



	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
Туре	FRR	FRR	FRR	FRR				
Commit ID	gff905c6c3	9931db7						
Commit Date	2021-05-27	2021-07-29						
IGMPV3-1.1	RFC 3376, IG	MP Version 3						
MUST	Quick test 1	to verify tha	at DUT acts a	as an IGMPv3	Router			
	Free BSD 10.3 untested	Free BSD 10.3 untested						
	Ubuntu 16.04:	Ubuntu 16.04:						
	pass	pass						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-1.2	RFC 3376, IG	MP Version 3						
MUST	Quick test 1	to verify tha	at DUT acts a	as an IGMPv3	Host			
	Free BSD 10.3	Free BSD 10.3						
	untested	untested						
	Ubuntu 16.04: pass	Ubuntu 16.04: unpredict						
	Free BSD 12.0 untested	Free BSD 12.0 untested						
IGMPV3-10.1	RFC 3376, IG	MP Version 3,	s7.1 p35 Que	y Version Disti	nctions	-		
MUST	The IGMP ver determined a IGMPv1 Query field is zer	rsion of a Me as follows: y: length = { ro	embership Que 3 octets AND	ery message i Max Resp Cod	.s le			
	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, IG	MP Version 3,	s7.2.1 p36 ln	the Presence of	of Older Version	n Queriers		
MUST	When Host Co IGMPv2 compa on that inte	ompatibility atibility moc erface	Mode is IGMI de, using on	Pv2, a host a ly the IGMPv2	acts in 2 protocol,			
	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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IGMPV3-10.11	RFC 3376, IG	MP Version 3,	s7.2.1 p36 ln t	the Presence o	of Older Version	n Queriers		
MUST	When Host Co IGMPv1 compa on that inte	ompatibility atibility mod erface	Mode is IGME de, using onl	Pvl, a host a ly the IGMPv]	acts in protocol,			
	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	RFC 3376, IG	MP Version 3,	s7.2.1 p37 In t	the Presence c	of Older Version	n Queriers		
MUST	An IGMPv1 ro Resp Code so of 100 (10 s	outer will se et to 0. Thi seconds)	end General ( ls MUST be ir	Queries with Iterpreted as	the Max a value			
	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	RFC 3376, IG	MP Version 3,	s7.2.1 p37 In t	the Presence c	of Older Version	n Queriers		
MUST	An IGMPv2 ro Resp Code so range of th: described is	outer will se et to the des is field is l s not used	end General ( sired Max Res linear and th	Queries with sp Time, i.e. ne exponentia	the Max , the full al algorithm			
	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	RFC 3376, IG	MP Version 3,	s7.2.1 p37 In t	the Presence c	of Older Version	n Queriers		
MUST	Whenever a h all its pend	host changes ding response	its compatik e and retrans	oility mode, smission time	it cancels ers			
	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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IGMPV3-10.15	RFC 3376, IG	MP Version 3,	s7.2.2 p37 ln 1	the Presence c	f Older Versio	n Group Memb	ers			
МАҮ	A host MAY a suppressed b or a Version (Tests for 3	allow its IGM by either a N n 2 Membershi IGMP Version	MPv3 Membersh Version 1 Mer 1p Report 1 Report)	nip Record to nbership Repo	) be prt,					
	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	RFC 3376, IG	MP Version 3,	s7.2.2 p37 ln t	the Presence c	f Older Versio	n Group Memb	ers			
MAY	A host MAY a suppressed b or a Version (Tests for 1	host MAY allow its IGMPv3 Membership Record to be uppressed by either a Version 1 Membership Report, r 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	RFC 3376, IG	MP Version 3,	s7.3.1 p37 ln t	the Presence c	f Older Versio	n Queriers				
MUST	When in IGM with a Max H	Pv1 mode, rou Resp Code of	uters MUST se O	end Periodic	Queries					
	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	RFC 3376, IG	MP Version 3,	s7.3.1 p37 ln t	the Presence c	f Older Versio	n Queriers	-			
MUST	When in IGM	Pvl mode, rou	iters MUST i	gnore Leave G	roup message	s	-			
	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								





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IGMPV3-10.19	RFC 3376, IG	MP Version 3,	s7.3.1 p37 ln 1	the Presence c	of Older Version	n Queriers	-			
MUST	When in IGM truncated at	Pv2 mode, rou t the Group <i>P</i>	uters MUST se Address field	end Periodic 1 (i.e., 8 by	Queries vtes 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	RFC 3376, IG	MP Version 3,	s7.1 p35 Quei	ry Version Disti	nctions					
MUST	The IGMP ver determined a IGMPv2 Query field is not	The IGMP version of a Membership Query message is letermined 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	RFC 3376, IG	MP Version 3,	s7.3.2 p38 ln t	the Presence c	of Older Version	n Group Memb	ers			
MUST	When Group ( internally f for that gro	Compatibility translates th oup to their	v Mode is IGN ne IGMPv2 Rep IGMPv3 equiv	MPv2, a route port messages valents as IS	er 5 5_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	RFC 3376, IG	MP Version 3,	s7.3.2 p38 ln 1	the Presence c	of Older Version	n Group Memb	ers			
MUST	When Group ( internally f for that gro	Compatibility translates th oup to their	7 Mode is IGN ne IGMPv2 Lea IGMPv3 equiv	MPv2, a route ave messages valents as TC	er D_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								





