

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
Type	FRR	FRR	FRR	FRR				
Commit ID	gff905c6c3	9931db7						
Commit Date	2021-05-27	2021-07-29						
IGMPV3-1.1	RFC 3376, IGMP Version 3							
MUST	Quick test to verify that DUT acts as an IGMPv3 Router							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-1.2	RFC 3376, IGMP Version 3							
MUST	Quick test to verify that DUT acts as an IGMPv3 Host							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: unpredict						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-10.1	RFC 3376, IGMP Version 3, s7.1 p35 Query Version Distinctions							
MUST	The IGMP version of a Membership Query message is determined as follows: IGMPv1 Query: length = 8 octets AND Max Resp Code field is zero							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-10.10	RFC 3376, IGMP Version 3, s7.2.1 p36 In the Presence of Older Version Queriers							
MUST	When Host Compatibility Mode is IGMPv2, a host acts in IGMPv2 compatibility mode, using only the IGMPv2 protocol, on that interface							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-10.11 MUST	RFC 3376, IGMP Version 3, s7.2.1 p36 In the Presence of Older Version Queriers							
	When Host Compatibility Mode is IGMPv1, a host acts in IGMPv1 compatibility mode, using only the IGMPv1 protocol, on that interface							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-10.12 MUST	RFC 3376, IGMP Version 3, s7.2.1 p37 In the Presence of Older Version Queriers							
	An IGMPv1 router will send General Queries with the Max Resp Code set to 0. This MUST be interpreted as a value of 100 (10 seconds)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-10.13 MUST	RFC 3376, IGMP Version 3, s7.2.1 p37 In the Presence of Older Version Queriers							
	An IGMPv2 router will send General Queries with the Max Resp Code set to the desired Max Resp Time, i.e., the full range of this field is linear and the exponential algorithm described is not used							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-10.14 MUST	RFC 3376, IGMP Version 3, s7.2.1 p37 In the Presence of Older Version Queriers							
	Whenever a host changes its compatibility mode, it cancels all its pending response and retransmission timers							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-10.15 MAY	RFC 3376, IGMP Version 3, s7.2.2 p37 In the Presence of Older Version Group Members							
	A host MAY allow its IGMPv3 Membership Record to be suppressed by either a Version 1 Membership Report, or a Version 2 Membership Report (Tests for IGMP Version 1 Report)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-10.16 MAY	RFC 3376, IGMP Version 3, s7.2.2 p37 In the Presence of Older Version Group Members							
	A host MAY allow its IGMPv3 Membership Record to be suppressed by either a Version 1 Membership Report, or a Version 2 Membership Report (Tests for IGMP Version 2 Report)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-10.17 MUST	RFC 3376, IGMP Version 3, s7.3.1 p37 In the Presence of Older Version Queriers							
	When in IGMPv1 mode, routers MUST send Periodic Queries with a Max Resp Code of 0							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-10.18 MUST	RFC 3376, IGMP Version 3, s7.3.1 p37 In the Presence of Older Version Queriers							
	When in IGMPv1 mode, routers MUST ignore Leave Group messages							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-10.19 MUST	RFC 3376, IGMP Version 3, s7.3.1 p37 In the Presence of Older Version Queriers When in IGMPv2 mode, routers MUST send Periodic Queries truncated at the Group Address field (i.e., 8 bytes long)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-10.2 MUST	RFC 3376, IGMP Version 3, s7.1 p35 Query Version Distinctions The IGMP version of a Membership Query message is determined as follows: IGMPv2 Query: length = 8 octets AND Max Resp Code field is non-zero							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-10.22 MUST	RFC 3376, IGMP Version 3, s7.3.2 p38 In the Presence of Older Version Group Members When Group Compatibility Mode is IGMPv2, a router internally translates the IGMPv2 Report messages for that group to their IGMPv3 equivalents as IS_EX({})							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-10.23 MUST	RFC 3376, IGMP Version 3, s7.3.2 p38 In the Presence of Older Version Group Members When Group Compatibility Mode is IGMPv2, a router internally translates the IGMPv2 Leave messages for that group to their IGMPv3 equivalents as TO_IN({})							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-10.24 MUST	RFC 3376, IGMP Version 3, s7.3.2 p38 In the Presence of Older Version Group Members							
	When Group Compatibility Mode is IGMPv1, a router internally translates the IGMPv1 Report messages for that group to their IGMPv3 equivalents as IS_EX({})							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-10.25 MUST	RFC 3376, IGMP Version 3, s7.3.2 p38 In the Presence of Older Version Group Members							
	When Group Compatibility Mode is IGMPv1, IGMPv2 Leave messages and IGMPv3 TO_IN() messages are also ignored							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-10.3 MUST	RFC 3376, IGMP Version 3, s7.1 p35 Query Version Distinctions							
	The IGMP version of a Membership Query message is determined as follows: IGMPv3 Query: length >= 12 octets							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-10.4 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s7.1 p35 Query Version Distinctions							
	Query messages that do not match any of the above conditions (e.g., a Query of length 10 octets) MUST be silently ignored.							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-10.5 MUST	RFC 3376, IGMP Version 3, s7.2.1 p35 In the Presence of Older Version Queriers							
	In order to be compatible with older version routers, IGMPv3 hosts MUST operate in version 1 compatibility mode							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-10.6 MUST	RFC 3376, IGMP Version 3, s7.2.1 p35 In the Presence of Older Version Queriers							
	In order to be compatible with older version routers, IGMPv3 hosts MUST operate in version 2 compatibility mode							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-10.7 MUST	RFC 3376, IGMP Version 3, s7.2.1 p36 In the Presence of Older Version Queriers							
