



Sample Output for Show Commands

This appendix provides output examples for IP fabric for media **show** commands.

- [Sample Show Command Output \(Spine-Leaf Deployment\)](#), on page 1
- [Sample Show Command Output \(Single Modular Switches\)](#), on page 16

Sample Show Command Output (Spine-Leaf Deployment)

This section provides output examples for switches in a spine-leaf deployment.



Note If you do not specify a VRF using the **vrf vrf-name** option, these commands display output for the default VRF.

This example shows sample output for the **show nbm defaults vrf all** command:

```
switch# show nbm defaults vrf all
-----
Defaults for VRF default (1)
-----

Default Flow Policy:

Bandwidth           : 1000 Kbps
DSCP                 : 0
Queue ID            : 7
Policer              : Enabled
Operation mode (cache) : EOR_PIM_A
Operation mode       : EOR_PIM_A
Unicast Fabric Bandwidth : 1
Number of ASM groups : 1
  Group 1 : 224.0.0.0/8

Default Host Policies:

Sender               : Permit
Local Receiver       : Permit
External Receiver (PIM) : Permit

-----
Defaults for VRF red (3)
-----
```

Default Flow Policy:

```

Bandwidth           : 1500 Kbps
DSCP                 : 0
Queue ID            : 7
Policer             : Enabled
Operation mode (cache) : EOR_PIM_A
Operation mode       : EOR_PIM_A
Unicast Fabric Bandwidth : 1
Number of ASM groups : 1
  Group 1 : 224.0.0.0/8

```

Default Host Policies:

```

Sender               : Permit
Local Receiver       : Permit
External Receiver (PIM) : Permit

```

This example shows sample output for the **show nbm flow-policy vrf all** command:

```

switch# show nbm flow-policy vrf all
Flow Policy for VRF 'blue'

```

```

-----
Total Group Ranges Found = 0
Total Policies Defined = 0

```

```

Flow Policy for VRF 'default'
-----

```

```

Default BW (Kbps)   : 1890
Default DSCP        : 36
Default QOS         : 7
Default Policer     : Enabled

```

```

-----
| Group Range          | BW (Kbps) | DSCP | QOS | Policer | Policy Name
-----|-----|-----|-----|-----|-----
| 235.1.1.1-235.1.2.255 | 30         | 0    | 7   | Enabled | Dynamic_IGMP
| 238.4.1.1-238.4.1.1   | 3000000   | 0    | 7   | Enabled | NBM_Static_2
| 238.4.1.2-238.4.1.10 | 3000000   | 0    | 7   | Enabled | NBM_Static_2
| 238.4.1.11-238.4.1.11 | 3000000   | 0    | 7   | Enabled | NBM_Static_2
| 238.4.1.12-238.4.1.100 | 3000000   | 0    | 7   | Enabled | NBM_Static_2
| 238.4.1.101-238.4.1.255 | 3000000   | 0    | 7   | Enabled | NBM_Static_2
| 239.1.1.2-239.1.1.2   | 100        | 0    | 7   | Disabled | SVI_239
| 239.1.1.3-239.1.1.9   | 100        | 0    | 7   | Disabled | SVI_239
| 239.1.1.10-239.1.1.10 | 100        | 0    | 7   | Disabled | SVI_239
| 239.1.1.11-239.1.1.30 | 100        | 0    | 7   | Disabled | SVI_239
| 239.1.1.1-239.1.1.1   | 200        | 0    | 7   | Enabled | SVI_239.1.1.1
| 227.1.1.51-227.1.1.51 | 1000       | 0    | 7   | Enabled | Dynamic_227.1
| 227.1.1.52-227.1.1.200 | 1000       | 0    | 7   | Enabled | Dynamic_227.1
| 229.1.1.1-229.1.1.100 | 1000       | 0    | 7   | Disabled | NBM_229
| 234.1.1.1-234.1.1.100 | 30         | 0    | 7   | Disabled | NBM_234
| 234.1.1.101-234.1.1.200 | 30         | 0    | 7   | Disabled | NBM_234
| 237.1.1.1-237.1.1.200 | 3000       | 0    | 7   | Disabled | NBM_Static_237.1
| 237.1.2.1-237.1.2.200 | 3000       | 0    | 7   | Disabled | NBM_Static_237.1
...
| 237.1.1.201-237.1.1.255 | 3000       | 0    | 7   | Enabled | NBM_Static_237_2
| 237.1.2.201-237.1.2.255 | 3000       | 0    | 7   | Enabled | NBM_Static_237_2
| 237.1.3.201-237.1.3.255 | 3000       | 0    | 7   | Enabled | NBM_Static_237_2
| 237.1.4.201-237.1.4.255 | 3000       | 0    | 7   | Enabled | NBM_Static_237_2

```

```

| 232.1.1.9-232.1.1.200      | 200      | 0      | 7      | Enabled | NBM_Static_232_2
| 232.1.1.5-232.1.1.7      | 200      | 0      | 7      | Enabled | NBM_Static_232_2
| 232.1.1.8-232.1.1.8      | 200      | 0      | 7      | Enabled | NBM_Static_232_2
| 235.2.2.2-235.2.2.10     | 3000000  | 24     | 7      | Disabled| Test_R_V
-----

