



# Kafka Notifications for Cisco Nexus Dashboard Fabric Controller (NDFC) IPFM Fabrics, Release 12.1.3b

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## Overview

Cisco NDFC Notification Service utilizes an Apache Kafka Producer to publish a stream of notifications to a Kafka topic. Each notification represents a single object-modifying event. The user can then use a Kafka Consumer to consume the object change records and take any necessary actions.

Note: The documentation set for this product strives to use bias-free language. For this documentation set, bias-free is defined as language that does not imply discrimination based on age, disability, gender, racial identity, ethnic identity, sexual orientation, socioeconomic status, and intersectionality. Exceptions may be present in the documentation due to language that is hardcoded in the user interfaces of the product software, language used based on RFP documentation, or language that is used by a referenced third-party product.

## Client Bundle Certificate

To fetch the client bundle certificate, perform the following steps:

1. Launch Cisco NDFC Web UI.
2. In the browser url, enter the following address:  
`https://<ndfc-server-ip>/appcenter/cisco/ndfc/api/v1/pmnl/kafka-cert-bundle?password=<password-to-encrypt-bundle>`

The “kafka-cert-bundle.zip” file is downloaded to your local directory.

Ensure that you remember the password to encrypt the bundle. This password is required to decrypt the client.key.encrypted file.

3. Unzip the kafka-cert-bundle.zip and extract the files.
4. Decrypt the file client.key.encrypted to client.key using the following command:

```
openssl enc -aes-256-cbc -a -d -in client.key.encrypted -out client.key -k <password-to-encrypt-bundle>
```

Ensure that you use the correct version of SSL. Note that few SSL versions may not work.

**Note:** If you need java JKS keystore or truststore, use the steps mentioned in the readme.txt file

You can view following Kafka topic for IPFM notifications:

- NDFC Generated Notifications - These messages are generated by NDFC while managing IPFM configurations. Subscribe to Kafka topic (com-cisco-ndfc-ipfm-controller)
- Switch Real-Time Notification - These messages are generated by switches where NDFC acts as a pass-through. Subscribe to Kafka topic (com-cisco-ndfc-ipfm-switch-realtime)

## Change History

Date	Description

## NDFC Generated Notifications

Date	Description
23 August 2023	The following new notifications are introduced in Release 12.1.3b: <ul style="list-style-type: none"> <li>• Precision Time Protocol (PTP)               <ul style="list-style-type: none"> <li>○ Parent changes</li> <li>○ Port status changes</li> <li>○ GrandMaster changes</li> </ul> </li> </ul>
31 January 2023	The following new notifications are introduced in Release 12.1.2e: <ul style="list-style-type: none"> <li>• Passive mode VRF               <ul style="list-style-type: none"> <li>○ Create</li> <li>○ Deploy</li> </ul> </li> </ul>
08 June 2022	The following new notifications are introduced in Release 12.1.1e: <ul style="list-style-type: none"> <li>• Multicast to Unicast NAT Mode               <ul style="list-style-type: none"> <li>○ Create</li> <li>○ Deploy</li> <li>○ Undeploy</li> <li>○ Ingress NAT Mode</li> <li>○ Recirc Interfaces</li> <li>○ NAT rules</li> </ul> </li> <li>• Unicast to Multicast Mode               <ul style="list-style-type: none"> <li>○ Recirc Interfaces</li> <li>○ NAT SR Rules</li> </ul> </li> </ul>
30 September 2021	All the notifications mentioned in this document are introduced in Cisco Nexus Dashboard Fabric Controller, Release 12.0.1a.

## NDFC Generated Notifications

## Passive Mode VRF

## Create VRF

Key	vrf.
Payload	<pre>{   "messageId": 8201,   "routingKey": "information.com.cisco.dcnm.event.pmnm.create.vrf",   "header": {     "Type": "vrf",     "User": "Internal",     "Operation Status": "Success",     "Event": "Successfully created pmnm vrf with vrf name and description (nbm_vrf_passive, ) in Fabric multi-vrf by admin",     "Sent At": "2022-11-22, 00:12:44 UTC",     "Severity": "Information",</pre>

Passive Mode VRF

```
"Operation": "Create"
},
"data": {
  "fabric": "multi-vrf",
  "vrf": "nbm_vrf_passive",
  "message": "Successfully created pmn vrf with vrf name and description
(nbm_vrf_passive, ) in Fabric multi-vrf by admin"
}
}
```

## NBM VRF Create

## Deploy VRF

Key	vrf.
Payload	<pre>{   "messageId": 8006,   "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.vrf",   "header": {     "Type": "vrf",     "User": "Internal",     "Operation Status": "Success",     "Event": "vrf [] Deployment in VRF: 'nbm_vrf_passive' in Fabric: 'multi-vrf' on switch: 172.22.198.4",     "Sent At": "2022-11-22, 00:12:45 UTC",     "Severity": "Information",     "Operation": "Deploy"   },   "data": {     "Deployed data": "{\"nbmGlobalConfDom\": {\"attributes\": { {\"name\": \"nbm_vrf_passive\"}, \"children\": [{\"nbmGlobalConfig\": {\"attributes\": { {\"operMode\": \"PIM_PASSIVE\"}}}]}}\",     \"fabric\": \"multi-vrf\",     \"deployment type\": \"vrf\",     \"vrf\": \"nbm_vrf_passive\",     \"switch-ip\": \"172.22.198.4\"   } }</pre>

## NBM VRF Create

## Create VRF

Key	vrf.
Payload	<pre>{   "messageId": 8201,   "routingKey": "information.com.cisco.dcnm.event.pmn.create.vrf",   "header": {     "Type": "vrf",     "User": "Internal",     "Operation Status": "Success",     "Event": "Successfully created pmn vrf with vrf name and description (vrf_test1234, ) in Fabric pmn-fnc by admin",     "Sent At": "2021-08-17, 20:39:13 UTC",     "Severity": "Information",     "Operation": "Create"   },   "data": {     "fabric": "pmn-fnc",     "vrf": "vrf_test1234",     "message": "Successfully created pmn vrf with vrf name and description (vrf_test1234) in Fabric pmn-fnc by admin"   } }</pre>

}

## Deploy VRF

Key

vrf.

Payload

```
{
  "messageId": 8006,
  "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.vrf",
  "header": {
    "Type": "vrf",
    "User": "Internal",
    "Operation Status": "Success",
    "Event": "vrf [] Deployment in VRF: 'vrf_test1234' in Fabric: 'pmn-fnc' on switch:
172.31.148.36",
    "Sent At": "2021-08-17, 20:39:15 UTC",
    "Severity": "Information",
    "Operation": "Deploy"
  },
  "data": {
    "Deployed data": "{ \"nbmGlobalConfDom\" : { \"attributes\" :
{ \"name\" : \"vrf_test1234\" } }",
    "fabric": "pmn-fnc",
    "deployment type": "vrf",
    "vrf": "vrf_test1234",
    "switch-ip": "172.31.148.36"
  }
}
```

## Edit VRF

Key

vrf.

Payload

```
{
  "messageId": 8202,
  "routingKey": "information.com.cisco.dcnm.event.pmn.update.vrf",
  "header": {
    "Type": "vrf",
    "User": "Internal",
    "Operation Status": "Success",
    "Event": "Successfully updated pmn vrf with vrf name and description from
(vrf_test1234, ) to (vrf_test1234, just modifyng the description of vrf for test) in Fabric
pmn-fnc by admin",
    "Sent At": "2021-08-17, 20:40:59 UTC",
    "Severity": "Information",
    "Operation": "Update"
  },
  "data": {
    "fabric": "pmn-fnc",
    "vrf": "vrf_test1234",
    "message": "Successfully updated pmn vrf with vrf name and description from
(vrf_test1234, ) to (vrf_test1234, just modifyng the description of vrf for test) in Fabric
pmn-fnc by admin"
  }
}
```

## NBM VRF Create

```
}
}
```

## Delete VRF

Key

vrf.

Payload

```
{
  "messageId": 8203,
  "routingKey": "information.com.cisco.dcnm.event.pmn.delete.vrf",
  "header": {
    "Type": "vrf",
    "User": "Internal",
    "Operation Status": "Success",
    "Event": "Successfully deleted pmn vrf with vrf name and description (vrf_test1234, just modifyng the description of vrf for test) in Fabric pmn-fnc by admin",
    "Sent At": "2021-08-17, 20:41:29 UTC",
    "Severity": "Information",
    "Operation": "Delete"
  },
  "data": {
    "fabric": "pmn-fnc",
    "vrf": "vrf_test1234",
    "message": "Successfully deleted pmn vrf with vrf name and description (vrf_test1234, just modifyng the description of vrf for test) in Fabric pmn-fnc by admin"
  }
}
```

## Undeploy VRF on delete

Key

vrf.

Payload

```
{
  "messageId": 8006,
  "routingKey": "information.com.cisco.dcnm.event.pmn.undeploy.vrf",
  "header": {
    "Type": "vrf",
    "User": "Internal",
    "Operation Status": "Success",
    "Event": "vrf [] Undeployment in VRF: 'vrf_test1234' in Fabric: 'pmn-fnc' on switch: 172.31.149.58",
    "Sent At": "2021-08-17, 20:41:31 UTC",
    "Severity": "Information",
    "Operation": "Undeploy"
  },
  "data": {
    "Deployed data": "{ \"nbmGlobalConfDom\" : { \"attributes\" : { \"name\" : \"vrf_test1234\", \"status\" : \"deleted\" } } }",
    "fabric": "pmn-fnc",
    "deployment type": "vrf",
    "vrf": "vrf_test1234",
    "switch-ip": "172.31.149.58"
  }
}
```

## NBM Global Config

### ASM group-ranges – Deploy Success

Key	asm.
Payload	<pre>{   "messageId": 8001,   "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.asm",   "header": {     "Type": "asm",     "User": "Internal",     "Operation Status": "Success",     "Event": "asm [Count:2(asm.....)] Deployment in VRF: 'test_pmn' in Fabric: 'pmn-soln' on switch: 172.31.147.80",     "Sent At": "2021-07-29, 17:57:52 UTC",     "Severity": "Information",     "Operation": "Deploy"   },   "data": {     "Deployed data": "[asm, 31]",     "fabric": "pmn-soln",     "deployment type": "asm",     "vrf": "all vrfs",     "switch-ip": "172.31.147.80"   } }</pre>

### ASM group-ranges – Deploy Failure

Key	asm.
Payload	<pre>{   "messageId": 8101,   "routingKey": "error.com.cisco.dcnm.event.pmn.deploy.asm",   "header": {     "Type": "asm",     "User": "Internal",     "Operation Status": "Failure",     "Event": "asm [Count:2(asm.....)] Deployment failed in VRF: 'test_pmn' in Fabric: 'pmn-soln' on switch: 172.31.147.161, Reason: ERROR: Please Create NBM VRF test_pmn before this config",     "Sent At": "2021-07-29, 18:05:04 UTC",     "Severity": "Error",     "Operation": "Deploy"   },   "data": {     "Deployed data": "[asm, 31]",     "fabric": "pmn-soln",     "deployment type": "asm",     "vrf": "all vrfs",     "switch-ip": "172.31.147.161"   } }</pre>



## Unicast Bandwidth

}

## ASM group-ranges – Undeploy

Key	asm.
Payload	<pre> {   "messageId": 8001,   "routingKey": "information.com.cisco.dcnm.event.pmn.undeploy.asm",   "header": {     "Type": "asm",     "User": "Internal",     "Operation Status": "Success",     "Event": "asm [Count:2(asm.....)] Undeployment in VRF: 'test_pmn' in Fabric: 'pmn- soln' on switch: 172.31.204.28",     "Sent At": "2021-07-29, 18:09:55 UTC",     "Severity": "Information",     "Operation": "Undeploy"   },   "data": {     "Deployed data": "[asm, 31]",     "fabric": "pmn-soln",     "deployment type": "asm",     "vrf": "all vrfs",     "switch-ip": "172.31.204.28"   } } </pre>

## Unicast Bandwidth

## Deploy Success

Key	unicast_bw.
Payload	<pre> {   "messageId": 8000,   "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.unicast_bw",   "header": {     "Type": "unicast_bw",     "User": "Internal",     "Operation Status": "Success",     "Event": "unicast_bw [Count:2(unicast_bw.....)] Deployment in VRF: 'test_pmn' in Fabric: 'pmn-soln' on switch: 172.31.203.171",     "Sent At": "2021-07-29, 17:57:55 UTC",     "Severity": "Information",     "Operation": "Deploy"   },   "data": {     "Deployed data": "[unicast_bw, 31]",     "fabric": "pmn-soln",     "deployment type": "unicast_bw",     "vrf": "all vrfs", </pre>

## Unicast Bandwidth

```

    "switch-ip": " 172.31.203.171"
  }
}

```

## Deploy Failure

Key	unicast_bw.
Payload	<pre> {   "messageId": 8100,   "routingKey": " error.com.cisco.dcnm.event.pmn.deploy.unicast_bw",   "header": {     "Type": " unicast_bw",     "User": " Internal",     "Operation Status": " Failure",     "Event": " unicast_bw [Count:2(unicast_bw.....)] Deployment failed in VRF: 'test_pmn' in Fabric: 'pmn-soln' on switch: 172.31.147.161, Reason: Invalid request. dn 'sys/nbm/conf/global/dom-test_pmn' does not match naming properties specified 'sys/nbm/conf/global/dom-test_pmn/global'",     "Sent At": " 2021-07-29, 18:05:06 UTC",     "Severity": " Error",     "Operation": " Deploy"   },   "data": {     "Deployed data": " [unicast_bw, 31]",     "fabric": " pmn-soln",     "deployment type": " unicast_bw",     "vrf": " all vrfs",     "switch-ip": " 172.31.147.161"   } } </pre>

## Undeploy

Key	unicast_bw.
Payload	<pre> {   "messageId": 8000,   "routingKey": " information.com.cisco.dcnm.event.pmn.undeploy.unicast_bw",   "header": {     "Type": " unicast_bw",     "User": " Internal",     "Operation Status": " Success",     "Event": " unicast_bw [Count:2(unicast_bw.....)] Undeployment in VRF: 'test_pmn' in Fabric: 'pmn-soln' on switch: 172.31.204.97",     "Sent At": " 2021-07-29, 18:09:44 UTC",     "Severity": " Information",     "Operation": " Undeploy"   },   "data": {     "Deployed data": " [unicast_bw, 31]",     "fabric": " pmn-soln",     "deployment type": " unicast_bw", </pre>

## Flow Policy

```

    "vrf": "all vrfs",
    "switch-ip": "172.31.204.97"
  }
}

```

## Flow Policy

Key	flowPolicy.
Payload	<pre> {   "messageId": 3106,   "routingKey": "error.com.cisco.dcnm.event.pmn.undeploy.flowpolicy",   "header": {     "Type": "FlowPolicy",     "User": "Internal",     "Operation Status": "Failure",     "Event": "FlowPolicy [Default] Undeployment failed in VRF: 'test_pmn' in Fabric: 'pmn-soln' on switch: 172.31.149.99, Reason: org.springframework.web.client.ResourceAccessException: I/O error on POST request for \"https://dcnm-sim-master.cisco-dcnm.svc:9443/sim/job\": Timeout waiting for connection from pool; nested exception is org.apache.http.conn.ConnectionPoolTimeoutException: Timeout waiting for connection from pool",     "Sent At": "2021-07-29, 18:09:44 UTC",     "Severity": "Error",     "Operation": "UnDeploy"   },   "data": {     "Deployed data": "[Default]",     "fabric": "pmn-soln",     "deployment type": "FlowPolicy",     "vrf": "all vrfs",     "switch-ip": "172.31.149.99"   } } </pre>

## Bandwidth Enabled

## Deploy Success

Key	bw_enabled.
Payload	<pre> {   "messageId": 8004,   "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.bw_enabled",   "header": {     "Type": "bw_enabled",     "User": "Internal",     "Operation Status": "Success",     "Event": "bw_enabled [Count:2(bw_enabled.....)] Deployment in VRF: 'test_pmn' in Fabric: 'pmn-soln' on switch: 172.31.149.97",     "Sent At": "2021-07-29, 17:57:57 UTC", </pre>

## Bandwidth Enabled

```

    "Severity": "Information",
    "Operation": "Deploy"
  },
  "data": {
    "Deployed data": "[bw_enabled, 31]",
    "fabric": "pmn-soln",
    "deployment type": "bw_enabled",
    "vrf": "all vrfs",
    "switch-ip": "172.31.149.97"
  }
}

```

## Deploy Failed

Key

bw\_enabled.