	IGMPv1 Querier Present is set to Older Version Querier Present Timeout seconds whenever an IGMPv1 Membership Query is received. When the IGMPv1 Querier Present timer expires, a host switches to Host Compatibility mode of IGMPv2 if it has a running IGMPv2 Querier Present timer. If it does not have a running IGMPv2 Querier Present timer then it switches to Host Compatibility of IGMPv3.							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-10.8 MUST	RFC 3376, IGMP Version 3, s7.2.1 p35 In the Presence of Older Version Queriers							
	IGMPv2 Querier Present is set to Older Version Querier Present Timeout seconds whenever an IGMPv2 General Query is received							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-10.9 MUST	RFC 3376, IGMP Version 3, s7.2.1 p36 In the Presence of Older Version Queriers When Host Compatibility Mode is IGMPv3, a host acts using the IGMPv3 protocol on that interface							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-11.1 SHOULD	RFC 3376, IGMP Version 3, s9.1 p44 Query Message Hosts SHOULD ignore v1, v2 or v3 General Queries sent to a multicast address other than 224.0.0.1, the all-systems address NOTE: This test is for v3 General Queries							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-2.1 MUST	RFC 3376, IGMP Version 3, s2 p3 The Service Interface for Requesting IP Multicast Reception If reception of the same multicast address is desired on more than one interface, IPMulticastListen is invoked separately for each desired interface							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: FAIL						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-2.2 MUST	RFC 3376, IGMP Version 3, s2 p3 The Service Interface for Requesting IP Multicast Reception If reception of more than one multicast address on a given interface is desired, IPMulticastListen is invoked separately for each desired multicast address							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: unpredict						
	Free BSD 12.0 untested	Free BSD 12.0 untested						

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-2.3 MUST	RFC 3376, IGMP Version 3, s2 p4 The Service Interface for Requesting IP Multicast Reception							
	An implementation MAY impose a limit on the size of source lists, but that limit MUST NOT be less than 64 addresses per list							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-2.4 MUST	RFC 3376, IGMP Version 3, s2 p4 The Service Interface for Requesting IP Multicast Reception							
	Each subsequent request completely replaces any earlier request for the given socket, interface and multicast address							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-3.2 MUST	RFC 3376, IGMP Version 3, s3.2 p7 Interface State							
	if *all* such records (associated to socket) have a filter mode of INCLUDE, then the filter mode of the interface record is INCLUDE, and the source list of the interface record is the union of the source lists of all the socket records							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-3.3 MUST	RFC 3376, IGMP Version 3, s3.2 p7 Interface State							
	a change of socket state does not necessarily result in a change of interface state							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-4.1 MUST	RFC 3376, IGMP Version 3, s4 p7 Message Formats							
	IGMP messages are encapsulated in IPv4 datagrams, with an IP protocol number of 2 (Tests that IGMPv3 Membership Query Message conforms to above statement)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-4.10 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4 p7 Message Formats							
	Every IGMP message described in this document is sent with IP Precedence of Internetwork Control (e.g., Type of Service 0xc0) (Tests that IGMPv3 Membership Query Message conforms to above statement)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-4.11 MUST	RFC 3376, IGMP Version 3, s4 p7 Message Formats							
	Every IGMP message described in this document is sent with IP Precedence of Internetwork Control (e.g., Type of Service 0xc0) (Tests that IGMPv3 Membership Report Message conforms to above statement)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-4.13 MUST	RFC 3376, IGMP Version 3, s4 p7 Message Formats							
	Every IGMP message described in this document carries an IP Router Alert option [RFC-2113] in its IP header (Tests that IGMPv3 Membership Query Message conforms to above statement)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-4.14 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4 p7 Message Formats							
	Every IGMP message described in this document carries an IP Router Alert option [RFC-2113] in its IP header (Tests that IGMPv3 Membership Query Message conforms to above statement) (NOTE:RFC 3376, Section 9.1. Query Message, Page 44 : o Hosts SHOULD ignore v2 or v3 Queries without the Router-Alert option)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-4.15 MUST	RFC 3376, IGMP Version 3, s4 p7 Message Formats							
	Every IGMP message described in this document carries an IP Router Alert option [RFC-2113] in its IP header (Tests that IGMPv3 Membership Report Message conforms to above statement)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-4.16 SHOULD	NEGATIVE: RFC 3376, IGMP Version 3, s4 p7 Message Formats							
	Every IGMP message described in this document carries an IP Router Alert option [RFC-2113] in its IP header (Tests that IGMPv3 Membership Report Message conforms to above statement)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-4.17 MUST	RFC 3376, IGMP Version 3, s4 p8 Message Formats							
	An implementation of IGMPv3 MUST also support the following message type, for interoperability with previous versions of IGMP: 0x12 Version 1 Membership Report [RFC-1112]							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-4.18 MUST	RFC 3376, IGMP Version 3, s4 p8 Message Formats							
	An implementation of IGMPv3 MUST also support the following message type, for interoperation with previous versions of IGMP: 0x16 Version 2 Membership Report [RFC-2236]							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-4.19 MUST	RFC 3376, IGMP Version 3, s4 p8 Message Formats							
