	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21
Type	FRR	FRR	FRR	FRR	FRR	FRR	FRR
Commit ID	99477bc	62ac43d	86a5e5a	933b834	7a2b85a	61ba3a4	852b11e
Commit Date	2022-11-03	2023-01-10	2023-03-13	2023-03-16	2023-04-23	2023-06-14	2023-11-22
ANVL-IGMP-1.2 **MUST**	DUT supporting IGMP router						
	DUT Setup Verification Tests Quick test to verify that DUT supports an IGMP router behavior i.e. it sends an IGMP general query at startup						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass
ANVL-IGMP-2.1 **SHOULD**	RFC 2236, IGMP Version 2, s7 page 13 Router State Diagram						
	Protocol Operations Upon starting the router should multicast a general query						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass
ANVL-IGMP-2.2 **SHOULD**	RFC 2236, IGMP Version 2, s3 p4 Protocol Description						
	Protocol Operations On startup, a router SHOULD Multicast [Startup Query Count] General Queries spaced closely together [Startup Query Interval] (This test is for number of startup General Queries)						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass
ANVL-IGMP-2.3 **SHOULD**	RFC 2236, IGMP Version 2, s3 p4 Protocol Description						
	Protocol Operations On startup, a router SHOULD Multicast [Startup Query Count] General Queries spaced closely together [Startup Query Interval] (This test is for the interval between startup General Queries)						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass

	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21
ANVL-IGMP-2.4	RFC 2236, IGMP Version 2, s3 p4 Protocol Description						
MUST	`Protocol Operations` `Routers periodically [QUERY_INTERVAL] multicast a general query on each attached network for which this router is the querier`						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass
ANVL-IGMP-2.5	RFC 2236, IGMP Version 2, s3 p4 Protocol Description						
MUST	`Protocol Operations` `If a multicast router hears a query message from a router with lower IP address, it MUST become a non-querier for that network`						
	Ubuntu 18.04: untested	Ubuntu 18.04: FAIL	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: FAIL	Debian 12: FAIL	Debian 12: FAIL
ANVL-IGMP-2.6	NEGATIVE: RFC 2236, IGMP Version 2, s3 p4 Protocol Description						
MUST	`Protocol Operations` `If a multicast router hears a query message from a router with lower IP address, it MUST become a non-querier for that network`						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass
ANVL-IGMP-2.7	RFC 2236, IGMP Version 2, s3 p4 Protocol Description						
MUST	`Protocol Operations` `After multicasting Startup Query Count general queries, a router multicasts a general query after QUERY_INTERVAL`						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass
ANVL-IGMP-2.8	RFC 2236, IGMP Version 2, s3 p4 Protocol Description RFC 2236, IGMP Version 2, s2 p2 Introduction						

MUST	`Protocol Operations`
	`A general query is addressed to ALL-SYSTEMS, has a Group Address field of 0 and a Max Response Time of [Query Response Interval].`
	`All IGMP messages described in this document are sent with IP TTL 1`						

	Ubuntu 18.04: untested	Ubuntu 18.04: FAIL	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: FAIL	Debian 12: FAIL	Debian 12: FAIL

	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21
ANVL-IGMP-3.2 **MUST**	RFC 2236, IGMP Version 2, s3 p5 Protocol Description						
	`Joining and Leaving Multicast Groups When a router receives a report, it adds the group being reported to the list of multicast group memberships on the network.`						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass
ANVL-IGMP-3.3 **MUST**	RFC 2236, IGMP Version 2, s3 p5 Protocol Description						
	`Joining and Leaving Multicast Groups The router stops forwarding remotely-originated multicasts for a group after GROUP_MEMBERSHIP_INTERVAL`						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass
ANVL-IGMP-3.8 **SHOULD**	RFC 2236, IGMP Version 2, s3 p5 Protocol Description						
	`Joining and Leaving Multicast Groups Routers SHOULD accept a leave group message being addressed to the group being left`						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass
ANVL-IGMP-3.9 **MUST**	RFC 2236, IGMP Version 2, s3 p5 Protocol Description						
	`Joining and Leaving Multicast Groups A querier multicasts [Last Member Query Count] Group-Specific Queries every [LAST_MEMBER_QUERY_INTERVAL] upon receiving a Leave message`						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass
ANVL-IGMP-3.10 **MUST**	RFC 2236, IGMP Version 2, s3 p6 Protocol Description						
	`Joining and Leaving Multicast Groups Any querier to non-querier transition is ignored during the period of Last Member Query Interval * Last Member Query Count`						
	Ubuntu 18.04: untested	Ubuntu 18.04: FAIL	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: FAIL	Debian 12: FAIL	Debian 12: FAIL