Payload

```

{
  "messageId": -1,
  "routingKey": "error.com.cisco.dcnm.event.pmn.deploy.bw_enabled",
  "header": {
    "Type": "bw_enabled",
    "User": "Internal",
    "Operation Status": "Failure",
    "Event": "bw_enabled [Count:2(bw_enabled.....)] Deployment failed in VRF:
'test_pmn' in Fabric: 'pmn-soln' on switch: 172.31.204.98, Reason: unknown attribute
'resBwRxOnly' in element 'nbmGlobalConfig'",
    "Sent At": "2021-07-29, 17:57:58 UTC",
    "Severity": "Error",
    "Operation": "Deploy"
  },
  "data": {
    "Deployed data": "[bw_enabled, 31]",
    "fabric": "pmn-soln",
    "deployment type": "bw_enabled",
    "vrf": "all vrfs",
    "switch-ip": ""
  }
}

```

## Undeploy

Key

bw\_enabled.

Payload

```

{
  "messageId": 8004,
  "routingKey": "information.com.cisco.dcnm.event.pmn.undeploy.bw_enabled",
  "header": {
    "Type": "bw_enabled",
    "User": "Internal",
    "Operation Status": "Success",
    "Event": "bw_enabled [] Undeployment in VRF: 'default' in Fabric: 'pmn-fnc' on
switch: 172.31.148.35",
    "Sent At": "2021-08-17, 20:52:16 UTC",
  }
}

```

## Host Policy

```

    "Severity": "Information",
    "Operation": "Undeploy"
  },
  "data": {
    "Deployed data": "{ \"nbmGlobalConfig\" :
{\"attributes\":{\"resBwRxOnly\": \"DISABLED\"}}}",
    "fabric": "pmn-fnc",
    "deployment type": "bw_enabled",
    "vrf": "default",
    "switch-ip": "172.31.148.35"
  }
}

```

## Host Policy

## Create Host Policy – Sender

Key	HostPolicy.
Payload	<pre> {   "messageId": 2000,   "routingKey": "information.com.cisco.dcnm.event.pmn.create.hostpolicy",   "header": {     "Type": "HostPolicy",     "User": "Internal",     "Operation Status": "Success",     "Event": "Host policy 'abc10' in VRF 'default' in Fabric 'pmn-soln' successfully saved by admin",     "Sent At": "2021-07-29, 16:03:06 UTC",     "Severity": "Information",     "Operation": "Create"   },   "data": {     "sequenceNumber": "4",     "policyName": "abc10",     "fabric": "pmn-soln",     "permit": "true",     "hostRole": "Sender",     "vrf": "default",     "message": "Host policy 'abc10' in VRF 'default' in Fabric 'pmn-soln' successfully saved by admin",     "multicast": "224.1.1.10",     "senderIp": "10.1.1.10",     "mask": "32",     "receiverIp": ""   } } </pre>

## Create Host Policy – Receiver

Key	HostPolicy.
-----	-------------

## Host Policy

Payload	<pre> {   "messageId": 2000,   "routingKey": "information.com.cisco.dcnm.event.pmn.create.hostpolicy",   "header": {     "Type": "HostPolicy",     "User": "Internal",     "Operation Status": "Success",     "Event": "Host policy 'rcr_abc10' in VRF 'default' in Fabric 'pmn-soln' successfully saved by admin",     "Sent At": "2021-07-29, 16:07:34 UTC",     "Severity": "Information",     "Operation": "Create"   },   "data": {     "sequenceNumber": "1",     "policyName": "rcr_abc10",     "fabric": "pmn-soln",     "permit": "true",     "hostRole": "Receiver-Local",     "vrf": "default",     "message": "Host policy 'rcr_abc10' in VRF 'default' in Fabric 'pmn-soln' successfully saved by admin",     "multicast": "224.1.1.10",     "senderIp": "10.1.1.11",     "mask": "32",     "receiverIp": "10.1.1.10"   } } </pre>
---------	---

## Create Host Policy – Deploy

Key	HostPolicy.
Payload	<pre> {   "messageId": 2006,   "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.hostpolicy",   "header": {     "Type": "HostPolicy",     "User": "Internal",     "Operation Status": "Success",     "Event": "HostPolicy [abc10] Deployment in VRF: 'default' in Fabric: 'pmn-soln' on switch: 172.31.203.173",     "Sent At": "2021-07-29, 16:03:13 UTC",     "Severity": "Information",     "Operation": "Deploy"   },   "data": {     "Deployed data": "[abc10]",     "fabric": "pmn-soln",     "deployment type": "HostPolicy",     "vrf": "all vrfs",     "switch-ip": "172.31.203.173"   } } </pre>

## Host Policy

Key	HostPolicy.
Payload	<pre>{   "messageId": 2006,   "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.hostpolicy",   "header": {     "Type": "HostPolicy",     "User": "Internal",     "Operation Status": "Success",     "Event": "HostPolicy [rcr_abc10] Deployment in VRF: 'default' in Fabric: 'pmn-soln' on switch: 172.31.147.80",     "Sent At": "2021-07-29, 16:07:40 UTC",     "Severity": "Information",     "Operation": "Deploy"   },   "data": {     "Deployed data": "[rcr_abc10]",     "fabric": "pmn-soln",     "deployment type": "HostPolicy",     "vrf": "all vrfs",     "switch-ip": "172.31.147.80"   } }</pre>

## Edit or Update Host Policy

Key	HostPolicy.
Payload	<pre>{   "messageId": 2001,   "routingKey": "information.com.cisco.dcnm.event.pmn.update.hostpolicy",   "header": {     "Type": "HostPolicy",     "User": "Internal",     "Operation Status": "Success",     "Event": "Host Policy with policy name 'rcr_abc10' in VRF 'default' in Fabric 'pmn- soln' successfully saved by admin",     "Sent At": "2021-07-29, 16:10:47 UTC",     "Severity": "Information",     "Operation": "Update"   },   "data": {     "sequenceNumber": "1",     "policyName": "rcr_abc10",     "fabric": "pmn-soln",     "permit": "false",     "hostRole": "Receiver-Local",     "vrf": "default",     "message": "Host Policy with policy name 'rcr_abc10' in VRF 'default' in Fabric 'pmn-soln' successfully saved by admin",     "multicast": "224.1.1.10",     "senderIp": "10.1.1.11",     "mask": "32",   } }</pre>

## Host Policy

```

    "receiverIp": " 10.1.1.10"
  }
}

```

## Deploy Host Policy

Key	HostPolicy.
Payload	<pre> {   "messageId": 2006,   "routingKey": " information.com.cisco.dcnm.event.pmn.deploy.hostpolicy",   "header": {     "Type": " HostPolicy",     "User": " Internal",     "Operation Status": " Success",     "Event": " HostPolicy [rcr_abc10] Deployment in VRF: 'default' in Fabric: 'pmn-soln' on switch: 172.31.203.182",     "Sent At": " 2021-07-29, 16:10:55 UTC",     "Severity": " Information",     "Operation": " Deploy"   },   "data": {     "Deployed data": " [rcr_abc10]",     "fabric": " pmn-soln",     "deployment type": " HostPolicy",     "vrf": " all vrfs",     "switch-ip": " 172.31.203.182"   } } </pre>

## Undeploy Host Policy

Key	HostPolicy.
Payload	<pre> {   "messageId": 2006,   "routingKey": " information.com.cisco.dcnm.event.pmn.undeploy.hostpolicy",   "header": {     "Type": " HostPolicy",     "User": " Internal",     "Operation Status": " Success",     "Event": " HostPolicy [rcr_abc10] Undeployment in VRF: 'default' in Fabric: 'pmn- soln' on switch: 172.31.203.171",     "Sent At": " 2021-07-29, 16:13:10 UTC",     "Severity": " Information",     "Operation": " UnDeploy"   },   "data": {     "Deployed data": " [rcr_abc10]",     "fabric": " pmn-soln",     "deployment type": " HostPolicy",     "vrf": " all vrfs",     "switch-ip": " 172.31.203.171"   } } </pre>



## Host Policy

```
}
}
```

## Delete Host Policy

Key

HostPolicy.

Payload

```
{
  "messageId": 2002,
  "routingKey": "information.com.cisco.dcnm.event.pmn.delete.hostpolicy",
  "header": {
    "Type": "HostPolicy",
    "User": "Internal",
    "Operation Status": "Success",
    "Event": "Host policy rcr_abc10' in VRF 'default' in Fabric 'pmn-soln' deleted by admin",
    "Sent At": "2021-07-29, 16:21:10 UTC",
    "Severity": "Information",
    "Operation": "Delete"
  },
  "data": {
    "sequenceNumber": "1",
    "policyName": "rcr_abc10",
    "fabric": "pmn-soln",
    "permit": "false",
    "hostRole": "Receiver-Local",
    "vrf": "default",
    "message": "Host policy rcr_abc10' in VRF 'default' in Fabric 'pmn-soln' deleted by admin",
    "multicast": "224.1.1.10",
    "senderIp": "10.1.1.11",
    "mask": "32",
    "receiverIp": "10.1.1.10"
  }
}
```

## Host Policy Failure – Create

Key

HostPolicy.

Payload

```
{
  "messageId": 2105,
  "routingKey": "error.com.cisco.dcnm.event.pmn.deploy.hostpolicy",
  "header": {
    "Type": "HostPolicy",
    "User": "Internal",
    "Operation Status": "Failure",
    "Event": "HostPolicy [sdr1] Deployment failed in VRF: 'default' in Fabric: 'pmn-fnc' on switch: 172.31.148.36, Failed Policy Name: sdr1 ERROR: Only permission can be modified for an existing policy. To change other elements, please create a new policy, and delete the existing one.\\nfaulty_dn=sys/nbm/conf/hostpolicytable/default/sender/seq-10",
    "Sent At": "2021-08-17, 16:37:09 UTC",
    "Severity": "Error",
  }
}
```

## Flow Policy

```

    "Operation": "Deploy"
  },
  "data": {
    "Deployed data": "[sdr1]",
    "fabric": "pmn-fnc",
    "deployment type": "HostPolicy",
    "vrf": "all vrfs",
    "switch-ip": "172.31.148.36"
  }
}

```

## Host Policy Failure – Delete

Key	HostPolicy.
Payload	<pre> {   "messageId": 2105,   "routingKey": "error.com.cisco.dcnm.event.pmn.undeploy.hostpolicy",   "header": {     "Type": "HostPolicy",     "User": "Internal",     "Operation Status": "Failure",     "Event": "HostPolicy [sdr1] Undeployment failed in VRF: 'default' in Fabric: 'pmn-fnc' on switch: 172.31.148.36, Reason: Failed to execute DME request. Failed to get DME auth token. Post \"https://172.31.148.36/api/aaaLogin.json\": dial tcp 172.31.148.36:443: connect: connection refused",     "Sent At": "2021-08-17, 16:40:56 UTC",     "Severity": "Error",     "Operation": "UnDeploy"   },   "data": {     "Deployed data": "[sdr1]",     "fabric": "pmn-fnc",     "deployment type": "HostPolicy",     "vrf": "all vrfs",     "switch-ip": "172.31.148.36"   } } </pre>

## Flow Policy

## Default Flow Policy – Edit

Key	FlowPolicy.
Payload	<pre> {   "messageId": 3006,   "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.flowpolicy",   "header": {     "Type": "FlowPolicy",     "User": "Internal", </pre>

## Flow Policy

```

    "Operation Status": "Success",
    "Event": "FlowPolicy [Default] Deployment in VRF: 'default' in Fabric: 'pmn-fnc' on
switch: 172.31.148.36",
    "Sent At": "2021-08-17, 20:54:10 UTC",
    "Severity": "Information",
    "Operation": "Deploy"
  },
  "data": {
    "Deployed data": "[Default]",
    "fabric": "pmn-fnc",
    "deployment type": "FlowPolicy",
    "vrf": "all vrfs",
    "switch-ip": "172.31.148.36"
  }
}

```

## Default Flow Policy - Deploy

Key

FlowPolicy

Payload

```

{
  "messageId": 3006,
  "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.flowpolicy",
  "header": {
    "Type": "FlowPolicy",
    "User": "Internal",
    "Operation Status": "Success",
    "Event": "FlowPolicy [Default] Deployment in VRF: 'default' in Fabric: 'rolal-fnc' on
switch: 172.31.149.58",
    "Sent At": "2021-07-29, 20:12:39 UTC",
    "Severity": "Information",
    "Operation": "Deploy"
  },
  "data": {
    "Deployed data": "[Default]",
    "fabric": "rolal-fnc",
    "deployment type": "FlowPolicy",
    "vrf": "all vrfs",
    "switch-ip": "172.31.149.58"
  }
}

```

## Default Flow Policy - Undeploy

Key

FlowPolicy.