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IGMPV3-10.24	RFC 3376, IG	MP Version 3,	s7.3.2 p38 ln t	the Presence c	f Older Versio	n Group Memb	ers		
MUST	When Group ( internally for that gro	Compatibility translates th oup to their	y Mode is IGM Ne IGMPv1 Rep IGMPv3 equiv	MPvl, a route port messages valents as IS	er s S_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	RFC 3376, IGMP Version 3, s7.3.2 p38 In the Presence of Older Version Group Members								
MUST	When Group ( messages and	Compatibility d IGMPv3 TO_I	7 Mode is IGN IN() messages	MPv1, IGMPv2 s are also ig	Leave nored				
	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	RFC 3376, IGMP Version 3, s7.1 p35 Query Version Distinctions								
MUST	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	NEGATIVE: F	RFC 3376, IGM	P Version 3, s	7.1 p35 Query	Version Distine	ctions			
MUST	Query message conditions silently ign	ges that do n (e.g., a Quen nored.	not match any cy of length	y of the abov 10 octets) M	re IUST be				
	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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IGMPV3-10.5	RFC 3376, IG	MP Version 3,	s7.2.1 p35 ln t	the Presence c	of Older Version	n Queriers		
MUST	In order to IGMPv3 hosts	be compatibl s MUST operat	le with olden te in version	r version rou n 1 compatibi	lters, lity 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	RFC 3376, IG	MP Version 3,	s7.2.1 p35 ln t	the Presence c	of Older Version	n Queriers		
MUST	In order to IGMPv3 hosts	be compatibl s MUST operat	le with olden te in version	r version rou n 2 compatibi	iters, lity 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	RFC 3376, IG	MP Version 3,	s7.2.1 p36 ln t	the Presence c	of Older Version	n Queriers		
MUST	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	RFC 3376, IG	MP Version 3,	s7.2.1 p35 ln t	the Presence c	f Older Versio	n Queriers		
MUST	IGMPv2 Quer: Present Time is received	ier Present i eout seconds	is set to Olc whenever an	der Version ( IGMPv2 Gener	Querier Cal Query			
	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						





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IGMPV3-10.9	RFC 3376, IG	MP Version 3,	s7.2.1 p36 ln t	the Presence c	f Older Versio	n Queriers					
MUST	When Host Co the IGMPv3 p	ompatibility protocol on t	Mode is IGME that interfac	Pv3, a host a ce	acts using						
	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	RFC 3376, IG	MP Version 3,	s9.1 p44 Quei	ry Message							
SHOULD	Hosts SHOULI multicast ad NOTE: This 1	Hosts SHOULD ignore v1, v2 or v3 General Queries sent to a nulticast 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	RFC 3376, IGMP Version 3, s2 p3 The Service Interface for Requesting IP Multicast Reception										
MUST	If reception more than on separately i	n of the same ne interface, for each desi	e multicast a , IPMulticast ired interfac	address is de Listen is ir Ce	esired on nvoked						
	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	RFC 3376, IG	MP Version 3,	s2 p3 The Ser	vice Interface	for Requesting	IP Multicast R	eception				
MUST	If reception interface is separately i	n of more tha s desired, II for each des	an one multic PMulticastLis ired multicas	cast address sten is invok st address	on a given Ked						
	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									





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IGMPV3-2.3	RFC 3376, IG	MP Version 3,	s2 p4 The Sei	vice Interface	for Requesting	IP Multicast R	eception			
MUST	An implement lists, but per list	tation MAY in that limit MU	npose a limit JST NOT be le	t on the size ess than 64 a	e of source addresses					
	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	RFC 3376, IG	MP Version 3,	s2 p4 The Sei	rvice Interface	for Requesting	IP Multicast R	eception			
MUST	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	3.2 RFC 3376, IGMP Version 3, s3.2 p7 Interface State									
MUST	<pre>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</pre>									
	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	RFC 3376, IG	MP Version 3,	s3.2 p7 Interfa	ace State						
MUST	a change of change of in	socket state nterface stat	e does not ne ce	ecessarily re	esult in a					
	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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IGMPV3-4.1	RFC 3376, IG	MP Version 3,	s4 p7 Messag	e Formats			-			
MUST	IGMP message IP protocol (Tests that above states	es are encaps number of 2 IGMPv3 Membe nent)	sulated in II ership Query	Pv4 datagrams Message conf	s, with an Forms to	-				
	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	NEGATIVE: F	RFC 3376, IGM	P Version 3, s	4 p7 Message	Formats					
MUST	Every IGMP of IP Precedend 0xc0) (Tests that above states	very IGMP message described in this document is sent with P Precedence of Internetwork Control (e.g., Type of Service xc0) Tests that IGMPv3 Membership Query Message conforms to bove 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	RFC 3376, IG	MP Version 3,	s4 p7 Messag	e Formats						
MUST	Every IGMP T IP Precedent 0xc0) (Tests that above states	message descr ce of Interne IGMPv3 Membe ment)	ribed in this atwork Contro ership Report	s document is ol (e.g., Typ t Message cor	s sent with be of Service nforms to	2				
	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	RFC 3376, IG	MP Version 3,	s4 p7 Messag	e Formats						
MUST	Every IGMP T Router Aler (Tests that above states	message descr t option [RFC IGMPv3 Membe ment)	ribed in this 2-2113] in it ership Query	s document ca ts IP header Message conf	arries an IP Forms to					
	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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IGMPV3-4.14	NEGATIVE: F	RFC 3376, IGM	P Version 3, s	4 p7 Message	Formats					
MUST	Every IGMP r Router Alert (Tests that above stater (NOTE:RFC 3: o Host	nessage descr t option [RFC IGMPv3 Membe nent) 376, Section ts SHOULD ign	ribed in this 2-2113] in it ership Query 9.1. Query M hore v2 or v3	s document ca cs IP header Message conf Message, Page 8 Queries wit	arries an IP Forms to e 44 : chout the Rou	ter-Alert op	tion)			
	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	RFC 3376, IGMP Version 3, s4 p7 Message Formats									
MUST	Every IGMP r Router Alert (Tests that above stater	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	NEGATIVE: F	RFC 3376, IGM	P Version 3, s	4 p7 Message	Formats					
SHOULD	Every IGMP r Router Alert (Tests that above stater	message desc t option [RFC IGMPv3 Membe ment)	ribed in this 2-2113] in it ership Report	s document ca is IP header Message cor	nrries an IP nforms to					
	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	RFC 3376, IG	MP Version 3,	s4 p8 Messag	e Formats						
MUST	An implementation of IGMPv3 MUST also support the following message type, for interoperation 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								





