

# MRF Next Hop Router Unreachable

Virtual Multimedia Resource Function

Operating Instructions

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MRF Next Hop Router Unreachable



# 1 Overview

This instruction concerns alarm handling.

## 1.1 MRF Next Hop Router Unreachable Alarm Description

This alarm is a primary alarm. The alarm is issued by the `MrfMediaInterface` MO. The severity of the alarm is Major.

The alarm is issued when connection from VM to next hop router is lost, that is, if a vMRF VM does not receive ARP reply (IPv4) or neighbor advertisement message (IPv6) from the next hop router before the response timer expires.

The next hop client in the vMRF VM continuously monitors the next router availability, and the alarm is ceased when the VM gets a valid ARP response (IPv4) or neighbor advertisement message (IPv6) from the next hop router.

The following are the consequences for the VM if the alarm is not solved:

- No user plane traffic is possible on the media interface.

The possible alarm causes and fault locations are explained in [Table 1](#).

Table 1 Alarm Causes

Alarm Cause	Description	Fault Reason	Fault Location	Impact
Next hop router is not responding	Connectivity failure between next hop router and client	Next hop router down or Faulty next hop configuration or Hardware fault	Next hop router or Network or Cloud environment	No user plane traffic is possible on the media interface.

The alarm attributes are listed and explained in [Table 2](#).

Table 2 Alarm Attributes

Attribute Name	Attribute Value
Major Type	193
Minor Type	5308431
Managed Object Class	<code>MrfMediaInterface</code>



Attribute Name	Attribute Value
Managed Object Instance	ManagedElement=1,MediaResourceFunction=1,MrfResource=1,MrfInstance=<MrfInstanceId>,MrfMediaInterface=<MrfMediaInterfaceId>
Specific Problem	MRF Next Hop Unreachable
Event Type	communicationsAlarms (2)
Probable Cause	CommunicationsProtocolError (305)
Additional Text	Next hop router <IP_address> is unreachable; uuid:<uuid> <sup>(1)</sup>
Perceived Severity	major (4)

(1) <uuid> is the identity of the Virtual Machine from which the alarm is issued.



## 2 Cease the MRF Next Hop Router Unreachable Alarm

The following procedure describes how to cease an MRF Next Hop Router Unreachable alarm.

1. Check from the cloud environment or from external next hop router, in case it is used, if next hop router is enabled for the instance. If the router is disabled, enable it.
2. Check the next hop router configuration.
3. Check firewall settings, one option is that ICMP messages are blocked by firewall.
4. Check if the MRF Next Hop Router Unreachable alarm is still active.
  - If the alarm is active only in a few VMs, lock and restart the affected VMs.
  - If the alarm is active in all VMs, restart the next hop router in the cloud environment.
  - If the alarm has ceased, continue to [Perform Concluding Routines](#) on page 4.
5. If the alarm remains, consult the next level of maintenance support. Further actions are outside the scope of this instruction. Continue to [Perform Concluding Routines](#) on page 4.



## 3 Perform Concluding Routines

### Steps

1. Make a report.
2. The job is completed.