

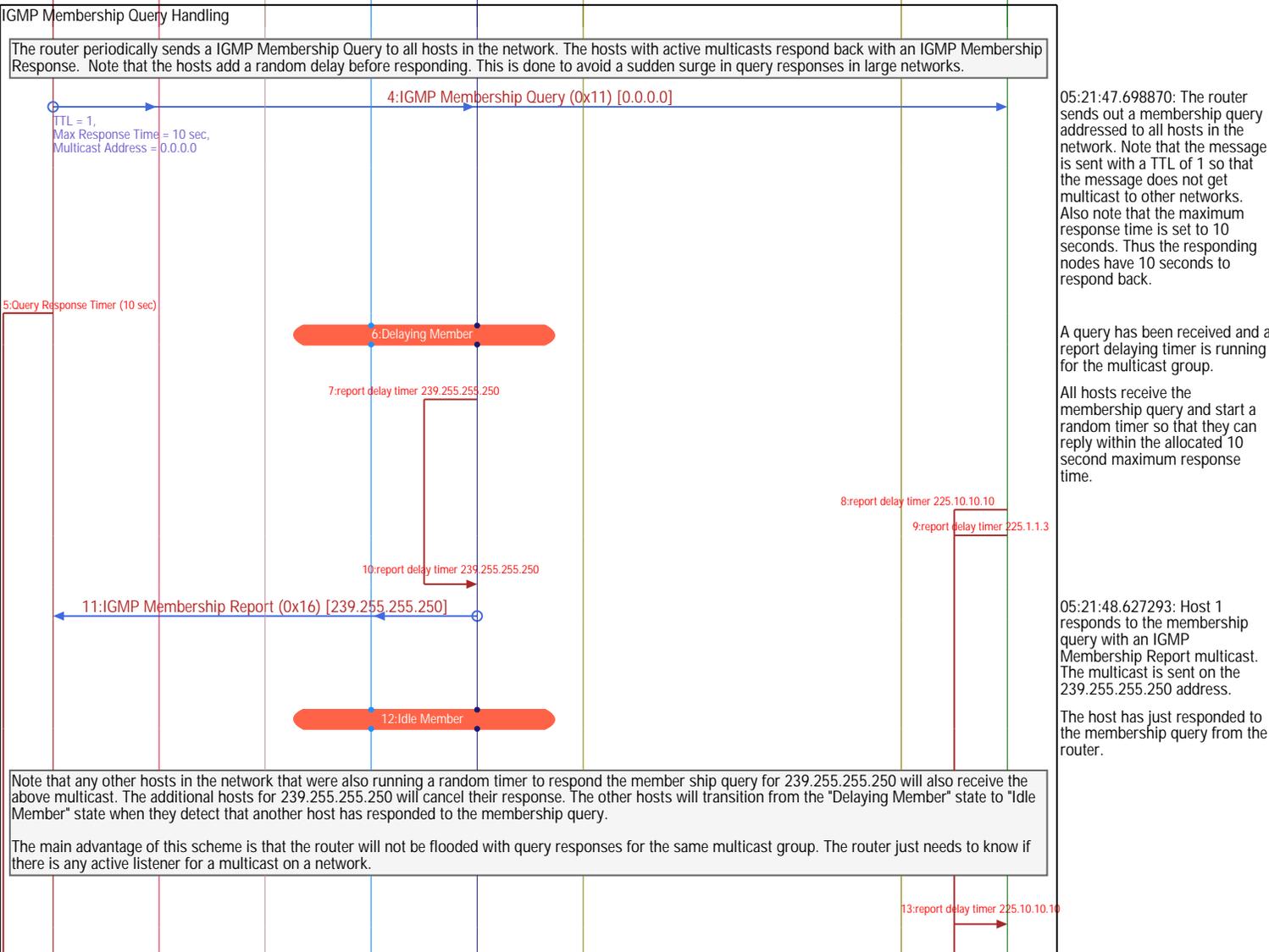


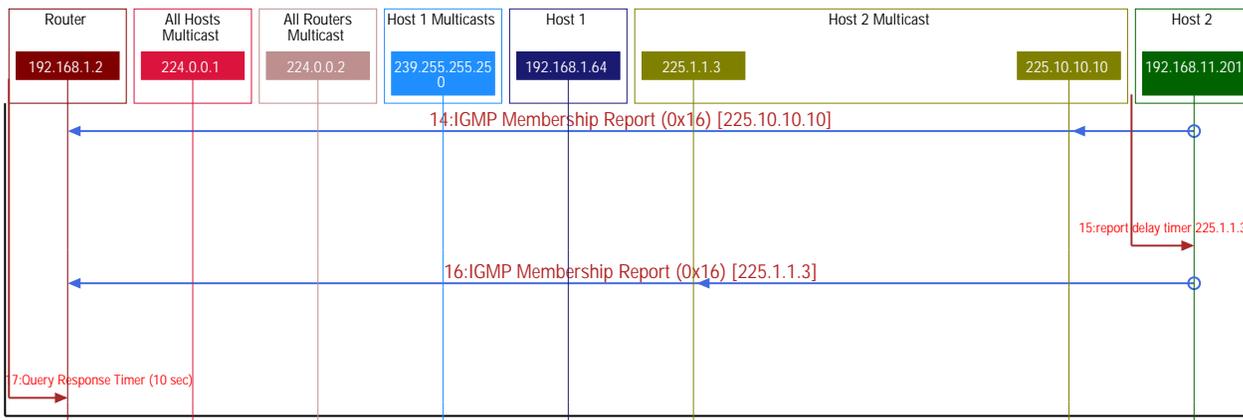
IGMP Query, Join and Leave Sequence Diagram

The Internet Group Management Protocol (IGMP) is used by routers and hosts to management multicast group membership. This protocol flow describes the following IGMP operations:

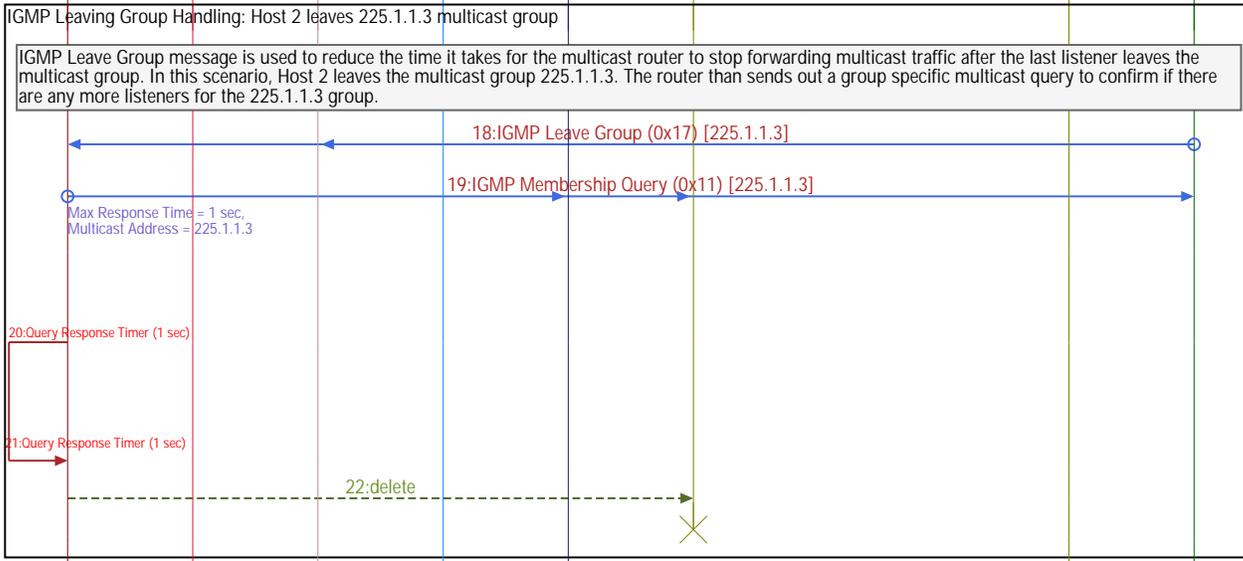
- IGMP query Handling
- Hosts joining multicast groups
- Hosts leaving multicast groups

You can click on individual message titles in the sequence diagram to see the complete contents on the message.
The messages are also shown with a timestamp to give you an idea of the timer intervals involved in the message exchanges.