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IGMPV3-4.18	RFC 3376, IG	MP Version 3,	s4 p8 Messag	e Formats							
MUST	An implement message type of IGMP: 0x16	tation of IGN e, for intero Version 2	MPv3 MUST als operation wit Membership H	so support th th previous w Report [RB	ne following versions FC-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	RFC 3376, IG	RFC 3376, IGMP Version 3, s4 p8 Message Formats									
MUST	An implement message type of IGMP: 0x17	n implementation of IGMPv3 MUST also support the following essage type, for interoperation with previous versions f IGMP: x17 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	NEGATIVE: F	RFC 3376, IGM	IP Version 3, s	4 p7 Message	Formats						
MUST	IGMP message IP protocol (Tests that above states	es are encaps number of 2 IGMPv3 Membe ment)	sulated in II ership Query	Pv4 datagrams Message conf	s, with an Forms to						
	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	RFC 3376, IG	MP Version 3,	s4 p8 Messag	e Formats							
MUST	An implement three messag versions of silently ign	tation of IGN ge types, for IGMP Unr nored	MPv3 MUST als r interoperat recognized me	so support th tion with pre essage types	ne following evious MUST be						
	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	RFC 3376, IG	MP Version 3,	s4 p7 Messag	e Formats			-				
MUST	IGMP message IP protocol (Tests that above states	es are encaps number of 2 IGMPv3 Membe ment)	sulated in II ership Report	Pv4 datagrams t Message cor	s, with an nforms to						
	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	NEGATIVE: F	RFC 3376, IGM	P Version 3, s	4 p7 Message	Formats						
MUST	IGMP message IP protocol (Tests that above states	GMP messages are encapsulated in IPv4 datagrams, with an P 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	RFC 3376, IG	MP Version 3,	s4 p7 Messag	e Formats							
MUST	Every IGMP with an IP (Tests that above states	message desc Time-to-Live IGMPv3 Membe ment)	ribed in this of 1 ership Query	s document is Message conf	s sent Forms to						
	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	NEGATIVE: F	RFC 3376, IGM	P Version 3, s	4 p7 Message	Formats						
MUST	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	RFC 3376, IG	MP Version 3,	s4 p7 Messag	e Formats							
MUST	Every IGMP with an IP 7 (Tests that above states	message desci Time-to-Live IGMPv3 Membe ment)	ribed in this of 1 ership Report	s document is t Message cor	s sent nforms to						
	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	NEGATIVE: F	RFC 3376, IGM	P Version 3, s	4 p7 Message	Formats						
SHOULD	Every IGMP with an IP ( (Tests that above state)	very 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	RFC 3376, IGMP Version 3, s4 p7 Message Formats										
MUST	Every IGMP of IP Precedend 0xc0) (Tests that above states	message desci ce of Interne IGMPv3 Membe ment)	ribed in this etwork Contro ership Query	s document is ol (e.g., Typ Message conf	s sent with be of Service Forms to	2					
	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	NEGATIVE: F	RFC 3376, IGM	P Version 3, s	4.1.1 p9 Max F	Resp Code						
MUST	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	NEGATIVE: F	RFC 3376, IGM	P Version 3, s	4.1.4 p10 Resv	(Reserved)						
MAY	The Resv fie	eld is ignore	ed on recepti	on by the ho	ost.						
	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	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										
MUSI	When set to multicast ro timer update While receiv S-Flag is no (Tests for S	<pre>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 Free BSD 10.3 Free BSD 10.3</pre>									
	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	NEGATIVE: F 3376, IGMP V	RFC 3376, IGM /ersion 3, s6.6.	P Version 3, s 1. p33 Timer L	4.1.5 p10 S Fla Ipdates	ag (Suppress R	Router-Side Pro	ocessing) NEG	ATIVE: RFC			
MUST	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	RFC 3376, IG	MP Version 3,	s4.1.5 p10 S F	-lag (Suppress	Router-Side F	Processing)					
MUST	When the S I suppress the	Flag is set t e querier ele	to one, it do ection	oes not, howe	ever,						
	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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IGMPV3-5.14	RFC 3376, IG	MP Version 3,	s4.1.7 p10 QC	QIC (Querier's (	Query Interval	Code)				
MUST	The Querier [Query Inte: called the ( in units of	's Query Inte rval] used by Querier's Que seconds	erval Code fi y the queries ery Interval	ield specifie r. The actua (QQI), is re	es the al interval, epresented					
	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	RFC 3376, IG	MP Version 3,	s4.1.8 p11 Nu	mber of Sourc	es (N)					
MUST	The Number of addresses as in a General	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	RFC 3376, IG	MP Version 3,	s4.1.8 p11 Nu	mber of Sourc	es (N)					
MUST	The Number of addresses a: a Group Spec	of Sources (N re present ir cific Query	<ol> <li>field spectrum</li> <li>the Query.</li> </ol>	cifies how ma This number	any source is zero 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								
IGMPV3-5.17	RFC 3376, IG	MP Version 3,	s4.1.8 p11 Nu	mber of Source	es (N)					
MUST	The Number of addresses at non-zero in	of Sources (M re present ir a Group-and-	N) field spec n the Query. -Source-Spect	cifies how ma This number ific Query	any source is					
	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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IGMPV3-5.18	RFC 3376, IG	MP Version 3,	s4.1.9 p11 So	urce Address [	ï]						
MUST	The Source A unicast add of Sources (Tests that the above st	Address [i] f resses, where (N) field IGMPv3 Gener tatement)	fields are a e n is the va cal Query Mes	vector of n alue in the M ssage conform	IP Number ns to						
	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	RFC 3376, IG	RFC 3376, IGMP Version 3, s4.1.9 p11 Source Address [i]									
MUST	The Source is unicast add of Sources (Tests that to the above	he Source Address [i] fields are a vector of n IP nicast addresses, where n is the value in the Number f Sources (N) field Tests that IGMPv3 Group-Specific Query Message conforms o 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	NEGATIVE: RFC 3376, IGMP Version 3, s4.1.1 p9 Max Resp Code										
MUST	The actual of represented Max Resp Coo Code represe Max Resp Tin	time allowed, in units of de as follows ents a float: me = (mant	, called the 1/10 second s: If Max Res ing-point va 0x10) <&	Max Resp Tin and is deriv sp Code = 128 lue as follow lt; (exp + 3)	ne, is ved from the 3, Max Resp ws: )						
	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	RFC 3376, IG	MP Version 3,	s4.1.9 p11 So	urce Address [	i]						
MUST	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									