	An implementation of IGMPv3 MUST also support the following message type, for interoperation with previous versions of IGMP: 0x17 Version 2 Leave Group [RFC-2236]							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-4.2 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4 p7 Message Formats							
	IGMP messages are encapsulated in IPv4 datagrams, with an IP protocol number of 2 (Tests that IGMPv3 Membership Query Message conforms to above statement)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-4.20 MUST	RFC 3376, IGMP Version 3, s4 p8 Message Formats							
	An implementation of IGMPv3 MUST also support the following three message types, for interoperation with previous versions of IGMP ... Unrecognized message types MUST be silently ignored							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						

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IGMPV3-4.3 MUST	RFC 3376, IGMP Version 3, s4 p7 Message Formats							
	IGMP messages are encapsulated in IPv4 datagrams, with an IP protocol number of 2 (Tests that IGMPv3 Membership Report Message conforms to above statement)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-4.4 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4 p7 Message Formats							
	IGMP messages are encapsulated in IPv4 datagrams, with an IP protocol number of 2 (Tests that IGMPv3 Membership Report Message conforms to above statement)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-4.5 MUST	RFC 3376, IGMP Version 3, s4 p7 Message Formats							
	Every IGMP message described in this document is sent with an IP Time-to-Live of 1 (Tests that IGMPv3 Membership Query Message conforms to above statement)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-4.6 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4 p7 Message Formats							
	Every IGMP message described in this document is sent with an IP Time-to-Live of 1 (Tests that IGMPv3 Membership Query Message conforms to above statement)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							

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IGMPV3-4.7 MUST	RFC 3376, IGMP Version 3, s4 p7 Message Formats							
	Every IGMP message described in this document is sent with an IP Time-to-Live of 1 (Tests that IGMPv3 Membership Report Message conforms to above statement)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-4.8 SHOULD	NEGATIVE: RFC 3376, IGMP Version 3, s4 p7 Message Formats							
	Every IGMP message described in this document is sent with an IP Time-to-Live of 1 (Tests that IGMPv3 Membership Report Message conforms to above statement)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-4.9 MUST	RFC 3376, IGMP Version 3, s4 p7 Message Formats							
	Every IGMP message described in this document is sent with IP Precedence of Internetwork Control (e.g., Type of Service 0xc0) (Tests that IGMPv3 Membership Query Message conforms to above statement)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-5.1 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4.1.1 p9 Max Resp Code							
	The actual time allowed, called the Max Resp Time, is represented in units of 1/10 second and is derived from the Max Resp Code as: If Max Resp Code < 128, Max Resp Time = Max Resp Code							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							

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IGMPV3-5.10 MAY	NEGATIVE: RFC 3376, IGMP Version 3, s4.1.4 p10 Resv (Reserved)							
	The Resv field is ignored on reception by the host.							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-5.11 MUST	RFC 3376, IGMP Version 3, s4.1.5 p10 S Flag (Suppress Router-Side Processing) RFC 3376, IGMP Version 3, s6.6.1. p33 Timer Updates							
	When set to one, the S Flag indicates to any receiving multicast routers that they are to suppress the normal timer updates they perform upon hearing a Query While received Q(G) Group Timer is lowered to LMQT if S-Flag is not set (Tests for S Flag set to 1)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-5.12 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4.1.5 p10 S Flag (Suppress Router-Side Processing) NEGATIVE: RFC 3376, IGMP Version 3, s6.6.1. p33 Timer Updates							
	When set to one, the S Flag indicates to any receiving multicast routers that they are to suppress the normal timer updates they perform upon hearing a Query While received Q(G) Group Timer is lowered to LMQT if S-Flag is not set (Tests for S Flag set to 0)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-5.13 MUST	RFC 3376, IGMP Version 3, s4.1.5 p10 S Flag (Suppress Router-Side Processing)							
	When the S Flag is set to one, it does not, however, suppress the querier election							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-5.14 MUST	RFC 3376, IGMP Version 3, s4.1.7 p10 QQIC (Querier's Query Interval Code)							
	The Querier's Query Interval Code field specifies the [Query Interval] used by the querier. The actual interval, called the Querier's Query Interval (QQI), is represented in units of seconds							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-5.15 MUST	RFC 3376, IGMP Version 3, s4.1.8 p11 Number of Sources (N)							
	The Number of Sources (N) field specifies how many source addresses are present in the Query. This number is zero in a General Query							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-5.16 MUST	RFC 3376, IGMP Version 3, s4.1.8 p11 Number of Sources (N)							
	The Number of Sources (N) field specifies how many source addresses are present in the Query. This number is zero in a Group Specific Query							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-5.17 MUST	RFC 3376, IGMP Version 3, s4.1.8 p11 Number of Sources (N)							
	The Number of Sources (N) field specifies how many source addresses are present in the Query. This number is non-zero in a Group-and-Source-Specific Query							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-5.18 MUST	RFC 3376, IGMP Version 3, s4.1.9 p11 Source Address [i]							
	The Source Address [i] fields are a vector of n IP unicast addresses, where n is the value in the Number of Sources (N) field (Tests that IGMPv3 General Query Message conforms to the above statement)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-5.19 MUST	RFC 3376, IGMP Version 3, s4.1.9 p11 Source Address [i]							