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ANVL-IGMP-3.11 **SHOULD**	RFC 2236, IGMP Version 2, s3 p6 Protocol Description						
	`Joining and Leaving Multicast Groups Queriers SHOULD ignore Leave Group messages for which there are no group members on the reception interface`						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass
ANVL-IGMP-5.4 **MUST**	NEGATIVE: RFC 2236, IGMP Version 2, s6 p8 Host State Diagram						
	`Host State Operations To be valid the query message MUST have the right checksum and must be 8 octets long`						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass
ANVL-IGMP-5.6 **MUST**	NEGATIVE: RFC 2236, IGMP Version 2, s6 p8 Host State Diagram						
	`Host State Operations To be valid a report must have a valid checksum and any greater than 8 octets long must be accepted for future compatability`						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass
ANVL-IGMP-5.10 **SHOULD**	NEGATIVE: RFC 2236, IGMP Version 2, s6 p9 Host State Diagram						
	`Host State Operations The Leave message is sent to ALL-ROUTERS`						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass
ANVL-IGMP-6.1 **MUST**	NEGATIVE: RFC 2236, IGMP Version 2, s7 page 13 Router State Diagram						
	`Router State Operations To be valid, a leave message must have correct IGMP checksum and must be 8 octets long`						
	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass

	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21
ANVL-IGMP-6.3 **MUST**	RFC 2236, IGMP Version 2, s7 page 13 Router State Diagram						

	`Router State Operations`
	`The DUT retransmits the Group-Specific query when the retransmit`
	`timer expires. Its value is LAST_MEMBER_QUERY_INTERVAL`						

	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass
ANVL-IGMP-6.4 **MUST**	RFC 2236, IGMP Version 2, s7 page 13 Router State Diagram						

	`Router State Operations`
	`The Group-Specific query has a Max Response Time of`
	`[Last Member Query Interval]`						

	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass
ANVL-IGMP-6.5 **MUST**	RFC 2236, IGMP Version 2, s3 page 5 Protocol Description						

	`Router State Operations`
	`There is no querier-non-querier transition when a group-specific`
	`query has been sent out`						

	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass
ANVL-IGMP-6.6 **MUST**	RFC 2236, IGMP Version 2, s7 page 13 Router State Diagram						

	`Router State Operations`
	`10 IGMP v2 hosts join and leave 2 groups on 2 different interfaces`
	`DUT is an IGMP v2 router`
	`(Tests an IGMP router behavior according to router state machine`
	`on its multiple interfaces)`						

	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass

	Release 8.4	Release 8.4.2	Release 8.5	Release 8.4.3	Release 8.5.1	Dev-9.0 2023-06-13	Stable 9.1 @2023-11-21
ANVL-IGMP-6.7 **MUST**	RFC 2236, IGMP Version 2, s7 page 13 Router State Diagram						

	`Router State Operations`
	`10 IGMP v2 hosts join and leave a group, DUT is an IGMP v2 router`
	`(Tests an IGMP router behavior according to router state machine`
	`on its one interface)`						

	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass
ANVL-IGMP-6.9 **MUST**	RFC 2236, IGMP Version 2, s7 page 13 Router State Diagram						

	`Router State Operations`
	`10 IGMP v2 hosts join and leave a group, DUT is an IGMP v2 router.`
	`10 remotely originated multicast packets are sent to the DUT`
	`(Tests an IGMP router behavior including its multicast packet`
	`forwarding capability according to router state machine`						

	Ubuntu 18.04: untested	Ubuntu 18.04: pass	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested	Ubuntu 18.04: untested
	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: untested	Debian 12: pass	Debian 12: pass	Debian 12: pass