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IGMPV3-5.21	RFC 3376, IG	MP Version 3,	s4.1.10 p11 A	dditional Data							
MUST	When sending include add: (Tests that the above s	g a Query, an itional octet IGMPv3 Gener tatement)	n IGMPv3 imp s beyond the ral Query Mes	lementation M e fields desc ssage conform	MUST NOT cribed here ns to						
	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	RFC 3376, IG	RFC 3376, IGMP Version 3, s4.1.10 p11 Additional Data									
MUST	When sending include add (Tests that the above s	hen sending a Query, an IGMPv3 implementation MUST NOT nclude additional octets beyond the fields described here Tests that IGMPv3 Group-Specific Query Message conforms to he 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	RFC 3376, IGMP Version 3, s4.1.10 p11 Additional Data										
MUST	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	NEGATIVE: F	RFC 3376, IGM	P Version 3, s	4.1.10 p11 Add	ditional Data						
MUST	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									





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IGMPV3-5.25	NEGATIVE: F	RFC 3376, IGM	IP Version 3, s	4.1.10 p11 Add	litional Data					
MUST	If there beyond the f to verif otherwise is	e are addition fields descri fy the receiv gnore those a	onal octets o ibed here, IC ved IGMP Cheo additional oc	of data prese GMPv3 impleme cksum, but MU ctets	ent, entations JST					
	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	RFC 3376, IG	MP Version 3,	s4.1.10 p12 Q	uery Variants						
MUST	In a Group-S the multicas Sources (N)	n a Group-Specific Query, the Group Address field contains he multicast address of interest, and the Number of ources (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	RFC 3376, IG	MP Version 3,	s4.1.10 p12 Q	uery Variants						
MUST	In a Group-a fields conta	and-Source-Sp ain the sourc	pecific Query ce address(es	7, Source Add s) of interes	dress [i] st					
	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	RFC 3376, IG	MP Version 3,	s4.1.12 p12 IF	P Destination A	ddresses for C	lueries				
MUST	In IGMPv3, ( address of 2	General Queri 224.0.0.1, th	ies are sent ne all-syster	with an IP c ns multicast	lestination 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								





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IGMPV3-5.29	RFC 3376, IG	MP Version 3,	s4.1.12 p12 IF	P Destination A	ddresses for C	ueries				
MUST	Group-Specia address equa	fic Queries a al to the mu	are sent with ulticast addr	n an IP desti ress of inter	nation					
	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	NEGATIVE: RFC 3376, IGMP Version 3, s4.1.1 p9 Max Resp Code									
MUST	The actual f represented Max Resp Coo Code represe Max Resp Tim	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 Tode 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	RFC 3376, IG	RFC 3376, IGMP Version 3, s4.1.12 p12 IP Destination Addresses for Queries								
MUST	Group-and-So destination interest	ource Specifi address equa	ic Queries ar al to the mu	re sent with ulticast addr	an IP cess of					
	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	NEGATIVE: F	RFC 3376, IGM	P Version 3, s	4.1.12 p12 IP [	Destination Add	dresses for Qu	eries			
MUST	*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								