	The Source Address [i] fields are a vector of n IP unicast addresses, where n is the value in the Number of Sources (N) field (Tests that IGMPv3 Group-Specific Query Message conforms to the above statement)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-5.2 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4.1.1 p9 Max Resp Code							
	The actual time allowed, called the Max Resp Time, is represented in units of 1/10 second and is derived from the Max Resp Code as follows: If Max Resp Code = 128, Max Resp Code represents a floating-point value as follows: ... Max Resp Time = (mant 0x10) << (exp + 3)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-5.20 MUST	RFC 3376, IGMP Version 3, s4.1.9 p11 Source Address [i]							
	The Source Address [i] fields are a vector of n IP unicast addresses, where n is the value in the Number of Sources (N) field (Tests that IGMPv3 Group-and-Source-Specific Query Message conforms to the above statement)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-5.21 MUST	RFC 3376, IGMP Version 3, s4.1.10 p11 Additional Data							
	When sending a Query, an IGMPv3 implementation MUST NOT include additional octets beyond the fields described here (Tests that IGMPv3 General Query Message conforms to the above statement)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-5.22 MUST	RFC 3376, IGMP Version 3, s4.1.10 p11 Additional Data							
	When sending a Query, an IGMPv3 implementation MUST NOT include additional octets beyond the fields described here (Tests that IGMPv3 Group-Specific Query Message conforms to the above statement)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-5.23 MUST	RFC 3376, IGMP Version 3, s4.1.10 p11 Additional Data							
	When sending a Query, an IGMPv3 implementation MUST NOT include additional octets beyond the fields described here (Tests that IGMPv3 Group-and-Source-Specific Query Message conforms to the above statement)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-5.24 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4.1.10 p11 Additional Data							
	If the Packet Length field in the IP header of a received Query indicates that there are additional octets of data present, beyond the fields described here, IGMPv3 implementations MUST include those octets in the computation to verify the received IGMP Checksum							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-5.25 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4.1.10 p11 Additional Data							
	If ... there are additional octets of data present, beyond the fields described here, IGMPv3 implementations ... to verify the received IGMP Checksum, but MUST otherwise ignore those additional octets							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-5.26 MUST	RFC 3376, IGMP Version 3, s4.1.10 p12 Query Variants							
	In a Group-Specific Query, the Group Address field contains the multicast address of interest, and the Number of Sources (N) field contains zero							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-5.27 MUST	RFC 3376, IGMP Version 3, s4.1.10 p12 Query Variants							
	In a Group-and-Source-Specific Query, Source Address [i] fields contain the source address(es) of interest							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-5.28 MUST	RFC 3376, IGMP Version 3, s4.1.12 p12 IP Destination Addresses for Queries							
	In IGMPv3, General Queries are sent with an IP destination address of 224.0.0.1, the all-systems multicast address							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-5.29 MUST	RFC 3376, IGMP Version 3, s4.1.12 p12 IP Destination Addresses for Queries							
	Group-Specific Queries are sent with an IP destination address equal to the multicast address of interest							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-5.3 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4.1.1 p9 Max Resp Code							
	The actual time allowed, called the Max Resp Time, is represented in units of 1/10 second and is derived from the Max Resp Code as follows: If Max Resp Code > 128, Max Resp Code represents a floating-point value as follows: ... Max Resp Time = (mant 0x10) << (exp + 3)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-5.30 MUST	RFC 3376, IGMP Version 3, s4.1.12 p12 IP Destination Addresses for Queries							
	Group-and-Source Specific Queries are sent with an IP destination address equal to the multicast address of interest							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-5.31 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4.1.12 p12 IP Destination Addresses for Queries							
	However, a system MUST accept and process any Query whose IP Destination Address field contains *any* of the addresses (unicast or multicast) assigned to the interface on which the Query arrives (Tests for an IP Multicast Address)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-5.32 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4.1.12 p12 IP Destination Addresses for Queries							
	However, a system MUST accept and process any Query whose IP Destination Address field contains *any* of the addresses (unicast or multicast) assigned to the interface on which the Query arrives (Tests for an IP Unicast Address)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-5.4 MUST	RFC 3376, IGMP Version 3, s4.1.2 p10 Checksum							
	The Checksum is the 16-bit one's complement of the one's complement sum of the whole IGMP message (the entire IP payload).							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-5.5 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4.1.2 p10 Checksum							
	When receiving a General Query, the checksum MUST be verified by the host before processing that packet							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-5.6 MUST	RFC 3376, IGMP Version 3, s4.1.3 p10 Group Address							
	The Group Address field is set to zero when sending a General Query							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-5.7 MUST	RFC 3376, IGMP Version 3, s4.1.3 p10 Group Address							
	The Group Address field is set to the IP multicast address being queried when sending a Group-Specific Query							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-5.8 MUST	RFC 3376, IGMP Version 3, s4.1.3 p10 Group Address							