```

```

Total Group Ranges Found = 56
Total Policies Defined = 16

```

This example shows sample output for the **show nbm flows detail vrf all** command:

```

switch# show nbm flows detail vrf all
-----
NBM Flows for VRF 'default'
-----

Active Source-Group-Based Flow(s) :

Mcast-Group      Src-IP          Uptime          Src-Intf        Nbr-Device      LID Profile
Status  Num Rx  Bw Mbps  CFG Bw Slot Unit  Slice DSCP  QOS Policed FHR Policy-name
Rcvr-Num Rcvr-slot Unit    Num-Rcvrs    Rcvr-ifidx  IOD Rcvr-Intf  Nbr-Device
-----
NBM Flows for VRF 'red'
-----

Active Source-Group-Based Flow(s) :

Mcast-Group      Src-IP          Uptime          Src-Intf        Nbr-Device      LID Profile
Status  Num Rx  Bw Mbps  CFG Bw Slot Unit  Slice DSCP  QOS Policed FHR Policy-name
Rcvr-Num Rcvr-slot Unit    Num-Rcvrs    Rcvr-ifidx  IOD Rcvr-Intf  Nbr-Device
-----
225.1.1.11      10.1.4.2        00:00:11       Vlan100        not-applicable  *      *
ACTIVE          0      1.500    1.500    0    0    0    0    7 Yes    Yes Default
225.1.7.228     10.1.4.2        00:00:12       Vlan100        not-applicable  *      *
ACTIVE          0      1.500    1.500    0    0    0    0    7 Yes    Yes Default
225.1.6.193     10.1.4.2        00:00:12       Vlan100        not-applicable  *      *
ACTIVE          0      1.500    1.500    0    0    0    0    7 Yes    Yes Default
...
225.1.19.52     10.2.3.2        00:02:13       Eth1/31        gretta-r10-eor2  349    962
ACTIVE          1      1.500    1.500    1    5    0    0    7 Yes    Yes Default
                1      0      0          1    0x09010064  2 Vlan100  not-applicable
225.1.23.31     10.2.3.2        00:35:04       Eth1/31        gretta-r10-eor2  1119    962
ACTIVE          1      1.500    1.500    1    5    0    0    7 Yes    Yes Default
                1      0      0          1    0x09010064  2 Vlan100  not-applicable
...
225.1.0.23      10.1.4.2        02:20:38       Vlan100        not-applicable  *      *
ACTIVE          1      1.500    1.500    0    0    0    0    7 Yes    Yes Default
                1      1      5          1    0x1a003c00  48 Eth1/31  gretta-r10-eor2
225.1.0.10      10.1.4.2        02:20:38       Vlan100        not-applicable  *      *
ACTIVE          1      1.500    1.500    0    0    0    0    7 Yes    Yes Default
                1      1      5          1    0x1a003e00  49 Eth1/32  gretta-r10-eor2
...
225.1.0.3       10.1.4.2        02:20:38       Vlan100        not-applicable  *      *
ACTIVE          1      1.500    1.500    0    0    0    0    7 Yes    Yes Default
                1      1      5          1    0x1a003c00  48 Eth1/31  gretta-r10-eor2

```

This example shows sample output for the **show nbm flows static vrf all** command:

```

switch# show nbm flows static vrf all
-----+
| NBM Static Flow Table for VRF "default"
-----+
-----+
| NBM Static Flow Table for VRF "moon"
-----+
-----+
|   Stitched Flows
-----+
| Source          | Group          | Egress Intf    | Host IP        |
-----+-----+-----+-----+
| 22.7.1.2        | 233.10.1.1    | Null0          |                |
|                 |                | eth6/20/3      |                |
|                 |                | eth6/20/3      | 21.7.1.2       |
| 22.7.1.2        | 233.10.1.2    | Null0          |                |
|                 |                | eth6/20/3      |                |
|                 |                | eth6/20/3      | 21.7.1.2       |
| 22.7.1.2        | 233.10.1.3    | Null0          |                |
|                 |                | eth6/20/3      |                |
|                 |                | eth6/20/3      | 21.7.1.2       |
| 22.7.1.2        | 233.10.1.4    | Null0          |                |
|                 |                | eth6/20/3      |                |
|                 |                | eth6/20/3      | 21.7.1.2       |
| ...
| 0.0.0.0         | 233.80.1.149  | Null0          |                |
|                 |                | eth6/20/3      |                |
|                 |                | eth6/20/3      | 21.7.1.2       |
| 0.0.0.0         | 233.80.1.150  | Null0          |                |
|                 |                | eth6/20/3      |                |
|                 |                | eth6/20/3      | 21.7.1.2       |
-----+-----+-----+-----+
|   Unstitched Flows
-----+
| Source          | Group          | Egress Intf    | Host IP        |
-----+-----+-----+-----+
| 0.0.0.0         | 233.80.1.1    |                |                |
|                 |                | vlan851        |                |
-----+-----+-----+-----+

```

This example shows sample output for the **show nbm flows statistics vrf all** command:

```

switch# show nbm flows statistics vrf all
-----
NBM Flow Statistics for VRF 'default'
-----

Source-Group-Based Flow Statistics :

Mcast-Group   Src-IP          Uptime          Src-Intf  Packets        Bytes
Allow-Bytes   Drop-Bytes

-----
NBM Flow Statistics for VRF 'red'
-----

Source-Group-Based Flow Statistics :