Payload

```

{
  "messageId": 3006,
  "routingKey": "information.com.cisco.dcnm.event.pmn.undeploy.flowpolicy",
  "header": {
    "Type": "FlowPolicy",
    "User": "Internal",
    "Operation Status": "Success",
    "Event": "FlowPolicy [Default] Undeployment in VRF: 'default' in Fabric: 'rolal-fnc' on

```

## Flow Policy

```

switch: 172.31.148.35",
  "Sent At": " 2021-07-29, 20:14:10 UTC",
  "Severity": " Information",
  "Operation": " UnDeploy"
},
" data": {
  "Deployed data": " [Default]",
  "fabric": " rolal-fnc",
  "deployment type": " FlowPolicy",
  "vrf": " all vrfs",
  "switch-ip": " 172.31.148.35"
}
}

```

## Custom Flow Policy – Create

Key	FlowPolicy.
Payload	<pre> {   "messageId": 3000,   "routingKey": " information.com.cisco.dcnm.event.pmn.create.flowpolicy",   "header": {     "Type": " FlowPolicy",     "User": " Internal",     "Operation Status": " Success",     "Event": " Flow Policy with policy name 'testflowpolicy' in VRF 'default' in Fabric 'pmn-fnc' successfully created by admin",     "Sent At": " 2021-08-17, 20:54:59 UTC",     "Severity": " Information",     "Operation": " Create"   },   "data": {     "policer": " Enabled",     "dscp": " Best Effort",     "policyName": " testflowpolicy",     "bandwidth": " 1gbps",     "fabric": " pmn-fnc",     "link": " https://&lt;DCNM_IP&gt;/appcenter/cisco/dcnm/v1/pmn/rest/pmn/fabrics/pmn-fnc/vrfs/default/flowpolicies/testflowpolicy",     "vrf": " default",     "message": " Flow Policy with policy name 'testflowpolicy' in VRF 'default' in Fabric 'pmn-fnc' successfully created by admin",     "multicastRangeList": [       {         "endIP": " 224.1.1.10",         "deleted": false,         "beginIP": " 224.1.1.1",         "flowPriority": " DEFAULT"       }     ]   } } </pre>

## Custom Flow Policy – Deploy

Key	FlowPolicy.
Payload	<pre>{   "messageId": 3006,   "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.flowpolicy",   "header": {     "Type": "FlowPolicy",     "User": "Internal",     "Operation Status": "Success",     "Event": "FlowPolicy [fp_video] Deployment in VRF: 'default' in Fabric: 'rolal-fnc' on switch: 172.31.149.58",     "Sent At": "2021-07-29, 20:16:30 UTC",     "Severity": "Information",     "Operation": "Deploy"   },   "data": {     "Deployed data": "[fp_video]",     "fabric": "rolal-fnc",     "deployment type": "FlowPolicy",     "vrf": "all vrfs",     "switch-ip": "172.31.149.58"   } }</pre>

## Edit Flow Policy

Key	FlowPolicy.
Payload	<pre>{   "messageId": 3001,   "routingKey": "information.com.cisco.dcnm.event.pmn.update.flowpolicy",   "header": {     "Type": "FlowPolicy",     "User": "Internal",     "Operation Status": "Success",     "Event": "Flow Policy with policy name 'testflowpolicy' in VRF 'default' in Fabric 'pmn- fnc' successfully updated by admin",     "Sent At": "2021-08-17, 20:55:36 UTC",     "Severity": "Information",     "Operation": "Update"   },   "data": {     "policer": "Disabled",     "dscp": "Best Effort",     "policyName": "testflowpolicy",     "bandwidth": "1 mbps",     "fabric": "pmn-fnc",     "link": "https://&lt;DCNM_IP&gt;/appcenter/cisco/dcnm/v1/pmn/rest/pmn/fabrics/pmn- fnc/vrfs/default/flowpolicies/testflowpolicy",     "vrf": "default",     "message": "Flow Policy with policy name 'testflowpolicy' in VRF 'default' in Fabric 'pmn-fnc' successfully updated by admin",     "multicastRangeList": [</pre>

## Host Alias

```

    {
      "endIP": " 224.1.1.10",
      "deleted": false,
      "beginIP": " 224.1.1.1",
      "flowPriority": " DEFAULT"
    }
  ]
}
}

```

## Delete Flow Policy

Key	FlowPolicy.
Payload	<pre> {   "messageId": 3002,   "routingKey": " information.com.cisco.dcnm.event.pmn.delete.flowpolicy",   "header": {     "Type": " FlowPolicy",     "User": " Internal",     "Operation Status": " Success",     "Event": " Flow Policy with policy name 'testflowpolicy' in VRF 'default' in Fabric 'pmn-fnc' successfully deleted by admin",     "Sent At": " 2021-08-17, 20:58:02 UTC",     "Severity": " Information",     "Operation": " Delete"   },   "data": {     "policer": " Disabled",     "policyName": " testflowpolicy",     "bandwidth": " 1mbps",     "fabric": " pmn-fnc",     "vrf": " default",     "message": " Flow Policy with policy name 'testflowpolicy' in VRF 'default' in Fabric 'pmn-fnc' successfully deleted by admin",     "multicastRangeList": [       {         "endIP": " 224.1.1.10",         "deleted": false,         "beginIP": " 224.1.1.1",         "flowPriority": " DEFAULT"       }     ]   } } </pre>

## Host Alias

## Create

Key	HostAlias.
-----	------------

## Host Alias

## Payload

```
{
  "messageId": 7000,
  "routingKey": "information.com.cisco.dcnm.event.pmn.create.hostalias",
  "header": {
    "Type": "HostAlias",
    "User": "Internal",
    "Operation Status": "Success",
    "Event": "Host Alias with alias name 'sdr_inat1' in VRF 'default' in Fabric 'pmn-soln-readonly' successfully created by admin",
    "Sent At": "2021-08-05, 16:08:45 UTC",
    "Severity": "Information",
    "Operation": "Create"
  },
  "data": {
    "fabric": "pmn-soln-readonly",
    "name": "sdr_inat1",
    "ipAddress": "10.32.25.10",
    "link": "https://<DCNM_IP>/appcenter/cisco/dcnm/v1/pmn/rest/pmn/fabrics/pmn-soln-readonly/vrfs/default/hostaliases/sdr_inat1",
    "vrf": "default",
    "message": "Host Alias with alias name 'sdr_inat1' in VRF 'default' in Fabric 'pmn-soln-readonly' successfully created by admin"
  }
}
```

## Update/Edit

## Key

HostAlias

## Payload

```
{
  "messageId": 7001,
  "routingKey": "information.com.cisco.dcnm.event.pmn.update.hostalias",
  "header": {
    "Type": "HostAlias",
    "User": "Internal",
    "Operation Status": "Success",
    "Event": "Host Alias with original name and IP address sdr_inat1, (10.32.25.10) updated to sdr_inat2, (10.32.25.12) in VRF 'default' in Fabric 'pmn-soln-readonly' by admin",
    "Sent At": "2021-08-05, 16:09:03 UTC",
    "Severity": "Information",
    "Operation": "Update"
  },
  "data": {
    "fabric": "pmn-soln-readonly",
    "name": "sdr_inat2",
    "ipAddress": "10.32.25.12",
    "link": "https://<DCNM_IP>/appcenter/cisco/dcnm/v1/pmn/rest/pmn/fabrics/pmn-soln-readonly/vrfs/default/hostaliases/sdr_inat2",
    "vrf": "default",
    "message": "Host Alias with original name and IP address sdr_inat1, (10.32.25.10) updated to sdr_inat2, (10.32.25.12) in VRF 'default' in Fabric 'pmn-soln-readonly' by admin"
  }
}
```

## Delete

Key

HostAlias

Payload

```
{
  "messageId": 7002,
  "routingKey": "information.com.cisco.dcnm.event.pmn.delete.hostalias",
  "header": {
    "Type": "HostAlias",
    "User": "Internal",
    "Operation Status": "Success",
    "Event": "Host Alias with name 'sdr_inat2' in VRF 'default' in Fabric 'pmn-soln-readonly' deleted by admin",
    "Sent At": "2021-08-05, 16:09:36 UTC",
    "Severity": "Information",
    "Operation": "Delete"
  },
  "data": {
    "fabric": "pmn-soln-readonly",
    "name": "sdr_inat2",
    "ipAddress": "10.32.25.12",
    "vrf": "default",
    "message": "Host Alias with name 'sdr_inat2' in VRF 'default' in Fabric 'pmn-soln-readonly' deleted by admin"
  }
}
```

## Flow Alias

## Create

Key

FlowAlias.

Payload

```
{
  "messageId": 4000,
  "routingKey": "information.com.cisco.dcnm.event.pmn.create.flowalias",
  "header": {
    "Type": "FlowAlias",
    "User": "Internal",
    "Operation Status": "Success",
    "Event": "Flow alias with alias name '232_nat1' in VRF 'default' in fabric 'pmn-soln-readonly' successfully created by admin",
    "Sent At": "2021-08-05, 16:06:58 UTC",
    "Severity": "Information",
    "Operation": "Create"
  },
  "data": {
    "fabric": "pmn-soln-readonly",
    "name": "232_nat1",
    "description": "",
    "vrf": "default",
    "message": "Flow alias with alias name '232_nat1' in VRF 'default' in fabric 'pmn-"
```



## Flow Alias

```
soln-readonly' successfully created by admin",
  "multicastIp": " 232.232.5.1"
}
}
```

## Update/Edit

Key

FlowAlias.

Payload

```
{
  "messageId": 4001,
  "routingKey": "information.com.cisco.dcnm.event.pmn.update.flowalias",
  "header": {
    "Type": "FlowAlias",
    "User": "Internal",
    "Operation Status": "Success",
    "Event": "Flow alias updated with alias name '232_nat2' in VRF 'default' in fabric
'pmn-soln-readonly' by admin",
    "Sent At": "2021-08-05, 16:07:21 UTC",
    "Severity": "Information",
    "Operation": "Update"
  },
  "data": {
    "fabric": "pmn-soln-readonly",
    "name": "232_nat2",
    "description": "",
    "vrf": "default",
    "message": "Flow alias updated with alias name '232_nat2' in VRF 'default' in fabric
'pmn-soln-readonly' by admin",
    "multicastIp": "232.232.5.2"
  }
}
```

## Delete

Key

FlowAlias.

Payload

```
{
  "messageId": 4002,
  "routingKey": "information.com.cisco.dcnm.event.pmn.delete.flowalias",
  "header": {
    "Type": "FlowAlias",
    "User": "Internal",
    "Operation Status": "Success",
    "Event": "Flow alias deleted with name '232_nat2' in VRF 'default' in fabric 'pmn-
soln-readonly' by admin",
    "Sent At": "2021-08-05, 16:07:30 UTC",
    "Severity": "Information",
    "Operation": "Delete"
  },
  "data": {
    "fabric": "pmn-soln-readonly",
    "name": "232_nat2",
    "description": ""
  }
}
```

## Hosts - Discovered Hosts

```

    "vrf": "default",
    "message": "Flow alias deleted with name '232_nat2' in VRF 'default' in fabric 'pmn-
soln-readonly' by admin",
    "multicastIp": "232.232.5.2"
  }
}

```

## Hosts - Discovered Hosts

## ARP Endpoints - Create

Key	Host.
Payload	<pre> {   "messageId": 1005,   "routingKey": "information.com.cisco.dcnm.event.pmn.discover.host",   "header": {     "Type": "Host",     "User": "Internal",     "Operation Status": "Success",     "Event": "Host:10.35.24.10 Discovered Source:10.35.24.10 group: in VRF 'default' in fabric 'pmn-soln'",     "Sent At": "2021-07-30, 21:43:35 UTC",     "Severity": "Information",     "Operation": "Discover"   },   "data": {     "role": "ARP",     "Switch time": "Fri, Jul 30 2021 21:43:03 (UTC)",     "ipAddress": "10.35.24.10",     "discovered by": "",     "vrf": "default",     "source": "10.35.24.10",     "message": "Host:10.35.24.10 Discovered Source:10.35.24.10 group: in VRF 'default' in fabric 'pmn-soln'",     "interface": "Ethernet1/24",     "mac": "00:10:94:00:01:6C",     "switch": "&lt;switchName &gt;",     "fabric": "pmn-soln",     "fault reason": "",     "name": "Host-10.35.24.10",     "group": ""   } } </pre>

## ARP Endpoints - Delete

Key	Host.
Payload	<pre> {   "messageId": 1002, </pre>

## Hosts - Discovered Hosts

```

    "routingKey": "information.com.cisco.dcnm.event.pmn.delete.host",
    "header": {
      "Type": "Host",
      "User": "Internal",
      "Operation Status": "Success",
      "Event": "Host:10.35.24.10 Deleted Source:10.35.24.10 group: in VRF 'default' in
fabric 'pmn-soln'",
      "Sent At": "2021-07-30, 21:45:37 UTC",
      "Severity": "Information",
      "Operation": "Delete"
    },
    "data": {
      "role": "ARP",
      "Switch time": "Fri, Jul 30 2021 21:43:03 (UTC)",
      "ipAddress": "10.35.24.10",
      "discoverd by": "",
      "vrf": "default",
      "source": "10.35.24.10",
      "message": "Host:10.35.24.10 Deleted Source:10.35.24.10 group: in VRF 'default' in
fabric 'pmn-soln'",
      "interface": "Ethernet1/24",
      "mac": "00:10:94:00:01:6C",
      "switch": "<switchName >",
      "fabric": "pmn-soln",
      "fault reason": "",
      "name": "Host-10.35.24.10",
      "group": ""
    }
  }
}

```

## ARP Endpoints – Sender/Create

Key	Host.
Payload	<pre> {   "messageId": 1005,   "routingKey": "information.com.cisco.dcnm.event.pmn.discover.host",   "header": {     "Type": "Host",     "User": "Internal",     "Operation Status": "Success",     "Event": "Host:10.1.24.10 Discovered Source:10.1.24.10 group:224.0.255.1 in VRF 'default' in fabric 'pmn-soln'",     "Sent At": "2021-07-30, 20:44:11 UTC",     "Severity": "Information",     "Operation": "Discover"   },   "data": {     "role": "Sender",     "Switch time": "Fri, Jul 30 2021 20:43:12 (UTC)",     "ipAddress": "10.1.24.10",     "discoverd by": "",     "vrf": "default",     "source": "10.1.24.10",     "message": "Host:10.1.24.10 Discovered Source:10.1.24.10 group:224.0.255.1 in </pre>

```

VRF 'default' in fabric 'pmn-soln",
  "interface": " Ethernet1/24",
  "mac": "",
  "switch": " <switchName >",
  "external": " NO",
  "fabric": " pmn-soln",
  "fault reason": " NONE",
  "name": " Host-10.1.24.10",
  "group": " 224.0.255.1"
}
}

```

## ARP Endpoints – Sender/Delete

Key	Host.
Payload	<pre> {   "messageId": 1002,   "routingKey": " information.com.cisco.dcnm.event.pmn.delete.host",   "header": {     "Type": " Host",     "User": " Internal",     "Operation Status": " Success",     "Event": " Host:255.255.255.255 Deleted Source:10.1.24.10 group:224.0.255.1 in VRF 'default' in fabric 'pmn-soln",     "Sent At": " 2021-07-30, 20:50:16 UTC",     "Severity": " Information",     "Operation": " Delete"   },   "data": {     "role": " Static Receiver",     "Switch time": " Fri, Jul 30 2021 20:43:12 (UTC)",     "ipAddress": " 255.255.255.255",     "discoverd by": " NBM-STATIC",     "vrf": " default",     "source": " 10.1.24.10",     "message": " Host:255.255.255.255 Deleted Source:10.1.24.10 group:224.0.255.1 in VRF 'default' in fabric 'pmn-soln",     "interface": " DUMMY",     "mac": "",     "switch": " &lt;switchName &gt;",     "external": " NO",     "fabric": " pmn-soln",     "fault reason": " NONE",     "name": " Host-255.255.255.255",     "group": " 224.0.255.1"   } } </pre>