	The Group Address field is set to the IP multicast address being queried when sending a Group-and-Source-Specific Query							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-5.9 MUST	RFC 3376, IGMP Version 3, s4.1.4 p10 Resv (Reserved)							
	The Resv field is set to zero on transmission							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-6.1 MUST	RFC 3376, IGMP Version 3, s4.2.1 p14 Reserved							
	In Version 3 Membership Report Message, the Reserved fields are set to zero on transmission							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-6.10 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4.2.10 p15 Auxiliary Data							
	Implementations of IGMPv3 MUST ignore any auxiliary data present in any received Group Record in a Version 3 Membership Report							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.11 MUST	RFC 3376, IGMP Version 3, s4.2.11 p15 Additional Data							
	When sending a Report, an IGMPv3 implementation MUST NOT include additional octets beyond the last Group Record							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.12 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4.2.11 p15 Additional Data							
	If the Packet Length field in the IP header of a received Report indicates that there are additional octets of data present, beyond the last Group Record, IGMPv3 implementations MUST include those octets in the computation to verify the received IGMP Checksum							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.13 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4.2.11 p15 Additional Data							
	If the Packet Length field in the IP header ... additional octets of data present, beyond the last Group Record, ... the received IGMP Checksum but MUST otherwise ignore those additional octets							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-6.14 MUST	RFC 3376, IGMP Version 3, s4.2.12 p16 Group Record Types							
	A "Current-State Record" is sent by a system in response to a Query received on an interface. It reports ... address. MODE_IS_INCLUDE - indicates that ... The Source Address [i] fields in this Group Record contain the interface's source list for the specified multicast address, if it is non-empty							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.15 MUST	RFC 3376, IGMP Version 3, s4.2.12 p16 Group Record Types							
	A "Current-State Record" is sent by a system in response to a Query received on an interface. It reports ... address. MODE_IS_EXCLUDE - indicates that ... Source Address [i] fields in this Group Record contain the interface's source list for the specified multicast address, if it is non-empty							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.16 MUST	RFC 3376, IGMP Version 3, s4.2.12 p16 Group Record Types							
	A "Filter-Mode-Change Record" is sent by a system whenever a local invocation of IPMulticastListen ... the filter mode CHANGE_TO_INCLUDE_MODE - indicates that the interface has changed to INCLUDE filter mode for the specified multicast address. The Source Address [i] fields ... is non-empty							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.17 MUST	RFC 3376, IGMP Version 3, s4.2.12 p16 Group Record Types							
	A "Filter-Mode-Change Record" is sent by a system whenever a local invocation of IPMulticastListen ... the filter mode CHANGE_TO_EXCLUDE_MODE - indicates that the interface has changed to EXCLUDE filter mode for the specified multicast address. The Source Address [i] fields ... is non-empty							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-6.18 MUST	RFC 3376, IGMP Version 3, s4.2.12 p17 Group Record Types							
	A "Source-List-Change Record" is sent by a system whenever a local invocation of IPMulticastListen ... two values: ALLOW_NEW_SOURCES - indicates that the Source Address [i] fields ... If the change was to an INCLUDE source list, these are the addresses that were added to the list;							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.19 MUST	RFC 3376, IGMP Version 3, s4.2.12 p17 Group Record Types							
	A "Source-List-Change Record" is sent by a system whenever a local invocation of IPMulticastListen ... two values: ALLOW_NEW_SOURCES - indicates that the Source Address [i] fields ... if the change was to an EXCLUDE source list, these are the addresses that were deleted from the list							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.2 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4.2.1 p14 Reserved							
	In Version 3 Membership Report Message, the Reserved fields are ignored on reception							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.20 MUST	RFC 3376, IGMP Version 3, s4.2.12 p17 Group Record Types							
	A "Source-List-Change Record" is sent by a system whenever a local invocation of IPMulticastListen ... two values: BLOCK_OLD_SOURCES - indicates that the Source Address [i] fields ... If the change was to an INCLUDE source list, these are the addresses that were deleted from the list							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-6.21 MUST	RFC 3376, IGMP Version 3, s4.2.12 p17 Group Record Types							
	A "Source-List-Change Record" is sent by a system whenever a local invocation of IPMulticastListen ... two values: BLOCK_OLD_SOURCES - indicates that the Source Address [i] fields ... if the change was to an EXCLUDE source list, these are the addresses that were added to the list							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.22 MUST	RFC 3376, IGMP Version 3, s4.2.12 p17 Group Record Types							
	If a change of source list results in both allowing new sources and blocking old sources, then two Group Records are sent for the same multicast address, one of type ALLOW_NEW_SOURCES and one of type BLOCK_OLD_SOURCES							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.23 MUST	RFC 3376, IGMP Version 3, s4.2.13 p17 IP Source Addresses for Reports							
	An IGMP report is sent with a valid IP source address for the destination subnet							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.24 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4.2.13 p17 IP Source Addresses for Reports							