```

```

Mcast-Group      Src-IP      Uptime      Src-Intf    Packets      Bytes
Allow-Bytes      Drop-Bytes
225.1.2.47       10.2.3.2    02:29:53    Eth1/32     1124095     1124095000
1124095000       0
225.1.2.45       10.2.3.2    02:29:53    Eth1/31     1124096     1124096000
1124096000       0
225.1.2.44       10.2.3.2    02:29:53    Eth1/32     1124096     1124096000
1124096000       0
225.1.2.43       10.2.3.2    02:29:53    Eth1/31     1124096     1124096000
1124096000       0
...
225.1.2.2        10.2.2.2    02:29:53    Eth1/32     1124115     1124115000
1124115000       0
225.1.2.1        10.2.2.2    02:29:53    Eth1/31     1124114     1124114000
1124114000       0
225.1.0.2        10.1.4.2    02:30:13    Vlan100     1125105     1125105000
1125105000       0
225.1.0.1        10.1.4.2    02:30:13    Vlan100     1125104     1125104000
1125104000       0
225.1.0.24       10.1.4.2    02:30:13    Vlan100     1125104     1125104000
1125104000       0
225.1.0.23       10.1.4.2    02:30:13    Vlan100     1125103     1125103000
1125103000       0
225.1.0.22       10.1.4.2    02:30:13    Vlan100     1125104     1125104000
1125104000       0
225.1.0.21       10.1.4.2    02:30:13    Vlan100     1125103     1125103000
1125103000       0
225.1.0.20       10.1.4.2    02:30:13    Vlan100     1125104     1125104000
1125104000       0
225.1.0.19       10.1.4.2    02:30:13    Vlan100     1125103     1125103000
1125103000       0
...
225.1.0.5        10.1.4.2    02:30:13    Vlan100     1125102     1125102000
1125102000       0
225.1.0.4        10.1.4.2    02:30:13    Vlan100     1125103     1125103000
1125103000       0
225.1.0.3        10.1.4.2    02:30:13    Vlan100     1125102     1125102000
1125102000       0
switch1#

```

```
switch# show nbm flows statistics group 225.1.2.47 source 10.2.3.2 vrf red
```

```

-----
NBM Flow Statistics for VRF 'red'
-----

```

```
Source-Group-Based Flow Statistics for Source 10.2.3.2 Group 225.1.2.47 :
```

```

Mcast-Group      Src-IP      Uptime      Src-Intf    Packets      Bytes
Allow-Bytes      Drop-Bytes
225.1.2.47       10.2.3.2    02:29:53    Eth1/32     1124095     1124095000
1124095000       0

```

This example shows sample output for the **show nbm flows summary vrf all** command:

```
switch# show nbm flows summary vrf all
```

```

-----
NBM Flow Summary for VRF 'default'
-----

```

```

IIF = Incoming Interface
OIF = Outgoing Interface
-----

```

Category	(*,G)	(S,G)	Total
All Flows	0	0	0
Flows with No receivers	0	0	0
Flows with OIF	0	0	0
Flows with SVI IIF	0	0	0
Flows with PHY IIF	0	0	0
Flows (SVI) with Policing	0	0	0
Flows (PHY) with Policing	0	0	0

NBM Flow Summary for VRF 'red'

IIF = Incoming Interface
OIF = Outgoing Interface

Category	(*,G)	(S,G)	Total
All Flows	0	72	72
Flows with No receivers	0	0	0
Flows with OIF	0	72	72
Flows with SVI IIF	0	24	24
Flows with PHY IIF	0	48	48
Flows (SVI) with Policing	0	24	0
Flows (PHY) with Policing	0	48	0

Incoming Interface Name	(*,G)	(S,G)	Total
Vlan100	0	24	24
Ethernet1/31	0	24	24
Ethernet1/32	0	24	24

This example shows sample output for the **show nbm flows vrf all** command:

switch# **show nbm flows vrf all**

NBM Flows for VRF 'default'

Active Source-Group-Based Flow(s) :

Mcast-Group	Src-IP	Uptime	Src-Intf	Nbr-Device	Num Rx	Bw Mbps
Slot Unit Slice	DSCP QOS Policed	Policy-name				

NBM Flows for VRF 'red'

Active Source-Group-Based Flow(s) :