## NBM Static Receiver – Create

Key	Host.
-----	-------

## Hosts - Discovered Hosts

Payload	<pre> {   "messageId": 1005,   "routingKey": "information.com.cisco.dcnm.event.pmn.discover.host",   "header": {     "Type": "Host",     "User": "Internal",     "Operation Status": "Success",     "Event": "Host:10.35.24.1 Discovered Source:0.0.0.0 group:224.0.255.1 in VRF 'default' in fabric 'pmn-soln'",     "Sent At": "2021-07-30, 20:42:09 UTC",     "Severity": "Information",     "Operation": "Discover"   },   "data": {     "role": "Static Receiver",     "Switch time": "Fri, Jul 30 2021 20:40:02 (UTC)",     "ipAddress": "10.35.24.1",     "discoverd by": "NBM-STATIC",     "vrf": "default",     "source": "0.0.0.0",     "message": "Host:10.35.24.1 Discovered Source:0.0.0.0 group:224.0.255.1 in VRF 'default' in fabric 'pmn-soln'",     "interface": "Ethernet1/24",     "mac": "",     "switch": "&lt;switchName &gt;",     "external": "NO",     "fabric": "pmn-soln",     "fault reason": "NONE",     "name": "Host-10.35.24.1",     "group": "224.0.255.1"   } } </pre>
---------	---

## Stage-flow Receiver - Create

Key	Host.
Payload	<pre> {   "messageId": 1005,   "routingKey": "information.com.cisco.dcnm.event.pmn.discover.host",   "header": {     "Type": "Host",     "User": "Internal",     "Operation Status": "Success",     "Event": "Host:255.255.255.255 Discovered Source:10.1.24.10 group:224.0.255.1 in VRF 'default' in fabric 'pmn-soln'",     "Sent At": "2021-07-30, 20:44:11 UTC",     "Severity": "Information",     "Operation": "Discover"   },   "data": {     "role": "Static Receiver",     "Switch time": "Fri, Jul 30 2021 20:43:12 (UTC)",     "ipAddress": "255.255.255.255",     "discoverd by": "NBM-STATIC", </pre>

```

    "vrf": "default",
    "source": "10.1.24.10",
    "message": "Host:255.255.255.255 Discovered Source:10.1.24.10
group:224.0.255.1 in VRF 'default' in fabric 'pmn-soln'",
    "interface": "DUMMY",
    "mac": "",
    "switch": "<switchName >",
    "external": "NO",
    "fabric": "pmn-soln",
    "fault reason": "NONE",
    "name": "Host-255.255.255.255",
    "group": "224.0.255.1"
  }
}

```

## Stage-flow Receiver – Delete

Key	Host.
Payload	<pre> {   "messageId": 1002,   "routingKey": "information.com.cisco.dcnm.event.pmn.delete.host",   "header": {     "Type": "Host",     "User": "Internal",     "Operation Status": "Success",     "Event": "Host:10.35.24.1 Deleted Source:0.0.0.0 group:224.0.255.1 in VRF 'default' in fabric 'pmn-soln'",     "Sent At": "2021-07-30, 20:50:16 UTC",     "Severity": "Information",     "Operation": "Delete"   },   "data": {     "role": "Static Receiver",     "Switch time": "Fri, Jul 30 2021 20:40:02 (UTC)",     "ipAddress": "10.35.24.1",     "discoverd by": "NBM-STATIC",     "vrf": "default",     "source": "0.0.0.0",     "message": "Host:10.35.24.1 Deleted Source:0.0.0.0 group:224.0.255.1 in VRF 'default' in fabric 'pmn-soln'",     "interface": "Ethernet1/24",     "mac": "",     "switch": "&lt;switchName &gt;",     "external": "NO",     "fabric": "pmn-soln",     "fault reason": "NONE",     "name": "Host-10.35.24.1",     "group": "224.0.255.1"   } } </pre>

## IGMP Dynamic Receiver – Create

Key	Host.
Payload	<pre>{   "messageId": 1005,   "routingKey": "information.com.cisco.dcnm.event.pmn.discover.host",   "header": {     "Type": "Host",     "User": "Internal",     "Operation Status": "Success",     "Event": "Host:10.35.23.10 Discovered Source:10.20.201.10 group:232.20.35.177 in VRF 'default' in fabric 'pmn-soln'",     "Sent At": "2021-07-30, 21:04:32 UTC",     "Severity": "Information",     "Operation": "Discover"   },   "data": {     "role": "Dynamic Receiver",     "Switch time": "Fri, Jul 30 2021 21:03:03 (UTC)",     "ipAddress": "10.35.23.10",     "discoverd by": "IGMP",     "vrf": "default",     "source": "10.20.201.10",     "message": "Host:10.35.23.10 Discovered Source:10.20.201.10 group:232.20.35.177 in VRF 'default' in fabric 'pmn-soln'",     "interface": "Ethernet1/23",     "mac": "",     "switch": "&lt;switchName &gt;",     "external": "NO",     "fabric": "pmn-soln",     "fault reason": "NONE",     "name": "Host-10.35.23.10",     "group": "232.20.35.177"   } }</pre>

## IGMP Dynamic Receiver – Delete

Key	Host.
Payload	<pre>{   "messageId": 1002,   "routingKey": "information.com.cisco.dcnm.event.pmn.delete.host",   "header": {     "Type": "Host",     "User": "Internal",     "Operation Status": "Success",     "Event": "Host:10.35.23.10 Deleted Source:10.20.201.10 group:232.20.35.53 in VRF 'default' in fabric 'pmn-soln'",     "Sent At": "2021-07-30, 21:17:02 UTC",     "Severity": "Information",     "Operation": "Delete"   },   "data": {</pre>

```

    "role": "Dynamic Receiver",
    "Switch time": "Fri, Jul 30 2021 21:02:32 (UTC)",
    "ipAddress": "10.35.23.10",
    "discoverd by": "IGMP",
    "vrf": "default",
    "source": "10.20.201.10",
    "message": "Host:10.35.23.10 Deleted Source:10.20.201.10 group:232.20.35.53 in
VRF 'default' in fabric 'pmn-soln",
    "interface": "Ethernet1/23",
    "mac": "",
    "switch": "<switchName >",
    "external": "NO",
    "fabric": "pmn-soln",
    "fault reason": "NONE",
    "name": "Host-10.35.23.10",
    "group": "232.20.35.53"
  }
}

```

## WAN Sender – Create

Key	Host.
Payload	<pre> {   "messageId": 1005,   "routingKey": "information.com.cisco.dcnm.event.pmn.discover.host",   "header": {     "Type": "Host",     "User": "Internal",     "Operation Status": "Success",     "Event": "Host:11.4.19.1 Discovered Source:11.4.19.1 group:232.1.1.100 in VRF 'default' in fabric 'pmn-soln'",     "Sent At": "2021-07-30, 21:53:44 UTC",     "Severity": "Information",     "Operation": "Discover"   },   "data": {     "role": "External Sender",     "Switch time": "Fri, Jul 30 2021 21:51:47 (UTC)",     "ipAddress": "11.4.19.1",     "discoverd by": "",     "vrf": "default",     "source": "11.4.19.1",     "message": "Host:11.4.19.1 Discovered Source:11.4.19.1 group:232.1.1.100 in VRF 'default' in fabric 'pmn-soln'",     "interface": "Ethernet1/1",     "mac": "",     "switch": "&lt;switchName &gt;",     "external": "YES",     "fabric": "pmn-soln",     "fault reason": "NONE",     "name": "Host-11.4.19.1",     "group": "232.1.1.100"   } } </pre>



```
| }

```

## WAN Sender - Delete

Key	Host.
Payload	<pre>{   "messageId": 1002,   "routingKey": "information.com.cisco.dcnm.event.pmn.delete.host",   "header": {     "Type": "Host",     "User": "Internal",     "Operation Status": "Success",     "Event": "Host:11.4.19.1 Deleted Source:11.4.19.1 group:232.1.1.100 in VRF 'default' in fabric 'pmn-soln",     "Sent At": "2021-07-30, 22:09:58 UTC",     "Severity": "Information",     "Operation": "Delete"   },   "data": {     "role": "External Sender",     "Switch time": "Fri, Jul 30 2021 21:51:47 (UTC)",     "ipAddress": "11.4.19.1",     "discoverd by": "",     "vrf": "default",     "source": "11.4.19.1",     "message": "Host:11.4.19.1 Deleted Source:11.4.19.1 group:232.1.1.100 in VRF 'default' in fabric 'pmn-soln",     "interface": "Ethernet1/1",     "mac": "",     "switch": "&lt;switchName &gt;",     "external": "YES",     "fabric": "pmn-soln",     "fault reason": "NONE",     "name": "Host-11.4.19.1",     "group": "232.1.1.100"   } }</pre>

## WAN Receiver - Create

Key	Host.
Payload	<pre>{   "messageId": 1005,   "routingKey": "information.com.cisco.dcnm.event.pmn.discover.host",   "header": {     "Type": "Host",     "User": "Internal",     "Operation Status": "Success",     "Event": "Host:11.41.1.2 Discovered Source:10.35.23.10 group:232.1.1.1 in VRF 'default' in fabric 'pmn-soln",     "Sent At": "2021-07-30, 21:53:44 UTC",     "Severity": "Information", </pre>

```

    "Operation": "Discover"
  },
  "data": {
    "role": "",
    "Switch time": "Fri, Jul 30 2021 21:51:47 (UTC)",
    "ipAddress": "11.41.1.2",
    "discoverd by": "PIM",
    "vrf": "default",
    "source": "10.35.23.10",
    "message": "Host:11.41.1.2 Discovered Source:10.35.23.10 group:232.1.1.1 in VRF
'default' in fabric 'pmn-soln'",
    "interface": "Ethernet1/1",
    "mac": "",
    "switch": "<switchName >",
    "external": "YES",
    "fabric": "pmn-soln",
    "fault reason": "NONE",
    "name": "Host-11.41.1.2",
    "group": "232.1.1.1"
  }
}

```

## WAN Receiver - Delete

Key	Host.
Payload	<pre> {   "messageld": 1002,   "routingKey": "information.com.cisco.dcnm.event.pmn.delete.host",   "header": {     "Type": "Host",     "User": "Internal",     "Operation Status": "Success",     "Event": "Host:11.41.1.2 Deleted Source:10.35.23.10 group:232.1.1.1 in VRF 'default' in fabric 'pmn-soln'",     "Sent At": "2021-07-30, 22:09:58 UTC",     "Severity": "Information",     "Operation": "Delete"   },   "data": {     "role": "",     "Switch time": "Fri, Jul 30 2021 21:51:47 (UTC)",     "ipAddress": "11.41.1.2",     "discoverd by": "PIM",     "vrf": "default",     "source": "10.35.23.10",     "message": "Host:11.41.1.2 Deleted Source:10.35.23.10 group:232.1.1.1 in VRF 'default' in fabric 'pmn-soln'",     "interface": "Ethernet1/1",     "mac": "",     "switch": "&lt;switchName &gt;",     "external": "YES",     "fabric": "pmn-soln",     "fault reason": "NONE",   } } </pre>

## Fault Endpoints

```

    "name": "Host-11.41.1.2",
    "group": "232.1.1.1"
  }
}

```

## Fault Endpoints

## Create

Key	<switchName>^sys/nbm/show/faults/dom-default/faults-[sys/nbm/show/endpoints/dom-default/h-[10.4.12.10]-if-436213248/s-[0.0.0.0]-g-[224.1.1.34]]
Payload	<pre> {   "faultReason": "No Bandwidth",   "faultResolution": "Please consult documentation",   "Switch": "&lt;switchName &gt;",   "dn": "sys/nbm/show/faults/dom-default/faults-[sys/nbm/show/endpoints/dom-default/h-[10.4.12.10]-if-436213248/s-[0.0.0.0]-g-[224.1.1.34]]",   "TimestampReceived": 1629236351477,   "Timestamp": 1629236172077,   "status": "created" } </pre>

## Delete

Key	<switchName>^sys/nbm/show/faults/dom-default/faults-[sys/nbm/show/endpoints/dom-default/h-[10.4.12.10]-if-436213248/s-[0.0.0.0]-g-[224.1.1.34]]
Payload	<pre> {   "Switch": "&lt;switchName &gt;",   "dn": "sys/nbm/show/faults/dom-default/faults-[sys/nbm/show/endpoints/dom-default/h-[10.4.12.10]-if-436213248/s-[0.0.0.0]-g-[224.1.1.48]]",   "TimestampReceived": 1629236403450,   "Timestamp": 1629236224052,   "status": "deleted" } </pre>

## Flow Create

Key	Flow.
Payload	<pre> {   "messageId": 5000,   "routingKey": "information.com.cisco.dcnm.event.pmn.create.flow",   "header": {     "Type": "Flow",     "User": "Internal",     "Operation Status": "Success",     "Event": "Flow created for Source:10.1.24.10, Receiver:10.35.24.1, group:224.0.255.1 in VRF 'default' in Fabric 'pmn-soln",     "Sent At": "2021-07-30, 20:44:12 UTC", </pre>

## Fault Endpoints

```

    "Severity": "Information",
    "Operation": "Create"
  },
  "data": {
    "Receiver Switch time": "172.31.147.161: 2021-07-30, 20:39:42",
    "receiver-IP": "10.35.24.1",
    "receiver-host-interface": "Ethernet1/24",
    "vrf": "default",
    "sender-leaf": "172.31.204.98",
    "priority": "LOW",
    "sender-host-interface": "Ethernet1/24",
    "Sender Switch time": "172.31.204.98: 2021-07-30, 20:42:55",
    "sender-IP": "10.1.24.10",
    "fabric": "pmn-soln",
    "receiver-leaf": "172.31.147.161",
    "group": "224.0.255.1",
    "policy": "Default"
  }
}

```

## Flow Delete

Key	<switchName>^sys/nbm/show/notify/dom-default/event-[FLOW:s-[10.20.100.1]-g-[232.1.1.1]/oif-[Eth1/24]]=
Payload	<pre> {   "Switch": "&lt;switchName &gt;",   "dn": "sys/nbm/show/notify/dom-default/event-[FLOW:s-[10.20.100.1]-g-[232.1.1.1]/oif-[Eth1/24]]",   "TimestampReceived": 1627678730095,   "Timestamp": 1627678709196,   "status": "deleted" } </pre>