	Routers MUST accept a report with a source address of 0.0.0.0							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-6.25 MUST	RFC 3376, IGMP Version 3, s4.2.14 p18 IP Destination Addresses for Reports							
	Version 3 Reports are sent with an IP destination address of 224.0.0.22							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.26 MUST	RFC 3376, IGMP Version 3, s4.2.14 p18 IP Destination Addresses for Reports							
	Version 3 Reports are sent with an IP destination address of 224.0.0.22, to which all IGMPv3-capable multicast routers listen							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.27 MUST	RFC 3376, IGMP Version 3, s4.2.14 p18 IP Destination Addresses for Reports							
	A system that is operating in version 1 or version 2 compatibility modes sends version 1 or version 2 Reports to the multicast group specified in the Group Address field of the Report (Tests for IGMP version 1 compatibility mode)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.28 MUST	RFC 3376, IGMP Version 3, s4.2.14 p18 IP Destination Addresses for Reports							
	A system that is operating in version 1 or version 2 compatibility modes sends version 1 or version 2 Reports to the multicast group specified in the Group Address field of the Report (Tests for IGMP version 2 compatibility mode)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-6.29 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4.2.14 p18 IP Destination Addresses for Reports							
	In addition, a system MUST accept and process any version 1 or version 2 Report whose IP Destination Address field contains *any* of the addresses (unicast or multicast) assigned to the interface on which the Report arrives (Tests for IGMPv1 compatibility mode and multicast address)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.3 MUST	RFC 3376, IGMP Version 3, s4.2.2 p14 Checksum							
	In Version 3 Membership Report Message, the Checksum is the 16-bit one's complement of the one's complement sum of the whole IGMP message (the entire IP payload). For computing the checksum, the Checksum field is set to zero							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.30 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4.2.14 p18 IP Destination Addresses for Reports							
	In addition, a system MUST accept and process any version 1 or version 2 Report whose IP Destination Address field contains *any* of the addresses (unicast or multicast) assigned to the interface on which the Report arrives (Tests for IGMPv1 compatibility mode and unicast address)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.31 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4.2.14 p18 IP Destination Addresses for Reports							
	In addition, a system MUST accept and process any version 1 or version 2 Report whose IP Destination Address field contains *any* of the addresses (unicast or multicast) assigned to the interface on which the Report arrives (Tests for IGMPv2 compatibility mode and multicast address)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-6.32 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4.2.14 p18 IP Destination Addresses for Reports							
	In addition, a system MUST accept and process any version 1 or version 2 Report whose IP Destination Address field contains *any* of the addresses (unicast or multicast) assigned to the interface on which the Report arrives (Tests for IGMPv2 compatibility mode and unicast address)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.4 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s4.2.2 p14 Checksum							
	When receiving Version 3 Membership Report packets, the checksum MUST be verified before processing a message							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.5 MUST	RFC 3376, IGMP Version 3, s4.2.3 p14 Number of Group Records (M)							
	The Number of IGMP Group Records (M) field specifies how many Group Records are present in this Report							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.6 MUST	RFC 3376, IGMP Version 3, s4.2.7 p15 Number of Sources (N)							
	The Number of Sources (N) field in an Version 3 Membership Report specifies how many source addresses are present in this Group Record							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-6.7 MUST	RFC 3376, IGMP Version 3, s4.2.8 p15 Multicast Address							
	In a Version 3 Membership Report, the Multicast Address field contains the IP multicast address to which this Group Record pertains							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.8 MUST	RFC 3376, IGMP Version 3, s4.2.9 p15 Source Address [i]							
	In a Version 3 Membership Report, The Source Address [i] fields are a vector of n IP unicast addresses, where n is the value in this record's Number of Sources (N) field							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-6.9 MUST	RFC 3376, IGMP Version 3, s4.2.10 p15 Auxiliary Data							
	Implementations of IGMPv3 MUST NOT include any auxiliary data (i.e., MUST set the Aux Data Len field to zero) in any transmitted Group Record in a Version 3 Membership Report							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-7.1 MUST	RFC 3376, IGMP Version 3, s4.2.15 p18 Notation for Group Records							
	IS_IN (x) - Type MODE_IS_INCLUDE, source addresses x. It is sent by a system in response to a Query. It indicates that the interface has a filter mode of INCLUDE for the specified multicast addresses							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-7.2 MUST	RFC 3376, IGMP Version 3, s4.2.15 p18 Notation for Group Records							
	IS_EX (x) - Type MODE_IS_EXCLUDE, source addresses x It is sent by a system in response to a Query. It indicates that the interface has a filter mode of EXCLUDE for the specified multicast addresses							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-7.3 MUST	RFC 3376, IGMP Version 3, s4.2.15 p18 Notation for Group Records							
	TO_IN (x) - Type CHANGE_TO_INCLUDE_MODE, source addresses x It is sent by a system whenever a local invocation of IPMulticastListen causes a change of filter mode. It indicates that the interface has changed to INCLUDE filter mode for the specified multicast address							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-7.4 MUST	RFC 3376, IGMP Version 3, s4.2.15 p18 Notation for Group Records							
