# IGMPV3 Results

**vmware**®

| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | Release x.x.x | Release x.x.x | Release x.x.x | Release x.x.x |
|---|---|---|---|---|---|---|---|---|
| Type | FRR | FRR | FRR | FRR | FRR | | | |
| Commit ID | 99477bc | 62ac43d | 86a5e5a | 2863e7e | | | | |
| Commit Date | 2022-11-03 | 2023-01-11 | 2023-03-14 | 2023-08-08 | | | | |

**IGMPV3-1.1**
**MUST**

RFC 3376, IGMP Version 3

`Quick test to verify that DUT acts as an IGMPv3 Router`

| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | | | | |
|---|---|---|---|---|---|---|---|---|
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

**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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
|---|---|---|---|---|---|---|---|---|
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
|---|---|---|---|---|---|---|---|---|
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
|---|---|---|---|---|---|---|---|---|
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

# IGMPV3 Results

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| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | Release x.x.x | Release x.x.x | Release x.x.x | Release x.x.x |
|---|---|---|---|---|---|---|---|---|
| **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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 20.04: FAIL | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

# IGMPV3 Results

| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | Release x.x.x | Release x.x.x | Release x.x.x | Release x.x.x |
|---|---|---|---|---|---|---|---|---|
| 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 interoperation with previous versions of IGMP: <br> 0x12          Version 1 Membership Report     [RFC-1112] | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 20.04: FAIL | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| 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: <br> 0x16          Version 2 Membership Report     [RFC-2236] | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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: <br> 0x17          Version 2 Leave Group          [RFC-2236] | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 20.04: FAIL | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

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| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | Release x.x.x | Release x.x.x | Release x.x.x | Release x.x.x |
|---|---|---|---|---|---|---|---|---|
| **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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| **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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | Release x.x.x | Release x.x.x | Release x.x.x | Release x.x.x |
|---|---|---|---|---|---|---|---|---|
| **IGMPV3-5.11** <br> **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 <br> multicast routers that they are to suppress the normal <br> timer updates they perform upon hearing a Query <br> While received Q(G) Group Timer is lowered to LMQT if <br> S-Flag is not set <br> (Tests for S Flag set to 1) | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| **IGMPV3-5.12** <br> **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 <br> multicast routers that they are to suppress the normal <br> timer updates they perform upon hearing a Query <br> While received Q(G) Group Timer is lowered to LMQT if <br> S-Flag is not set <br> (Tests for S Flag set to 0) | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 20.04: FAIL | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| **IGMPV3-5.13** <br> **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, <br> suppress the querier election | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| **IGMPV3-5.14** <br> **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 <br> [Query Interval] used by the querier.  The actual interval, <br> called the Querier's Query Interval (QQI), is represented <br> in units of seconds | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

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| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | Release x.x.x | Release x.x.x | Release x.x.x | Release x.x.x |
|---|---|---|---|---|---|---|---|---|
| **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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| **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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

# IGMPV3 Results

| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | Release x.x.x | Release x.x.x | Release x.x.x | Release x.x.x |
|---|---|---|---|---|---|---|---|---|
| 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | Release x.x.x | Release x.x.x | Release x.x.x | Release x.x.x |
|---|---|---|---|---|---|---|---|---|
| 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

# IGMPV3 Results

| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | Release x.x.x | Release x.x.x | Release x.x.x | Release x.x.x |
|---|---|---|---|---|---|---|---|---|
| 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 20.04: FAIL | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 20.04: FAIL | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | Release x.x.x | Release x.x.x | Release x.x.x | Release x.x.x |
|---|---|---|---|---|---|---|---|---|
| **IGMPV3-6.32** <br> **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 <br> or version 2 Report whose IP Destination Address field <br> contains *any* of the addresses (unicast or multicast) <br> assigned to the interface on which the Report arrives <br> (Tests for IGMPv2 compatibility mode and unicast address) | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| **IGMPV3-7.2** <br> **MUST** | RFC 3376, IGMP Version 3, s4.2.15 p18 Notation for Group Records | | | | | | | |
| | IS_EX ( x )  -  Type MODE_IS_EXCLUDE, source addresses x <br> It is sent by a system in response to a Query. It indicates <br> that the interface has a filter mode of EXCLUDE for the <br> specified multicast addresses | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 20.04: inconclusive | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| **IGMPV3-7.4** <br> **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 <br> It is sent by a system whenever a local invocation of <br> IPMulticastListen causes a change of filter mode. It indicates <br> that the interface has changed to EXCLUDE filter mode for the <br> specified multicast address | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 20.04: inconclusive | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| **IGMPV3-7.6** <br> **MUST** | RFC 3376, IGMP Version 3, s4.2.15 p18 Notation for Group Records | | | | | | | |
| | BLOCK ( x )  -  Type BLOCK_OLD_SOURCES, source addresses x <br> It is sent by a system whenever a local invocation of <br> IPMulticastListen causes a change of source list. It indicates <br> that the Source Address [i] fields in this Group Record contain <br> a list of the sources the system no longer wishes to hear from | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 20.04: inconclusive | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

| | | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | Release x.x.x | Release x.x.x | Release x.x.x | Release x.x.x |
|---|---|---|---|---|---|---|---|---|---|
| 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 20.04: inconclusive | | | | |
| | | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | Release x.x.x | Release x.x.x | Release x.x.x | Release x.x.x |
|---|---|---|---|---|---|---|---|---|
| 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 20.04: inconclusive | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 20.04: FAIL | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 20.04: inconclusive | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | 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),<br>it updates the Router State to  INCLUDE (A) and sends<br>Q(G,A*B) [Last Member Query Count] times, in order to<br>maintain protocol robustness | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 20.04: inconclusive | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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),<br>it updates the Router State to  INCLUDE (A) and sends<br>Q(G,A*B) at [Last Member Query Intrval] interval,<br>in order to maintain protocol robustness | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 20.04: inconclusive | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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,<br>it sets the Other-Querier-Present timer to Other Querier<br>Present Interval and ceases to send queries on the network<br>if it was the previously elected querier | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 ...<br>After its Other-Querier Present timer expires, it should<br>begin sending General Queries | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | Release x.x.x | Release x.x.x | Release x.x.x | Release x.x.x |
|---|---|---|---|---|---|---|---|---|
| **IGMPV3-10.1** <br><br> **MUST** | RFC 3376, IGMP Version 3, s7.1 p35 Query Version Distinctions | | | | | | | |
| | The IGMP version of a Membership Query message is determined as follows: <br> IGMPv1 Query: length = 8 octets AND Max Resp Code field is zero | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 20.04: inconclusive | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| **IGMPV3-10.3** <br><br> **MUST** | RFC 3376, IGMP Version 3, s7.1 p35 Query Version Distinctions | | | | | | | |
| | The IGMP version of a Membership Query message is determined as follows: <br> IGMPv3 Query: length &gt;= 12 octets | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| **IGMPV3-10.17** <br><br> **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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 20.04: inconclusive | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| **IGMPV3-10.18** <br><br> **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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 20.04: inconclusive | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | Release x.x.x | Release x.x.x | Release x.x.x | Release x.x.x |
|---|---|---|---|---|---|---|---|---|
| **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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 20.04: FAIL | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| **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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 20.04: FAIL | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

# IGMPV3 Results

| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | Release x.x.x | Release x.x.x | Release x.x.x | Release x.x.x |
|---|---|---|---|---|---|---|---|---|
| IGMPV3-12.6 **MUST** | RFC 4604, Using IGMPv3 and MLDv2 for SSM, s3.1p7 IGMPv3 ,and MLDv2 Reports | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 20.04: FAIL | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| IGMPV3-12.7 **MUST** | RFC 4604, Using IGMPv3 and MLDv2 for SSM, s3.1p7 IGMPv3 ,and MLDv2 Reports | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 20.04: FAIL | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| IGMPV3-12.8 **SHOULD** | RFC 4604, Using IGMPv3 and MLDv2 for SSM, s3.7p8 IGMPv2,Leave and MLDv1 Done | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 20.04: inconclusive | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| IGMPV3-12.9 **SHOULD** | RFC 4604, Using IGMPv3 and MLDv2 for SSM, s3.7p8 IGMPv2,Leave and MLDv1 Done | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 18.04: inconclusive | Ubuntu 20.04: inconclusive | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | Release x.x.x | Release x.x.x | Release x.x.x | Release x.x.x |
|---|---|---|---|---|---|---|---|---|
| **IGMPV3-12.10** **MAY** | RFC 4604, Using IGMPv3 and MLDv2 for SSM, s2.2.2p4 IGMPv3 ,and MLDv2 Reports | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 18.04: FAIL | Ubuntu 20.04: FAIL | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| **IGMPV3-12.11** **SHOULD** | RFC 4604, Using IGMPv3 and MLDv2 for SSM, s3.5p8 IGMPv1/v2,and MLDv1 Reports | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| **IGMPV3-12.13** **SHOULD** | RFC 4604, Using IGMPv3 and MLDv2 for SSM, s3.5p8 IGMPv1/v2,and MLDv1 Reports | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| **IGMPV3-12.15** **MUST** | RFC 4604, Using IGMPv3 and MLDv2 for SSM, s3.5p8 IGMPv3 and MLDv2 Group-and-Source-Specific Queries | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | Release x.x.x | Release x.x.x | Release x.x.x | Release x.x.x |
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| **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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | 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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| **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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | Release x.x.x | Release x.x.x | Release x.x.x | Release x.x.x |
|---|---|---|---|---|---|---|---|---|
| **IGMPV3-9.7** <br> **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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| **IGMPV3-9.9** <br> **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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| **IGMPV3-10.2** <br> **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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| **IGMPV3-10.19** <br> **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 | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |

| | Release 8.4 | Release 8.4.2 | Release 8.5 | Release 9.0 | Release x.x.x | Release x.x.x | Release x.x.x | Release x.x.x |
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| IGMPV3-12.4 **MAY** | RFC 4604, Using IGMPv3 and MLDv2 for SSM, s3.1p7 IGMPv3 ,and MLDv2 Reports | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| IGMPV3-12.5 **MAY** | RFC 4604, Using IGMPv3 and MLDv2 for SSM, s3.1p7 IGMPv3 ,and MLDv2 Reports | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| IGMPV3-12.12 **MAY** | RFC 4604, Using IGMPv3 and MLDv2 for SSM, s3.1p7 IGMPv3 ,and MLDv2 Reports | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |
| IGMPV3-12.14 **MAY** | RFC 4604, Using IGMPv3 and MLDv2 for SSM, s3.1p7 IGMPv3 ,and MLDv2 Reports | | | | | | | |
| | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | Free BSD 10.3 untested | | | | |
| | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 18.04: pass | Ubuntu 20.04: pass | | | | |
| | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | Free BSD 12.0 untested | | | | |