## Flow Create IGMP Receiver

Key	Flow.
Payload	<pre> {   "messageId": 5000,   "routingKey": "information.com.cisco.dcnm.event.pmn.create.flow",   "header": {     "Type": "Flow",     "User": "Internal",     "Operation Status": "Success",     "Event": "Flow created for Source:10.20.202.10, Receiver:10.35.23.10, group:232.20.35.121 in VRF 'default' in Fabric 'pmn-soln'",     "Sent At": "2021-07-30, 21:04:41 UTC",     "Severity": "Information",     "Operation": "Create"   },   "data": {     "Receiver Switch time": "172.31.147.161: 2021-07-30, 21:02:35", </pre>

## Fault Endpoints

```

    "receiver-IP": " 10.35.23.10",
    "receiver-host-interface": " Ethernet1/23",
    "vrf": " default",
    "sender-leaf": " 172.31.203.182",
    "priority": " LOW",
    "sender-host-interface": " Vlan202",
    "Sender Switch time": " 172.31.203.182: 2021-07-30, 21:02:35",
    "sender-IP": " 10.20.202.10",
    "fabric": " pmn-soln",
    "receiver-leaf": " 172.31.147.161",
    "group": " 232.20.35.121",
    "policy": " Default"
  }
}

```

## Flow Create WAN Sender

Key	Flow.
Payload	<pre> {   "messageId": 5000,   "routingKey": " information.com.cisco.dcnm.event.pmn.create.flow",   "header": {     "Type": " Flow",     "User": " Internal",     "Operation Status": " Success",     "Event": " Flow created for Source:11.4.19.1, Receiver:255.255.255.255, group:232.1.1.100 in VRF 'default' in Fabric 'pmn-soln",     "Sent At": " 2021-07-30, 21:53:45 UTC",     "Severity": " Information",     "Operation": " Create"   },   "data": {     "Receiver Switch time": " 172.31.147.161: 2021-07-30, 21:51:26",     "receiver-IP": " 255.255.255.255",     "receiver-host-interface": " DUMMY",     "vrf": " default",     "sender-leaf": " 172.31.203.189",     "priority": " LOW",     "sender-host-interface": " Ethernet1/1",     "Sender Switch time": " 172.31.203.189: 2021-07-30, 21:51:26",     "sender-IP": " 11.4.19.1",     "fabric": " pmn-soln",     "receiver-leaf": " 172.31.147.161",     "group": " 232.1.1.100",     "policy": " Default"   } } </pre>

## Flow Delete WAN Sender

Key	Flow.
Payload	<pre> { </pre>

## Fault Endpoints

```

"messaged": 5003,
"routingKey": "information.com.cisco.dcnm.event.pmn.delete.flow",
"header": {
  "Type": "Flow",
  "User": "Internal",
  "Operation Status": "Success",
  "Event": "Flow deleted for Source:11.4.19.1, Receiver:255.255.255.255,
group:232.1.1.100 in VRF 'default' in Fabric 'pmn-soln'",
  "Sent At": "2021-07-30, 22:09:59 UTC",
  "Severity": "Information",
  "Operation": "Delete"
},
"data": {
  "Receiver Switch time": "172.31.147.161: 2021-07-30, 21:51:26",
  "receiver-IP": "255.255.255.255",
  "receiver-host-interface": "DUMMY",
  "vrf": "default",
  "sender-leaf": "172.31.203.189",
  "priority": "LOW",
  "sender-host-interface": "Ethernet1/1",
  "Sender Switch time": "172.31.203.189: 2021-07-30, 21:51:26",
  "sender-IP": "11.4.19.1",
  "fabric": "pmn-soln",
  "receiver-leaf": "172.31.147.161",
  "group": "232.1.1.100",
  "policy": "Default"
}
}

```

## Flow Create WAN Receiver

Key	Flow.
Payload	<pre> {   "messaged": 5000,   "routingKey": "information.com.cisco.dcnm.event.pmn.create.flow",   "header": {     "Type": "Flow",     "User": "Internal",     "Operation Status": "Success",     "Event": "Flow created for Source:10.35.23.10, Receiver:11.41.1.2, group:232.1.1.1 in VRF 'default' in Fabric 'pmn-soln'",     "Sent At": "2021-07-30, 21:53:45 UTC",     "Severity": "Information",     "Operation": "Create"   },   "data": {     "Receiver Switch time": "172.31.203.189: 2021-07-30, 21:51:37",     "receiver-IP": "11.41.1.2",     "receiver-host-interface": "Ethernet1/1",     "vrf": "default",     "sender-leaf": "172.31.147.161",     "priority": "LOW",     "sender-host-interface": "Ethernet1/23", </pre>

## Fault Endpoints

```

    "Sender Switch time": " 172.31.147.161: 2021-07-30, 21:51:37",
    "sender-IP": " 10.35.23.10",
    "fabric": " pmn-soln",
    "receiver-leaf": " 172.31.203.189",
    "group": " 232.1.1.1",
    "policy": " Default"
  }
}

```

## Flow Delete WAN Receiver

Key	Flow.
Payload	<pre> {   "messageId": 5003,   "routingKey": " information.com.cisco.dcnm.event.pmn.delete.flow",   "header": {     "Type": " Flow",     "User": " Internal",     "Operation Status": " Success",     "Event": " Flow deleted for Source:10.35.23.10, Receiver:11.41.1.2, group:232.1.1.1 in VRF 'default' in Fabric 'pmn-soln",     "Sent At": " 2021-07-30, 22:09:59 UTC",     "Severity": " Information",     "Operation": " Delete"   },   "data": {     "Receiver Switch time": " 172.31.203.189: 2021-07-30, 21:51:37",     "receiver-IP": " 11.41.1.2",     "receiver-host-interface": " Ethernet1/1",     "vrf": " default",     "sender-leaf": " 172.31.147.161",     "priority": " LOW",     "sender-host-interface": " Ethernet1/23",     "Sender Switch time": " 172.31.147.161: 2021-07-30, 21:51:37",     "sender-IP": " 10.35.23.10",     "fabric": " pmn-soln",     "receiver-leaf": " 172.31.203.189",     "group": " 232.1.1.1",     "policy": " Default"   } } </pre>

## RTP Packet Drop

Key	RTPPacketDrop.
Payload	<pre> {   "messageId": 5203,   "routingKey": " information.com.cisco.dcnm.event.pmn.delete.rtppacketdrop",   "header": {     "Type": " RTPPacketDrop",     "User": " Internal",     "Operation Status": " Success", </pre>

## Switch Real-Time Notification

```

    "Event": " Flow Error deleted for Source:10.1.24.10:22401,
Receiver:224.0.255.2:5004 on fabric:pmn-soln and vrf:default",
    "Sent At": " 2021-07-30, 19:10:49 UTC",
    "Severity": " Information",
    "Operation": " Delete"
  },
  "data": {
    "source-port": " 22401",
    "bits-per-sec": " 25389547",
    "packet-loss": " 1",
    "start-time": " 09:49:17 PST Jul 30 2021",
    "loss-start": " 11:00:43 PST Jul 30 2021",
    "vrf": " default",
    "interface": " Ethernet1/50",
    "destination-ip": " 224.0.255.2",
    "switch": " <switchName >",
    "protocol": " 17",
    "destination-port": " 5004",
    "packet-count": " 14297328",
    "fabric": " pmn-soln",
    "source-ip": " 10.1.24.10"
  }
}

```

## Switch Real-Time Notification

## Flow Provisional - Create

Key	<switchName>sys/nbm/show/notify/dom-default/event-[FLOW:s-[10.20.100.1]-g-[232.1.1.1]/oif-[Eth1/24]]
Payload	<pre> {   "identifier": " FLOW:s-[10.20.100.1]-g-[232.1.1.1]/oif-[Eth1/24]",   "reason": " FLOW Provisioned Successfully",   "Switch": " &lt;switchName&gt;",   "dn": " sys/nbm/show/notify/dom-default/event-[FLOW:s-[10.20.100.1]-g-[232.1.1.1]/oif-[Eth1/24]]",   "TimestampReceived": 1627678601522,   "Timestamp": 1627678580623,   "status": " created" } </pre>

## Flow Provisional - Delete

Key	<switchName>^sys/nbm/show/notify/dom-default/event-[FLOW:s-[10.35.23.10]-g-[232.35.20.249]/oif-[Vlan208]]=
Payload	<pre> {   "Switch": " &lt;switchName&gt;",   "dn": " sys/nbm/show/notify/dom-default/event-[FLOW:s-[10.35.23.10]-g-[232.35.20.249]/oif-[Vlan208]]", } </pre>



## Switch Real-Time Notification

```

    "TimestampReceived": 1627667127792,
    "Timestamp": 1627522908039,
    "status": "deleted"
  }

```

## Fault Notification - No Bandwidth

Key	<code>&lt;switchName&gt;^sys/nbm/show/faults/dom-default/faults-[s-[12.1.10.10]-g-[233.11.2.44]]=</code>
Payload	<pre> {   "faultReason": "No Bandwidth",   "faultResolution": "Please consult documentation",   "Switch": "&lt;switchName&gt;",   "dn": "sys/nbm/show/faults/dom-default/faults-[s-[12.1.10.10]-g-[233.11.2.44]]",   "TimestampReceived": 1627666856894,   "Timestamp": 1627666103065,   "status": "created" } </pre>

## Fault Notification - Delete

Key	<code>&lt;switchName&gt;^sys/nbm/show/faults/dom-default/faults-[s-[12.1.10.10]-g-[233.11.1.82]]=</code>
Payload	<pre> {   "Switch": "&lt;switchName&gt;",   "dn": "sys/nbm/show/faults/dom-default/faults-[s-[12.1.10.10]-g-[233.11.1.82]]",   "TimestampReceived": 1627667133432,   "Timestamp": 1627666110654,   "status": "deleted" } </pre>

## Fault Notification - No Flow Policy

Key	<code>&lt;switchName&gt;^sys/nbm/show/faults/dom-default/faults-[sys/nbm/show/endpoints/dom-default/h-[10.18.8.11]-if-0/g-[230.1.8.24]]=</code>
Payload	<pre> {   "faultReason": "No Flow Policy",   "faultResolution": "Please consult documentation",   "Switch": "&lt;switchName&gt;",   "dn": "sys/nbm/show/faults/dom-default/faults-[sys/nbm/show/endpoints/dom-default/h-[10.18.8.11]-if-0/g-[230.1.8.24]]",   "TimestampReceived": 1627671997103,   "Timestamp": 1627671528693,   "status": "created" } </pre>

## No Unicast Route

Key	<switchName>^sys/nbm/show/faults/dom-default/faults-[sys/nbm/show/endpoints/dom-default/h-[10.4.100.10]-if-0/g-[224.1.1.1]]=
Payload	<pre>{   "faultReason": " No Unicast Route",   "faultResolution": " Please consult documentation",   "Switch": "&lt;switchName&gt;",   "dn": " sys/nbm/show/faults/dom-default/faults-[sys/nbm/show/endpoints/dom-default/h-[10.4.100.10]-if-0/g-[224.1.1.1]]",   "TimestampReceived": 1629216102484,   "Timestamp": 1629215922988,   "status": " created" }</pre>

## PTP Corrections

Key	<switchName>^sys/ptp/correction
Payload	<pre>{   "LastHighCorrectionValue":520,   "Switch": "&lt;switchName&gt;",   "MGR": " 2",   "dn": " sys/ptp/correction",   "TimestampReceived":1692660192763,   "HighCorrectionCount":1,   "Timestamp":1692660233026,   "LastHighCorrectionTime": " Mon Aug 21 23:23:33 2023 439524" }</pre>

## PTP PortState Change

### PTP PortState Change from Slave to Disabled State

Key	<switchName>^sys/ptp/portstate-[eth1/49]
Payload	<pre>{   "Switch": "&lt;switchName&gt;",   "StateChange": "",   "CurrentState": " Disabled",   "LastPortStateChangeTime": " Mon Aug 21 23:25:58 2023 853968",   "dn": " sys/ptp/portstate-[eth1/49]",   "TimestampReceived":1692660318599,   "Timestamp":1692660358862,   "Interface": " eth1/49",   "PreviousState": " Slave",   "status": " created" }</pre>

## PTP PortState Change from Master to Disabled State

Key	<code>&lt;switchName&gt;^sys/ptp/portstate-[eth3/18]</code>
Payload	<pre>{   "Switch" : "&lt;switchName&gt;",   "StateChange" : "",   "CurrentState" : "Disabled",   "LastPortStateChangeTime" : " Mon Aug 21 23:25:59 2023 233014",   "dn" : " sys/ptp/portstate-[eth3/18]",   "TimestampReceived" : 1692660318977,   "Timestamp" : 1692660359240,   "Interface" : " eth3/18",   "PreviousState" : " Master",   "status" : " created" }</pre>

## PTP PortState Change from Passive to Uncalibrated State

Key	<code>&lt;switchName&gt;^sys/ptp/portstate-[eth1/50]</code>
Payload	<pre>{   "Switch" : "&lt;switchName&gt;",   "StateChange" : "",   "CurrentState" : "Uncalibrated",   "LastPortStateChangeTime" : " Mon Aug 21 23:25:58 2023 854388",   "dn" : " sys/ptp/portstate-[eth1/50]",   "TimestampReceived" : 1692660318600,   "Timestamp" : 1692660358863,   "Interface" : " eth1/50",   "PreviousState" : " Passive",   "status" : " created" }</pre>

## PTP PortState Change from Uncalibrated to Slave State

Key	<code>&lt;switchName&gt;^sys/ptp/portstate-[eth1/50]</code>
Payload	<pre>{   "Switch" : "&lt;switchName&gt;",   "CurrentState" : " Slave",   "LastPortStateChangeTime" : " Mon Aug 21 23:25:58 2023 894325",   "dn" : " sys/ptp/portstate-[eth1/50]",   "TimestampReceived" : 1692660318633,   "Timestamp" : 1692660358896,   "PreviousState" : " Uncalibrated",   "status" : " modified" }</pre>

## PTP PortState Change from Disabled to Listening State

Key	<code>&lt;switchName&gt;^sys/ptp/portstate-[eth3/18]</code>
Payload	<pre>{</pre>

## Switch Real-Time Notification

```

    "Switch" : "<switchName>",
    "CurrentState" : "Listening",
    "LastPortStateChangeTime" : "Mon Aug 21 23:26:35 2023 829529",
    "dn" : "sys/ptp/portstate-[eth3/18]",
    "TimestampReceived" : 1692660355571,
    "Timestamp" : 1692660395833,
    "PreviousState" : "Disabled",
    "status" : "modified"
  }

```

## PTP PortState Change from Listening to Pre-Master State

Key	<code>&lt;switchName&gt;^sys/ptp/portstate-[eth3/18]</code>
Payload	<pre> {   "Switch" : "&lt;switchName&gt;",   "CurrentState" : "Pre-Master",   "LastPortStateChangeTime" : "Mon Aug 21 23:26:38 2023 831786",   "dn" : "sys/ptp/portstate-[eth3/18]",   "TimestampReceived" : 1692660358570,   "Timestamp" : 1692660398833,   "PreviousState" : "Listening",   "status" : "modified" } </pre>

