43.20	RFC 2328, sA.3.6 p201 The Link State Acknowledgment packet							
MUST	RFC 2328 Compatibility A Link State Acknowledgment packet is sent either to the multicast address AllSPFRouters, to the multicast address AllDRouters, or as a unicast (NOTE: This test is for unicast address)							
	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: FAIL	FreeBSD 10.3: untested	FreeBSD 10.3: untested
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL
	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: untested	FreeBSD 12.0: FAIL	FreeBSD 12.0: FAIL