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IGMPV3-5.32	NEGATIVE: F	RFC 3376, IGM	P Version 3, s	4.1.12 p12 IP [	Destination Add	dresses for Qu	eries		
MUST	*However*, a whose IP Der addresses (1 on which tha (Tests for a Free BSD 10.3	a system MUS stination Add unicast or mu e Query arriv an IP Unicast Free BSD 10.3	F accept and dress field o ulticast) ass ves Address)	process any contains *any signed to the	y Query 7* of the e interface				
	untested	untested							
	Ubuntu 16.04: pass	Ubuntu 16.04: pass							
	Free BSD 12.0	Free BSD 12.0							
	untested	untested							
IGMPV3-5.4	RFC 3376, IG	MP Version 3,	s4.1.2 p10 Ch	ecksum					
MUST	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	NEGATIVE: F	RFC 3376, IGM	P Version 3, s	4.1.2 p10 Cheo	cksum				
MUST	When receiv verified by	ing a General y the host be	L Query, the efore process	checksum MUS sing that pac	ST be cket				
	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	RFC 3376, IG	MP Version 3,	s4.1.3 p10 Gr	oup Address					
MUST	The Group Ad General Que:	ddress field ry	is set to ze	ero when send	ling a				
	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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IGMPV3-5.7	RFC 3376, IG	MP Version 3,	s4.1.3 p10 Gr	oup Address					
MUST	The Group Ad being querio	ddress field ed when send:	is set to th ing a Group-S	he IP multica Specific Quer	ast address Ty	-			
	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	.8 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								
MUST									
	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	RFC 3376, IG	MP Version 3,	s4.1.4 p10 Re	esv (Reserved)					
MUST	The Resv fi	eld is set to	o zero on tra	ansmission	-				
	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	RFC 3376, IG	MP Version 3,	s4.2.1 p14 Re	eserved					
MUST	In Version are set to s	3 Membership zero on trans	Report Messa smission	age, the Rese	erved fields		-		
	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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IGMPV3-6.10	NEGATIVE: F	RFC 3376, IGM	P Version 3, s	4.2.10 p15 Au	iliary Data		-			
MUST	Implementat: present in a Membership H	ions of IGMP any received Report	73 MUST igno Group Record	re any auxili 1 in a Versio	ary data on 3					
	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	RFC 3376, IG	MP Version 3,	s4.2.11 p15 A	dditional Data						
MUST	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	NEGATIVE: RFC 3376, IGMP Version 3, s4.2.11 p15 Additional Data									
MUST	If the Packa Report india present, bey implementat: to verify th	et Length fic cates that th yond the last ions MUST inc he received i	eld in the I here are add: Group Recor- clude those o IGMP Checksur	P header of a itional octet rd, IGMPv3 octets in the n	a received s of data e computatior	1				
	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	NEGATIVE: F	RFC 3376, IGM	P Version 3, s	4.2.11 p15 Add	litional Data					
MUST	If the Packe octets of da the received additional o	et Length fie ata present, d IGMP Checks octets	eld in the II beyond the I sum but MUST	P header Last Group Re otherwise ig	additional ecord, gnore those					
	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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IGMPV3-6.14	RFC 3376, IG	MP Version 3,	s4.2.12 p16 G	roup Record T	ypes	-					
MUST	A "Current-S a Query rece MODE_IS_INCI fields in the list for the	State Record eived on an f LUDE - indica his Group Rec e specified r	" is sent by interface. I ates that cord contain multicast add	a system in It reports . . The Source the interfac dress, if it	response to address. Address [i] ce's source is non-empty	7					
	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	RFC 3376, IG	RFC 3376, IGMP Version 3, s4.2.12 p16 Group Record Types									
MUST	A "Current-3 a Query reco MODE_IS_EXCU fields in the list for the	"Current-State Record" is sent by a system in response to Query received on an interface. It reports address. ODE_IS_EXCLUDE - indicates that Source Address [i] ields in this Group Record contain the interface's source ist 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	RFC 3376, IG	RFC 3376, IGMP Version 3, s4.2.12 p16 Group Record Types									
MUST	A "Filter-Ma a local invo CHANGE_TO_II changed to 3 address. The	ode-Change Re ocation of IF NCLUDE_MODE - INCLUDE filte Source Adda	ecord" is ser PMulticastLis - indicates t er mode for t ress [i] fiel	nt by a syste sten the chat the inte che specified lds is no	em whenever filter mode erface has d multicast on-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	RFC 3376, IG	MP Version 3,	s4.2.12 p16 G	roup Record T	ypes						
MUST	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									





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IGMPV3-6.18	RFC 3376, IG	MP Version 3,	s4.2.12 p17 G	roup Record T	ypes					
MUST	A "Source-L. local invoca ALLOW_NEW_SO fields 5 these are th	ist-Change Re ation of IPMu OURCES - ind: If the change he addresses	ecord" is ser alticastListe cates that t was to an I that were ac	nt by a system en two va che Source Ac INCLUDE source dded to the 1	em whenever a alues: ddress [i] ce list, list;	L				
	Free BSD 10.3 untested	Free BSD 10.3 untested								
	Ubuntu 16.04: unpredict Free BSD 12.0	Ubuntu 16.04: pass Free BSD 12.0								
	untested	untested								
IGMPV3-6.19	RFC 3376, IGMP Version 3, s4.2.12 p17 Group Record Types									
MUST	A "Source-Li local invoca ALLOW_NEW_So fields i these are th	"Source-List-Change Record" is sent by a system whenever a .ocal invocation of IPMulticastListen two values: .LLOW_NEW_SOURCES - indicates that the Source Address [i] if the change was to an EXCLUDE source list, the addresses that were deleted from the list								
	Free BSD 10.3	Free BSD 10.3								
	untested	untested								
	Ubuntu 16.04: unpredict	Ubuntu 16.04: unpredict								
	Free BSD 12.0 untested	Free BSD 12.0 untested								
IGMPV3-6.2	NEGATIVE: F	RFC 3376, IGM	P Version 3, s	4.2.1 p14 Rese	erved					
MUST	In Version are ignored	3 Membership on receptior	Report Messa	age, the Rese	erved fields					
	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	RFC 3376, IG	MP Version 3,	s4.2.12 p17 G	roup Record T	ypes					
MUST	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								