## PTP PortState Change from Pre-Master to Uncalibrated State

Key	<code>&lt;switchName&gt;^sys/ptp/portstate-[eth1/49]</code>
Payload	<pre> {   "Switch" : "&lt;switchName&gt;",   "CurrentState" : "Uncalibrated",   "LastPortStateChangeTime" : "Mon Aug 21 23:26:41 2023 424916",   "dn" : "sys/ptp/portstate-[eth1/49]",   "TimestampReceived" : 1692660361163,   "Timestamp" : 1692660401426,   "PreviousState" : "Pre-Master",   "status" : "modified" } </pre>

## PTP ParentChange

Key	<code>&lt;switchName&gt;^sys/ptp/parentchange</code>
Payload	<pre> {   "CurrentParentId" : "28:6f:7f:ff:fe:0a:d3:fd",   "LastParentChangeTime" : "Mon Aug 21 23:29:12 2023 378848",   "Switch" : "&lt;switchName&gt;",   "PreviousParentId" : "2c:f8:9b:ff:fe:98:27:ff",   "dn" : "sys/ptp/parentchange",   "TimestampReceived" : 1692660512126,   "Timestamp" : 1692660552388,   "status" : "created" } </pre>

## Switch Real-Time Notification

}

## PTP GMChange

Key	<switchName>^sys/ptp/gmchange
Payload	<pre>{   "CurrentGmId": "08:00:11:ff:fe:22:ff:39",   "Switch": "&lt;switchName&gt;",   "PreviousGmId": "28:6f:7f:ff:fe:0a:d3:fd",   "dn": "sys/ptp/gmchange",   "TimestampReceived": 1692660701084,   "LastGmChangeTime": "Mon Aug 21 23:32:21 2023 344877",   "Timestamp": 1692660741347,   "status": "modified" }</pre>

## TCAM Not Carved

Key	<switchName>^sys/nbm/show/faults/dom-default/faults-[sys/nbm/show/endpoints/dom-default/h-[10.3.3.10]-if-0/g-[224.1.1.100]]=
Payload	<pre>{   "faultReason": "No TCAM Carved",   "faultResolution": "Please consult documentation",   "Switch": "&lt;switchName&gt;",   "dn": "sys/nbm/show/faults/dom-default/faults-[sys/nbm/show/endpoints/dom-default/h-[10.3.3.10]-if-0/g-[224.1.1.100]]",   "TimestampReceived": 1629218653504,   "Timestamp": 1629218474113,   "status": "created" }</pre>

## NAT FlowPolicy Mismatch - Create

Key	<switchName>^sys/nbm/show/faults/dom-default/faults-[post_s-[10.2.100.1]-post_g-[225.255.255.1]-pre_s-[10.4.2.10]-pre_g-[224.255.255.1]-S[0]-D[0]-egress/if-[eth1/4]]=
Payload	<pre>{   "faultReason": "Pre and Post Translation Flow BW Mismatch",   "faultResolution": "Please consult documentation",   "Switch": "&lt;switchName&gt;",   "dn": "sys/nbm/show/faults/dom-default/faults-[post_s-[10.2.100.1]-post_g-[225.255.255.1]-pre_s-[10.4.2.10]-pre_g-[224.255.255.1]-S[0]-D[0]-egress/if-[eth1/4]]",   "TimestampReceived": 1629232533230,   "Timestamp": 1629232353834,   "status": "created" }</pre>

## NAT FlowPolicy Mismatch - Delete

Key	<switchName>^sys/nbm/show/faults/dom-default/faults-[post_s-[10.2.100.1]-post_g-[225.255.255.1]-pre_s-[10.4.2.10]-pre_g-[224.255.255.1]-S[0]-D[0]-egress/if-[eth1/4]]=
Payload	{ <pre> "Switch": "&lt;switchName&gt;", "dn": "sys/nbm/show/faults/dom-default/faults-[post_s-[10.2.100.1]-post_g-[225.255.255.1]-pre_s-[10.4.2.10]-pre_g-[224.255.255.1]-S[0]-D[0]-egress/if-[eth1/4]]", "TimestampReceived": 1629232653257, "Timestamp": 1629232473859, "status": "deleted" </pre>

## Flow Utilization

## Flow Utilization less than 60%

Key	<switchName>^sys/nbm/show/notify/dom-default/event-[BW:s-10.3.3.10-g-224.1.1.100]
Payload	{ <pre> "identifier": "BW:s-10.3.3.10-g-224.1.1.100", "reason": "Rate below 60%", "Switch": "&lt;switchName&gt;", "dn": "sys/nbm/show/notify/dom-default/event-[BW:s-10.3.3.10-g-224.1.1.100]", "TimestampReceived": 1629219104797, "Timestamp": 1629218925397, "status": "created" </pre>

## Flow Utilization over 100%

Key	<switchName>^sys/nbm/show/notify/dom-default/event-[BW:s-10.3.12.10-g-224.1.1.15]=
Payload	{ <pre> "identifier": "BW:s-10.3.12.10-g-224.1.1.15", "reason": "Rate over 100%", "Switch": "&lt;switchName&gt;", "dn": "sys/nbm/show/notify/dom-default/event-[BW:s-10.3.12.10-g-224.1.1.15]", "TimestampReceived": 1629230151310, "Timestamp": 1629229971709, "status": "created" </pre>

## Link Utilization

### Ingress Link Utilization above 60%

Key	<switchName>^sys/nbm/show/notify/dom-default/event-[INTF:eth1/12-INGRESS]=
Payload	<pre>{   "identifier": "INTF:eth1/12-INGRESS",   "reason": "WARNING: INGRESS bw usage is at or above 60%",   "Switch": "&lt;switchName&gt;",   "dn": "sys/nbm/show/notify/dom-default/event-[INTF:eth1/12-INGRESS]",   "TimestampReceived": 1629230289185,   "Timestamp": 1629230109792,   "status": "created" }</pre>

### Ingress Link Utilization above 75%

Key	<switchName>^sys/nbm/show/notify/dom-default/event-[INTF:eth1/12-INGRESS]
Payload	<pre>{   "identifier": "INTF:eth1/12-INGRESS",   "reason": "SEVERE: INGRESS bw usage is at or above 75%",   "Switch": "&lt;switchName&gt;",   "dn": "sys/nbm/show/notify/dom-default/event-[INTF:eth1/12-INGRESS]",   "TimestampReceived": 1629230520124,   "Timestamp": 1629230340726,   "status": "created" }</pre>

### Ingress Link Utilization above 90%

Key	<switchName>^sys/nbm/show/notify/dom-default/event-[INTF:eth1/12-INGRESS]=
Payload	<pre>{   "identifier": "INTF:eth1/12-INGRESS",   "reason": "CRITICAL: INGRESS bw usage is at or above 90%",   "Switch": "&lt;switchName&gt;",   "dn": "sys/nbm/show/notify/dom-default/event-[INTF:eth1/12-INGRESS]",   "TimestampReceived": 1629230988331,   "Timestamp": 1629230808932,   "status": "created" }</pre>

### Egress Link Utilization above 60%

Key	<switchName>^sys/nbm/show/notify/dom-default/event-[INTF:eth1/12-EGRESS]=
Payload	<pre>{   "identifier": "INTF:eth1/12-EGRESS",   "reason": "WARNING: EGRESS bw usage is at or above 60%", }</pre>

## NAT Mode

```

    "Switch": "<switchName>",
    "dn": "sys/nbm/show/notify/dom-default/event-[INTF:eth1/12-EGRESS]",
    "TimestampReceived": 1629230940898,
    "Timestamp": 1629230761502,
    "status": "created"
  }

```

## Egress Link Utilization above 75%

Key	<switchName>^sys/nbm/show/notify/dom-default/event-[INTF:eth1/12-EGRESS]
Payload	<pre> {   "identifier": "INTF:eth1/12-EGRESS",   "reason": "SEVERE: EGRESS bw usage is at or above 75%",   "Switch": "&lt;switchName&gt;",   "dn": "sys/nbm/show/notify/dom-default/event-[INTF:eth1/12-EGRESS]",   "TimestampReceived": 1629230880888,   "Timestamp": 1629230701491,   "status": "created" } </pre>

## Egress Link Utilization above 90%

Key	<switchName>^sys/nbm/show/notify/dom-default/event-[INTF:eth1/12-EGRESS]
Payload	<pre> {   "identifier": "INTF:eth1/12-EGRESS",   "reason": "CRITICAL: EGRESS bw usage is at or above 90%",   "Switch": "&lt;switchName&gt;",   "dn": "sys/nbm/show/notify/dom-default/event-[INTF:eth1/12-EGRESS]",   "TimestampReceived": 1629230760854,   "Timestamp": 1629230581458,   "status": "created" } </pre>

## NAT Mode

## Ingress NAT Mode - Create

Key	mNatMode.
Payload	<pre> {   "mode": "Ingress",   "switchNameOrIP": "172.31.149.97",   "link":     "https://172.31.201.84/appcenter/cisco/dcnm/v1/pmn/rest/pmn/switches/172.31.149.97/vrfs/default/groups/224.0.0.0/masks/8/modes/Ingress/natmodes",   "vrf": "default",   "message": "Ingress' Multicast NAT Mode for group '224.0.0.0' and mask '8' in VRF 'default' and switch </pre>



## NAT Mode

```
'172.31.149.97' successfully created by admin",
  "group": " 224.0.0.0",
  "mask": 8
}
```

## Ingress NAT Mode - Deploy

Key	mNatMode.
Payload	<pre>{   "Deployed data": "[default:224.0.0.0/8_Ingress]",   "fabric": "pmn-soln",   "deployment type": "mNatMode",   "vrf": "all vrfs",   "switch-ip": "172.31.149.97" }</pre>

## Ingress NAT Mode - Undeploy

Key	mNatMode.
Payload	<pre>{   "Deployed data": "[default:224.0.0.0/8_Ingress]",   "fabric": "pmn-soln",   "deployment type": "mNatMode",   "vrf": "all vrfs",   "switch-ip": "172.31.149.97" }</pre>

## Ingress NAT Mode - Delete

Key	mNatMode
Payload	<pre>{   "message": "1 Multicast NAT Mode has been successfully deleted by admin" }</pre>

## Ingress NAT Mode - Failed Deploy

Key	mNatMode.
Payload	<pre>{   "Deployed data": "[default:232.0.0.1/24_Ingress]",   "fabric": "pmn-soln",   "deployment type": "mNatMode",   "vrf": "all vrfs",   "switch-ip": "172.31.149.97" }</pre>

## Egress NAT Mode – Create

Key	mNatMode.
Payload	<pre>{   " mode" : " Egress" ,   " switchNameOrIP" : " 172.31.149.97" ,   " link" : " https://172.31.201.84/appcenter/cisco/dcnm/v1/pmn/rest/pmn/switches /172.31.149.97/vrfs/default/groups/232.0.0.0/masks/8/modes/Egress/natmodes" ,   " vrf" : " default" ,   " message" : " 'Egress' Multicast NAT Mode for group '232.0.0.0' and mask '8' in VRF 'default' and switch '172.31.149.97' successfully created by admin" ,   " group" : " 232.0.0.0" ,   " mask" : 8 }</pre>

## Egress NAT Mode- Deploy

Key	mNatMode.
Payload	<pre>{   " Deployed data" : " [default:232.0.0.0/8_Egress]" ,   " fabric" : " pmn-soln" ,   " deployment type" : " mNatMode" ,   " vrf" : " all vrfs" ,   " switch-ip" : " 172.31.149.97" }</pre>

## Egress NAT Mode – Undeploy

Key	mNatMode.
Payload	<pre>{   " Deployed data" : " [default:231.1.1.1/32_Egress]" ,   " fabric" : " pmn-soln" ,   " deployment type" : " mNatMode" ,   " vrf" : " all vrfs" ,   " switch-ip" : " 172.31.149.97" }</pre>

## Egress NAT Mode – Delete

Key	mNatMode.
Payload	<pre>{   " message" : " 1 Multicast NAT Mode has been successfully deleted by admin" }</pre>

## Egress NAT Mode – Deploy Failure

Key	mNatMode.
-----	-----------

## NAT Rule

Payload	<pre>{   "Deployed data": "[default:232.0.0.1/32_Egress]",   "fabric": "pmn-soln",   "deployment type": "mNatMode",   "vrf": "all vrfs",   "switch-ip": "172.31.149.97" }</pre>
---------	---

## Egress NAT Mode – Undeploy Failure

Key	mNatMode.
Payload	<pre>{   "Deployed data": "[default:232.0.0.0/8_Egress]",   "fabric": "pmn-soln",   "deployment type": "mNatMode",   "vrf": "all vrfs",   "switch-ip": "172.31.149.97" }</pre>

## NAT Rule

## Ingress NAT Rule – Create

Key	mNatRule.
Payload	<pre>{   "destinationPort": 0,   "switchNameOrIP": "172.31.149.97",   "sourcePort": 25510,   "vrf": "default",   "message": "Multicast NAT Rule has been successfully created by admin",   "mode": "Ingress",   "groupMask": 24,   "staticOif": "N/A",   "postTranslationGroup": "225.255.1.0",   "preTranslationSource": "10.32.1.10",   "sourceMask": 32,   "postTranslationSource": "10.32.255.1",   "preTranslationGroup": "225.0.0.0" }</pre>

## Ingress NAT Rule – Deploy

Key	mNatRule
Payload	<pre>{   "Deployed data": "[105]",   "fabric": "pmn-soln",   "deployment type": "mNatRule",   "vrf": "all vrfs", }</pre>

## NAT Rule

```
    "switch-ip": " 172.31.149.97"
  }
```

## Ingress NAT Rule – Undeploy

Key	mNatRule.
Payload	<pre>{   "Deployed data": "[105]",   "fabric": " pmn-soln",   "deployment type": " mNatRule",   "vrf": " all vrfs",   "switch-ip": " 172.31.149.97" }</pre>

## Ingress NAT Rule – Delete

Key	mNatRule.
Payload	<pre>{   "message": " 1 Multicast NAT Rule has been successfully deleted by admin" }</pre>

## Ingress NAT Rule – Deploy Failed

Key	mNatRule.
Payload	<pre>{   "Deployed data": "[107]",   "fabric": " pmn-soln",   "deployment type": " mNatRule",   "vrf": " all vrfs",   "switch-ip": " 172.31.149.97" }</pre>

## Egress NAT Rule – Create

Key	mNatRule.
Payload	<pre>{   "destinationPort": 30000,   "switchNameOrIP": " 172.31.149.97",   "sourcePort": 10000,   "link": " https://172.31.201.84/appcenter/cisco/dcnm/v1/pmn/rest/pmn/switches/ 172.31.149.97/vrfs/default/modes/Egress/preTranslationGroups/232.232.1.100/ postTranslationGroups/232.232.255.100/preTranslationSources/10.31.1.10/ postTranslationSources/10.32.100.1/groupMasks/32/sourceMasks/32/ sourcePorts/10000/destinationPorts/30000/staticOifs/Ethernet1/1/natrules",   "vrf": " default",   "message": " Multicast NAT Rule has been successfully created by admin",   "mode": " Egress", }</pre>