	TO_EX (x) - Type CHANGE_TO_EXCLUDE_MODE, source addresses x It is sent by a system whenever a local invocation of IPMulticastListen causes a change of filter mode. It indicates that the interface has changed to EXCLUDE filter mode for the specified multicast address							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-7.5 MUST	RFC 3376, IGMP Version 3, s4.2.15 p18 Notation for Group Records							
	ALLOW (x) - Type ALLOW_NEW_SOURCES, source addresses x It is sent by a system whenever a local invocation of IPMulticastListen causes a change of source list. It indicates that the Source Address [i] fields in this Group Record contain a list of the additional sources that the system wishes to hear from							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-7.6 MUST	RFC 3376, IGMP Version 3, s4.2.15 p18 Notation for Group Records							
	BLOCK (x) - Type BLOCK_OLD_SOURCES, source addresses x It is sent by a system whenever a local invocation of IPMulticastListen causes a change of source list. It indicates that the Source Address [i] fields in this Group Record contain a list of the sources the system no longer wishes to hear from							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-8.1 MUST	RFC 3376, IGMP Version 3, s5 p19 Description of the Protocol for Group Members							
	Note that a multicast router that is also a group member performs both parts of IGMPv3, receiving and responding to its own IGMP message transmissions as well as those of its neighbors							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-8.10 MUST	RFC 3376, IGMP Version 3, s5.1 p21 Action on Change of Interface State							
	When [Robustness Variable] State-Change reports with Filter-Mode-Change records ... after the last filter-mode change, and if source-list changes to the interface reception have scheduled additional reports, then the next State-Change report will include Source-List-Change records							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-8.11 MUST	RFC 3376, IGMP Version 3, s5.2 p23 Action on Reception of a Query							
	If the received Query is a Group-Specific Query or a Group-and-Source-Specific Query and ... used to schedule a report. If the received Query is a Group-and-Source-Specific Query, the list of queried sources is recorded to be used when generating a response							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-8.12 MUST	RFC 3376, IGMP Version 3, s5.2 p23 Action on Reception of a Query							
	If the expired timer is the interface timer ... one Current-State Record is sent for each multicast address for which ... (MODE_IS_INCLUDE or MODE_IS_EXCLUDE) and source list. Multiple Current-State Records are packed into individual Report messages, to the extent possible							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-8.13 MUST	RFC 3376, IGMP Version 3, s5.2 p23 Action on Reception of a Query							
	If the expired timer is a group timer and the list ... is a pending response to a Group-Specific Query), then ... is sent for that address. The Current-State Record carries the multicast address and its associated filter mode (MODE_IS_INCLUDE or MODE_IS_EXCLUDE) and source list							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-8.14 MUST	RFC 3376, IGMP Version 3, s5.2 p24 Action on Reception of a Query							
	If ... it is a pending response to a Group-and-Source-Specific Query), ... If interface state is INCLUDE (A), set of sources in the pending response record is B, then Current-State Record is IS_IN (A*B)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-8.15 MUST	RFC 3376, IGMP Version 3, s5.2 p23 Action on Reception of a Query							
	If ... it is a pending response to a Group-and-Source-Specific Query), ... If interface state is EXCLUDE (A), set of sources in the pending response record is B, then Current-State Record is IS_IN (B-A)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-8.16 MUST	RFC 3376, IGMP Version 3, s5.2 p23 Action on Reception of a Query							
	If the resulting Current-State Record has an empty set of source addresses, then no response is sent (Tests when interface state is INCLUDE and Current-State Record (A*B) is empty)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-8.17 MUST	RFC 3376, IGMP Version 3, s5.2 p23 Action on Reception of a Query							
	If the resulting Current-State Record has an empty set of source addresses, then no response is sent (Tests when interface state is EXCLUDE and Current-State Record (B-A) is empty)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-8.2 MUST	RFC 3376, IGMP Version 3, s5 p19 Description of the Protocol for Group Members							
	A system performs the protocol described in this section over all interfaces on which multicast reception is supported							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-8.3 MUST	RFC 3376, IGMP Version 3, s5 p19 Description of the Protocol for Group Members							
	The all-systems multicast address, 224.0.0.1, is handled as a special case ... No IGMP messages are ever sent regarding the all-systems multicast address (Tests that although DUT listens on 224.0.0.1, it does not sent report for that address)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-8.4 MUST	RFC 3376, IGMP Version 3, s5.1 p20 Action on Change of Interface State							
	A change of interface state from EXCLUDE (A) to EXCLUDE (B) causes the system to immediately transmit a State-Change Report with State-Change Records ALLOW (A-B), BLOCK (B-A) from that interface.							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-8.5 MUST	RFC 3376, IGMP Version 3, s5.1 p20 Action on Change of Interface State							
	To cover the possibility of the State-Change Report being missed by one or more multicast routers, it is retransmitted [Robustness Variable] - 1 more times							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-8.6 MUST	RFC 3376, IGMP Version 3, s5.1 p20 Action on Change of Interface State							
	To cover the possibility of the State-Change Report being missed by one or more multicast routers, it is retransmitted [Robustness Variable] - 1 more times, at intervals chosen at random from the range (0, [Unsolicited Report Interval])							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-8.7 MUST	RFC 3376, IGMP Version 3, s5.1 p20 Action on Change of Interface State							