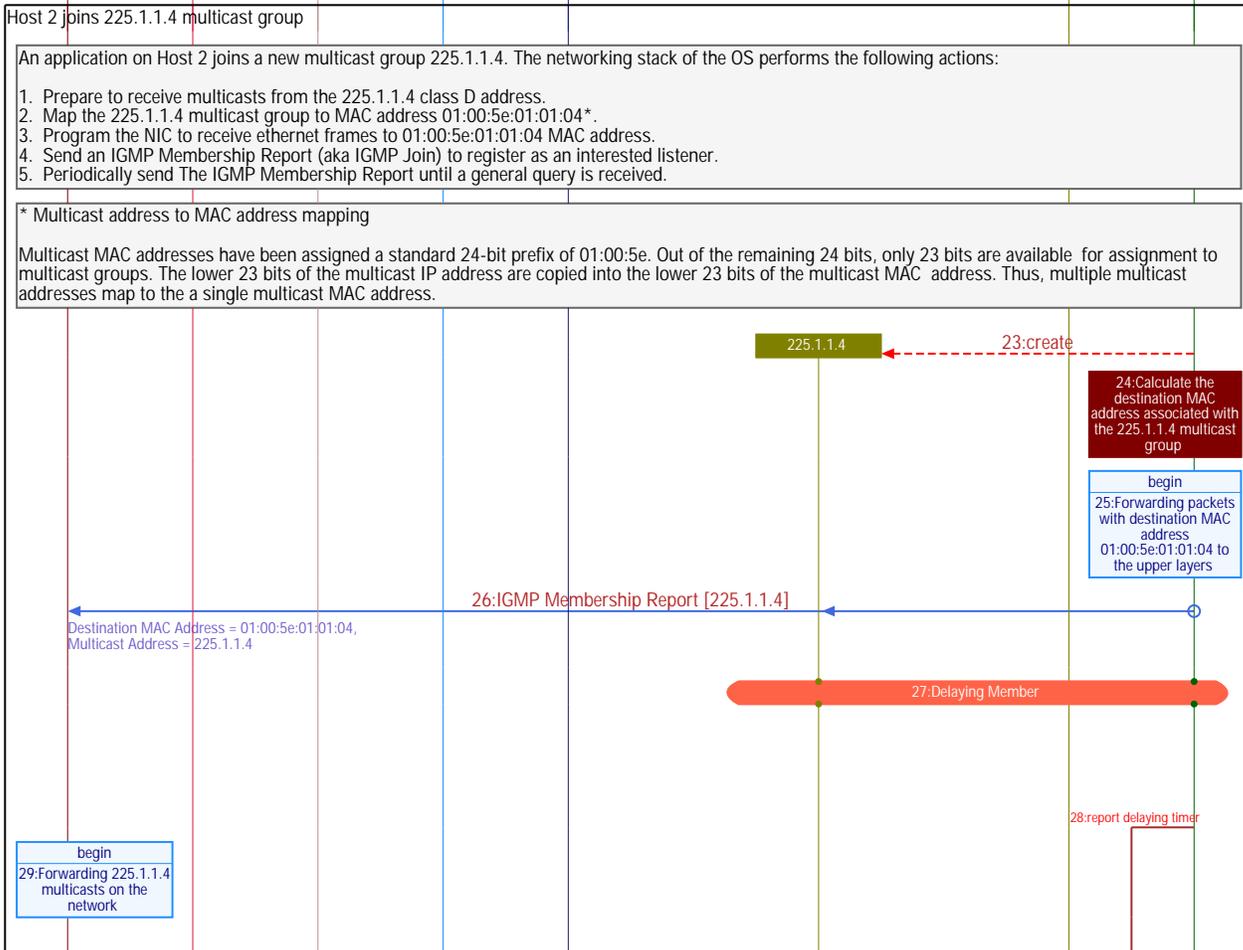




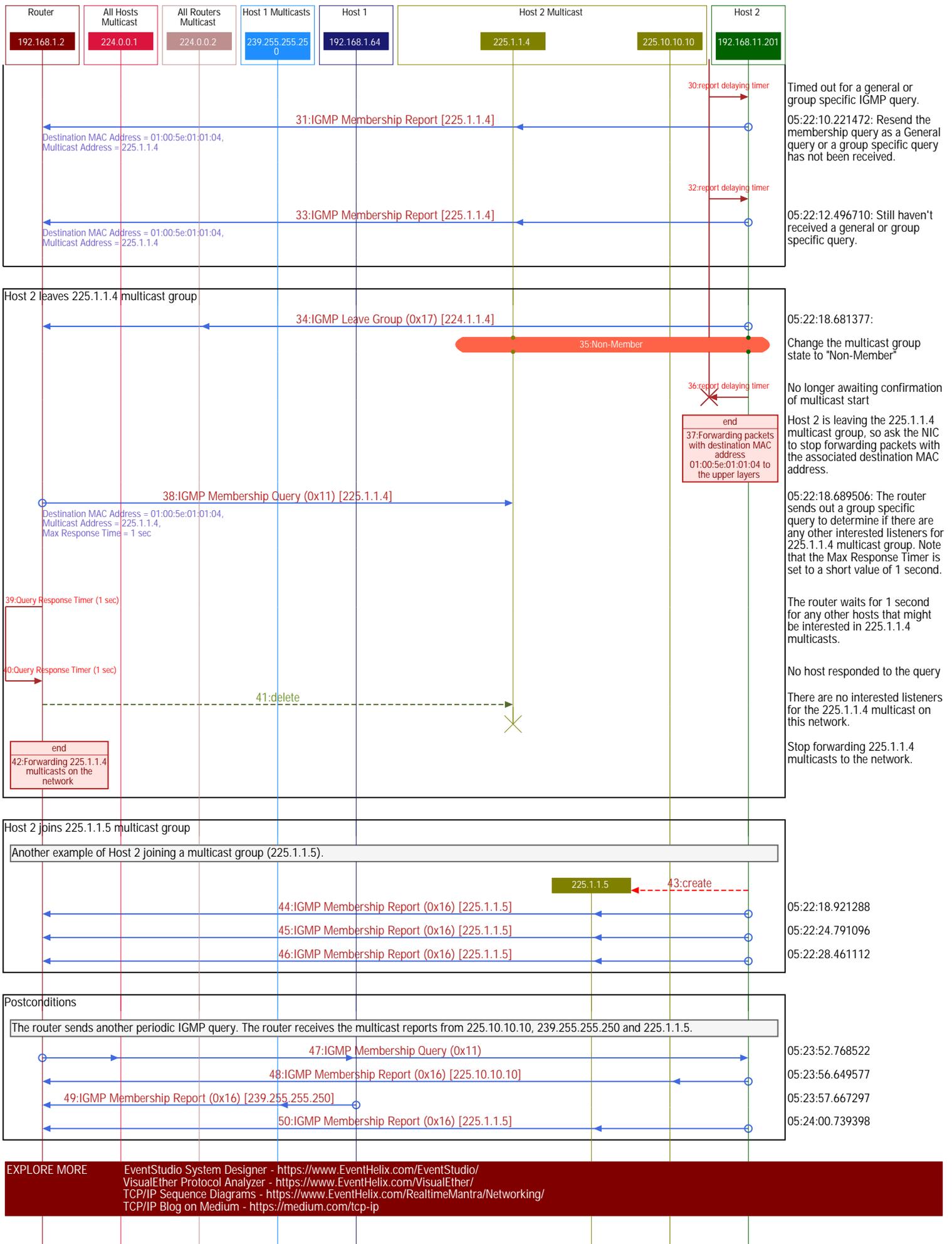
05:21:54.761748: Host 2 responds to the membership query with 225.10.10.10 multicast address.
 05:21:56.111610: Host 2 responds to the membership query with 225.1.1.3 multicast address.



05:22:07.221561: Host 2 leaves the 225.1.1.3 multicast group.
 05:22:07.231083: The multicast router initiates a membership query to check if there are any other hosts in the network that are still listening to multicasts on 225.1.1.3. It gives the hosts 1 second to respond.
 The router waits for 1 second for any other hosts that might be interested in 225.1.1.3 multicasts.
 No host responded to the query
 The router stops forwarding multicasts for 225.1.1.3.



The destination MAC address 01:00:5e:01:01:04 is associated with the 225.1.1.4 multicast address.
 Program the NIC to forward packets destination MAC address 01:00:5e:01:01:04.
 05:22:07.461496: Send an IGMP Membership Report for the new multicast group 225.1.1.4.
 The new multicast starts in the "Delaying Member" state (RFC 2236). Note that the application has started sending and receiving multicast data at this point.



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