## NAT Rule

```

    "groupMask": 32,
    "staticOif": " Ethernet1/1",
    "postTranslationGroup": " 232.232.255.100",
    "preTranslationSource": " 10.31.1.10",
    "sourceMask": 32,
    "postTranslationSource": " 10.32.100.1",
    "preTranslationGroup": " 232.232.1.100"
  }

```

## Egress NAT Rule – Deploy

Key	mNatRule.
Payload	<pre> {   "Deployed data": "[114]",   "fabric": "pmn-soln",   "deployment type": "mNatRule",   "vrf": "all vrfs",   "switch-ip": "172.31.149.97" } </pre>

## Egress NAT Rule – Undeploy

Key	mNatRule.
Payload	<pre> {   "Deployed data": "[114]",   "fabric": "pmn-soln",   "deployment type": "mNatRule",   "vrf": "all vrfs",   "switch-ip": "172.31.149.97" } </pre>

## Egress NAT Rule – Delete

Key	mNatRule.
Payload	<pre> {   "message": "1 Multicast NAT Rule has been successfully deleted by admin" } </pre>

## Egress NAT Rule – Failure

Key	mNatRule.
Payload	<pre> {   "Deployed data": "[116]",   "fabric": "pmn-soln",   "deployment type": "mNatRule",   "vrf": "all vrfs",   "switch-ip": "172.31.149.97" } </pre>

## NAT Mapping Configuration

### Egress Mapping Configuration – Create

Key	mNatEgressIfMap.
Payload	<pre>{   "switchNameOrIP": " 172.31.149.97",   "egressInterfaces": [     "Ethernet1/1"   ],   "link": " https://172.31.201.84/appcenter/cisco/dcnm/v1/pmn/rest/pmn/switches/ 172.31.149.97/mapInterface/eth1/13/egressInterfaces/ethernet1/1/ maxReplications/40/nategressifmaps",   "mapInterface": " Ethernet1/13",   "maxReplications": 40,   "message": " Multicast NAT Egress Interface Mappings successfully created by admin" }</pre>

### Egress Mapping Configuration – Deploy

Key	mNatEgressIfMap.
Payload	<pre>{   "Deployed data": "[109]",   "fabric": " pmn-soln",   "deployment type": " mNatEgressIfMap",   "vrf": " all vrfs",   "switch-ip": " 172.31.149.97" }</pre>

### Egress Mapping Configuration – Update

Key	mNatEgressIfMap.
Payload	<pre>{   "switchNameOrIP": " 172.31.149.97",   "egressInterfaces":   [     " Ethernet1/1",     " Ethernet1/9"   ],   "link": " https://172.31.201.84/appcenter/cisco/dcnm/v1/pmn/rest/pmn/switches/ 172.31.149.97/mapInterface/eth1/13/egressInterfaces/ethernet1/ 1,ethernet1/9/maxReplications/40/nategressifmaps",   "mapInterface": " Ethernet1/13",   "maxReplications": 40,   "message": " Multicast NAT Egress Interface Mappings successfully updated by admin" }</pre>

## Egress Mapping Configuration – Delete

Key	mNatEgressIfMap.
Payload	{ "message": " 1 Multicast NAT Egress Interface Mapping has been successfully deleted by admin" }

## Egress Mapping Configuration – Undeploy

Key	mNatEgressIfMap.
Payload	{ "Deployed data": "[111]", "fabric": "pmn-soln", "deployment type": "mNatEgressIfMap", "vrf": "all vrfs", "switch-ip": "172.31.149.97" }

## Egress Mapping Configuration – Deploy Failure

Key	mNatEgressIfMap.
Payload	{ "Deployed data": "[112]", "fabric": "pmn-soln", "deployment type": "mNatEgressIfMap", "vrf": "all vrfs", "switch-ip": "172.31.149.97" }

## Egress Mapping Configuration – Undeploy Failure

Key	mNatEgressIfMap.
Payload	{ "Deployed data": "[110]", "fabric": "pmn-soln", "deployment type": "mNatEgressIfMap", "vrf": "all vrfs", "switch-ip": "172.31.149.97" }

## Egress Mapping Configuration – Create All Mappings

Key	mNatEgressIfMap.
Payload	{ "switchNameOrIP": "172.31.149.97", "egressInterfaces":

## Multicast to Unicast NAT

```
[
  "all"
],
"link": "https://172.31.201.84/appcenter/cisco/dcnm/v1/pmn/rest/pmn/switches/172.31.149.97/mapInterface/eth1/33/egressInterfaces/all/maxReplications/40/nategressifmaps",
"mapInterface": "Ethernet1/33",
"maxReplications": 40,
"message": "Multicast NAT Egress Interface Mappings successfully created by admin"
}
```

## Egress Mapping Configuration – Deploy All INTF Mapping

Key	mNatEgressIfMap.
Payload	<pre>{   "Deployed data": "[113]",   "fabric": "pmn-soln",   "deployment type": "mNatEgressIfMap",   "vrf": "all vrfs",   "switch-ip": "172.31.149.97" }</pre>

## Multicast to Unicast NAT

## NAT Mode – Create

Key	mNatMode.
Payload	<pre>{   "messageId": 11000,   "routingKey": "information.com.cisco.dcnm.event.pmn.create.mnatmode",   "header": {     "Type": "mNatMode",     "User": "Internal",     "Operation Status": "Success",     "Event": "'Egress' Multicast NAT Mode for group '229.0.0.0' and mask '8' in VRF 'vrf3' and switch '172.22.198.10' successfully created by admin",     "Sent At": "2022-06-09, 18:36:16 UTC",     "Severity": "Information",     "Operation": "Create"   },   "data": {     "mode": "Egress",     "switchNameOrIP": "172.22.198.10",     "link":       "https://172.28.49.176/appcenter/cisco/ndfc/api/v1/pmn/switches/172.22.198.10/vrfs/vrf3/groups/229.0.0.0/masks/8/modes/Egress/natmodes",     "vrf": "vrf3",     "message": "'Egress' Multicast NAT Mode for group '229.0.0.0' and mask '8' in VRF 'vrf3' and switch '172.22.198.10' successfully created by admin",   } }</pre>



## Multicast to Unicast NAT

	<pre>       "group": "229.0.0.0",       "mask": 8     }   } </pre>
Key	mNatMode.
Payload	<pre> {   "messageId": 11006,   "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.mnatmode",   "header": {     "Type": "mNatMode",     "User": "Internal",     "Operation Status": "Success",     "Event": "mNatMode [vrf3:229.0.0.0/8_Egress] Deployment in VRF: 'vrf3' in Fabric: 'munat-active' on switch: 172.22.198.10",     "Sent At": "2022-06-09, 18:36:17 UTC",     "Severity": "Information",     "Operation": "Deploy"   },   "data": {     "Deployed data": {       "mNatMode": [         {           "mode": "Egress",           "group/mask": "229.0.0.0/8"         }       ]     }   },   "fabric": "munat-active",   "deployment type": "mNatMode",   "vrf": "vrf3",   "switch-ip": "172.22.198.10" } </pre>

## NAT Mode – Deploy

Key	mNatMode.
Payload	<pre> {   "messageId": 11006,   "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.mnatmode",   "header": {     "Type": "mNatMode",     "User": "Internal",     "Operation Status": "Success",     "Event": "mNatMode [vrf3:229.0.0.0/8_Egress] Deployment in VRF: 'vrf3' in Fabric: 'munat-active' on switch: 172.22.198.10",     "Sent At": "2022-06-09, 18:37:55 UTC",     "Severity": "Information",     "Operation": "Deploy"   },   "data": { </pre>

```

    "Deployed data": {
      "mNatMode": [
        {
          "mode": "Egress",
          "group/mask": "229.0.0.0/8"
        }
      ]
    },
    "fabric": "munat-active",
    "deployment type": "mNatMode",
    "vrf": "vrf3",
    "switch-ip": "172.22.198.10"
  }
}

```

## NAT Mode – Undeploy

Key	mNatMode.
Payload	<pre> {   "messageId": 11006,   "routingKey": "information.com.cisco.dcnm.event.pmn.undeploy.mnatmode",   "header": {     "Type": "mNatMode",     "User": "Internal",     "Operation Status": "Success",     "Event": "mNatMode [vrf3:229.0.0.0/8_Egress] Undeployment in VRF: 'vrf3' in Fabric: 'munat-active' on switch: 172.22.198.10",     "Sent At": "2022-06-09, 18:38:44 UTC",     "Severity": "Information",     "Operation": "UnDeploy"   },   "data": {     "Deployed data": {       "mNatMode": [         {           "mode": "Egress",           "group/mask": "229.0.0.0/8"         }       ]     },     "fabric": "munat-active",     "deployment type": "mNatMode",     "vrf": "vrf3",     "switch-ip": "172.22.198.10"   } } </pre>

## Ingress NAT Mode – Create

Key	mNatMode.
Payload	{

## Multicast to Unicast NAT

```

    "messageId": 11000,
    "routingKey": "information.com.cisco.dcnm.event.pmn.create.mnatmode",
    "header": {
      "Type": "mNatMode",
      "User": "Internal",
      "Operation Status": "Success",
      "Event": "'Ingress' Multicast NAT Mode for group '227.0.0.0' and mask '8' in VRF
'vrf4' and switch '172.22.198.10' successfully created by admin",
      "Sent At": "2022-06-09, 18:39:56 UTC",
      "Severity": "Information",
      "Operation": "Create"
    },
    "data": {
      "mode": "Ingress",
      "switchNameOrIP": "172.22.198.10",
      "link":
" https://172.28.49.176/appcenter/cisco/ndfc/api/v1/pmn/switches/172.22.198.10
/vrfs/vrf4/groups/227.0.0.0/masks/8/modes/Ingress/natmodes",
      "vrf": "vrf4",
      "message": "'Ingress' Multicast NAT Mode for group '227.0.0.0' and mask '8' in VRF
'vrf4' and switch '172.22.198.10' successfully created by admin",
      "group": "227.0.0.0",
      "mask": 8
    }
  }
}

```

Key

mNatMode.

Payload

```

{
  "messageId": 11006,
  "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.mnatmode",
  "header": {
    "Type": "mNatMode",
    "User": "Internal",
    "Operation Status": "Success",
    "Event": "mNatMode [vrf4:227.0.0.0/8_Ingress] Deployment in VRF: 'vrf4' in Fabric:
'munat-active' on switch: 172.22.198.10",
    "Sent At": "2022-06-09, 18:39:56 UTC",
    "Severity": "Information",
    "Operation": "Deploy"
  },
  "data": {
    "Deployed data": {
      "mNatMode": [
        {
          "mode": "Ingress",
          "group/mask": "227.0.0.0/8"
        }
      ]
    }
  },
  "fabric": "munat-active",
  "deployment type": "mNatMode",
  "vrf": "vrf4",
  "switch-ip": "172.22.198.10"
}

```

}

## Ingress NAT Mode – Deploy

Key	mNatMode.
Payload	<pre>{   "messageId": 11006,   "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.mnatmode",   "header": {     "Type": "mNatMode",     "User": "Internal",     "Operation Status": "Success",     "Event": "mNatMode [vrf4:227.0.0.0/8_Ingress] Deployment in VRF: 'vrf4' in Fabric: 'munat-active' on switch: 172.22.198.10",     "Sent At": "2022-06-09, 18:41:05 UTC",     "Severity": "Information",     "Operation": "Deploy"   },   "data": {     "Deployed data": {       "mNatMode": [         {           "mode": "Ingress",           "group/mask": "227.0.0.0/8"         }       ]     }   },   "fabric": "munat-active",   "deployment type": "mNatMode",   "vrf": "vrf4",   "switch-ip": "172.22.198.10" }</pre>

## Ingress NAT Mode – Undeploy

Key	mNatMode.
Payload	<pre>{   "messageId": 11006,   "routingKey": "information.com.cisco.dcnm.event.pmn.undeploy.mnatmode",   "header": {     "Type": "mNatMode",     "User": "Internal",     "Operation Status": "Success",     "Event": "mNatMode [vrf4:227.0.0.0/8_Ingress] Undeployment in VRF: 'vrf4' in Fabric: 'munat-active' on switch: 172.22.198.10",     "Sent At": "2022-06-09, 18:41:36 UTC",     "Severity": "Information",     "Operation": "UnDeploy"   },   "data": {</pre>

## Multicast to Unicast NAT

```

"Deployed data": {
  "mNatMode": [
    {
      "mode": "Ingress",
      "group/mask": "227.0.0.0/8"
    }
  ]
},
"fabric": "munat-active",
"deployment type": "mNatMode",
"vrf": "vrf4",
"switch-ip": "172.22.198.10"
}
}

```

## Recirc Interfaces – Create

Key mNatEgressIfMap.

```

Payload
{
  "messageId": 12000,
  "routingKey": "information.com.cisco.dcnm.event.pmn.create.mnategressifmap",
  "header": {
    "Type": "mNatEgressIfMap",
    "User": "Internal",
    "Operation Status": "Success",
    "Event": "Multicast NAT Recirc Mappings successfully created by admin",
    "Sent At": "2022-06-09, 18:48:16 UTC",
    "Severity": "Information",
    "Operation": "Create"
  },
  "data": {
    "switchNameOrIP": "172.22.198.10",
    "egressInterfaces": [],
    "destinationPrefix": "1.1.1.0/24",
    "link":
    "https://172.28.49.176/appcenter/cisco/ndfc/api/v1/pmn/switches/172.22.198.10/vrfs/vrf3/mapInterface/eth1%2F1/destPrefix/1.1.1.0%2F24/maxReplications/4/nategressifmaps",
    "mapInterface": "Ethernet1/1",
    "vrf": "vrf3",
    "maxReplications": 4,
    "message": "Multicast NAT Recirc Mappings successfully created by admin"
  }
}

```

Key mNatEgressIfMap.

```

Payload
{
  "messageId": 12006,
  "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.mnategressifmap",
  "header": {
    "Type": "mNatEgressIfMap",
    "User": "Internal",
    "Operation Status": "Success",

```

```

    "Event": "mNatEgressIfMap [103] Deployment in VRF: 'vrf3' in Fabric: 'munat-active'
on switch: 172.22.198.10",
    "Sent At": "2022-06-09, 18:48:17 UTC",
    "Severity": "Information",
    "Operation": "Deploy"
  },
  "data": {
    "Deployed data": {
      "mNatEgressIfMap": [
        {
          "destinationPrefix": "1.1.1.0/24",
          "mapInterface": "Ethernet1/1",
          "maxReplications": 4
        }
      ]
    }
  },
  "fabric": "munat-active",
  "deployment type": "mNatEgressIfMap",
  "vrf": "vrf3",
  "switch-ip": "172.22.198.10"
}