	If more changes to the same interface state entry occur before all the retransmissions of the State-Change Report for the first change have been completed, each such additional change triggers the immediate transmission of a new State-Change Report							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-8.8 MUST	RFC 3376, IGMP Version 3, s5.1 p21 Action on Change of Interface State							
	The transmission of the merged State-Change Report terminates retransmissions of the earlier State-Change Reports for the same multicast address, and becomes the first of [Robustness Variable] transmissions of State-Change Reports.							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-8.9 MUST	RFC 3376, IGMP Version 3, s5.1 p21 Action on Change of Interface State							
	If the interface reception-state change that triggers the new report is a filter-mode change, then the next [Robustness Variable] State-Change Reports will include a Filter-Mode-Change record. This applies even if any number of source-list changes occur in that period							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-9.1 MUST	RFC 3376, IGMP Version 3, s6 p25 Description of the Protocol for Multicast Routers							
	On each interface over which this protocol is being run, the router MUST enable reception of multicast address 224.0.0.22, from all sources							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-9.10 MUST	RFC 3376, IGMP Version 3, s6.4.1 p30 Reception of Current-State Records Filter-Mode							
	When a router in state INCLUDE (A), receiving Current-State Records IS_EX (B), it updates the Router State to EXCLUDE (A*B,B-A) and source timer (B-A)=0, Delete (A-B).							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-9.11 MUST	RFC 3376, IGMP Version 3, s6.4.2 p31 Reception of Filter- Mode-Change and Source-List-Change Records							
	When a router in state INCLUDE (A), receiving BLOCK (B), it updates the Router State to INCLUDE (A) and sends Q(G,A*B) [Last Member Query Count] times, in order to maintain protocol robustness							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-9.12 MUST	RFC 3376, IGMP Version 3, s6.4.2 p31 Reception of Filter- Mode-Change and Source-List-Change Records							
	When a router in state INCLUDE (A), receiving BLOCK (B), it updates the Router State to INCLUDE (A) and sends Q(G,A*B) at [Last Member Query Interval] interval, in order to maintain protocol robustness							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-9.13 MUST	RFC 3376, IGMP Version 3, s6.6.2 p34 Querier Election							
	When a router receives a query with a lower IP address, it sets the Other-Querier-Present timer to Other Querier Present Interval and ceases to send queries on the network if it was the previously elected querier							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-9.14 MUST	RFC 3376, IGMP Version 3, s6.6.2 p34 Querier Election							
	When a router receives a query with a lower IP address ... After its Other-Querier Present timer expires, it should begin sending General Queries							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-9.2 MUST	RFC 3376, IGMP Version 3, s6.1 p25 Conditions for IGMP Queries RFC 3376, IGMP Version 3, s8.2 p40 Query Interval							
	Multicast routers send General Queries periodically to request group membership information from an attached network The Query Interval is the interval between General Queries sent by the Querier							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: pass						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-9.3 MUST	RFC 3376, IGMP Version 3, s6.1 p25 Conditions for IGMP Queries							
	When a group membership is terminated at a system or traffic from a particular source is no longer desired, a multicast router must query for other members ... before deleting the group (or source) and pruning its traffic (Tests for group deletion by IGMPv3 router)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-9.4 MUST	RFC 3376, IGMP Version 3, s6.1 p25 Conditions for IGMP Queries							
	When a group membership is terminated at a system or traffic from a particular source is no longer desired, a multicast router must query for other members ... before deleting the group (or source) and pruning its traffic (Tests for source deletion by IGMPv3 router)							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-9.5 MUST	RFC 3376, IGMP Version 3, s6.1 p25 Conditions for IGMP Queries							
	Group-Specific Queries are sent when a router receives a State-Change record indicating a system is leaving a group							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							

	Release 7.5.1	Release 8.0	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x	Release x.x.x
IGMPV3-9.6 MUST	RFC 3376, IGMP Version 3, s6.1 p26 Conditions for IGMP Queries							
	Group-and-Source Specific Queries list sources for a particular group which have been requested to no longer be forwarded ... Group-and-Source Specific Queries are only sent in response to State-Change Records							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-9.7 MUST	NEGATIVE: RFC 3376, IGMP Version 3, s6.1 p26 Conditions for IGMP Queries							
	Group-and-Source Specific Queries list sources for a particular group which have been requested to no longer be forwarded ... Group-and-Source Specific Queries are never sent in response to Current-State Records							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-9.8 MUST	RFC 3376, IGMP Version 3, s6.2.1 p27 Definition of Router Filter-Mode							
	As a rule, once a group record with a filter-mode of EXCLUDE is received, the router filter-mode for that group will be EXCLUDE							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL						
Free BSD 12.0 untested	Free BSD 12.0 untested							
IGMPV3-9.9 MUST	RFC 3376, IGMP Version 3, s6.4.1 p30 Reception of Current-State Records							
	When a router in state INCLUDE (A), receiving Current-State Records IS_IN (B), it updates the Router State to INCLUDE (A+B) and source timer (B)=GMI.							
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict						
Free BSD 12.0 untested	Free BSD 12.0 untested							