Mcast-Group	Src-IP	Uptime	Src-Intf	Nbr-Device	Num Rx	Bw Mbps
Slot Unit Slice	DSCP QOS Policed	Policy-name				
225.1.2.48	10.2.3.2	02:16:27	Eth1/31	gretta-r10-eor2	1	1.001
1 5 0	1 0 Yes	poll				
225.1.2.47	10.2.3.2	02:16:27	Eth1/32	gretta-r10-eor2	1	1.500
1 5 0	0 7 Yes	Default				
225.1.2.46	10.2.3.2	02:16:27	Eth1/32	gretta-r10-eor2	1	2.002
1 5 0	3 0 Yes	pol2				

```

225.1.2.45      10.2.3.2      02:16:27      Eth1/31      gretta-r10-eor2      1      1.500
  1  5  0  0  7 Yes      Default
225.1.2.44      10.2.3.2      02:16:27      Eth1/32      gretta-r10-eor2      1      1.500
  1  5  0  0  7 Yes      Default
225.1.2.43      10.2.3.2      02:16:27      Eth1/31      gretta-r10-eor2      1      1.500
  1  5  0  0  7 Yes      Default
225.1.2.42      10.2.3.2      02:16:27      Eth1/32      gretta-r10-eor2      1      1.500
  1  5  0  0  7 Yes      Default
...
225.1.0.2      10.1.4.2      02:16:48      Vlan100     not-applicable      1      1.500
  0  0  0  0  7 Yes      Default
225.1.0.1      10.1.4.2      02:16:48      Vlan100     not-applicable      1      1.500
  0  0  0  0  7 Yes      Default
225.1.0.24     10.1.4.2      02:16:48      Vlan100     not-applicable      1      1.500
  0  0  0  0  7 Yes      Default
225.1.0.23     10.1.4.2      02:16:48      Vlan100     not-applicable      1      1.500
  0  0  0  0  7 Yes      Default
225.1.0.22     10.1.4.2      02:16:48      Vlan100     not-applicable      1      1.500
  0  0  0  0  7 Yes      Default
225.1.0.21     10.1.4.2      02:16:48      Vlan100     not-applicable      1      1.500
  0  0  0  0  7 Yes      Default
225.1.0.20     10.1.4.2      02:16:48      Vlan100     not-applicable      1      1.500
  0  0  0  0  7 Yes      Default
225.1.0.19     10.1.4.2      02:16:48      Vlan100     not-applicable      1      1.500
  0  0  0  0  7 Yes      Default
225.1.0.18     10.1.4.2      02:16:48      Vlan100     not-applicable      1      1.500
  0  0  0  0  7 Yes      Default
225.1.0.17     10.1.4.2      02:16:48      Vlan100     not-applicable      1      1.500
  0  0  0  0  7 Yes      Default
225.1.0.16     10.1.4.2      02:16:48      Vlan100     not-applicable      1      1.500
  0  0  0  0  7 Yes      Default
225.1.0.15     10.1.4.2      02:16:48      Vlan100     not-applicable      1      1.200
  0  0  0  11 0 Yes      bw10
225.1.0.14     10.1.4.2      02:16:48      Vlan100     not-applicable      1      1.200
  0  0  0  11 0 Yes      bw10
225.1.0.13     10.1.4.2      02:16:48      Vlan100     not-applicable      1      1.200
  0  0  0  11 0 Yes      bw10
225.1.0.12     10.1.4.2      02:16:48      Vlan100     not-applicable      1      1.200
  0  0  0  11 0 Yes      bw10
225.1.0.11     10.1.4.2      02:16:48      Vlan100     not-applicable      1      1.200
  0  0  0  11 0 Yes      bw10
225.1.0.10     10.1.4.2      02:16:48      Vlan100     not-applicable      1      1.500
  0  0  0  0  7 Yes      Default
...

```

This example shows sample output for the **show nbm host-policy all receiver external vrf all** command:

```
switch# show nbm host-policy all receiver external vrf all
```

```
-----
VRF 'blue': External Receiver Policy Table
-----
```

```
Default External Receiver Policy: Deny
```

```
-----
Seq Num      Source          Group           Group Mask     Permission
-----
1            70.20.10.110   228.1.1.1      32             Allow
2            70.20.10.110   228.1.1.0      24             Deny
3            70.20.10.110   228.1.0.0      16             Deny
4            0.0.0.0        228.1.1.0      24             Allow
5            0.0.0.0        228.1.1.2      32             Deny
6            0.0.0.0        227.1.1.0      24             Allow
11           70.20.10.102   229.1.1.2      32             Deny

```

```
-----
Total Policies Found = 7
-----
```

```
VRF 'default': External Receiver Policy Table
-----
```

```
Default External Receiver Policy: Allow
-----
```

Seq Num	Source	Group	Group Mask	Permission
4096	70.30.1.103	235.1.1.121	32	Allow
4352	70.30.1.104	235.1.1.178	32	Allow
1	70.20.10.110	228.1.1.1	32	Deny
4097	70.30.1.103	235.1.1.122	32	Allow
4353	70.30.1.104	235.1.1.179	32	Allow
...				
4094	70.30.1.103	235.1.1.119	32	Allow
4350	70.30.1.104	235.1.1.176	32	Allow
4095	70.30.1.103	235.1.1.120	32	Allow
4351	70.30.1.104	235.1.1.177	32	Allow

```
-----
Total Policies Found = 601
-----
```

This example shows sample output for the **show nbm host-policy all receiver local vrf all** command:

```
switch# show nbm host-policy all receiver local vrf all
```

```
-----
VRF 'blue': Local Receiver Policy Table
-----
```

```
Default Local Receiver Policy: Allow
-----
```

```
Total Policies Found = 0
-----
```

```
-----
VRF 'blue': Local Receiver Policy Table
-----
```

```
Default Local Receiver Policy: Allow
-----
```

```
Total Policies Found = 0
-----
```

```
-----
VRF 'default': Local Receiver Policy Table
-----
```

```
Default Local Receiver Policy: Allow
-----
```