```

## Recirc Interfaces – Deploy

Key	mNatEgressIfMap.
Payload	<pre> {   "messageId": 12006,   "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.mnategressifmap",   "header": {     "Type": "mNatEgressIfMap",     "User": "Internal",     "Operation Status": "Success",     "Event": "mNatEgressIfMap [103] Deployment in VRF: 'vrf3' in Fabric: 'munat-active' on switch: 172.22.198.10",     "Sent At": "2022-06-09, 18:49:34 UTC",     "Severity": "Information",     "Operation": "Deploy"   },   "data": {     "Deployed data": {       "mNatEgressIfMap": [         {           "destinationPrefix": "1.1.1.0/24",           "mapInterface": "Ethernet1/1",           "maxReplications": 4         }       ]     }   },   "fabric": "munat-active",   "deployment type": "mNatEgressIfMap",   "vrf": "vrf3",   "switch-ip": "172.22.198.10" } </pre>

```
}
}
```

## Recirc Interfaces – Undeploy

Key	mNatEgressIfMap.
Payload	<pre>{   "messageId": 12006,   "routingKey": "information.com.cisco.dcnm.event.pmn.undeploy.mnategressifmap",   "header": {     "Type": "mNatEgressIfMap",     "User": "Internal",     "Operation Status": "Success",     "Event": "mNatEgressIfMap [103] Undeployment in VRF: 'vrf3' in Fabric: 'munat-active' on switch: 172.22.198.10",     "Sent At": "2022-06-09, 18:50:16 UTC",     "Severity": "Information",     "Operation": "UnDeploy"   },   "data": {     "Deployed data": {       "mNatEgressIfMap": [         {           "destinationPrefix": "1.1.1.0/24",           "mapInterface": "Ethernet1/1",           "maxReplications": 4         }       ]     },     "fabric": "munat-active",     "deployment type": "mNatEgressIfMap",     "vrf": "vrf3",     "switch-ip": "172.22.198.10"   } }</pre>

## NAT Rules – Create

Key	mNatRule.
Payload	<pre>{   "messageId": 13000,   "routingKey": "information.com.cisco.dcnm.event.pmn.create.mnatrule",   "header": {     "Type": "mNatRule",     "User": "Internal",     "Operation Status": "Success",     "Event": "Multicast NAT Rule has been successfully created by admin",     "Sent At": "2022-06-09, 18:43:25 UTC",     "Severity": "Information",     "Operation": "Create"   },   "data": {</pre>

## Multicast to Unicast NAT

```

    "destinationPort": 0,
    "switchNameOrIP": " 172.22.198.10",
    "sourcePort": 10000,
    "vrf": " vrf3",
    "message": " Multicast NAT Rule has been successfully created by admin",
    "mode": " N/A",
    "groupMask": 32,
    "staticOif": " N/A",
    "postTranslationGroup": " 1.1.1.1",
    "preTranslationSource": " 2.2.2.2",
    "sourceMask": 32,
    "postTranslationSource": " 3.3.3.3",
    "preTranslationGroup": " 229.1.1.1"
  }
}

```

Key

mNatRule.

Payload

```

{
  "messageId": 13006,
  "routingKey": " information.com.cisco.dcnm.event.pmn.deploy.mnatrule",
  "header": {
    "Type": " mNatRule",
    "User": " Internal",
    "Operation Status": " Success",
    "Event": " mNatRule [102] Deployment in VRF: 'vrf3' in Fabric: 'munat-active' on
switch: 172.22.198.10",
    "Sent At": " 2022-06-09, 18:43:26 UTC",
    "Severity": " Information",
    "Operation": " Deploy"
  },
  "data": {
    "Deployed data": {
      "mNatRule": [
        {
          "mode": " N/A",
          "destinationPort": 0,
          "sourcePort": 10000,
          "groupMask": 32,
          "staticOif": " N/A",
          "postTranslationGroup": " 1.1.1.1",
          "preTranslationSource": " 2.2.2.2",
          "sourceMask": 32,
          "postTranslationSource": " 3.3.3.3",
          "preTranslationGroup": " 229.1.1.1"
        }
      ]
    }
  },
  "fabric": " munat-active",
  "deployment type": " mNatRule",
  "vrf": " vrf3",
  "switch-ip": " 172.22.198.10"
}

```



## NAT Rules – Deploy

Key	mNatRule.
Payload	<pre>{   "messageId": 13006,   "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.mnatrule",   "header": {     "Type": "mNatRule",     "User": "Internal",     "Operation Status": "Success",     "Event": "mNatRule [102] Deployment in VRF: 'vrf3' in Fabric: 'munat-active' on switch: 172.22.198.10",     "Sent At": "2022-06-09, 18:44:41 UTC",     "Severity": "Information",     "Operation": "Deploy"   },   "data": {     "Deployed data": {       "mNatRule": [         {           "mode": "N/A",           "destinationPort": 0,           "sourcePort": 10000,           "groupMask": 32,           "staticOif": "N/A",           "postTranslationGroup": "1.1.1.1",           "preTranslationSource": "2.2.2.2",           "sourceMask": 32,           "postTranslationSource": "3.3.3.3",           "preTranslationGroup": "229.1.1.1"         }       ]     }   },   "fabric": "munat-active",   "deployment type": "mNatRule",   "vrf": "vrf3",   "switch-ip": "172.22.198.10" }</pre>

## NAT Rules – Undeploy

Key	mNatRule.
Payload	<pre>{   "messageId": 13006,   "routingKey": "information.com.cisco.dcnm.event.pmn.undeploy.mnatrule",   "header": {     "Type": "mNatRule",     "User": "Internal",     "Operation Status": "Success",     "Event": "mNatRule [102] Undeployment in VRF: 'vrf3' in Fabric: 'munat-active' on switch: 172.22.198.10",     "Sent At": "2022-06-09, 18:45:17 UTC",</pre>

## Unicast to Multicast NAT

```

    "Severity": "Information",
    "Operation": "UnDeploy"
  },
  "data": {
    "Deployed data": {
      "mNatRule": [
        {
          "mode": "N/A",
          "destinationPort": 0,
          "sourcePort": 10000,
          "groupMask": 32,
          "staticOif": "N/A",
          "postTranslationGroup": "1.1.1.1",
          "preTranslationSource": "2.2.2.2",
          "sourceMask": 32,
          "postTranslationSource": "3.3.3.3",
          "preTranslationGroup": "229.1.1.1"
        }
      ]
    },
    "fabric": "munat-active",
    "deployment type": "mNatRule",
    "vrf": "vrf3",
    "switch-ip": "172.22.198.10"
  }
}

```

## Unicast to Multicast NAT

## Recirc Interfaces – Create

Key	mNatEgressIfMap.
Payload	<pre> {   "messageId": 12000,   "routingKey": "information.com.cisco.dcnm.event.pmn.create.mnategressifmap",   "header": {     "Type": "mNatEgressIfMap",     "User": "Internal",     "Operation Status": "Success",     "Event": "Multicast NAT Recirc Mappings successfully created by admin",     "Sent At": "2022-06-09, 18:54:39 UTC",     "Severity": "Information",     "Operation": "Create"   },   "data": {     "switchNameOrIP": "172.22.198.10",     "egressInterfaces": [],     "destinationPrefix": "225.0.0.0/8",     "link":       "https://172.28.49.176/appcenter/cisco/ndfc/api/v1/pmn/switches/172.22.198.10/vrfs/vrf3/mapInterface/eth1%2F2/destPrefix/225.0.0.0%2F8/maxReplications/4/nategressifmaps", </pre>

## Unicast to Multicast NAT

```

    "mapInterface": "Ethernet1/2",
    "vrf": "vrf3",
    "maxReplications": 4,
    "message": " Multicast NAT Recirc Mappings successfully created by admin"
  }
}

```

Key

mNatEgressIfMap.

Payload

```

{
  "messageId": 12006,
  "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.mnategressifmap",
  "header": {
    "Type": "mNatEgressIfMap",
    "User": "Internal",
    "Operation Status": "Success",
    "Event": "mNatEgressIfMap [105] Deployment in VRF: 'vrf3' in Fabric: 'munat-active' on switch: 172.22.198.10",
    "Sent At": "2022-06-09, 18:54:39 UTC",
    "Severity": "Information",
    "Operation": "Deploy"
  },
  "data": {
    "Deployed data": {
      "mNatEgressIfMap": [
        {
          "destinationPrefix": "225.0.0.0/8",
          "mapInterface": "Ethernet1/2",
          "maxReplications": 4
        }
      ]
    },
    "fabric": "munat-active",
    "deployment type": "mNatEgressIfMap",
    "vrf": "vrf3",
    "switch-ip": "172.22.198.10"
  }
}

```

## Recirc Interfaces – Deploy

Key

mNatEgressIfMap.

Payload

```

{
  "messageId": 12006,
  "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.mnategressifmap",
  "header": {
    "Type": "mNatEgressIfMap",
    "User": "Internal",
    "Operation Status": "Success",
    "Event": "mNatEgressIfMap [105] Deployment in VRF: 'vrf3' in Fabric: 'munat-active' on switch: 172.22.198.10",
    "Sent At": "2022-06-09, 18:55:32 UTC",
    "Severity": "Information",
  }
}

```

```

    "Operation": "Deploy"
  },
  "data": {
    "Deployed data": {
      "mNatEgressIfMap": [
        {
          "destinationPrefix": "225.0.0.0/8",
          "mapInterface": "Ethernet1/2",
          "maxReplications": 4
        }
      ]
    }
  },
  "fabric": "munat-active",
  "deployment type": "mNatEgressIfMap",
  "vrf": "vrf3",
  "switch-ip": "172.22.198.10"
}
}

```

## Recirc Interfaces – Undeploy

Key

mNatEgressIfMap.

Payload

```

{
  "messageId": 12006,
  "routingKey": "information.com.cisco.dcnm.event.pmn.undeploy.mnategressifmap",
  "header": {
    "Type": "mNatEgressIfMap",
    "User": "Internal",
    "Operation Status": "Success",
    "Event": "mNatEgressIfMap [105] Undeployment in VRF: 'vrf3' in Fabric: 'munat-active' on switch: 172.22.198.10",
    "Sent At": "2022-06-09, 18:56:10 UTC",
    "Severity": "Information",
    "Operation": "UnDeploy"
  },
  "data": {
    "Deployed data": {
      "mNatEgressIfMap": [
        {
          "destinationPrefix": "225.0.0.0/8",
          "mapInterface": "Ethernet1/2",
          "maxReplications": 4
        }
      ]
    }
  },
  "fabric": "munat-active",
  "deployment type": "mNatEgressIfMap",
  "vrf": "vrf3",
  "switch-ip": "172.22.198.10"
}
}

```

## NAT SR Rules – Create

Key	mNatRule.
Payload	<pre>{   "messageId": 13000,   "routingKey": "information.com.cisco.dcnm.event.pmn.create.mnatrule",   "header": {     "Type": "mNatRule",     "User": "Internal",     "Operation Status": "Success",     "Event": "Multicast NAT Rule has been successfully created by admin",     "Sent At": "2022-06-09, 18:57:44 UTC",     "Severity": "Information",     "Operation": "Create"   },   "data": {     "destinationPort": 0,     "switchNameOrIP": "172.22.198.10",     "sourcePort": 0,     "vrf": "vrf3",     "message": "Multicast NAT Rule has been successfully created by admin",     "mode": "N/A",     "groupMask": 32,     "staticOif": "N/A",     "postTranslationGroup": "227.1.1.1",     "preTranslationSource": "6.6.6.6",     "sourceMask": 32,     "postTranslationSource": "7.7.7.7",     "preTranslationGroup": "3.1.1.1"   } }</pre>
Key	mNatRule.
Payload	<pre>{   "messageId": 13006,   "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.mnatrule",   "header": {     "Type": "mNatRule",     "User": "Internal",     "Operation Status": "Success",     "Event": "mNatRule [106] Deployment in VRF: 'vrf3' in Fabric: 'munat-active' on switch: 172.22.198.10",     "Sent At": "2022-06-09, 18:57:45 UTC",     "Severity": "Information",     "Operation": "Deploy"   },   "data": {     "Deployed data": {       "mNatRule": [         {           "mode": "N/A",           "destinationPort": 0,           "sourcePort": 0, </pre>

```

        "groupMask": 32,
        "staticOif": "N/A",
        "postTranslationGroup": "227.1.1.1",
        "preTranslationSource": "6.6.6.6",
        "sourceMask": 32,
        "postTranslationSource": "7.7.7.7",
        "preTranslationGroup": "3.1.1.1"
      }
    ]
  },
  "fabric": "munat-active",
  "deployment type": "mNatRule",
  "vrf": "vrf3",
  "switch-ip": "172.22.198.10"
}
}

```

## NAT SR Rules – Deploy

Key

mNatRule.

Payload

```

{
  "messageId": 13006,
  "routingKey": "information.com.cisco.dcnm.event.pmn.deploy.mnatrule",
  "header": {
    "Type": "mNatRule",
    "User": "Internal",
    "Operation Status": "Success",
    "Event": "mNatRule [106] Deployment in VRF: 'vrf3' in Fabric: 'munat-active' on
switch: 172.22.198.10",
    "Sent At": "2022-06-09, 18:58:47 UTC",
    "Severity": "Information",
    "Operation": "Deploy"
  },
  "data": {
    "Deployed data": {
      "mNatRule": [
        {
          "mode": "N/A",
          "destinationPort": 0,
          "sourcePort": 0,
          "groupMask": 32,
          "staticOif": "N/A",
          "postTranslationGroup": "227.1.1.1",
          "preTranslationSource": "6.6.6.6",
          "sourceMask": 32,
          "postTranslationSource": "7.7.7.7",
          "preTranslationGroup": "3.1.1.1"
        }
      ]
    }
  },
  "fabric": "munat-active",
  "deployment type": "mNatRule",
  "vrf": "vrf3",
}

```

```

    "switch-ip": " 172.22.198.10"
  }
}

```

## NAT SR Rules – Undeploy

Key	mNatRule.
Payload	<pre> {   "messageId": 13006,   "routingKey": "information.com.cisco.dcnm.event.pmn.undeploy.mnatrule",   "header": {     "Type": "mNatRule",     "User": "Internal",     "Operation Status": "Success",     "Event": "mNatRule [106] Undeployment in VRF: 'vrf3' in Fabric: 'munat-active' on switch: 172.22.198.10",     "Sent At": "2022-06-09, 18:59:21 UTC",     "Severity": "Information",     "Operation": "UnDeploy"   },   "data": {     "Deployed data": {       "mNatRule": [         {           "mode": "N/A",           "destinationPort": 0,           "sourcePort": 0,           "groupMask": 32,           "staticOif": "N/A",           "postTranslationGroup": "227.1.1.1",           "preTranslationSource": "6.6.6.6",           "sourceMask": 32,           "postTranslationSource": "7.7.7.7",           "preTranslationGroup": "3.1.1.1"         }       ]     },     "fabric": "munat-active",     "deployment type": "mNatRule",     "vrf": "vrf3",     "switch-ip": " 172.22.198.10"   } } </pre>

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