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IGMPV3-6.21	RFC 3376, IG	MP Version 3,	s4.2.12 p17 G	roup Record T	ypes					
MUST	A "Source-L. local invoca BLOCK_OLD_S( fields these are the Free BSD 10.3	ist-Change Re ation of IPMn DURCES - ind: if the chang he addresses Free BSD 10.3	ecord" is ser alticastListe icates that t ge was to an that were ac	nt by a syste en two va the Source Ad EXCLUDE sour dded to the 1	em whenever a alues: ddress [i] cce list, .ist					
	untested	untested								
	Ubuntu 16.04: unpredict	Ubuntu 16.04: FAIL								
	Free BSD 12.0 untested	Free BSD 12.0 untested								
IGMPV3-6.22	RFC 3376, IG	MP Version 3,	s4.2.12 p17 G	roup Record T	ypes					
MUST	If a change sources and sent for the ALLOW_NEW_SO	f a change of source list results in both allowing new ources and blocking old sources, then two Group Records are ent for the same multicast address, one of type LLOW_NEW_SOURCES and one of type BLOCK_OLD_SOURCES Free BSD 10.3 Free BSD 10.								
	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	RFC 3376, IG	MP Version 3,	s4.2.13 p17 IF	Source Addre	esses for Repo	rts				
MUST	An IGMP repo the destinat	ort is sent v tion subnet	vith a valid	IP source ad	ldress for					
	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	NEGATIVE: F	RFC 3376, IGN	P Version 3, s	4.2.13 p17 IP S	Source Addres	ses for Reports	3			
MUST	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								





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IGMPV3-6.25	RFC 3376, IG	MP Version 3,	s4.2.14 p18 IF	P Destination A	ddresses for R	eports					
MUST	Version 3 Re 224.0.0.22	eports are se	ent with an ]	IP destinatio	on address of						
	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	RFC 3376, IGMP Version 3, s4.2.14 p18 IP Destination Addresses for Reports										
MUST	Version 3 Re 224.0.0.22, listen	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	RFC 3376, IGMP Version 3, s4.2.14 p18 IP Destination Addresses for Reports										
MUST	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	RFC 3376, IG	MP Version 3,	s4.2.14 p18 IF	P Destination A	ddresses for R	eports					
MUST	A system the compatibilit to the mult: of the Report (Tests for 1	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									





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IGMPV3-6.29	NEGATIVE: F	RFC 3376, IGM	P Version 3, s	4.2.14 p18 IP [	Destination Add	dresses for Re	ports				
MUST	In addition or version contains *a assigned to (Tests for	, a system MT 2 Report whos ny* of the ac the interfac IGMPv1 compat	JST accept an se IP Destina ddresses (uni ce on which t tibility mode	nd process ar ation Address icast or mult the Report an e and multica	ny version 1 s field ticast) crives ast 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	RFC 3376, IGMP Version 3, s4.2.2 p14 Checksum										
MUST	In Version 16-bit one's whole IGMP the checksus	n Version 3 Membership Report Message, the Checksum is the 6-bit one's complement of the one's complement sum of the hole IGMP message (the entire IP payload). For computing he 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	NEGATIVE: F	RFC 3376, IGM	P Version 3, s	4.2.14 p18 IP [	Destination Add	dresses for Re	ports				
MUST	In addition or version contains *a assigned to (Tests for	, a system MT 2 Report whos ny* of the ac the interfac IGMPv1 compat	JST accept ar se IP Destina ddresses (uni ce on which t tibility mode	nd process ar ation Address icast or mult the Report ar and unicast	ny version 1 s field ticast) trives s 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	NEGATIVE: F	RFC 3376, IGM	P Version 3, s	4.2.14 p18 IP [	Destination Add	dresses for Re	ports				
MUST	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	NEGATIVE: F	RFC 3376, IGM	P Version 3, s	4.2.14 p18 IP [	Destination Add	dresses for Rep	oorts			
MUST	In addition or version : contains *au assigned to (Tests for :	, a system MI 2 Report whos ny* of the ac the interfac IGMPv2 compat	JST accept ar se IP Destina ddresses (uni ce on which t tibility mode	nd process ar ation Address icast or mult the Report ar e and unicast	ny version 1 s field ticast) trives 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	NEGATIVE: RFC 3376, IGMP Version 3, s4.2.2 p14 Checksum									
MUST	When receive checksum MU	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	RFC 3376, IG	MP Version 3,	s4.2.3 p14 Nu	mber of Group	Records (M)					
MUST	The Number of many Group I	of IGMP Group Records are p	p Records (M) present in th	) field speci nis Report	fies how					
	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	RFC 3376, IG	MP Version 3,	s4.2.7 p15 Nu	mber of Source	es (N)					
MUST	The Number of Report spect this Group 1	of Sources (1 ifies how mar Record	N) field in a ny source add	an Version 3 dresses are p	Membership present 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								