Seq Num	Source	Group	Group Mask	Reporter	Permission
256	0.0.0.0	228.1.1.246	32	70.30.1.102	Allow
512	0.0.0.0	228.1.2.247	32	70.30.1.102	Allow
768	0.0.0.0	228.1.3.248	32	70.30.1.102	Allow
4864	0.0.0.0	228.1.2.30	32	100.1.1.101	Allow


```

100096      0.0.0.0      231.1.1.106    32          0.0.0.0      Deny
100352      0.0.0.0      236.1.1.112    32          0.0.0.0      Deny
257         0.0.0.0      228.1.1.247    32          70.30.1.102  Allow
513         0.0.0.0      228.1.2.248    32          70.30.1.102  Allow
769         0.0.0.0      228.1.3.249    32          70.30.1.102  Allow
...
511         0.0.0.0      228.1.2.246    32          70.30.1.102  Allow
767         0.0.0.0      228.1.3.247    32          70.30.1.102  Allow
4863        0.0.0.0      228.1.2.29     32          100.1.1.101  Allow
100095      0.0.0.0      231.1.1.105    32          0.0.0.0      Deny
100351      0.0.0.0      236.1.1.111    32          0.0.0.0      Deny
-----

```

Total Policies Found = 1470

This example shows sample output for the **show nbm host-policy all sender vrf all** command:

```

switch# show nbm host-policy all sender vrf all
-----
VRF 'blue': Sender Policy Table
-----

Default Sender Policy: Allow

Total Policies Found = 0

-----
VRF 'default': Sender Policy Table
-----

Default Sender Policy: Allow

-----
Seq Num      Source          Group           Group Mask      Permission
-----
776          70.20.10.201   234.1.1.1       32              Allow
777          70.20.10.201   234.1.1.2       32              Allow
778          70.20.10.201   234.1.1.3       32              Allow
779          70.20.10.201   234.1.1.4       32              Allow
780          70.20.10.201   234.1.1.5       32              Allow
781          70.20.10.201   234.1.1.6       32              Allow
782          70.20.10.201   234.1.1.7       32              Allow
783          70.20.10.201   234.1.1.8       32              Allow
784          70.20.10.201   234.1.1.9       32              Allow
...
3970         70.20.10.215   234.1.1.195     32              Allow
3971         70.20.10.215   234.1.1.196     32              Allow
3972         70.20.10.215   234.1.1.197     32              Allow
3973         70.20.10.215   234.1.1.198     32              Allow
3974         70.20.10.215   234.1.1.199     32              Allow
3975         70.20.10.215   234.1.1.200     32              Allow
-----

Total Policies Found = 3000

```

This example shows sample output for the **show nbm host-policy applied receiver external vrf all** command:

```

switch# show nbm host-policy applied receiver external vrf all
-----
VRF 'blue': Applied External Receiver Policy Table
-----

```

Default External Receiver Policy: Deny

Applied policy for interface 'ALL':

Seq Num	Source	Group	Group Mask	Permission	Deny Counter
6	0.0.0.0	227.1.1.0	24	Allow	0
4	0.0.0.0	228.1.1.0	24	Allow	0
5	0.0.0.0	228.1.1.2	32	Deny	1116
11	70.20.10.102	229.1.1.2	32	Deny	0
3	70.20.10.110	228.1.0.0	16	Deny	0
2	70.20.10.110	228.1.1.0	24	Deny	6839
1	70.20.10.110	228.1.1.1	32	Allow	0

Total Policies Found = 7

VRF 'default': Applied External Receiver Policy Table

Default External Receiver Policy: Allow

Applied policy for interface 'ALL':

Seq Num	Source	Group	Group Mask	Permission	Deny Counter
5	0.0.0.0	228.1.1.1	32	Deny	0
1	70.20.10.110	228.1.1.1	32	Deny	0
3976	70.30.1.103	235.1.1.1	32	Allow	0
3977	70.30.1.103	235.1.1.2	32	Allow	0
3978	70.30.1.103	235.1.1.3	32	Allow	0
...					
4567	70.30.1.105	235.1.1.193	32	Allow	0
4568	70.30.1.105	235.1.1.194	32	Allow	0
4569	70.30.1.105	235.1.1.195	32	Allow	0
4570	70.30.1.105	235.1.1.196	32	Allow	0
4571	70.30.1.105	235.1.1.197	32	Allow	0
4572	70.30.1.105	235.1.1.198	32	Allow	0
4573	70.30.1.105	235.1.1.199	32	Allow	0
4574	70.30.1.105	235.1.1.200	32	Allow	0

Total Policies Found = 601

This example shows sample output for the **show nbm host-policy applied receiver local all vrf all** command:

switch# **show nbm host-policy applied receiver local all vrf all**

VRF 'blue': Applied Local Receiver Policy Table

Default Local Receiver Policy: Allow

Total Policies Found = 0

VRF 'default': Applied Local Receiver Policy Table

Default Local Receiver Policy: Allow

Applied policy for interface 'Vlan1001':

Seq Num	Source	Group	Group Mask	Permission	Deny Counter
4831	0.0.0.0	228.1.2.1	32	Allow	0
4836	0.0.0.0	228.1.2.2	32	Allow	0
4837	0.0.0.0	228.1.2.3	32	Allow	0
4838	0.0.0.0	228.1.2.4	32	Allow	0
4839	0.0.0.0	228.1.2.5	32	Allow	0
4840	0.0.0.0	228.1.2.6	32	Allow	0
4841	0.0.0.0	228.1.2.7	32	Allow	0
4842	0.0.0.0	228.1.2.8	32	Allow	0
...					
5086	0.0.0.0	228.1.2.252	32	Allow	0
5087	0.0.0.0	228.1.2.253	32	Allow	0
5088	0.0.0.0	228.1.2.254	32	Allow	0
5089	0.0.0.0	228.1.2.255	32	Allow	0

Applied policy for interface 'Wildcard':

Seq Num	Source	Group	Group Mask	Permission	Deny Counter
10000	0.0.0.0	231.1.0.0	16	Deny	0
10001	0.0.0.0	231.1.1.1	32	Deny	0
10002	0.0.0.0	231.1.1.2	32	Allow	0
100001	0.0.0.0	231.1.1.11	32	Deny	0
100002	0.0.0.0	231.1.1.12	32	Deny	0
100003	0.0.0.0	231.1.1.13	32	Deny	0
...					
100440	0.0.0.0	236.1.1.200	32	Deny	0
10300	0.0.0.0	237.1.0.0	16	Deny	0
10301	0.0.0.0	237.1.1.1	32	Allow	0
10401	0.0.0.0	238.1.0.0	16	Deny	0
10402	0.0.0.0	238.1.1.1	32	Allow	0

Total Policies Found = 705

This example shows sample output for the **show nbm host-policy applied receiver local interface interface vrf vrf-name** command:

```
switch# show nbm host-policy applied receiver local interface vlan 1001
```

```
-----
VRF 'blue': Applied Local Receiver Policy Table
-----
```

```
Default Local Receiver Policy: Allow
```

Applied policy for interface 'Vlan1001':

Seq Num	Source	Group	Group Mask	Permission	Deny Counter
4831	0.0.0.0	228.1.2.1	32	Allow	0
4836	0.0.0.0	228.1.2.2	32	Allow	0
4837	0.0.0.0	228.1.2.3	32	Allow	0
4838	0.0.0.0	228.1.2.4	32	Allow	0
4839	0.0.0.0	228.1.2.5	32	Allow	0

```

4840      0.0.0.0      228.1.2.6      32      Allow      0
4841      0.0.0.0      228.1.2.7      32      Allow      0
...
5087      0.0.0.0      228.1.2.253    32      Allow      0
5088      0.0.0.0      228.1.2.254    32      Allow      0
5089      0.0.0.0      228.1.2.255    32      Allow      0
-----

```

Total Policies Found = 255

This example shows sample output for the **show nbm host-policy applied receiver local wildcard vrf default** command:

```
switch# show nbm host-policy applied receiver local wildcard vrf default
```

```
-----
VRF 'default': Applied Local Receiver Policy Table
-----
```

Default Local Receiver Policy: Allow

Applied policy for interface 'Wildcard':

```
-----
Seq Num      Source      Group      Group Mask  Permission  Deny Counter
-----
10000      0.0.0.0      231.1.0.0      16      Deny      0
10001      0.0.0.0      231.1.1.1      32      Deny      0
10002      0.0.0.0      231.1.1.2      32      Allow     0
100001     0.0.0.0      231.1.1.11     32      Deny     0
100002     0.0.0.0      231.1.1.12     32      Deny     0
100003     0.0.0.0      231.1.1.13     32      Deny     0
100004     0.0.0.0      231.1.1.14     32      Deny     0
100005     0.0.0.0      231.1.1.15     32      Deny     0
100006     0.0.0.0      231.1.1.16     32      Deny     0
...
100439     0.0.0.0      236.1.1.199    32      Deny     0
100440     0.0.0.0      236.1.1.200    32      Deny     0
10300     0.0.0.0      237.1.0.0      16      Deny     0
10301     0.0.0.0      237.1.1.1      32      Allow     0
10401     0.0.0.0      238.1.0.0      16      Deny     0
10402     0.0.0.0      238.1.1.1      32      Allow     0
-----

```

Total Policies Found = 450

This example shows sample output for the **show nbm host-policy applied sender all vrf all** command:

```
switch# show nbm host-policy applied sender all vrf all
```

```
-----
VRF 'default': Applied Sender Policy Table
-----
```

Default Sender Policy: Allow

Total Policies Found = 0

```
-----
```

VRF 'red': Applied Sender Policy Table

 Default Sender Policy: Allow

Applied policy for interface 'Ethernet1/32':

Seq Num	Source	Group	Group Mask	Permission
20	10.1.31.10	228.31.1.1	32	Allow

 Total Policies Found = 1

 VRF 'blue': Applied Sender Policy Table

 Default Sender Policy: Allow

Applied policy for interface 'Ethernet1/31':