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IGMPV3-6.7	RFC 3376, IG	MP Version 3,	s4.2.8 p15 Mu	Ilticast Address	5						
MUST	In a Version Address fie this Group 1	n 3 Membershi ld contains t Record pertai	p Report, th the IP multic	ne Multicast cast address	to which						
	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	RFC 3376, IG	MP Version 3,	s4.2.9 p15 So	urce Address [	i]						
MUST	In a Version Address [i] where n is field	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	RFC 3376, IGMP Version 3, s4.2.10 p15 Auxiliary Data										
MUST	Implementat data (i.e., any transmi Report	ions of IGMP MUST set the tted Group Re	73 MUST NOT i e Aux Data Le ecord in a Ve	include any a en field to z ersion 3 Memb	uxiliary ero) in pership						
	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	RFC 3376, IG	MP Version 3,	s4.2.15 p18 N	otation for Gro	up Records						
MUST	IS_IN ( x ) It is sent in that the in specified m	- Type MOI by a system i terface has a ulticast addr	DE_IS_INCLUDH in response t a filter mode resses	E, source add to a Query. I e of INCLUDE	resses x. t indicates for the						
	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									





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IGMPV3-7.2	RFC 3376, IG	MP Version 3,	s4.2.15 p18 N	otation for Gro	up Records						
MUST	IS_EX ( x ) It is sent 1 that the int specified m	- Type MOI by a system i terface has a ulticast addu	DE_IS_EXCLUDE in response t a filter mode resses	E, source add to a Query. I e of EXCLUDE	dresses x t indicates for the						
	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	RFC 3376, IG	MP Version 3,	s4.2.15 p18 N	otation for Gro	up Records						
MUST	TO_IN ( x ) It is sent l IPMulticast that the in specified mu Free BSD 10.3	CO_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									
	untested	untested									
	Ubuntu 16.04: FAIL	Ubuntu 16.04: FAIL									
	Free BSD 12.0 untested	Free BSD 12.0 untested									
IGMPV3-7.4	RFC 3376, IG	RFC 3376, IGMP Version 3, s4.2.15 p18 Notation for Group Records									
MUST	TO_EX ( x ) It is sent I IPMulticast that the int specified mu	- Type CHA by a system w Listen causes terface has o ulticast adda	ANGE_TO_EXCLU whenever a lo s a change of changed to EX cess	JDE_MODE, sou ocal invocati f filter mode KCLUDE filter	arce addresse on of a. It indicat mode for th	es x ces ne					
	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	RFC 3376, IG	MP Version 3,	s4.2.15 p18 N	otation for Gro	up Records						
MUST	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									





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IGMPV3-7.6	RFC 3376, IG	MP Version 3,	s4.2.15 p18 N	otation for Gro	up Records						
MUST	BLOCK ( x ) It is sent I IPMulticast that the So a list of t	- Type BLC by a system w Listen causes urce Address he sources th	OCK_OLD_SOUR whenever a lo a change of [i] fields i ne system no	CES, source a ocal invocati f source list in this Group longer wishe	addresses x ion of . It indicat Record cont es to hear fr	es cain com					
	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	RFC 3376, IGMP Version 3, s5 p19 Description of the Protocol for Group Members										
MUST	Note that a performs bo to its own its neighbo	ote that a multicast router that is also a group member erforms both parts of IGMPv3, receiving and responding o its own IGMP message transmissions as well as those of ts 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	RFC 3376, IG	RFC 3376, IGMP Version 3, s5.1 p21 Action on Change of Interface State									
MUST	When [Robus Mode-Change and if sour scheduled av report will	tness Variabl records ce-list chang dditional rep include Soun	le] State-Cha after the la ges to the ir ports, then t cce-List-Char	ange reports ast filter-mo nterface rece the next Stat nge records	with Filter- ode change, eption have te-Change						
	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	RFC 3376, IG	MP Version 3,	s5.2 p23 Actic	on on Reception	n of a Query						
MUST	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									





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IGMPV3-8.12	RFC 3376, IG	MP Version 3,	s5.2 p23 Actic	on on Reception	n of a Query						
MUST	If the expir -State Recor (MODE_I: Multiple Cur Report messa	red timer is rd is sent fo S_INCLUDE or rrent-State F ages, to the	the interfac or each multi MODE_IS_EXCI Records are p extent possi	ce timer icast address LUDE) and sou packed into i ible	one Current s for which arce list. .ndividual						
	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	RFC 3376, IG	MP Version 3,	s5.2 p23 Actic	on on Reception	n of a Query						
MUST	If the expire a pending re- sent for the the multicas (MODE_IS_ING	f the expired timer is a group timer and the list is pending response to a Group-Specific Query), then is ent for that address. The Current-State Record carries he 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	RFC 3376, IG	MP Version 3,	s5.2 p24 Actic	on on Reception	n of a Query						
MUST	If it is Specific Que set of source Current-Stat	s a pending p ery), If ces in the pe te Record is	response to a interface st ending respor IS_IN (A*B)	a Group-and-S cate is INCLU nse record is	Gource- JDE (A), B, then						
	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	RFC 3376, IG	MP Version 3,	s5.2 p23 Actic	on on Reception	n of a Query						
MUST	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									