Seq Num	Source	Group	Group Mask	Permission
10	10.1.31.10	228.31.1.1	32	Allow
11	10.1.31.10	228.31.1.2	32	Allow
12	10.1.31.10	228.31.1.3	32	Allow
13	10.1.31.10	228.31.1.4	32	Allow

 Total Policies Found = 4

This example shows sample output for the **show nbm host-policy applied sender interface *interface vrf vrf-name*** command:

switch# **show nbm host-policy applied sender interface e1/31**

 VRF 'blue': Applied Sender Policy Table

 Default Sender Policy: Allow

Applied policy for interface 'Ethernet1/31':

Seq Num	Source	Group	Group Mask	Permission
10	10.1.31.10	228.31.1.1	32	Allow
11	10.1.31.10	228.31.1.2	32	Allow
12	10.1.31.10	228.31.1.3	32	Allow
13	10.1.31.10	228.31.1.4	32	Allow

Total Policies Found = 4

This example shows sample output for the **show nbm host-policy applied sender wildcard vrf all** command:

```
switch# show nbm host-policy applied sender wildcard vrf all
```

```
-----
VRF 'default': Applied Sender Policy Table
-----
```

Default Sender Policy: Allow

Total Policies Found = 0

```
-----
VRF 'red': Applied Sender Policy Table
-----
```

Default Sender Policy: Allow

Applied policy for interface 'Wildcard':

```
-----
```

Seq Num	Source	Group	Group Mask	Permission
10	0.0.0.0	228.1.10.1	32	Allow
20	0.0.0.0	228.1.20.1	32	Deny
30	0.0.0.0	228.1.30.1	32	Deny
40	0.0.0.0	228.1.40.1	32	Deny
50	0.0.0.0	228.1.50.1	32	Allow

```
-----
```

Total Policies Found = 5

This example shows sample output for the **show nbm flows static** command when static flow provisioning is enabled:

```
switch# show nbm flows static
```

```
-----
| NBM Static API Flow Table for VRF default
-----
```

```
| Provisioned Static Flows
-----
```

Source Is LHR	Group Egress Intf	Ingress Intf Fault Reason	BW (in Kbps)	Policed
10.1.103.10	231.1.1.1	Vlan103 None	1000000	Yes
YES	Vlan104	None		
YES	Vlan105	None		
NO	Ethernet1/64	None		

This example shows sample output for the **show nbm flows static group** command when static flow provisioning is enabled. The Fault Reason column shows the reason for any errors that occur.

```
switch# show nbm flows static group 231.1.1.2
```

NBM Static API Flow Table for VRF default				
Provisioned Static Flows				
Source	Group	Ingress Intf	BW (in Kbps)	Policed
Is LHR	Egress Intf	Fault Reason		
10.1.103.10	231.1.1.2	Vlan103	1000000	Yes
		None		
YES	Vlan104	Intf down		
YES	Vlan105	None		
NO	Ethernet1/64	None		

This example shows sample output for the **show running-config nbm** command:

```
switch# show running-config nbm
!Command: show running-config nbm
!Running configuration last done at: Fri Mar 29 05:21:38 2019
!Time: Fri Mar 29 10:09:24 2019

version 9.3(1) Bios:version 08.35
feature nbm

nbm mode pim-active
nbm host-policy
  sender
    default permit
  receiver
    default permit
  pim
    default permit
nbm reserve unicast fabric bandwidth 2
nbm flow asm range 225.0.0.0/8 234.80.0.0/16 232.6.0.0/16 233.80.0.0/16
nbm flow asm range 235.6.0.0/16 239.80.0.0/16 227.0.0.0/8 238.80.0.0/16
nbm flow asm range 238.100.0.0/16 239.100.0.0/16
nbm flow bandwidth 1002 kbps
nbm flow-policy
  policy v2.leaf1.1.225.50
    bandwidth 1001 kbps
    dscp 26
    ip group-range 225.50.1.6 to 225.50.1.10
  policy v2.leaf1.1.225.80
    bandwidth 1001 kbps
    dscp 24
    ip group-range 225.80.1.1 to 225.80.1.5
nbm vrf mars
  nbm mode pim-active
  nbm host-policy
    sender
      default permit
    receiver
      default permit
    pim
      default permit
```

```

nbm reserve unicast fabric bandwidth 1
nbm flow asm range 225.0.0.0/8 227.0.0.0/8 234.80.0.0/16 233.80.0.0/16
nbm flow asm range 235.6.0.0/16 239.80.0.0/16 232.6.0.0/16 238.80.0.0/16
nbm flow asm range 238.100.0.0/16 239.100.0.0/16
nbm flow bandwidth 1004 kbps
nbm flow-policy
  policy static.v2.leaf3.1.238.80
    bandwidth 1001 kbps
    dscp 35
    ip group-range 238.80.1.1 to 238.80.1.5
  policy static.v2.leaf4.1.239.80
    bandwidth 1001 kbps
    dscp 35
    ip group-range 239.80.1.1 to 239.80.1.5
nbm flow-definition 233.80.1.1 0.0.0.0
  egress-interface eth6/20/3
  egress-interface vlan851
  stage-flow
  egress-host 21.7.1.2
nbm flow-definition 233.80.1.2 0.0.0.0
  egress-interface eth6/20/3
  stage-flow
  egress-host 21.7.1.2

```

Sample Show Command Output (Single Modular Switches)

This section provides output examples for single modular switches without the DCNM Media Controller. In controller-based deployments, statistics are available in the DCNM Media Controller GUI.