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IGMPV3-8.16	RFC 3376, IG	MP Version 3,	s5.2 p23 Actio	n on Reception	n of a Query						
MUST	If the result source addre (Tests when Record (A*B	lting Current esses, then r interface st ) is empty)	-State Recor no response i tate is INCLU	rd has an emp ls sent JDE and Curre	ety set of						
	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	RFC 3376, IG	MP Version 3,	s5.2 p23 Actio	n on Reception	n of a Query						
MUST	If the result source addre (Tests when Record (B-A	f the resulting Current-State Record has an empty set of ource addresses, then no response is sent Tests when interface state is EXCLUDE and Current-State ecord (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	RFC 3376, IG	MP Version 3,	s5 p19 Descri	ption of the Pro	tocol for Grou	p Members					
MUST	A system per over all int supported	rforms the pr terfaces on w	rotocol descr vhich multica	ribed in this ast reception	s section is						
	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	RFC 3376, IG	MP Version 3,	s5 p19 Descri	ption of the Pro	tocol for Grou	p Members					
MUST	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									





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IGMPV3-8.4	RFC 3376, IG	MP Version 3,	s5.1 p20 Actic	on on Change o	of Interface Sta	te					
MUST	A change of causes the s Report with from that in	interface st system to imm State-Change nterface.	tate from EXC nediately tra e Records ALI	CLUDE (A) to ansmit a Stat LOW (A-B), BI	EXCLUDE (B) ce-Change LOCK (B-A)						
	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	RFC 3376, IG	MP Version 3,	s5.1 p20 Actic	on on Change o	of Interface Sta	te					
MUST	To cover the missed by or [Robustness	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	RFC 3376, IG	MP Version 3,	s5.1 p20 Actic	on on Change o	of Interface Sta	te					
MUST	To cover the missed by ou [Robustness random from	e possibility ne or more mu Variable] - the range ((	y of the Stat ulticast rout 1 more times ), [Unsolicit	te-Change Rep ters, it is n s, at interva ted Report In	oort being cetransmitted als chosen at aterval])	1					
	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	RFC 3376, IG	MP Version 3,	s5.1 p20 Actic	on on Change o	of Interface Sta	te					
MUST	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									





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IGMPV3-8.8	RFC 3376, IG	MP Version 3,	s5.1 p21 Actic	on on Change o	of Interface Sta	ite					
MUST	The transmis terminates of Reports for the first of State-Change	ssion of the retransmissio the same mul f [Robustness e Reports.	merged State ons of the ea lticast addre s Variable] t	e-Change Repo arlier State- ess, and beco transmissions	ort Change omes s of						
	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	RFC 3376, IG	MP Version 3,	s5.1 p21 Actic	on on Change o	of Interface Sta	ite					
MUST	If the inter new report : [Robustness Filter-Mode of source-1:	f the interface reception-state change that triggers the ew report is a filter-mode change, then the next Robustness Variable] State-Change Reports will include a ilter-Mode-Change record. This applies even if any number f 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	RFC 3376, IG	MP Version 3,	s6 p25 Descri	ption of the Pro	otocol for Multie	cast Routers					
MUST	On each inte the router M 224.0.0.22,	erface over w MUST enable m from all sou	which this pr reception of urces	rotocol is be multicast ac	eing run, ldress						
	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	RFC 3376, IG	MP Version 3,	s6.4.1 p30 Re	ception of Curi	ent-State Rec	ords Filter-Mod	le				
MUST	When a route Records IS_1 (A*B,B-A) an	er in state I EX (B), it up nd source tir	INCLUDE (A), pdates the Ro ner (B-A)=0,	receiving Cu outer State t Delete (A-B)	arrent-State to EXCLUDE						
	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									



#### **vm**ware<sup>®</sup>

	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	RFC 3376, IG	MP Version 3,	s6.4.2 p31 Re	ception of Filte	r- Mode-Chang	ge and Source	-List-Change R	ecords			
MUST	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	2 RFC 3376, IGMP Version 3, s6.4.2 p31 Reception of Filter- Mode-Change and Source-List-Change Records										
MUST	When a route it updates t Q(G,A*B) at in order to	hen a router in state INCLUDE (A), receiving BLOCK (B), t updates the Router State to INCLUDE (A) and sends (G,A*B) at [Last Member Query Intrval] interval, n 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	RFC 3376, IG	MP Version 3,	s6.6.2 p34 Qu	erier Election							
MUST	When a route it sets the Present Inte if it was th	er receives a Other-Queric erval and cea he previously	a query with er-Present ti ases to send y elected que	a lower IP a imer to Other queries on t erier	address, Querier Lhe network						
	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	RFC 3376, IG	MP Version 3,	s6.6.2 p34 Qu	erier Election							
MUST	When a route After its Of begin sendin	er receives a ther-Querier ng General Qu	a query with Present time Jeries	a lower IP a er expires, i	address it should						
	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	RFC 3376, IGMP Version 3, s6.1 p25 Conditions for IGMP Queries RFC 3376, IGMP Version 3, s8.2 p40 Query											
MUST	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	RFC 3376, IGMP Version 3, s6.1 p25 Conditions for IGMP Queries											
MUST	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	RFC 3376, IG	MP Version 3,	s6.1 p25 Cond	ditions for IGMI	Queries							
MUST	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	RFC 3376, IG	MP Version 3,	s6.1 p25 Cond	ditions for IGMI	Queries							
MUST	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	RFC 3376, IGMP Version 3, s6.1 p26 Conditions for IGMP Queries										
MUST	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	NEGATIVE: RFC 3376, IGMP Version 3, s6.1 p26 Conditions for IGMP Queries										
MUST	IUST 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	RFC 3376, IG	MP Version 3,	s6.2.1 p27 De	finition of Rout	er Filter-Mode						
MUST	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	RFC 3376, IG	MP Version 3,	s6.4.1 p30 Re	ception of Curr	rent-State Rec	ords					
MUST	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									