This example shows sample output for the **show nbm defaults** command:

```

switch# show nbm defaults
Default Flow Policy:
Bandwidth : 1000 Kbps
DSCP      : 0
QID       : 0

Default Host Policies:
Sender    : Permit
Receiver  : Permit
PIM       : Permit

Default Unicast Fabric Bandwidth : 1

```

This example shows sample output for the **show nbm flows** command:

```

switch# show nbm flows
NBM Active Source-Group-Based Flows :
Mcast-Group Src-IP Start-Time Src-Intf L4-S L4-D LID Status Num Rx Bw Mbps CFG Bw Mbps
Src-slot Unit Slice DSCP QOS
228.2.10.3 10.12.85.10 08/21 18:45:27.429 Vlan1000 0 0 0 ACTIVE 7 66.000 66.000 1 0 0 48 7

228.1.3.3 10.10.85.10 08/21 18:45:27.324 Vlan1000 0 0 0 ACTIVE 8 18.000 18.000 1 0 0 24 7
228.1.4.1 10.10.85.10 08/21 18:45:27.068 Vlan1000 0 0 0 ACTIVE 8 19.000 19.000 1 0 0 32 7
228.1.9.1 10.10.85.10 08/21 18:45:26.732 Vlan1000 0 0 0 ACTIVE 8 31.000 31.000 1 0 0 32 7

```

This example shows sample output for the **show nbm flows group multicast-group** command:

```

switch# show nbm flows group 228.2.10.3
NBM Active Source-Group-Based Flows :

```



```
Mcast-Group Src-IP Start-Time Src-Intf L4-S L4-D LID Status Num Rx Bw Mbps CFG Bw Mbps
Src-slot Unit Slice DSCP QOS
228.2.10.3 10.12.85.10 08/21 18:45:27.429 Vlan1000 0 0 0 ACTIVE 7 66.000 66.000 1 0 0 48 7
```

This example shows sample output for the **show ip igmp groups** command:

```
switch# show ip igmp groups
IGMP Connected Group Membership for VRF "default" - 61520 total entries
Type: S - Static, D - Dynamic, L - Local, T - SSM Translated
Group Address      Type Interface      Uptime    Expires    Last Reporter
225.3.5.1          D   Ethernet3/5        11:48:07  00:03:36  3.5.1.6
225.3.5.2          D   Ethernet3/5        11:48:07  00:03:36  3.5.1.6
225.3.5.3          D   Ethernet3/5        11:48:07  00:03:36  3.5.1.6
225.3.5.4          D   Ethernet3/5        11:48:07  00:03:36  3.5.1.6
```

This example shows sample output for the **show ip igmp groups interface** command:

```
switch# show ip igmp groups eth3/5
IGMP Connected Group Membership for Interface "Eth3/5" - 1165 total entries
Type: S - Static, D - Dynamic, L - Local, T - SSM Translated
Group Address      Type Interface      Uptime    Expires    Last Reporter
225.3.5.1          D   Ethernet3/5        11:51:22  00:02:24  3.5.1.6
225.3.5.2          D   Ethernet3/5        11:51:22  00:02:24  3.5.1.6
225.3.5.3          D   Ethernet3/5        11:51:22  00:02:24  3.5.1.6
225.3.5.4          D   Ethernet3/5        11:51:22  00:02:24  3.5.1.6
```

This example shows sample output for the **show ip igmp groups multicast-group** command:

```
switch# show ip igmp groups 225.3.5.1
IGMP Connected Group Membership for VRF "default" - matching Group "225.3.5.1"
Type: S - Static, D - Dynamic, L - Local, T - SSM Translated
Group Address Type Interface Uptime Expires Last Reporter
225.3.5.1     D   Ethernet3/5 00:05:20 00:10:10 3.5.1.6
```

This example shows sample output for the **show running-config nbm** command:

```
switch# show running-config nbm
!Command: show running-config nbm
!Running configuration last done at: Thu May 10 08:53:37 2018
!Time: Thu May 10 09:33:23 2018

version 9.2(1) Bios:version 07.50
feature nbm

nbm mode pim-active
nbm host-policy
  sender
    default deny
  receiver
    default deny
    5 host 1.0.0.5 source 1.2.3.4 group 232.1.2.0/24 permit
    6 host 1.0.3.5 source 1.2.3.77 group 224.1.2.0/24 permit
    7 host 1.0.0.5 source 1.2.3.88 group 224.1.2.0/24 permit
  pim
    default deny
nbm reserve unicast fabric bandwidth 10
nbm flow asm range 237.1.1.0/24
nbm flow bandwidth 123 kbps
nbm flow-policy
  policy BLAH
  policy POL
  policy POL_1
```

```
bandwidth 123 kbps
dscp 10
ip group-range 237.1.1.0 to 238.1.1.0
policy POL_A
policy flow
policy nbm1_1
bandwidth 1000000 kbps
dscp 11
ip group-range 224.1.0.1 to 224.1.255.255
ip group-range 225.1.0.1 to 225.1.255.255
```